

STEREO HI-FI 1971 DIRECTORY

**COMPLETE
BUYER'S
GUIDE**
Latest Models
Latest Prices
1500 Products

**SPECIAL SHOPPER'S
GUIDE TO STEREO**
How To Decide—What To Pay

\$1.50



**Now that you know
you want a Dual,
the next question is which one?**



1215—\$99.50

1219—\$175.00



1209—\$129.50

It's not an easy decision to make. There's such a wealth of precision built into every Dual that even the testing laboratories can measure only small differences in performance among the Dual 1215 at \$99.50, the 1209 at \$129.50 and 1219 at \$175.00.

This raises an interesting question for you to consider: What are the important differences to you among these three Duals?

Let's consider them in turn.

Even our lowest priced turntable, the 1215, boasts features any turntable should have (and few do).

Its low-mass counterbalanced tonearm accepts the most sensitive cartridge available today and tracks flawlessly as low as $\frac{3}{4}$ gram.

Tracking force and anti-skating settings are ingeniously synchronized, so one setting does for both. The cue control is silicone-damped, and eases the tonearm onto the record more gently than a surgeon's hand.

The hi-torque motor brings the heavy $3\frac{3}{4}$ pound platter to full speed in less than a half turn, and maintains that speed within 0.1% even if line voltage varies widely.

And it even has a control to let you match record pitch with less fortunate instruments such as out-of-tune pianos.

Even a professional doesn't need more.

But you may want more. In which case the 1209 offers some refinements that are both esthetically pleasing and add something to performance.

For example: its tonearm tracks at as low as a half gram. Its anti-skating system is calibrated separately for elliptical and conical styli. Its counterbalance features a 0.01 gram click-stop. And its motor is hi-torque and synchronous.

Now what could the 1219 add to this?

The only true gimbal suspension ever available on an automatic arm. Four identical suspension points, one ring pivoting inside another.

And the Mode Selector, which shifts the entire tonearm base — down for single play, up for multiple play — so that the stylus will track at precisely the correct angle (15°) whether playing one record or a stack.

The tonearm is $8\frac{3}{4}$ " long, and the 12 inch dynamically balanced platter weighs 7 pounds.

So the question really isn't which Dual is good enough, but how much more than "good" your turntable has to be.

If our literature doesn't help, perhaps a visit to your dealer will.

United Audio Products, Inc., 120 So. Columbus Ave., Mt. Vernon, New York 10553.



A lot of people don't know that a cartridge that's great for one high fidelity system could be disastrous for another.

That's why Pickering has done something fantastically simple.

We've developed *Dynamic Coupling Factor*—henceforth known as *DCF*.

All it is is a complicated name for an uncomplicated way to select the best cartridge for your system. It is your guide to the selection of that cartridge based on its intended application in playback equipment—just as horsepower is the guide to the proper engine for a vehicle.

It works like this. You own an XYZ model record changer. What cartridge do you pick? Not the \$29.95 model because it isn't designed for the capability of your XYZ player. Not the \$60.00 cartridge either, for its quality cannot be realized in that unit.

Our chart—available to you free—reveals that you need our model XV-15 with a *DCF* rating of 400 for optimum performance. This means that you will get

100% of the music from your records. Not 50% or 75% but *all* of the music capable of being obtained from your particular playback unit.

Technically, what we've done is taken virtually every high fidelity record player and pre-analyzed the vital variables for you; those affecting cartridge design and those related to the engineering features of the various turntables and changers.

So now all you need to be well informed on cartridges is to send for our *DCF* application guide containing our recommendations for what cartridge you use with which record player.

And next time you walk into a high fidelity salon, tell the man: "I'd like a Pickering XV-15 with a *DCF* of 400." Or whatever.

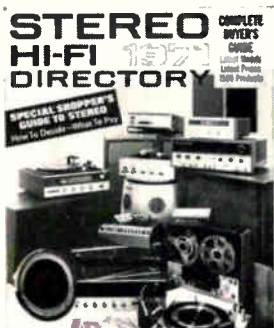
Pickering cartridges are priced from \$29.95 to \$60.00. For your free *DCF* chart, write *DCF*, Pickering & Co., 101 Sunnyside Blvd., Plainview, N.Y. 11803.



PICKERING

"for those who can hear the difference"

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1971 EDITION



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STEREO HI-FI 1971 DIRECTORY

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"The finest loudspeakers I've ever listened to, regardless of size, type or price."

That's how Ronald M. Benrey, electronics editor of Popular Science, described a pair of Rectilinear III speaker systems in the May 1968 issue of his magazine, in an article on "The Stereo System I Wish I Owned."

Mr. Benrey went on to justify his ranking of the Rectilinear III's:

"They produce beautiful bass tones without boom, accurate midrange tones without a trace of coloration, and crystal-clear treble tones without a hint of harshness. And they do it at any volume, including 'window-rattling' sound levels."

Of course, one expert's opinion may differ considerably from another's. But here's what Julian D. Hirsch wrote in the "Equipment Test Reports" of Stereo Review, December 1967:

"The Rectilinear III ranks as one of the most natural-sounding speaker systems I have ever used in my home. Over a period of several months, we have had the opportunity to compare it with a number of other speakers. We have found speakers that can outpoint the Rectilinear III on any individual characteristics—frequency range, smoothness, distortion, efficiency, dispersion, or transient response. However... none of the speakers combine all of these properties in such desirable proportions as the Rectilinear III."

Summing up his test report, Mr. Hirsch concluded: "In our opinion, we have never heard better sound reproduction in our home, from any speaker of any size or price."

Of course, both Mr. Benrey and Mr. Hirsch write for the readers of popular,

large-circulation magazines. But here's what Larry Zide wrote for the more specialized audience of The American Record Guide ("Sound Ideas" column, October 1968):

"The transient response of the speaker is superb... the overall quality is extreme in its fidelity to 'live' music. The bass is solid and firm, the midrange is clear and neutral, and highs are bell-like in their cleanliness."

"It all comes down to this: there are only a handful of speakers that I find completely satisfactory... I have had these Rectilinear III units for a month

now. Lately I have found myself listening to them just for the pleasure of it. They are among the very best speakers on the market today."

Of course, all of the opinions above appeared in publications that accept advertising. But here's what Buyer's Guide magazine wrote in their August 1968 issue, just in case you're more inclined to trust a consumer review without ads:

"Rectilinear III... has had tremendous impact on the hi-fi industry... This speaker's virtue is the fact that it is the first and only full-range dynamic speaker system that possesses sound quality which is directly comparable to electrostatic speakers."

"... Flute and violin concertos as well as string quartet were reproduced with honest clarity... Piano and organ music were effortlessly reproduced in a manner that suggested the instruments were being performed live. Jazz and rock music were unpretentious and true sounding..."

To such unanimity from such varied sources we need only add the dimensions and price of the Rectilinear III: 35" by 18" by 12" deep, \$279.00 in oiled walnut.

(For further information, see your audio dealer or write to Rectilinear Research Corp., 107 Bruckner Blvd., Bronx, N. Y. 10454. Canada: H. Roy Gray Co. Ltd., 14 Laidlaw Blvd., Markham, Ont. Overseas: Royal Sound Co., 409 N. Main St., Freeport, N. Y. 11520.)

Rectilinear III



CIRCLE NO. 42 ON READER SERVICE CARD



By WALTER GOODMAN

President
INSTITUTE OF HIGH FIDELITY, INC.



President of Harman-Kardon and vice-president and director of H-K's parent company, Jervis Corp., he joined Jerrold Electronics in 1952 and 1967 found him in his present position as head of Harman-Kardon. He is also a member of the board of AEM, has served 5 years on the board of the EIA, is a member of the Electronic Industries Show Corp. and is on the executive committee of the Consumer Products Div., EIA.

Guest Editorial

THIS year in Institute of High Fidelity history could well go down as "The Year of Transition"—in shows and other activities. No New York show was held in 1969. Instead a committee was appointed to study the feasibility of a multi-market show program that would bring the IHF and its members to millions of Americans *via* suburban shows in major areas around the U.S.

The Committee's activities resulted in the Board of Directors endorsing many aspects of the Committee's program—suburban markets, motel locations, lower admissions, dealer participation, community activities, and greater show coverage. To this end, the Board designated the first two locations recommended by the Committee—Westbury, New York (September 18-20) and Newton, Mass. (October 30-November 1)—for the 1970 New York and Boston shows, respectively. The locations—The Island Inn Motel in Westbury and the Marriott Motor Lodge in Newton—are the exact locations that were actually checked out and recommended by the Committee and, except for minor changes, the dates themselves are almost identical.

We expect that the two shows will open up new vistas for consumers who seek the new in sound equipment.

In our efforts to supply the public with information on component stereo, the IHF has aimed its educational efforts at a wide segment of the public.

The past year has seen a fifteen minute IHF segment (in color) of the Ed Nelson Morning Show over ABC-TV in twelve major cities, including New York, Los Angeles, and Chicago. Over a dozen stereo supplements in such cities as Boston, Washington, Philadelphia, and Indianapolis appeared last year carrying the story of components to those who may never have had the opportunity to be exposed to "quality"

sound equipment. Many of you may have indeed enjoyed some of these fine informative supplements in the major newspapers in your city. These same activities are being carried on with major magazines.

To add to the information and knowledge of the much-valued youth market, we have assisted in the production of a show entitled "The Marvel of Sound" that will be shown at high schools and junior highs around the country. Through the fine cooperation of many of our members in supplying quality stereo components, the show demonstrates the marvel of sound and how enjoyable good sound can be. Three road shows will be touring the Eastern, Central, and Western U.S. this year, playing to audiences of about 800 at each performance—three shows a day.

As our industry expands and other industries begin to overlap, we are seeking to provide more helpful buying information. We have opened communications channels with the EIA to develop new standards which will be agreeable to both associations. The initial net result should be a wattage rating technique that will allow direct comparison of any power amplifier sold in the U.S., thus benefiting you in your selection of products.

We anticipate that the next few years, with the development of new types of products and techniques—four-channel stereo, viewer-programmed television, etc.—will add to the excitement and enjoyment of sound as part of the total home entertainment spectrum. More and more people every day are learning to appreciate the joy and satisfaction that can be derived from listening to stereo components. And just around the corner are the rewarding opportunities to extend this enjoyment through the boldly imaginative and promising new developments that are inalienably part of the stereo component system.

The greatest record and tape offer in our history... FOR EVERYONE - EVEN THOSE

Free... ANY 3 STEREO LP's or WITH ABSOLUTELY NO OBLIGATION



31787 MAMAS & PAPAS—16 Great Hits
Atlan LP, 8TR, CASS



42665 CROSBY, STILLS & NASH
Atlan LP, 8TR, CASS



33077 JOAN BAEZ—
One Day at a Time
Vangu LP, 8TR, CASS



42673 LED ZEPPELIN
II
Atlan LP, 8TR, CASS



49706 B.B. KING—
Completely Well
Blues LP, 8TR, CASS



44368 PAUL MAURIAT
—Midnight Cowboy
Phil LP, 8TR, CASS



30615 JACKSON 5—
ABC
Motow LP, 8TR, CASS



42693 KING CRIMSON
Atlan LP, 8TR, CASS



33032 IAN & SYLVIA
—Nashville
Vangu LP



17317 CASALS—
Plays Beethoven
Phil LP



34525 HELLO DOLLY
—Soundtrack
Tw Cen LP, 8TR, CASS



66611 JAMES BROWN—
Soul On Top
King LP



33495 BLIND FAITH
Atco LP, 8TR, CASS



33257 CHARLIE BYRD—
Byrd Man
River LP, 8TR



31799 THREE O'G
NIGHT—It Ain't Easy
Ounh LP, 8TR, CASS



15116 HANDEL—
Jephtha
Vangu LP (3 records)



17263 GREGORIAN
CHANT
Phili LP



44365 JACQUES BREL
—If You Go Away
Phili LP



33486 CREAM—Best
of Cream
Atco LP, 8TR, CASS



17238 BERLIOZ—
Te Deum—London Sym.
Phili LP, 8TR, CASS



44373 HAIR: French
Original Cast
Phili LP



16759 TCHAIKOVSKY
—1812 Overture
Mercu LP



67503 SMITH—
Minus—Plus
Ounhi LP, 8TR, CASS



34506 ZORBA THE
GREEK—Soundtrack
Tw Cen LP, 8TR, CASS



33065 JOAN BAEZ—
David's Album
Vangu LP, 8TR, CASS



30606 TEMPTATIONS
Psychedelic Shack
Gordy LP, 8TR, CASS



33078 WEAVERS—
On Tour
Vangu LP, 8TR, CASS



42715 BEST OF MJQ
Atlan LP, 8TR, CASS



33083 COUNTRY JOE
& FISH—CJ Fish
Vangu LP, 8TR, CASS



66546 RARE EARTH—
Get Ready
RarEa LP, 8TR, CASS



44369 MYSTIC MOOS
ORCH. Stormy Weekend
Phili LP, 8TR, CASS



15113 MAHLER
Sym #3 Utah Sym
Vangu LP (2 records)



31795 RICHARD
HARRIS—Love Album
Ounhi LP, 8TR, CASS



48782 APPLAUSE
—Original Cast
ABC LP, 8TR, CASS



33487 BEST OF BEE
GEES
Atco LP, 8TR, CASS

WOODSTOCK

Original Movie
Soundtrack includes
uncut music, stage
announcements and
live performances
from the Music
Event of the Year.



42745 WOODSTOCK—
Soundtrack (3 records)
Cotil LP



33443 IRON
BUTTERFLY—In A
Gadda-Da-Vida
Atco LP, 8TR, CASS



17008 HANDEL—
Messiah (3 records)
Phili LP



17042 BEETHOVEN:
Piano Sonatas
Richter Phil LP



43793 SPANKY AND
OUR GANG—Greatest
Hits
Mercu LP, 8TR, CASS



30609 SUPREMES—
Right On
Motow LP, 8TR, CASS



17064 MOZART: Sym
Nos. 25, 29, 32—
Lon. Sym, Davis
Phil LP



33029 BUFFY
SAINTE-MARIE
—Gonna Be A
Country Girl Again
Vangu LP, 8TR, CASS



42704 CROSBY,
STILLS, NASH &
YOUNG—Deja Vu
Atlan LP, 8TR, CASS



44195 FOUR SEASONS
Gold Vault of Hits
Phili LP, 8TR, CASS



31973 JOHN COLTRANE
—Selflessness
Impul LP



30601 DIANA ROSS
& SUPREMES —
Greatest Hits 3
Motow LP, 8TR, CASS



67500 STEPPENWOLF
"Live" (2 records)
Ounhi LP

PEOPLE WHO SWORE THEY WOULD NEVER JOIN ANOTHER RECORD OR TAPE CLUB!

ANY 1 TAPE Cartridge or Cassette **SHOWN HERE** Worth up to \$20.94 TO BUY ANYTHING EVER!

Yes, take your pick of these great hits right now. Choose any 3 Stereo LP's (worth up to \$20.94) or any 1 stereo tape (worth up to \$6.98) FREE . . . as your welcome gift from Record Club Of America when you join at the low lifetime membership fee of \$5.00. We make this amazing offer to introduce you to the only record and tape club offering guaranteed discounts of 33 1/3% to 79% on all labels—with no obligation or commitment to buy anything ever. As a member of this one-of-a-kind club you will be able to order any record or tape commercially available, at savings up to 79%—guaranteed never less than 33 1/3%. No automatic shipments, no cards to return. We ship only what you order. Money back guarantee if not satisfied.

See for yourself why over 3/4 million record and tape collectors paid \$5 to join Record Club of America when other record or tape clubs would have accepted them free.

Compare and see!	Columbia Record Club as advertised in Playboy February 1970	Capitol Record Club as advertised in Playboy April 1970	The RCA Cassette Club as advertised in Sports Illustrated May 11, 1970	Columbia Stereo Tape Cartridge Club as advertised in TV Guide April 25, 1970	RCA Stereo 8 Tape Club as advertised in Playboy April 1970	RECORD CLUB OF AMERICA
CAN YOU CHOOSE FROM ALL LABELS? LP'S OR TAPES, INCLUDING CARTRIDGE AND CASSETTE TAPES?	NO	NO	NO	NO	NO	YES! Choose any LP or tape on any label! No exceptions! Over 300 different manufacturers including Capitol, Columbia, RCA, Angel, London, etc.
MUST YOU BUY A "MINIMUM" NUMBER OF RECORDS OR TAPES? HOW MANY?	10	12	6	12	6	NONE! No obligations! No yearly quota! Take as many, as few, or nothing at all if you so decide!
HOW MUCH MUST YOU SPEND TO FULFILL YOUR LEGAL OBLIGATION?	\$49.80 to \$59.80	\$59.76 to \$71.76	\$35.70 to \$41.70	\$83.76 to \$95.40	\$41.70 to \$47.70	ZERO DOLLARS! You don't have to spend a penny—because you're not "legally obligated" to buy even a single record or tape!
CAN YOU BUY ANY RECORD OR TAPE YOU WANT AT A DISCOUNT?	NO	NO	NO	NO	NO	ALWAYS! Your discount up to 79% OFF. Guaranteed never less than a third! No exceptions!
DO YOU EVER RECEIVE UNORDERED RECORDS OR TAPES?	YES	YES	YES	YES	YES	NEVER! There are no cards which you must return. Only the records and tapes you want are sent and only when you ask us to send them.
HOW LONG MUST YOU WAIT FOR SELECTIONS TO ARRIVE?	5 to 6 weeks	5 to 6 weeks	5 to 6 weeks	5 to 6 weeks	5 to 6 weeks	NO LONG WAITS! Your order processed same day received. No shipping on cycle.

TYPICAL "EXTRA DISCOUNT" SALE
Savings of 50% And More From Recent Club Sales . . . Savings up to \$3.49 per LP

	Label	List Price	Half Price
Simon & Garfunkel—Bridge Over Troubled Water	Col	5.98	2.99
Joe Cocker	A&M	4.98	2.49
Peter, Paul & Mary—Album 1700	War	4.98	2.49
Herb Alpert—Greatest Hits	A&M	4.98	2.49
Creedence Clearwater Revival—Willy & Poorboys	Fant	4.98	2.49
The Beatles—Let It Be	Apple	6.98	3.49
Hair—Original B'way Cast	RCA	5.98	2.99
Tom Jones—Tom	Parrot	5.98	2.99
Paul McCartney—McCartney	Apple	5.98	2.99
Jose Feliciano—Fireworks	RCA	4.98	2.49
Glen Campbell—Oh Happy Day	Cap	5.98	2.99
Barbra Streisand—Greatest Hits	Col	5.98	2.99
Miles Davis—Bitches Brew	Col	6.98	3.49
Leontyne Price—Verdi Heroines	RCA	6.98	3.49

Your \$5.00 membership fee entitles you to buy or offer gift memberships to friends, relatives, neighbors for only \$2.50 each, with full privileges. You can split the total between you—the more gift members you get—the more you save! Special Note: gift members do not receive any FREE records or tapes.

40-R8

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AT LAST A RECORD AND TAPE CLUB WITH NO "OBLIGATIONS"—ONLY BENEFITS!

This is the way you want it—the only record and tape club with no strings attached! Ordinary record or tape clubs make you choose from just a few labels—usually their own! They make you buy up to 12 records or tapes a year—usually at list price—to fulfill your obligation. And if you forget to return their monthly card—they send you a record or tape you don't want and a bill for \$4.98, \$5.98, \$6.98 or \$7.98! In effect, you may be charged almost double for your records and tapes.

But Record Club of America Ends All That!

We're the largest all-label record and tape club in the world. Choose any LP or tape (cartridges and cassettes) . . . on any label . . . including new releases. No exceptions! Take as many, or as few, or no selections at all if you so decide. Discounts are GUARANTEED AS HIGH AS 79% OFF! You always save at least 33 1/3%. You never pay full-price! You get bestsellers for as low as 99¢, plus a small handling and mailing charge.

No Automatic Shipments

With Record Club of America there are no cards which you must return to prevent shipment of unwanted LP's or tapes (which you would have to return at your own expense if you have failed to send written notice not to ship). We send only what you order.

How Can We Break All Record and Tape Club Rules?

We are the only major record and tape club NOT OWNED . . . NOT CONTROLLED . . . NOT SUBSIDIZED by any record or tape manufacturer anywhere. Therefore, we are never obliged by company policy to push any one label, or honor the list price of any manufacturer. Nor are we prevented by distribution commitments, as are other major record or tape clubs, from offering the very newest records and tapes.

Join Record Club of America now and take advantage of this special INTRODUCTORY MEMBERSHIP OFFER. Choose any three LP's or any one tape 1971 EDITION

shown here (worth up to \$20.94) and mail coupon with check or money order for \$5.00 membership fee (a small handling and mailing charge for your free records or tapes will be sent later). This entitles you to LIFETIME MEMBERSHIP—and you never pay another club fee. You are never obligated to buy another record or tape ever. Your savings have already MORE THAN MADE UP FOR THE NOMINAL MEMBERSHIP FEE.

Look What You Get

- FREE Lifetime Membership Card—guarantees you brand new LP's and tapes at discounts up to 79% . . . Never less than 1/2 off.
- FREE Giant Master LP Catalog—lists readily available LP's of all labels! Thousands of listings; hundreds of labels.
- FREE Giant Master Tape Catalog—sent on request. Lists readily available tapes (cartridges and cassettes) on all labels.
- FREE Disc & Tape Guide—The Club's own Magazine, and special Club sales announcements which regularly bring you news of just-issued new releases and "extra discount" specials.
- FREE Any 3 Stereo LP's or any 1 Tape shown here (worth up to \$20.94) with absolutely no obligation to buy anything ever!

Guaranteed Instant Service

All records and tapes ordered from Disc & Tape Guide and special sale announcements are shipped the same day received (orders from the Master Catalogs may take a few days longer). ALL RECORDS AND TAPES GUARANTEED—factory new and completely satisfactory or replacements will be made without question.

Money Back Guarantee

If you aren't absolutely delighted with our discounts (up to 79%)—return items within 10 days and membership fee will be refunded AT ONCE! Join over one million budget-wise record and tape collectors now. Mail coupon to: Record Club of America Club Headquarters, York, Pa. 17405

CIRCLE NO. 41 ON READER SERVICE CARD



RECORD CLUB OF AMERICA
CLUB HEADQUARTERS
YORK, PENNSYLVANIA 17405 **X782A**

Yes—Rush me a lifetime Membership Card, Free Giant Master LP Catalog (check box below if you also wish a Master Tape Catalog) and Disc & Tape Guide at this limited Special Introductory Membership offer. Also send me the 3 FREE LP's or 1 FREE tape which I have indicated below (with a bill for a small mailing and handling charge). I enclose my \$5.00 membership fee. (Never another club fee for the rest of my life.) This entitles me to buy any LP's or Tapes at discounts up to 79%, plus a small mailing and handling charge. I am not obligated to buy any records or tapes—no yearly quota. If not completely delighted I may return items above within 10 days for immediate refund of membership fee.

Also send Master Tape Catalog
3 FREE LP'S

or 1 FREE TAPE

8 track
 cassette

Also add _____ Gift Memberships at \$2.50 each to my request. (Attach separate sheet with names and addresses. Indicate Master Catalog request.)

I enclose \$ _____ covering my \$5.00 lifetime membership and any gift memberships at \$2.50 each.

CASH CHECK MONEY ORDER

Make a check or money order payable to Record Club of America.

Mr. _____
Mrs. _____
Miss _____

Address _____

City _____ State _____ Zip _____

**AFTER YOU'VE
INTRODUCED THE
WORLD'S FINEST
\$500 TAPE DECK*
WHAT DO
YOU DO FOR
AN ENCORE?**

**YOU MAKE THE
WORLD'S FINEST
POPULARLY
PRICED
TAPE DECK.**



When our Tandberg 6000X was reviewed by Hirsch-Houck Laboratories, they said it set a new standard for others to aim at.

Well, we're not about to rest on our laurels, because we've got another winner in our 3000X.

For a start, you'll probably never use its 7½ ips speed—except to play back your old tapes. After all, at 3¾ ips you can record everything from 50 to 16,000 Hz with perfect fidelity.

At a signal-to-noise ratio of better than 60dB.

That's because the 3000X gives you Tandberg's uniquely-engineered Cross-field bias head in addition to separate erase, record and playback heads. With full monitoring facilities, three speeds, cueing lever to locate recorded passages during fast-forward and rewind...and just about everything you're likely to need this side of getting your own professional studio.

At \$299 the Tandberg 3000X is just plain unbeatable.

Prove it by testing it out at your nearest Tandberg dealer.

TANDBERG 3000X

Tandberg of America
P.O. Box 171, 8 Third Avenue
Pelham, New York 10803

**"It is difficult to imagine how the Tandberg 6000X could be improved."—Stereo Review, June 1970.*

COVER STORY

Our cover is somewhat different this year; we hope you like it. Instead of showing one particular hi-fi system in an actual living room setting as we have the past few years, we decided to display individual components in such a way that they are larger and easier to see. All units pictured are described in greater detail under each manufacturer's listing. For still further information, we direct you to the manufacturers themselves; a complete listing of addresses appears on page 23.



- | | | |
|--|---|---|
| (1) Electro-Voice 12TRXB 3-way speaker | (8) Kenwood KR7070 automatic-tuning stereo receiver | (16) Altec Lansing 729A Acoustavoicette |
| (2) Electro-Voice 4A speaker system | (9) Wharfedale W70E speaker system | (17) Panasonic RS-256US cassette tape deck |
| (3) Fisher 115 music center (See item #6 for companion speaker systems.) | (10) Bell & Howell raw tape | (18) TDK raw-tape cassette |
| (4) KLH Model Five acoustic-suspension speaker systems | (11) Tandberg 6041X tape recorder | (19) Bell & Howell raw-tape cassette |
| (5) Concord F400 cassette recorder | (12) Record & tape cases (See ad p. 44.) | (20) Sony SS9500 "barrel" speaker system |
| (6) Fisher XP44B bookshelf speaker systems | (13) Perpetuum-Ebner 2040 automatic turntable | (21) Dynaco SCA-80 stereo control amplifier |
| (7) Pioneer SR-202 reverberation amplifier | (14) Sharpe 10MKII headset | (22) PML F67BS dynamic microphones |
| | (15) Scott 386 AM/FM stereo receiver | |

Four Japanese music critics rated the AR-3a best of fifty domestic and imported speakers.

① ブラインドテスト・採点表

	オーケストラ	室内楽	ピアノ	声楽	ムード	ヴォーカル	ジャズ	パフォーマンス コストパー	総合評価
岡	◎	◎	◎	◎	◎	◎	◎	8	◎
菅野	◎	◎	◎	◎	◎	◎	◎	6	◎
瀬川	◎	◎	◎	◎	◎	◎	◎	7	◎
山中	◎	◎	◎	◎	◎	◎	◎	8	◎

Categories of music are across the top; reviewers at left. Two circles denote *excellent*, three circles *superior*. Overall ratings are at extreme right, following rating of value per unit cost, in which 5 is the break-even point.

In Japan, *Stereo Sound* magazine recently conducted a listening comparison test of fifty Japanese, American, British and German speaker systems. Four distinguished Japanese music critics brought their own records to test, and each spent four full days of 8 to 14 hours comparing speakers. The location of each speaker system was changed daily behind the acoustically transparent curtain which also concealed the size and identity of the tested units. The critics were asked to rate each speaker system as *superior*, *excellent*, *good* or *unacceptable* for each of seven kinds of music and were encouraged to use the volume and tone controls of the amplifier. A JBL SA600 amplifier and Shure and Ortofon cartridges were used.

The AR-3a received the highest score of all the systems tested. It was also the only speaker system rated *excellent* or *superior* in every music category by every critic. This is of particular interest since the critics were carefully prevented from communicating with each other during the test period.

Complete technical specifications of the AR-3a are available free on request.



Acoustic Research, Inc.
24 Thorndike Street, Cambridge, Massachusetts 02141

A Shopper's Guide to STEREO

By JULIAN HIRSCH/Hirsch-Houck Labs

Buying a component high-fidelity system can be fun—but first learn as much as you can about the most important features. An intelligent choice is then relatively easy.

WOULD you like to know which is the best amplifier in its price class? Or perhaps which record player or speaker system is undeniably superior to its competitors? If so, you are in good company, for these and similar questions are among those most frequently asked of hi-fi "experts."

Unfortunately, there is rarely a definite answer to this sort of question. Even when one product enjoys a temporary advantage due to an innovative design, its competitors are sure to come out with something similar—or possibly better—in a short time. Many of the "differences" among competing products are relatively minor, or at least confined to a limited aspect of their performance. In the exceptional case where one product is "best" across the board, chances are that it is also the most expensive.

Does this mean that it really doesn't matter which components you buy? No, not at all. Brand "A" may excel in some characteristic which is not particularly important to you. Brand "B", not quite so outstanding in that area, may be better suited to your needs in other respects, or may be less expensive. Even the purely subjective aspect of styling may have a profound influence on your choice. It is important that you understand the true significance of the various features emphasized by competing hi-fi equipment manufacturers, and thereby be better equipped to make an intelligent choice.

What should you expect from a good hi-fi stereo music system? Concert hall realism? Probably not, regardless of the size of your investment in components, records, and tapes. Your listening room will inevitably impose its acoustic properties on the reproduced sound. Music scaled for a small room, such as solo and chamber works, can sound amazingly lifelike at home, if the recording itself does not contain too much reverberation. Most orchestral music, reproduced in two-channel stereo, cannot accurately simulate the concert-hall environment in the home. If you doubt this, you should attend more live performances!

Nevertheless, with good audio components you can create a satisfying *illusion* of attending a live performance, in the comfort of your own home. That is really the "name of the game" in high fidelity, as I see it. The tonal color, spatial distribution, and much of the dynamics of the original performance can be captured with remarkable fidelity on disc or tape. The accuracy with which you can translate this recorded program into its audible equivalent depends on how wisely you choose the components of your music system.

Record Players

**Performance is
basically mechanical
but check rumble,
wow and flutter.**

THE phonograph record remains one of the most popular program sources for home music systems. Despite inroads made by tape, the economy of disc manufacturing and high quality obtainable at modest cost makes any change in this situation unlikely in the near future.

A record playing system consists of a turntable to support and rotate the record, a cartridge whose stylus traces the microscopic groove undulations of the record, and a tone-arm which supports the cartridge in the proper position relative to the record. Sometimes these basic elements are purchased separately—often from different manufacturers—and installed in a system. Frequently the arm and turntable can be purchased as a unit, which simplifies one of the more critical aspects of a high-fidelity installation. The most widely used form of record player is the record changer—or, as it is now commonly called, the automatic turntable.

The automatic turntable combines a turntable and arm with a mechanism for supporting a stack of records (6 to 10 in number) and playing them automatically in sequence. This is obviously a great convenience when playing a number of records, but is of little or no value when playing a single LP disc, or a recording which occupies both sides of a disc. At one time, an automatic turntable was considered, with good reason, to be inferior to a separate turntable and arm. Today, the better automatic turntables are, in every respect, the equal of comparably priced separate components.

The purpose of the turntable is to rotate the record at a constant speed. This is not as simple as it sounds. Motors usually have small pulsations of torque superimposed on their rotation. Unless these are smoothed out, they cause the turntable speed to fluctuate rapidly, at rates of 10 to 200 Hz (pulsations per second). This adds a frequency modulation, known as *flutter*, to the recorded program. In large amounts, such as .5%, flutter imparts a "gargling" sound to music or voice. Smaller flutter amplitudes (about .2%) are not always heard distinctly, but nevertheless can detract from the clarity of reproduced sound. When flutter is reduced to .1% or less, it is usually not audible.

A low frequency flutter, at rates between .5 Hz and 10 Hz, may be caused by an unbalance or other flaw in the turntable drive system. It can also happen with a perfect turntable if the record center hole is slightly eccentric. The characteristic sound of low-frequency flutter has given it its name of "wow." Wow and flutter are most easily heard on

sustained tones, particularly of piano, organ, or woodwind instruments. When playing piano records, even very small amounts of wow can be heard clearly. There is no way to filter out wow and flutter; they must be prevented rather than removed.

Flutter is minimized by using a rotating platter whose mass is much greater than that of the motor and other rotating parts, and isolating the platter from rapid speed changes by a soft rubber idler wheel or flexible belt. Since it is the ratio of the turntable and motor mass that is involved, a heavy platter does not automatically imply very low flutter. Some of the best turntables use very light platters, driven by tiny synchronous ("clock") motors.

Absolute speed accuracy is not as critical as short term speed stability. Speed errors of up to 1% are common in record players and are unlikely to be detected by ear. The use of a synchronous motor guarantees a constant speed with different line voltages and record loads, but the absolute speed of the turntable is still a function of its mechanical tolerances. If critical speed adjustment is important (such as when matching the pitch of a record to that of a live accompaniment) variable speed turntables are available. They usually provide an adjustment of a few percent about each nominal speed. This feature is available on several automatic turntables and a few separate component turntables.

Most turntables use a fixed speed motor, either induction or synchronous, to drive the platter through an idler wheel or belt. Speeds are changed by mechanically shifting the drive point to different diameters of a stepped motor shaft. There are two turntables using variable speed motors, controlled by servo (feedback) loops. The *Sony* turntables use a d.c. motor which is essentially free of the torque pulsations found in a.c. motors, while the *Thorens* TD-125 uses a very low speed a.c. motor, driven by a variable frequency transistorized oscillator and power amplifier. Both types achieve exceptionally low rumble and freedom from flutter, but are relatively expensive.

Rumble, like wow, is named for its audible effect. It is caused by low-frequency vibration of the motor and idler wheel, transmitted to the turntable and motorboard in such a manner that relative motion occurs between the arm and the record. Rumble is minimized by careful balance of all moving parts and elastic suspension of the motor to reduce the transmission of vibration to the rest of the system. A very effective technique used on some turntables is to rigidly couple the arm and the spindle of the rotating platter, and float them as a unit on a compliant suspension.

The predominant rumble frequency is that of the basic motor rate, which is about 1800 rpm in most cases. This produces a 30-Hz vibration, which can be reproduced by many of the better speaker systems. Harmonics are also present, so that frequently the audible rumble is at 60, 90, or 120 Hz. Some turntables use low speed motors, operating at 600 rpm, 300 rpm, or even slower. The rumble produced by these is well below the audible frequency range.

Rumble is expressed in decibels below a standard reference level. The better turntables, both manual and automatic, have unweighted rumble levels of better than -35 dB, which is usually inaudible. Medium-priced automatic turntables have rumble figures between -25 dB and -35 dB, not likely to be obtrusive with moderate priced speaker systems. The rumble of the lowest priced automatic turntables frequently measures -20 dB to -25 dB, and can be heard clearly on speakers with extended bass response. However, smaller and less expensive speakers, which should be used with these turntables, will not normally reproduce their rumble.

Sometimes published rumble figures are in the range of -50 to -60 dB. These are "weighted" figures, which cannot be compared directly with unweighted figures. They are, however, valid for comparing turntables rated by the same standards.

Rumble is sometimes confused with hum, since they occur at similar frequencies. To check your system for rumble, set the volume somewhat higher than normal and play the silent groove band in a test record such as the *STEREO REVIEW* SR 12. You may hear a low pitched rumbling or humming sound. Pick up the arm—if the sound goes away or drops considerably in volume, it was rumble. Any low-

pitched sound heard with the pickup off the record is hum.

The tonearm must support the cartridge so that it is nearly tangent to the record groove over the entire record surface. The recording cutter moves radially, so that it is always tangent to the groove it cuts. The playback tonearm (with rare exceptions) is pivoted at one end, so that the cartridge travels in an arc. By installing the cartridge with the correct angular offset in the arm, and with a critical position relative to the center of the turntable, perfect tangency can be obtained at two points on the record, and the tracking angle error can be minimized elsewhere.

Low pivot friction is important, especially with cartridges tracking at forces of 1 gram or so. Friction forces are only significant when they exceed a few percent of the tracking force. Most good separate tonearms, and those in top-quality automatic turntables, have negligible friction. Increased pivot friction is a characteristic of most lower-priced automatic turntable arms. However, since these units are designed to operate at relatively high tracking forces, this does not detract from their usefulness.

The offset angle of the cartridge in a pivoted tonearm gives rise to the so-called "skating force," which tends to push the pickup toward the center of the record. This results in a higher effective tracking force on the inner groove wall, with possible increased wear, while the outer groove wall (the other stereo channel) may have insufficient tracking force to be played without distortion.

This is an extreme example, but in any event it is desirable for the stylus to exert the same force on both groove walls. Various systems have been devised for "anti-skating" correction, which is now offered on most tonearms and automatic turntables. Although different techniques are used to apply the corrective force, in practice all the ones we have used seem to do their job with equal effectiveness. Since the distortions due to the skating effect are not audible except when playing very loud recorded passages, the improvement due to anti-skating may not be immediately apparent.

Some arms have been designed to carry the cartridge along a radius, always tangent to the groove. Only one such arm is currently being manufactured in this country, but we may expect others to appear from time to time. This completely eliminates tracking error "problems" (which are not really much of a problem to most people), but is quite expensive and is obviously intended for the uncompromising purist.

Some automatic turntables provide for tilting the cartridge in the vertical plane (or shifting the arm to accomplish the same effect) to compensate for the height of a record stack and maintain the correct vertical tracking angle. The distortions due to vertical errors of a few degrees are very small, compared to other distortions in the record playing process, but this allows them, at least in theory, to be further reduced.

Summarizing, whether you decide on separate record playing components or an automatic turntable, a higher price buys superior workmanship and greater refinement of operation. By the time you reach the \$100 to \$120 bracket in automatic turntables, the wow, flutter, and rumble have been reduced to negligible proportions. More expensive models feature longer arms, lower pivot friction, and larger, more massive turntable platters, often driven by synchronous motors. Below \$100, excellent performance is still obtainable, although it may not be possible to use cartridges tracking in the vicinity of 1 gram. Below about \$60, automatic turntables are designed for cartridges tracking at forces of 2 to 3 grams or more, and can do a very satisfactory job with these relatively rugged cartridges.

It is more difficult to generalize about separate arm and turntable combinations, if only because of the great number of possible pairings. Their high performance is based on precision manufacturing methods, which are reflected in their prices. In many cases, it would be difficult to justify their cost, from a purely listening quality standpoint. However, they are inherently more trouble-free than a complex record changer or automatic turntable, and can be considered as a long-term investment. Then, too, as cartridges, tracking at forces below 1 gram, become available, advanced record playing equipment will be required to use them.



**You cannot judge
by price alone.
You will have to
spend time listening.**

Phono Cartridges

LISTENING to the fantastically complex, yet detailed, sounds from a stereo phonograph record, it is difficult to appreciate that the frequency, dynamic, and spatial characteristics of a large symphony orchestra have been captured and preserved in the form of a barely visible undulating spiral groove in a vinyl disc. Equally remarkable is the ability of the phonograph cartridge to extract this information from the groove with a high degree of fidelity.

Although they may differ somewhat in design details, all stereo cartridges are based on the use of a tiny jewel stylus to follow the microscopic contours of the record groove. Each wall of the groove carries one stereo channel. The stylus motion is transmitted, usually *via* a slim cantilever strut, to independent transducers within the cartridge body. Most current cartridges use magnetic transduction, generating electrical voltages proportional to the stylus velocity. Some cartridges employ ceramic elements, flexed by the stylus displacement, to generate the electrical output. From time to time, other types of generating systems have been employed. However, there appears to be little fundamental advantage to any one method of transduction, and the established compatibility of magnetic cartridges with available amplifier inputs has led to their general acceptance.

Among the most significant parameters of a cartridge (or, more accurately, of its stylus and moving system), are its *compliance* and effective *tip mass*. A highly compliant stylus can be deflected by a very small force, so that a lower tracking force can be used. A low tracking force, in turn, contributes to low record and stylus wear. The moving mass of the stylus determines the dynamic force exerted on (and by) the groove wall as the stylus is accelerated back and forth thousands of times per second while playing a

record. A low moving mass contributes to extended high-frequency response as well as reduced record wear.

It might seem that an ideal cartridge should have the highest possible compliance and the lowest possible moving mass. However, this is true only up to a point. The cartridge compliance resonates with the arm mass at a low frequency, which should be sub-audible but not so low as to accentuate the effects of record warp and eccentricity. With available tonearms, most good cartridges resonate between 8 and 16 Hz. A significant increase in compliance would necessitate the use of a very low mass arm, to keep the resonant frequency in a safe region.

The tip mass of the cartridge also has a resonance, with the compliance of the vinyl record material (there are many other possible resonant modes, but these are the major ones). The resonant frequency should be as high as possible, above the audible range. Most modern cartridges of hi-fi quality resonate between 15 kHz and 25 kHz. While there would be no harm in extending the resonant frequency upward by a further reduction in tip mass, this is difficult to do from a practical standpoint, and also requires a more delicate and expensive stylus structure.

Compliance is expressed in units of *cm/dyne*, and may be as low as 5×10^{-6} cm/dyne for an inexpensive cartridge tracking at several grams, to as high as 35×10^{-6} cm/dyne for a premium-quality unit designed to operate at 1 gram or less. The corresponding tip masses might range from several milligrams to less than 1 milligram.

Although these parameters may or may not be specified by the cartridge manufacturer, they need not concern the prospective buyer. Each cartridge is rated for operation over a limited range of stylus force, reflecting the combined effect of its compliance, mass, and other design parameters. There is a rough inverse relationship between tracking force and price, as well as the over-all sonic performance of the cartridge. Since certain record players and arms are designed for use with minimum tracking forces of 2 or 3 grams, this is a factor to consider when choosing a cartridge.

One of the major differences among cartridges, even within a single manufacturer's line, is stylus shape and size. The most popular stylus, which has a spherical tip with a radius of 0.7 mil (0.0007") represents a good compromise for playing both stereo and mono LP records. Mono records were originally intended to be played with a 1 mil stylus, while many modern stereo releases can benefit from a smaller tip radius, such as 0.6 or even 0.5 mil.

In recent years, elliptical styli have become quite popular. Their tips have a small radius, from 0.2 to .04 mils, in contact with the groove walls. This provides improved tracing of the very short wavelengths corresponding to the

SYSTEM PLANNING

AHAPHAZARD mating of audio components is likely to prove disappointing irrespective of their cost. For best results, your budget should be allotted in the proper proportions to the different parts of your system. There are no set rules for this procedure, but a few common-sense guidelines are worth mentioning.

The speakers, which will determine what you finally hear, are the most critical part of your system. You should expect to pay about as much for a pair of speakers as for your receiver (or separate tuner and amplifier). There is considerable leeway in this, since a \$300 receiver might be compatible with a pair of good \$60 bookshelf speakers, or with a pair of \$300 console speakers. However, to use a somewhat extreme example, the limitations of a typical under-\$200 receiver would be clearly audible on most speakers selling for its price. On the other hand, the performance potential of a powerful, deluxe receiver costing over \$500 would not be realized with a pair of inexpensive speakers.

If you buy a separate tuner and amplifier, they should be about the same price. Many manufacturers make matching lines of tuners and amplifiers, which operate compatibly and have similar styling. If you mix brands, keep in mind that a \$100 tuner will sound no better when played through a \$400 amplifier than through a \$100 amplifier. Conversely, that same \$100 amplifier will probably make a \$400 tuner sound very much like the \$100 model with which it should have been used.

The record player (including the cartridge) should cost roughly half

as much as the receiver. Once again, common sense should suggest that a budget-priced record player, with a rugged but inexpensive cartridge, selling for perhaps \$50, would be wasted on a \$200 amplifier or a \$400 receiver, especially if it is used with speakers of appropriate quality which would faithfully reproduce the rumble and other imperfections of the record player. By the same token, the finer nuances of a record as played by a deluxe \$250 record player would be masked by the distortions of a low-priced amplifier and speakers.

Not everyone will include a tape recorder, at least initially, in his music system. The price of a tape recorder is influenced by many factors not directly related to its sound qualities, such as built-in power amplifiers, speakers, microphones, reversible operation, and control flexibility. This makes it difficult to assign any specific fraction of the system cost to the tape recorder. In general, many tape recorders selling for over \$200 and almost all over \$300 are compatible, from a listening standpoint, with most good music systems.

You can obviously pay upwards of \$500 for a tape recorder, and get better quality and more features in proportion to the cost. On the other hand, the quality of a \$100 tape deck or cassette recorder will be distinctly inferior to that of a phonograph record or of a higher priced tape deck. Anyone using it with a music system costing perhaps \$500 or more is likely to be disappointed.

Most of the problems and pitfalls of system planning are eliminated when one buys a "compact" packaged system. This will be discussed in a later section of this "Shopper's Guide to Stereo."

highest frequencies. At the same time, the large radius (0.7 to 0.9 mil) at right angles to the length of the groove prevents the stylus from "bottoming" in the groove and generating distortion—a problem with spherical styli of very small dimensions.

An elliptical stylus should be operated at a low tracking force, since the small contact area results in very high unit pressures. The recommendations of the manufacturer should be followed. In general, most cartridges operate best at or near the maximum force recommended by the manufacturer. Elliptical styli cost more than spherical styli, and their audible advantages may not be immediately apparent. However, many records (particularly mono records) do sound better when played with an elliptical stylus, and many of the best cartridges are only available in that form.

While the audible differences between cartridges are rarely as apparent as those between speakers, a good cartridge will have a smoother, more transparent sound, and noticeably less distortion when playing heavily cut records. You should expect to pay roughly half as much for a cartridge as for your record player.



Tuners

When buying consider sensitivity, capture ratio, and distortion.

THE tuner is the "radio" part of the hi-fi system. Its task is to select a desired broadcast signal, amplify it, and recover the program modulation at a level suitable for driving an amplifier. Today virtually all component-type tuners also include stereo circuits which separate the program into its left-and right-channel components.

High sensitivity is equated by many people with the quality of a tuner, much as high power is (incorrectly) considered to be a characteristic of a good amplifier. Neither assumption is necessarily true, although under certain circumstances they may be. Most FM tuners have a rated IHF Usable Sensitivity between 1.5 and 3 microvolts (μV). Some tuners are still rated in terms of quieting sensitivity, which gives a smaller number, but has no direct relationship to the generally accepted IHF rating.

The IHF sensitivity rating means that if a signal of that level is applied to the tuner's antenna terminals, the 400-Hz audio output of the tuner will contain noise and distortion 30 dB below the output level. If a broadcast signal of the same strength is tuned in, it will not be of usable quality, because of the very audible hiss level. A stronger signal is needed for hi-fi listening quality—anywhere from two to five times as strong as the IHF Sensitivity figure—and perhaps another ten-fold increase for fully quiet stereo reception.

Fortunately, most of us live in relatively high signal-strength areas, and the voltage at our tuner antenna terminals is typically hundreds, or even thousands, of microvolts. The most sensitive tuners, plus a good outside antenna, will be needed in some rural or fringe areas, but for most people sensitivity *per se* is not a critical factor in tuner selection. A rated IHF sensitivity of 3 microvolts or better should be satisfactory. Since higher figures (poorer sensitivity) often are associated with tuners whose performance has been compromised in other respects, sensitivity can be used as a rough guide to over-all quality—but not because of its own intrinsic importance.

The urban congestion which makes high sensitivity unnecessary for many people brings with it another prob-

lem—spurious signal responses due to overload of the tuner's circuits by powerful nearby stations. The applicable specifications, many of which are published by tuner manufacturers, include image response, i.f. rejection, cross-modulation, and spurious responses. It is very difficult to generalize on the relative importance of these specifications, which depends on the specific conditions existing at your location. Interference rejection capability is expressed in decibels, with magnitudes anywhere from 50 to 100 dB. The higher the figure, the better the tuner, but this is also reflected in its price.

A related characteristic is the tuner's selectivity, which is its ability to reject a signal adjacent in frequency to the desired station. In any given area, the minimum channel spacing is 400 kHz. Alternate channel selectivity ratings of 45 to 50 dB, typical of moderate priced tuners, are satisfactory in most cases but a locally crowded spectrum may require the 60 to 90 dB selectivity of the more expensive tuners.

At one time, double-tuned i.f. transformers provided the selectivity in FM tuners. Although they might have been adequate when the tuner left the factory, the tuning of these transformers often changed with time, requiring periodic re-alignment to maintain original performance. Many tuners in the medium- and high-priced brackets now use fixed-tuned filters, which never require re-alignment, and which usually have better selectivity characteristics (and more uniform stereo separation) than conventional i.f. transformers. These filters may use ceramic or quartz crystal elements, or may be multi-pole LC filters with high "Q" toroidal inductors. Good results can be obtained with any of these, although the crystal and LC filters tend to be more expensive and therefore are used in the higher priced tuners.

Another common problem in urban FM reception is multipath interference. A signal arriving at the receiving antenna from several directions, due to reflections from buildings or natural objects, may be severely distorted. A good directional antenna is often necessary (and always desirable) to exclude most of the unwanted signal components. The capture ratio of the tuner is a measure of its ability to respond only to the strongest of several signals on the same channel, while completely rejecting the weaker signals. Low capture ratios, such as 1.5 dB, are the best; a capture ratio greater than 3 or 4 dB is definitely undesirable.

The integrated circuits (IC's) used in many tuner i.f. sections, have excellent limiting properties which, in turn, makes possible a good capture ratio. Most tuners today use a field-effect transistor (FET) as an r.f. amplifier, and sometimes for the mixer as well. The FET is superior to ordinary transistors in resisting overload from strong signals, and is relatively immune to cross-modulation effects.

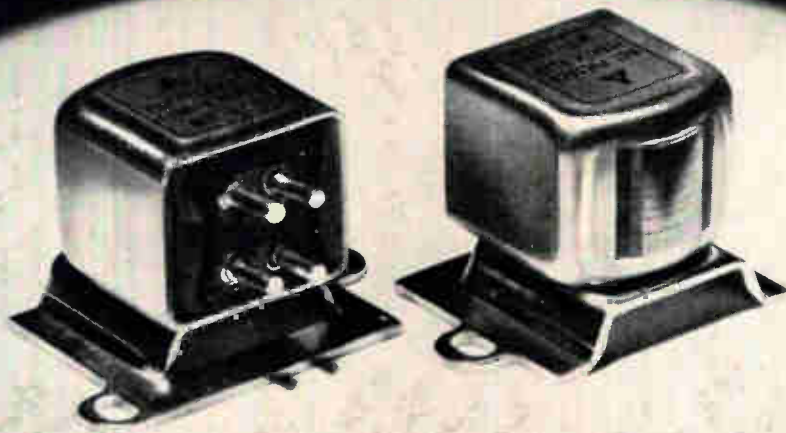
The stereo multiplex decoder, which typically requires 6 to 12 transistors, has been replaced in some tuners by a single IC specifically designed for that purpose. The IC, in addition to being much simpler and smaller than a discrete component circuit, has excellent stereo separation, and provides muting and automatic stereo switching functions as well.

Tuning indicators are almost a necessity for optimum reception. The zero-center type of meter is more accurate and preferable to the relative signal-strength meter used on many tuners. Some tuners use both types of meter. A few now use an IC differential amplifier to light a lamp on the panel when a station is tuned in "dead center." This is probably the most accurate, as well as the most easily interpreted type of tuning indicator.

Interstation noise is muted on most medium- and high-priced tuners. Muting circuits vary widely in effectiveness, from a smooth, almost inaudible transition from silence to program and *vice versa*, to those whose thumps and noise bursts make them nearly worthless. Listen for yourself and judge the usefulness of this feature when evaluating a tuner.

Although AM tuners have also benefited from such technological advances as FET's, IC's, and ceramic filters, and sometimes sound remarkably good, most AM programming makes the quest for hi-fi AM rather futile. If you plan to do much AM listening, check the tuner aurally for adequate reception of your favorite stations, low noise, and freedom

WARNING: The guarantee on these tape heads is due to expire in 1995




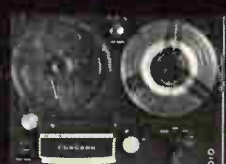
The newly developed pressure-sintered ferrite record and playback heads in the Concord Mark III tape deck carry a 25 year guarantee. These diamond-hard heads maintain their original high standard of performance longer than any others. There's no significant headwear, no deterioration in frequency response or signal-to-noise ratio — even under conditions of constant use.

But, there's more to recommend the Mark III than just the heads. The hysteresis synchronous drive motor assures a speed accuracy of 97.7% with line voltage variation of from 100 to 128 volts. Three heads with a 2-micron gap playback head deliver a 20 to 27,000 Hz response. It has advance-design IC preamplifiers—four of them. A unique flip-up head cover for easy access, and head-gap position markings for precise editing. Dynamic muting suppresses hiss. The tape transport mechanism assures a fast start-up—you don't miss a note. Two tape tension arms stamp out burble. A special flutter filter eliminates flutter due to tape

scrape, cogging action. Consider these capabilities: sound-on-sound, variable echo, cue/pause control, independent record-indicator lights for each channel, and two calibrated VU meters. The Mark III, under \$250. The Mark II, under \$200 is similar to the Mark III except that it has a ferrite erase head and high-Mu laminated recording and playback heads.

The top-of-the-line Mark IV has all of the performance, quality and convenience of the Mark II plus dual capacitor electronic automatic reverse and continuous play, no metal foil or signal required on the tape. Under \$300.

Today, buy the tape deck that you'll still be enjoying in 1995. For free Concord Comparison Chart, write to: Concord Electronics Corporation, 1935 Armacost Avenue, Los Angeles, Calif. 90025. Subsidiary of Ehrenreich Photo-Optical Ind., Inc. 



CIRCLE NO. 17 ON READER SERVICE CARD

Concord Mark III

from whistles and "birdies", as well as for clean and reasonably wide range sound. A ferrite rod antenna, part of every AM tuner, is usually adequate in urban or suburban areas. Since it is directional, it is helpful if the rod can be pivoted for best reception.

The FM antenna, although not a part of the tuner, is vital to good reception. The high performance of many tuners has led to their use with indoor folded dipoles or line-cord antennas. An improvement can be obtained with an outside antenna, placed as high as possible. It need not be elaborate although larger arrays will probably be needed if you are more than 30 or 40 miles from your favorite FM stations.

Amplifiers

You can judge quality simply by comparing specifications.



THE amplifier plays a dual role in a hi-fi system. It serves as a control center, selecting one of several available program sources, modifying the system frequency response as required, and sometimes acting as an interface with a tape recorder or as a switching center for several sets of speakers. It also amplifies the low-level input signal to the high power level needed to drive speakers.

The preamplifier functions are quite distinct from those of the power amplifier, and the two are sometimes handled by physically separate units. However, a transistorized power amplifier, lacking bulky output transformers and heat-producing tubes, can readily be integrated with the pre-amplifier to form a single, compact unit. Most amplifiers are now made in this format.

Amplifier power output, unlike many aspects of hi-fi performance, can be measured and specified with good accuracy. Nevertheless, few equipment specifications are as confusing and misleading as power ratings. Two basic rating systems are defined by an IHF standard. Continuous power output (sometimes called r.m.s. power) is the maximum power an amplifier can deliver for at least 30 seconds, at a specified distortion (usually about 1%).

Most amplifiers can deliver more power for short periods than they can continuously. This is due to the drop in internal power-supply voltage at full power, limiting the available power. During musical transients lasting a fraction of a second, the voltage change is slight and more power can be obtained. The IHF Dynamic Power rating of a given amplifier is usually from 10% to 30% greater than its continuous rating. The less the difference between the two ratings, the better the amplifier (all other factors being equal) since this implies a bigger or better regulated power supply.

A recent practice, deprecated by much of the hi-fi industry but still in wide use, is the addition of " ± 1 dB" to the IHF Dynamic Power rating. This is a crude attempt, without a vestige of legitimate justification, to inflate the advertised power rating. The "IHF ± 1 dB" power is 20% greater than the true IHF Dynamic Power.

So-called "peak power" figures, in any rating system, are mathematically twice the true power and have no other significance.

Published "Dynamic Power" ratings are usually the sum of the two channel outputs, although the IHF standard is based on a single channel measurement. Frequently, continuous power ratings are also given as " 2×30 watts," implying that a full 60 watts can be obtained when both channels are driven. However, unless it is clearly stated otherwise, one must assume that the measurement was made

with only one channel driven, resulting in a slightly higher power output.

Most solid-state amplifiers can deliver about 60% more power into 4 ohms than into the usual 8-ohm speaker load. Published power ratings are often based on 4-ohm loads, but most speakers are still designed with an 8-ohm nominal impedance. Unless your speakers are definitely 4-ohm models, be sure to compare amplifier specifications based on the use of 8-ohm loads.

To illustrate the use of the "numbers game" in power ratings, consider a hypothetical amplifier advertised as "100 watts, IHF ± 1 dB" into 4 ohms. By omitting the ± 1 dB, this can be immediately converted to an IHF Dynamic Power rating of 80 watts. A typical continuous power rating for such an amplifier might be " 2×30 watts." However, with both channels driven, each could probably deliver only about 22 watts. If your speakers have 8-ohm voice coils, only about 15 watts could be delivered to each speaker—and that only at the usual testing frequency of 1000 Hz. It is interesting to observe that this amplifier could also be advertised as having a "200-watt peak" output!

Except for the " ± 1 dB" and "peak" ratings, these are all legitimate and meaningful specifications. It is important that comparisons between amplifiers be made on the same basis, so be sure to read the specifications carefully. Bear in mind that when a speaker manufacturer recommends a driving power for his products, he is referring to continuous power for each channel. In other words, our hypothetical "100 watt" amplifier is really a medium-powered unit, not suitable for use with low-efficiency speakers recommended for use with 30- or 40-watt amplifiers.

The distortion of an amplifier may be 1% at full power, but is normally much less at ordinary listening levels of a watt or less. It is difficult to state categorically that the distortion should be less than "X%." There is not a simple relationship between the audibility of a certain distortion percentage on a sine-wave tone and its effect on program material. It is not uncommon for even low-priced amplifiers to have less than 0.2% distortion at normal operating levels, and many of the better amplifiers have less than 0.1% distortion over a wide range of power outputs. In general, a distortion level under about 0.5% is unlikely to be objectionable, unless accompanied by other deficiencies.

A good amplifier should be able to deliver a useful output over the entire audible frequency range from 20 Hz to 20 kHz. It is normal for distortion to increase at both frequency extremes, but some amplifiers cannot supply more than a small fraction of their mid-range power in the lowest and highest octaves. This may not be a serious fault—if the speakers cut off below 60 Hz there is not much need for undistorted amplifier power at 20 or 30 Hz. However, there is no justification for the amplifier being the limiting factor in a system, so be sure to choose one that can operate effectively over the full range of the speakers.

Power output requirements are established by the speaker efficiency, room size, and your listening habits. Follow the speaker manufacturer's recommendations, remembering the distinction between single-channel continuous power and the IHF Dynamic Power ratings.

The preamplifier should contain, as a minimum, volume and balance controls (or the equivalent in two concentric volume controls, although this is less convenient to use), bass and treble tone controls, and an input selector. Loudness compensation is often provided, to boost the lows at reduced volume control settings. Its absence is no drawback, since tone controls can usually perform the same function. Rumble and scratch filters are rarely needed, and most of them do not have the proper characteristics for most effective results. If you plan to install more than one speaker system, the multiple speaker switching provided on many amplifiers is very convenient. A tape monitor switch is a "must" if you plan to do any serious tape recording.

Remember that an impressive control panel may be a facade for a mediocre amplifier, while some of the finest amplifiers are disarmingly simple in appearance. It is better to invest your money in a basically sound amplifier, with adequate power and low distortion over the full frequency range, than in one offering a host of features that you may never use.

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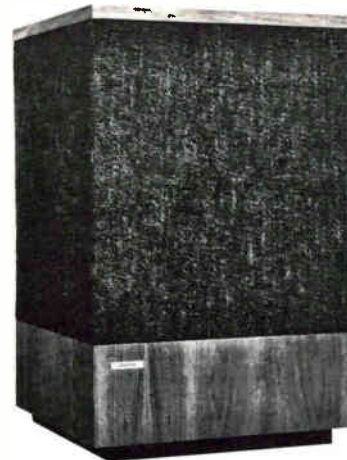
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Speakers

The most difficult choice of all—you will have to depend on listening tests.

UNLIKE other audio components, speakers cannot be evaluated in a purely objective manner. Many researchers have attempted to devise tests which would unequivocally establish the worth of a speaker (as has been done, with fair success, for the electronic portions of the hi-fi system). So far, their efforts have been in vain.

Many aspects of speaker performance can be measured. The problem lies in determining *what* to measure. No one knows exactly what an ideal speaker should sound like! Sonically transporting the performer to the listening room might be very desirable for a soloist or a string quartet, but certainly not for a symphony orchestra. Giving the listener the illusion that he is in the concert hall is another possibility, but the success of this approach is as much a function of the engineer's talents and the listening room acoustics as of the speaker itself. Some say that the ideal speaker should produce an acoustic analog of the electrical input waveform. This is fine—but the acoustic response is still very much a function of the listening room, and of one's position in that room.

In the final analysis, everyone must decide for himself what sort of sound pleases him. There *are* measurable characteristics of a speaker that contribute to one's understanding of it, but they must be supplemented by listening judgment. Audio shows are not too reliable for auditioning speakers, since competitive models are not heard in the same environment. A well equipped dealer's showroom or listening room is better, and your own home is best (once you have narrowed the field of choice to two or three models). Equipment reviews or the advice of knowledgeable friends can be helpful, but even they should not be relied upon exclusively.

The first step in choosing a speaker is to decide on the approximate price. The two speakers should cost nearly as much as the receiver and tuner and amplifier used to drive them. In general, when you pay more than about \$250 to \$300 for a speaker, you are buying a piece of furniture as well. There are some superior sounding speaker systems at very high prices, but their appeal is primarily to advanced hobbyists and especially to highly critical listeners. For most people, there is little sonic improvement to be gained by spending more than about \$500 or \$600 for a pair of speakers.

It can be helpful to listen to some of the higher priced models from different manufacturers, even if they exceed your price range. When you find one that appeals to you, compare it to less expensive speakers from the same manufacturer's line. Usually there is a definite continuity of sound character within a given manufacturer's line, with the less expensive units sacrificing low bass response and sometimes the extreme high frequency response and dispersion characteristics.

Most hi-fi speakers are two-way or three-way systems, in which each speaker handles a portion of the frequency range. In theory, and often in practice, the three-way system is better, but there is no clear dividing line between the two types.

Most bookshelf speakers use fully sealed cabinets, with acoustic-suspension woofers, but recently there has been a return trend to ported enclosures. Except in the lowest bass region, where the acoustic-suspension speakers usually have lower distortion, there is little difference between the two types. Some of the ported systems compensate very

effectively for a slight loss of low bass with an exceptionally smooth upper bass response.

Do not be influenced by the number of speaker units used in a system. One good speaker is worth more than any number of mediocre speakers. Sometimes a number of smaller speakers is used instead of a single large one, because of other design considerations.

Omnidirectional speakers are growing in popularity. Instead of beaming the sound into the listening area, they scatter it around the room, reflecting it from a wall or other surface. Many people like the sense of spaciousness imparted by omnidirectional speakers. Some of the speakers are deficient in the extreme highs, which are absorbed in the room furnishings. This can usually be corrected by the amplifier tone controls, or with the equalizers which are used with some speaker systems.

One of the most noteworthy trends we have observed during the past year or two is the appearance of compact, low-cost speakers with exceptionally smooth, uncolored sound. Several such systems, in the \$70 to \$120 range, can rival or surpass older designs selling for two or three times their price.

A reasonable goal for the high-fidelity system should be to create the subjective impression of listening to a live performance. This implies a sound pressure at the listener's ear similar to that he would have experienced in the concert hall (this is by no means as loud as the original sound in the middle of the orchestra). The best way to prepare to select a speaker is to attend live musical performances. Try to remember what they sounded like when you audition loudspeakers. Notice, for example, that in live music, the bass is not room-shaking, nor do the highs "sizzle," contrary to what some hi-fi buffs seem to think. Be aware of the "ease"—freedom from distortion—and spaciousness of the live performance. This is the quality you should try to simulate with your own system. You won't achieve this goal, but it is possible to come surprisingly close to it.

When listening to a speaker, try to drive it with the amplifier or receiver you plan to use, or one of similar performance. Do not use the tone controls or loudness compensation. Listen to male voices for the heavy or boomy quality that indicates a response peak in the 100 to 200 Hz region. Try several FM stations if you notice this quality, since some stations always seem to impart this quality to their announcers' voices.

Listen for the balance between lows, middles, and highs, with various types of program material. Some speakers seem to project the sound into the room. This usually indicates a mid-range peak (sometimes intentional), which can be tiring in the long run. Other speakers have a depressed mid-range response, giving the sound a withdrawn, or "hole-in-the-wall" character. Both types of speakers have their adherents, although we feel that a flat, neutral sounding speaker is more likely to provide lasting satisfaction.

Tune between FM stations and listen to the hiss. It should sound reasonably smooth, with no definite pitch. Walk from side to side in front of the speaker and observe the peaking of the high frequency hiss components as you pass the axis of the speaker. A good speaker, having wide angular dispersion, shows little of this beaming effect. Omnidirectional loudspeakers are usually quite free of this characteristic.

Percussion instruments, such as triangles, cymbals, and bells, should sound crystal clear—not piercing, which could result from a peaked high-frequency response, or muted and dulled by a lack of highs. Low bass should be felt as much as heard. This is a characteristic of some of the more expensive speakers, but not all of them, by any means. Speakers selling for less than about \$100 rarely have much output below 50 Hz, but that is a surprisingly low frequency from a subjective standpoint and, if reproduced with low distortion, should satisfy all but pipe organ and bass drum devotees.

When you have selected a speaker, or narrowed the choice to a couple of types, try to listen to them in your own home before making a final decision. Any loudspeaker will sound quite different in your home than it did in the dealer's showroom. Most reputable dealers will allow exchange privileges on speakers if you do not find them to your liking in their final environment.

FOUR-CHANNEL STEREO

THE most promising new development in stereo for 1971 is the four-channel (sometimes called "Quadri-phonics") technique. This has been in an experimental phase for some years, but now appears to be on the verge of commercial reality.

The original purpose of adding two more channels was to recreate the "ambience," or reverberant sound of the concert hall. The sound picked up by two microphones near the rear of the hall was recorded on the two added channels and reproduced through two speakers in the rear of the listening room.

It soon became apparent that popular music and electronic music were adaptable to unconventional recording methods, in which each of the four channels could carry a distinctly different portion of the program. This would require a universal four-channel system to have equal amplifier and speaker capability in all channels. A system used only to restore ambience to the sound would require little amplifier power and limited range speakers in the two rear channels.

At present there are no standards, either for recording or playback of four-channel stereo. Several tape recorder manufacturers have introduced four track recorders, and some demonstration tapes have been produced. At least one manufacturer has announced a four-channel amplifier. All of these initial units are relatively expensive, and are intended as an aid in evaluating the merits of the system rather than as final, marketable products.

It is clear that acceptance of four-channel stereo hinges on its compatibility with two-channel stereo in FM broadcasting and in disc recording (there is little problem with tape since four tracks are available both on standard $\frac{1}{4}$ " tape and cassettes). Experimental FM broadcasts have been made using the facilities of two stations, but this is obviously impractical for general use. One system has been demonstrated which allows four channels to be recorded and played back from a conventional two-channel stereo disc, and even to be transmitted over a standard stereo-FM broadcast. A small decoder device is required in the playback system to extract the additional two channels of information. Other systems have been proposed to achieve the same results, and it is too early to know which, if any, will ultimately be accepted as the standard.

One thing appears certain—there *will* be four-channel stereo in 1971, and it *will* be compatible with present two-channel equipment. This means that the four-channel program will be heard as good two-channel stereo on standard stereo receivers, and as mono on single-channel receivers. No one need be concerned about obsolescence of presently owned or contemplated two-channel stereo equipment. The advantages of four-channel stereo are genuine and we have been favorably impressed by the better examples we have heard. Thus, we are willing to predict that on the whole 1971 should be an exciting year for hi-fi enthusiasts!

Receivers

Remember that a receiver is a tuner and an amplifier mounted on a single chassis.

INSTALLING the components of a hi-fi system is usually a simple matter, but the array of interconnecting cables may be unsightly and difficult to conceal. Also, it may not be practical to fit two or three bulky units in a limited space, such as on a bookshelf or end table.

The integrated stereo receiver offers a convenient solution to this problem. It combines a tuner (often both FM and AM), preamplifier, and power amplifier in a single compact unit. The only external connections required are to the speakers and antenna (plus the record player and tape recorder if these are used).

Since a receiver shares a common chassis, cabinet, and power supply among its sections, it is slightly less expensive than separate components of equivalent performance. The elimination of redundant controls, almost inevitable when using separate components, makes its operation simpler and more foolproof. Another benefit of the integrated design is the assured compatibility of signal levels within the system, and a reduced likelihood of faulty or incorrect connections.

Flexibility is not sacrificed in the typical receiver. Virtually all the control functions found on component tuners and amplifiers are retained, including tape monitoring, speaker switching (some can handle three sets of speakers), filters, and headphone jacks. Some of these features are omitted in lower priced units, but most receivers are versatile enough to satisfy the most critical user.

What about performance? The tuner sections of most receivers are fully comparable to good component tuners, in respect to sensitivity, distortion, and stereo separation. The amplifiers are usually in the low-to-moderate power range (10 to 30 watts per channel), although a few of the top-priced models can deliver over 50 watts per channel. Distortion is typically low, and in some receivers is comparable to that of the finest separate amplifiers.

The major performance compromise in most receivers is a somewhat limited low-frequency power handling capability. Space and economic considerations usually restrict the power-supply capacity, which is manifested as substantially increased distortion at full power below about 50 Hz. This

is not a serious problem for many users, but the audio buff with a taste for powerful low bass performance may prefer a separate amplifier. A few of the better receivers have heavy-duty power supplies and are the equal of comparable component amplifiers in every respect.

If there were a major technical advance in hi-fi, comparable to the introduction to stereo, which obsoleted a basic system component, the receiver user would be faced with replacing practically his entire system, while only one part of a separate component system might be affected. This is unlikely to occur, and even the proposed four-channel stereo system should be fully compatible with present equipment. We do not consider possible obsolescence to be a factor in choosing a receiver.

Compact Systems

They are more economical—but they are not as versatile as separate components.

MUCH as the receiver integrates the electronic portions of a music system, the "compact" system eliminates the need to select the other components such as the record player and speakers. Installation has been simplified to the point where connecting the antenna and the speakers is all that is required to place the system into operation.

In a compact system, the record player is built into the top of the receiver. A pair of speakers is supplied, with long cables that plug into the rear of the unit, eliminating the possibility of incorrect speaker phasing. Since the phono cartridge is factory installed, the arm balance and tracking force are preset.

The convenience of the compact system has its price, both in performance and versatility. The speakers are often small, inexpensive models with limited frequency range and power handling ability. The better compacts are available with rather good speakers, sometimes identical to those sold for use in component systems. Amplifier power is limited, but is matched to the requirements of the speakers. Manufacturers rarely specify the amplifier ratings of their compact systems but, in general, they can deliver from 10 to 20 watts per channel at middle frequencies. Low-frequency performance is usually reduced, but is compatible with the speaker design.

The phonograph usually consists of a relatively low-priced record changer with a magnetic cartridge tracking at 2 to 3 grams. The refinements of the better automatic turntables and highly compliant cartridges are not offered in the typical compact system. Most compacts can accept one external program source and many have tape monitoring provisions.

The tuners tend to be of good quality, but for the most part are less sensitive than good component tuners. Most of them lack interstation muting, but automatic stereo switching and tuning meters are in general use. A few compacts include tape cartridge players or cassette recorders.

A compact system should be judged by its sound, without too much concern with the internal characteristics of its tuner, amplifier, and record player. With its inherent inability to be upgraded or modified, the compact is likely to appeal to the non-technical user rather than to the hobbyist who likes to keep pace with new developments. As with any hi-fi system, the ultimate sound is determined by the speakers, and this is clearly reflected in the price range of these systems. The low priced compacts (up to about \$200) have small speakers, and often do not include a tuner. At the other extreme, there are some systems in the \$500 to \$600 range, offering performance fully comparable to that of component systems in the same price bracket.



Tape Recorders

Reel-to-reel still gives best performance, but cartridge machines are more convenient.

TAPE enthusiasts have long felt that the tape recorder would supplant the phonograph as a program source in home music systems. This has not happened as yet, but the sales volume of tape machines is clear evidence of their growing popularity.

A large percentage of tape recorders are bought for casual use, rather than as an integral part of a hi-fi system. In the past, a sizable investment in a tape machine was needed to achieve the quality of a phonograph record, but recent developments in heads, tape coatings, and electronic circuits have made a dramatic improvement in the performance of moderately priced tape decks.

A portable recorder, with built-in or detachable speakers, is suitable for non-critical listening, but the potential of any tape recorder can only be realized when it is integrated with a good hi-fi system. Pre-recorded reel-to-reel tapes are relatively expensive and frequently are inferior to discs in quality. However, one can record FM broadcasts and dub from phonograph records at modest cost, and with little or no audible degradation of quality, using any of several tape decks in the \$250 to \$350 price range.

The $7\frac{1}{2}$ ips tape speed formerly was necessary for a frequency response extending to 15 kHz or higher. A number of tape decks can now achieve this bandwidth at $3\frac{3}{4}$ ips, which halves the cost of tape and makes the tape recorder economically competitive with discs. From a listening standpoint, the principal weakness of tape has been its high hiss level, which is usually much more audible than record noise. The Dolby noise reduction system, universally used in professional recording to gain a 10-dB improvement in signal-to-noise ratio, is now available in a moderate priced tape recorder, and we can expect to see its widespread use in other tape recorders during the months to come. An "add-on" Dolby unit is available for use with older tape recorders.

With the Dolby system, a home recording made at $3\frac{3}{4}$

ips from an FM broadcast usually cannot be distinguished from the original program. There should be little need for $7\frac{1}{2}$ ips operation, except to play tapes made at that speed, or for ease of editing. Some machines also have a $1\frac{1}{4}$ ips speed, but the frequency response of most reel-type recorders at that speed is suitable only for voice recordings.

Lower priced recorders have only two heads, one for erasing and the other a combined recording and playback head. Many of the electronic circuits are common to recording and playback functions, so that these machines cannot record and play back at the same time. It is preferable to use a three-head machine, which has separate heads and electronics for recording and playback functions. Most amplifiers and receivers have a tape monitor switch which allows a selected program to be recorded and played back simultaneously (with a fraction of a second delay). In this way any malfunction or incorrect level setting in the recorder can be detected immediately. Special effects are also possible with a three-head machine, including echo and copying one track on to the other with added material. If this feature is important to you, look for a machine with built-in switching rather than the external cable patching required by some recorders for special effects.

Many tape recorders use a single motor to drive both the capstan and the reels. Sometimes a separate motor is used for the reels, and in many of the better recorders three motors are used—one for the capstan and one for each reel. Three-motor machines usually have lower flutter and faster rewind than single-motor machines. However, some of the finest tape recorders have a single motor. Quality of construction is more important than the number of motors used.

Automatic tape reversal is featured on some recorders. This eliminates the annoyance of having to interchange reels half way through a program. Most reversing mechanisms require adding a strip of conducting foil to the tape at the desired point; some are operated by recording a subsonic signal on the tape, and one senses the absence of a recorded program to actuate the reversing mechanism. Virtually all automatic reversing machines operate in this manner on playback only, so that it is still necessary to interchange reels manually when making a recording.

Level-indicating meters are found on practically all recorders. Experience with a specific machine is necessary to determine a suitable recording level, due to the wide differences in response characteristics in meters used on different makes of machines (few use real "vu meters," whose response is well defined).

One of the qualities distinguishing a good recorder from a poor one is low flutter. This is a rapid speed fluctuation, which can muddy the sound or, in severe cases, give it a "gargly" quality. Most recorders which would be seriously considered for use in a good home hi-fi system have less than 0.15% flutter, which is usually not objectionable, and many have less than 0.1%.

Handling tape reels and loading a recorder is undeniably less convenient than handling phonograph records. This problem has been effectively eliminated by tape cartridges, which are merely plugged into a transport mechanism. The four- and eight-track cartridges used in automobile players can be played in home cartridge players, but have not received wide acceptance in hi-fi systems since it is not convenient to make recordings on them. Cassettes, however, are growing rapidly in popularity and it appears likely that the cassette will ultimately rival phonograph records, as the open-reel tape never managed to do.

Cassettes are small, enclosed reel-to-reel tape packages, using a narrow tape with four tracks operating at $1\frac{1}{4}$ ips. In spite of their slow speed (which allows up to 90 minutes of recorded program on a single cassette), the frequency response achieved by the better cassette players and recorders is compatible with hi-fi music requirements. A number of cassette decks have a record/playback frequency response extending beyond 10 kHz, sometimes as high as 12 to 13 kHz.

The cassette format combines most of the features of the reel-to-reel tape machine, including fast-forward and rewind operation, with ruggedness and ease of handling surpassing that of phonograph records. It has a few basic drawbacks, however. The slow speed results in higher flutter

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than is found on most reel machines, due to the mechanical tolerances of the drive mechanism, and the narrow track width degrades the signal-to-noise ratio, compared to open reel machines using standard 1/4" tape. Also, cassette tapes cannot be conveniently edited and spliced.

The flutter problem can be solved, or at least minimized, by better mechanical construction, although this inevitably raises the price. Many cassette decks selling for over \$100 have less than 0.25% flutter, which is tolerable if not exactly of hi-fi quality. Some of the best units have as little as 0.12% flutter, a satisfactory figure for home use.

Fortunately, the *Dolby* noise reduction system, applied to cassette recorders, can bring their quality to full hi-fi standards. This year several manufacturers will release cassette recorders with built-in *Dolby* circuits. Judging from advance demonstrations, these units will compete strongly, from a quality standpoint, with open-reel ma-

chines in the same price range (around \$250). It is reported that the pre-recorded cassette tapes will soon be available with *Dolby* processing, so that the advantages of the system will be applicable to commercially produced as well as home recordings.

For the serious tape hobbyist, who wishes to edit his tapes and will not accept performance compromises, there are several fine reel-to-reel machines, selling for \$500 or more, which are capable of fully professional quality. It is unlikely that any cassette machine, however refined, will meet the standards of these people.

For live recording, as distinguished from off-the-air or disc copying, good microphones will be required. Although some tape recorders are supplied with fairly good microphones, almost any recorder can be improved by the use of a high quality microphone. A pair of dynamic microphones, costing between \$30 and \$75 each, is a worthwhile investment.

POWER BANDWIDTH

It is evident that many persons are unfamiliar with the exact meanings of some of the technical terms used in audio discussions. The term "power bandwidth," often given as one of the amplifier's specifications, appears to be particularly confusing. Power bandwidth is usually expressed as a frequency range, for example, "20 to 20,000 Hz." A more complete statement of this specification, however, would add (for example) "referred to 20 watts output and at 2 percent distortion."

To make a power-bandwidth measurement, a 1000-Hz test tone is fed into the amplifier under test, which is driven to its rated power output at a given distortion level, say, 2 percent. Then the test signal's frequency is decreased until the amplifier's output falls to half its original power at the rated distortion level. The low frequency at which this occurs establishes the lower bandwidth frequency. The half-power point at which the same distortion occurs is also determined (in the same manner) for high frequencies. The high-frequency figure together with the low-frequency figure define the power bandwidth. In the example cited, if a 20-watt amplifier (20 watts r.m.s. at 2 percent distortion) can deliver 10 watts at 20 and 20,000 Hz with 2 percent distortion, the amplifier's power bandwidth is 20 to 20,000 Hz.

Obviously, it is desirable to have as wide a power bandwidth as possible in a high-fidelity amplifier, preferably one spanning at least the 20 to 20,000 Hz range. Some amplifiers have bandwidths far exceeding this range; others may have power bandwidths of 50 to 10,000 Hz or even less. A limited power bandwidth does not necessarily mean that the amplifier cannot deliver useful power ("useful" for a particular speaker system and listening room) at the frequency extremes. If one assumes that, for satisfactory reproduction, 10 watts is required at 20 and 20,000 Hz, sufficient power might be obtained from a 10-watt amplifier with a 10 to 40,000 Hz bandwidth, a 20-watt amplifier with a 20 to 20,000 Hz bandwidth, or a 40-watt amplifier with a 50 to 10,000 Hz bandwidth. Although mid-range power from the three amplifiers varies over a four-to-one range, it is possible that their power outputs are equal at the frequency extremes.

In the example given, the choice of 2 percent as the rated distortion level is purely arbitrary. Under the terms of the present IHF standard, a manufacturer is free to rate his amplifier's power at any distortion level he wishes. Some of the best amplifiers are rated at 0.5 percent distortion or less, and inexpensive amplifiers might be rated at 3 to 5 percent. If the manufacturer rates his unit at less than 2 percent distortion, the amplifier will generally show little difference in power bandwidth between the less than 2 percent and the 2 percent distortion levels. On the other hand, a mediocre amplifier may, in effect, have no power bandwidth at 0.5 percent distortion, simply because it has at least that much distortion at all power levels.

While all IHF members usually quote power figures as a "dynamic measurement" at distortion figures of less than 2% (sometimes as low as 0.1%), it is surprising to find that EIA member companies usually quote power figures at the "peak music power" at 5% distortion. In some places in this Directory you will find EIA figures quoted.

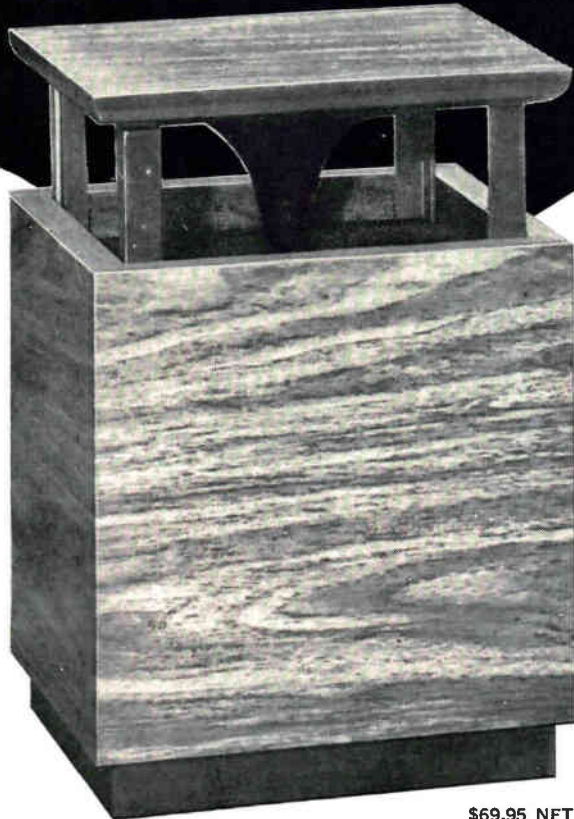
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If you have any additional questions about products described in this Directory, do not hesitate to write direct to the manufacturer. He will be glad to be of help.

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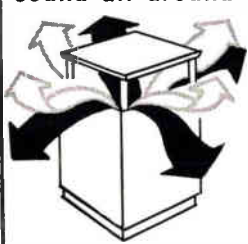
from Alpha to Omni



\$69.95 NET

OM-1 OMNI SPEAKER SYSTEM. We've been in it from the beginning... at point ALPHA in time. Our engineers took audible sounds—electronically produced, and made them clear, high fidelity tones. We participated in the design and engineering of speakers to create the world's finest stereophonic sound reproduction. Now, we have reached OMNI... OM-1 OMNI SPEAKER SYSTEM produces sound uniformly for any part of the room. It is "omni-directional," (radiates 360 degrees). This new concept radiates both direct and reflected sound deftly, creating a real depth sensation. You can place this OMNI speaker anywhere from the middle of the room to a corner bookshelf. The UTAH Omni Speaker is a wonderful new way to enjoy music.

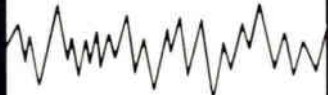
sound all around



SPECIFICATIONS

Woofer; 8" diameter, cloth roll suspension, 1 $\frac{3}{4}$ pound magnet structure, 1" voice coil. Tweeter; 3" diameter, co-axially mounted, Alnico V magnet. Crossover frequency; 4,500 Hz. Cabinet; 9 $\frac{3}{4}$ x 9 $\frac{3}{4}$ x 14 $\frac{1}{2}$ " high, durable laminated walnut finish. Power; 30 watts peak, (15 watts program). Response, 35/18,500 Hz. Impedance, 8 ohms. Shipping weight, 15 pounds.

utah



HUNTINGTON, INDIANA 46750
CIRCLE NO. 59 ON READER SERVICE CARD

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STEREO HI-FI DIRECTORY

Send for **FREE BOOKLET: "Why's and How's of Equalization"**



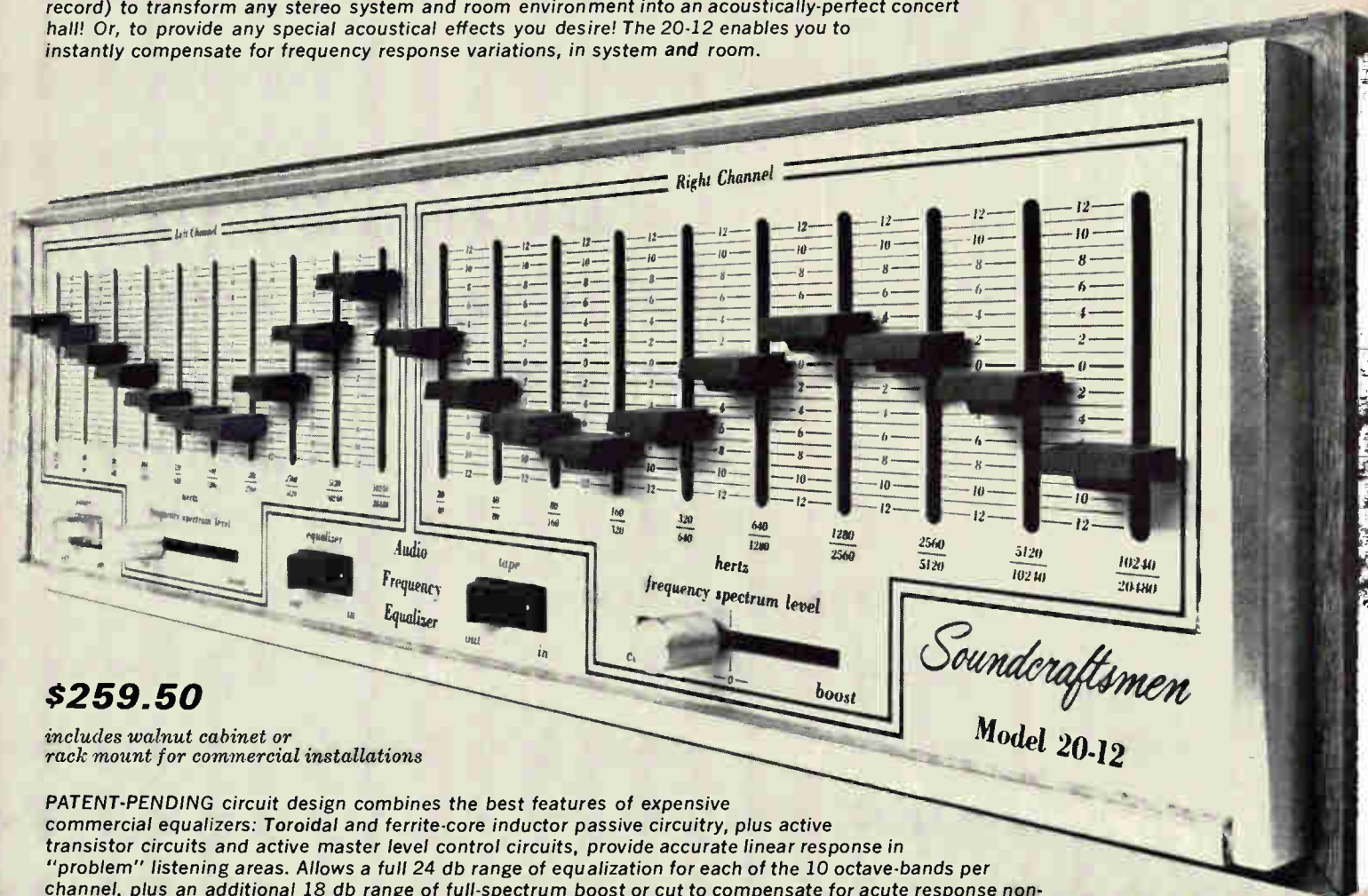
Soundcraftsmen presents...

the new component that is a "must" with every fine stereo system...

the new **Audio Frequency Equalizer**

guaranteed to improve any stereo system and
guaranteed to improve any listening area environment!

Now, in a few minutes, you can accurately "tune" the frequency response of your stereo system and room environment to a flat ± 2 db! All you need are your own ears and the 20-12 (with its step-by-step instruction record) to transform any stereo system and room environment into an acoustically-perfect concert hall! Or, to provide any special acoustical effects you desire! The 20-12 enables you to instantly compensate for frequency response variations, in system and room.



\$259.50

includes walnut cabinet or
rack mount for commercial installations

PATENT-PENDING circuit design combines the best features of expensive commercial equalizers: Toroidal and ferrite-core inductor passive circuitry, plus active transistor circuits and active master level control circuits, provide accurate linear response in "problem" listening areas. Allows a full 24 db range of equalization for each of the 10 octave-bands per channel, plus an additional 18 db range of full-spectrum boost or cut to compensate for acute response non-linearities due to deficiencies in the entire recording-reproducing process.

SPECIFICATIONS and SPECIAL FEATURES

TOROIDAL and ferrite-core inductors, ten octave-bands per channel.

FREQUENCY response: $\pm \frac{1}{2}$ db from 20-20, 480 Hz at zero setting.

HARMONIC DISTORTION: less than .1% THD.

IM DISTORTION: less than 0.1% at rated input(s).

SIGNAL-TO-NOISE RATIO: greater than 65 db at rated input(s).

INPUT IMPEDANCE: 100K ohms or greater.

OUTPUT IMPEDANCE: less than 10K ohms.

RANGE: 12 db boost and 12 db cut, each octave.

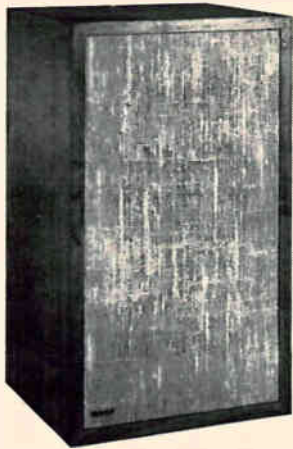
MASTER OUTPUT LEVEL: "Frequency-spectrum-level" controls for left and right channels, continuously variable 18 db range, for unity gain compensation from minus 12 db to plus 6 db.

MAXIMUM OUTPUT SIGNAL: variable Master "frequency spectrum level" Controls allow adjustment of optimum output voltage for each channel, to exactly match amplifier capability, up to 6 v RMS.

SIZE: designed to coordinate with receivers, comes installed in handsome walnut-grained wood receiver-size case, (5 $\frac{1}{8}$ " x 17 $\frac{3}{4}$ " x 11").

WARRANTY: 2-year parts and labor.

Soundcraftsmen: 1320 E. Wakeham Ave., Santa Ana, Ca. 92705, Ph: (714) 835-1087
CIRCLE NO. 49 ON READER SERVICE CARD



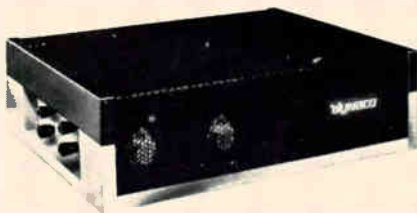
"...quite probably the best buy in high fidelity today."

—the Dynaco A-25 speaker (\$79.95 assembled only)

from THE STEREOPHILE, Box 49, Elwyn, Pa. 19063

"...(sonically) we cannot see how any preamp, present or future, could surpass the PAT-4."

(\$89.95 kit, \$129.95 assembled)



"...makes most loudspeakers sound better."

The Dynaco Stereo 120 power amplifier
(\$159.95 kit, \$199.95 assembled)

These opinions from *The Stereophile* are even more meaningful since it is the most respected journal in the audio field, whose sole source of revenue is from its subscriptions.

Over the years Dynaco has proved faithful to its philosophy of providing outstanding per-

formance at a most moderate cost. Proper initial design eliminates the need for model changes. The savings achieved are passed on to you. What is "state-of-the-art" when you acquire it will still meet contemporary performance standards years later.

Send for literature or pick some up at your dealer where you can see and hear Dynaco equipment.

dynaco inc.

3060 JEFFERSON ST., PHILA., PA. 19121

IN EUROPE WRITE: DYNACO A/S, HUMLUM, STRUER, DENMARK



Amplifiers

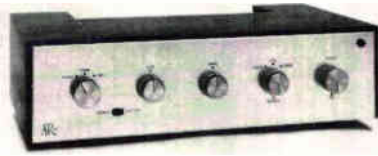


Power Amplifiers
Preamplifiers
Integrated Amplifiers

ACOUSTIC RESEARCH

AR Stereo Amplifier

Integrated design with 60 W/ch continuous sine-wave/channel into 4 ohms (50



W/ch into 8 ohms & 30 W/ch into 16 ohms). Dist. characteristics including phono amp: IM 0.25%; HD 0.5% from 20-20,000 Hz at any power up to max. rating. Response 20-20,000 Hz ± 1 dB. Has mag. phono, tuner & tape playback inputs. Input sensitivity: mag 2 to 5 mV adjustable at 1 kHz; tape playback & tuner inputs 200 mV. Has built-in null detector for channel balancing. With wood cover: 15 1/2" w. x 4 1/2" h. x 10" deep. With black aluminum cover . . . \$250.00 With oiled walnut wood cover . . \$265.00

ALLIED

429 Integrated Amplifier

Stereo design; 22 W/ch (IHF) at 4 ohms (12 W/ch r.m.s.); HD 1% at rated output.



Response 20-35,000 Hz ± 3 dB. Input sensitivity: mag. phono 2.5 mV; tuner, tape 200 mV. Has tape monitor input. With metal case. 4 3/8" x 13 1/2" x 2 5/8" d. 14B5018U \$109.95 14B5004X Oiled walnut cabinet optional.

995 Integrated Stereo Amplifier

Solid-state with all-silicon transistors; has complete tape-recording facilities. Has 5-



position switch for a.c. power, main speakers, speakers off, remote speakers, and main plus remote speakers. 100 W/ch (IHF) at 4 ohms; HD 1% at rated output; IM distortion less than 2% at 45 W/ch, 8 ohm load. Response 30-50,000 Hz ± 3 dB; power bandwidth 35-50,000 Hz

1971 EDITION

at 1% HD. Input sensitivity: 3.5 mV on mag. phono; 200 mV on aux. and tape monitor. 5 1/2" x 16" x 13 3/4".

14A5521U. 995 with metal case \$199.95 13A5003X. Optional walnut wood case. \$19.95

AUDIO RESEARCH

The audio products division of Electronic Industries Inc. has been acquired by Audio Research which is now marketing the products.

SP-2 Stereo Preamplifier

Response 20-20,000 Hz ± 1 dB; dist. 0.01% @ 5 V r.m.s. output & at 1000 Hz;



hum: aux. 90 dB below 1 V input; sensitivity for 1 V output: mag. phono 2 mV; aux. 100 mV. Max. output 30 V r.m.s. into hi-Z. (5 V r.m.s. into 10,000 ohms). Tube design. Size 15 1/8" x 5" x 13 1/2" d. \$395.00

SP-1A Stereo Preamp

Same as SP-2 except with electronic voltage regulation & additional variable equalization \$750.00

Dual 50 Stereo Power Amp

Features 50 W/ch r.m.s. from 30-15,000 Hz; response 25-20,000 Hz ± 1 dB at rat-



ed output; dist. 0.1% at 50 W & 1000 Hz. Hum & Noise -90 dB. Input sensitivity 1.15 V r.m.s. for 50 W output. 4-16 ohm output. Tube design. \$440.00

M60B Mono Power Amp

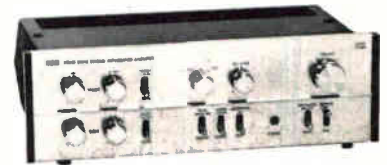
Tube design; 50 W continuous from 20-20,000 Hz; response 20-20,000 Hz ± 1 dB; HD 1% 30-20,000 Hz at rated power. Input sensitivity: 1.15 V; output 4-8-16 ohms. 9" x 10" x 7" h. \$199.50 M60A Same but has added 0.75V at 20 mA output for driving preamp . . \$219.50

BIC / LUX

71/6A Integrated Stereo Amp

Features separate bass & treble tone con-

trols working in combination with slope selector switches (bass 250 or 500 Hz & treble 1500 or 5000 Hz); main/remote speaker facilities; 20 W/ch r.m.s. with both channels driven into 8 ohms & 0.3%



HD (30 W/ch into 4 ohms & 0.4% HD). Response 10-50,000 Hz; power bandwidth 15-30,000 Hz @ 0.5% HD. Sensitivity: phono 4 mV; tuner, aux., tape 100 mV. 16 1/2" x 5" x 9" d. Has extruded front panel with end bells \$179.00

71/4A Integrated Stereo Amp

Features separate bass & treble tone controls working in combination with slope selector switches (bass 150, 300, or 600 Hz & treble 1500, 3000, or 6000 Hz). main/remote speaker facilities; 75 W/ch r.m.s. with both channels driven into 8

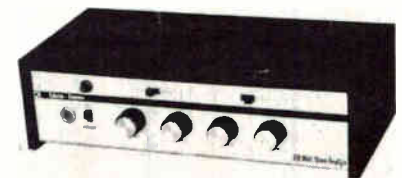


ohms & 0.3% HD (100 W/ch @ 4 ohms & 0.4% HD). Response 10-50,000 Hz; power bandwidth 15-30,000 Hz @ 0.5% HD. Sensitivity: 3 3/4 ips tape 1.6 mV; 7 1/2 ips tape 1.8 mV, phono high 2 mV; phono low 8 mV; aux. & tape 100 mV. Has extruded front panel with end bells. 18 1/2" x 6" x 12 1/2" d. \$337.00

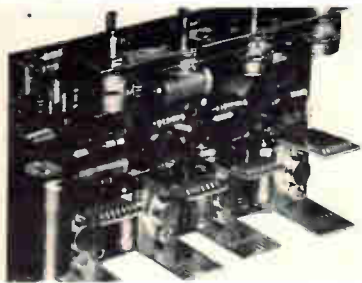
CALECTRO-AMPEREX

Line of eight modular solid-state amplifiers, including low-power mono units, guitar amplifier modules with tremolo, two stereo amplifier modules, and stereo magnetic phono preamp module. Universal, wood-grain finish cabinet/chassis can be used to house all units.

R1-120 20 W (r.m.s.) stereo amplifier



1 Amplifiers



module. \$39.95
 R1-125 Stereo magnetic preamp module . . . \$14.95
 R2-120 Power transformer & hardware kit . . . \$11.95
 R2-900 Universal cabinet and chassis. . . \$11.95

CROWN

D-150 Stereo Power Amplifier

120 W/ch (IHF) dynamic power at 8 ohms (200 W/ch at 4 ohms); 75 W/ch continuous at 8 ohms (125 W/ch at 4 ohms). Response 4-100,000 Hz ± 0.75 dB at 1 W with 8 ohms; power bandwidth 20-20,000 Hz; IM dist. 0.1% at any power level; 4-16 ohm output. Sensitivity 1.2 V for 75 W at 8 ohms. 17" x 5 1/4" x 9" d. \$429.00
 5-D Walnut cabinet \$37.00

IC-150 Stereo Preamp

Features seven inputs (2 phono & 5 high level); 2 tape monitors; 12 dB/octave



scratch filter; 6 dB/octave rumble filter; IM dist. 0.01% at 2.5 V output. 17" x 5 1/4" x 8 1/2" d. \$239.00
 5-C Walnut cabinet \$37.00

DC300 "Lab Standard" Power Amp

Solid-state design; 210 W/ch dynamic power at 8 ohms (400 W/ch at 4 ohms);



190 W @ 8 ohms continuous sine-wave (340 W/ch @ 4 ohms). Response 0-20,000 Hz ± 0.1 dB @ 150 W, 8 ohms (0-100,000 Hz ± 0.5 dB @ 1W). IM dist. 0.1% for rated output. Output 4-16 ohms. Sensitivity 1.75 V for full output. 19" standard rack width. 7" h. x 8 3/4" deep. \$685.00
 7-C. Walnut enclosure \$39.00

DYNACO

Mark IV Mono Power Amplifier Kit

40 W continuous sine-wave power, up to 80 W peak; less than 1% IM distortion at



40 W; frequency response ± 0.5 dB from 10 Hz to 40 kHz; sensitivity 1.3 volts r.m.s. input for 40 watts output; output impedances are 4, 8, and 16 ohms; tube complement: 2 EL34, 7199, GZ34, selenium rectifier; over-all size 5" x 14" x 6 1/2".

Mark IV Kit \$59.95
 Mark IV Factory wired \$79.95

Stereo 35 Power Amplifier Kit

17.5 W/ch (continuous sine wave); 22.5 W/ch dynamic power; IM dist. less than



1% at 17 W; response 10-40,000 Hz ± 1 dB; sensitivity 1 V for 17.5 W output; damping factor 10; hum & noise -80 dB; 8 & 16 ohm outputs; tube complement: 2-7247, 4-6BQ5, & 2 silicon rect.; 13" x 5 1/2" x 4" h.; with case; kit \$59.95
 Factory wired \$79.95

Mark III Mono Power Amplifier Kit

Power output 60 W continuous sine wave up to 140 W peak; frequency response 6-60,000 Hz within 1/2 dB at 60 watts; sensitivity 1.6 volts r.m.s. input for 60 watts out; IM distortion less than 1% at rated output; damping factor 15; includes patented Biaset for non-critical balancing control; matched set of KT88 power output tubes; other tubes are 6AN8, GZ34, selenium rectifier; power socket for preamp; printed circuit boards; 4, 8 & 16 ohm output imp.; over-all size 9" x 9" x 6 3/4".

Mark III Kit \$79.95
 Mark III Factory wired \$99.95



Mark III-70 4-8-16 ohm & 70.7 volt output. Kit \$84.95
 Factory wired \$104.95
 Mark III-500 500 or 125 ohm output only. Kit \$89.95
 Factory wired \$109.95

Stereo 70 Power Amplifier Kit

Two power amplifiers 35 W continuous sine-wave power each both channels



driven; full 70 W on mono operation; printed circuit board; tube complement: 7199 driver, push-pull EL34's; frequency response ± 5 dB 15-40,000 Hz; IM distortion less than 1% at 35 watts; sensitivity

1.3 volts r.m.s. input for 35 watts output; 4, 8 & 16 ohms; estimated time of assembly 4-6 hours.

Model 70 Kit \$99.95
 Model 70 Factory wired \$129.95

PAM-1 Mono Preamp Kit

Six inputs: high and low level magnetic phono, tuner, TV, tape, plus option of



tape head, mic or extra phono position; two outputs, low impedance (1000 ohms), and tape output; equalization for RIAA, LP, 78 rpm records; tape A-B monitor switch; separate bass and treble controls with up to 15 dB of boost or cut at 30 Hz and 15 kHz; loudness control with switch; IM distortion under .05% at 1.5 volts output; noise level less than 3 microvolts equivalent input noise on RIAA position; frequency response 10 Hz to 100 kHz, ± 1 dB; d.c. filaments; tube complement: 2-12AX7 or ECC83, selenium rectifier; 4 a.c. outlets, 2 switched; scuff-proof and washable; 12" x 6" x 2 3/4"; 7 lbs.; preassembled printed-circuit board. Required power: 200 to 400 V d.c. @ 4 mA, 6 V a.c. @ 0.75 A.

Kit \$34.95
 Factory wired \$59.95
 PM-1 Panel mounting kit \$ 2.95

PAS-3X Stereo Preamp Kit

Inputs for 3 low level stereo and 4 high level stereo; controls for bass, treble, vol-



ume, balance, blend, tape monitor switch, loudness compensation, feedback scratch filter; tone controls out of circuit in "flat" position; RIAA equalization; gain: 60 dB at 1000 Hz on RIAA, 20 dB 20-20,000 Hz at high level inputs; d.c. filament supply; tube complement: 4-ECC83, 12X4 rectifier; 13" x 8" x 4"; kit \$ 69.95
 PAS-3X/A Factory wired \$109.95
 PAS-2X Kit (Same as PAS-3X except styling) \$ 59.95
 PAS-2X/A Factory wired \$ 99.95
 PM-3 Panel mounting kit for PAS-2X \$4.95

PK-30 Deluxe panel & knob kit (same as on PAS-3X) for modernizing PAS-2X units \$ 13.95

SCA-35 Stereo Control Amp Kit

Combines dual-channel preamps & power amps; 17.5 W/ch continuous sine-wave power; response 20-20,000 Hz $\pm .25$ dB; IM dist. less than 1% at 17 W;



has 7 pairs inputs: mag. phono, low & high levels; ceramic phono; tape head; radio; tape; and spare; controls; selector;

STEREO HI-FI DIRECTORY

volume, balance, bass, treble, stereo/mono, loudness, on-off, filter; sensitivity 2.5 mV at tape head, 4 mV mag. phono, 1 V at high-level inputs; 8 or 16 ohm outputs; 13" x 10" x 4"; with cabinet.

Kit\$ 99.95
Factory wired\$139.95

PAT-4 Stereo Preamp

Features special tone-control circuit (out of circuit in "flat" position); rumble filter



sw.; high-freq. filter @ 7 kHz, 10 kHz, and 15 kHz plus a flat position. Response 5-100,000 Hz ± 0.5 dB; HD 0.1% @ 3 V output from 20 to 20,000 Hz; 1M dist. 0.1% at 3 V output; noise 70 dB below 1 mV cartridge input. 600 ohm output; front-panel input and output jacks; independent bass & treble controls for each channel. 13" x 8" x 4".

Kit\$ 89.95
Wired\$129.95

120 Stereo Power Amp

60 W/ch into 8 ohms continuous sine wave, both channels driven; response 5-

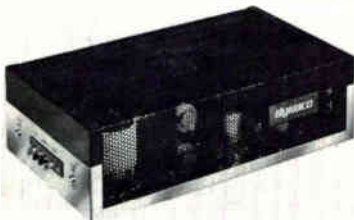


100,000 Hz; power bandwidth at 0.5% HD 5-50,000 Hz; 1M & harmonic dist. less than 0.5% at any power level; channel separation 70 dB from 20-20,000 Hz; noise 95 dB below rated output (unweighted). Regulated power supply. Input sensitivity 1.5 V for 60 W output. 13" x 10 1/2" x 4 1/4".

Kit\$159.95
Wired\$199.95

Stereo 80 Power Amp

With both channels operating simultaneously & 8-ohm loads, power output is



40 W/ch with less than 0.5% HD from 20-20,000 Hz. Response 15-50,000 Hz ± 0.5 dB; power bandwidth 6-50,000 Hz at 0.5% HD; 1M dist. 0.1% at any power figure. Input sensitivity 1.3 V. Each amp supplied with universal power supply for 100, 120, 220, or 240 V at 50-60 Hz line operation. 13 1/2" w. x 4 1/4" x 9" d.

Kit\$119.95
Factory wired\$159.95

SCA-80 Integrated Amp

Combines Stereo 80 power amp with preamp circuitry. Input sensitivity for phono 3 mV, high-level 0.13 V. Has mag. phono and special level inputs & 3 high-level inputs including tape monitor & tape output. Preamp specs similar to PAT-4 but with different control arrangement, front-panel headphone output, and 1971 EDITION



speaker selector switch. Universal power supply as in Stereo 80.

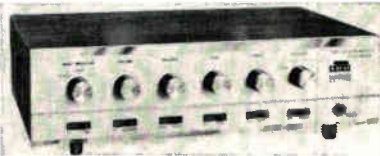
Kit\$169.95
Factory wired\$249.95

Note: 4- and 16-ohm load operation satisfactory with all units.

EICO

"Cortina" 3070 Stereo Control Amp

35 W/ch dynamic power (IHF) @ 4 ohms (25 W/ch into 8 ohms). All silicon



solid-state design without transformers. Response 5-100,000 Hz ± 1.5 dB (8-60,000 Hz ± 0.5 dB); rise time 4 μ s; HD 0.8%; hum & noise -72 dB; channel separation 50 dB. Input sensitivity: mag phono 4.2 mV & 270 mV for all others; damping factor 30; 1M dist. 2% @ 8 ohms & full power (1% @ 8 W/ch). Has all conventional controls. Supplied with cabinet. 3 1/8" x 12" x 7 1/4".

Kit\$ 99.95
Wired\$139.95

"Cortina" 3150 Stereo Amp

75 W/ch dynamic power (IHF) into 4 ohms (43 1/2 W/ch into 8 ohms). Re-



sponse 10-50,000 Hz ± 1.5 dB; HD 0.25% from 50-10,000 Hz & 35 W/ch continuous sine-wave power; 8 ohm load. Sensitivity 4.7 mV for mag. phono, 280 mV for all others. Power bandwidth 20-20,000 Hz @ 0.5% dist.; continuous sine-wave power 50 W/ch into 4 ohms & 35 W/ch into 8 ohms. Output 4 to 16 ohms. 14 1/2" x 3 3/8" x 9" d.

Kit\$149.95
Assembled\$225.00

"Cortina" 3080 Integrated Amp

Solid-state design; 16 W/ch IHF dynamic power into 4 ohms (11 W r.m.s. into 8



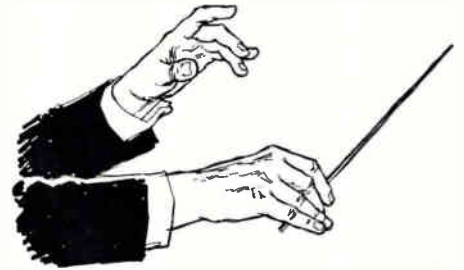
ohms). Response 20-20,000 Hz ± 3 dB; HD 0.75% at 1 kHz & 8 W output (0.4% at 4 W). Input sensitivity 3.8 mV mag. phono, 300 mV at all other inputs. Damping factor 30 dB min. 1M dist. 1.7% at 5 W. 50/60 Hz operation. 3 1/8" x 12" x 6 3/8". With vinyl-clad metal cabinet.

Kit\$69.95
Assembled\$109.95

ELECTRO-VOICE

E-V 1244 Control Amplifier

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What would happen to a **IC 150** preamplifier design, if the design engineer could free himself from stereotyped ideas and start fresh with only a list of customers' requests? Well, at CROWN that has just happened, and the result is the IC150, an exciting "new concept" control center with simplified circuitry, controls that are easy to understand and use, several exclusive features, unsurpassed quality, and - to top it all off - a lower price tag.

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1 Amplifiers

32½ W/ch dynamic power with 4 ohm load, both channels driven. Stereo design. Frequency response 20-20,000 Hz ± 1.5 dB; HD 1% at rated power 4-16 ohms



output. Has computer-type indicator lights indicating input source; inputs: mag. phono, tuner, aux., high-level tape. Has all conventional operating controls plus speaker "on-off" and headphone jack. 3⅝" x 8¼" x 10¼" d. With cabinet\$132.30

FISHER

TX-2000 Control Amplifier

Integrated stereo design; dynamic (IHF) power 60 W/ch @ 4 ohms (50 W/ch continuous sine wave @ 1000 Hz); HD 0.5% @ 1000 Hz at rated output & IM 0.8%. IHF power bandwidth 22-24,000 Hz. Sensitivity: phono 2 mV & 7.5 mV; tuner 200 mV; tape head 1.8 mV; aux. 1 & 2 200 mV; monitor 250 mV. Has 3-pos. speaker selector; 3-stage high filter; loudness contour; 6-pos. program selector; 4-pos. tape monitor selector; switchable center-channel power output; separate mono/stereo indicators; microphone input. 15½" x 4⅞" x 12¼" d. ...\$349.95
50UW Walnut cabinet\$22.95

TX-50 Integrated Stereo Amp

Features 26 W/ch dynamic power (IHF) at 8 ohms (20 W/ch continuous sine wave). Has main/remote speaker sw. 15½" x 4⅞" x 9" d.\$149.95
60UW Walnut cabinet\$19.95

HARMAN-KARDON

"Citation" 11 Stereo Preamp

Preamp control center with audio equalizers instead of conventional tone controls. Provision for two tape recorders and two monitoring facilities. Has speaker selector switch and two low-impedance headphone receptacles. Response 1-250,000 Hz ± 0.5 dB.

Factory wired\$295.00
Kit\$225.00
Walnut cabinet\$ 29.95

"Citation" 12 Stereo Power Amp

Power amplifier with 60 W/ch r.m.s., with both channels driven simultaneously into 8 ohms; THD 0.2% from 20-20,000 Hz at full power. Features dual power supply. IM dist. 0.15% at rated output. Hum & noise, -100 dB at 120 watts. Response 5-75,000 Hz ± 0.5 dB; power bandwidth 5-35,000 Hz.

Factory wired\$295.00
Kit\$225.00

HEATH

AA-14 Integrated Stereo Amp

Output 15 W/ch dynamic power; re-



sponse 15-60,000 Hz ± 1 dB; separation 45 dB. Input sensitivity; phono 4.5 mV, tuner & aux. 300 mV. Has 6-position source switch (mono & stereo phono, tuner, and auxiliary); phone jack; speaker switch; 4, 8, and 16 ohm output. 9¾" d. x 3¼" h. x 12". Kit AA-14 (less cab. for custom mounting)\$67.95
AE-35 Beige metal cabinet\$ 3.50
AE-25 Walnut veneer cabinet ...\$ 9.95

AA-15 Integrated Stereo Amplifier

Similar in design & performance to Mod-



el AR-15 AM-FM stereo receiver. 16¾" x 4¾" h. x 12½" d.
AA-15 Kit (less cab.)\$179.95
AE-18 Walnut cabinet\$ 19.95

AA-32 Integrated Stereo Amp

Features 16 W cont. sine-wave, 20 W dynamic power. Response 30-30,000 Hz



± 1 dB. HD 2% at rated output; IM distortion 3% at rated output. Has 4 stereo inputs, mag. & ceramic cartridges, and tuner & auxiliary with complete controls, two push-pull power output stages and two 4-stage preamps. 4, 8, and 16 ohm outputs. 13¾" w. x 4⅞" h. x 9¾" d. Kit\$39.95

HITACHI

1A-1200 Integrated Amp

Features 120 W total (IHF) dynamic power divided into 4 separate channels

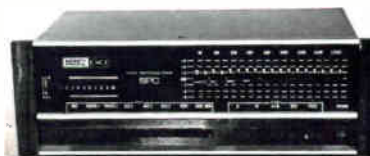


30 W ea. Front panel sw. selects 4 separate channels; 2-60 W, 1-120 W, or 2-30 W plus a 60 W as a center channel; HD 0.08% at rated output. Has tone control defeat sw. and preamp & power amp can be operated separately. Response 20-50,000 Hz\$595.00

INFINITY

SPC Preamp

Signal-processing center stereo preamp with 9 octave filters (tone controls); re-



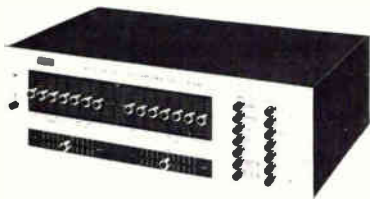
sponse through phono 10-100,000 Hz; IM & HD through phono input 0.01%; output voltage 6 V r.m.s. Filters cover 50-12,800 Hz. With metal case with rosewood panels\$499.50

STEREO HI-FI DIRECTORY

JVC

5011 Stereo Preamplifier

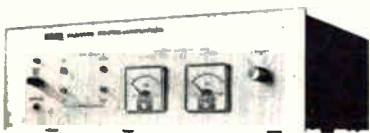
Features SEA (Sound Effects Amplifier) control system; provides 7-zone tone ad-



justment for each channel within ± 10 dB in 2-dB steps at 60, 150, 400, 1000, 2000, 4000, 6000, and 15,000 Hz; response aux. 10-100,000 Hz ± 0.5 dB. Output 3 V (10-70,000 Hz); input for 1.5 V output: aux., tuner 170 mV; mag. phono 3 mV (100,000 ohms); mag. phono 1 mV (50,000 ohms). tape head 1.2 mV; crystal cartridge 120 mV; mic 2 mV. Power input 100-240 V, 50/60 Hz. 6" x 19" x 13 1/2" d.\$699.95

5012 Stereo Power Amp

80 W/ch (IHF) dynamic power; 60 W/ch continuous power; HD 0.5% at 60 W/ch

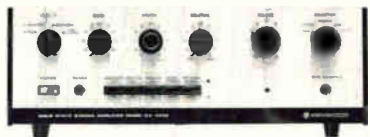


dynamic power & 10-70,000 Hz; output 4-32 ohms; power bandwidth 10-100,000 Hz with 0 reference at 60 W/ch dynamic power; input sensitivity: 1 V for 60 W/ch dynamic power; input power 100-240 V, 50/60 Hz. 6" x 19" x 13 1/2" d. ...\$699.95

KENWOOD

KA-4002 Integrated Stereo Amp

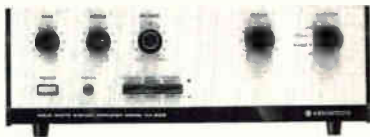
29 W/ch (IHF) dynamic power into 8 ohms (40 W/ch into 4 ohms); 24 W/ch



continuous power into 8 ohms (33 W/ch into 4 ohms); HD 0.5% at rated output. Response 20-40,000 Hz ± 1.5 dB; power bandwidth 18-30,000 Hz; input sensitivity: mag. phono 2.5 mV; tuner, aux, tape play 150 mV. Features 2 pairs of mag. phono inputs; main/remote speaker selection; center-channel output. 13" x 5" x 9 1/2" d.\$139.95 SR-42 Oiled walnut cabinet\$15.00

KA-2002 Integrated Stereo Amp

19 W/ch (IHF) dynamic power into 8 ohms (23 W/ch into 4 ohms); 17 W/ch



continuous power into 8 ohms (19 W/ch into 4 ohms); HD 0.8% at rated output. Response 20-30,000 Hz ± 2 dB; input sensitivity: mag. phono 2 mV; tuner, tape play, aux. 150 mV. Features 2 pairs mag. phono inputs. 13" x 5" x 9 1/2" d. ...\$99.95 SR-42 Oiled walnut cabinet\$15.00

KA-6000 Integrated Amplifier

Solid-state stereo design; 90 W/ch (IHF) 1971 EDITION

the new SANSUI AU999



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1

Amplifiers

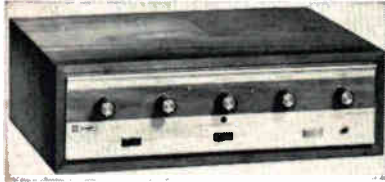


dynamic power at 4 ohms, 45 W/ch continuous sine wave power at 8 ohms with both channels driven & from 20-20,000 Hz; power bandwidth 10-50,000 Hz. HD 0.5% at rated output; IM dist. 0.3% at rated output. Sensitivity: phono #1 2 mV, 0.5 mV, 0.05 mV (switchable), phono #2 2 mV, tape head 2.3 mV, mic 2 mV & aux, tuner & tape play 200 mV. 16 $\frac{1}{16}$ " x 5 $\frac{1}{32}$ " x 11 $\frac{1}{32}$ ". With cabinet ...\$249.95

KNIGHT-KIT

KG-865 Integrated Amplifier

Solid-state design; 25 W/ch dynamic power @ 8 ohms (17 W/ch continuous



sine wave); response 18-30,000 Hz \pm 1 dB; power bandwidth 20-20,000 Hz @ 1% HD; output 4-16 ohms. Input sensitivity: mag. phono 5 mV; tuner & aux. 400 mV. 3 $\frac{3}{16}$ " x 13" x 10".

22C3700W Kit\$79.95
22C3713W Oiled walnut case ...\$14.95

LAFAYETTE

LA-125TA Stereo Control Amplifier

62 $\frac{1}{2}$ W/ch (IHF) dynamic power with 4 ohm load; response 20-20,000 Hz \pm 1



dB; HD 0.8%; hum & noise -75 dB (tuner input); 6 pairs of inputs: hi and lo mag. phono; ceramic phono; tuner aux.; tape deck; mic input. Outputs: front panel headphones; tape out. Has conventional operating controls plus high/low filters; ext. speaker switch; loudness. Supplied with simulated wood-grained metal case. 13" x 3 $\frac{3}{8}$ " x 9 $\frac{1}{4}$ " d.\$129.95

LA-750 Stereo Control Amplifier

40 W/ch (IHF) at 4 ohms. Response 20-20,000 Hz \pm 1 dB; HD 0.8%. Six pairs of



inputs: mag. phono, ceramic phono, tuner, aux., and tape. Outputs: tape, main and remote speakers, headphones. Full range of operating controls with push-

button switches. With simulated wood-grain metal case. 12" w. x 3 $\frac{3}{4}$ " h. x 9 $\frac{1}{2}$ ".
.....\$79.95

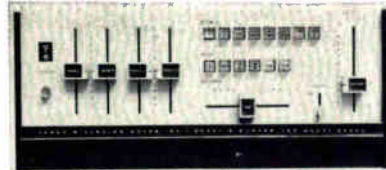
LA-324A Stereo Control Amplifier

20 W/ch (IHF) at 4 ohms. Response 20-20,000 Hz \pm 1 dB; HD 0.07%. Inputs for mag. or ceramic phono, tuner, aux. Outputs: main/remote speakers, tape out, headphones. With simulated wood-grain metal case. 10 $\frac{1}{8}$ " x 8 $\frac{1}{8}$ " d. x 3 $\frac{1}{2}$ ". \$59.95

LANSING, JAMES B.

SG520 "Graphic Controller" Preamplifier

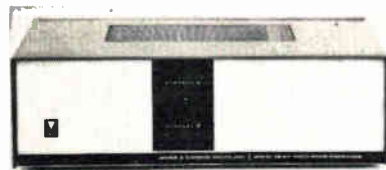
Stereo control center using straight-line controls and illuminated push-button



switches. Seldom-used controls and supplementary signal jacks concealed behind hinged front panel for easy access. Built-in 1000-Hz test tone and provisions for use with JBL Aural Null balancing system. Response within $\frac{1}{4}$ dB 20 to 20,000 Hz at 3 volts rated output. Harmonic distortion less than 0.15% and IM distortion less than 0.05% at rated output. Hum and noise 1 μ V or less referred to low-level phono input. Oiled walnut and olive case available separately\$450.00

SE400S Energizer

Stereo power source which takes the place of conventional stereo power am-



plifier. Plug-in equalizer board controls damping and makes minor adjustments in frequency-response contour to complement performance of specific JBL speaker systems used. Supplied in brushed gold and olive case for freestanding use. Model also available to match speaker systems of other manufacturers. With equalizer board set "flat," the Energizer can be used as a stereo amplifier with 40 W/ch from 20-20,000 Hz. Response 20-20,000 Hz \pm 1/2 dB at full rated power. HD less than 0.15% at rated output. Overload typically less than 0.004 millisecond to recover from 100% single-cycle overload at any frequency in musical range. All specifications are based on 8-ohm load, continuous sine wave with both channels operating simultaneously. 4 to 16 ohms
.....\$300.00

SA660 Control Amplifier

Stereo preamp and 60 W/ch power amplifier in a single unit. Preamp sensitivity 4 mV for phono inputs, 0.25 V for high-level inputs. All specifications based on 8-ohm load, continuous sine-wave power with both channels operating simulta-



neously. 16 $\frac{1}{16}$ " x 5 $\frac{1}{16}$ " x 13 $\frac{3}{4}$ " d. Oiled walnut side panels available separately
.....\$435.00

SE460 Energizer

Same as SE400S except 60 W/ch output
.....\$354.00

LEAK

Stereo 70 Integrated Amplifier

35 W/ch continuous r.m.s. into 8 ohms (30 W/ch into 16 ohms); 50 W/ch dy-



amic power into 8 ohms (35 W/ch into 16 ohms); HD 0.1% at 1000 Hz & rated output; IM dist. 0.3% at rated output. Response 20-30,000 Hz; input sensitivity: phono #1 2 mV (47 k); phono #2 switchable 10 mV at 33 k or 30 mV at 100 k; tuner #1/mic 25 mV or 2 mV at 47 k; tuner #2 60 mV or 250 mV at 50 k; aux. 400 mV at 47 k. Has main/remote speaker sw. 13" x 4 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ " d. \$299.00

MARANTZ

15 Stereo Power Amp

Has 100 W/ch r.m.s. continuous power with both channels driven from 20-



20,000 Hz & at 8 ohms; HD & IM dist. each 0.1%. Response 20-20,000 Hz \pm 0.25 dB. Has separate power supplies for ea. channel\$450.00
WC-2 Walnut cabinet\$ 32.50

16 Stereo Power Amp

Features 60 W/ch r.m.s. continuous power into either 4 or 8 ohms (30 W/ch into 16 ohms) with both channels driven from 20-20,000 Hz @ 0.15% HD. Dynamic power 90 W/ch (IHF) into 8 ohms. IM dist. 0.15% @ rated output. Response 3-80,000 Hz \pm 1.5 dB. Input sensitivity 1 V for rated output. 15 $\frac{1}{8}$ " w. x 5 $\frac{1}{4}$ " h. x 9 $\frac{1}{8}$ "
.....\$295.00
WC-2 Walnut cabinet\$ 32.50

30 Integrated Stereo Amp

Combines Model 32 (90 W/ch dynamic power) power amp & preamp circuitry.



Input sensitivity phono 1 mV & aux. 100 mV. Output: tape recorder 5 V; center channel 5 V. Has high & low filters with all tape recording dubbing facilities on front panel. 15 $\frac{1}{8}$ " x 5 $\frac{1}{4}$ " x 14" d. \$450.00
WC-1 Walnut cabinet\$ 32.50

33 Stereo Preamplifier

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Award Winning LR-1500TA IC Solid State Receiver

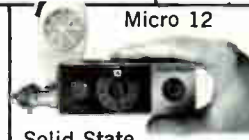


Profile 80 AM/FM Receiver Plus 8 Track-Player



Citizens Band

Dyna Com Super Series Walkie-Talkies



Micro 12

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Have a friend interested in hi-fi or electronics? Send us his name and address and we will send him his own personal copy of the 1971 Lafayette Catalog 710.

balance controls; front-panel tape recorder dubbing facilities; center-channel output. Response 5-100,000 Hz ± 0.5 dB; HD & IM dist. each 0.02% @ 3 V output



& 20-21,000 Hz. Input sensitivity: phono 1 mV for 1.4 V output & aux. 100 mV for 1 V output. Has high & low filters. 15 $\frac{1}{4}$ " x 5 $\frac{3}{4}$ " x 8 $\frac{3}{4}$ " d.\$395.00
WC-2 Walnut cabinet\$ 32.50
RPX-33 Rack-mount kit\$ 50.00

MATTES-MARTIN

SSP/200 Stereo Power Amp

100 W/ch continuous power with 4 & 8 ohm loads, both channels driven; re-



sponse 15-30,000 Hz ± 1 dB; IM dist. 0.1% at rated output; HD 0.5% at rated output & 20-15,000 Hz. Sensitivity 1 V. 14 $\frac{1}{4}$ " x 9 $\frac{3}{4}$ " x 5 $\frac{1}{8}$ ".\$495.00

SSD/1 Stereo Preamp

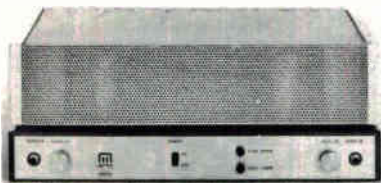
Features 9-position stepped tone controls (24 dB action); a 4-position h.f. filter; a



low-freq. filter; 2 volume controls (one stepped and other continuous vernier); a built-in 1 W/ch phono amplifier (5.6 ohms imp). Has RIAA & LP phono equalization & 3 $\frac{1}{2}$ & 7 $\frac{1}{2}$ ips for tape. Response 10-50,000 Hz ± 1 dB; input sensitivity: mic, tape head, phono #1 & #2 3.5 mV; tuner, aux. #1, tape monitor 350 mV; power amp. 1 V. Front panel 14 $\frac{3}{4}$ " x 4 $\frac{1}{8}$ " x 12 $\frac{1}{4}$ " deep.\$475.00

SSA/200 Integrated Stereo Amp

Combination of SSD/1 preamp & SSP/



200 power amp. Case depth 13". Gold finish\$875.00

NIKKO

TRM-40 Integrated Stereo Amp

22 W/ch (IHF) dynamic power into 8 ohms (15 W/ch continuous sine wave); response 15-20,000 Hz ± 1 dB; HD 1% at rated output; input sensitivity: mag. phono 2.8 mV; tape head 1.8 mV; ceramic phono 150 mV; aux. 200 mV; tuner

1971 EDITION



300 mV. 12" x 3 $\frac{3}{4}$ " x 8 $\frac{1}{2}$ " d. 117 V/240 V, 50/60 Hz power input\$99.95

TRM-50 Integrated Stereo Amp

26 W/ch (IHF) dynamic power into 8 ohms; HD & IM dist. 0.6%; response aux.



20-30,000 Hz ± 1 dB; input sensitivity: mag. phono 2.4 mV; ceramic phono 50 mV; tuner, aux. & tape 300 mV; tape monitor input 300 mV. 13" x 3 $\frac{3}{4}$ " x 9 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input\$119.95

TRM-1200 Integrated Stereo Amp

60 W/ch (IHF) dynamic power into 8 ohms (65 W/ch into 4 ohms); 40 W/ch



continuous power into 8 ohms with both channels driven (50 W/ch into 4 ohms). Response aux. 20-40,000 Hz ± 1 dB; HD & IM dist. 0.3% at rated output. Input sensitivity: phono #1 & #2 2 mV; mic 2 mV; tape, tuner, aux. 220 mV. Features mic input & 2 turntables can be played simultaneously. 15 $\frac{1}{8}$ " x 4 $\frac{1}{2}$ " x 12 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input.\$249.95

NORELCO

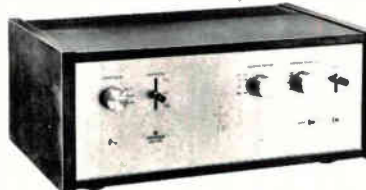
591 Integrated Stereo Amplifier

Features 28 W/ch continuous r.m.s. into 8 ohms with both channels driven (32 W/ch into 4 ohms & 20 W/ch into 16 ohms); 38 W/ch dynamic (IHF) power into 8 ohms. Response 20-20,000 Hz ± 0.5 dB; HD & IM 0.3% at all power levels; power bandwidth 20-20,000 Hz. Input sensitivity: mag. phono 3.5 mV & tuner, aux., tape & monitor 133 mV. Has main/remote speaker facilities. 16 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ " x 10". With walnut cabinet \$199.95

PIONEER

SM-100 Stereo Power Amp

105 W/ch dynamic power into 4 ohms (90 W/ch continuous sine wave). THD



0.5%; power bandwidth 10-30,000 Hz ± 1 dB. Response 5-100,000 Hz ± 1 dB; 4, 8, 16 ohms output. Has two pairs of inputs & outputs; damping factor control & switchable input sensitivity. 16 $\frac{1}{2}$ " w. x 11 $\frac{1}{2}$ " x 6 $\frac{3}{4}$ ". Supplied with walnut cab.\$375.00

SC-100 Stereo Preamp

Response 5-50,000 Hz ± 1 dB; 5 V r.m.s.

output; 0.04% dist. Sensitivity: phono 0.08 mV & 1.5 mV; tape 1.2 mV & aux. 0.08 V. 16 $\frac{1}{2}$ " x 11 $\frac{1}{2}$ " x 6 $\frac{3}{4}$ ". With walnut cabinet\$375.00

SA-900 Integrated Amp

Features 100 W/ch (IHF) dynamic power at 4 ohms & 0.3% dist. (72 $\frac{1}{2}$ W/ch at 8



ohms); 64 W/ch continuous power at 4 ohms & 0.3% dist. with both channels driven (50 W/ch at 8 ohms). Response 20-50,000 Hz ± 1 dB; power bandwidth 20-50,000 Hz with 0.3% dist. Inputs: mag. phono 3.1 mV & 0.155 mV; ceramic phono 71 mV; mic. 1.9 mV; tape head 1.8 mV; tape monitor, tuner & aux. 180 mV; main in 500 mV. 15 $\frac{1}{8}$ " w. x 5 $\frac{1}{2}$ " h. x 13 $\frac{1}{2}$ " d. With metal case\$259.95
Wood cabinet\$9.95

SA-700 Integrated Amp

Features 60 W/ch (IHF) dynamic power at 4 ohms & 0.5% dist. (42 $\frac{1}{2}$ W/ch at 8



ohms); 31 W/ch continuous power at 4 ohms & 0.5% dist. with both channels driven (27 W/ch at 8 ohms). Response 20-40,000 Hz ± 1 dB; power bandwidth 15-60,000 Hz with 0.5% dist. Inputs: mag. phono 3 mV & 0.12 mV; main in 500 mV; tuner, aux., and tape monitor 200 mV. 14 $\frac{1}{8}$ " x 4 $\frac{1}{8}$ " h. x 12 $\frac{5}{16}$ " d. With metal case\$199.95
Wood cabinet\$9.95

SC-700 Preamp

Has 3 dB stepped tone control; muting switch that attenuates sound 20 dB; 2



mag. phono inputs. Response 10-60,000 Hz ± 1 dB; 4 V output; 0.5% HD at 1 kHz & at 2 V. S/N ratio phono 80 dB @ 4 V (aux. 100 dB). Input sensitivity: phono #1 & #2 4 mV; aux. #1 & #2 250 mV; tuner 250 mV. 11 $\frac{1}{8}$ " x 4 $\frac{1}{2}$ " x 10" d.\$129.95

SA-500 Integrated Amp

Features 22 W/ch (IHF) dynamic power at 4 ohms & 0.5% dist. (18 W/ch at 8 ohms); 12 W/ch continuous power with both channels driven at 4 ohms & 0.5%



1

Amplifiers

dist. (10 W/ch at 8 ohms). Response 20-50,000 Hz ± 1 dB; power bandwidth 20-40,000 Hz at 0.5% dist. Inputs: phono 2.5 mV; tuner, tape monitor 200 mV; 13" w. x 4 $\frac{5}{8}$ " x 12 $\frac{5}{8}$ " d.

Supplied with metal case\$109.95
Wood cabinet\$9.95

SM-700 Stereo Power Amp

40 W/ch (IHF) dynamic power into 8 ohms (60 W/ch into 4 ohms) 32 W/ch continuous into 8 ohms (42 W/ch into 4 ohms). HD 0.05% at 1000 Hz & 10 W/ch. Response 15-60,000 Hz ± 0.5 dB; power bandwidth 15-60,000 Hz. Input sensitivity: 0.5 or 1 V switchable; output 2 V. Has center-channel output & main/remote speaker selection. Power source 110 to 240 V a.c. 11 $\frac{1}{8}$ " x 4 $\frac{1}{4}$ " x 10".

.....\$129.95

REALISTIC

SA-350 Stereo Amplifier

25 W/ch dynamic power @ 8 ohm load; response 20-20,000 Hz. Has auxiliary input, and tape output. Sensitivity: mag. phono 5 mV; aux & tuner 250 mV. Oiled walnut cabinet. Size 10" d. x 14" x 3" h.

.....\$79.95

SA-700 Stereo Amplifier

Features speaker selector for multiple speaker operation. Has two mag phono,



aux, and tuner inputs. 35 W/ch dynamic power into 8 ohms; HD 1%; response 20-20,000 Hz; 8 ohms. 4" x 14 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ ". Walnut case\$99.95

REVOX

A50 Integrated Stereo Amp

40 W/ch continuous sine wave into 4 or 8 ohms (25 W/ch into 16 ohms); 70 W/ch dynamic power into 4 or 8 ohms (40 W/ch into 16 ohms); HD 0.3% from 40-15,000 Hz @ 8 ohms; IM dist. 0.3% @ 8 ohms. Response 20-20,000 Hz ± 1 dB; power bandwidth 10-40,000 Hz. Input sensitivity: mic & mag phono 3 mV (Phono 2, 7 mV); tape tuner, aux. 100 mV; ceramic phono & tape monitor 250 mV. Has step-type tone controls. 16 $\frac{1}{2}$ " x 6 $\frac{1}{4}$ " x 9 $\frac{5}{8}$ "\$375.00

ROTEL

RA-840 Integrated Stereo Amp

80 W/ch (IHF) dynamic power into 4 ohms (42 W/ch continuous power into 8 ohms); power bandwidth 10-35,000 Hz; input sensitivity: mag. phono 2 mV; tape head 1.5 mV; ceramic phono, tuner, tape & aux. 100 mV. Response 6-40,000 Hz +0, -1 dB at max. output. HD 0.1% at rated output. Has main/remote speaker sw. 14 $\frac{1}{8}$ " x 10 $\frac{1}{2}$ " d. x 5 $\frac{1}{8}$ "\$199.95

100-AMP Integrated Stereo Amp

30 W/ch (IHF) dynamic power into 4 ohms (17 W/ch continuous into 8 ohms); power bandwidth 30-17,000 Hz; response 25-15,000 Hz ± 1 dB at rated output. HD 0.3% at rated output; input sensitivity: mag. phono 3 mV; aux. 200 mV; tuner

36

100 mV. Has main/remote speaker sw. 12 $\frac{1}{4}$ " x 8 $\frac{3}{4}$ " d. x 3 $\frac{3}{4}$ "\$139.50

SANSUI

AU-999 Integrated Amp

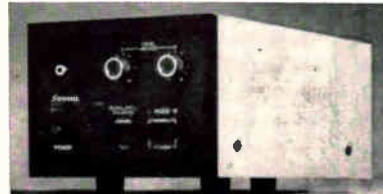
70 W/ch (IHF) dynamic power into 8 ohms (90 W/ch into 4 ohms); 50 W/ch



continuous into 8 ohms with both channels driven (70 W/ch into 4 ohms); response 5-100,000 Hz ± 1 dB at normal listening level; power bandwidth 10-30,000 Hz at 8 ohms; HD & IM dist. each 0.4% at rated output; input sensitivity: phono #1 & #2 2 mV; mic 3 mV; tuner & aux. 200 mV.\$299.95
Optional wood cabinet\$22.50

BA-60 Basic Stereo Power Amp

Solid-state design; 30 W/ch dynamic power at 4 ohms (24 W/ch at 8 ohms);



25 W/ch continuous sine wave at 4 ohms with both channels driven (20 W/ch at 8 ohms); HD 0.3% at rated output; IM dist. 0.5% at rated output. Power bandwidth 20-40,000 Hz at 8 ohms; sensitivity 0.7 V ± 3 dB at rated output. 4 to 16 ohms. Features aural null balance switch; phase switch. Overall size 6" x 4 $\frac{1}{4}$ " x 10 $\frac{1}{4}$ ".

.....\$119.95

BA-90 Basic Stereo Power Amp

Same styling as BA-60; features 45 W/ch dynamic power at 4 ohms (35 W/ch at 8 ohms); 32 W/ch continuous sine wave at 4 ohms with both channels driven (28 W/ch at 8 ohms); HD & IM dist. 0.3% at rated output. Power bandwidth 15-50,000 Hz at 8 ohms; response 15-100,000 Hz ± 1 dB at 8 ohms; input 1 V ± 3 dB; output 4-16 ohms. Features damping factor sw., aural null balance switch level adjuster, and phase switch. Overall size 7 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " x 14 $\frac{1}{4}$ ".

.....\$149.95

AU-222 Integrated Amplifier

Solid-state stereo design; 23 W/ch dynamic power at 8 ohms (20 W/ch at 4



ohms); 18 W/ch continuous sine wave at 8 ohms with both channels driven (16 W/ch at 4 ohms). HD & IM dist. 0.8%. Power bandwidth 20-20,000 Hz at 8 ohms; response 20-30,000 Hz ± 1 dB; output 4 to 16 ohms. Has six inputs; two phono & tape monitor sw. 11 $\frac{1}{2}$ " x 4 $\frac{1}{4}$ " x 10 $\frac{1}{2}$ "\$119.95

AU-555 Integrated Amplifier

Solid-state stereo design; 30 W/ch dynamic power at 4 ohms (25 W/ch at 8 ohms); 25 W/ch continuous sine wave at 4 ohms with both channels driven (20 W/ch at 8 ohms). HD & IM dist. 0.8%. Power bandwidth 20-30,000 Hz ± 1 dB



at normal listening level; output 4 to 16 ohms. Has speaker selector sw. (A, B, A + B, Off); output 5 V (rated output 1 V). Four outputs & seven inputs; two phono inputs; tape monitor sw.; direct tape monitor; mic input. 15" x 4 $\frac{1}{4}$ " x 11"\$159.95

SCOTT, H.H.

499 Four-Channel Stereo Amp

Features 8 $\frac{3}{4}$ W/ch (35 W total) continuous power at 8 ohms with all 4 channels



driven; power bandwidth 15-25,000 Hz; response 15-30,000 Hz ± 1 dB; HD 0.5% at rated output. Input sensitivity: mag. phono high 3 mV; low 6 mV; aux. 0.5 V; tape 1 mV; mic. 10 mV. Features speaker phasing switches; tape equalization sw.; individual speaker fuses; 4 individual vu meters; 4-channel tape monitor; 4-channel balancing controls. 18 $\frac{1}{4}$ " x 11 $\frac{1}{4}$ " d. x 6 $\frac{1}{4}$ " h. With walnut cabinet\$599.95

SHERWOOD

Model S-9500c Control Amplifier

57 W/ch dynamic power @ 4 ohms with one channel driven at a time (45 W/ch r.m.s.) stereo design. Response 20-20,000 Hz ± 1 dB. Power bandwidth 15-25,000 Hz @ 1% HD; HD .33% at rated output; IM dist. 1% at rated output; hum & noise -60 dB (phono) -80 dB (tuner); input sensitivity: 1.6 mV variable phono; 20 V tuner; channel separation 45 dB @ 1 kHz. Has 6 high-level & 4 low-level inputs; 4 to 16 ohm speaker, headphone & stereo record outputs; center-channel speaker output. 23 silicon transistors & 2 silicon rectifiers. Has all conventional operating controls. Size 14" x 10 $\frac{1}{2}$ " x 4" h.\$199.95
Walnut leatherette case\$9.00
Prices quoted are "Fair Trade Minimum Resale"

SINCLAIR

Neoteric 60 Integrated Stereo Amp

30 W/ch (IHF) dynamic power into 8 ohms (24 W/ch into 5 ohms); 15 W/ch continuous sine wave into 8 ohms with both channels driven (12 W/ch into 15 ohms); HD 0.1% at 15 W & 8 ohms; 5-15 ohms output. Response 40-20,000 Hz ± 1 dB. Input sensitivity: mag. phono 2.8 mV; ceramic phono 2.8 mV to 40 mV; radio 17 mV to 900 mV; aux. 2.5 mV to 990 mV; tape 110 mV. Has main/remote speaker switching; 110 to 250 V a.c. power source. 8 $\frac{1}{2}$ " x 2 $\frac{1}{8}$ " x 9 $\frac{1}{4}$ " d. Anodized aluminum case with a solid rosewood front\$179.95

SONY

TA-1120A Stereo Amp

Same as TA-3120A except has preamp added. Response 5-200,000 Hz +0, -2 dB; HD 0.05% at 1000 Hz & at rated output; IM dist. 0.2%; sensitivity: tuner, aux.

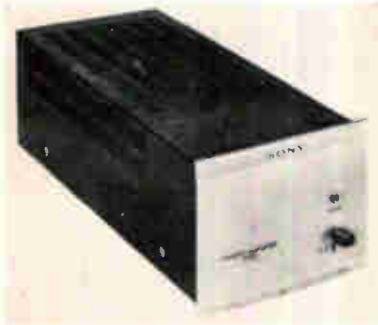
STEREO HI-FI DIRECTORY



tape 0.15 V; phono #1 & #2 and tape head 1.2 mV; mic 1.2 mV. 5 3/4" x 15 3/4" x 12 1/4"\$449.50
TAC-1 Walnut cabinet\$ 24.50

TA-3120A Stereo Power Amp

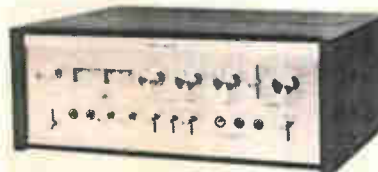
50 W/ch continuous power @ 8 ohms (80 W/ch @ 4 ohms). 60 W/ch dynamic



power @ 8 ohms (100 W/ch @ 4 ohms); response 5-200,000 Hz +0 -2 dB; HD 0.05% at rated output & 1000 Hz (at 1 W HD is 0.01%); IM dist. 0.2% @ rated output; S/N ratio 110 dB; damping factor 360 @ 8 ohms; sensitivity 1 V; 4-8-16 ohm output; 5 3/4" x 7 1/8" x 17 1/2" with metal cabinet\$249.50

TA-2000 Stereo Preamp

Response 20-100,000 Hz \pm 1 dB; IM dist. 0.05% through low-level phono cir-



cuits; sensitivity: tape head, phono #1 & #2 1.2 mV max. (adjustable), has additional phono 0.06 mV; tuner, aux. #1 & #2, tape input 120 mV; mic 1.2 mV. 15 3/4" x 5 3/4" x 12 1/4"\$329.50
TAC-1 Walnut cabinet\$24.50

TA-1010 Integrated Stereo Amp

22 W/ch (IHF) dynamic power (15 W/ch r.m.s.). HD at rated power 0.5% (0.2%

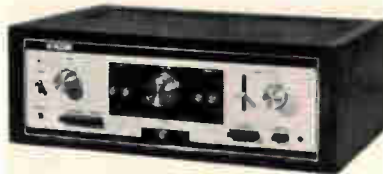


at 1/2 W); IM dist. at rated power 1.0% (0.3% at 1/2 W); S/N ratio (IHF) 90 dB (Aux); damping factor 25. Features two phono inputs, main & remote speaker terminal, and source/tape monitor. With walnut cabinet\$119.50

TA-1144 Integrated Stereo Amp

50 W/ch (IHF) dynamic power (30 W/ch r.m.s.). HD & IM dist. at rated output each 0.2% (0.05% at 1/2 W); S/N ratio (IHF) 90 dB (Aux); damping factor 70. Features two phono inputs, speaker selector for main/remote, stepped bass & treble controls, and preamp outputs.

1971 EDITION



Power amp inputs with selector sw. for normal or separate operation ...\$219.50
TAC-9 Walnut cabinet optional.

TA-3060 Stereo Power Amp

50 W/ch (IHF) dynamic power (30 W/ch r.m.s.). HD at rated power 0.1%



(0.02% at 1/2 W); IM dist. at rated power 0.1% (0.03% at 1/2 W); S/N ratio (IHF) 110 dB (Aux); damping factor 180\$159.50

TA-3200F Stereo Power Amp

145 W/ch (IHF) dynamic power (100 W/ch r.m.s.). HD & IM dist. at rated



power each 0.1% (0.03% at 1/2 W); S/N ratio (IHF) 110 dB (Aux); damping factor 200. Features speaker selector main/remote, power limiter\$349.50
TAC-1. Walnut cabinet\$24.50
All power figures are into 8 ohms.

STANDARD RADIO

SR-A401AU Stereo Amp

20 W/ch (IHF) dynamic power at 8 ohms & 0.5% HD (15 W/ch continuous with one channel driven); power bandwidth 30-30,000 Hz at 8 ohms; input sensitivity: mag. phono 2.5 mV; crystal phono 150 mV; tuner & aux. 50 mV; tape 500 mV. 13 3/8" x 3 3/8" x 7 1/4"\$89.95

TEAC

AS-2000 Integrated Amplifier

44 1/2 W/ch continuous sine wave at 0.5% HD into 8 ohms (53 1/2 W/ch into 4



ohms); power bandwidth 20-30,000 Hz into 8 ohms; response 20-80,000 Hz +0, -1 dB at rated output. Input sensitivity: phono #1 & #2 2 mV (50,000 & 80,000 ohms imp.); aux. tape deck, tuner 150 mV. Has center-channel output & main/remote speaker sw. Eurasian teak cab. 16 5/8" x 11 1/2" x 6"\$299.50

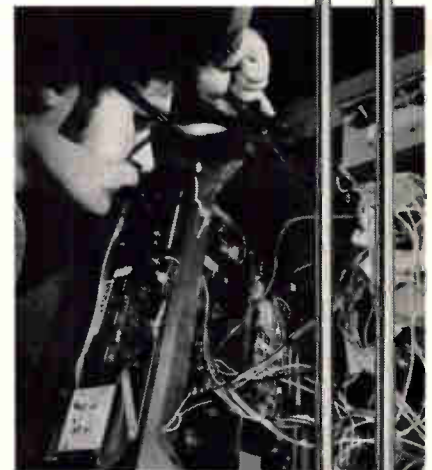
NEW

TV/radio/Hi Fi

fix-it tools



make tricky jobs easy



SUPER LONG NUTDRIVERS

Over 20" long with 1/4" and 5/16" hex openings, color-coded plastic (UL) handles, full length hollow shafts.

Eliminate skinned knuckles and the frustration of trying to reach tuners, bezels, other up-front components from the back of a TV set with ordinary tools.

Extra length means more convenience, greater driving power for many other "fix-it" jobs.

INVERTED PALNUT DRIVER SHANKS

Fit all Xcelite "99" handles, including Tee and ratchet types. Popular 7/16" and 1/2" external hex sizes, hollow shanks.

Save time, prevent damage to fastener or equipment when removing Palnuts on balance controls, on-off switches, volume control shafts of most TV sets, record players, portable radios.



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CIRCLE NO. 61 ON READER SERVICE CARD

Performance

***Audio magazine says:**

"It is extremely attractive with its base and dust cover, both of which are optional accessories, and it performs superbly. In over twenty hours of use, the unit performed flawlessly, with never a fault in its changing operations during that time. Naturally, we cannot test any equipment to destruction and still produce a number of profiles each month. However, Garrard's reputation practically guarantees continued high-quality performance for years, and any user should be completely satisfied with this model, which represents the culmination of many years of turntable manufacture."

Price

****Stereo Review says:**

"At a time when most automatic turntable prices are soaring, it is encouraging to note that the price of the SL95B is unchanged from that of the SL95 (\$129.50). A number of different bases are available ranging in price from \$6.50 to \$19.95. A dust cover that fits all bases is \$6.50."

Unbeatable combination



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Garrard's SL95B

Automatic Turntable \$129.50.

For literature write Garrard, Westbury, N.Y. 11590
British Industries Co.

CIRCLE NO. 13 ON READER SERVICE CARD



Changers & Turntables

2

ACOUSTIC RESEARCH

AR Turntable

Two-speed (33 $\frac{1}{3}$ rpm & 45 rpm) turntable and arm combination; complete with



oiled-walnut base, transparent dust cover, and accessories such as needle force gauge, overhang adjustment device, etc.; meets NAB specifications for broadcast equipment on wow, flutter, rumble, and speed accuracy; 3.3 lb machined, individually balanced aluminum platter is belt-driven from synchronous motors; insensitive to external shock or to acoustic feedback because of internal suspension; arm damping, which operates if arm is dropped, is released during play; less cartridge \$87.00
Single speed, 33 $\frac{1}{3}$ rpm \$84.00

BELL & HOWELL

3800 Record Changer

4-speed (16, 33, 45 & 78 rpm); will handle 8 average (7", 10" & 12" size) rec-



ords. Has an Electro-Voice ceramic cartridge & is supplied with dust cover, 45 rpm spindle & walnut base. 15 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ ". \$59.95

BSR McDONALD

MP60 Manual Turntable

Has all basic features of Model 610 except changer capability. Has automatic return to rest & shut-off at end of record and will automatically set down on 12", 10", 7" records \$69.50

610 Record Changer

Features viscous damped cue & pause control; dual-range anti-skate device; stylus pressure gauge; slide-on cartridge



holder; pop filter & change-cycle muting sw. 3-speed design. \$79.50

610/X Total Turntable

Combines 610 record changer, Shure M-93E elliptical mag. cartridge, a BSR PB-1 power base & a BSR DC-3 dust cover. \$141.95

MP60/X Total Turntable

Combines MP60 manual turntable,



BSR PB-2 base & BSR DC-3 dust cover. \$82.50

Model 510 Record Changer

Similar to Model 610 changer except has lighter weight turntable although same dia. \$64.50

Model 510X Total Turntable

Combines Model 510 record changer, a Shure M-75 magnetic cartridge, a BSR PB-2 base & DC-2 dust cover .. \$100.00

Model 310 Record Changer

Improved version of last year's model 300T. Now has cueing lever, an adjustable anti-skate control, a fixed counterweight & dust cover. Features low tracking force, slide-in cartridge holder, cue & pause control, pop filter \$44.50

Model 310/X Total Turntable

Combines Model 310 record changer, Shure M-75 magnetic cartridge, BSR PB-2 base & DC-2 dust cover \$80.00

Accessories

DC-3 Deluxe dust cover \$7.50
DC-2 Standard dust cover \$5.50
PB-1 Deluxe power base; molded in ebony with silver trim. Has power sw. \$15.00
PB-2 Standard base \$5.50

DUAL

All Dual models offer the following features; dynamically balanced tonearm does not require critical leveling of chassis; direct-dial settings for stylus force and anti-skating; 6% pitch control for all three speeds (33 $\frac{1}{3}$, 45, 78); fully automatic and manual operation in both single- and multiple-play modes; interchangeable single- and multiple-play spindles; self-stabilizing multiple-play spindles hold up to six records; records removable from platter without removing spindle; silicone-damped cueing system operates with both automatic and manual starts; jamproof slipclutch engagement between tonearm and cycling mechanism; quick-release cartridge holder with stylus overhang adjustment. All prices are less base and cartridge.

Dual 1219 Professional Automatic Turntable

Features in addition to those on all Duals include: Mode Selector which lowers



tonearm base to parallel tonearm to record for 15° vertical stylus tracking in single-play mode, raises tonearm base to parallel tonearm to center of stack in multiple-play mode. Tonearm suspension centers tonearm within four-point "ring-in-ring" gyroscopic gimbal. Damped counterbalance with coarse and fine adjusts, plus 0.01 gram clickstops. Separate anti-skating scales for conical and elliptical styli. Synchronous/continuous-pole motor. 12" 7-pound one-piece dynamically balanced cast platter. Cue control system with silicone-damping in both directions. Four-point damped spring suspension. 14 $\frac{1}{4}$ " x 12", plus 1" at rear and right for tonearm overhang. 5" clearance above, 3" clearance below mtg. board. \$175.00

WB-19X Deluxe oiled-walnut base with flip-open accessory panel \$29.95

DC-9X Deluxe dust cover with lift-open front \$24.95

WB-19. Oiled walnut base for 1219. \$14.95

DC-9. Smoke-tinted dust cover .. \$12.95

Dual 1209 Auto/Professional Turntable

Features in addition to those on all Duals

2 Changers & Turntables

include: tracking down to 1/2 g; damped counterbalance with coarse and fine adjusts plus 0.01 g click stops; synchronous/hi-torque motor; one-piece balanced 4-lb cast platter; separately calibrated anti-skating scales for conical & elliptical styli. 13" x 10 3/4" plus 1" at rear and right for tonearm overhang. 5" above and 2 3/4" below mtg. board \$129.50

Dual 1215 Auto/Standard Turntable

Features in addition to those on all Duals include: tracking as low as 1 g; fine-adjust



damped counterbalance; synchronized direct-dial tracking force with anti-skating settings; 3 3/4-lb platter. 12 1/2" x 10 3/4". 5" above and 2 3/4" below mtg. board. \$99.50

Accessories for 1209, 1215

WB-12. Oiled walnut base \$10.95
DC-2. Smoke tinted dust cover . . \$10.95

EMPIRE

598 "Troubador" Turntable

Features Model 990 tonearm with "Dyna-Lift"; anti-skating adj.; hysteresis-



synchronous motor with belt drive; 12" platter; wow & flutter 0.01%; 3 speeds (33, 45 & 78 rpm); push-button power control; built-in 45 rpm spindle. Will track cartridges down to 0.1 g. Size with base & dust cover: 17 1/2" x 15 1/8" d. x 8"; size without base & dust cover: 16" d. x 13 1/2" x 3 3/4" above mtg. board & 3 1/2" below.

Without base & dust cover \$199.95
Base & cover \$ 34.95

GARRARD

Standard features of all "Synchro Lab" (SL) models include: viscous-damped cueing and pause. On SL95B, SL75B, and SL72B tonearm descent is also fully damped during automatic play. Exclusive on the SL95B, SL75B, and SL82B 2-point record support for automatic play. Up to six records are supported at center

& edge. Other Synchro-Lab models have "Swing-Away" overarm. All models have same motor drive, adjustable anti-skating controls & slide-in cartridge clip. Except as noted all are less base & cartridge.

SL95B Automatic Turntable

Three-speed (33 1/3, 45, 78 rpm) design. Has low-mass tonearm of Afrosomia



wood set into aluminum; calibrated stylus pressure gauge with window scale for easy reading gyroscopically gimballed tonearm mounting. 15 1/8" x 14 3/8" x 4 3/8" above & 3" below the mtg. \$129.50

SL75B. Same as SL95B except has low-mass aluminum tonearm and different type of tonearm pivot & pressure gauge. \$109.50

SL72B. Same as SL95B except has a low-mass tubular tonearm \$89.50

SL65B Automatic Turntable

Three-speed (33 1/3, 45, 78 rpm) design. Has low-mass tubular aluminum tonearm



dynamically balanced with adjustable counterweight & stylus pressure gauge with optical scale \$79.50

SL55B. Same as SL65B except with different tonearm & pivot assembly. Has tubular tonearm with fixed-position damped counterweight \$59.50

SL40B. Similar in all respects to Model SL55B except economy version . . \$44.50

Model 30 Automatic Turntable

For either single-play manual operation or as a changer intermixing record sizes.



Has cast aluminum tonearm, stylus pressure adjust; supplied with ceramic diamond stylus cartridge; 4-speed design. 15 1/8" w. x 12 1/2" x 4 3/8" above & 2 7/8" below motorboard. \$39.50

SP20B Manual Player

Features semi-counterbalanced tonearm



with adjustable stylus pressure; automatic arm return to rest & shut-off after play. Plug-in cartridge head; has weighted turntable & will trip at 2 grams. 14 3/8" x 12 1/2" x 3 3/4" (16 3/8, 33 1/3, 45, and 78 rpm) design. \$37.50

Power-Matic Bases

Supplied with 117 V line switch for operating entire music system or amplifier



and/or receiver only while record player is shut off. Ebony & walnut.

B1P for Models SL65B, SL55B, 40 30, SP20B \$14.95

B2P for Models SL95B, SL75B & SL72B with covered accessory tray \$15.95

Injection Molded Bases

B1 Same as B1P except without switch. \$5.50

B2 Same as B2P except without switch. \$6.50

Wood bases also available in place of B1 & B2 designs.

Dust Covers

D1 for B1, B1P bases \$5.50
D2 for units taking B2, B2P bases . \$6.50

SLX-2 Automatic Turntable Module

3 speed, (33 1/3, 45 & 78 rpm) design with built-in stylus adj.; adjustable counterbal-



ance; low-mass tubular aluminum tonearm; manual/cueing pause control; mag. cartridge. With clear styrene dust cover & base. 15" l. x 13 1/4" d. \$69.50

SLX-3 Automatic Turntable Module

Combines turntable with matched magnetic cartridge, base, and dust cover. Four-speed design; similar to SLX-2 except has more advanced turntable features similar to "Synchro-Lab" series. \$99.50

X-10 Automatic Turntable Module

Combines turntable with matched stereo ceramic cartridge, base, and dust cover. Three-speed design with flip-over diamond stylus; swing-away overarm plays

STEREO HI-FI DIRECTORY



7", 10", 12" records. Has ultra-low-mass tubular aluminum tonearm. Stylus force preset & single lever control for cueing & pause in auto or manual play . . . \$52.50

X-11 Automatic Turntable Module

Combines a turntable with matched ceramic cartridge, base, and dust cover. Four-speed design with flip-over diamond stylus, swing-away overarm stacks 1 to 8 records. . . . \$39.95

JVC

5202 Automatic Turntable

4-speed (16, 33, 45 & 78 rpm); 11" platter; will handle up to 6 records. Output 5 mV; S/N ratio 45 dB. Supplied with mag. stereo cartridge & diamond stylus; response 10-22,000 Hz; 2.5 g stylus pressure. 7 1/4" x 16 3/8" x 1 1/4" d. With dust cover . . . \$99.95

MAGNAVOX

1K8888 "Micromatic" Record Player

Features 11" turntable, cue control & stylus pressure control. Supplied with dust cover, 45 rpm adapter, diamond/sapphire stylus cartridges & walnut cabinet. \$89.90

MIRACORD

770H Automatic Turntable

Features 2 speeds (33 & 45 rpm); adjustable speed control over 6% range; built-in



illuminated speed indicator visible on rim of turntable, with digital readouts; built-in elapsed time stylus-wear indicator; adjustable vertical stylus angle; (has lever indicating position from manual to stack of 8 records). Less cartridge . . . \$225.00
 RB-4 Deluxe recessed wood base \$11.95
 PCA-600 Power control adapter . \$ 8.95
 SA-383 45 rpm spindle \$ 6.50

PW-50H Auto/Manual Turntable

Stacks up to 10 records for automatic play & can be used manually. Features Papst hysteresis-synchronous motor; low-mass, lightweight tonearm for 1/2 g. tracking; interchangeable cartridge inserts; anti-skating control; illuminated speed indicator; 4-speed operation; stylus overhang gauge; built-in stylus brush; built-in cueing system. 12" non-ferrous turntable. 14 1/2" x 12 1/2" d. (5/8" above motorboard & 3/4" below); needs 2" right-side clearance for arm. Less cartridge & base \$169.50
 CR-50 Plug-in head \$ 5.00
 PCB-50WX Power control base allows automatic shut-off of entire system which
1971 EDITION

For cartridges that can track as low as 0.1 gram



- Features all new Empire 990 . . . world's most perfectly balanced playback arm.
- No acoustic feedback even when you turn up gain and bass.
- World's finest turntable motor—hysteresis synchronous type maintains speed accuracy with zero error.
- Lowest rumble of any turntable tested, 90dB (RRLL), wow and flutter, .01%.
- Exclusive pneumatic suspension lets you dance, jump or rock without bouncing the stylus off the record.
- Tone arm floats down or lifts up from a record surface bathed in light. Pick out the exact selection you want, even in a darkened room.



New Troubador 598 record playback system

\$199.95—less base and cover / walnut base and plexiglas cover—\$34.95



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2

Changers & Turntables

plugs into back of base. 16 $\frac{3}{8}$ " x 14 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ ". Oiled walnut \$25.00
 RB-4 Deluxe recessed wood base in walnut \$11.95
 DCP-4 Dust cover \$14.95
 RB-5 Wood finish molded base ... \$5.95
 MB-1 Mounting board \$3.00

630 Automatic Turntable

Features 4-speed (78, 33 $\frac{1}{3}$, 45, 16 $\frac{2}{3}$ rpm) anti-skate system with adjustable calibrated dial; interchangeable cartridge insert with overhang adjustment (has lead-screw adjust deck gauge to position stylus); will track at less than 1 g; cueing device; nonferrous turntable. Will play single records manually or automatically and stacks up to 10 records in automatic sequence; over-all design similar in appearance to Model 620. Less base & cartridge \$129.50
 RB-6. Wood-finish molded base ... \$5.95
 DC-1. Dust cover \$4.95
 DCP-6 Playing dust cover \$5.95

620 Automatic Turntable

Features 4-speed (78, 45, 33 $\frac{1}{3}$ & 16 $\frac{2}{3}$ rpm) anti-skate system with adjustable calibrated dial; cueing device; gram calibrated tracking-force adjustment. Will track at less than 1 g; will play single records manually or automatically and stacks of up to 10 records in automatic sequence. Chassis plate 13 $\frac{3}{8}$ " w. x 11 $\frac{1}{8}$ " d. Less base & cartridge \$109.50
 RB-6. Wood-finish molded base ... \$5.95
 DC-1. Dust cover \$4.95
 DCP-6 Playing dust cover \$5.95

750 Automatic Turntable

Features four speeds (16 $\frac{2}{3}$, 33 $\frac{1}{3}$, 45 & 78 rpm); manual or automatic operation (one record continuously or 10 automatically); 12" non-magnetic turntable; 7", 10", or 12" records. Rumble 40 dB, wow 0.06%, flutter 0.02%, tracking error less than 0.5°/inch. Has stylus force adj. (0-6 $\frac{1}{2}$ g); cueing device; anti-skate adjustment and dynamic & static balance in horizontal and vertical planes. 14 $\frac{1}{2}$ " w. x 12 $\frac{1}{2}$ " d. x 7 $\frac{1}{2}$ " above mtg. board & 3 $\frac{3}{4}$ " below \$139.50
 RB-5. Wood-finish molded base ... \$5.95
 DC-1 Universal dust cover \$4.95
 RB-4 Deluxe recessed wood base in walnut \$11.95
 DCP-4 Dust cover \$14.95

NORELCO

202 Electronic Turntable

Has electronic solid-state speed controls $\pm 2\%$ at 33, 45 & 78 rpm. Flutter 0.06% av.; rumble -36 dB; tracking force 0.5-4 g. Has hydraulic cueing level; photoelectric motor shut-off; anti-skating bias; 2-stage belt drive. 15 $\frac{1}{2}$ " x 5 $\frac{3}{8}$ " x 14 $\frac{1}{8}$ ". With walnut cabinet, dust cover but less cartridge \$129.50

PERPETUUM-EBNER

PE-2018 Automatic Turntable

Features 3 speeds (45, 78, 33), $\pm 3\%$ pitch control; 1.8" tangent tracking error, vertical tracking error adjustable up to 8 records; adjustable 0-6 g tracking force. Has anti-skating device & anti-skating correction for different stylus tip radii. Flutter & wow $\pm 0.15\%$; rumble 56 dB. 13 $\frac{1}{8}$ " w. x 10 $\frac{7}{8}$ " w. x 4 $\frac{7}{8}$ " above mtg. board & 3 $\frac{1}{8}$ " below. Less base, cartridge & dust cover \$99.95

PE-2020 Automatic Turntable

Similar to PE-2018 except has additional 16 $\frac{2}{3}$ rpm speed; extra heavy & larger diameter turntable. Flutter & wow $\pm 0.1\%$; rumble -58 dB. 14 $\frac{1}{8}$ " w. x 12" d. Less base, cartridge & dust cover \$129.95

PE-2038 Automatic Turntable

3-speed (33, 45, 78 rpm) with vertical tracking angle (VTA) control & separate cueing. Has cast metal 10 $\frac{3}{4}$ " (4.4-lb) platter, 4-pole induction motor, pitch control ($\pm 3\%$). VTA adjustable up to 8 records. Stylus force 0-6 g; tracking error 1.8% max.; wow & flutter $\pm 0.15\%$; rumble -56 dB (related to 10 cm/sec, 1000 Hz). 13" x 11" x 6 $\frac{1}{2}$ " h. x 3 $\frac{3}{4}$ " d. \$115.00

PE-2040 Automatic Turntable

Deluxe version of PE-2038. Has 11 $\frac{1}{4}$ "



dia., 7.1-lb zinc die-cast platter. Wow & flutter $\pm 0.1\%$; rumble -58 dB. 14" x 12" \$145.00

Accessories for PE-2018/PE-2038

BV-18 Standard base \$8.00
 TX-18/20 Dust cover \$8.00
 SP-145 45 rpm spindle \$4.95
 CS-2018 Cartridge slide \$5.95

Accessories for PE-2020/PE-2040

BV-20 Standard base \$8.00
 TX18/20 Dust cover for BV-20 base \$8.00
 LZ-2020 Deluxe base & cover ... \$50.00
 SP-245 45 rpm spindle \$5.95
 CS-2020 Cartridge slide \$5.95

PIONEER

PL-41A Turntable Assembly

Two speed (33 & 45 rpm) belt-drive design with oil-damped tonearm elevator. Has 4-pole hysteresis synchronous motor; induced magnetic-type cartridge with 0.5-mil diamond stylus; anti-skating device & direct-reading stylus pressure gauge. Wow & flutter 0.08%; response 10-25,000 Hz; 3.5 mV output @ 1000 Hz & 50 mm/sec. Stylus pressure 2-3 g. 19 $\frac{3}{8}$ " x 7 $\frac{3}{4}$ " x 16" d. With oiled-walnut base & dust cover. \$220.00

PL-A25 Automatic Turntable

Belt-driven design with tonearm that provides auto lead-in & return, cut & repeat.



Has lateral balancer and is oil-damped. Includes walnut base & induced magnetic cartridge with 0.5-mil diamond stylus. Has plug-in type cartridge shell; two speeds (33 & 45 rpm); 2-3 g stylus pressure; output 3.5 mV @ 1 kHz & 50 mm/sec. Response 10-25,000 Hz; S/N ratio -46 dB; wow & flutter 0.1%. Has universal power supply (110, 117, 130, 220, or 240 volts, 50-60 Hz). 17 $\frac{3}{4}$ " w. x 6 $\frac{3}{4}$ " x 13 $\frac{3}{4}$ " \$129.95

REALISTIC

LAB-36 Automatic Turntable

British-built; features synchronous motor; cast turntable; counterweighted arm;



micrometer stylus force adjustment; anti-skate control; viscous cueing control; automatic tonearm lock and a muting & pop filters; four speeds. Supplied mounted on deluxe base with Realistic/Shure $\frac{3}{4}$ -1 $\frac{1}{2}$ g elliptical diamond magnetic cartridge installed \$79.95

Realistic/Miracord 40A Automatic Turntable

Features four speeds (16, 33, 45 & 78 rpm); plays 7", 10", 12" records, but will not intermix. Has a 4-pole, single-phase synchronous motor and a hydraulic tonearm cueing device. Includes a Realistic/Shure elliptical diamond magnetic, $\frac{3}{4}$ -gram tracking cartridge and a walnut-grain base. \$119.95

REK-O-KUT

Model B-12H Stereotable

3-speed; hysteresis synchronous motor; 12" aluminum turntable; rubber mat; rim



driven by idler wheel; noise level: better than 59 dB below average recording level; 17 $\frac{3}{4}$ " w. x 16", height above deck 3", height below deck 6 $\frac{1}{4}$ " \$159.00
 Base BH walnut. \$18.95

CVS012 Variable Speed Turntable

Continuously variable speed control from 25 to 100 rpm. Ideal for sound effects, dance studios, skating rinks, and instrument instruction \$169.00
 Supplied with base, tonearm, and cartridge \$225.00

SHERWOOD

SEL-100 Automatic Turntable

Features two speeds (33 $\frac{1}{3}$ & 45 rpm); beam-of-light/photoelectric cell end-of-record tonearm trip; hydraulically damped cueing; two separate low-speed motors (1 for drive, 1 for record changing); intermix record size handling & stylus pressure adjust with readout from 0.5 to 4 g. 17" x 13" x 5 $\frac{1}{2}$ " h. Less base \$155.00

Our Professional Series.

For those who want the best, no matter how little it costs.

When you first start shopping around for automatic turntables, you'll discover that our Professional Series is priced pretty much the same as our competition.

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Ours is what we call a Total Turntable. That means we give you a custom base, dust cover, and on two of the models, a Shure magnetic cartridge. You won't have to shell out six dollars here, eight dollars there, and forty dollars somewhere else.

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With each Record and Tape Case you order you will receive, **FREE OF CHARGE**, a specially designed record and tape cataloging form with pressure-sensitive backing for affixing to the side of each case. It enables you to list the record names and artists and will prove an invaluable aid in helping you locate your albums. The catalog form can be removed from the side of the case at any time without damaging the leatherette.

Record Cases are available in three sizes: for 7", 10" and 12" records. Each case, with a center divider that separates your records for easy accessibility, holds an average of 20 records in their original jackets. The Recording Tape Case holds 6 tapes in their original boxes.

• The Tape Cases and the 7" Record Cases (with catalog forms) are only \$4 each; 3 for \$11; 6 for \$21.

• The 10" and 12" Record Cases (with catalog forms) are \$4.25 each; 3 for \$12; 6 for \$22. Add an additional \$1.00 per order (regardless of number of cases ordered) for shipping and handling. Outside U.S.A. add \$1.00 PER CASE ORDERED.

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2 Changers & Turntables

SONY

TTS-3000A Servo-Controlled Turntable

2-speed (33 $\frac{1}{3}$ & 45 rpm) design; has built-in strobe disc & a speed control adjustment. Motor speed is maintained by a servo control amplifier which maintains constant turntable speed. Servomatic is powered by a low-speed d.c. motor; has belt drive. Rumble -47 dB; wow & flutter 0.05% r.m.s. 14 $\frac{1}{16}$ " w. x 15" d. x 3" above mtg. board with Sony PUA-237 or 286 tonearm and 3 $\frac{1}{2}$ " below motorboard

.....\$149.50

TAC-2A Base using 12" tonearm \$32.50

TAC-3 Base using 16" tonearm \$39.95

TAC-4 Motorboard to mount 16" tonearm\$14.50

DU-4 Tinted dust cover for TAC-2A base\$19.95

PS-1800A Phono Combination

Combines 2-speed (33 $\frac{1}{3}$ & 45 rpm) turntable; tonearm; base; dust cover. Wow &



flutter 0.08%; rumble -41 dB. Has d.c. servo motor with belt drive. Stylus force 0.3 g. Has cueing & anti-skating devices

.....\$199.50

SH-120 Cartridge mtg. shell\$ 4.95

THORENS

TD-125 Transcription Turntable

Features an electronic pitch control governed by freq. change of a Wien-bridge



transistorized oscillator. Motor speed is 250 rpm at 33 $\frac{1}{3}$ rpm platter speed by dropping synchronous freq. from 60 to 37 Hz. Three-speed (16 $\frac{2}{3}$, 33 $\frac{1}{3}$, 45 rpm) design; wow & flutter 0.08% rumble -48 dB (unweighted). Has dynamically balanced 12" die-cast turntable. Replaceable tonearm mounting hoards are available for 12" or 16" arms. (Predrilled mtg. boards for Ortofon RMG212 & RS212 tonearms are available.) 18" l. (20" with 16" tonearm) x 14" w. x 5"\$205.00

TD-125B On wooden base\$220.00

TD-125AB With arm & base\$300.00

TD-125LB On large wooden base for use with 16" tonearms\$275.00

TD-150 Mark II Transcription Turntable

Dual-speed (33 $\frac{1}{3}$ & 45 rpm). Features viscous-damped cueing device; 7 lb, 12"

anti-magnetic platter; arm resonance below 10 Hz; adj. tracking force 0.5-3.5g. Thorens TP13A tonearm. Double synchronous 16-pole motor. Wow & flutter \pm 0.09; rumble -43 dB. Has plug-in cartridge shell. 15 $\frac{1}{8}$ " w. x 12 $\frac{1}{8}$ " x 5" h. Base height 2 $\frac{1}{4}$ ". With tonearm & wooden base\$130.00

Accessories

WB-125 Walnut base for TD-125 \$15.00

TX-11 Dust cover for TD-150 MKII

.....\$10.00

TX-25 Dust cover with hinge for TD-125B\$30.00

TX-25L Dust cover with hinge for TD-125LB\$70.00

TX-44 Dust cover for TD-125B,

TD-125AB\$15.00

CE-509 Molded mounting frame for TD-125\$15.00

AS-25 12" tonearm mounting board for TD-125\$3.00

AS-25SME 12" tonearm mounting board for TD-125 & SME tonearm\$3.00

AS-25/16 16" tonearm mounting board for TD-125\$3.75

AS-25L 16" tonearm mounting board drilled for Ortofon RMG 309 tonearm & TD-125\$3.75

AS-25P 12" tonearm mounting board drilled for Ortofon RS-212 tonearm & TD-125\$3.00

TP-50 Plug-in shell for TD-150 MKII & TD-125AB tonearms\$7.00

V-M

1542 Record Changer/Cartridge

4-speed (16,33,45 & 78 rpm) design; rumble 1.8%; wow 0.42% r.m.s.; flutter 0.21% r.m.s. Comes complete with walnut base, dust cover, automatic needle-cleaning brush & Shure magnetic cartridge with 0.6-mil spherical diamond stylus. 3 g. tracking force. Response 20-20,000 Hz; output 8 mV at 1000 Hz. 6" h. x 14 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ " d.\$105.00

1555 Automatic Turntable/Cartridge

2-speed (33 & 45 rpm) belt-driven design; wow 0.3% at 33 rpm; flutter 0.15%



r.m.s. at 33 rpm. Will handle six 12" or eight 7" records & 6" to 12" intermixed. Has separate motors for turntable & changing mechanism; an extra-long (9 $\frac{1}{2}$ " from pivot to stylus) tonearm; photocell cycle change sensor & end-of-play shut-off. Can be used to shut off entire hi-fi system. Comes complete with walnut base, dust cover & Shure magnetic cartridge with 0.6-mil spherical diamond stylus. 5.5 mV at 1000 Hz output. 1 $\frac{1}{2}$ -2 $\frac{1}{2}$ g. tracking force. Response 20-20,000 Hz. 6 $\frac{1}{4}$ " x 19" x 15" d.\$220.00

YAMAHA

YP-70 Turntable

Single-play, 2-speed (33 $\frac{1}{3}$ & 45 rpm) design; wow & flutter 0.08%. Features belt drive with separately floating motor drive assembly; static balanced tonearm; plug-in type cartridge shell & 0-5 g stylus pressure adjust. Supplied with wood cabinet, dust cover & magnetic stereo cartridge with 0.7-mil diamond stylus (4 mV output). Response 10-20,000 Hz; 110/240 V operation. 19" x 16" x 6"\$209.00

STEREO HI-FI DIRECTORY

ATV commercial composer talks about the new VM professionals.



Bill Walker makes his living in sound. He writes and produces music for television and radio advertisers. Chevrolet. Kraft. Oldsmobile and Continental Airlines. He pioneered in the uses of the Moog Synthesizer. And has written songs for Peggy Lee, Dean Martin, Gordon MacCrea and others. Over the years, Bill produced more than 5,000 sound tracks for radio and television.

"If you're a pro, you can't help but be impressed with the new VM PROFESSIONALS.

"I sure like the way my music sounds on them. Sensitive. Subtle. And yet this is the kind of equipment you can play ten hours a day and not have trouble with.

"I am particularly impressed with the receiver. The VM PROFESSIONAL 1521. It has a new type filter that really gives you great FM selectivity. And the stereo separation! It's almost as good as some 8-track playbacks I heard in recording studios.

"And I really like the VM PROFESSIONAL automatic turntable. The "Synchro-Matic" 1555. It tracks beautifully. I can't pick up any tonal variation from the beginning to the end of a record. That's probably because the tone arm is longer, 9½ inches. And the tripping mechanism is photo-electric, so there's no mechanical distortion.

"It's really great at reproducing those nuances and shading you work so hard to get out of a vocal or an arrangement.

"And the spindle! Really something to see. It gently lowers records all the way down to a motionless platter. That's what I call loving care.

"Of course the speakers make the whole outfit pay off. They're VM's new Spiral Reflex System speakers. Compact. And very efficient. Gives you really clean basses and horns. And none of the instruments ever sound strained or pushed, even in attack-passages.

"And another thing, about 95% of all the component parts in the VM PROFESSIONAL line are made in America. And I know it isn't fashionable, but to me that means better and tougher.

"The only problem I have with my VM PROFESSIONAL outfit is, I can't decide whether to leave it at my studio or take it home.

"I just may have to buy another one."

THE VM PROFESSIONAL 1555
Two synchronous motors -24-pole for turntable, one for changer mechanism
• Belt driven, completely isolated, low mass, dynamically balanced turntable
• Gentle lowering spindle
• Automatic record size sensor system • Photo cell cycle-change sensor eliminates side pressure and trip noise • Piston-damped 2-way cue control • 9½" tone arm (from pivot to stylus); the longest on any automatic turntable • Piano-key control center isolated from turntable and pick-up arm
• Quick-change, plug-in housing accepts any standard magnetic cartridge • Rumble: -52 db (CBS weighting).



For engineering specs on the complete VM Professional Series write:

VM CORPORATION

Dept. 74, P.O. Box 1247, Benton Harbor, Michigan 49022 or call direct, Area Code 616-925-8841. (Ask for Dept. 74.)



Cartridges & Tonearms

Cartridges46
Tonearms50



ADC

All cartridges are induced magnetic types with 47,000-ohm recommended load impedance. Elliptical diamond stylus is 0.3 x 0.7 mil and spherical is 0.7 mil. Cartridges all feature 15° tracking angle & output figures are at 5.5 cm/sec recorded velocity.

ADC 27 Cartridge

Output 4 mV; tracking force 1/2-1 1/4 g; response 10-22,000 Hz ± 2 dB; compliance 40 x 10⁻⁶ cm/dyne. Has elliptical stylus\$65.00

ADC 10E-MK11 Cartridge

Output 4 mV; tracking force 1/2-1 1/4 g; response 10-20,000 Hz ± 2 dB; compliance



35 x 10⁻⁶ cm/dyne. Has elliptical stylus\$59.50

ADC 550XE Cartridge

Output 5 mV; tracking force 3/4-2 g; response 10-20,000 Hz ± 2 dB; compliance



35 x 10⁻⁶ cm/dyne. Has elliptical stylus\$44.95

ADC 660XE Cartridge

Output 5 mV; tracking force 3/4-2 g; response 10-20,000 Hz ± 2 dB; compliance 30 x 10⁻⁶ cm/dyne. Has elliptical stylus\$39.95

ADC 990XE Cartridge

Output 5 mV; tracking force 1-2 g; response 10-20,000 Hz ± 3 dB; compliance 25 x 10⁻⁶ cm/dyne. Has elliptical stylus\$29.95

ADC 220XE Cartridge

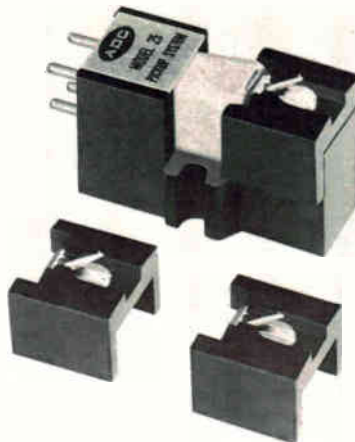
Output 6 mV; tracking force 1-2 1/2 g; response 10-18,000 Hz ± 3 dB; compliance 20 x 10⁻⁶ cm/dyne. Has elliptical stylus\$25.95

ADC 220X Cartridge

Output 6 mV; tracking force 1-2 1/2 g; response 10-18,000 Hz ± 3 dB; compliance 20 x 10⁻⁶ cm/dyne. Has spherical stylus\$20.00

ADC 25 Cartridge System

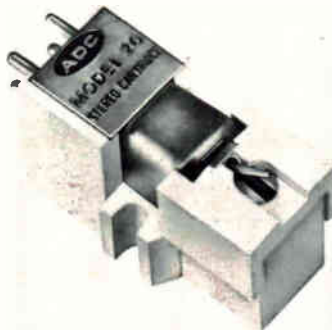
Output 4 mV; tracking force 1/2-1 1/4 g; response 10-24,000 Hz ± 2 dB; compliance



50 x 10⁻⁶ cm/dyne. To custom match record & stylus; design is supplied with 3 interchangeable styli (.7 x .3 mil elliptical, a .9 x .3 mil elliptical, and 0.6 mil spherical)\$100.00

ADC 26 Cartridge

Same as ADC 25 except supplied with only one stylus assembly, a 0.3 x 0.7 mil

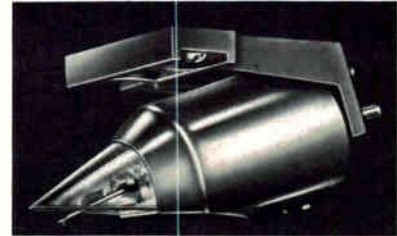


elliptical. Others can be obtained later\$75.00

B&O

SP-10 Stereo Cartridge

Magnetic design; response 15-25,000 Hz ± 3 dB (50-10,000 Hz ± 1 dB); compliance 25 x 10⁻⁶ cm/sec; tracking force 1-1.5 g; output 1 mV/cm/sec (5 mV from



av. record). Has 15° vertical tracking angle & spherical diamond stylus ...\$59.95
SP-12 Same except with elliptical stylus.\$69.95

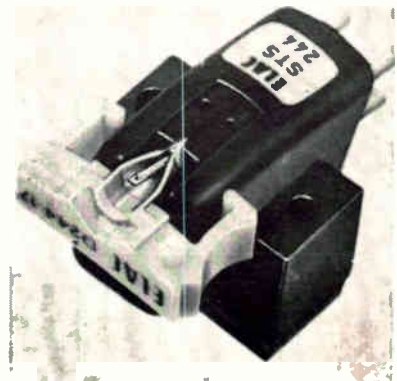
SP-14 Stereo Cartridge

Magnetic design; response 20-16,000 Hz ± 2.5 dB; compliance 15 x 10⁻⁶ cm/sec; tracking force 1.5-2.5 g; output 1 mV/cm/sec (5 mV from av. record). Has 15° vertical tracking angle & spherical diamond stylus.\$29.95

ELAC

STS-244-17 Stereo Cartridge

Mono/stereo mag cartridge with 0.7 mil diamond stylus. Response 20-22,000 Hz;



stylus force 1.5-3 g; sensitivity 15 mV r.m.s. at 10 cm/sec. Trackability 1.5 g./10 Hz/3.8 cm/sec.\$24.95

STS-344-17 Stereo Cartridge

Same as STS-244-17 except stylus force 1-2 g. Sensitivity 10 mV. Tracking force 1 g./100 Hz/3.8 cm/sec.\$39.50
STS-344-E with elliptical 0.9 x 0.2 mil stylus\$39.50

STS-444-12 Stereo Cartridge

Same as STS-244-17 except response 10-24,000 Hz; stylus force 0.75-1.5 g; sensitivity 10 mV; tracking ability 0.75 g./100 Hz/3.8 cm/sec. Has 0.5 mil stylus. \$59.50
STS-444-E with elliptical 0.9 x 0.2 mil stylus\$59.50

EMPIRE

All cartridges feature induced field moving-magnet armatures, 15° vertical tracking angle; 47,000-ohm load imp. & all except 909E/X, 909/X & 90EE/X have hand polished styli.

1000ZE/X Stereo Cartridge

Response 4-40,000 Hz; output 5 mV; compliance 35 x 10⁻⁶ cm/dyne; tracking



force ¼ to 1½ g; Has 0.2 x 0.7 mil elliptical stylus\$99.95

999VE/X Stereo Cartridge

Same as 1000ZE/X except response 6-36,000 Hz; 6 mV output & ½ to 1½ g tracking force\$79.95

999TE/X Stereo Cartridge

Same as 999VE/X except response 6-32,000 Hz & 30 x 10⁻⁶ cm/dyne compliance\$64.95

999SE/X Stereo Cartridge

Same as 999TE/X except response 8-32,000 Hz; 8 mV output\$49.95

999PE/X Stereo Cartridge

Same as 999SE/X except 25 x 10⁻⁶ cm/dyne compliance; ¾ to 2 g tracking force & 0.3 x 0.7 mil elliptical stylus ...\$44.95

999E/X Stereo Cartridge

Same as 999PE/X except 10-30,000 Hz response\$39.95

999/X Stereo Cartridge

Same as 999E/X except 20 x 10⁻⁶ cm/dyne compliance & has 0.7 mil spherical stylus\$34.95

909E/X Stereo Cartridge

Response 12-25,000 Hz; 8 mV output; 15 x 10⁻⁶ cm/dyne compliance; 1-4 g tracking force; 0.4 x 0.7 mil elliptical stylus.\$29.95

909/X Stereo Cartridge

Response 15-25,000 Hz; 8 mV output; 15 x 10⁻⁶ cm/dyne compliance; 1-4 g tracking force. Has 0.7 mil spherical stylus.\$24.95

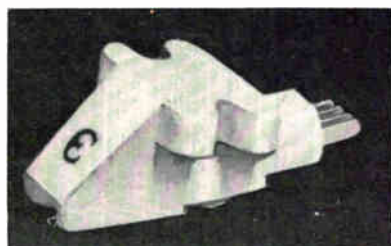
90EE/X Stereo Cartridge

Response 15-25,000 Hz; 8 mV output; 10 x 10⁻⁶ cm/dyne compliance; 1½-4 g tracking force. Has 0.4 x 0.7 elliptical stylus\$24.95

EUPHONICS

U-15-LS "Miniconic" Stereo Cartridge

Features bi-radial stylus; compliance 25 x 10⁻⁶ cm/dyne; response 20-20,000 Hz ± 2 dB. Separation 30 dB @ 1 kHz (20 dB @ 10 kHz); tracking force 1.0-2.0 g.



1971 EDITION

or less; 15° tracking angle. Operates on semi-conductor strain gauge principle and must be used with 12 V d.c. supply

.....\$36.00
U-15-LS (P1) Plug-in design for use with company's TA-15 tonearm\$36.00
PS-15 Power source\$19.00

U-15-P "Miniconic" Stereo Cartridge

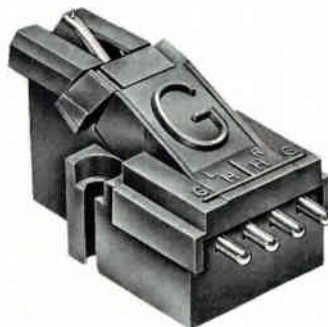
More rugged design than U-15-LS with .5 mil conical stylus. Response 20-20,000 Hz ± 2 dB. Separation 25 dB @ 1 kHz (5 dB @ 15 kHz); compliance 15 x 10⁻⁶ cm/dyne; tracking force 1.5-3 g; 15° tracking angle. Operates on semiconductor strain gauge principle and must be used with 12 V d.c. supply\$20.00
U-15P (P1) Plug-in design for use with TA-15 tonearm\$20.00
PS-15 Power source\$19.00

GRADO

F Series Phono Cartridges

All are 4-coil magnetic moving-iron type & have diamond stylus.

F-1 Features a patented twin tip diamond; it has two separate 0.3-mil spherical tips ground on 1 diamond. Each tip independently contacts each (L + R) of the groove walls. Response 7-40,000 Hz;



separation 35 dB (at 1000 Hz); 30 dB at 10,000 Hz; output 0.8 mV/cm/sec. Tracking force 0.7-2 grams\$75.00

F-2 Same as F-1 except has 0.6 x 0.3-mil elliptical stylus.\$60.00

F-3 Same as F-1 except has 0.6-mil spherical stylus\$49.50

FCE Response 10-35,000 Hz; separation at 1000 & 10,000 Hz 25 dB; output 1.3 mV/cm/sec; tracking force 1.5-3.5 grams. 0.7 x 0.3-mil elliptical stylus\$35.00

FCR Same as FCE except has 0.6-mil spherical stylus\$25.00

FTE Inexpensive version of FCE ..\$19.95

FTR Inexpensive version of FCR ..\$9.95

IMF

Goldring 800E Stereo Cartridge

Magnetic design uses "Free Field" system of transduction. Sensitivity 5 mV at



5 cm/sec; tracking force ¾-1½ g; compliance 30 x 10⁻⁶ cm/dyne; response 10-20,000 Hz ± 3 dB; 15° tracking angle at 1 g. Has 0.3 x 0.8 mil elliptical type stylus.\$39.95
Replacement stylus\$18.00

THE CARTRIDGE KILLER.

This man doesn't have time to baby the tools of his trade. Not with a commercial, a traffic report and time check breathing down his neck. He's got to keep those records spinning fast and furious. And, if he kills a cartridge or two along the way, well—that's how it goes

Until now.

Meet the Stanton 500AL—the cartridge that's tougher than disc jockeys. Here is the workhorse of the broadcast industry. We designed the entire stylus assembly to withstand the rugged demands of back cueing and the kind of handling that would quickly ruin ordinary pickups. Yet its high restoring force and tracking reliability is accomplished without sacrifice of professional standards for frequency response, output, channel separation, etc.

The Stanton Model 500AL is just one of many cartridges engineered by Stanton for the varied and critical applications in the fields of broadcasting and recording. For nothing less than Stanton performance and reliability would meet the needs of the engineers who have made Stanton—The Professional Standard.

For free literature write to Stanton Magnetics, Inc., Terminal Drive, Plainview, L.I., New York 11803



STANTON

CIRCLE NO. 51 ON READER SERVICE CARD

These long playing cartridges will outperform any long playing records you own.



Here are two exciting stereo cartridges that barely touch your records, yet track them like radar, at forces so low that your records will be good as new after years of use.*

1000ZE/X "Measurement Standard"
—Tracks as low as 0.1 gram in laboratory playback arms. List Price—\$99.95.

Each 1000ZE/X and 999VE/X cartridge is individually adjusted to have a flat frequency response within ± 1 dB from 20-20,000 Hz. Stereo separation is better than 35 dB at 1 K Hz and remains 25 dB or better all the way out to 20,000 Hz. Overall frequency response a phenomenal 4-40,000 Hz. There are no electrical or mechanical peaks and total IM distortion at the standard 3.54 cm/sec groove velocity does not exceed .05% at any frequency within the full spectrum. Uses a .2 x .7 mil hand polished miniature diamond for exceptional low mass.

999VE/X "Professional" — Recommended tracking force 1/4 to 1 1/4 grams. List Price—\$79.95.

*Based on Empire's 5000 play tests (more than 50 times the normal life usage of a record).

Write for your free copy of "1971 Guide to Sound Design," Empire Scientific Corp., 1055 Stewart Avenue, Garden City, N.Y. 11530.

EMPIRE



CIRCLE NO. 26 ON READER SERVICE CARD

3 Phono Cartridges

800 Super E Stereo Cartridge

Has dual pivoting stylus assembly for extra low tracking force (1/2-1 1/4 g) operation. Sensitivity 4 mV at 5 cm/sec.; compliance 45×10^{-6} cm/dyne; 15° tracking angle at 1/4 g. Response 10-23,000 Hz ± 3 dB. Supplied with 0.3 x 0.8 mil elliptical stylus & an individually calibrated response curve.\$69.50

G800 Cartridge

5 mV at 5 cm/sec; tracking force 1 1/2-3 g; compliance 20×10^{-6} cm/dyne; stylus 0.5-mil spherical. Has 15° tracking angle at 2 g.\$19.95

G850 Cartridge

8 mV at 5 cm/sec; tracking force 1 1/2-4 g; compliance 15×10^{-6} cm/dyne; stylus 0.7-mil spherical\$9.95

NORELCO

412 Phono Cartridge

Each cartridge comes with individually calibrated chart showing freq. response. Tracking force 3/4-1 1/2 g; compliance 30×10^{-6} cm/dyne; output 6 mV at 3.54 cm/sec. Has elliptical 0.3 x 0.7 mil stylus. 15° tracking angle.\$67.50

ORTOFON

S-15T Stereo Cartridge

Moving coil design featuring response 15-40,000 Hz; output impedance 15,000



ohms; recommended load 47,000 ohms; stylus pressure 1 to 2 g. Output 6 mV/cm/sec with built-in transformer. Stylus elliptical diamond tip .007"/.003"; 15° vertical tracking angle; channel separation 20-30 dB; for all tonearms ... \$80.00
S-15MC Mounted in Ortofon shell.\$85.00

SL-15T Universal cartridge with external transformers, two 15,000 ohm for all tonearms\$75.00

SL-15 Same as SL-15T but without transformers; output 0.04 mV/cm/sec.\$60.00

PICKERING

XV-15/750E Stereo Cartridge

For manual & automatic turntables; has a D.C.F. of 750; output 4.4 mV; tracking force 0.5 to 1 g.; response 10-25,000 Hz. Has 0.2 x 0.9 mil elliptical diamond stylus\$65.00

XV-15 "Dustamatic" Series

All cartridges are supplied with V-Guard diamond stylus & "Dustamatic" brush. Channel separation 35 dB. The D.C.F. (dynamic coupling factor) is an index of maximum stylus performance and is related to type of playback equipment. Output referenced to 5.5 cm/sec record velocity.

XV-15/400E (D.C.F. 400) for manual turntables, automatic transcription turntables & light-tracking automatics; output 5.5 mV; tracking force 3/4 to 1 1/4 g.



response 10-25,000 Hz. Has elliptical stylus (0.3 x 0.9 mil)\$54.95
XV-15/350 (D.C.F. 350) for manual turntables, automatic transcription turntables & light-tracking automatics; output 6 mV; tracking force 1 to 3 g.; response 10-25,000 Hz. Has conical 0.7 mil stylus.\$39.95

XV-15/200E (D.C.F. 200) for automatic turntables; output 8 mV; tracking force 2-4 g.; response 10-25,000 Hz. Has elliptical (0.4 x 0.9 mil) stylus\$49.95

XV-15/150 (D.C.F. 150) for automatic turntables; output 8 mV; tracking force 2-5 g.; response 10-25,000 Hz. Has conical 0.7 mil stylus\$34.95

XV-15/100 (D.C.F. 100) for record changers; output 7 mV; tracking force 3-5 g.; response 10-20,000 Hz. Has 0.7 mil conical stylus\$29.95

V-15/3 "Dustamatic" Series

High performance through lower tip mass & extended response (10-25,000



Hz); cartridge weight 5 g.; has self-supporting (1 gr.) built-in Dustamatic brush; 15° tracking angle; channel separation 35 dB; brush does not affect tracking force or performance characteristics, does prevent skating, absorbs shock, keeps records dust-free while in play. Output referenced to 5.5 cm/sec record velocity.

V-15/AME-3 For manual turntables, automatic transcription turntables; elliptical stylus (.0003" x .0009"); tracking force 3/4 to 1 1/2 g.; output 5.5 mV\$49.95

V-15/AM-3 For manual turntables, light-tracking automatics; conical stylus 0.7 mil; tracking force 1 to 3 g.; output 6.5 mV\$34.95

V-15/ATE-3 For automatic turntables, record changers; elliptical stylus (.0004" x .0009"); tracking force 2 to 5 g.; output 6.5 mV\$39.95

V-15/AT-3 For automatic turntables; conical stylus 0.7 mil; tracking force 2 to 5 g.; output 7.5 mV\$29.95

V-15/ACE-3 For record changers; elliptical (0.4 x 0.9 mil) stylus; tracking force 2 to 5 g.; output 7.5 mV\$29.95

V-15/AC-3 For record changers; conical 0.7 mil stylus; tracking force 3 to 7 g.; Output 7.5 mV\$24.95

V-15/Phase IV Micro Magnetic Series

Newest member of Micro-Magnetic car-



STEREO HI-FI DIRECTORY

tridge family has a narrow & low profile. High-frequency tracking is accomplished through lower moving mass of the stylus assembly. Has built-in "Dustomatic" brush assembly.

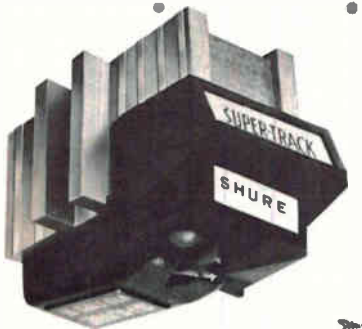
V-15/Phase IV-AME for manual turntables; automatic transcription turntables, light-tracking automatics; output 5.5 mV; tracking force $1\frac{1}{2} \pm \frac{1}{4}$ g.; response 10-25,000 Hz; elliptical stylus 0.0003" x 0.0009"\$49.95

V-15/Phase IV-AM for manual turntables, automatic transcription turntables, light-tracking automatics; output 6.0 mV; tracking force 2 ± 1 g.; response 10-25,000 Hz; 0.0007" spherical type stylus.\$34.95

SHURE

V-15 Type II (Improved) Stereo Cartridge

"Super-Track" elliptical cartridge; max. trackability at minimum tracking force.



Bi-radial 0.0002" x 0.0007" diamond stylus. 20-25,000 Hz. Separation over 25 dB at 1 kHz. Tracking force $\frac{3}{4}$ to $1\frac{1}{2}$ g. Trackability specifications at 1 g: 28 cm/sec at 400 Hz; 35 cm/sec at 1000 Hz; 30 cm/sec at 5000 Hz; 22 cm/sec at 10,000 Hz.\$67.50
 VN15E. Replacement stylus\$27.00
 V-15II-7. Super-Track cartridge with spherical (0.0007") stylus\$62.50
 VN7. Replacement stylus\$24.00

M91E "Easy Mount" Stereo Cartridge

Hi-Track elliptical cartridge with optimized design parameters for trackability similar to V-15, Type II (Improved). Bi-radial 0.0002" x 0.0007" diamond stylus; 20-20,000 Hz. Separation 25 dB at 1 kHz. Tracking force $\frac{3}{4}$ to $1\frac{1}{2}$ g. Trackability at 1 g.: 20 cm/sec at 400 Hz; 28 cm/sec at 1 kHz; 25 cm/sec at 5000 Hz; 18 cm/sec at 10,000 Hz\$49.95
 N91E. Replacement stylus\$24.50

M92E "Easy Mount" Stereo Cartridge

Hi-Track elliptical cartridge for use with finest manual and automatic turntables. Bi-radial 0.0002" x 0.0007" diamond stylus. 20-20,000 Hz. Separation 25 dB at 1 kHz. Tracking force $\frac{3}{4}$ to $1\frac{1}{2}$ g. Trackability at 1 g.: 18 cm/sec at 400 Hz; 26 cm/sec at 1 kHz; 25 cm/sec at 5000 Hz; 15 cm/sec at 10,000 Hz\$44.95
 N92E. Replacement stylus\$22.50

M93E "Easy Mount" Stereo Cartridge

Hi-Track elliptical cartridge for automatic or manual turntables. Bi-radial 0.0004" x 0.0007" diamond stylus. 20-20,000 Hz. Separation 25 dB at 1 kHz. Tracking force $1\frac{1}{2}$ to 3 g.\$39.95
 N93E. Replacement stylus\$19.50

M75E Stereo Cartridge

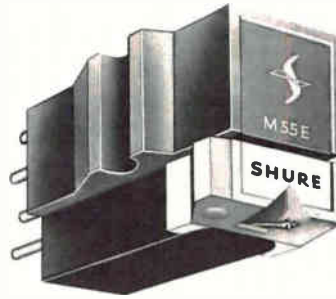
Features "Hi-Track" elliptical (.7 & .2 mil) diamond stylus & built-in stylus guard. 20-20,000 Hz; 25 dB separation; 6.6 mV output; $\frac{3}{4}$ to $1\frac{1}{2}$ g tracking force.\$39.95
 N75E. Replacement stylus\$20.00

1971 EDITION

M75-6 "Hi-Track" conical stylus cartridge for $1\frac{1}{2}$ -3 g tracking\$24.50
 N75-6. Replacement stylus\$11.35

M55E Stereo Cartridge

Features retractable (.7 & .2 mil) 15° diamond stylus and built-in stylus guard. 20-



20,000 Hz; 6.6 mV output @ 5 cm/sec; 25 dB separation at 1000 Hz. $\frac{3}{4}$ to 2 g tracking force\$24.95
 N55E Replacement stylus\$14.95

M44 Series Stereo Cartridges

Features 15° elliptical, retractile stylus. Response 20-20,000 Hz, channel separation greater than 25 dB. Appearance similar to M55E.

M44E for use with automatic turntables that track $1\frac{3}{4}$ to 4 g; output 9.3 mV

.....\$24.95

N44E. Replacement stylus\$12.50

M44-5 tracks $\frac{3}{4}$ - $1\frac{1}{2}$ g with .5 mil diamond; output 6 mV/ch\$21.95

Replacement stylus N44-5\$11.35

M-44-7 cartridge tracks at $\frac{3}{4}$ - $1\frac{1}{2}$ g with .7 mil diamond; output level 9 mV ch.

.....19.95

N44-7 Replacement stylus\$9.75

M44C output 9.3 mV; tracking force 3 to 5 g. Stylus is type N44C 7-mil diamond

.....\$17.95

N44C. Replacement stylus\$9.00

N44-1 For mono LP records at $1\frac{1}{2}$ to 3 g with .001" diamond\$9.75

N44-3 For 78 rpm mono records at $1\frac{1}{2}$ to 3 g with .0025" diamond\$9.00

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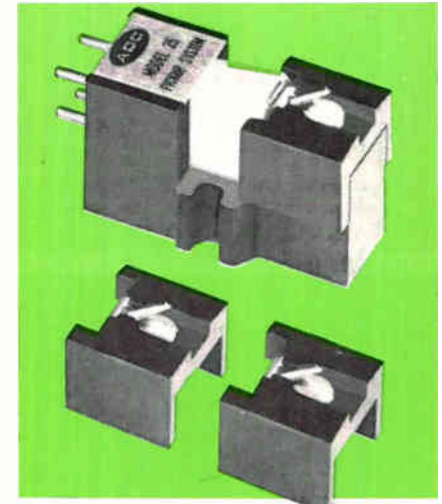
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THE LITTLE PERFECTIONIST. ONLY \$100.



Not all records are created equal. And now Audio Dynamics has done something about it. We've hand-crafted the world's only 3 stylus cartridge. It allows you to custom match the cartridge to each record in your collection, simply by selecting the optimum stylus assembly.

The ADC 25 represents the "state of the art"—the ultimate refinement of Audio Dynamics' induced magnet principle.

With all this, the ADC 25 naturally costs a little more than most other cartridges, but for audiophiles \$100.00 is a small price to pay for perfection.

If money is an object, buy the ADC 26. It is the same cartridge, but with one elliptical stylus. You can always add one or both of the other 2 styli later.

SPECIFICATIONS

ADC 25 STEREO PICKUP SYSTEM with GRAIN ORIENTED DIAMOND STYLUS*

Type... Induced magnet

Sensitivity... 4 mv at 5.5 cms/sec. recorded velocity

Tracking force range... $\frac{1}{2}$ gram to $1\frac{1}{4}$ grams

Frequency response... 10 Hz to 24,000 Hz ± 2 db

Channel separation... 30 db from 50 Hz to 10 KC

20 db from 12,000 Hz to 24,000 Hz

Compliance... 40×10^{-6} cms/dyne

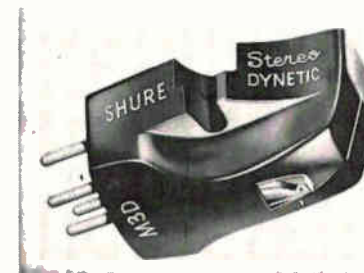
Vertical tracking angle... 15 degrees

Recommended load impedance... 47,000 nominal ohms

Price... \$100.00 suggested resale

Replacement Styl... #251, #252, #253

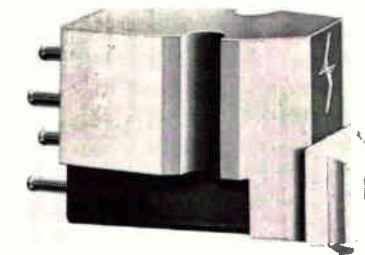
*For substantially increased stylus life



Hz; output 5 millivolts; tracking force 3-6 grams; recommended impedance 47,000 ohms; 0.7-mil diamond stylus.\$15.75
 N3D replacement diamond stylus \$ 7.95

M31E Stereo Cartridge

Designed for light (1 to 2 g) tracking turntables; response 20-18,500 Hz; out-



AUDIO FOR AUDIOPHILES

CIRCLE NO. 8 ON READER SERVICE CARD

3 Phono Cartridges

put 10 mV at 5 cm/sec.; compliance vert. & horiz. 15×10^{-6} cm/dyne. Has elliptical diamond stylus (0.7 mil frontal radius, 0.2 mil side contact & 1.0 mil at groove contact)\$29.95
 N31E. Replacement stylus\$14.95
 M32E. Similar to M31E except response to 17,500 Hz. Output 9 mV; compliance 10×10^{-6} cm/dyne. Stylus 0.4 mil side contact radius; tracking force $2\frac{1}{2}$ to 5 g\$29.50
 N32E. Replacement stylus\$14.50

Model M7/N21D

Features a tracking force of $2\frac{1}{2}$ g or less. Response 20-20,000 Hz; output 4 mV per channel; compliance 9×10^{-6} cm/dyne; separation over 20 dB\$17.95
 N21D Replacement stylus\$11.00

STANTON

681EE Calibration Standard

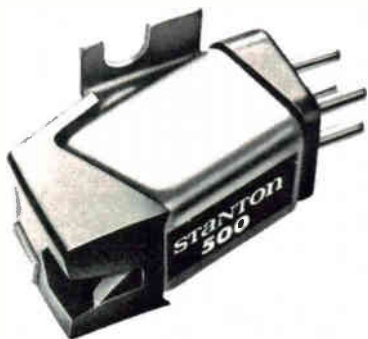
Response 10 to 10,000 Hz ± 0.5 dB. Individually calibrated from 10 to 20,000



Hz; output 0.7 mV/cm/sec. Tracking force $\frac{3}{4}$ to $1\frac{1}{2}$ g. Has 0.2×0.9 mil elliptical diamond stylus\$72.00
 Model 681A Same as 681EE except has 0.7 spherical diamond stylus. Output 0.9 mV/cm/sec.\$66.00
 Model 681SE. Same as 681EE except has 0.4×0.9 mil elliptical stylus; 1.1 mV/cm/sec. output for 2.5 g tracking force.\$66.00
 Model 681L. Similar to Model 681EE except low impedance. Inductance 19 mH; load resistance 2400 ohms; 0.18 mV/cm/sec output. Available with different type styli. Prices will vary depending on stylus used.

500 E Stereo Cartridge

Response 20-10,000 Hz ± 1 dB; output 0.8 mV/cm; minimum tracking force 2-5



g. Has 0.4×0.9 mil elliptical diamond stylus\$35.00
 500A Same as Model 500E except has 0.7 mil diamond stylus\$30.00
 Model 500AA. Same as Model 500E except has 0.5-mil spherical stylus. For $\frac{3}{4}$ -3 g tracking force\$35.00
 Model 500AL. Same as Model 500E except has 0.7-mil spherical stylus. Output 1 mV/cm/sec. For 3-7 g tracking force.\$30.00

3 Tonearms

EMPIRE

990 Tonearm

Features stylus force adjustment 0-4 g within ± 0.1 g; 6-Hz arm resonance; au-



tomatic end-of-play lift; has anti-skating adjustment; plug-in cartridge with 5-wire shielded cable. Over-all length $12\frac{3}{8}$ "; arm offset 23.45° . Satin gold finish \$74.95

EUPHONICS

TA-15 "Miniconic" Tonearm

For 12" turntables; effective mass with cartridge 14 g.; resonance 12 Hz; viscous damped ball-bearing pivots; adj. stylus force .5 to 3 g.\$32.50
 TK-15-LS with U-15-LS (PI) cartridge and PS-15 power supply\$87.50
 TK-15-P with U-15-P (PI) cartridge and PS-15 power supply\$71.50

TA-16 "Miniconic" Tonearm

For 16" turntables; effective mass, with cartridge, 16 grams; resonance 10 Hz; viscous damped ball bearings; adj. stylus force 0.5 to 3 grams\$42.50
 TK-16-LS With U-15-LS (PI) cartridge and PS-15 power supply\$97.50
 TK-16-P With U-15-P (PI) cartridge and PS-15 power supply\$81.50

ORTOFON

Model RMG-309 Tonearm

Professional 16" stereo arm; tracks at 2 grams with plug-in Ortofon stereo cartridge; plug-in shells available to fit standard U. S. stereo cartridges; statically balanced by counterweight with spring-controlled stylus force (no table leveling required); micrometer stylus force adjustment reads directly in grams; adjustable height over mounting plate; rubber damping between arm and counterweight; approx. dimensions $12\frac{3}{8}$ " pivot to record center.\$75.00

RS-212 Tonearm

Features a stylus pressure mechanism based on spring tension & an anti-skating



arrangement involving same spring in such a way that the anti-skating force will automatically have the correct relation to stylus force. Counterweight adjustable for 7 to 18.5 g. cartridges; adjustable stylus pressure 0 to 4.5 g.; total arm length 11.8" & offset angle 22.7° ; max. tracking error 1.19"\$90.00
 RS-212T Mounted on Thorens AS-12 ebony tonearm board\$95.00

RABCO

SL-8 Servo-Driven Tonearm

Straight-line arm, 14" long, $3\frac{3}{4}$ " high

(adjustable). Has a transistor amplifier driving a Swiss servo motor powered by standard "C" battery (10 mA intermittent drain). Has $\frac{1}{4}$ g min. tracking force.\$169.50

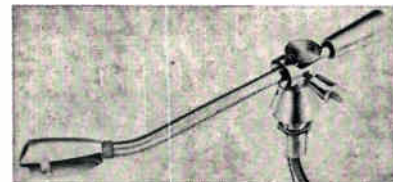
Accessories

Shure V15 Type II cartridge installed.\$67.50
 Thorens TD-150 turntable fitted to arm.\$85.00
 Walnut base\$12.00
 Plug-in cartridge holders\$10.00
 Adapter kit for AR turntable\$12.00

REK-O-KUT

Model S-320 Tonearm

Plugs into amp with permanently attached cable; has "Micropoise" dynamic



balance, spring-cushioned; calibrated from 0-6 grams; isolated counterweight; includes aluminum 4-wire plug-in shell; collar locks shell into arm; single hole mounting; features "Omni-Balance" for optimum bearing loads and lateral balance.\$44.95

Model S-260 Tonearm

Same as S-320 for 16" table (less "Omni-Balance")\$49.95

SHURE

SME 3009/Tonearm

Made in England; tracking force $\frac{1}{4}$ to 5 grams; anti-skating control; precision ball



races and knife edge bearings; accurate longitudinal and lateral balance control; minimal tracking error; subaudible resonance; convenient overhang adjustment; lever-operated cueing device; 12" version; less cartridge\$117.50
 Model 3009HE Same as 3009 but with horizontal cable entry\$123.75
 Model Shure-SME 3012 for 16" records.\$116.50

Models M232 & M236 Tonearm

Accepts all cartridges (mono or stereo); micrometer counterweight; direct-reading stylus force gauge; slide adjustment for stylus overhang; arm height adjustable; stylus tracking force adjustable 1-8 grams; for 12" records\$29.95
 Model M236 for 16" records\$31.95

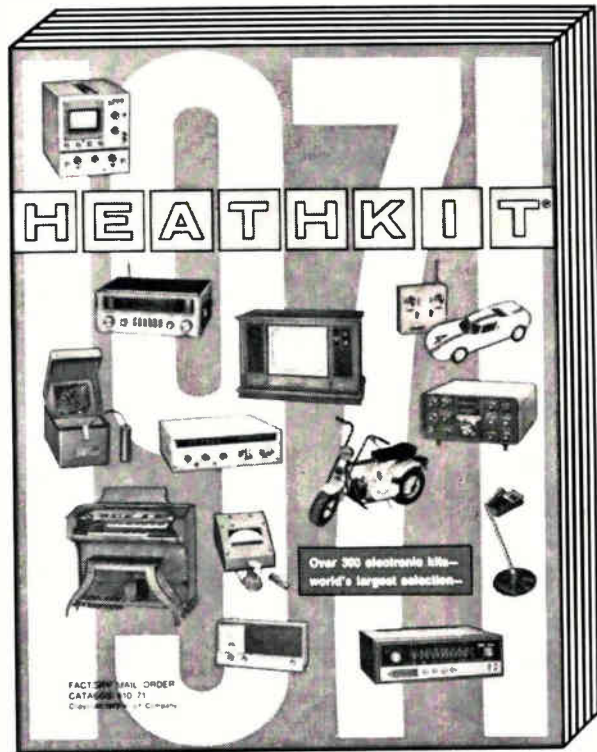
SONY

PUA-237 Tonearm

12" design features built-in cueing device with silicone-damped piston & a semi-automatic method for lowering stylus into lead-in grooves of 7", 10", 12" records. Has anti-skate device; interchangeable tonearm head\$85.00
 PUA-286 Same except 16" design; max. tracking error $1^\circ 24'$ & arm resonance 8 Hz vertically and 10 Hz laterally.\$99.50
 SH-100 Cartridge shell\$ 4.95

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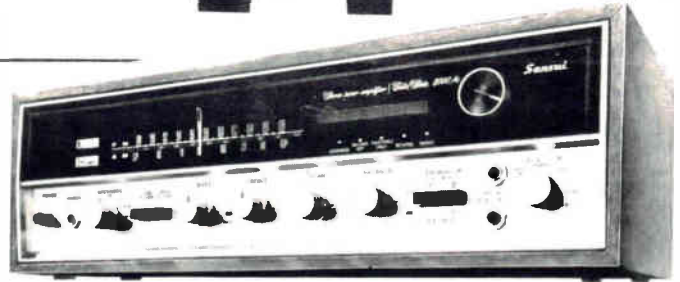
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CL-391

the receiver is the heart of your music system... shouldn't you get a sansui?



Model 4000 160 watts (IHF) \$349.95



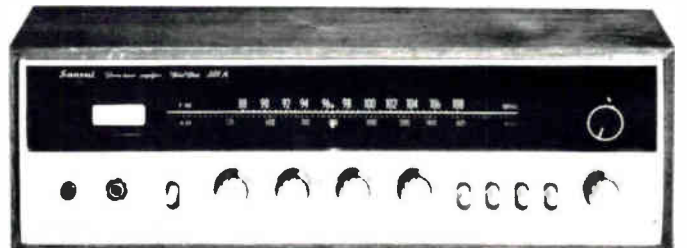
Model 5000A 180 watts (IHF) \$399.95



Model 1000X 100 watts (IHF) \$269.95



Model 2000A 120 watts (IHF) \$299.95



Model 350A 54 watts (IHF) \$199.95

Almost every music system today is built around a receiver, its heart and brains, the one component that controls it all. What you need then is a receiver that within its price class, offers you widest frequency response with lowest distortion, highest sensitivity and selectivity and clean power sufficient for your needs; and with all the features and conveniences a quality receiver can offer you.

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STEREO HI-FI DIRECTORY



Receivers

FM Receivers
FM-Stereo Receivers
AM-FM Stereo Receivers



ACOUSTIC RESEARCH

AR Stereo-FM Receiver

Features 60 W/ch continuous r.m.s. into 4 ohms with both channels driven (50



W/ch into 8 ohms & 30 W/ch into 16 ohms); bandwidth 14-44,000 Hz @ 8 ohms. IM dist. 0.15% at rated output; HD 0.5% from 20-20,000 Hz. Dist. figure includes phono preamps. Response 20-20,000 Hz \pm 1 dB; input sensitivity: phono 2 to 5 mV (adjustable) @ 1 kHz; all others 200 mV. FM sensitivity 2 μ V (IHF); capture ratio 2 dB. With black aluminum cover. 16 $\frac{3}{8}$ " w. x 5 $\frac{3}{4}$ " x 11 $\frac{1}{8}$ "\$420.00
 Oiled walnut cabinet\$20.00

ADC

Model 1000 Stereo-FM Receiver

Solid-state design; 50 W/ch dynamic power @ 4 ohms (40 W/ch @ 8 ohms).



Continuous sine-wave power (both channels driven), 30 W/ch @ 4 ohms (25 W/ch @ 8 ohms); HD 0.3% @ rated output; IM distortion 0.4% @ rated output; power bandwidth 10-25,000 Hz @ 8 ohms; response 10-60,000 Hz \pm 2 dB. Input sensitivity: mag. phono 2 mV, tape head 2 mV, aux. 200 mV. FM usable sensitivity (IHF) 2.5 μ V; capture ratio 3 dB. Features interstation quieting, FM noise filter, defeatable a.f.c., dual-function tuning meter, control for two sets of speakers, monitoring facilities. 17 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 11"\$289.95
 Walnut cabinet available at extra cost.

Model 606A Stereo-FM Receiver

Features 45 W/ch (IHF) at 4 ohms (40 W/ch at 8 ohms) with 0.3% HD & 0.4% IM dist. at rated output. Response 10-60,000 Hz \pm 1 dB. Input sensitivity: mag. phono 3 mV; musical instrument 50 mV; tape 100 mV; aux. 100 mV. Usable FM sensitivity 2.5 μ V (IHF). Capture ratio 3 dB. Has automatic stereo-FM switching; 1971 EDITION



independent controls for two sets of speakers & side panels. 17" w. x 5" h. x 9" d.\$199.50

AIWA

TPR-2001 AM-FM/Cassette System

Features 20 W/ch continuous power stereo design. Has phono, aux. & tape in-



puts and main/remote speaker sw. Walnut finish\$229.95
 With pair of speaker systems, each with 6" dual-cone speaker\$299.95

ALLIED

435 AM-FM Stereo Receiver

16 W/ch (IHF) dynamic power (11 W/ch r.m.s.); response 20-40,000 Hz; HD 1%. Input sensitivity: mag. phono 4 mV; FM sensitivity 2.5 μ V; capture ratio 3 dB.\$179.95

445 AM-FM Stereo Receiver

30 W/ch (IHF) dynamic power (20 W/ch r.m.s.); response 20-50,000 Hz; HD



1%; input sensitivity: mag. phono 3 mV; FM sensitivity 2 μ V; capture ratio 2.3 dB.\$229.95

490 AM-FM Stereo Receiver

Design similar to Model 445. 50 W/ch (IHF) dynamic power (33 W/ch r.m.s.); response 20-70,000 Hz; HD 1%; input sensitivity: magnetic phono 2.8 mV; FM sensitivity 1.8 μ V; capture ratio 2 dB.\$299.95

495 AM-FM Stereo Receiver

Design similar to Model 445; 80 W/ch (IHF) dynamic power (55 W/ch r.m.s.). Response 15-100,000 Hz; HD 1%; input sensitivity: mag. phono 2.5 mV; FM sensitivity 1.4 μ V; capture ratio 1.95 dB.

Features main/remote speaker selection. Has center-channel & field-strength meters\$349.95

498 AM-FM Stereo Receiver

100 W/ch (IHF) dynamic power (65 W/ch r.m.s.); response 8-100,000 Hz; HD

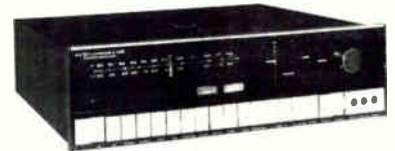


0.8%; input sensitivity: mag. phono 2 mV. FM sensitivity 1.25 μ V; capture ratio 1.5 dB. Features automatic tuning, 2 tuning meters (signal strength & center channel), 2 crystal filters. Has FM-stereo only sw, which selects only FM stereo broadcasts\$499.95

ALTEC LANSING

725A AM/Stereo-FM Receiver

Features i.f.'s using Butterworth & crystal filters. 60 W/ch r.m.s. with both chan-



nels driven & into 8 ohms. HD 0.3% at rated output from 20-20,000 Hz. Response 20-20,000 Hz \pm 1/2 dB; power bandwidth 15-25,000 Hz; input sensitivity: phono #1 2 mV, phono #2 2 or 5 mV. FM sensitivity 1.8 μ V (IHF); capture ratio 1.3 dB. 17 $\frac{1}{8}$ " x 5" x 16 $\frac{1}{2}$ " d.\$699.00
 42161 Walnut cabinet\$28.50

714A AM/Stereo-FM Receiver

Similar in design to 725A except 44 W/ch r.m.s.; 90 W/ch (IHF) dynamic power at 4 ohms; HD 0.5%; response 15-45,000 Hz \pm 1 dB; FM sensitivity (IHF) 1.9 μ V; capture ratio 2 dB. 16 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ " x 13 $\frac{3}{8}$ " d.\$399.00
 42162 Walnut cabinet\$25.50

AMPEX

ASR-100 AM-FM Stereo Receiver

30 W/ch (IHF) dynamic power at 4 ohms (18 W/ch r.m.s. at 8 ohms); power bandwidth 20-25,000 Hz; HD 0.8%. FM sensitivity (IHF) 3 μ V; capture ratio 4 dB. Has mag. or ceramic phono, aux. & tape inputs; main/remote speaker outputs; tape monitoring. With walnut cabinet. 16 $\frac{1}{2}$ " x 4 $\frac{1}{4}$ " x 11 $\frac{1}{4}$ "\$249.95

4

Receivers

BELL & HOWELL

3600 AM-FM Stereo Receiver

30 W/ch dynamic (IHF) power (17½ W/ch continuous r.m.s.); power bandwidth



20-20,000 Hz at 1% HD; response 20-20,000 Hz; FM sensitivity 2 µV (IHF); capture ratio 3 dB. Has ceramic & mag. phono & aux. inputs. 4" x 19½" x 12½" d.\$169.95

BIC/LUX

71/3R AM-FM Stereo Receiver

Features 3-gang varactor tuner; crystal filters; interstation muting; separate tone



controls with slope selector (bass 150,300, or 600 Hz; treble 1500, 3000 or 6000 Hz). Field-strength & center-tune meters; 3-station pre-set FM tuning; 50 W/ch r.m.s. with both channels driven @ 8 ohms & 0.3% HD (60 W/ch @ 4 ohms & 0.4% HD). Response 10-50,000 Hz. power bandwidth 15-30,000 Hz @ 0.5% HD. Input sensitivity: phono high 2 mV; phono low 8 mV; aux. & tape 100 mV. FM sensitivity 2.2 µV for 30 dB S/N ratio; capture ratio 4 dB. Has extruded front panel with end bells. 18.5" x 6" x 13¾".\$497.00

71/2R AM-FM Stereo Receiver

Combines 71/5T tuner with 71/4A integrated amp. 75 W/ch r.m.s. with both channels driven into 8 ohms. Has end bells. 18½" x 6" x 13¾" d.\$580.00

BOGEN

BR320 AM/Stereo-FM Receiver

Features 25 W/ch IHF (15 W/ch continuous sine wave into 4 ohms with one channel driven); ceramic i.f. filters; integrated circuits; stereo minder light; local/remote speaker sw. THD at rated power 0.5% & IM dist. 0.7% (IM dist. at 1 W = 0.35%); power bandwidth 20-20,000 Hz; response 20-35,000 Hz ± 2 dB at 1 W



Sensitivity: phono 2.5 mV; FM 1.5 µV for 30 dB quieting; 1.9 dB capture ratio. 16½" x 4½" x 14"\$199.95

BR340 AM/Stereo-FM Receiver

Same as Model BR320 except 40 W/ch IHF (30 W/ch continuous sine wave into 4 ohms with one channel driven); phono

sensitivity 3 mV\$249.95
Also available in white with tangerine accents. BR340W\$259.95

BR360 AM/Stereo-FM Receiver

Similar to Model BR320 except 50 W/ch (IHF); 40 W/ch continuous sine wave into 4 ohms with one channel driven; ceramic i.f. filters & IC's; phono sensitivity 3 mV. Has exclusive "Crescendo Control" expander-compressor\$299.95
Also available in white with tangerine accents. BR360W\$309.95

BR350 AM/Stereo-FM Receiver

Similar to Model BR320 except 80 W/ch (IHF); 30 W/ch continuous sine wave



into 4 ohms with one channel driven; ceramic i.f. filters & integrated circuits; phono sensitivity 3 mV; Has exclusive "Crescendo Control" expander-compressor. Tan vinyl covering. Walnut cabinet optional\$274.95

BR380 AM/Stereo-FM Receiver

Same as BR350 except 60 W/ch (IHF); 45 W/ch continuous sine wave into 4 ohms with one channel driven; ceramic i.f. filters & IC's; phono sensitivity 3 mV. Has exclusive "Crescendo Control" ex-



pander-compressor. Walnut vinyl covering. Walnut cabinet optional.\$329.95

BSR McDONALD

R-40 AM/FM Stereo Receiver

25 W/ch dynamic power (IHF) into 8 ohms; HD 1%; response 20-20,000 Hz ± 1 dB; FM sensitivity 3 µV. Has inputs for mag. phono & aux. With oiled walnut cabinet\$179.95

CLARICON

36-790 AM/Stereo-FM Receiver

Features 45 W/ch dynamic (EIA) power; response 20-30,000 Hz. Has mag. ceramic, aux. & tape inputs plus main/remote speaker facilities. Size 15¾" x 5" x 11½"\$169.95

36-820 AM/Stereo-FM Receiver

Features 60 W/ch dynamic (EIA) power;



response 30-30,000 Hz ± 3 dB; 8 ohms. 18" x 13¾" x 5". Walnut cabinet \$179.95

CONCORD

Mark 10 AM-FM Receiver

Stereo design with 35 W/ch (IHF) dynamic power into 8 ohms (40 W/ch into 4 ohms); 25 W/ch continuous r.m.s. power into 8 ohms with single channel driven (28 W/ch into 4 ohms). HD 0.5% at rated power; response 20-22,000 Hz ± 1 dB @ 1 W. Power bandwidth 25-20,000 Hz;

input sensitivity: mag. phono 3 mV; ceramic phono 150 mV; aux. 200 mV; tape 150 mV. FM sensitivity 2 µV (IHF) usable; capture ratio 2 dB; selectivity 40 dB @ 98 MHz; AM sensitivity 60 µV. Has main/remote speaker facilities. 18½" x 12½" x 5½" with walnut cabinet \$229.95

Mark 12 AM-FM Receiver

Stereo design with 45 W/ch (IHF) dynamic power into 8 ohms (60 W/ch with



4 ohms); 35 W/ch continuous r.m.s. power into 8 ohms with single channel driven (45 W/ch into 4 ohms). HD 0.5% @ rated output; response 20-25,000 Hz ± 1 dB at 1 W; power bandwidth 25-22,000 Hz. Preamp section same as in Mark 10. FM selectivity 45 dB @ 98 MHz; AM sensitivity 60 µV. Features main/remote speaker facilities; interstation muting; 75 & 300 ohm FM antenna inputs; center-reading FM tuning meter; max. signal-strength tuning meter for AM. 17½" x 12½" x 5½" with walnut cabinet \$269.95

Mark 20 AM-FM Receiver

Stereo design with 87½ W/ch (IHF) dynamic power into 8 ohms (120 W/ch into 4 ohms); 55 W/ch continuous r.m.s. power into 8 ohms with single channel driven (75 W/ch into 4 ohms); HD 0.5% @ rated power; response 10-35,000 Hz ± 1 dB at 1 W; power bandwidth 5-40,000 Hz. Preamp section same as Mark 10. FM sensitivity 1.7 µV (IHF) usable; capture ratio 1 dB; selectivity 45 dB @ 98 MHz; AM sensitivity 20 µV. Features ceramic



i.f. amplifiers, interstation muting, calibrated slide controls for tone/balance & volume, main/remote speaker facilities; 75 & 300 ohm FM antenna inputs. 17½" x 14" x 5½" with walnut cabinet \$349.95

EICO

"Cortina" 3770 AM/FM Receiver

35 W/ch dynamic power (IHF) at 4 ohms (25 W/ch @ 8 ohms). Design is



combination of Eico's Model "Cortina" 3070 stereo control amplifier & "Cortina" 3200 stereo-FM tuner with added AM circuitry. Has vinyl-clad, Danish walnut cabinet.

Kit\$189.95
Assembled\$279.95

"Cortina" 3570 Same as Model 3770 except does not have AM circuitry.

Kit\$169.95
Assembled\$259.95

"Cortina" 3780 AM/FM Receiver

Stereo design combining Model 3300 AM/FM tuner & Model 3080 integrated amp. 4" x 16½" x 9½".



Kit\$109.95
Assembled\$169.95

ELECTRO-VOICE

E-V 1382 AM-FM Stereo Receiver

Features 75 W/ch (IHF) dynamic power at 4 ohms (40 W/ch continuous at 8



ohms both channels driven); response 15-55,000 Hz \pm 1.5 dB; THD 0.8% at rated output. FM sensitivity 2 μ V (IHF); capture ratio 2 dB. Has dual mag. phono inputs, dual speaker selector, tape monitor.

.....\$299.95
CWR-3 Walnut cabinet\$24.30

E-V 1281 FM-Stereo Receiver

46 W/ch dynamic power (26 W/ch continuous sine wave at 8 ohms both channels driven); response 20-20,000 Hz \pm 1.5 dB; HD 0.8% at rated output. Input sensitivity; mag. phono 3 mV, tape & aux. 200 mV. FM usable sensitivity (IHF) 2.2 μ V. Has stereo indicator light & auto mono/stereo switching; main/remote speaker sw. 3 $\frac{1}{4}$ " h. x 14 $\frac{1}{4}$ " x 10 $\frac{1}{2}$ " d. With grey metal enclosure ...\$229.50

E-V 1282 AM-FM Stereo Receiver

Same as E-V 1281 except has additional AM tuner\$249.30

E-V 1181 FM-Stereo Receiver

Same in performance as Model E-V 1281 except dynamic power output is 25 W/ch (21 $\frac{1}{2}$ W/ch continuous sine wave at 8 ohms output both channels driven).

.....\$189.00

E-V 1182 AM-FM Stereo Receiver

Same as E-V 1181 except has AM tuner added\$209.70

CWR-1 Case

Walnut finished case for Models 1181, 1182, 1281, 1282. 4 $\frac{1}{4}$ " h. x 16" w. x 11 $\frac{1}{2}$ " d.\$19.80
All specifications quoted are with one channel operating. 4-ohm ratings are same as 8-ohm ratings quoted.

FISHER

202 AM-FM Stereo Receiver

Features 40 W/ch dynamic (IHF) power at 8 ohms (32 W/ch continuous sine



wave) at 0.8% THD; response 25-20,000 Hz \pm 2 dB; power bandwidth 25-20,000 Hz; sensitivity: phono 2.5 & 8 mV; aux. #1 & #2 200 mV; FM usable sensitivity 2.5 μ V (IHF); capture ratio 3.0 dB. Has main/remote speaker sw.; muting & tape monitor. Size 15 $\frac{1}{32}$ " x 4 $\frac{3}{8}$ " x 14 $\frac{1}{4}$ " d.\$249.95
21-UW Walnut finish cabinet\$14.95

1971 EDITION

210-T AM-FM Stereo Receiver

Features 44 W/ch dynamic (IHF) power at 8 ohms (36 W/ch continuous sine wave) at 0.5% THD; response 20-20,000 Hz \pm 2 dB; power bandwidth 25-25,000 Hz; sensitivity: phono 2.5 & 7.5 mV; aux. 250 mV; FM usable sensitivity 2.0 μ V (IHF); capture ratio 2.8 dB. Has main/remote speaker switch; tape monitor; loudness control. 15 $\frac{1}{2}$ " x 4 $\frac{5}{8}$ " x 12 $\frac{3}{4}$ " d.\$299.95
60-UW Walnut finish cabinet\$19.95

250-TX AM-FM Stereo Receiver

Features 48 W/ch dynamic (IHF) power at 8 ohms (38 W/ch continuous sine



wave) at 0.5% THD; response 20-20,000 Hz \pm 2 dB; power bandwidth 20-25,000 Hz; sensitivity: phono 2.5 & 7.5 mV; aux. 250 mV; FM usable sensitivity 2.0 μ V (IHF); capture ratio 2.8 dB. Has "Tune-O-Matic" push-button tuning. 15 $\frac{1}{2}$ " x 4 $\frac{5}{8}$ " x 12 $\frac{3}{4}$ " d.\$349.95
60-UW Walnut finish cabinet\$19.95

450-T AM-FM Stereo Receiver

Features 72 W/ch dynamic (IHF) power at 8 ohms (44 W/ch continuous sine



wave) at 0.5% THD; response 20-25,000 Hz \pm 2 dB; power bandwidth 10-30,000 Hz; sensitivity: phono 2.5 & 7.5 mV; aux. 250 mV; FM usable sensitivity 2.0 μ V (IHF); capture ratio 2.5 dB. Has "Auto-Scan" electronic tuning. 15 $\frac{1}{2}$ " x 4 $\frac{3}{8}$ " x 14 $\frac{1}{4}$ " d.\$399.95
80-UW Walnut finish cabinet\$22.95

500-TX AM-FM Stereo Receiver

Features 80 W/ch dynamic (IHF) power at 8 ohms (52 W/ch continuous sine wave) at 0.5% THD; response 20-25,000 Hz \pm 1.5 dB; power bandwidth 8-35,000 Hz; sensitivity: phono 2.5 & 10 mV; aux. 250 mV; FM usable sensitivity 1.7 μ V (IHF); capture ratio 1.5 dB. Has "Tune-O-Matic" and "Auto-Scan". 16 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ " d.\$499.95
90-UW Walnut finish cabinet\$22.95

701 Four-Channel Receiver

Fully compatible 4-channel receiver with 50 W/ch dynamic (IHF) power at 8



ohms (32 W/ch continuous sine wave) at 0.5% THD; response 20-25,000 Hz \pm 1.5 dB; power bandwidth 20-25,000 Hz; FM usable sensitivity 1.7 μ V (IHF); capture ratio 1.5 dB. Has toroidal resonators, ceramic filters, tape monitor. 16 $\frac{1}{16}$ " x 5 $\frac{1}{4}$ " x 14 $\frac{1}{4}$ " d.\$699.95
110-UW Walnut finish cabinet ...\$22.95

HARMAN-KARDON

130 AM/Stereo-FM Receiver

Has auto stereo-FM, bass & treble controls, stereo indicator light. Features 10 W/ch dynamic (IHF) power. Walnut cabinet\$129.95

"Nocturne Two-Thirty" AM/Stereo-FM Receiver

Features 17 $\frac{1}{2}$ W/ch dynamic (IHF) power at 4 ohms. Has tuning meter for AM and FM stations; tape monitor & speaker switches. Response 10-70,000 Hz at normal listening level. IM distortion 1% at rated output. FM sensitivity 2.7 μ V (IHF)\$159.95
CW20 Walnut cabinet\$9.95

"Nocturne Three-Thirty" AM/Stereo-FM Receiver

Solid-state stereo design with 35 W/ch IHF dynamic power at 4 ohms. Features



automatic stereo/mono switching with indicator light. Provides stereo in two rooms separately or same time, with front-panel switching. Has tuning meter & tape monitoring sw. Response 7-50,000 Hz \pm 1 $\frac{1}{2}$ dB at 1 W. IM dist. 0.8%, HD 0.8%; usable FM (IHF) sensitivity 2.7 μ V; damping factor 20:1. 13" x 15 $\frac{1}{8}$ " w. x 4 $\frac{1}{4}$ "\$199.95
CW30A Walnut cabinet\$24.95

"Nocturne Eight-Twenty" Stereo-FM Receiver

Solid-state stereo design with 55 W/ch IHF dynamic power at 4 ohms. Uses in-



tegrated circuits & crystal filters in i.f. strip. Features automatic stereo/mono switching with indicator light. Provides stereo in two rooms separately or at once with front-panel sw. Has tuning meter & tape monitor sw. Response 5-60,000 Hz \pm 1 dB at 1 W. IM & HD each 0.5%; damping factor 25:1. Usable FM (IHF) sensitivity 1.8 μ V. 12" x 16 $\frac{1}{8}$ " w. x 4 $\frac{1}{4}$ "\$269.95
CW80 Walnut cabinet\$29.95

HEATH

AR-14 FM-Stereo Receiver

Features 15 W/ch dynamic power. Has stereo indicator light; filtered outputs; pre-assembled front end; 6-position source switch; and phase control. Amplifier response 12-60,000 Hz \pm 1 dB; separation 45 dB; output 4, 8, and 16 ohms. Tuner response 20-20,000 Hz \pm 1 dB mono; 50-15,000 Hz \pm 3 dB stereo. Capture ratio 3 dB. Sensitivity 5 μ V. 3 $\frac{3}{8}$ " h. x 15 $\frac{1}{4}$ " w. x 12". Kit AR-14 (less cabinet for custom mounting)\$119.95
AE-55 Walnut veneer cabinet ...\$12.95
AE-65 Beige steel cabinet\$3.95

AR-15 AM-FM Stereo Receiver

75 W/ch dynamic power (50 W/ch continuous sine wave) for 8-ohm output. Design based around two integrated circuits and two crystal filters in the i.f. amplifier, replacing conventional i.f. transformers. Features two tuning meters (1 for max. signal & 1 for center of station);

4

Receivers

front-panel input level controls; automatic squelch circuit; automatic stereo light; SCA filter; transformerless design. Power bandwidth for 0.5% THD 6-30,000 Hz. Response at 1 W 6-50,000 Hz ± 1 dB; IM dist. 0.5% at 50 W; damping factor 45. Input sensitivity: phono 2.2 mV & aux. 200 mV. FM response 20-15,000 Hz ± 1 dB; capture ratio 1.5 dB (IHF standard); harmonic & IM distortion 0.5%. Sensitivity 1.8 μ V (IHF). 16 $\frac{1}{8}$ " x 4 $\frac{3}{4}$ " x 14 $\frac{1}{2}$ " d.

AR-15 Kit (less cab.)\$349.95
ARW-15 Wired (less cab.)\$540.00
AE-16 Walnut cab.\$ 24.95

AR-17 FM-Stereo Receiver

7 W/ch dynamic power, 5 W/ch continuous power (two channels simultaneously). Automatic stereo indicator light; preassembled front end; 6-pos. source switch. Response at 5 W 25-35,000 Hz ± 1 dB; THD at 5 W, 1% from 20-20,000 Hz; IM dist. 2%. Capture ratio 3 dB; sensitivity 5 μ V. Overall size 12" w. x 3" x 10 $\frac{3}{8}$ " d.

AR-17 Kit (less cab.)\$72.95
AE-35 Beige metal cabinet\$ 3.50
AE-25 Walnut veneer cabinet ...\$ 9.95

AR-19 AM-FM Stereo Receiver

30 W/ch (IHF) dynamic power into 8 ohms (20 W/ch into 4 ohms & 17 W/ch



into 16 ohms); 20 W/ch continuous power into 8 ohms with both channels driven (20 W into 4 ohms & 15 W into 16 ohms). Power bandwidth 5-30,000 Hz; response 6-35,000 Hz ± 1 dB; HD 0.25% from 5-20,000 Hz at 20 W r.m.s. (0.1% at 1000 Hz & 1 W). Input sensitivity: phono 2.4 mV, tape, aux. & tape monitor 180 mV. FM sensitivity 1.6 μ V for 30 dB S/N ratio; capture ratio 2.5 dB. 105-125 V or 210-250 V, 50/60 Hz operation. Has both signal-strength & center-tuning meters; main/remote speaker selection or center-channel output. Supplied with FM i.f. board preassembled and aligned. 16 $\frac{3}{4}$ " x 5 $\frac{1}{8}$ " x 14 $\frac{1}{2}$ " d.

Kit\$225.00
AE-19 Cabinet\$ 19.95

AR-27 FM Mono Receiver

Features 7 W dynamic power, 5 W continuous power; preassembled FM tuner; input connectors for phono & aux.; front-panel controls. Response at 5 W 25-60,000 Hz ± 1 dB; THD 1% from 20-20,000 Hz; IM dist. 2%; capture ratio 3 dB; sensitivity 5 μ V. 12" w. x 3" h. x 10 $\frac{3}{8}$ " d.

AR-27 Kit (less cab.)\$41.95
AE-35 Beige metal cabinet\$ 3.50
AE-25 Walnut veneer cabinet ...\$ 9.95

AR-29 AM-FM Stereo Receiver

50 W/ch (IHF) dynamic power into 8 ohms (65 W/ch into 4 ohms & 30 W/ch into 16 ohms); 35 W/ch continuous power into 8 ohms with both channels driven (35 W/ch into 4 ohms & 25 W/ch into 16 ohms). Power bandwidth 5-30,000 Hz at 0.25% HD. Response 7-60,000 Hz ± 1 dB at 1 W level; input sensitivity: phono 2.2 mV; tape, aux. & tape monitor 180

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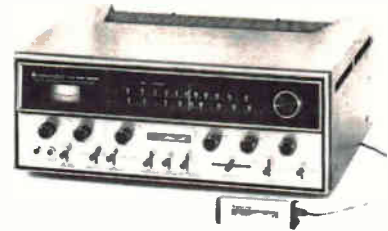


ohms (82 $\frac{1}{2}$ W/ch into 4 ohms). 5 $\frac{7}{8}$ " x 20 $\frac{3}{4}$ " x 15 $\frac{1}{2}$ " d.\$449.95

KENWOOD

KR-7070 AM-FM Receiver

Features 3-way tuning: mono/automatic/remote; FM stereo automatic/remote. A



slight touch of the tuning bar on front panel or on remote control will automatically select AM or FM stations to right or left; stereo automatic tuning will select only FM-stereo stations. 110 W/ch dynamic (IHF) power into 8 ohms (150 W/ch into 4 ohms); 80 W/ch continuous into 8 ohms with both channels driven (65 W/ch at 8 ohms 20-20,000 Hz; 95 W/ch into 4 ohms). HD & IM dist. each 0.5% at rated output; power bandwidth 10-30,000 Hz; input sensitivity: mag. phono #1 & #2 2.5 mV; aux. tape play 200 mV; FM sensitivity (IHF) 1.5 μ V; capture ratio 1.5 dB. Has crystal filter i.f.'s; interstation muting; main/remote speaker selection; mono speaker output (5 W) with "on-off" sw. 4 to 16 ohm output. 17" x 6 $\frac{1}{2}$ " x 15" d. Has 110 to 240 V, 50/60 Hz power supply\$549.95

KR-6160 AM-FM Stereo Receiver

90 W/ch (IHF) dynamic power into 8 ohms (110 W/ch into 4 ohms); 70 W/ch



continuous into 8 ohms (40 W/ch into 4 ohms); HD & IM dist. each 0.5% at rated output. Response 15-40,000 Hz ± 1.5 dB; power bandwidth 12-30,000 Hz; input sensitivity: mag. phono 2.5 mV; aux. & tape play 180 mV. FM sensitivity 1.6 μ V (IHF); capture ratio 1.5 dB. Features low & high freq. filters; interstation muting; 3 sets speaker outputs; 2 sets of mag. phono & aux. inputs; mechanical i.f. stages; center-channel output & mic input for p.a. applications and for mixing with any mode input. 16 $\frac{3}{4}$ " x 5 $\frac{1}{8}$ " x 12 $\frac{3}{8}$ " d. With microphone\$379.95
SR-66/6 Oiled walnut cabinet ...\$19.95

KR-5150 AM-FM Stereo Receiver

Has many of the same features as Model KR-6160 except less power; 55 W/ch (IHF) dynamic into 8 ohms (75 W/ch into 4 ohms) 40 W/ch continuous into 8 ohms (50 W/ch into 4 ohms); response 20-40,000 Hz ± 1.5 dB; input sensitivity: aux & tape play 150 mV; FM sensitivity 1.7 μ V; capture ratio 2 dB; Does not have mixing facilities but has mic input.\$319.95
SR-66/6 Oiled walnut cabinet. ...\$19.95

KR-4140 AM-FM Stereo Receiver

Same as KR-5150 except has less power: 29 W/ch (IHF) dynamic power into 8 ohms (40 W/ch into 4 ohms); 24 W/ch continuous power into 8 ohms (33 W/ch into 4 ohms); FM sensitivity 1.8 μ V; capture ratio 2.5 dB. Has 2 instead of 3 sets

mV. FM sensitivity 1.5 μ V @ 30 dB S/N ratio; capture ratio 1.5 dB. 105-125 V or 210-250 V, 50/60 Hz. Has both field-strength and center-tuning meters; preassembled & aligned FET tuning unit & main/remote speaker selection or center-channel output. Overall size 16 $\frac{3}{4}$ " x 5 $\frac{1}{8}$ " x 14 $\frac{1}{2}$ " d.

Kit\$285.00
AE-19 Cabinet\$ 19.95

HITACHI

SR-600 AM/Stereo-FM Receiver

Features 40 W/ch (IHF) dynamic power into 8 ohms; S/N ratio 60 dB at 15 W/ch



output; HD 0.5% at 10 W/ch output & 1 kHz. Phono sensitivity: 3 mV; FM 1.7 μ V for 20 dB quieting\$269.95

JVC

5010 AM-FM Stereo Receiver

Features SEA (Sound Effects Amplifier) control system; provides 5-zone tone adjustment within ± 12 dB in 2-dB steps at 60, 200, 1000, 5000 & 15,000 Hz; 17 W/ch dynamic (IHF) power into 8 ohms (20 W/ch into 4 ohms); 13 W/ch continuous into 8 ohms (16 W/ch into 4 ohms); HD 1% at 1000 Hz & rated power; IM dist. 1% at rated power. Power bandwidth 30-30,000 Hz; response 20-30,000 Hz; input sensitivity: mag. phono 2 mV; aux. & tape play 150 mV; FM sensitivity (IHF)



2.5 μ V. Has main/remote speaker selection. 4 $\frac{1}{2}$ " x 16 $\frac{3}{4}$ " x 13" d. With walnut cabinet\$229.95

5020 AM-FM Stereo Receiver

Same as 5010 except 30 W/ch (IHF) dynamic power into 8 ohms (37 $\frac{1}{2}$ W/ch into 4 ohms); 25 W/ch continuous into 8 ohms (28 W/ch into 4 ohms); HD 0.5%; IM dist. 0.8%; input sensitivity: mag. phono 1.5 mV; aux. #1 & #2 and tape play 125 mV. 4 $\frac{3}{8}$ " x 20" x 13 $\frac{1}{4}$ " d. With walnut cabinet\$299.95

5030 AM-FM Stereo Receiver

Same as 5020 except 70 W/ch (IHF) dynamic power into 8 & 4 ohms; 50 W/ch



continuous into 8 & 4 ohms; FM sensitivity 1.8 μ V (IHF)\$399.95

5040-2 AM-FM Stereo Receiver

Same as 5030 except 90 W/ch (IHF) dynamic power into 8 ohms (100 W/ch into 4 ohms); 75 W/ch continuous into 8

of speaker outputs\$259.95
 SR-66/6 Oiled walnut cabinet ...\$19.95

KR-3130 AM-FM Stereo Receiver

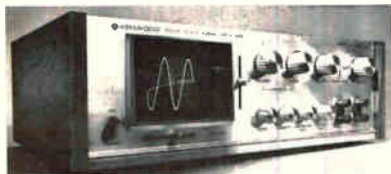
Same as KR-4140 except 21 W/ch (IIF) dynamic power into 8 ohms (25 W/ch into 4 ohms); 19 W/ch continuous into 8 ohms (22 W/ch into 4 ohms); HD & IM dist. each 0.8% at rated output; FM sensitivity 2 μ V (IHF); capture ratio 4 dB. Does not have FM interstation muting or low-freq. filter\$199.95
 SR-33/6 Oiled walnut cabinet ...\$19.95

KR-2120 AM-FM Stereo Receiver

Same as KR-3130 except 15 W/ch (IHF) dynamic power (17 W/ch into 4 ohms); 11 W/ch continuous into 8 ohms (13 W/ch into 4 ohms); response 25-30,000 Hz \pm 2 dB; sensitivity: aux. & tape play 180 mV; FM sensitivity 2.3 μ V. Has 1 instead of 2 pairs of mag. phono inputs & does not have mic input; center-channel output\$159.95
 SR-33/6 Oiled walnut cabinet ...\$19.95

KC-6060A Audio-Lab Scope

FM multipath indicator using a 3" oscilloscope; also has capability for testing



waveform or right & left channels. 16 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ " x 11 $\frac{1}{8}$ " d. With cabinet. \$219.95

KR-70 FM Stereo Receiver

28 W/ch (IHF) dynamic power into 8 ohms (37 $\frac{1}{2}$ W/ch into 4 ohms); 18 W/ch continuous power into 8 ohms with both channels driven; HD & IM dist. each 0.5% at rated output; response 20-30,000 Hz \pm 1.5 dB; power bandwidth 20-30,000 Hz; input sensitivity: mag. phono 2. mV; aux & tape play 200 mV; 4 to 16 ohm output; FM sensitivity 1.9 μ V; capture ratio 2.5 dB. Has main/remote speaker selection; center-channel output. 16 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " x 12 $\frac{1}{2}$ " d. With simulated walnut cabinet\$199.95

KLH

Model Twenty-Seven AM-FM Receiver

Stereo design, 45 W/ch dynamic power at 8 ohms; THD 0.5% at rated output; IM



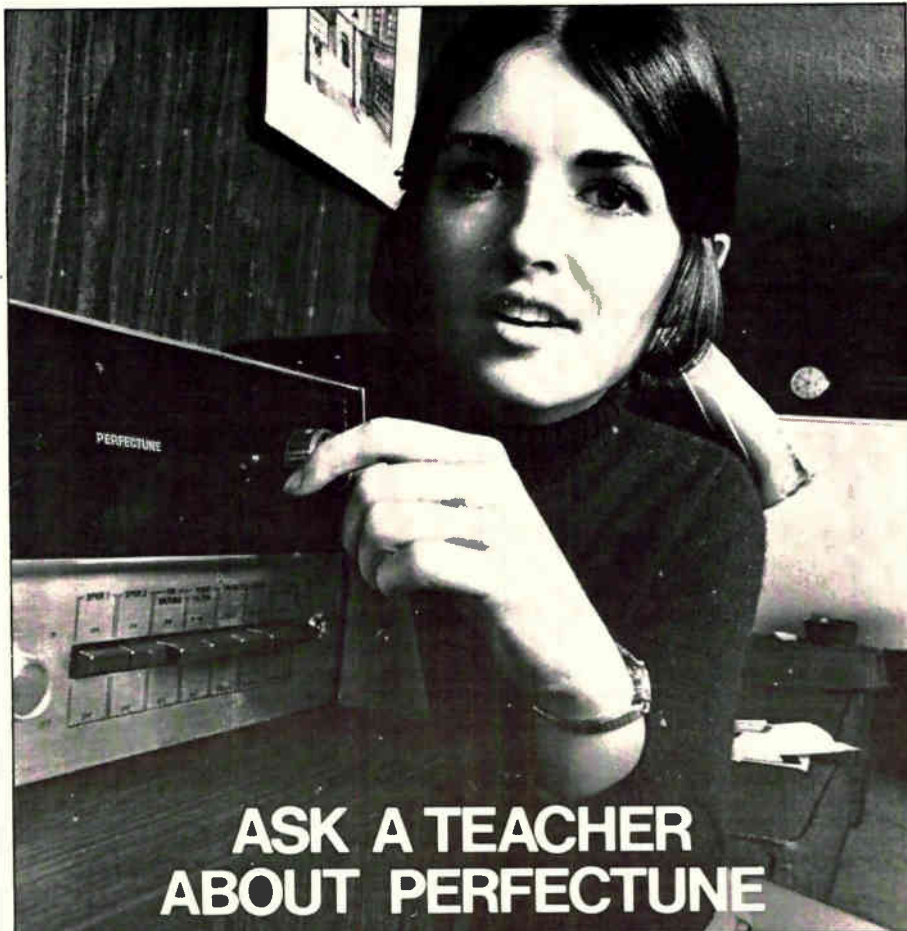
dist. 0.5% at rated output. Power bandwidth 17-20,000 Hz; response at 1 W 6-25,000 Hz. Phono sensitivity 1.3 mV, tape sensitivity 0.2 V. FM sensitivity 2 μ V for 30 dB quieting; capture ratio 3 dB. Has automatic mono/stereo switching, stereo indicator. Oiled walnut side panels. 13 $\frac{1}{4}$ " w. x 4 $\frac{1}{4}$ " x 15" ...\$319.95

KNIGHT-KIT

KG-988A AM-FM Stereo Receiver Kit

Silicon solid-state circuit with 40 W/ch dynamic power into 4 ohms (24 $\frac{1}{2}$ W/ch continuous sine wave at 8 ohms). Response 20-20,000 Hz. Features tape monitor switch for 3-head machines; main/remote speaker sw.; inputs for mag. or ceramic phono, tape monitor, auxiliary. Walnut wood case. 5 $\frac{3}{4}$ " x 17 $\frac{3}{4}$ " x 14"

1971 EDITION



ASK A TEACHER ABOUT PERFECTURE

"Teaching an active group of students is very often an exercise in endurance," says Nancy Mozzicato, of Medford, Mass., "and at the end of the day, I like to relax and listen to music on my Scott 386 stereo receiver. I'm in no mood to fuss with complicated controls, so I really appreciate the Scott Perfecture light. When the light goes on, I know the station is tuned right, and that's that."

Scott's Perfecture is a specially developed digital computer circuit which scans the other tuner circuits and flashes a light when you're tuned for *both* lowest distortion *and* best reception. It makes tuning easy, but more important, it makes tuning perfect. Just one more reason why Scott is your best investment in sound.

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4

Receivers



d. 22A3711X. Kit complete with instructions, solder, wire\$189.95

KG-996 AM-FM Stereo Receiver Kit

Features 95 W/ch (IHF) dynamic power into 4 ohms; 62 W/ch r.m.s.; response 20-30,000 Hz ± 1 dB; HD 1%. FM sensitivity 2 μ V. Critical PC boards are wired and pre-aligned. 18 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ " x 5". With walnut veneer case.
Kit\$229.95

LAFAYETTE

LR-1500T AM-FM Stereo Receiver

95 W/ch @ 4 ohms (IHF) dynamic power design; response 20-20,000 Hz ± 0.75



dB; HD 0.8%; S/N ratio -75 dB; stereo separation 40 dB; capture ratio 1.25 dB; FM sensitivity 1.5 μ V; selectivity 40 dB. Features four IC's plus front- and rear-panel tape outputs; FM interstation muting; tuning meter; automatic overload protection; simulated walnut wood-grained metal case. 16 $\frac{3}{4}$ " x 4 $\frac{1}{8}$ " x 14 $\frac{1}{4}$ " d.\$299.95

LR1000TA AM-FM Stereo Receiver

60 W/ch @ 4 ohms (IHF) dynamic power design; response 22-20,000 Hz ± 1 dB; HD 0.8%; S/N ratio -68 dB; stereo separation 38 dB; capture ratio 1.5 dB; FM sensitivity 1.65 μ V. Features four IC's plus front- and rear-panel tape outputs; interstation muting; tuning meter; stereo indicator light; automatic overload protection; simulated walnut wood-grained metal case. 15 $\frac{1}{8}$ " x 5" x 13" d.\$239.95

LR-775 AM-FM Stereo Receiver

40 W/ch at 4 ohms (IHF); THD 0.8% at rated output. Power bandwidth 15-30,000 Hz. FM sensitivity 1.7 μ V (IHF); capture ratio 1.5 dB. Features four IC's, main-remote speaker switching, "black-out" tuning dial. Has full set of inputs and outputs. With simulated walnut-grain metal cabinet. Size 14 $\frac{1}{2}$ " w. x 10 $\frac{1}{4}$ " x 4" h.\$199.95

LR-100 AM-FM Stereo Receiver

20 W/ch at 4 ohms (IHF); THD 0.8% at rated output; power bandwidth 35-30,000 Hz. FM sensitivity 2.5 μ V (IHF); capture ratio 5 dB. Inputs for mag and ceramic phono, aux. Main and remote speaker outputs (switchable), tape out jacks, headphone jacks. Features tuning meter, stereo indicator light, "black-out" tuning dial. With simulated walnut-finish metal cabinet. Overall size 14 $\frac{1}{2}$ " w. x 10 $\frac{1}{2}$ " d. x 4 $\frac{1}{2}$ ".\$139.95

LR-75 AM-FM Stereo Receiver

10 W/ch at 4 ohms (IHF). Response 20-20,000 Hz ± 1 dB; HD 0.2%; S/N ratio



-50 dB; capture ratio 5 dB; FM sensitivity 3.5 μ V. Features automatic station lock-in; front-panel tape output and stereo headphone jacks; main/remote speaker selector switch. Simulated walnut grain metal case. 13" w. x 4 $\frac{1}{2}$ " h. x 9 $\frac{7}{8}$ " d.\$109.95

MAGNAVOX

All following models are stereo designs with AM-FM tuners, a.f.c., stereo indicator & two-position speaker selector.

1K8893 AM-FM Receiver

Features 25 W/ch (EIA) dynamic power amplifier. Walnut cabinet\$189.90

1K8851 AM-FM Receiver

Features 50 W/ch (EIA) dynamic power amplifier. 22 $\frac{1}{4}$ " x 11 $\frac{1}{4}$ " d. x 7 $\frac{1}{4}$ ". With walnut cabinet\$249.90

1K8886 AM-FM Receiver

Features 75 W/ch (EIA) dynamic power amplifier. 22 $\frac{1}{4}$ " w. x 15 $\frac{1}{4}$ " d. x 7 $\frac{1}{2}$ ". With walnut cabinet\$299.90

MARANTZ

22 AM/Stereo-FM Receiver

Features 40 W/ch continuous sine wave from 20-20,000 Hz with both channels



driven into 4 or 8 ohm loads (23 W/ch into 16-ohm load); HD & IM dist. ea. 0.3% at rated output. Response through phono 20-20,000 Hz ± 0.5 dB. Input sensitivity 2 mV (mag. & tape head), 180 mV aux. FM sensitivity 2.4 μ V (IHF); capture ratio 2.5 dB. Has two tuning meters for center channel & signal strength as well as a multipath tuning meter; stereo indicator light; conversion facilities for 240 V a.c. operation. With simulated walnut-finish metal cabinet. 16 $\frac{1}{8}$ " x 5" x 14" d.\$449.00
WC-4 Oiled walnut cabinet\$ 32.50

26 AM/Stereo-FM Receiver

Features 10 W/ch r.m.s. continuous into 8 ohms 20-20,000 Hz with both channels being driven. (21 W/ch IHF); HD & IM dist. each 1% at rated output & 20-20,000 Hz. Response through phono 20-20,000 Hz ± 1.5 dB. Input sensitivity 2 mV for mag. phono & tape head, 150 mV for aux. FM sensitivity 3 μ V (IHF); capture ratio 3 dB. 15 $\frac{1}{2}$ " x 3 $\frac{1}{4}$ " x 12 $\frac{1}{4}$ ". With simulated walnut-finish metal cabinet \$219.00
WC-5 Walnut cabinet\$ 25.50

19 Stereo-FM Receiver

Has 50 W/ch r.m.s. power with both channels driven from 20-20,000 Hz into 8 ohms (75 W/ch IHF @ 8 ohms); HD & IM dist. each 0.15%; response 20-20,000 Hz ± 0.5 dB. FM sensitivity (IHF) 1.8 μ V. Features built-in scope. 18 $\frac{1}{4}$ " x 5 $\frac{3}{4}$ " x 16"\$1000.00
WC-9 Walnut cabinet\$ 39.50

27 AM/Stereo-FM Receiver

Has 30 W/ch r.m.s. with both channels driven from 20-20,000 Hz into 8 ohms

(75 W/ch IHF); HD & IM dist. ea. 0.3%; response 20-20,000 Hz ± 1 dB. FM sensitivity (IHF) 2.8 μ V; capture ratio 3 dB.



Input sensitivity: phono 2 mV; aux. 150 mV\$319.00
WC-7 Walnut cabinet\$ 25.50

MIDLAND

19-551 AM/Stereo-FM Receiver

Features 37 $\frac{1}{2}$ W/ch dynamic power (20 W/ch r.m.s.); response 25-30,000 Hz ± 1.5 dB; HD 1%; FM sensitivity 2 μ V (IHF); input sensitivity: mag. phono 2.5 mV; aux. 200 mV. Walnut cabinet. 16 $\frac{1}{8}$ " x 10" x 5 $\frac{1}{4}$ "\$199.95

19-555 AM/Stereo-FM Receiver

Features 50 W/ch dynamic power (30 W/ch r.m.s.); HD 0.8%; FM sensitivity 1.8 μ V (IHF); response 20-30,000 Hz ± 1.5 dB. Input sensitivity: mag. phono 2.5 mV; aux. 200 mV. Walnut cabinet. 17 $\frac{1}{8}$ " x 12" x 5 $\frac{1}{2}$ "\$249.95

19-560 AM/Stereo-FM Receiver

Features 75 W/ch dynamic power (40 W/ch r.m.s.); response 20-30,000 Hz ± 1.5 dB; HD 0.5%; FM sensitivity 1.2 μ V (IHF); input sensitivity: mag. phono 2.5 mV; aux. 200 mV. Walnut cabinet. 17 $\frac{1}{8}$ " x 12" x 5 $\frac{1}{2}$ "\$299.95

MONARCH

SAT-180X AM/Stereo-FM Receiver

Features 25 W/ch dynamic (EIA) power; response 30-20,000 Hz ± 1 dB. Input sensitivity: mag. phono 3 mV. Has phono & aux. inputs. 13 $\frac{3}{4}$ " x 4 $\frac{3}{4}$ " x 10". \$189.60

SAT-460XW AM/Stereo-FM Receiver

Features 32 $\frac{1}{2}$ W/ch dynamic (EIA) power into 8 ohms; FM sensitivity 2.2 μ V



(IHF); input sensitivity: mag. phono 3 mV; tape & aux. 200 mV. Has main/remote speaker facilities. 16 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " x 11 $\frac{1}{2}$ "\$304.80

MOTOROLA

SK109GW AM/Stereo-FM Receiver

Deluxe design with 18 $\frac{1}{2}$ W/ch (EIA) dynamic power into 8 ohms. Includes two separately housed speaker systems, each with 8", a 3" & a horn tweeter. Walnut



vener cab. 17 $\frac{1}{4}$ " x 4 $\frac{1}{8}$ " x 10 $\frac{1}{2}$ " d.
Speaker cab. size is 11 $\frac{1}{4}$ " x 17 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "
d.\$299.95

NIKKO

STA301 AM-FM Stereo Receiver

15 W/ch (IHF) dynamic power into 8 ohms; HD 0.8% at rated output; IM dist. 1% at rated output. FM sensitivity 2.5 μ V (IHF); capture ratio 4.5 dB; input sensitivity: mag. phono 2.8 mV; tape head 1.9 mV; aux. 200 mV. 14 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " x 12 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input\$159.95
With two SS83 speaker systems . \$249.95

STA501S AM-FM Stereo Receiver

25 W/ch (IHF) dynamic power into 8 ohms; AM-FM tuner section same performance as FAM12 tuner. Input sensitivity: mag. phono 2.8 mV; tape head 1.8 mV; aux. #1 200 mV, aux. #2 500 mV. Amp. response 15-50,000 Hz \pm 1 dB; HD 0.8% at rated output; IM dist. 1% at rated output. 15 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " x 12 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input \$189.95

STA701B AM-FM Stereo Receiver
35 W/ch (IHF) dynamic power into 8 ohms; AM-FM tuner has same perform-



ance as Model FAM12 tuner; amp. HD 0.8% at rated output; IM dist. 1% at rated output. Response 15-50,000 Hz \pm 1 dB; input sensitivity: mag. phono 2.8 mV; tape head 1.8 mV; aux. #1 200 mV; aux. #2 500 mV. 14 $\frac{1}{2}$ " x 4 $\frac{1}{2}$ " x 12 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input \$239.95

1101 AM-FM Stereo Receiver

56 W/ch (IHF) dynamic power into 8 ohms (80 W/ch into 4 ohms); 37 W/ch



continuous power into 8 ohms with both channels driven; response (aux.) 20-40,000 Hz \pm 1 dB; HD 0.3% at rated output (IM dist. 0.6%). FM sensitivity: 1.5 μ V (IHF); capture ratio 1.5 dB; input sensitivity: mag. phono 2 mV; mic. 2 mV; tape 200 mV. Features separate AM & FM tuning; interstation muting; mic input. Has 2 vu meters. 6 $\frac{1}{2}$ " x 18 $\frac{1}{4}$ " x 14 $\frac{1}{8}$ " d. 117 V/240 V, 50/60 Hz power input. Supplied with satin black metal cabinet\$399.95
With walnut cabinet\$419.95

NORELCO

790 AM/Stereo-FM Receiver

Features 25 W/ch continuous r.m.s. into 8 ohms with both channels driven (29



W/ch @ 4 ohms & 18 W/ch @ 16 ohms); 34 W/ch dynamic (IHF) power into 8 ohms. HD 0.2%; IM 0.5%; response 20-20,000 Hz \pm 0.5 dB; power bandwidth 18-30,000 Hz; input sensitivity: mag. phono 3.8 mV; ceramic phono (aux.) 70 mV; tape 100 mV; FM usable sensitivity 3.5 μ V for 26 dB S/N ratio; capture ratio (IHF) 4 dB. Features main/remote speaker facilities & touch control tuning of 3 FM stations. Also has separate short-wave bands (6-18 MHz). 20 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ " x 10". With walnut cabinet\$299.95

OLSON ELECTRONICS

RA-192 AM/Stereo-FM Receiver

15 W/ch dynamic power into 8 ohms; Has illuminated black-out dial; tuning



meter; stereo indicator lamp. Capture ratio 6 dB; response 40-20,000 Hz; HD 1%. Has inputs for mag. phono & aux. 16 $\frac{1}{2}$ " w. x 3 $\frac{1}{16}$ " h. x 8 $\frac{1}{4}$ ". 50/60 Hz operation. With walnut cabinet\$100.00

RA-193 AM/Stereo-FM Receiver

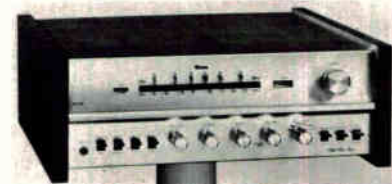
Features 30 W/ch dynamic power into 8 ohms. Has black-out dial; tuning meter;



stereo indicator. Inputs: mag. & crystal phono, tape, and auxiliary. FM sensitivity 2 μ V; response 20-20,000 Hz. 14" w. x 5" h. x 11 $\frac{1}{8}$ ". 50/60 Hz. Walnut cabinet\$159.98

RA-194 AM/Stereo-FM Receiver

42 $\frac{1}{2}$ W/ch dynamic power into 8 ohms. Features three-dimensional effect and



aluminum front panel; stereo-FM indicator lamp; tuning meter. Inputs for phono (mag. & ceramic), tape head, and aux. Response 30-20,000 Hz. FM sensitivity 2.0 μ V; 4-16 ohms. 16 $\frac{1}{8}$ " w. x 5 $\frac{3}{4}$ " h. x 14 $\frac{1}{2}$ ". 50/60 Hz. Walnut cabinet \$200.00

RA-195 AM-FM Stereo Receiver

75 W/ch dynamic power into 8 ohms. Features two IC's plus FET; front-panel

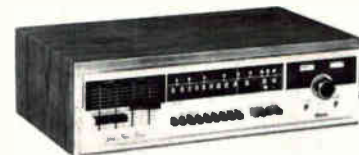


tape recorder jacks; dual tuning meters for center-of-channel tuning; FM stereo indicator light; main & remote speaker

terminals; tape head inputs. FM sensitivity 1.5 μ V for 30 dB quieting; response 30-20,000 Hz \pm 3 dB. Imp. 4-16 ohms. 18 $\frac{1}{16}$ " w. x 14 $\frac{1}{4}$ " d. x 5 $\frac{3}{4}$ ". 50/60 Hz operation. With walnut cabinet. . \$250.00

RA-300 AM/Stereo-FM Receiver

Features 125 W/ch dynamic power into 8 ohms. Receiver incorporates 2 ceramic



i.f. filters, 4 IC's. Has stereo indicator lamps, dual vu meters. Capture ratio 2.5 dB; response 15-25,000 Hz. 17" w. x 5" h. x 13 $\frac{1}{4}$ ". With walnut cabinet.. \$349.98

PANASONIC

All receivers provide main/remote speaker selection and are supplied with walnut cabinet.

SA-40 AM-FM Receiver

Stereo design; 20 W/ch (IHF) dynamic power into 8 ohms (27 $\frac{1}{2}$ W/ch into 4 ohms); 12 W/ch continuous r.m.s. into 8 ohms & with 0.8% HD; IM dist. 1.2%; power bandwidth 20-50,000 Hz; response aux. 30-50,000 Hz \pm 3 dB; input sensitivity: phono #1 3.5 mV; phono #2 10 mV; aux. & tape monitor 170 mV. Has h.f. filter. FM sensitivity (IHF) 2.8 μ V; capture ratio 3 dB. 16" x 5" x 14"\$219.95

SA-60 Same as SA-40 except 25 W/ch (IHF) dynamic power into 8 ohms (30 W/ch into 4 ohms); 22 $\frac{1}{2}$ W/ch continuous r.m.s. into 8 ohms; IM dist. 1%; re-



sponse aux. 30-60,000 Hz \pm 3 dB; input sensitivity: aux & tape monitor 230 mV. Does not have h.f. filter; FM sensitivity (IHF) 2.2 μ V; capture ratio 2.5 dB. Has center-channel output. 19 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ " x 14"\$279.95

SA-50 Same as SA-60 except does not have AM circuits.\$249.95

SA-70 AM-FM Receiver

Stereo design; 40 W/ch (IHF) dynamic power into 8 ohms (45 W/ch into 4



ohms); 32 W/ch continuous r.m.s. into 8 ohms with 0.8% HD; IM dist. 1%; power bandwidth 15-70,000 Hz; response aux. 30-60,000 Hz; input sensitivity: phono #1 4 mV; phono #2 18 mV; aux. & tape monitor 200 mV. Has low & h.f. filters; FM sensitivity (IHF) 2 μ V; capture ratio 2 dB. Has center-channel output. 19 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ " x 14"\$349.95

SA-6500 AM-FM Receiver

Stereo design; 70 W/ch (IHF) dynamic power into 8 ohms (100 W/ch into 4 ohms); 50 W/ch continuous r.m.s. into 8 ohms with 0.5% HD (65 W/ch into 4 ohms); IM dist. 1%; power bandwidth 15-

4

Receivers



60,000 Hz; response aux. 20-60,000 Hz ± 1 dB; input sensitivity: phono #1 & #2 3 mV; aux. & tape monitor 170 mV; has low & h.f. filters. FM sensitivity (IHF) 1.8 μ V; capture ratio 1.5 dB. 16 $\frac{1}{8}$ " x 5 $\frac{7}{8}$ " x 15 $\frac{1}{4}$ "\$399.95

SA-4000 FM Stereo Receiver

Features automatic meter tuning; also has capability for presetting up to 5 sta-



tions; a remote control is available. Has ceramic filters: 80 W/ch dynamic (IHF) power into 8 ohms (90 W/ch into 4 ohms); 60 W/ch continuous r.m.s. into 8 ohms with 0.1% HD; IM dist. 0.2%; power bandwidth 20-30,000 Hz; response aux. 20-50,000 Hz ± 3 dB; input sensitivity: phono #1 3 mV; phono #2 5 mV; aux. & tape monitor 150 mV. FM sensitivity (IHF) 1.5 μ V; capture ratio 1 dB. 20 $\frac{1}{8}$ " x 7" x 16 $\frac{3}{8}$ "\$990.00

PIONEER

SX-2500 AM-FM Stereo Receiver

104 W/ch (IHF) dynamic power into 8 ohms (170 W/ch into 4 ohms); 84 W/ch continuous into 8 ohms (120 W/ch into 4 ohms). HD 0.5% at 1000 Hz. Response 20-70,000 Hz ± 2 dB; power bandwidth 20-30,000 Hz. Input sensitivity: mag. phono 2.7 mV; ceramic phono 60 mV; aux. & tape monitor 200 mV. FM sensitivity (IHF) 1.6 μ V; capture ratio 1 dB. Features automatic tuning & touching button sends tuning to next station left or right. Has remote (23 feet) for auto-tuning & volume. Has center-channel output; crystal filters in i.f. stages; inter-station muting. 19 $\frac{1}{8}$ " x 5 $\frac{3}{8}$ " x 15 $\frac{1}{8}$ " d.\$549.95

SX-9000 AM/Stereo-FM Receiver

120 W/ch dynamic (IHF) power at 4 ohms (75 W/ch @ 8 ohms); 60 W/ch continuous power @ 4 ohms (50 W/ch @ 8 ohms) with both channels driven. HD 0.5% @ rated power; response 10-35,000 Hz ± 1 dB; power bandwidth 10-35,000 Hz; input sensitivity: mag. phono 2.5 mV; aux. & tape monitor 160 mV; mic 1.6 mV. FM sensitivity: 1.6 μ V (IHF); capture ratio 1 dB. Features stereo or mono mic mixing; reverb controllable 0-2 sec; three-pair speaker selector capability. Has 110, 120, 130, 220, 240 volts universal-type power supply. 20 $\frac{1}{8}$ " x 7 $\frac{3}{8}$ " x 13 $\frac{3}{8}$ " d.\$499.95

SX-990 AM/Stereo-FM Receiver

50 W/ch dynamic (IHF) power @ 8 ohms (28 W/ch continuous power @ 8 ohms with both channels driven). HD 0.5% @ rated output & 1 kHz. Response



10-100,000 Hz ± 3 dB; power bandwidth 15-40,000 Hz. Input sensitivity: mag. phono 3.3 mV; ceramic phono 24 mV; tape monitor & aux. 200 mV. FM usable sensitivity (IHF) 1.7 μ V. Has mic input for either channel. Universal power supply 110, 117, 130, 220 & 240 volts. 18 $\frac{1}{8}$ " x 5 $\frac{3}{8}$ " x 14 $\frac{1}{2}$ " d.\$299.95

SX-1500TD AM/Stereo-FM Receiver

Features 90 W/ch dynamic power at 4 ohms; HD 0.5% at 1 kHz @ rated output



(72 $\frac{1}{2}$ W/ch @ 8 ohms); 70 W/ch continuous power into 4 ohms with both channels driven (58 W/ch into 8 ohms). Has facilities for mic mixing. Power bandwidth 15-70,000 Hz; response 20-40,000 Hz ± 1 dB; Phono sensitivity 3.3 mV; FM usable sensitivity 1.7 μ V; capture ratio 0.7 dB. Features automatic mono/stereo sw.; four IC's; main/remote speaker sw.; phono 1 & 2 selector. 18 $\frac{1}{8}$ " x 5 $\frac{3}{8}$ " x 14 $\frac{1}{2}$ " d. Has rosewood end pieces & mic\$399.95

SX-440 AM/Stereo-FM Receiver

Features 20 W/ch (IHF) music power at 4 ohms (16 $\frac{1}{2}$ W/ch at 8 ohms); 15 W/ch



continuous power with both channels driven at 4 ohms (12 W/ch at 8 ohms). Response 20-70,000 Hz ± 3 dB; HD 1%; power bandwidth 30-20,000 Hz. FM sensitivity 2.5 μ V (IHF). Inputs: phono 3 mV; tape monitor & aux. 130 mV. Will handle two separate speaker systems. 15 $\frac{1}{16}$ " w. x 5 $\frac{1}{16}$ " x 15". With walnut cabinet\$199.95

SX-700 AM/Stereo-FM Receiver

Features 35 W/ch (IHF) dynamic power at 4 ohms (26 W/ch at 8 ohms); 17 W/ch



continuous power at 4 ohms (15 W/ch at 8 ohms); HD 0.8%. Response 20-40,000 Hz ± 3 dB; power bandwidth 15-35,000 Hz. FM usable sensitivity (IHF) 1.8 μ V. Input sensitivity: mag. phono 2.5 mV; ceramic phono 58 mV; mic 5 mV; tape monitor & aux. 200 mV. Will power two separate speaker systems. With walnut cabinet. 16 $\frac{15}{16}$ " w. x 5 $\frac{11}{16}$ " x 13 $\frac{3}{8}$ ".\$249.95

REALISTIC

STA-36 AM-FM Stereo Receiver

FM sensitivity 3.0 μ V (IHF); output 18

W/ch (IHF) at 8 ohms; HD 1% at rated power; response 20-20,000 Hz ± 1 dB. Can be used with 4-ohm speakers. Walnut case included\$119.95

STA-45B FM Stereo Receiver

FM sensitivity 2.5 μ V for 20 dB quieting; amplifier response 20-20,000 Hz ± 1 dB. Features 27 $\frac{1}{2}$ W/ch (IHF) into an 8-ohm load; HD below 1%. Has two FM tuning meters & speaker selector and tape monitor switches. Can be used with 4-ohm speakers\$159.95

STA-65C AM-FM Stereo Receiver

32 $\frac{1}{2}$ W/ch (IHF) at 8 ohms; HD 0.8% at rated power; FM sensitivity 2.0 μ V



(IHF). Has two tuning meters, slide volume controls, walnut cabinet ...\$199.95

STA-120 AM-FM Stereo Receiver

Solid-state design with 70 W/ch (IHF) into 8 ohms; FM sensitivity 2 μ V for 20 dB quieting. Built-in AM & FM antennas. HD below 1%. Has tape monitor, speaker selector switches, slide volume controls, dual tuning meters, and walnut case\$269.95

ROBERTS

Model 30 AM-FM Stereo Receiver

Solid-state design; 7 $\frac{1}{2}$ W/ch dynamic power @ 8 ohm load; has switchable inputs for magnetic or ceramic cartridges; automatic stereo/mono indicator. Supplied with walnut cabinet\$179.95
Model 50 Same as Model 30 except 25 W/ch dynamic power\$199.95

Model 120 AM-FM Stereo Receiver

50 W/ch (IHF) dynamic power into 8 ohms (60 W/ch at 4 ohms); 37 $\frac{1}{2}$ W/ch



continuous power per channel at 8 ohms; HD 0.8% at rated output; power bandwidth 20-30,000 Hz at 8 ohms. Input sensitivity: mag. phono 3 mV; aux. 200 mV; tape monitor 200 mV; 4-16 ohms output. FM sensitivity (IHF) 2 μ V; capture ratio (IHF) 2 dB; power source 100-240 V, 50/60 Hz. Has both field-strength & station center-tuning meters; main/remote speaker selection and both 75 & 300 ohm FM antenna inputs. With oiled walnut cabinet. 5 $\frac{1}{4}$ " x 17 $\frac{1}{2}$ " x 13 $\frac{3}{8}$ " d.\$299.95

ROTEL

FAX-330-A AM-FM Stereo Receiver

30 W/ch (IHF) dynamic power into 4 ohms; 17 W/ch continuous sine wave into 8 ohms; HD 0.3% at rated output. 8 ohms; power bandwidth 30-17,000 Hz; response 25-20,000 Hz ± 1.5 dB at rated output. Input sensitivity: mag. phono 3 mV; ceramic phono & aux. 200 mV. FM sensitivity 2.5 μ V (IHF); capture ratio 2.5 dB. Has walnut cabinet. 16 $\frac{3}{4}$ " x 10 $\frac{3}{4}$ " d. x 5 $\frac{1}{8}$ "\$189.50

STEREO HI-FI DIRECTORY

FAX-550A AM-FM Stereo Receiver

45 W/ch (IHF) dynamic power into 4 ohms (22 W/ch continuous into 8 ohms); response 15-35,000 Hz \pm 1.5 dB at rated output. Input sensitivity: mag. phono 2 mV; ceramic phono 200 mV; aux. 200 mV. FM sensitivity 2.2 μ V (IHF); capture ratio 2.5 dB. 16 $\frac{1}{8}$ " x 13 $\frac{1}{2}$ " d. x 5 $\frac{1}{8}$ " h.\$249.50

FAX-660A AM-FM Stereo Receiver

60 W/ch dynamic power (IHF) at 4 ohms; 30 W/ch continuous at 8 ohms;



HD 0.2% at rated output; power bandwidth 20-25,000 Hz; response 15-35,000 Hz \pm 1.5 dB at rated output. FM sensitivity 2.0 μ V (IHF); capture ratio 2.5 dB. Input sensitivity: mag. phono 2 mV; ceramic phono 180 mV; aux. 200 mV. 17 $\frac{3}{4}$ " x 6 $\frac{1}{4}$ " h. x 13 $\frac{1}{2}$ " d.\$279.95

FAX-1000 AM-FM Stereo Receiver

100 W/ch (IHF) dynamic power into 4 ohms (50 W/ch continuous into 8 ohms); power bandwidth 15-50,000 Hz; response 10-50,000 Hz \pm 1.5 dB at rated power; HD 0.1% at rated output; input sensitivity: mag. phono 2 mV; ceramic phono 180 mV; aux. 250 mV. FM sensitivity 1.8 μ V (IHF); capture ratio 2 dB. Has center-channel output; crystal filter i.f.'s; main/remote speaker switch; interstation muting; zero-center FM tuning meter; mic/guitar inputs. Size 17 $\frac{3}{8}$ " x 16" d. x 5 $\frac{1}{8}$ ".\$399.50

SANSUI

5000A AM-FM Stereo Receiver

70 W/ch (IHF) dynamic power into 8 ohms (90 W/ch into 4 ohms); 55 W/ch



continuous power at 8 ohms with both channels driven (75 W/ch into 4 ohms); HD 0.8% at rated output; power bandwidth 15-30,000 Hz at 8 ohms; response 10-50,000 Hz \pm 1 dB; input sensitivity: mag. phono 2.5 mV; tape head 2.5 mV; aux. 150 mV; tape monitor 200 mV. FM sensitivity 1.8 μ V (IHF); capture ratio 1.5 dB. Features stereo-only circuit; 3-system speaker selector switch; center-channel tuning meters. 4 $\frac{1}{8}$ " x 17 $\frac{1}{4}$ " x 14 $\frac{1}{2}$ " d.\$399.95
Optional wood cabinet\$22.50

4000 AM-FM Stereo Receiver

Solid-state design; IC's; 80 W/ch dynamic power at 4 ohms (60 W/ch at 8 ohms); 65 W/ch continuous sine wave power with both channels driven (45 W/ch at 8 ohms). HD & IM dist. 0.8% at rated output; response 10-50,000 Hz \pm 1 dB; power bandwidth 20-30,000 Hz at 8 ohms; output 4 to 16 ohms. FM sensitivity 1.8 μ V (IHF), 1.4 μ V for 20 dB quieting. THD (tuner section) less than 0.6%; capture ratio 1 dB. Features inputs for 3 pair of stereo speaker systems; signal-strength meter; FM center-tuning meter; FM SCA filter. 14 $\frac{3}{4}$ " x 5 $\frac{1}{4}$ " x 13 $\frac{1}{4}$ ". \$349.95
Optional wood case\$22.50

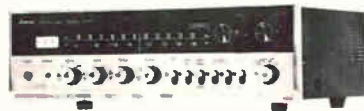
1971 EDITION

2000A AM-FM Stereo Receiver

90 W/ch (IHF) dynamic power into 8 ohms (60 W/ch into 4 ohms); 35 W/ch continuous into 8 ohms with both channels driven (43 W/ch at 4 ohms); HD & IM dist. each 0.8% at rated output; power bandwidth 20-40,000 Hz at 8 ohms; response 10-50,000 Hz; input sensitivity: phono #1 & #2 2.5 mV; aux., tape monitor, tape recorder 150 mV. FM sensitivity 1.8 μ V (IHF); capture ratio 1 dB. Has 300 & 75 ohm ant. inputs; main/remote speaker sw. 18" x 5" x 13 $\frac{1}{4}$ ".\$299.95
Optional wood cabinet\$22.50

1000X AM-FM Stereo Receiver

76 W/ch (IHF) dynamic power into 8 ohms (50 W/ch into 4 ohms); 34 W/ch



continuous into 8 ohms (28 W/ch into 4 ohms); HD & IM dist. each 0.8%; power bandwidth 20-30,000 Hz; response 50-40,000 Hz \pm 1 dB; input sensitivity: mag. phono 2.5 mV; tape monitor 150 mV; tape in 30 mV. FM sensitivity 2.5 μ V (IHF); Has 300 & 75 ohm antenna inputs and main/remote speaker sw. 16 $\frac{1}{4}$ " x 5 $\frac{1}{8}$ " x 12" d. With wood cabinet \$269.95

800 AM-FM Stereo Receiver

Solid-state design; integrated circuits; 29 W/ch dynamic power at 8 ohms; 22 W/ch continuous sine wave at 8 ohms; HD 1% at rated output; power bandwidth 20-30,000 Hz at 8 ohms; response 15-50,000 Hz \pm 1 dB at normal listening level; FM usable sensitivity (IHF) 2.8 μ V, 2 μ V for 20 dB quieting; input sensitivity: phono 2.2 mV; aux & tape monitor 150 mV. Output 4 to 16 ohms. FM local/distant sw.; multiplex stereo noise eliminator; FM stereo indicator. 15 $\frac{1}{4}$ " x 6 $\frac{1}{8}$ " x 13 $\frac{1}{8}$ " d.\$249.95
Optional wood case\$19.95

350 AM-FM Stereo Receiver

Solid-state design; integrated circuits; 23 W/ch dynamic power at 8 ohms; 18 W/ch continuous sine wave at 8 ohms; HD 1% at rated output; power bandwidth 30-20,000 Hz at 8 ohms; response 20-30,000 Hz \pm 1.5 dB at normal listening level; FM usable sensitivity (IHF) 2.5 μ V for 20 dB quieting; input sensitivity: phono 2.2 mV; aux. & tape monitor 150 mV; output 4 to 16 ohms; FM local/distant switch; multiplex stereo noise eliminator; FM stereo indicator. 15 $\frac{1}{4}$ " x 4 $\frac{1}{8}$ " x 13 $\frac{1}{8}$ " d.\$199.95

SCOTT, H.H.

All Scott receivers feature field-effect transistor FM front-ends; silicon output transistors; direct-coupled amplifier circuits; tuning meters; loudness controls; automatic stereo switching; stereo indicator lights; separate bass & treble controls for each channel; front-panel phone jacks; main/remote/both speaker switching; sub-channel filter provisions for speaker balancing and tape monitoring. All continuous power measurements made with both channels driven.

631 AM-FM Stereo Receiver

35 W/ch (IHF) dynamic power into 4 ohms (25 W/ch continuous into 4 ohms



& 18 W/ch into 8 ohms with both channels driven). Bandwidth 25-20,000 Hz; HD 0.5% at rated output; input sensitivity: mag. phono 4.5 mV; tape in & aux. 0.25 V; FM sensitivity 2.2 μ V for 30 dB S/N; capture ratio 2.5 dB. Features tape monitor; main/remote speaker selection. 14 $\frac{1}{4}$ " x 14 $\frac{1}{4}$ " x 4 $\frac{1}{8}$ ".\$199.95

342-C FM Stereo Receiver

Features 45 W/ch dynamic power at 4 ohms; continuous power (at 0.8% dist.) at 4 ohms 33 W/ch; 25 W/ch at 8 ohms; power bandwidth 20-20,000 Hz; response 14-25,000 Hz \pm 1 dB. FM usable sensitivity 1.9 μ V; selectivity 40 dB; capture ratio 2.5 dB. Phono sensitivity 4 mV. 15 $\frac{3}{4}$ " x 11 $\frac{1}{2}$ " x 5"\$269.95
382-C. Same as Model 342-C except with AM circuits\$299.95

386 AM-FM Stereo Receiver

Features 67 $\frac{1}{2}$ W/ch dynamic power at 4 ohms; 42 W/ch continuous at 4 ohms; 35 W/ch continuous at 8 ohms, 0.8% HD. Response 10-25,000 Hz \pm 1 dB; power bandwidth 10-25,000 Hz; FM usable sensitivity 1.9 μ V; capture ratio 2.5 dB. Phono sensitivity 3 and 6 mV. 17 $\frac{1}{2}$ " w. x 15 $\frac{3}{4}$ " d. x 5 $\frac{1}{2}$ ".\$389.95

387 AM-FM Stereo Receiver

70 W/ch (IHF) dynamic power into 8 ohms (110 W/ch into 4 ohms; 55 W/ch



continuous power into 8 ohms with both channels driven (85 W/ch into 4 ohms); HD 0.5% at rated output; power bandwidth 10-38,000 Hz; input sensitivity: mag. phono high 4.2 mV; low 8.5 mV; mic 5.5 mV; aux. & tape in 0.70 mV. FM sensitivity 1.9 μ V for 30 dB S/N; capture ratio 2.5 dB. Features interstation muting; sloping dial panel; main/remote speaker selection. 17 $\frac{1}{4}$ " x 15" d. x 6".\$449.95

SHERWOOD

S-7100 AM/Stereo-FM Receiver

Features 35 W/ch (IHF) dynamic power into 8 ohms (40 W/ch into 4 ohms); 25



W/ch continuous r.m.s. power into 8 ohms with one channel driven (30 W/ch into 4 ohms). HD 1% into 8 ohms at rated power (0.35% at 10 W); power bandwidth 25-20,000 Hz @ 1% dist.; response aux. 30-20,000 Hz \pm 2 dB. Input sensitivity: phono 1.5 mV; aux. 200 mV. FM sensitivity 1.9 μ V (IHF) (-30 dB noise & dist.). Capture ratio 2.8 dB. Features FM interstation muting; loudness defeat; main/remote speaker facilities & front-panel tape dubbing jack. 17 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ " d. x 5 $\frac{1}{4}$ ". With oiled walnut cabinet\$199.95

S-7500 AM/Stereo-FM Receiver

Features 50 W/ch (IHF) dynamic power into 8 ohms (60 W/ch into 4 ohms); 40 W/ch continuous r.m.s. power into 8 ohms with one channel being driven (50 W/ch into 4 ohms). HD 0.6% at 8 ohms & rated output (0.15% at 10 W). Power bandwidth 18-25,000 Hz @ 1% dist. Response aux. 20-20,000 Hz \pm 1 dB. Input

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Receivers

sensitivity: phono 2/7/14 mV variable to 50 mV; aux. 700 mV; FM sensitivity 1.8 μ V (IHF) (-30 dB noise & dist.). Capture ratio 2 dB. Has ceramic i.f. circuits; main/remote speaker facilities; FM zero-center tuning meter; front-panel control adjusts interchannel FM hush sensitivity. 16 $\frac{1}{4}$ " x 12" x 5 $\frac{1}{4}$ ". With metal cabinet.

W9 Oiled walnut cabinet\$339.95
S-8500 Same as S-7500 except without AM circuitry\$299.95

S-7900 AM/Stereo-FM Receiver

Features 60 W/ch (IHF) dynamic power into 8 ohms (90 W/ch into 4 ohms); 48 W/ch continuous r.m.s. into 8 ohms with one channel driven (70 W/ch into 4 ohms). HD 0.35% @ 8 ohms & rated power (0.1% at 10 W). IM dist. 0.6% @ 8 ohms & rated power (0.15% at 10 W); power bandwidth 12-30,000 Hz \pm 1% dist. Response aux. 20-20,000 Hz \pm 1 dB; input sensitivity: phono 1.6 mV variable to 50 mV; aux. 200 mV; FM sensitivity (IHF) 1.7 μ V (-30 dB noise & dist.); capture ratio 1.9 dB. Has front panel tape dubbing jack; ceramic i.f. circuitry; zero-center FM tuning meter & main/remote speaker facilities. 16 $\frac{1}{4}$ " x 14" d. x 5 $\frac{1}{4}$ ". With metal cabinet\$439.95
W9 Oiled walnut cabinet\$28.00
S-8900 Same as S-7900 except does not have AM circuitry.\$399.95

SEL-200 Stereo-FM Receiver

Features 70 W/ch (IHF) dynamic power @ 8 ohms (30 W/ch r.m.s. with one



channel driven) & 112 W/ch (IHF) music power @ 4 ohms (42 $\frac{1}{2}$ W/ch r.m.s.). HD 0.2% @ 8 ohms & rated output (0.1% @ 10 W); IM dist. 0.6% @ 8 ohms & rated output (0.1% @ 10 W). Power bandwidth 8-35,000 Hz @ 1% dist.; response aux. 20-20,000 Hz \pm 1 dB; amp sensitivity: phono 1.6 mV variable to 7.2 mV; tape monitor & aux. 200 mV. FM sensitivity (IHF) 1.5 μ V (-30 dB noise & dist.). FM quieting 0.9 μ V for 20 dB (3 μ V for -50 dB); capture ratio 1.7 dB. Has 9-pole "Legendre" toroid FM i.f. filter, 4-gang, 3-FET r.f. tuning circuit, zero-center tuning meter; FM signal-strength meter; main/remote speaker facilities. 19 $\frac{1}{8}$ " x 6 $\frac{1}{4}$ " x 14" d. With metal cabinet.\$599.00
W4 Walnut cabinet\$29.95
Prices quoted are "Fair Trade Minimum Resale."

SONY

STR-6060 AM/Stereo-FM Receiver

FM sensitivity (IHF) 2.2 μ V; capture ratio 2 dB. Power amp 55 W/ch dynamic power at 8 ohms (45 W/ch r.m.s.). Output 4, 8, 16 ohms; HD 0.2% at rated output, 0.08% at $\frac{1}{2}$ W; IM dist. 0.2% at rated output, 0.15% at $\frac{1}{2}$ W. Input sensitivity; aux., tape 180 mV; phono 2.1 mV; tape head 1.2 mV. 17 $\frac{1}{8}$ " x 6" x 13 $\frac{1}{8}$ ". \$399.50
TAC-5 Walnut cabinet\$ 26.50

STR-6040 AM/Stereo-FM Receiver

Features 16 W/ch (IHF) (15 W/ch



r.m.s.) at 0.5% THD & 0.5% IM dist. (IM dist. at $\frac{1}{2}$ W = 0.1%) Response 30-50,000 Hz \pm 1 dB. Sensitivity: phono 2.5 mV; FM 2.6 μ V (IHF); capture ratio 2 dB. 15 $\frac{1}{8}$ " x 12 $\frac{1}{4}$ " x 5 $\frac{1}{4}$ ".\$199.50
TAC-1 Walnut cabinet\$ 24.50

STR-6050 AM/Stereo-FM Receiver

FM sensitivity (IHF) 2.6 μ V. Features 35 W/ch (IHF) (30 W/ch continuous sine wave) at 0.2% THD & 0.4% IM dist. (IM dist. at $\frac{1}{2}$ W = 0.2%) Response 30-50,000 Hz \pm 1 dB. FM tuner performance same as Model STR-6040. 17 $\frac{1}{8}$ " x 13 $\frac{1}{8}$ " x 5 $\frac{1}{8}$ ".\$279.95
TAC-5 Walnut cabinet\$ 26.50

STR-6120 AM/Stereo-FM Receiver

Features 75 W/ch (IHF) (60 W/ch continuous sine wave) at 0.2% THD & 0.3%



IM dist. (IM dist. at $\frac{1}{2}$ W = 0.05%) Response 20-15,000 Hz \pm 0.5 dB. Phono sensitivity 1.5 mV; FM sensitivity 1.8 μ V (IHF); capture ratio 1.5 dB. Has two tuning indicators. Over-all size 19" x 16" x 6".\$699.50
TAC-6 Walnut cabinet\$28.50
Solid-state i.f. filters are used on all models. All power figures are into 8 ohms.

STANDARD RADIO

SR-606S AM/Stereo-FM Receiver

Features 50 W/ch (IHF) dynamic power at 8 ohms (30 W/ch continuous power); power bandwidth 30-30,000 Hz at 8 ohms; response 20-50,000 Hz. Input sensitivity: mag. phono 3 mV; crystal phono 50 mV; tape head 1.5 mV; tape monitor 100 mV; aux. 50 mV. FM usable sensitivity 1.3 μ V for 30 dB quieting. 17" x 4 $\frac{1}{2}$ " x 12" d.\$299.95

SR-A1000S AM/Stereo-FM Receiver

Same AM-FM tuner performance as in R-A201TU but with capture ratio of 2.5



dB. Has 20 W/ch continuous r.m.s. power into 8 ohms with both channels operating. HD 1% at rated output; response 20-20,000 Hz \pm 1 dB; power bandwidth 40-20,000 Hz \pm 1 dB; input sensitivity: mag. phono 2.5 mV; tape head 1.5 mV; tape monitor & aux. each 100 mV. 16 $\frac{1}{4}$ " x 5 $\frac{1}{2}$ " x 12 $\frac{1}{8}$ ". With walnut cabinet.\$209.95

SR-A205SU AM/Stereo-FM Receiver

Features 15 W/ch (IHF) dynamic power at 8 ohms (10 W/ch continuous power); HD 1% at rated output; power bandwidth 20-30,000 Hz. Input sensitivity: mag. phono 3 mV; crystal phono 150 mV; aux. 50 mV; tape 100 mV. FM sensitivity 2.5 μ V for 30 dB quieting; capture ratio 3

dB. 15 $\frac{1}{16}$ " x 8 $\frac{1}{32}$ " d. x 3 $\frac{1}{2}$ "\$119.95
Continuous power ratings are with one channel driven.

V-M

1542 AM-FM Stereo Receiver

30 W/ch (IHF) dynamic power (20 W/ch r.m.s.); power bandwidth 9-20,000 Hz; HD 0.5% at rated output; response 20-20,000 Hz \pm 1 dB. FM sensitivity (IHF) 2.5 μ V; 30 dB S/N ratio; capture ratio 2.2 dB. Features center-tuning meter; interstation muting; high & low level mag. phono inputs; main/remote speaker selector. 4 $\frac{1}{2}$ " x 17 $\frac{1}{4}$ " x 15 $\frac{3}{8}$ " d. With cabinet\$330.00

1521 TF-10 AM-FM Stereo Receiver

55 W/ch (IHF) dynamic power into 8 ohms with 0.5% HD (40 W/ch r.m.s.);

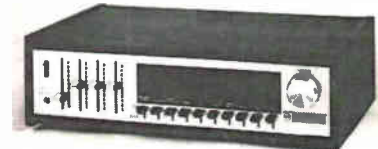


power bandwidth 9-30,000 Hz; response 20-20,000 Hz \pm 1 dB. FM sensitivity 1.9 μ V (IHF) 30 dB S/N ratio; capture ratio 1.8 dB. Features 5-pole phase-linear toroidal filters in i.f. stages; center-tuning meter; interstation muting; high & low level phono inputs; main/remote speaker selection; mic input for p.a. applications. 6 $\frac{1}{2}$ " x 18 $\frac{3}{8}$ " x 13" d. Supplied with cabinet\$500.00
Model 1520 Same except 40 W/ch (IHF) dynamic power\$440.00

WEBCOR

ST-180 AM-FM Receiver

Features 50 W/ch dynamic power (EIA) at 8 ohms. Response 20-50,000 Hz \pm 1



dB; FM sensitivity 1 μ V for 20 dB quieting. 4 $\frac{1}{2}$ " x 17" x 12" d. Walnut cabinet\$289.95

ST-185 AM-FM Receiver

Features 30 W/ch dynamic power (EIA) at 8 ohms. Response 20-50,000 Hz \pm 1 dB. FM sensitivity 3.2 μ V for 20 dB quieting. Has inputs for ceramic & magnetic phono cartridges & auxiliary. 8 $\frac{1}{2}$ " x 4 $\frac{9}{16}$ " x 8 $\frac{11}{16}$ " d.\$249.95

WFX-151 AM/Stereo-FM Receiver

Features 10 W/ch dynamic output (EIA). Has stereo indicator and is supplied with two separately housed speaker systems. Receiver size 17 $\frac{1}{4}$ " x 10" x 4 $\frac{1}{4}$ ".\$124.95

YAMAHA

AA-70 AM Stereo-FM Receiver

Features 65 W/ch dynamic power (IHF) at 4 ohms (45 W/ch at 8 ohms). Continuous sine wave power is 30 W/ch at 8 ohms (35 W/ch at 4 ohms); HD 0.3% at 1000 Hz; IM dist. 0.8%. Power bandwidth (IHF) at 8 ohms 30-20,000 Hz. Sensitivity: phono 3 mV; aux. 170 mV; tape monitor 200 mV. FM usable sensitivity 2.5 μ V (IHF). With cabinet. Over-all size 18 $\frac{1}{2}$ " x 17 $\frac{1}{4}$ " x 5 $\frac{1}{2}$ ".\$269.00

STEREO HI-FI DIRECTORY

Introducing... The Stereo "Deceiver"

It looks straightforward enough. But, the clean front panel of the new Sony 222 FM Stereo/FM-AM receiver hides a simple, but effective circuit. A tuner section sensitive enough (2.0uV for 30dB quieting) to bring in even the weakest stations free of distortion. An amplifier that puts out 24 watts IHF at less than 0.8% distortion both channels operating into 8 ohms. Plenty of power. And a frequency response of 20 to 50,000 Hz \pm 3dB for clean reproduction from the bottom to the top of the audible spectrum.

The Sony 222 is devoid of frills. But all of the essentials are there — even a few essential extras like speaker selector switch, a signal strength meter, a high filter, a stereo indicator light and a stereo headphone jack.

Now the grand deception. The \$149.50* price which includes the walnut case. It's far less than you would expect to pay for such performance. It sort of makes purchasing the Sony 222 a rather straightforward decision.

Sony Corporation of America, 47-47 Van Dam Street, Long Island City, N.Y. 11101

SONY®
222 FM STEREO/FM-AM RECEIVER



*Suggested list

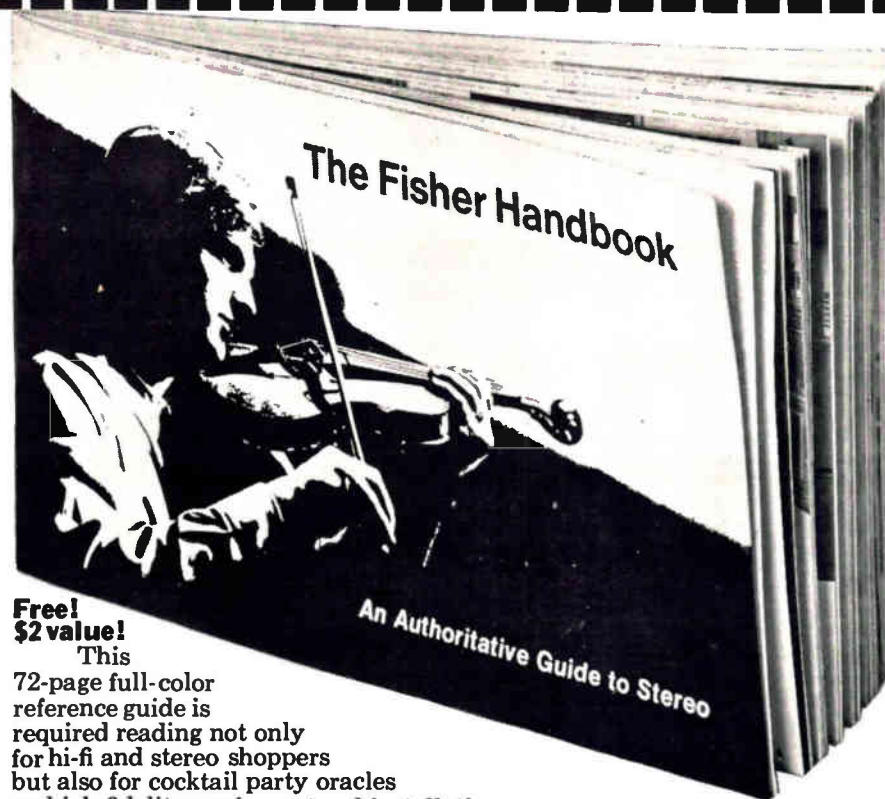
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65

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STEREO HI-FI DIRECTORY



Tuners

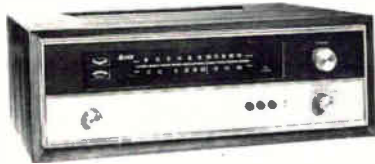
FM Tuners
FM-Stereo Tuners
AM-FM Stereo Tuners



ALLIED

295 AM-FM Stereo Tuner

FM sensitivity 1.5 μ V; response 15-20,000 Hz \pm 1 dB; capture ratio 1.5 dB.



Has 4 integrated circuits & crystal filters. Field-strength & center-tuning meters. With metal case. 5 1/2" x 16" x 13 3/4".
14B5520U\$249.95
14B5003X Oiled walnut wood cabinet.\$19.95

ALTEC LANSING

724A AM-FM Tuner/Preamp

Stereo design for use with Altec Barcelona Bi-amp speaker systems. Has Butterworth & crystal filters and indicator lights on all push-button functions; FM sensitivity (IHF) 1.8 μ V; capture ratio 1.3 dB. Response 20-15,000 Hz \pm 1 dB. Input sensitivity: phono #1 2 mV, phono #2 2 or 5 mV; output 5 V r.m.s. 5" x 17 1/4" x 16 1/2" d.\$550.00
42161 Walnut cabinet\$28.50

BIC/LUX

71/5T AM-FM Stereo Tuner

Features a 4-gang FET cascade varactor tuner; crystal i.f.; interstation muting & 3



pre-set FM station tuning. Has field-strength meter along with center-tune light; FM sensitivity 1.2 μ V for 30 dB S/N ratio; capture ratio 2.5 dB. Has extruded front panel with end bells.\$322.00

71/7T AM-FM Stereo Tuner

FM sensitivity 2.2 μ V for 30 dB S/N ratio; capture ratio 4 dB. Has field-strength meter & extruded front panel with end bells. 16 1/2" x 5" x 9" d.\$179.00



1971 EDITION

DYNACO

Model FM-1 FM Tuner Kit

Low-distortion, drift-free FM tuner; etched-circuit construction; high usable sensitivity; EM-84 tuning eye permits precision alignment without test instru-



ments; slug-tuned pre-aligned coils; four i.f. stages; balanced-bridge wide-band discriminator; feedback audio stage for 2-volt, low-impedance output; front-panel volume control; cover included.

Kit\$74.95
FM-1/A Factory assembled\$109.95
PM-4 Panel mount accessory kit for any Dynatuner combination\$4.95
PK-40 Deluxe panel & knob kit (supplied as standard on FM-3 tuner)\$9.95

Model FM-3 Stereo-FM Tuner Kit

Completely integrated design combining FM-1 tuner & FMX-3 multiplex circuit-



try; etched circuit boards are used throughout; sensitivity 4 μ V for 30 dB of quieting at 100% modulation; response 10-40,000 Hz \pm 1 dB; noise 70 dB below 100% mod.; distortion at 100% mod.: .5% IM & HD from 10 μ V to .1 V input; has simplified alignment procedure without requiring test instruments.

Kit\$99.95
Factory wired\$154.95

EICO

"Cortina" 3200 Stereo-FM Tuner

Sensitivity 2.4 μ V for 30 dB quieting; channel separation 40 dB @ 1 kHz; HD 0.75%; capture ratio 4.5 dB; S/N ratio 60 dB; image rejection 45 dB; full limiting 40 μ V. 19 kHz suppression 40 dB; SCA suppression 50 dB. Response 20-15,000 Hz \pm 1 dB. Features automatic time-switching circuitry; stereo indicator light, a.f.c., tuning meter. All r.f., i.f. & multiplex circuits supplied completely assembled and pre-aligned. 3 1/8" x 12" x 7 3/4" d. Supplied with cabinet.



Kit\$99.95
Wired\$139.95

"Cortina" 3300 AM/Stereo-FM Tuner

Features IHF usable sensitivity 3.5 μ V for 30 dB quieting; HD 1.75%; full limiting 100 μ V. Has preassembled front end,



multiplex circuits & i.f.'s. 3 1/8" x 12" x 6 5/8". Supplied with vinyl-clad metal cabinet.

Kit\$69.95
Assembled\$109.95

ELECTRO-VOICE

E-V 1255 FM Tuner

Design matches 1244 amplifier. Has automatic mono/stereo switching with stereo indicator light & tuning indicator. FM sensitivity 2 μ V for 25 dB quieting; HD 1% at 100% modulation. Capture ratio 2.5 dB; channel separation 30 dB @ 1 kHz; controls are: tuning, "on-off", mono/stereo, a.f.c. "on-off", local/distant switch. Left & right channels can be



paralleled for mono operation. 3 1/8" h. x 8 1/4" w. x 10 1/4" d.\$147.60

HEATH

Model AJ-14 FM Stereo Tuner

Complete FM, FM stereo. Has automatic stereo indicator; stereo phase control; fil-



5

Tuners

tered outputs; 4-stage i.f. section. Sensitivity 5 μ V for 30 dB of quieting. HD 1%; hum & noise -50 dB; pre-aligned, pre-assembled front-end tuner & circuit board construction; 12" w. x 3 $\frac{3}{4}$ " h. x 9 $\frac{3}{4}$ " d. Kit (less cab.)\$57.95
AE-25 Walnut veneer cabinet\$9.95

AJ-15 FM Stereo Tuner
Similar in design & performance to the FM tuner section of Model AR-15 AM-



FM receiver. 16 $\frac{7}{8}$ " w. x 4 $\frac{3}{4}$ " h. x 12 $\frac{1}{2}$ " d. AJ-15 Kit (less cab.)\$189.95
AE-18 Walnut cabinet\$19.95

KENWOOD

KT-7000 AM-FM Stereo Tuner

Features 3 FET's in front-end; four IC's and two crystal filters in i.f. stages; AM-FM signal-strength meter & FM zero-center tuning meter; automatic stereo/mono switching; interstation muting; stereo noise filter; step-type output level



control; FM usable sensitivity (IHF) 1.5 μ V; capture ratio 1.5 dB; response 20-15,000 Hz +0, -2 dB; HD 0.3%; output 1.5 V. 16 $\frac{1}{8}$ " w. x 5 $\frac{1}{2}$ " h. x 11 $\frac{1}{2}$ " d. With cabinet\$249.95

KT-2001 AM-FM Stereo Tuner

FM sensitivity (IHF) 2 μ V; response 20-15,000 Hz +0, -2 dB; capture ratio 4 dB;



output voltage 1 V; 13" x 5" x 9 $\frac{1}{2}$ " d.\$99.95
SR-42 Oiled walnut cabinet\$15.00

KLH

Model Eighteen FM-Stereo Tuner

Compact tuner; FM sensitivity 2 μ V for 30 dB quieting; capture ratio 3 dB; re-



sponse 20-15,000 Hz \pm 1 dB; THD 0.5% at 100% modulation. Has stereo indicator, automatic mono/stereo switching. Price is suggested list\$129.95

68

KNIGHT-KIT

KG-796 AM-FM Stereo Tuner

Silicon solid-state circuit with critical circuits assembled & tested with parts



mounted and soldered on PC boards for quick interconnection. FM circuit has two tuned r.f. stages. Has FM stereo indicator light & indoor dipole FM antenna. FM usable sensitivity (IHF) 3 μ V; response 30-15,000 Hz \pm 1 dB; HD 1.0%; capture ratio 3 dB. Output voltage 0.8 V with 1000 μ V input signal; 100% modulated at 400 Hz. Matches KG-865 stereo amplifier. 3 $\frac{1}{8}$ " x 13" x 10" d.

22A3918X. Kit\$79.95
22A3713X. Oiled walnut wood case.\$12.95

LAFAYETTE

LT-670 AM-FM Stereo Tuner

Solid-state stereo indicator light; multiplex filter; frequency-locking control; front & rear tape output jacks; automatic stereo switching. FM sensitivity (IHF) 3.5 μ V; capture ratio 5 dB; S/N ratio 50 dB. With simulated walnut-grain metal case. 10 $\frac{1}{8}$ " w. x 3 $\frac{3}{4}$ " h. x 8 $\frac{3}{4}$ " d. . \$69.95

LT-725 AM-FM Stereo Tuner

Solid-state design with four IC's; tuning meter; stereo indicator light; tape out-



puts; and "black-out" dial. Response 50-15,000 Hz. FM sensitivity (IHF) 1.7 μ V; capture ratio 1.5 dB. With simulated walnut-grain metal case. 12" x 9 $\frac{1}{8}$ " x 3 $\frac{3}{4}$ " d.\$99.95

LEAK

"Stereofetic" FM Stereo Tuner

Sensitivity 2 μ V for 30 dB S/N ratio; audio output 0.9 V r.m.s.; response 40-



15,000 Hz \pm 1 dB; capture ratio 3.5 dB. Has ceramic i.f.'s; interstation muting & push-button controls for stereo stations only or mono stations only. 11 $\frac{1}{8}$ " x 4 $\frac{1}{4}$ " x 7 $\frac{3}{4}$ "\$225.00

MARANTZ

20 Stereo-FM Tuner

Features built-in scope, a unique i.f. circuit based on the development of a



"twelve pole" phase linear filter, Butterworth filters in i.f. stages & 4 limiters. IHF sensitivity 2.8 μ V. Has automatic stereo switching. 15 $\frac{3}{8}$ " x 5 $\frac{3}{4}$ " x 14 $\frac{1}{2}$ " d.\$595.00
WC-1 Walnut cabinet\$ 32.50
RPK-20 Rack panel kit\$ 50.00

23 AM/Stereo-FM Tuner

Same as Model 22 AM/Stereo-FM receiver except does not have power ampli-



fiers or preamps. 15 $\frac{3}{8}$ " x 5 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ " d.\$259.00
WC-1 Walnut cabinet\$ 32.50

24 AM/Stereo-FM Tuner/Console

Same as Model 22 except does not have power amp. Has all the control facilities and AM-FM circuits as in Model 22. 15 $\frac{3}{8}$ " x 5 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ " d.\$339.00
WC-1 Walnut cabinet\$ 32.50

NIKKO

FAM12 AM-FM Stereo Tuner

FM sensitivity 1.8 μ V (IHF); capture ratio 3 dB; 1.5 V audio output. Has inter-



channel muting; 117 V/240 V, 50/60 Hz power input. 12" x 3 $\frac{3}{4}$ " x 10" d. \$109.95

FAM14 AM-FM Stereo Tuner

FM sensitivity 1.8 μ V (IHF); capture ra-



tio 1.5 dB; 1.2 V audio output. 13" x 3 $\frac{3}{4}$ " x 9 $\frac{1}{4}$ " d. 117 V/240 V, 50/60 Hz power input\$139.95

NORELCO

697 AM/Stereo-FM Tuner

FM sensitivity 3 μ V for 30 dB S/N ratio; capture ratio 4 dB; also has AM broadcast band & 2 short-wave bands (2.2-7.3 MHz & 9.5-21.75 MHz). 14" x 3 $\frac{3}{4}$ " x 10". With walnut cabinet\$179.95

PIONEER

TX-500 AM/Stereo-FM Tuner

Features 2.5 μ V (IHF) FM sensitivity;



S/N ratio 50 dB. Has tuning meter & universal 50-60 Hz, 110-240 V a.c. power supply. With walnut cabinet. 13" w. x 5" x 13 $\frac{1}{8}$ " d.\$109.95

STEREO HI-FI DIRECTORY

TX-900 AM/Stereo-FM Tuner
Features 1.7 μ V (IHF) FM sensitivity; capture ratio 1.5 dB; output 1 V. Has two



crystal filters, four integrated circuits; twin tuning meters. 110-240 V a.c. universal power supply. 15 $\frac{1}{8}$ " w. x 5 $\frac{1}{2}$ " x 14". \$259.95
Walnut cabinet \$9.95

TX-700 AM/Stereo-FM Tuner
Features station presetting up to 5 stations in addition to normal manual tun-



ing. FM sensitivity 2.2 μ V (IHF); capture ratio 1.8 dB. Has universal power supply (110, 120, 130, 220 & 240 volts.) 10 $\frac{3}{8}$ " x 4 $\frac{3}{8}$ " x 13 $\frac{1}{4}$ " d. \$199.95

REALISTIC

TM-7 FM Stereo Tuner
Features illuminated signal meter; stereo beacon; over 30 dB stereo separation; high-level, low-impedance outputs; response 25-20,000 Hz. 10" x 14" x 3". FM sensitivity 2.5 μ V for 20 dB quieting. Walnut cabinet \$79.95

TM-70 AM-FM Stereo Tuner
Features dual meters; stereo beacon; direct and controlled outputs for matching



level of AM/FM to level of records and tape. 10" x 14" x 3". Walnut case. Response 25-20,000 Hz; FM usable sensitivity 2.5 μ V \$99.95

REVOX

A76 Stereo-FM Tuner
Sensitivity 1 μ V, 30 dB S/N ratio; capture ratio 1 dB; audio output 1 V. Features a center tuning meter & signal-strength meter; multi-path indicator light. Has universal power supply 110 to 250 V, 50-60 Hz. 16 $\frac{3}{8}$ " x 6 $\frac{3}{8}$ " x 9 $\frac{3}{8}$ " d. \$495.00

SANSUI

TU-999AM-FM Stereo Tuner
Features 1.8 μ V(IHF) sensitivity with HD 0.5%; capture ratio (IHF) 1.5 dB; S/



N ratio 65 dB. Has 2 tuning meters (signal-strength & center-of-channel); stereo-only switch; 300 & 75 ohm ant. inputs; muting switch; 110-250 V a.c. universal power supply. 17" x 6" x 13" d. . \$279.95
Optional wood cabinet \$22.50

1971 EDITION

the new SANSUI TU999



The TU999 by Sansui is a top notch AM/FM Stereo Tuner designed from the ground up to meet the most exacting demands of today's audiophile. The TU999 has an advanced FM front end that ensures an excellent 1.8 μ V (IHF) sensitivity. FM IF filter with three IC's, crystal filter and block filter for a greatly improved distortion factor (less than 0.3%), stereo separation (better than 38dB at 400Hz) and phase characteristics. Double meters for precision tuning of FM signals. FM AGC changeover circuit for local, normal and distant stations . . . stereo only switch . . . wide dial and FM linear scale for easier and more precise tuning . . . high sensitivity AM tuner . . . and much much more. \$279.95



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5 Tuners

SCOTT, H.H.

312D-1 FM Stereo Tuner
 Features silver-plated field-effect transistor front-end; tuning meter; automatic stereo switching; and stereo indicator lights; cross-modulation rejection 60 dB; usable sensitivity 1.7 μ V; selectivity 46 dB; stereo separation 35 dB; capture ratio 2.5 dB; S/N ratio 65 dB. 14 $\frac{1}{4}$ " x 12 $\frac{1}{2}$ " x 4 $\frac{1}{8}$ "\$249.95

SHERWOOD

S-3300 Stereo/FM Tuner
 FM sensitivity 1.8 μ V (IHF) 30 dB of quieting; selectivity 250 kHz @ \pm 6 dB;



stereo-FM response 20-15,000 Hz \pm 0.5 dB; capture ratio 2.0 dB; channel separation 40 dB; \pm 95 dB crossmodulation rejection. Features FET r.f. stages, microcircuit i.f. & limiters, tuning meter, stereo indicator light, interchannel hush, automatic FM stereo/mono switching. 14" x 4" x 10 $\frac{1}{2}$ " d.\$197.50

S-2300 AM/Stereo-FM Tuner
 Same basic design as S-3300 except has additional AM circuitry\$224.50

S-2500 AM-FM Mono Tuner
 Same as S-2300 except FM-stereo omitted\$177.50

S-3500 FM Mono Tuner
 Similar to S-3300 except for mono only. Has switchable a.f.c. & meter switchable between 0-center tuning & signal strength; less case\$149.50
 All models available for rack mounting; 3 $\frac{1}{2}$ " x 19"; extra\$7.50
 Rack panel separately\$10.50
 Leatherette cases for all models ...\$7.50
 All prices quoted are "Fair Trade Minimum Resale."

SONY

ST-5000F Stereo-FM Tuner
 Features same FM performance as Model STR-6120 receiver; IHF sensitivity 1.8



μ V; capture ratio (IHF) 1.5 dB; Response 20-15,000 Hz \pm 0.5 dB; HD 0.2% at 400 Hz & 100% modulation. Has signal strength meter; 0-center tuning meter & automatic stereo indicator light. Has fixed 0.7 V 10,000 ohms output & variable 0-2 V 1000 ohms\$449.50
 TAC-1 Walnut cabinet\$ 24.50

ST-5600 AM/Stereo-FM Tuner
 FM sensitivity (IHF) 3 μ V; capture ratio 2 dB; S/N ratio 65 dB; selectivity 50 dB;



response 20-15,000 Hz \pm 1 dB. Has stereo indicator & signal-strength meter. With walnut cabinet\$119.50

ST-5100 AM/Stereo-FM Tuner
 FM sensitivity (IHF) 2.6 μ V; capture ratio 1.5 dB; S/N ratio 70 dB; selectivity 80



dB; response 20-15,000 Hz \pm 1 dB. Has stereo indicator, signal-strength meter & center station tuning meter\$219.50
 TAC-9 Walnut cabinet optional.

STANDARD RADIO

SR-A100T AM-FM Tuner
 FM sensitivity 5 μ V for 30 dB quieting; capture ratio 6 dB. Has FM tuning meter; FM stereo indicator lamp & SCA filter. 13 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " x 7 $\frac{1}{4}$ "\$69.95

SR-A200T Stereo-FM Tuner
 Unusual tuning system; has 5-dial preset tuning for instant station selection. FM sensitivity 3 μ V for 30 dB quieting. Capture ratio 6 dB. Has FM stereo indicator lamp & SCA filter. 13 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " x 7 $\frac{1}{4}$ "\$69.95

R-A201TU AM/Stereo-FM Tuner
 FM sensitivity (IHF) 2.5 μ V \pm 3 dB; response 30-20,000 Hz \pm 1 dB; capture ra-



tio 3 dB. Has variable tuning for both AM & FM in addition to five pre-settable FM stations. Also has ceramic filters. 13 $\frac{3}{8}$ " x 3 $\frac{3}{8}$ " x 7 $\frac{1}{4}$ ". With walnut cabinet\$99.95

Regarding Prices:

Unless otherwise indicated, all prices quoted should be considered Audio-ophile Net.
 As would be expected, prices do vary across the country and those quoted are usually the ones prevailing in the manufacturer's immediate vicinity. Obviously, because of transportation costs, prices in areas remote from his location will be higher.
 Manufacturers reserve the right to change prices without notice.



Tape Machines



Recorders, Players.....71
 Raw Tape.....84
 Cartridge Machines.....88

AIWA

TP-719 Portable Recorder

Mono, dual-track, 3-speed (7½, 3¾ with switch, and 1½ ips capstan change) de-



sign; wow & flutter 0.25% @ 7½ ips. Has 3" x 5" spkr. with 1.5 W output. Operates from 8 "D" batteries, 120 V a.c., or 12 V car battery. Will accept 7" reels. Supplied with attache-size case with locking provision, car battery adapter, dynamic mic with "on-off" switch, batteries, and carphone. 16½" x 13" x 3¾"\$149.95

TP-1012 Tape Recorder

Stereo design for a.c./d.c. operation (117 V a.c., 8 "D" cells, or 12 V battery). Fea-



tures 4-track, 7" reel; automatic shut-off; two vu meters; pause controls; 2 speeds (7½ & 3¾ ips; 1½ ips with capstan change); counter; 1¼ W/ch dynamic output; two 6" x 4" speakers. Response 50-16,000 Hz. Supplied with 2 dynamic mics. 13½" x 12¾" x 7½"\$189.95

TP-1006W Tape Recorder

4-track; 7" reel size; 2 speed (7½ & 3¾ ips; 1½ ips with capstan change) design. Response 50-18,000 Hz @ 7½ ips; 5 W/ch dynamic power (EIA 5% dist); wow & flutter 0.2%. Features sound-on-sound; sound-with-sound; vu meters; counter; pause control & 4" dynamic monitoring

1971 EDITION

speaker. For use with external spkrs. 20¾" x 14" x 8". Supplied with DM-51 dynamic microphone\$379.95

ALLIED

TR-1049 4-Track Stereo Tape Recorder

Features portable case with detachable lid speaker systems; 3 speeds (1½, 3¾,



7½ ips). Has dual mic & aux. inputs. Response 40-18,000 Hz ±3 dB at 7½ ips; S/N ratio 50 dB. With two mics. 12¾" x 19½" x 10¾". 15B7592U\$199.95

TD-1039 Stereo Tape Deck

4-track, 3-speed (1½, 3¾, 7½ ips) play/record design. Response 30-20,000 Hz



±3 dB at 7½ ips. Features dual vu meters, automatic shut-off, sound-on-sound. Dual mic & aux. inputs. Walnut veneer case. 13" x 19¾" x 7½". 15B7591\$139.95

TD-1099 Stereo Tape Deck

4-track, 3-speed (1½, 3¾, 7½ ips) play/record design. Response 30-22,000 Hz ±3 dB at 7½ ips; S/N ratio 48 dB. Input sensitivity: mic 25 mV; aux. 50 mV. Features three heads, tape monitoring, sound-on-sound, sound-with-sound, automatic shut-off & walnut grained vinyl-covered wood case. 12¾" x 16" x 6¾". 15B7599U\$179.95
 15B0222L2U Tape deck with Allied 3310 Mic outfit; 2 dynamic mics, desk stands in case. Size 13½" x 11¾" x 2½".\$199.95

AMPEX

AX-50 Stereo Tape Deck

Features record/play; 3 heads; tape moni-

toring; sound-on-sound; sound-with-sound; echo; pause/edit control. 3 speeds (1½, 3¾, 7½ ips); 4 separate preamps (does not have power amps or speakers). Response 40-15,000 Hz ±3 dB at 7½ ips; wow & flutter 0.12% at 7½ ips. Has line & high imp. mic inputs & 0.78 V preamp output. 16½" x 15¾" x 8½". Walnut cabinet\$279.95

AX-300 Stereo Tape Deck

Basically same as AX-50 except has 6 heads for bi-directional record/play & automatic reverse using 20-Hz signal. Response 40-16,000 Hz; wow & flutter 0.09%; preamp output 1 V. Has 4 high-imp. line & 2 mic inputs. 16½" x 14½" x 8". Walnut cabinet\$649.95

715 Speaker System

"Big Speaker" version for deluxe systems. Has two 6" woofers, 3½" wide-dispersion tweeter. Response 50-20,000 Hz; 8 ohms. 19" x 13" x 9¼" ...pair \$139.95

Accessories

702 mic.: Omnidirectional dynamic type, 3¼" x ¾" dia., with stand ...\$9.95
 # 1101 mic. Omnidirectional dynamic type\$19.90
 # 3001 mic.: Omnidirectional dynamic; high-imp. design (can be easily converted to low imp). With 18' shielded cable & adj. swivel\$59.95

767 Stereo Tape Recorder

Features 3-head design providing tape monitoring, sound-on-sound, sound-with-sound & echo effect. Response 50-15,000 Hz ±3 dB at 7½ ips; flutter & wow 0.08% at 7½ ips; 8 W/ch continuous sine wave. Supplied with two mics & pair of cube-shaped speaker systems which can be placed within carrying case. 23½" x 14" x 8½".\$379.95

1467 Stereo Tape Recorder

Same as Model 767 except has 4 heads. Features automatic reversing & thread-



ing. Includes cube speakers.\$479.95
 415 Cube speaker system using 6" speaker available separately. Walnut finish.pair \$59.95

2161 "Ultra-Automatic" Recorder

Has automatic reverse & bidirectional recording. Built-in mic & line input mixer.

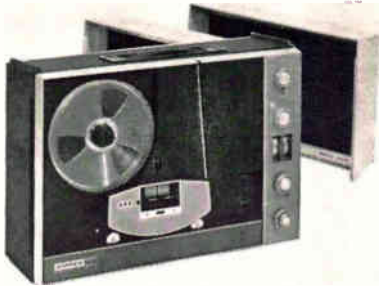
6

Tape Machines

Supplied with 2 mics & 2 slide-on speaker enclosures (each with 6" woofer & 3 1/2" tweeter). Features 4-track stereo, 3-speed operation. Response 50-17,000 Hz ± 3 dB @ 7 1/2 ips; flutter & wow 0.07% @ 7 1/2 ips; 6 W/ch continuous power output, over-all size 18 3/8" x 13 3/4" x 7".
.....\$499.00

755A Stereo Tape Deck

Features 3 heads, 3-speeds, sound-on-sound, sound-with-sound, echo. Response 50-15,000 Hz ± 3 dB @ 7 1/2 ips:



wow & flutter 0.08% @ 7 1/2 ips. Has line & mic inputs & 0.7 V preamp outputs. Mics & walnut case optional. 13" x 15 3/4" x 6 1/2"\$249.95
1455A. Same except has 4 heads for tape monitor; automatic reverse & tape threading\$379.95

ASTROCOM/MARLUX

407 Recorder

4-track, 2-channel, 2-speed, 3-motor de-



sign; 4 heads (erase, record, playback, reverse play); modular plug-in electronics; automatic reverse; sound-on-sound; sound-with-sound; echo recording; auto tape lifters; automatic shut-off; dual calibrated vu meters; direct off-the-tape monitoring. Response 30-20,000 Hz at 7 1/2 ips; wow & flutter 0.07% at 7 1/2 ips; THD 1% at 1 kHz at 0 vu. S/N better than 50 dB. 21" x 14" x 10 1/2". Includes wood cabinet\$469.95

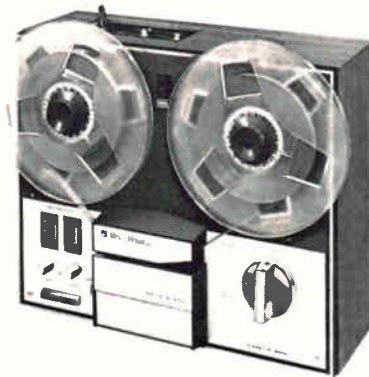
BELL & HOWELL

2433 Tape Deck

Features separate record, playback & erase heads; 3 speeds (1 1/8, 3 3/4 & 7 1/2 ips); sound-on-sound & echo; sound-with-sound; 4-track stereo operation. Response 30-20,000 Hz at 7 1/2 ips. Wow & flutter 0.1% at 7 1/2 ips. Has aux. & mic inputs & line (0.5 V) output. 18 1/2" x 13 3/4" x 8".\$199.95

2423 Tape Deck

Four-track stereo; 3 speed (1 1/8, 3 3/4, & 7 1/2 ips) tape recorder. Response 30-18,000 Hz at 7 1/2 ips. Has aux. & mic in-



puts & line outputs; wow & flutter 0.1% at 7 1/2 ips. 13 3/4" x 11" x 5 1/2" ...\$109.95

CONCERTONE

303-D Tape Recorder

Solid-state stereo; 4-track, 3-speed, 3-head design. Features sound-on-sound,



sound-with-sound & A-B monitoring. Response 50-15,000 Hz\$179.95

790 Tape Recorder

Solid-state, a.c./battery operated; 4-track stereo; 4 speeds (15, 7 1/2, 3 3/4 & 1 1/8 ips).



Will operate from size "D" flashlight & Nicad cells or 117 V a.c. Has 3 heads (erase, record & play). Wow & flutter 0.21% at 7 1/2 ips. Response 35-15,000 Hz at 7 1/2 ips. Two hi-imp inputs (line & mic), 3 outputs (hi-imp line, earphones, or 8-ohm speaker). Features vu meters, sound-with-sound. Nicad battery charger with automatic charger shut-off & built-in speakers. 11 1/8" x 14 1/2" x 6 3/4" d.\$179.95

Model 4001 Stereo Tape Recorder

Solid-state deluxe design. Response 30-16,000 Hz; wow & flutter 0.15% at 7 1/2 ips. Has pair of separately housed speaker systems\$199.00

CONCORD

"Mark II, III, IV" Tape Decks

Features 3 speeds (7 1/2, 3 3/4 & 1 1/8 ips); tape & source monitoring; sound-on-sound; variable echo control; mic & aux. inputs and line & headphone outputs. **Mark II** Has 20-23,000 Hz response at 7 1/2 ips\$229.95
Mark III With pressure-sintered (non-magnetic) ferrite heads; response to 27,000 Hz\$279.95
Mark IV Same as Mark II, but features four heads & automatic reverse\$329.95

Mark 8 8-Track Recorder

Features combination reel-to-reel stereo tape record/playback & 8-track cartridge

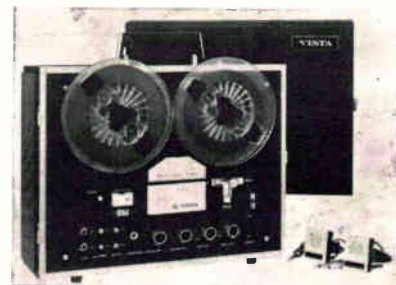


tape record/playback. Has facilities for recording any external program source onto a 7" reel & then re-recorded directly onto a 8-track cartridge tape if desired. Three-speed design; response 70-19,000 Hz @ 7 1/2 ips; wow & flutter 0.1% @ 7 1/2 ips; S/N ratio 45 dB. Response of 8-track recorder 50-12,000 Hz. Has two built-in speakers; 5 W/ch dynamic power. Features 4-track reel-to-reel recording; sound-with-sound. Has a built-in carrying handle\$319.95

CRAIG

"Craig 910" Stereo Tape Recorder

4-track, dual-speed (7 1/2 & 3 3/4 ips) design. Features sound-on-sound; built-in



stereo preamps & power amps & two 4" x 5" spkrs. Has vu meters, radio & mic inputs. Response 50-15,000 Hz @ 7 1/2 ips. 17" x 14" x 5 1/2" d. Supplied with mics.\$169.95

2106 Portable Recorder

Mono design; battery (six "D" cells) or optionally a.c.-operated; features 5" reel; 2 speeds (1 1/8 & 3 3/4 ips); wow & flutter



0.3% @ 3 3/4 ips; S/N ratio 40 dB; 0.55 W output. Response 150-7500 Hz @ 3 3/4 ips; records on 1/2-track with d.c. erase; has mic & radio inputs; 3" x 6" speaker & remote-control mic. 10 1/2" x 11 1/2" x 4 1/8". \$69.95

2403 Stereo Tape Recorder

3-speed design with automatic shut-off; 7" reels; dual vu meters; counter; 2 1/2 W/ch. Walnut cabinet \$239.95

2402 Stereo Recorder

Features automatic reverse; three speeds (7 1/2, 3 3/4 & 1 1/2 ips); 4-tracks: sound-on-sound; sound-with-sound. Wow & flutter 0.15% r.m.s. at 7 1/2 ips. Output 4 W/ch dynamic power; response 30-18,000 Hz at 7 1/2 ips. Supplied with 2 mics. 19 1/2" w. x 15" h. x 12 1/2". Includes separate (4") speaker systems \$349.95
All prices quoted are "List prices".

CROWN

SX700 Series Tape Recorders

Record and play response 30-25,000 Hz ± 2 dB @ 7 1/2 ips; has three-motor modular-designed transport; differential magnetic braking; automatic stop; two-speed record/play equalization; 7 1/2 & 3 3/4 ips (1 1/2 & 15 ips available); handles up to 10 1/2" reels; wow & flutter 0.09% @ 7 1/2 ips; S/N ratio 60 dB @ 7 1/2 ips; HD 1.2%; inputs: two high imp. inputs per channel, mic or line; +6 dBm or 2.5 V output. SX724 Two-track stereo \$995.00 SX724-P4C Four-track stereo with two- and four-track & 4-channel stereo playback \$1425.00

CX800 Series Solid-State Recorders

Can be remote controlled; features computer logic control photocell automatic stop; three motors; differential magnetic braking; three speeds. Handles up to 10 1/2" reels; wow & flutter 0.06% @ 15 ips. Available with either mono electronics or stereo control center; response @ 7 1/2 ips 30-30,000 Hz ± 2 dB; S/N ratio 60 dB. Four-channel stereo control center. Basic unit with 4 unbalanced line inputs, 2 mixing inputs per channel: line (basic) or microphone, RIAA phono (using optional plug-in modules). Outputs 0 level, 5000 ohms unbalanced, or up to +18 dBm (using optional amp module); two 5" vu meters. Available with low-impedance mic. input and balanced 600-ohm output. CX822 Two-track stereo \$1790.00



CX824 Quarter-track stereo . . \$1790.00
CX844 Four-channel in-line . . \$2880.00
19 C Walnut enclosure (for all units). \$70.00

CX700 Series Solid-State Recorders

Three heads, three motors featuring differential magnetic braking, automatic stop, three speeds. Handles up to 10 1/2" reels; wow & flutter 0.09% @ 7 1/2 ips. Available with either mono electronics or

stereo control center. Response @ 7 1/2 ips (4-tr) 30-30,000 Hz ± 2 dB; S/N ratio 60 dB. Four-channel stereo control center. Basic unit with 4 unbalanced line inputs, 2 mixing inputs per channel; line (basic) or microphone, RIAA phono (using optional plug-in modules). Outputs 0 level, 5000 ohms unbalanced or up to +18 dBm (using optional amp module). CX722 Two-track stereo \$1295.00 CX724 Quarter-track stereo . . \$1295.00

SX800 Series Solid-State Recorders

Uses SX700 electronics and CX800 transport. SX822 Two-track stereo \$1495.00



SX824 Quarter-track stereo . . \$1495.00
Complete series of SP700 and SP800 players are available.

D-40 Tape Recorder Amplifier

Solid-state 30 W/ch continuous sine-wave power into 8-ohm load (45 W/ch @ 4 ohms); damping factor is 200 at all frequencies below 1000 Hz; response 10-50,000 Hz ± 1 dB at rated output; HD 0.05% for all power levels up to 30 W. 1 3/4" x 8" x 19". Can be mounted in standard relay rack or in carrying case of Crown tape recorders. For rack mounting \$229.00 For shelf installation (including cover). \$245.00 2-C Walnut enclosure \$29.00

FERROGRAPH

Series 7 Tape Recorder

Features 3 heads & 3 motors with brake, reel height & bias adjustments accessible to user. Has variable wind & rewind; vu meters to monitor source. Unmounted without power amps or speakers but including rack mounting. 713A-S Mono, half-track, 1 1/2, 3 3/4, 7 1/2 ips \$599.00 713HA-S Mono, half-track, 3 3/4, 7 1/2, 15 ips \$649.00 702A-S Stereo half-track 1 1/2, 3 3/4, 7 1/2 ips \$649.00 702HA-S Stereo, half-track, 3 3/4, 7 1/2, 15 ips \$699.00 704A-S Stereo, quarter-track, 1 1/2, 3 3/4, 7 1/2 ips \$649.00 Models 702A-S, 702HA-S & 704A-S available with walnut cases at same prices. With power amplifiers & speakers in either walnut base or portable carrying case add \$50.00. Slow speed versions available on special order.

GRUNDIG

TK246 Stereo Tape Recorder

4-track, 7" reel design. Will record stereo or mono & playback mono. For stereo playback an additional amp & speaker are needed. Has automatic or manual record level control & built-in tape splicing channel. 17" x 13 3/4" x 8" . . . \$249.95

TK248 Stereo Tape Recorder

4-track, 7" reel, 2-speed design. Features sound-on-sound, sound-with-sound &



echo. Has automatic & manual level control and built-in tape splicing channel. 17" x 13 3/4" x 8" \$299.95

HITACHI

TRQ-770 Tape Recorder/Deck

Three-speed stereo design (7 1/2, 3 3/4, 1 1/2 ips); 7" reels; 1/4-track record/playback. Does not have power amps or speakers. Features automatic end-of-reel reverse or shut-off. Permits sound-with-sound. 16" w. x 17 3/4" x 8 5/8". With wood cabinet \$259.95

TRQ-730 Tape Recorder/Deck

Three-speed stereo design (7 1/2, 3 3/4, 1 1/2 ips); 7" reels; 1/4-track record/playback.



Has 3 heads & is supplied with wood cabinet, dust cover. Does not have power amps or speakers \$189.95

JVC

1224 Stereo Tape Recorder

Solid-state, 4-track, 3-speed (7 1/2, 3 3/4, 1 1/2 ips) design. Has automatic reverse,



sound-on-sound, sound-with-sound; 4 1/2 W/ch dynamic power (EIA); 30-20,000 Hz response; Supplied with twin microphones & matching speaker enclosures with 6 1/2" woofer & 3" tweeter. 12 3/4" h. x 38 3/4" w. x 7 1/2" d. \$329.95

1561 Mono Tape Recorder

Two-speed (3 3/4 & 1 1/2 ips); 5" reels & will



A black and white photograph of a control room, likely for a television broadcast. The room is filled with various pieces of equipment, including multiple monitors displaying different types of data and video feeds. Control panels with numerous buttons and knobs are visible. The perspective is from a low angle, looking up at the ceiling and the equipment, creating a sense of depth and complexity. The lighting is dramatic, with strong highlights and deep shadows.

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keep getting hooked
on our line.**



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Today's audiophile is a demanding type. Demanding components for specific purposes. And demanding them when he wants them.

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To stay first in new product concepts, we manufacture all our own critical components. This gives us the design flexibility that

other companies lack.

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6

Tape Machines

operate from 117 V a.c. or six "D" cells. Has automatic level control & mic \$79.95 1545. Basically same as Model 1561 except different case. Response at 7½ ips is 100-7000 Hz. Has 3" x 6" oval speaker. 3¾" x 11½" x 9¾"\$69.95

1694 Tape Recorder Deck
3-speed (1⅞, 3¾, 7½ ips), 4-track stereo design; features sound-on-sound; sound-with-sound; wow & flutter 0.15% at 7½ ips with 30-20,000 Hz freq. response. Has mic & aux. inputs & line outputs. 12⅞" h. x 15¼" x 8⅜" d.\$169.95

KENWOOD

KW-8077 Record/Playback Deck
3-motor design with automatic reverse. Has separate set of 3 heads for recording



& playback in both directions; built-in search system for quick location of recorded material during fast rewind; dual vu meters; tape monitor sw. Features mic & line mixing; 2 speeds (3¾ & 7½ ips); response 20-20,000 Hz at 7½ ips; wow & flutter 0.04% at 7½ ips. 17" x 19¾" x 9" d.\$669.95
RC-77 Remote control\$39.95

KW-5066 Record/Playback Stereo Deck
Features 4 heads (play, record, erase & full-track erase); 3 speeds (1⅞, 3¾ & 7½ ips); response 25-20,000 Hz at 7½ ips; S/N ratio 50 dB at 7½ ips; wow & flutter 0.15% at 7½ ips; sound-on-sound & echo recording. Has mic/line inputs. 16" x 7" x 15½" d.\$279.95

KW-4066 Record/Playback Deck
Stereo design featuring 3 speeds (1⅞, 3¾, 7½ ips); auto/stop; sound-with-sound; 3 heads. Response 25-20,000 Hz at 7½ ips; S/N ratio 50 dB; wow & flutter 0.15% at 7½ ips. Has mic/line inputs. 16" x 7⅞" x 12¾" d.\$199.95



KLH

Model Forty-One Tape Deck
Features 4-track, 3-speed (7½, 3¾ & 1⅞ ips) stereo design with separate erase.



record, and playback heads. Incorporates Dolby audio noise reduction system. Response with standard tape at 7½ ips 50-15,000 Hz ± 3 dB (50-12,000 Hz at 3¾ ips); flutter 0.1% at 7½ ips (0.2% at 3¾ ips). S/N 68 dB at 3¾ ips with Dolby circuit, which can be switched out at will. Two line inputs (135 mV & 500 mV) and mic input 0.5 mV; 1 line output 2.5 V. With walnut base. 11⅞" x 14¼" x 5⅝". Price is suggested resale.\$249.95

LAFAYETTE

RK-960 "Automatic Reversing" Tape Recorder
4-head, 4-track stereo design. Features one manual & three automatic tape re-



versing positions; bidirectional record & playback; 3 speeds (1⅞, 3¾ & 7½ ips); sound-on-sound; sound-with-sound; two 4-pole induction capstan driver motors; vu meters; stereo headphone jack; 6 inputs. Response 30-22,000 Hz ± 3 dB @ 7½ ips; S/N ratio 50 dB; flutter & wow 0.25% r.m.s. @ 3¾ ips. Housed in black leatherette-covered wood case. 22" x 15½" x 8¼" d.\$229.95

RK-710A Mono Tape Recorder
3-speed (1⅞, 3¾ & 7½ ips), dual-track mono record/playback; has 3" x 5" speaker; record/playback level meter; wow & flutter 0.2% @ 7½ ips; with dynamic microphone & carrying case 11⅞" x 12¼" x 6¼"\$69.95

NORELCO

4408 Stereo Tape Recorder
4-track, 3-speed design; response 40-18,000 Hz. Has 2 vu meters & facilities



for mixing, monitoring & automatic stop. Supplied with stereo mic & cabinet plus two separate speaker systems. ..\$350.00

PANASONIC

RS-736US Tape Recorder Deck
4-track, 3-speed (3¾, 7½, 15 ips) design. Features phono, aux. & line inputs with



separate level control & mixing facilities; firm's own noise-free device; sound-on-sound; sound-with-sound; automatic stop. Response 20-28,000 Hz at 7½ ips. 16⅞" x 18⅞" x 7¾". With walnut cabinet\$349.95

RS-796US Tape Deck
Four-track stereo; 3-speed (7½, 3¾ & 1⅞ ips) design featuring sound-on-sound, sound-with-sound, source monitor, auto control reverse system; 4 heads. Has mic & aux. inputs & line and earphone outputs. Includes stereo preamps. 19¾" x 14⅞" x 8½". Response 30-20,000 Hz at 7½ ips.\$249.95

RS-768US Tape Deck
Similar to RS-796US except has 3 heads; response 20-27,000 Hz at 7½ ips; tape &



source monitor. Does not have automatic reverse. Over-all size 18½" x 13¼" x 8".\$219.95

PIONEER

T-600 Tape Deck
Stereo design features automatic reverse for play & record; 4-track, 2-channel or 1 channel record & playback; two-speed (7½ & 3¾ ips). Has record/playback & erase heads. Wow & flutter 0.12% at 7½



ips; response 50-15,000 Hz ± 3 dB at 7½ ips. Input levels; mic 0.45 mV; line 45 mV. 17¼" w. x 17¼" x 8"\$299.95

REALISTIC

TR-101 Tape Recorder

Complete reel tape recorder system including power amps & speakers for stereo operation; features manual/automatic tape reversing system; response 30-18,000 Hz at 7½ ips; 2 W/ch output; flutter & wow 0.5%. Four heads, two vu meters. Tape speeds 7½, 3¾, and 1½ ips.\$259.95

TR-101D Tape deck. Same as above, but without power amplifier, speakers, or microphones. With tinted Lucite dust cover.\$199.95

909 Stereo Tape Recorder

3-speed (1½, 3¾ & 7½ ips); plays/records 4-track stereo or mono; features



sound-with-sound. Supplied with 2 dynamic mics & detachable speakers. Response 50-18,000 Hz at 7½ ips; wow & flutter 0.25%; 3½ W/ch. Has mic & aux. inputs. 24¼" x 14" x 7½". 14-909\$169.95

999 Stereo Tape Recorder Deck

Features sound-on-sound, sound-with-sound, tape monitoring. Has 3 heads; response 40-20,000 Hz at 7½ ips; wow & flutter 0.15% at 7½ ips. 3 speeds (1½, 3¾ & 7½ ips). Has mic & aux. inputs and preamp outputs. With walnut cabinet 15½" x 14" x 5¾". 14-999\$159.95

REVOX

A77 Series Tape Recorders

Two-speed (3¾ & 7½ ips) stereo design available either at 2-track or 4-track.



Wow & flutter 0.08% at 7½ ips. Response via tape 50-15,000 Hz ± 1.5 dB. Dist. at full modulation & 1 kHz is 2% at 7½ ips. Inputs: mic low (50,000 ohms) 0.15 mV; hi (to 100,000 ohms) 2 mV; radio 2 mV; aux. 40 mV. Features fully electric operation for remote functions; output amps (4-16 ohms) 8 W/ch continuous sine wave (EIA) arc plug-in and optional. Will handle up to 10½" reels; universal power-line operation from 110 to 250 V, 50/60 Hz.

1102. Two-track deck with walnut cabinet.\$569.00
1104. Four-track deck with walnut cabinet.\$569.00

1971 EDITION

inet\$569.00
1122. Two-track with walnut cabinet & amplifiers\$639.00
1124. Same as 1122 except 4-track\$639.00
1222. Two-track portable model with amplifiers & speakers\$669.00
1224. Same as 1222 except 4-track\$669.00
1302. Two-track deck with metal case for rack or custom mounting\$529.00
1304. Same as 1302 except 4-track\$529.00

RHEEM CALIFONE

3080T Mono Recorder

Dual-track, 3-speed (1½, 3¾ & 7½ ips) design; wow & flutter 0.15% @ 7½ ips;



10 W dynamic power output. Response 50-15,000 Hz. Features 8" speaker, mic & line inputs counter, vu meter. Can be used as a p.a. system & has monitor selector switch. Supplied with high imp. mic. 13" x 13¾" x 7".\$168.00

70-TC Mono Recorder

Solid-state, dual-track, 2-speed (3¾ & 7½ ips) design; wow & flutter 0.18%; 10 W dynamic power output. Response 50-15,000 Hz ± 2 dB. Has vu meter; 8" speaker; monitor selector sw.; counter. Can be used as a p.a. system. Supplied with high imp. mic. Over-all size 13¼" x 13¼" x 9"\$216.00

74-TC Tape Recorder

Mono, solid-state design. Features instant pause & repeat controls; 3-speed (3¾, 7½-15 ips optional); vu meter; automatic shut-off; horizontal or vertical operation; monitor & public address circuitry. Response 50-15,000 Hz ± 2 dB; output 20 W; wow & flutter 0.18% r.m.s.; S/N ratio 50 dB. Has 7" reels, 8" speaker, record/play & erase heads, mic & high-level inputs. 13¼" x 13¼" x 9". Supplied with mic\$324.50
Optional foot control for backspace & pause.\$8.15

70-TF Tape Recorder

Basically same as Model 74-TC except does not have instant pause & repeat features\$226.00

3205 Stereo Tape Recorder

Two speed (7½ & 3¾ ips) mono to 4-track stereo recording with 2 & 4 track stereo playback. Tracks may be recorded independently and played back simultaneously. Has two 4" x 8" built-in speakers. 5 W/ch output; high-imp mic & line inputs and two line & 8-ohm outputs. Response 50-15,000 Hz ± 3 dB at 7½ ips; wow and flutter 0.18% @ 7½ ips. Has two heads (play/record & erase). 15½" x 15¼" x 8½" d.\$315.00
3206. Same as Model 3205 except for deck mount use\$315.00

3077 Mono Tape Player

Features solid-state integrated circuit; 3



speeds (7½, 3¾ & 1½ ips), 2-tracks. Has 4" speaker, 4 W output, portable carrying case. 2 W continuous sine-wave output. Response 50-15,000 Hz ± 3 dB @ 7½ ips. Wow & flutter 0.15% @ 7½ ips. 19" x 9½" x 8½" d.\$115.50
3076. Same as Model 3077 except without case, speaker, or storage compartment. 15¾" l. x 10½" h. x 6" ..\$105.00

ROBERTS

Note: All Roberts stereo models, unless otherwise specified, record 4-track stereo, play back 4-track & half-track stereo; record 4-track mono; play back 4-track, half-track & full-track mono. 15 ips speed optional on all models.

333X Tape Recording System

Three-in-one recorder combines reel with cartridge and cassette recording and



playback. Transfer music from reel to cartridge, from reel to cassette, or from any auxiliary source. Reel section has 4-track stereo/mono record & playback; 4 speeds; automatic shut-off; pause control; tape speed equalizer. Cartridge section permits 8-track stereo record & playback; program selector & indicator lamp; automatic stop. Cassette section has 4-track stereo record & playback; automatic stop. Complete unit includes 2 built-in speakers, 2 slide-type vu meters. Features Cross Field and micron gap heads. Response 30-23,000 Hz ± 3 dB at 7½ ips; wow & flutter 0.09% at 7½ ips. Input sensitivity: mic. 0.15 mV; line 25 mV; 12 W/ch dynamic power output. Power source 100-240 V a.c., 50/60 Hz. 10½" x 13¼" x 18¾". Accessory pack has 2 dynamic mics with stands, 7" reel; pre-recorded demo cassette; 15 ips kit; fuse; silicone oil kit; head-cleaner pen\$559.95

778X Cartridge & Reel Recorder

Cross-Field recording on reels even at new LP speeds; 1 micron gap record head for recording on 8-track-type cartridge; two speeds for cartridge record & play;

6

Tape Machines

built-in cartridge erase. Records cartridge from reels or external record player, tuner, mics, or another deck. Illuminated read-out indicators for track selection. 4-speed option for standard reel record and play\$429.95

1725-8L III Cartridge & Reel Recorder
4-track stereo reel-to-reel plus "Stereo 8" track cartridge combinations; record & play; 18,000 Hz audio; two speeds (3¼ & 7½ ips); cartridge track selector sw.; illuminated cartridge program indicator; two mics included\$359.95

420XD Tape Deck

Features automatic reverse, automatic volume control, sound-on-sound, sound-with-sound, sound mixing. Automatic head sentry. Four heads including Cross Field, 3 motors. Response 30-22,000 Hz ±3 dB. Walnut cab. 16" x 17½" x 10".\$699.95

420X. Same as Model 420XD but with power amplifiers and built-in speakers in vinyl-covered cabinet.\$799.95

5050XD Tape Deck

Plays up to 10" reels. Features tape sensors for forward and reverse off-the-tape programming, automatic reverse, 3-speed hysteresis synchronous capstan motor and two eddy-current reel motors. Response 30-24,000 Hz ±3 dB. Walnut cabinet. 17" x 15" x 9½".\$599.95

650XD Tape Deck

Features 3 motors (including hysteresis synchronous), four heads including Cross



Field, automatic reverse, three speeds (7½, 3¾ & 1⅞ ips), slide-pot linear gain controls. Choice of 4-track mono or stereo recording. Horizontal or vertical operation. Walnut cabinet\$399.95

1719 Stereo Tape Recorder

Solid-state; 2-speed (7½ & 3¾ with 15 ips optional), 4-track design. Features sound-with-sound; separate volume & tone controls for each channel; speaker "on/off"; record monitoring; track select; sound adding; 2 vu meters; counter; 3 heads (record, play, erase) 5 W/ch dynamic music power (3 W/ch continuous sine wave). Response 40-15,000 Hz ±3 dB @ 7½ ips; S/N ratio 47 dB; Wow & flutter 0.25% @ 7½ ips. Has two speakers, one each side of case. Supplied with portable Pyroxylin covered case 15⅞" x 14⅞" x 9". Comes with one mic. \$199.95

1730 Stereo Tape Recorder

Features 2 speed (3¾ & 7½ ips); 7½ W/ch dynamic power; 9" elliptical dual-cone speaker for each channel; response 40-17,000 Hz ±3 dB at 7½ ips; wow & flut-

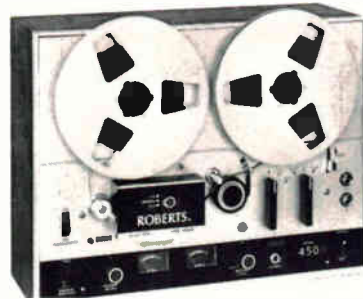
ter 0.18% r.m.s. at 7½ ips. Has record/play & erase heads and inputs for mic & aux.; dual record level meters. Permits sound-on-sound & sound-with-sound. Can be used as p.a. amp. Supplied with 2 dynamic mics. 15¼" x 15¼" x 11⅞" d.\$259.95

1720 Stereo Recorder

Same as Model 1719 but has two separate detachable speaker enclosures instead of built-in. Supplied with portable Pyroxylin covered case 15⅞" x 14⅞" x 10¼". Comes with 2 mics.\$219.95

Model 450A Tape Deck

4-track stereo; 3 heads (record, play, erase); all-silicon transistor record & play



amplifier; 3¾ & 7½ ips; automatic stop; instant pause control; off-the-tape record monitoring; one-micron gap play head; dust cover included; wood cab. . \$199.95

771X Cross-Field Recorder

22,000 Hz Cross-Field stereo; sound-on-sound; electrically switched hysteresis-synchronous motor; 4 speeds (1⅞, 3¾ & 7½ ips, 15 ips optional); two built-in extended range hi-fi speakers; mute monitor and p.a. switch. Separate tone and equalization controls for each channel.\$329.95

800X Tape Recorder

Features 3 motors (including hysteresis synchronous), automatic reverse, 4 heads (including Cross Field), sound-on-sound, sound-with-sound, instant pause control, choice of 4-track mono or stereo recording. Response 30-22,000 Hz ±3 dB. 18" x 19" x 9"\$539.95

1000 Video/Stereo Tape Deck

Video tape recorder/stereo tape recorder combination. Uses ¼-inch recording tape. Instant playback. Audio recorder: 4-track stereo deck for recording or playback; 7½ & 3¾ ips; reverse play on audio. All ferrite erase, playback, and recording heads. Four motors. Sensing tape reverse on audio, automatic stop. Response 30-19,000 Hz at 7½ ips. Camera and monitor optional extra ...\$1095.00

610X Tape Recorder

4-track Cross Field battery/a.c. portable stereo tape recorder. Will handle up to 7" reel. Four speeds (7½, 3¾, 1⅞, 1⅞ ips). Cross Field head; remote speaker jack; automatic record level sw.; remote-control jack; two vu meters; built-in rechargeable battery. Response 50-17,000 Hz at 7½ ips. 5⅞" x 11" x 12" ..\$329.95

SANSUI

SD7000 Tape Deck

4-track, 2-channel, 2-speed, 3-motor design. Features stereo record/play; dual vu meters; 4 heads for automatic reverse play; response 15-25,000 Hz; wow & flutter 0.06%; S/N ratio 60 dB; rewind activated by sensing foil or 20-Hz signal; automatic repeat; source playback tape monitor sw. 21" x 17" x 10¼" ..\$679.95 Remote control optional.

SONY/SUPERSCOPE

200 Solid-State Recorder

Four-track stereo/mono record/playback system; features built-in 6 W/ch (IHF) stereo amplifier & speakers (15' separation); 2 vu meters; sound-on-sound; two speeds (7½ & 3¾ ips) & counter; response 30-17,000 Hz @ 7½ ips; flutter & wow 0.12% @ 7½ ips; signal-to-noise ratio 48 dB; inputs: 2 mic & 2 high-level line; supplied with two F-97 dynamic micsLess than \$199.50

230 "Stereo Compact Portable"

4-track, 3-speed (7½, 3¾ & 1⅞ ips) design with 10 W/ch (IHF) dynamic pow-



er; response 30-18,000 Hz @ 7½ ips; wow & flutter 0.09% @ 7½ ips; S/N ratio 50 dB. Features automatic shut-off; counter; two vu meters; 2 inputs for magnetic phono; two detachable speaker systems. Supplied with two Sony F-45 dynamic mics\$249.50

560 Stereo Tape Recorder

Solid-state, 4-track, 3-speed (7½, 3¾ & 1⅞ ips) design with 10 W/ch dynamic power. Features Sony ESP (electronic sensory perception) automatic reverse; response 30-18,000 Hz @ 7½ ips; wow & flutter 0.07% @ 7½ ips; S/N ratio 52 dB. Features two vu meters; counter; automatic sentinel shut-off after tape has made complete reverse cycle; inputs for magnetic phono. Has two detachable speaker systems. Supplied with two Sony F-98 cardioid dynamic mics ...\$449.50 560D Tape deck version of Model 560; does not include power amps & speakers. Has walnut cabinet\$349.50

666D Auto-Reverse Stereo Deck

Solid-state with Sony ESP automatic tape reverse; three motors; a.c. bias; automatic shut-off; 7½ & 3¾ ips; mic & phono input; response 20-22,000 Hz at 7½ ips; wow & flutter 0.09% at 7½ ips; S/N ratio 53 dB with noise reduction "off", 59 dB with it "on". With walnut base and plastic dust cover\$575.00

770 Portable Stereo Recorder

Available in two forms: 770-2 featuring 4 heads, two-track erase, record and playback, plus 4-track playback head or as 770-4, featuring 4-track erase, record & playback and 2-track playback. Both units have built-in rechargeable nickel-cadmium battery pack; mic & line mixing; remote control; a.c. or battery operation. Response 20-22,000 Hz at 7½ ips; wow & flutter 0.09% at 7½ ips. 770-2\$750.00 770-4\$595.00

630 Stereo Tape Recorder

Four-track, 3-head, 3-speed (7½, 3¾ & 1⅞ ips) design. Features inputs for mag. phono, tuner, aux. & mic.; built-in switching for sound-on-sound, echo effect & tape/source monitoring. Has 20 W/ch dynamic (IHF) power output and is supplied with two F45 mics & a pair of matching speaker systems. Response 30-22,000 Hz at 7½ ips; wow & flutter

0.09% at 7½ ips. 17⅞" x 20" h. x 11⅞" d.\$449.50
 630-D. Tape deck same as Model 630 except includes only tape transport & preamps. Does not have power amps & speakers\$329.50

540 Stereo Tape Recorder

Four-track, 3-head, 3-speed design with 10 W/ch dynamic (IHF) power, two XL-4 Quad radial speaker systems. Response 30-20,000 Hz @ 7½ ips. Wow & flutter 0.09% @ 7½ ips. Features sound-on-sound, sound-with-sound & is supplied with two F-96 mics. Has p.a. capability. 19¼" x 10" x 15½" d.\$399.50

252 Stereo Tape Recorder

Four-track, 3-head, 3-speed (7½, 3¾, 1⅞ ips) design. Features sound-with-sound; 12 W/ch dynamic (IHF) power. Response 30-18,000 Hz @ 7½ ips. Wow & flutter 0.12% @ 7½ ips. Supplied with two F-98 mics and a pair of matching speaker systems. 16" x 10⅞" x 15" d.\$219.50
 252-D. Tape deck same as Model 252 except includes tape transport & preamps. Does not have power amps & speakers. Supplied with walnut base\$134.95
 DP-2. Plastic dust cover\$4.50

255 Stereo Tape Deck

Features 4-track stereo/mono record/play; sound-on-sound; sound-with-sound; 3 speeds (7½, 3¾ & 1⅞ ips); response 30-18,000 Hz at 7½ ips; wow & flutter 0.09% at 7½ ips. Has aux. & mic inputs per channel & line output. Does not have power amps. Size 15⅞" x 7¼" h. x 13¼".\$179.50

330 Record/Play Tape System

Features 7" reel-to-reel & cassette stereo tape system. Can record from mic, mag.



phono or aux. either reel-to-reel or cassette. Can also transfer from one recorder to another. System equivalent to 252-D reel-to-reel tape deck & 124 cassette recorder. 117 V, 60-Hz operation: ¼-track stereo system; response 30-18,000 Hz at 7½ ips; 50-10,000 Hz for cassette. Input sensitivity: aux. 0.06 V; mag. phono 1.1 mV; mic -72 dB low imp.; 7½ W/ch (IHF) dynamic power. Has vinyl covered portable case & pair of 5" full-range lid-integrated speakers; 2 cardioid dynamic mics. 21¼" x 11⅞" x 13⅞" d ...\$339.95

352-D Stereo Tape Deck

Similar transport as in 255. Has 3 heads simplifying tape/source monitoring & tape select switch for better performance from either standard or low-noise high-output tape\$179.95

366 Stereo Recorder Deck

Features 3 heads; automatic total equipment shut-off; mic/line mixing; tape equalization selector sw; no pressure pads; sound-on-sound; tape/source monitoring; 3 speeds (7½, 3¾ & 1⅞ ips); dual vu meters; 4-track system. Response 30-

20,000 Hz ±3 dB at 7½ ips. Has aux. & mic inputs & line outputs. 16⅞" x 8⅞" x 14⅞" d.\$249.50



366-4 Same as Model 366 except 4-channel output instead of two\$479.95

650-A Stereo Recorder Deck

Features 3-head design simplifying tape/source monitoring; tape selector switch; mic/line inputs with mixing control; dual vu meters; 2-track, 2-speed (3¾ & 7½ ips). Has line outputs\$445.00
 652-4 Similar to Model 650-2 except 4-track for quad-radial (4-channel) playback. Will record 2 channels. Has two additional playback preamps.\$549.95



652-4 Same as 652-4 except will provide for 4-channel record & playback. \$750.00

850 Stereo Tape Recorder

Features 10½" reels; automatic program scanner (will operate in fast-forward until it reaches pre-selected program via sensing foil—any number of foils can be used); 3 speeds (3¾, 7½ & 15 ips); interchangeable 2-track & 4-track head blocks (each head block has 1 record, 1 erase & 2 playback heads). Will play back half-track, two-track & 4-track tapes; wow & flutter 0.03% at 15 ips. Has automatic



**THOUSANDS OF
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There's a reason why Crown recorders cost over \$900. Why nearly every critical home music recordist hopes some day to own one. The reason is Crown's TOTAL PERFORMANCE.

Semi-professional decks may shout about a single outstanding spec, but who wants low noise at the expense of high distortion or wow and flutter? Only Crown delivers unexcelled engineering achievement in all areas of performance. Not just flat response @ ± 2db maximum, but bandwidth wider than the entire audible spectrum. Not just low noise, but wide dynamic range for flawless piano reproduction. Plus minimal wow and flutter and the industry's lowest distortion levels.

Now couple this with Crown's famous no-compromise workmanship: Only the very finest components available. Precision handcrafting with relentless inspection. Only nine or ten moving parts for reliability. Construction "rugged enough to withstand a parachute drop." (Audio 4/68) Individual proof-of-performance guarantee. Design engineered for ten years minimum continuous service. It's a lot of work—but the result is a professional deck unparalleled in the recording industry.

Yes, Crown does cost more than any semi-pro recorder. That's the price of no-compromise TOTAL PERFORMANCE. Send for our detailed spec sheets and compare Crown with any other deck—semi-pro or professional. After all, you deserve to know what a Crown owner knows. Write Crown, Dept. SHFD, Box 1000, Elkhart, Indiana, 46514.



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6

Tape Machines

shut-off; sound-on-sound; echo; mic/line mixing; tape/source monitoring.

- 850-2 Two-track\$775.00
- 850-4 Four-track\$775.00
- 854-4 Same as 850 except provides for 4-channel record & playback ..\$1395.00

TANDBERG

Model 65 Stereo Playback Deck

Three-speed (7½, 3¾ & 1⅞ ips), 4-track stereo playback tape deck; response 30-20,000 Hz @ 7½ ips, 30-15,000 Hz @ 3¾ ips, 50-7000 Hz @ 1⅞ ips; lever knob for playback, fast forward, fast reverse; 4-digit revolving counter; complete mechanical drive; over-all size of the deck 16" x 12" x 6". With teak base ..\$100.00

Series 11 Tape Recorder

Battery-operated (10 1.5-V cells or rechargeable type can be used); battery



eliminator for connection to 110/220 V, 50/60 Hz. Three speeds (7½, 3¾ & 1⅞ ips); electronic speed control; maximum reel diameter 7", with cover 5". Response 40-16,000 Hz @ 7½ ips; S/N ratio 56 dB at maximum recording level @ 7½ ips; wow & flutter better than 0.2% @ 7½ ips; vu meter, solid-state. Inputs: radio & mic; outputs: line & headphone. 13" x 10" x 4". 9½ lbs. without battery.

- Full track\$449.50
- Two track\$449.50
- Carrying bag with strap\$29.95
- Power supply\$44.95

Model 11-1-P Pilotone/Tape Recorder

Designed specifically for sound/film synchronization. Has 5 heads, separate mic



& line inputs with mixing. Basically same as full-track version of Series 11 except has neopilot head, pilot signal indicator & tape start signal\$699.00

Series 1600X Tape Recorder Deck

Four-track, 3-speed (7½, 3¾, 1⅞ ips) stereo design. Has low-imp. line & mic and high-imp. line inputs & line outputs. Wow 0.1% at 7½ ips. Response 40-20,000 Hz @ 7½ ips. 15¾" l. x 14¼" w. x 6¼" h.

- 1621X 2-track\$249.00
 - 1641X 4-track\$249.00
- Accessories:
- 125. Telephone pickup\$15.75
 - 22FP. Foot pedal\$18.90

Series 14 Tape Recorders

Mono, 2-speed (3¾ & 1⅞ ips) design featuring mic & line input mixing; 2 heads for 2- or 4-track operation & 3 W output into built-in 7" x 4" speaker. Has 10 W power output for ext. 4-ohm speaker. Response 50-9000 Hz ±2 dB at 3¾ ips. Wow 0.15% at 3¾ ips. Has "free head" output for auto slide synchronizers. With teak cabinet. 15" x 11¾" d. x 6¾".

- 1421 Half-track\$250.00
- 1441 Four-track. Also features two tracks (programs) to be played back simultaneously\$270.00
- 1422 Half-track in airplane luggage case\$275.00
- 1442 Four-track in airplane luggage case\$294.00

Series 15 Tape Recorders

Similar to Series 14 except 3 speeds (7½, 3¾ & 1⅞ ips) & has mic and 2 line inputs. Response 40-16,000 Hz ±2 dB at 7½ ips; wow 0.1% @ 7½ ips.

- 1511 Full-track\$362.00
- 1521 Half-track\$287.00
- 1541 Four-track\$313.50
- 1521F Half-track with remote operation\$386.00
- 1541F Full-track with remote operation\$401.50

Airplane luggage-type carrying cases optional. Other models available for educational applications.

Series 1200X Tape Recorders

Stereo, 2- or 4-track, 3-speed (7½, 3¾ & 1⅞ ips) design; power output 10 W/ch continuous sine wave; permits mono mixing and monitoring when recording. Has input for mag. phono & selector for line/mic; internal/ext. speaker sw. Cross Field bias head. Response 40-18,000 Hz ±2 dB @ 7½ ips; wow & flutter 0.15% @ 7½ ips. Two 7" x 4" built-in speakers; 4-ohm outputs. 15¾" x 6¾" x 12". Teak cabinet optional.

- 1221X Two-track\$485.00
- 1241X Four-track\$485.00

Series 14, 15, and 1200X recorders designed for 230/115 V, 50-60 Hz power-line operation.

Series 6000X Tape Recorder/Deck

Features 4 or 2 track stereo operation; 3-speeds (7½, 3¾ & 1⅞ ips); cueing facilities;



stereo mixing; A-B testing; sound-on-sound; add-a-track; echo effects; remote start/stop control. Has peak-reading vu meters & incorporates Crossfield technique. Response 40-22,000 Hz ±2½ dB @ 7½ ips; S/N ratio -62 dB @ 7½ ips quarter-track weighted; wow & flutter 0.1% @ 7½ ips. Four heads are used (record, play, erase & Crossfield). Has stereo inputs for 200-ohm balanced mic; 100,000 ohm line; phono with built-in magnetic/ceramic cartridge selector & two 100,000 ohm tuner. 1.5 V output each; does not have power amplifiers.

- 6021X 2-track\$499.00
- 6041X 4-track\$499.00

Series 3000 Tape Recorder/Deck

Features 2 or 4 track, 3-speed (7½, 3¾, 1⅞ ips); stereo design without power am-



plifiers; has add-a-track; sound-on-sound; A-B test; echo effect; response 40-20,000 Hz ±2 dB @ 7½ ips; wow & flutter 0.07% r.m.s. @ 7½ ips. Incorporates Crossfield technique. Has 4 heads (record, play, erase & Crossfield); automatic end stop & is equipped with cueing. Inputs: 1 mic/ch, 1 high-level (100 mV)/ch & 1 low-level (5 mV)/ch. Outputs 0.75V ea. 15½" x 6½" x 12¾" d. wal. base.

- 3021X 2-track\$299.00
- 3041X 4-track\$299.00

TAPESONIC

Studio Recorders

All-silicon, solid-state with five modular plug-in units. Three speeds (15, 7½, 3¾ ips); 3 separate stereo heads permit direct monitoring from tape. A-B switch for each channel; adaptable for remote control. Three motors, automatic stop. Two electronic mixing inputs for each channel for radio, mic & phono. Bias check for each channel; handles up to 10½" NAB reels. 4½" vu meter for each channel. Response at 15 ips 35-26,000 Hz ±2 dB; 30-20,000 Hz ±2 dB at 7½ ips. Supplied without case for rack mount or custom installation applications.

Model 70-TRSO. ½-track stereo \$615.00

Model 70-TRSH. ½-track stereo \$615.00

Portable carrying case for either model

.....\$34.50

Also available; two low-impedance microphone inputs with Cannon XLR connectors\$35.00

TEAC

All models except Series TCA-40 provide electrical speed change within motor instead of mechanical method; 4-track; 2-channel; solid-state design; 7" reels & vu meters. Unless otherwise indicated they have four heads, 2 speeds (7½ & 3¾ ips), and 3 motors. All performance characteristics are given for 7½ ips speed. All machines are stereo design and are available on special order with ½-track or full-track heads.

A-1500U Stereo Tape Deck

Features "Add" recording & stereo echo. Has 4 heads for automatic reverse play & monitoring actual sound on tape while recording. Response 30-20,000 Hz; wow & flutter 0.12%. Does not have power amps or speakers. Has mic & line inputs & 1 V preamp output. Has separate preamps for record and playback. 17" x 15½" x 9¾". Walnut cabinet\$399.50

A-1200U Stereo Tape Deck

Has 3 heads; features stereo echo &



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Occupation _____ Age _____

6

Tape Machines

"Add" recording. Response 30-20,000 Hz; wow & flutter 0.12%. Does not have power amp & speaker. Has mic & line input & 1 V preamp outputs. 17" x 15½" x 9¾". Walnut cabinet\$299.50

A-1600U Tape Recorder

Stereo design featuring "Add" recording & stereo echo; with separate record & playback amplifiers; line & mic inputs. Response 30-20,000 Hz @ 7½ ips; wow & flutter 0.12% @ 7½ ips; S/N ratio 50 dB; 8 ohms; 2 W/ch dynamic power output. Features electrified automatic reverse for uninterrupted play of up to four hours. Solid-state design. 16" x 16¾" x 11½".\$519.50

A-6010U Stereo Tape Deck

Four-head, 4-track, 2-channel, two-speed (7½ & 3¾ ips) design; three motors: au-



omatic reverse provides continuous playback in both directions. Phase Sensing System permits reverse signal to be applied to tape automatically. Response 30-20,000 Hz (±2 dB 45-15,000 Hz) at 7½ ips; wow & flutter 0.08% at 7½ ips; S/N ratio 55 dB. 20¼" x 17½" x 6¾". 110/117 V. 50/ 60 Hz\$664.50

A-7010U Stereo Tape Deck

Four-head, four-track, 2-channel, 2-speed (7½ & 3¾ ips) design. Response 30-24,000 Hz at 7½ ips. Features Phase



Sensing System automatic reverse; 10½" max. reel size; wow & flutter 0.08%; built-in mic-line mixer; vu meters; auto delay circuit. Size 20¾" x 17½" x 8¼".\$849.50.

A-7030U Stereo Tape Deck

Four head, 4-track, two-speed (15 & 7½ ips) design. Records at half- and quarter-

track, plays back at quarter track. With optional head configurations; automatic rewinding & stop; full remote control; built-in line-mic mixer. Response 40-20,000 Hz at 15 ips; wow & flutter 0.05%. 20¾" x 17½" x 8¼"\$749.50

Series TCA-4-40 Tape Decks

Combines all quality features of quarter-track, 2-channel operation with 4-chan-



nel stereo capability. All 3 models feature 4-channel playback as well as 2-channel playback with 2-channel auto reverse. Models 40 & 41 can be later modified to the full 4-channel capability of Model 42. TCA-40 4 & 2 channel stereo playback deck with 4 built-in preamps. Includes connectors for future 2 or 4 channel record amplifiers. Has 2-channel (¼-track) erase & record heads, pre-wired but inactive, as well as 4-channel/2-channel playback head. Response 50-15,000 Hz ±3 dB at 7½ ips; wow & flutter 0.12% r.m.s. at 7½ ips; 2 speeds (3¾ & 7½ ips); 3 motors. 12" x 17½" x 7". With walnut cabinet\$365.00
TCA-41 Same as TCA-40 but has 2-channel record capability. Has separately housed RA-41 stereo record preamp. Includes connectors for 4-channel recording. Has mic & line mixing; tape monitoring. amp. size 4¾" x 17¼" x 7¼".\$535.00
TCA-42 4-channel record & playback. Same as TCA-41 but includes 2 RA-41 record preamps. Has inline & 4-channel record & separate erase heads ..\$695.00
RA-41 2-channel record preamp \$195.00

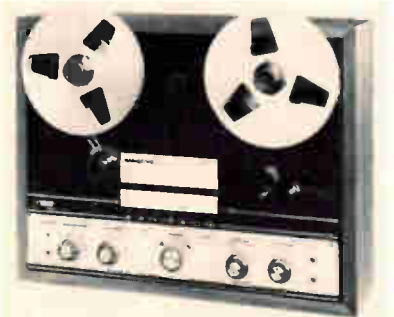
TELEX

Magnecord 1024 Stereo Recorder

Two-speed (3¾ & 7½ ips) design with selectable ¼-track erase head, ¼-track record, and ¼-track play and optional ½-track play. Response 45-18,000 Hz ±2 dB at 7½ ips; wow & flutter 0.2% r.m.s. at 7½ ips. Has mic input (50k ohms), hi-Z mixing bridge & aux. bridge; outputs: emitter follower & aux. emitter follower (0.5V)\$932.00
With 4th head installed for optional ½-track play\$970.00
Case\$ 50.00

Magnecord 2001 Tape Recorder Deck

Features 4-track stereo design; 2 speeds



(3¾ & 7½ ips); flutter-filter belt drive; 3 separate heads (erase, record, play); tape monitoring. Response 45-18,000 Hz ±2 dB at 7½ ips; wow & flutter 0.18% at 7½ ips. Has high imp. mic & aux. inputs & line outputs. Does not have power amps. 8" x 19½" x 14½". With walnut base.\$799.95

Viking "Quad/Sonic 2+2" Tape Transport

Features 2 & 4 channel stereo playback; 3 motors; 3 speeds (1½, 3¾ & 7½ ips).



Response 40-18,000 Hz ±3 dB at 7½ ips; wow & flutter 0.2% at 7½ ips; 4-channel in-line head. Has walnut cabinet. 11" x 16½" x 6¾"\$249.95

Viking Model 88 Stereo Deck

2-speed (7½ & 3¾ ips), 4-track design. Response 30-18,000 Hz ±3 dB @ 7½ ips; flutter & wow 0.2% @ 7½ ips; S/N ratio 55 dB @ 7½ ips; HD 1%. Features counter, vu meters, monitor facility, sound-on-sound, and automatic shut-off. Preamp outputs 2 V.\$349.95
1500 Cabinet, walnut\$ 18.95
Model 880 Same as 88 but with 5 W/ch dynamic power @ 8 ohm amp & two detachable speaker assemblies, each with 5" woofer and 2½" tweeter & crossover. 21½" w. x 14¾" x 9¼" d. Supplied with portable case.\$449.95

Viking 423 Stereo Tape Deck

3 speeds (1½, 3¾ & 7½ ips); 4-tracks; response 50-15,000 Hz ±3 dB @ 7½ ips; input sensitivity for 0 vu: 0.55 mV for 2500-ohm impedance mic; aux. 100 mV; HD 1.5%; vu meter; wow & flutter 0.2% @ 7½ ips. Has pause control. 15¾" x 12¾" x 6½" behind panel. Tape deck mechanism similar to Model 433 \$274.95
423W with walnut base\$294.95
423R with remote pause control \$299.95
433RW with remote pause & walnut base.\$319.95

Viking Model 807 Tape Player

Plays mono or stereo ½- or ¼-track at 7½ ips or 3¾ ips. Features automatic shut-off; response 30-18,000 Hz @ 7½ ips; flutter & wow 0.2% @ 7½ ips. Does not have preamps; heads connect direct to tape head input of external amp. 6½" x 13½" x 10" d.\$124.95

Viking 433 Stereo Tape Deck

Three-speed (1½, 3¾ & 7½ ips), 4-track design; response 40-18,000 Hz ±3 dB @ 7½ ips; S/N ratio 54 dB; THD 1% at 0 level; flutter & wow 0.2% @ 7½ ips; inputs for 0 level: mic 0.5 mV; aux. 75 mV. Features 3 heads; mixing controls; echo sw.; sound-with-sound and sound-on-sound; counter; pause control; automatic shut-off. Has preamps only; output 1V low impedance. 15¾" x 14¾" x 6½" behind panel\$374.95
433W With walnut base\$394.95
433R With remote pause\$399.95
433RW With remote pause & walnut base\$419.95

B9006 Stereo Tape Recorder

Four-track 3-speed (7½, 3¾, 1½ ips) de-



sign. Features sound-with-sound; vu meters; mic & aux. inputs. Wow & flutter 0.2%; 10 W/ch dynamic power (EIA). Has separately housed 8" woofer with whizzer cone speaker system. 16" x 15" x 6" d. Speaker cabinet 18" x 16" x 7 1/4" d. Supplied with walnut cabinets & 2 mics.\$299.95

UHER

Model 4000L Portable Record

2-track, 4-speed (7 1/2, 3 3/4, 1 7/8 & 1 5/16 ips) mono design; powered by five Ni-Cad



cells or rechargeable battery, 6-12 V or separate 120 V a.c. power supply; electro-magnetic start/stop remote control by means of microphone or remote switch; digital counter; vu meter and power supply indicator; acoustic switch available for sound control for start and stop of tape; response 40-20,000 Hz ±2.5 dB @ 7 1/2 ips; S/N 52 dB; wow & flutter 0.1% @ 7 1/2 ips; output speaker 1 watt; inputs: microphone 0.1 mV @ 2000 ohms; radio 1 mV @ 47,000 ohms; phono 4 mV @ 1 megohm; 10 hours playing time with Ni-Cad cells; 11" x 9" x 3 1/2"; weight without batteries 7 lbs.; complete with remote control dynamic microphone, leather case, shoulder strap, a.c. power unit, battery charger, and "Dryfit" storage battery\$349.50

"Universal 5000" Recorder

2-track, 3-speed (1 5/16, 1 7/8 & 3 3/4 ips), 6" reel design. Response 40-16,000 Hz @ 3 3/4 ips; S/N 48 dB; wow & flutter .2% @ 3 3/4 ips; output 2 W @ 4 ohms. Has digital counter, automatic recording level



1971 EDITION

control, completely solenoid controlled; vu meter & inputs for low-impedance mic., radio, phono. Playback outputs 2.5 V @ 4 ohms & 0.9 V @ 47,000 ohms. 6" x 10" x 13"\$319.50

Model 4400 Stereo Recorder

4-track version of Model 4000L; has additional stereo amplifiers & one speaker. Mark IV package\$459.50
Model 4200 Two-track version of Model 4400. Mark IV package\$459.50

6000-L Mono Tape Recorder

2-track, 2-speed (7 1/2 & 3 3/4 ips), 7" reel design; response 40-18,000 Hz @ 7 1/2 ips; wow & flutter 0.2% r.m.s.; 2 W @ 4 ohms. Has digital counter, vu meter. 3 inputs (mic, phono, radio) and 2 outputs. Speaker & earphones. 14" x 15" x 7".\$299.50

7000 Tape Deck/Preamps

4-track for stereo or mono record/playback, 2-speed (7 1/2 & 3 3/4 ips); 7" reel design; response 40-18,000 Hz ±2.5 dB @ 7 1/2 ips; S/N 48 dB; wow & flutter 0.08% r.m.s. at rated output; preamp output 0.75 V. Has automatic end of tape shut off, vu meter, mic & line inputs. Permits sound-on-sound. 117-250 V a.c., 50/60 Hz operation. 14" x 15" x 7" ...\$199.50

1000 Portable Tape Recorder

Will operate from 117-250 V a.c., five "D" cells, or 6-12 V car battery. Solid-



state design; response 20-20,000 Hz ±2.5 dB @ 7 1/2 ips; single 7 1/2-ips speed; full-track; 5" reels max. Features automatic photoelectric level control; overload filter; "Pilotone" level adjust; battery condition checker; monitoring off the tape; stroboscopic speed control; built-in speaker; pause control. Designed especially for sound synchronization of motion picture films. 11" x 9" x 3 1/2".\$749.50

Model 10,000 "Royal Deluxe"
4-speed, record/play stereo design with 10 W/ch continuous sine-wave amplifiers



& two built-in speakers. Features built-in "Dia-Pilot" for sound/slide synchronization; sound-on-sound; sound-with-sound; echo single channel & stereo mixing. Amplifiers can be used independent of tape recorder. Wow & flutter 0.025% at 7 1/2 ips. Response 20-20,000 Hz ±2 dB at 7 1/2 ips. With walnut case & plexiglas lid. 17 3/4" x 13 3/4" x 7 3/4" inc. lid. \$550.00

Model 9500 "Royal Deluxe" Tape Deck

Same as Model 10,000, less output ampli-



fiers & speakers\$450.00

Varicord 63 Tape Recorder

Mono design features simplified operation with high record/playback qualities; interchangeable 2-track & 4-track heads provide flexibility & with both heads assembled sound-with-sound is possible. An automatic record level control can be added. 3 speeds (1 7/8, 3 3/4 & 7 1/2 ips); response 30-20,000 Hz at 7 1/2 ips; 6 W continuous power output; wow & flutter 0.05% at 7 1/2 ips; input sensitivity: mic. 0.2 mV; radio 1.2 mV; ceramic phono 100 mV. Line output 1.4 volts. Size with lid 17 1/2" x 13 3/4" x 7"\$249.50

NOTICE TO OUR READERS

We consider it a valuable service to our readers to continue, as we have in previous editions of the STEREO/HI-FI DIRECTORY, to print the prices submitted by the manufacturers for items described as available at press time. With few exceptions, prices submitted by manufacturers should be considered "audiophile net."

We are aware that prices vary across the country in different trading areas. It is obvious that we are not in a position to quote local prices for the various trading areas in the United States on each of the items listed. Accordingly, we are quoting the price furnished to us by the manufacturer or distributor, for each of the products, even though it may be possible to purchase some items in your trading area (depending on where you are) at a price lower than that listed in this Directory.

We would also like to point out that almost all manufacturers' and distributors' prices are subject to change without notice.

6

Tape Machines

Varicord 263 Tape Recorder

Same as Varicord 63 except stereo design; 6 W/ch continuous power output; mic input sensitivity 0.12 mV; Features mixing of two separate sound sources. \$299.00

WEBCOR

2500 Tape Recorder

Three-speed (7½, 3¾, 1⅞ ips), 4-track stereo design. 5 W/ch dynamic power



(EIA). Has built-in speakers, pause control, and vu meters. 14½" x 14½" x 5¾" \$229.95

WOLLENSAK

1500SS 2-Track Mono Recorder

2 speed (7½ & 3¾ ips) design. Features built-in speaker; vu meter; counter; pause



control; monitor facility. Accepts accessory foot control. Response 40-15,000 Hz ±3 dB @ 7½ ips; wow & flutter 0.25%; S/N ratio 48 dB; output 10 W dynamic power. 9 W continuous @ 5% HD. Has mic & phono/radio inputs. 6½" x 10¼" x 11¼" \$184.95

3500 Portable Mono Tape Recorder

Operates from six "D" cells or 115-V a.c. Features 2 speeds (3¾ & 1⅞ ips); 5" reels; automatic record level; solid-state design; vu level/battery condition meter. Response 100-8000 Hz ±4 dB @ 3¾ ips; wow & flutter 0.4% @ 3¾ ips; output 750 mW. Supplied with remote mic. 11½" x 10¼" x 4" \$89.95

6300 Stereo Tape Recorder

3-speed design with separate compression-loaded wing speakers. Response 40-18,000 Hz ±3 dB @ 7½ ips; wow & flutter 0.15% @ 7½ ips \$249.95

6340 Same as 6300 except black & silver finish \$279.95

6200 Same as Model 6300 except speakers are self-contained \$239.95

6120 Same as Model 6300 except deck version \$189.95

6100 Same as 6300 except deck for custom installation \$179.95

6000 Same as 6300 except mono with self-contained speakers \$184.95

6250 Stereo Tape Recorder

With built-in speakers. Has 3 heads, 3 speeds (7½, 3¾ & 1⅞ ips). Inputs for

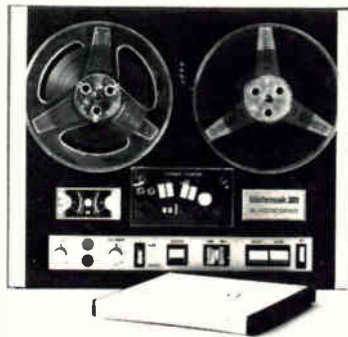


mic, mag. phono, tuner & aux.; source playback monitor sw. Features sound-on-sound, sound-with-sound, reverb, and input mixing. Response 40-20,000 Hz ±2 dB @ 7½ ips. Wow & flutter 0.12% @ 7½ ips. 25 W/ch continuous sine-wave power \$379.95

6150 Same as Model 6250 except deck version \$279.95

6364 "Quad/Stereo" Four-Channel Playback

Four-track stereo/mono record/playback. Has three heads, three speeds (7½,



3¾, 1⅞ ips); inputs for magnetic phono, tuner, mic, aux, tape/source monitoring. Features sound-on-sound, automatic tape shut-off, pause control. Response 35-20,000 Hz ±2 dB @ 7½ ips; wow & flutter 0.12% r.m.s. at 7½ ips; S/N ratio -54 dB at 7½ ips. Fixed preamp output: 1 V/ch; controlled preamp output 0-1.3 V/ch; power output 18 W/ch r.m.s. continuous at 1% HD with 8 ohm loads, both channels driven; power bandwidth 18-22,000 Hz at rated output \$599.95

6364 With A-1050 cubical acoustic-suspension speakers \$659.95

6154 Same as 6364 except deck version \$499.95

6250 Audio Center Series

Stereo record/playback with self-contained acoustic-suspension speakers. Three heads; three speeds (7½, 3¾, 1⅞ ips); 31 W/ch dynamic (IHF) power. Inputs for mag. phono, tuner, mic, aux.; tape-source monitoring. Features sound-on-sound, sound-with-sound, reverberation. Response 35-20,000 Hz ±2 dB @ 7½ ips; wow & flutter 0.12% r.m.s. @ 7½ ips; S/N ratio -54 dB @ 7½ ips; fixed preamp output 1 V/ch; controlled preamp output 0-1.3 V/ch; power output 18 W continuously @ 1% HD with 8 ohm loads, both channels driven. 20¼" x 13½" x 7½" \$375.95

6350 Same as 6250 but with snap-on acoustic suspension speakers . . . \$399.95

6360 Same as 6250 but with oiled-walnut finished base and optional acoustic suspension cube speakers. With speakers \$459.95

6150 Same as 6250 but deck version \$279.95

6

Raw Tape

AMPEX

311 1.5-mil Acetate Base Tape

3" reel, 150 feet \$0.90
5" reel, 600 feet \$2.25
7" reel, 1200 feet \$3.50

321 1.0-mil Acetate Base Tape

7" reel, 1800 feet \$5.50

331 1.5-mil Polyester Base Tape

5" reel, 600 feet \$2.65
7" reel, 1200 feet \$4.25

341 1.0-mil Polyester Base Tape

3" reel, 275 feet \$1.25
5" reel, 900 feet \$3.60
7" reel, 1800 feet \$6.20

351 0.5-mil Tensitized Polyester Tape

3" reel, 300 feet \$1.85
3" reel, 600 feet \$2.95
5" reel, 1200 feet \$5.45
5" reel, 1800 feet \$6.95
7" reel, 2400 feet \$9.50
7" reel, 3600 feet \$11.95

361 Cassette Tape

30 minutes \$1.98
60 minutes \$2.25
90 minutes \$3.49
120 minutes \$3.98

314 Low-noise 1.5-mil Acetate

5" reel, 600 feet \$2.80
7" reel, 1200 feet \$4.40

344 Low-noise 1.0-mil Polyester Tape

5" reel, 900 feet \$4.25
7" reel, 1800 feet \$7.35
3" reels supplied with plastic mailer.

AUDIOTAPE

Cartridge Tapes

AC-30. 30-minute cassette \$2.25
AC-60. 60-minute cassette \$2.65



AC-90. 90-minute cassette \$3.95

A-4A. 4-track, 300' cartridge \$2.65

A-8. 8-track, 80-minute cartridge . . . \$2.56

A-8A. 8-track, 40-minute cartridge . . \$2.23

Master 1.5-mil Mylar Tape

Made on 1.5 mil Mylar base; durable in wide temperature range.

Type 671M, 600 ft., 5" reel \$3.80

Type 1271M, 1200 ft., 7" reel \$5.10

Double Recording

(.5-mil tempered Mylar)

Made on tempered Mylar; allows twice as much recording per reel; stronger than double length tape.

Type 331T, 300 ft., 3" reel \$1.72

Type 1231T, 1200 ft., 5" reel \$5.85

Type 2431T, 2400 ft., 7" reel \$10.05

Triple Recording (tempered Mylar)

Three times as much recording time per reel as standard plastic-base tape, plus same extra strength as other tempered Mylar tapes.

Type 633T, 600 ft., 3¾" reel \$2.95

STEREO HI-FI DIRECTORY



The world's only 8-track stereo deck that has Fast Wind and Auto-Stop. The "Wallstey," Model RS-803US.

Tape up your stereo system.

If you got the jack, we've got the decks. That will turn your stereo system into a stereo tape recorder. One that records and plays 8-track cartridges. Or cassettes. Or both.

Our 8-track cartridge deck, Model RS-803US, is going to be a legend in its own time. Because it's the only one in the world with two special controls—Auto-Stop and Fast Wind. The Auto-Stop switch stops the tape at the end of the last track. So you can't accidentally over-record and turn Beethoven's First Symphony into Beethoven's

Lost Symphony. Fast Wind speeds you to the selection you want. Instead of wading you through the ones that you don't.

And that's only half the story. There's also our cassette deck, Model RS-256US. With a noise suppressor switch that makes tape sound sweeter than ever. (Cuts out the sour little hiss tape can pick up.) And Fast Forward and Rewind, automatic shut-off, and pause control. Plus simple pushbuttons that leave you more time to make like a sound engineer.

In fact, both these decks

have everything to get the finickiest tape connoisseur into cartridges and cassettes. Like twin VU meters, twin volume controls, twin whatever ought to be twin to give you great stereo recordings and playback. Plus AC bias to cancel out noise and distortion. AC erase. And jacks for optional single or twin mikes.

Go to your Panasonic dealer and see our 8-track deck, Model RS-803US and our cassette deck, Model RS-256US. They make it easy to tape up a stereo system. But choosing between them is something else again.



The stereo cassette deck that gives you professional sound quality. And easy operation. The "Bridgeport," Model RS-256US.

PANASONIC[®]
just slightly ahead of our time.

200 Park Avenue, New York 10017. For your nearest Panasonic dealer, call 800 243-6000. In Conn., 800 942-0655. We pay for the call. Ask about Models RS-803US and RS-256US.

CIRCLE NO. 38 ON READER SERVICE CARD



Raw Tape

Type 1833T, 1800 ft., 5" reel\$7.05
Type 3633T, 3600 ft., 7" reel ...\$11.99

Long Recording (1-mil plastic base)
Provides 50% more recording time per reel; 1-mil cellulose acetate base; maximum economy for applications where high strength is not required.
Type 941, 900 ft., 5" reel\$3.45
Type 1841, 1800 ft., 7" reel\$6.00

Longer Recording (1-mil Mylar)
Made on 1-mil Mylar polyester film; provides 50% more recording time per reel; exceptional strength and durability plus longer storage life.
Type 261, 225 ft., 3" mailer\$1.15
Type 961, 900 ft., 5" reel\$3.60
Type 1861, 1800 ft., 7" reel\$6.20

Standard Recording (1.5-mil Mylar)
High-strength super-durable magnetic tape that meets the highest professional standards of performance; withstands extreme temperatures; virtually immune to humidity; gives maximum tape life under any conditions of use or storage.
Type 671, 600 ft., 5" reel\$2.80
Type 1271, 1200 ft., 7" reel\$4.40

Double Recording (.5-mil Mylar)
Made on .5-mil Mylar; twice as much recording time per reel as standard plastic-base tape; suitable for extended-play applications where tape tension is not excessive.
Type 1231, 1200 ft., 5" reel\$3.74
Type 2431, 2400 ft., 7" reel\$6.95

Standard Recording (plastic base)
Professional-quality recording tape; maximum fidelity, uniformity, frequency response and freedom from noise and distortion; 1.5 mil acetate.
Type 351, 300 ft., 4" reel\$2.05
Type 651, 600 ft., 5" reel\$2.55
Type 1251, 1200 ft., 7" reel\$3.90

Low-Noise Tape
Provides high signal-to-noise ratio and reduced hiss level; on 1.5-mil plastic base.
Type 1257, 1200 ft., 7" reel\$4.00

AUDIOTEX

Raw Tape Cassettes
30-703 30 minutes\$1.79
30-706 60 minutes\$2.39
30-709 90 minutes\$3.85
30-712 120 minutes\$4.49

8-Track Tape Cartridges
Polyester lubricated tape.
30-750 32 minutes\$4.49
30-752 64 minutes\$4.99

BASF

SP-52 Recording Tape
Polyvinyl chloride, "Luvitherm" base; tensilized; 1.5-mil. Recommended for standard play.
600 ft., 5" reel\$2.48
1200 ft., 7" reel\$3.75
1200 ft., 7" reel, three pack\$11.25

LP-35 Recording Tape
Polyvinyl chloride, "Luvitherm" base; tensilized 1-mil. Recommended for long play applications.
900 ft., 5" reel\$3.33
900 ft., 5" reel, library box\$9.99
1800 ft., 7" reel\$5.42
1800 ft., 7" reel, three pack\$16.26

DP-26 Recording Tape
Polyvinyl chloride, "Luvitherm" base; tensilized 3/4-mil. Recommended where double play is desirable.
300 ft., 3" reel\$1.47
300 ft., 3" reel, plastic mailer\$1.85
450 ft., 3 1/2" reel\$2.44
1200 ft., 5" reel\$4.90
1200 ft., 5" reel, three pack\$14.70
2400 ft., 7" reel\$7.80
2400 ft., 7" reel, three pack\$23.40
* "Luvitherm", an unplasticized polyvinyl chloride film, is used as a backing material. During production it is pre-stressed, giving the tape excellent mechanical properties.

TP-18 Recording Tape
Polyester base; tensilized, 1/2-mil Triple Play.
450 ft., 3" reel\$2.50
450 ft., 3" reel, plastic mailer\$2.90
600 ft., 3 1/2" reel\$2.94
1800 ft., 5" reel\$7.65
3600 ft., 7" reel\$11.76

LP-35LH Long-Play Tape
1-mil polyester base.
900 ft., 5" reel\$3.93
1800 ft., 7" reel\$6.85

DP-26LH Double-Play Tape
3/4-mil polyester base.
1200 ft., 5" reel\$5.60
2400 ft., 7" reel\$9.15

TP-18LH Triple-Play Tape
1/2-mil polyester base.
1800 ft., 5" reel\$8.73
3600 ft., 7" reel\$13.10

Cassette Cartridge Tape
Plastic swivel box (suitable for mailing).
C-30\$2.48
C-60\$2.77
C-90\$4.58
C-120\$5.22
Standard plastic box.
C-30\$2.48
C-60\$2.77
C-90\$4.58
C-120\$5.22

"Sound Loop 8" Cartridges
32 minutes\$2.39
64 minutes\$3.05
84 minutes\$3.72

IRISH

190 Series Home-Professional Tape
Standard 1 1/2-mil, acetate base, 1/4".
195-111 150' 3" reel\$0.65
195-121 300' 4" reel\$1.75
195-131 600' 5" reel\$1.95
195-151 1200' 7" reel\$3.15
Extra-length, 1-mil, acetate base, 1/4".
196-111 225' 3" reel\$0.80
196-121 450' 4" reel\$2.10
196-131 900' 5" reel\$2.50
196-151 1800' 7" reel\$4.25
Extra-length, 1-mil, polyester base, 1/4".
197-111 225' 3" reel\$0.95
197-121 450' 4" reel\$2.55
197-131 900' 5" reel\$2.85
197-151 1800' 7" reel\$4.95
Double-length, 1/4-mil, polyester tensilized base, 1/4".
198-111 300' 3" reel\$1.40
198-121 600' 4" reel\$3.75
198-131 1200' 5" reel\$4.50
198-151 2400' 7" reel\$7.95

200 Series Professional Tape
Standard 1 1/2-mil, acetate base, 1/4".
211-111 150' 3" reel\$0.80
211-131 600' 5" reel\$2.55
211-151 1200' 7" reel\$3.90
Extra-length, 1-mil, acetate base, 1/4".
221-111 225' 3" reel\$0.90
221-131 900' 5" reel\$3.35
221-151 1800' 7" reel\$5.95

Standard, 1 1/2-mil, polyester base, 1/4".
231-131 600' 5" reel\$2.75
231-151 1200' 7" reel\$4.25
Extra-length, 1-mil, polyester base, 1/4".
241-111 225' 3" reel\$1.10
241-131 900' 5" reel\$3.40
241-151 1800' 7" reel\$5.90
Double-length, 1/2-mil, polyester tensilized base, 1/4".
251-111 300' 3" reel\$1.75
251-131 1200' 5" reel\$5.45
251-151 2400' 7" reel\$9.50
0.5-mil, polyester tensilized base, 1/4".
261-131 1800' 5" reel\$6.95
261-151 3600' 7" reel\$11.95

270 Series Low-Noise, Wide-Range Tape

1 1/2-mil, acetate base, 1/4".
271-131 600' 5" reel\$2.65
271-151 1200' 7" reel\$4.00
1 1/2-mil, polyester base, 1/4".
273-131 600' 5" reel\$2.70
273-151 1200' 7" reel\$4.60
1-mil, polyester base, 1/4".
274-131 900' 5" reel\$3.85
274-151 1800' 7" reel\$6.65
"Tape-A-Letter" Self-Mailer
4275 275' 1-mil acetate, 3" reel \$1.25
4275M 225' 1-mil polyester 3" reel\$1.50
Cassettes in Mailer
261-C30 15 min/side\$2.20
261-C60 30 min/side\$2.50
261-C90 45 min/side\$3.95
261-C120 60 min/side\$4.95

RCA

RCA Red Seal
Acetate Base.
15A1 3" x 150' x 1.5 mil, all-purpose in cardboard mailer\$0.70
15A6 5" x 600' x 1.5 mil, all-purpose, standard play\$2.25
15A12 7" x 1200' x 1.5 mil, all-purpose, standard play\$3.50
Polyester Base.
15M6 5" x 600' x 1.5 mil, all-purpose, standard play\$2.65
15M12 7" x 1200' x 1.5 mil, all-purpose, standard play\$4.25
10M2 3" x 225' x 1.0 mil, long play, in cardboard mailer\$1.00
10M9 5" x 900' x 1.0 mil, all-purpose, long-play\$3.60
10M18 7" x 1800' x 1.0 mil, all-purpose, long-play\$6.20
STM3 3" x 300' x 0.5 mil, all-purpose, double-play\$1.60
STM12 5" x 1200' x 0.5 mil, all-purpose, double-play\$4.75
STM24 7" x 2400' x 0.5 mil, all-purpose, double-play\$8.75
Tapes in Plastic Mailers.
15A1PM 3" x 150' x 1.5 mil acetate\$0.90
10M2PM 3" x 225' x 1.0 mil polyester\$1.35
5TM3PM 3" x 300' x 0.5 mil polyester, tensilized\$1.85

Red Seal
5TM18TP 5" x 1800' x 0.5 mil, all-purpose, triple play\$7.40
5TM36TP 7" x 3600' x 0.5 mil, all-purpose, triple play\$11.99
Low Noise, Low Print.
15ALN12LT. 7" x 1200' x 1.5 mil acetate\$4.40
15MLN12LT. 7" x 1200' x 1.5 mil polyester\$5.10
10MLN18LT. 7" x 1200' x 1.0 mil extra-strength\$7.35

Red Seal Cassettes
In plastic album box.
C30 15 min/side\$2.30
C60 30 min/side\$2.75
C90 45 min/side\$4.05
C120 60 min/side\$5.50

Vibrant Cassettes

CV30 15 min/side\$1.39
 CV60 30 min/side\$1.69
 CV90 45 min/side\$2.49

8-Track Cartridges

8TR32 150' lubricated tape in cartridge
 (32 min)\$2.45
 8TR64 300' lubricated tape in cartridge
 (64 min)\$2.95

Cassette Head Cleaner Tape

10R121 Non-abrasive cassette head
 cleaner in plastic box\$2.00

SCOTCH

Cassettes

Features "Dynarange" tapes designed specifically for low-speed, high-fidelity recording. In 1/2, 1, 1 1/2 & 2 hour recording time.

S-C-30 (mailer package)\$2.40
 S-C-60 (mailer package)\$2.75
 S-C-90 (mailer package)\$4.05
 S-C-120 (album package)\$5.50

No. 102 "All-Purpose" Tape

For all general recording; suitable for long-term storage; on super-tough, weather-balanced 1 1/2-mil polyester backing.

102-1/4-600 600' 5"\$2.80
 102-1/4-1200 1200' 7"\$4.40

No. 111 "All-Purpose" Tape

For all general recording; 1 1/2-mil plastic backing.

111-1/4-150 150' 3"\$0.85
 111-1/4-300 300' 4"\$2.15
 111-1/4-600 600' 5"\$2.70
 111-1/4-1200 1200' 7"\$4.00

No. 120 "High-Output" Tape

Over 100% more output, greater dynamic range, and freedom from distortion on signal peaks. 1 1/2-mil plastic backing.

120-1/4-600 600' 5"\$2.70
 120-1/4-1200 1200' 7"\$4.00

No. 131 "Low-Print" Tape

Reduces print-through to a point below noise level of most professional machines; allows long-time storage. 1 1/2-mil plastic backing.

131-1/4-1200 1200' 7"\$4.55

No. 138 "Low-Print, Extra Strength" Tape

Same as No. 131 except on strong 1 1/2-mil polyester backing.

138-1/4-1200 1200' 7"\$5.25

No. 150 "Extra Length, Extra Strength" Tape

Designed to withstand temperature and humidity extremes; high potency oxide on 1-mil polyester backing.

150-1/4-900 900' 5"\$3.60
 150-1/4-1800 1800' 7"\$6.20

No. 190 "Extra Length" Tape

Provides as much recording time as 1 1/2 reels of standard tape; high potency oxide on 1-mil plastic backing.

190-1/4-900 900' 5"\$3.60
 190-1/4-1800 1800' 7"\$6.20

No. 200 "Double Length, Double Strength" Tape

As much playing time as two reels of standard tape; for recording opera, concerts, or conferences; high potency oxide on tensilized polyester backing.

200-1/4-1200 1200' 5"\$5.85
 200-1/4-2400 2400' 7"\$10.05

"Dynarange Tapes"

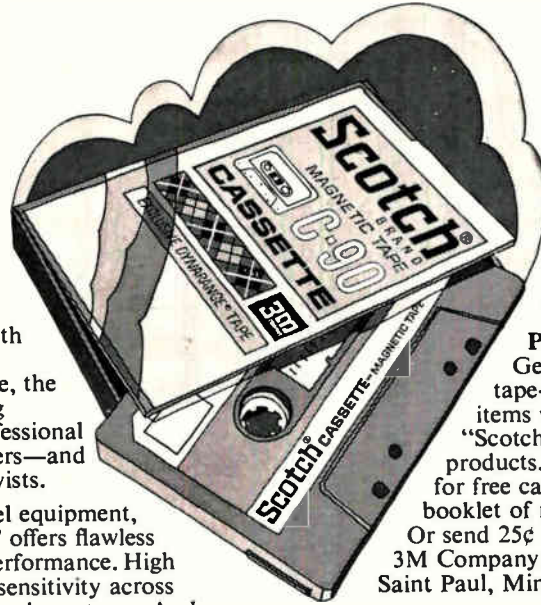
Although originally engineered for professional use, these tapes are now available for home recording. Provides high-fidelity recording even at 3 3/4 ips.

201 1 1/2-mil plastic

1971 EDITION

"Scotch" Brand, the professional recording tape.

In disguise.



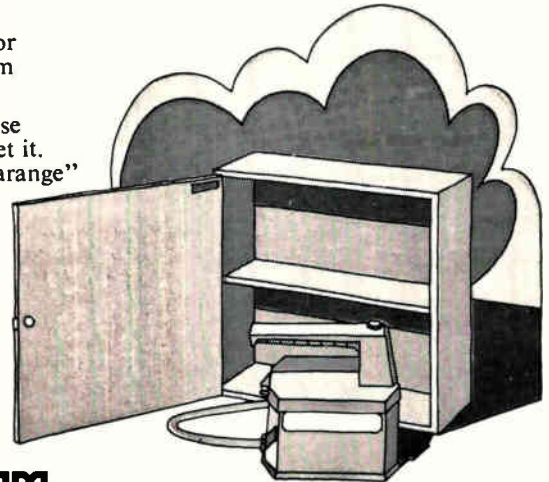
This innocent-looking little cassette is no teenybopper's toy. It's loaded with "Dynarange" recording tape, the overwhelming choice of professional sound engineers—and serious hobbyists.

On reel-to-reel equipment, "Dynarange" offers flawless full-fidelity performance. High S/N, superb sensitivity across the whole sound spectrum. And this tough polyester tape has permanent silicone lubrication for maximum tape life plus minimum head wear.

Yet cassette systems need all these qualities even more. And they get it. With the same dependable "Dynarange" tape in cassettes carefully engineered for smooth, jam-free performance. "Scotch" Brand Cassettes deliver the highest possible fidelity at cassette speed.

There's the same quality combination in "Scotch" Brand 8-Track Cartridges, too.

Professional savings: Get up to 40% off on tape-related premium items with tabs from "Scotch" Magnetic Tape products. Ask your dealer for free catalog, plus helpful booklet of recording tips. Or send 25¢ in coin to: 3M Company, P.O. Box 3146, Saint Paul, Minn. 55101.



Magnetic Products Division **3M** COMPANY

"SCOTCH", "DYNARANGE" AND PLAID DESIGN ARE REGISTERED TRADEMARKS OF 3M CO.

**Cooperate With the Zip Code
 Program of the Post Office
 Department—**

USE ZIP CODE IN ALL ADDRESSES

6

Raw Tape

201-1/4-600 600' 5"	\$2.80
201-1/4-1200 1200' 7"	\$4.10
202 1 1/2-mil polyester	
202-1/4-600 600' 5"	\$2.85
202-1/4-1200 1200' 7"	\$4.75
203 1-mil polyester	
203-1/4-900 900' 5"	\$4.05
203-1/4-1800 1800' 7"	\$6.85

No. 282 "Sandwich" Tape

Micro-thin protective plastic shield over oxide coating to eliminate oxide rub off and increase wear up to 30 times; weather-proof 1 1/2-mil polyester backing.

282-1/4-600 600' 5"	\$2.50
282-1/4-1200 1200' 7"	\$3.85

No. 290 "Triple Length" Tape

1/2-mil tensilized polyester backing.

290-1/4-1800 1800' 5"	\$7.40
290-1/4-3600 3600' 7"	\$11.99

"Living Letters" Tape

111-1/4-150-LL 150' 3"	\$1.05
200-1/4-300-LL 300' 3"	\$2.05

8-Track Cartridges

S-8TR-40 40 min.	\$2.95
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S-8TR-80 80 min.	\$3.40
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SONY/SUPERSCOPE

Professional Recording Tape

Extra-heavy formula Oxi-coat homogenized oxide coating. Polyester back, "lubri-cushion" impregnated lubricant.

PR-200-24; 2400' 7" reel	\$7.75
PR-150-18; 1800' 7" reel	\$4.69
PR-200-12; 1250' 5" reel	\$4.69
PR-150-9; 900' 5" reel	\$2.99
PR-150-3; 300' 3 3/4" reel	\$1.35
PR-300-6; 600' 3 3/4" reel	\$2.45
SLH-180-18; 1800' 7" reel	\$6.50

Tape Cassettes

For use with Models 50, 100, 124, 124CS, 125 and 130.

C-60 60 minutes of recording	\$1.89
C-90 90 minutes of recording	\$2.19
C-120 120 minutes of recording	\$3.29

8-Track Cartridge

8T-60 60 minutes of recording	\$4.29
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Empty Tape Reels

Computer-styled tape reels, with box.

7"	\$1.00
5"	\$0.60
3 1/2"	\$0.40

SOUNDCRAFT

"Standard" Tape

1.5-mil acetate base; professional quality; economy priced.

S-6 600 ft., 5" reel	\$2.10
S-12 1200 ft., 7" reel	\$3.50

"Standard-50" Tape

Long-play version of "Standard" tape on 1-mil acetate base.

S5-9 900 ft., 5" reel	\$3.29
S5-18 1800 ft., 7" reel	\$5.17

"Lifetime" Tape

For use where utmost strength and quality are necessary; 1.5-mil polyester base.

L-6 600 ft., 5" reel	\$2.65
L-12 1200 ft., 7" reel	\$4.25

"Plus-50" Tape

Made on 1-mil polyester for 50% more playing time than standard 1.5-mil tapes; combines long play with great tape strength.

PL-9 900 ft., 5" reel	\$3.40
PL-18 1800 ft., 7" reel	\$5.80

"Triple-Play" Tape

.5-mil polyester base

TP-18 1800 ft., 5" reel	\$5.10
TP-36 3600 ft., 7" reel	\$10.00

"Golden Tone" Tape

High quality special tape; 25% more high-frequency output & 7 dB better signal-to-noise ratio; 7" reel.

GTA-12 1.5-mil acetate base, 1200'	\$4.25
GTM-18 1-mil polyester base, 1800'	\$6.95

Cassette Tape Cartridges

C-60	\$2.95
C-90	\$3.95

TDK

"Super Dynamic" Cassettes

Employs new type of ferric oxide for wide dynamic range, low noise, distortion-free output. 30-20,000 Hz response; polyester-base tape packaged in plastic box.

C-30SD 30 minutes	\$2.19
C-60SD 60 minutes	\$2.99
C-90SD 90 minutes	\$3.59
C-12 120 minutes	\$3.99

Deluxe Cassettes

For all general recording, packaged in plastic box.

C-30P 30 minutes	\$1.40
C-60P 60 minutes	\$1.75
C-90P 90 minutes	\$2.35

Premium Cassettes

For all general recording, packaged in mailer cartons.

C-30F 30 minutes	\$1.30
C-60B 60 minutes	\$1.65
C-90B 90 minutes	\$2.25

No. 150 "Super Dynamic" Tape

Employs new type of ferric oxide for wide dynamic range, low noise & distortion-free output.

150-7SD 1800 ft., 7" reel	\$5.49
150H-7 SD 1200 ft., 7" reel	\$3.99

6

Cartridge Tape Machines

ADVENT

200 Cassette Tape Recorder Deck

Features stereo design that combines Dolby noise reduction system with a rec-



ord/play cassette system. Effective reduction in hiss level is +10 dB. 14 3/4" x 10 5/8" d. x 3 3/4"

.....\$250.00

AIWA

TP-1009 Cassette Tape Deck

Stereo, 117 V a.c. design; response 50-10,000 Hz; has preamps only for record



& playback; pause control; 1 V output each channel: two vu meters; a.c. bias & erase. 11" x 10" x 3 3/4"

.....\$119.95

ALLIED

1125 Stereo Cassette Recorder Deck

Response 10-12,000 Hz; flutter & wow 0.35% r.m.s. Has a.c. bias & erase; 2 re-



cord level meters & pause control.

.....\$129.95

1188 8-Track Stereo Cartridge Recorder Deck

Response 30-15,000 Hz; flutter & wow 0.2% r.m.s. Has a.c. bias & erase; dual mic & aux. inputs, headphone & 1 V line outputs; 117 V a.c. 60-Hz operation. Dual record-level meters. 4 1/8" x 15 1/4" x 9 3/4". With walnut case

.....\$159.95

AMPEX

Micro 52 Cassette Stereo Deck

Features play/record; mic & line input mixing; automatic level control. Dual vu meters; response 40-12,000 Hz; S/N ratio 45 dB; wow & flutter 0.25% r.m.s. 16 1/4" x 10 1/4" h. x 5 3/4" d. With 2 dynamic mics & walnut cabinet

.....\$169.95

STEREO HI-FI DIRECTORY

Use Your Copy of This Directory As a Reference
for Technical Details and Prices

Micro 54 Cassette Stereo Deck

Features play/record; provides pre-set record level; two vu meters; automatic end-of-tape shut-off. Response 40-12,000 Hz; S/N ratio 45 dB; wow & flutter 0.25%. Has mic & line inputs. 16 1/2" x 4 3/4" x 11 1/4". With 1 mic & walnut cabinet\$159.95

Micro 70 Portable Cassette Stereo Recorder

Features two-way power: 117 V a.c. or 5 "D" cells; automatic recharge circuits; automatic record-level control; vu meters with battery condition indicator; end-of-tape alarm. Has built-in 5" speakers and is supplied with 2 remote speaker systems (each with 6" x 4" speaker); any combination of the 3 speakers will work. Has mic & line inputs. 3" x 7" x 12". Speaker cab. 9" x 6 1/2" x 4". With 1 remote-control mic and leatherette case which can hold main unit & both speakers\$189.95

Micro 88 Portable Cassette Stereo Recorder

Features luggage-style case with 2 slide-on speaker systems. Records stereo from mic or line inputs. Will play stereo. Has vu meter & is supplied with 2 dynamic mics. Over-all size with speakers 16" x 7 3/4" x 14 3/8" h. Recorder measures 16" w. x 14 3/8" x 4 1/8" h. Speakers measure 12 3/4" x 4 3/8" d. x 8" h. 117 V a.c. operation\$179.95

Micro 40 Auto Cassette Stereo Player

5 W/ch dynamic (EIA) power (speakers not included). Response 40-12,000 Hz; features Staar system slot load; automatic shut-off; 12 V d.c. operation; 8 ohm outputs. 9 3/8" w. x 9" d. x 4 1/8"\$119.95

Micro 42 Same as 40 except can record mono. Supplied with remote-control mic.\$139.95

Micro 44 Same as Model 40 except has a stereo FM tuner. Sensitivity 5 μV (IHF).\$199.95

Micro 87 Cassette Recorder

Stereo design; response 40-12,000 Hz; 12 1/2 W/ch dynamic power (EIA). Has



mag. phono & line inputs and ext. speaker, line & earphone outputs. Supplied with 2 mics & 2 separately housed speaker systems, each with 6" x 9" dual-cone speaker. 16 1/4" x 10 1/4" x 5 3/4" d. Speaker case size 13 3/8" x 10 1/4" x 6 3/4" d. \$219.95
Micro 87R. Same as 87 except includes AM-FM stereo tuner\$299.95

Micro 90 Automatic Cassette Player

Stacks up to 6 cassette tapes for automatic play—up to 6 hours non-stop. Features stereo & mono playback. Has preamp outputs. 15 1/4" x 9 1/4" x 4 3/8" h. ...\$149.95



1971 EDITION

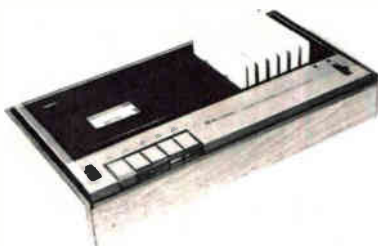
Micro 95 Automatic Cassette Recorder

Same as Micro 90 except has stereo record feature & is supplied with 2 mics & 2 separately housed 6" x 9" speaker systems. Speaker cab. size 14 1/4" x 7 1/4" d. x 9". Has mic & line inputs; line & speaker outputs.\$299.95
Micro 95D Same as Model 95 except without speaker systems\$229.95

BELL & HOWELL

3100 Cassette Play/Record Deck

Stereo design; over-all response 40-12,000 Hz; wow & flutter 0.25%. Has mic



& aux. inputs & 1 V line output. 8 1/8" x 15 1/4" x 4"\$99.95

3400 AM-FM/Cassette System

Features an AM-FM stereo receiver with



10 W/ch dynamic (5 W/ch r.m.s.) power (IHF) amplifier, record/play stereo cassette transport, two separately housed speaker systems, each with 6" speaker (cab. size 13" x 9 1/4" x 8 1/2"). Recorder response 100-8000 Hz over-all. System has mic, ceramic phono, aux. inputs. FM sensitivity 4 μV (IHF). 4 1/2" x 18 3/4" x 12 1/4" d.\$239.95

3500 AM-FM/Cassette System

Combines an AM-FM stereo receiver similar to that in Model 3400, a 12 1/2



W/ch dynamic (IHF) power amplifier (5 W/ch r.m.s.), a built-in deluxe cassette play/record stereo deck & pair of separately housed speaker systems (ea. with 8" speaker). Cabinet size 13" x 9 1/4" x 8 1/2" d. Unit size 5 1/4" x 23" x 13". Walnut finish\$339.95

BOGEN

CRP Stereo Cassette Deck

Records & plays back; push-button con-

what does TDK stand for*...



TDK stands for cassettes with wider frequency response, low noise, low distortion and greater dynamic range—not to mention freedom from tape jamming and dropouts.

That's because TDK's SD Super Dynamic tapes are made with ultra-fine magnetic oxides—up to 8 times as many particles per inch of tape as ordinary cassettes—and because our cassettes are precision engineered for easier, smoother tape flow.

TDK SD tape is available in 30, 60 and 90 minute cassettes and is sold by all leading audio, music, department & camera stores.

You'll learn more about TDK's Super Dynamic Tape, and how to get the most from all cassettes in a free booklet you'll find at your TDK Dealer. Or write to:

TDK ELECTRONICS CORP.
23-73 48th Street,
Long Island City, N.Y. 11103

*TDK's initials stand for Tokyo Denki Kagaku, or Tokyo Electrical Engineering Company, recognized as a pioneer in ferric oxides for electronics.



World's leader in tape technology since 1932.

TDK ELECTRONICS CORP.
NEW YORK • LOS ANGELES • CHICAGO

CIRCLE NO. 53 ON READER SERVICE CARD

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Cartridge Tape Machines



trols; two vu meters; digital counter. Wow & flutter 0.25%. Housed in walnut with black & gold motif \$149.95

SP 8-Track Cartridge Deck

Plays back only. Has fine-tuning track adjust control. "Micro Balance", which



reduces noise and crosstalk. Housed in walnut with black & gold motif . . \$79.95

BSR McDONALD

RD-8S 8-Track Recorder Deck

Stereo record/play design: wow & flutter 0.3%; response 30-15,000 Hz; S/N ratio 40 dB. Has dual vu meters; mic & aux. mixing. 12 1/4" x 10 1/4" x 4 1/8". With walnut cabinet \$199.95

RS-28 AM-FM/8-Track Player

Features AM-FM stereo receiver with 10 W/ch dynamic (1HF) power, an 8-track playback cartridge machine, and two separately housed speaker systems. Walnut cabinet \$219.95

RTS-28 Same as RS-28 but includes separately assembled Model 210/X phono system \$279.45

RS-24 Same as RS-28 but with 8-track



record/play device \$259.95
RTS-24 Same as RTS-28 except with 8-track record/play device \$319.95

CLARICON

49-420 8-Track Cartridge Player

Stereo design with 10 W/ch dynamic (EIA) power; response 40-10,000 Hz \pm 3 dB. 8 1/4" x 8 1/2" x 5". With 2 speaker systems, each 12" x 7 1/2" x 8" d. Walnut cabinet \$99.95

49-150 8-Track Cartridge Player

Stereo design with 25 W/ch dynamic (EIA) power; response 30-25,000 Hz. Has provisions for other inputs. Does not

include speakers. Walnut cabinet . \$99.95

49-520 AM-FM/8-Track Cartridge Player

Stereo design with 10 W/ch dynamic (EIA) power; response 26-25,000 Hz. Has AM/stereo-FM tuner & two speaker systems, each 12" x 7 1/2" x 8" d. Music center 15" x 5" x 9". Walnut cabinet. \$149.95

36-840 AM-FM/8-Track Player

Stereo design with 45 W/ch dynamic (EIA) power; response 20-30,000 Hz.

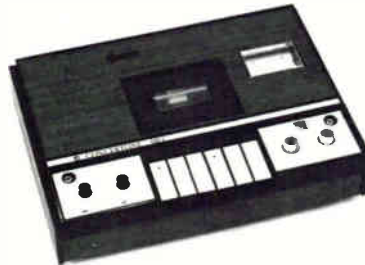


Has remote/main speaker facilities & mag., ceramic, aux., and tape inputs. Includes an AM/stereo-FM tuner & two speaker systems, each with 8" woofer, 3 1/2" tweeter. 15" x 10" x 7". Music center 15 3/4" x 11 1/8" x 5". Walnut cabinet. \$229.95

CONCERTONE

406-D Cassette Tape Deck/Preamp

Stereo, 4-track, 2-channel performance.



Response 150-8000 Hz \pm 5 dB. Walnut cabinet \$119.00

216-S Cassette Tape Recorder

Stereo design. Comes complete with pair of separately housed speaker systems,



mics & two signal earphones. Output 2 W/ch dynamic (EIA) power; 4" dynamic speakers. Response 100-10,000 Hz \pm 2 dB. Walnut cabinet \$175.95

CC-8-A 8-Track Tape Player

Features 8 W/ch dynamic (EIA) power; wow & flutter 0.4%; HD 1%. Response 50-8000 Hz \pm 1 dB. 117 V a.c. operation \$149.95



CONCORD

F-400 Cassette Stereo Recorder

117 V a.c. & six "C" cell operation with 4 W/ch power amps. Has auto level control 50-10,000 Hz response; built-in stereo speakers. Supplied with remote-control dynamic mic. 12 1/4" x 9 3/4" x 3 3/4". \$179.95
With optional SPS-2 detachable wrap-around external speaker systems . \$229.95

F-103 Cassette "Radiocorder"

Combines an AM & FM receiver with a cassette cartridge recorder: solid-state mono design; battery & a.c. operation, automatic shut-off in both play & fast wind/rewind modes; record level/battery condition meter; 1 1/8 ips; a.f.c.; telescoping antenna; with remote-control dynamic mic. 12" x 9 1/4" x 3 3/4" \$119.95

F-95 AM/Cassette Recorder

Mono design combining an AM radio & a cassette recorder. Features auto re-



ord/level control; dynamic mic with remote "on/off" control. Operates from 117 V a.c. or six "C" cells. 10 1/4" x 8 1/2" x 2 3/4" d. \$69.95

F-106 Cassette Tape Deck

Stereo recorder without power amps & speakers. Features pause control, head-



phone monitoring, dual bias selection for standard or super dynamic cassettes. Remote start/stop control; auto stop system; automatic end-of-reel indicator & separate channel record meters. Response 40-12,000 Hz; wow & flutter 0.2% r.m.s. Inputs for mic & aux. 10 1/2" x 10 1/4" x 3 1/2" h. Supplied with mic. \$149.95

CRAIG

2703 Cassette Recorder

117 V a.c. design. Has 1.75 W/ch stereo dynamic power amps. Supplied with 2 dynamic mics & a pair of speaker systems (each with 5" x 7" speaker). Main unit 14 1/4" x 3 3/4" x 9 1/4" d. Speaker cab. 7" x 10" x 6" d. Walnut \$189.95

3203 "Four-plus-Four" Player

Stereo 8-track & 1/2-hour, 4-track cartridge player. Output 3 W/ch dynamic power. Response 70-10,000 Hz. Supplied with two separate 6" speaker systems. 9 1/2" w. x 11 1/2" x 4 1/2". Main unit 9 1/2" x 4" x 11 1/2" d. \$144.95

2608 Portable Cassette Recorder

Stereo design; operates from 117 V a.c.

Hear Hear Hear

New 8 Track Cartridge Recorder

Hear the sound of "Solid State Profits." Exclusive Telex features that add up to big consumer demand... and MORE PROFITS for YOU.

Model 814S, 8 track stereo cartridge recorder/player with FET solid state AM-FM multiplex receiver, 100 watt integrated circuit stereo amplifier and two bookcase speakers.

Model 812S, 8 track stereo cartridge recorder/player with 100 watt stereo integrated circuit amplifier and two bookcase speakers.

All new models feature linear slide controls, pause control, ejector and record/play capacity up to 80 minutes. Add these to the profit packed 811R Telex record/play deck — the Telex success story that's still being written — you get a lot more "Hear" plus a lot more profit.

TELEX 814S AND 812S



New 4 Channel Stereo

Hear the sound of "Solid State Profits" in 4 channel stereo.

Telex offers the lowest priced 4 channel stereo tape deck. Four channel stereo spells sales and profit. Order and watch your in-store traffic build. When your customers ask — and they will — tell them about Quad/Sonic's 2 + 2 versatility — three motor, three-speed, and compatible with both four and two track stereo tapes.

The crowd gathering sound of Telex Quad/Sonic 2 + 2 will capture the imagination of all stereo buffs.

Quad/Sonic 2 + 2 equals sales and profits — THE Sound of the Seventies.

TELEX QUAD/SONIC 2 + 2



New Audiometric Stereo Headphones

Hear the sound of "Solid State Profits" with Studio I — THE major breakthrough in electro-acoustic design for the Seventies.

Studio I adds a new and exciting personal dimension to listening that took years of research to perfect. Outperforms all other headphones.

High performance audiometric drivers — four exclusive professional studio slide controls for volume and tone. Cyclocac[®] cups and new surgical silicone molded cushions and headband designed for maximum personal comfort. Styled in off-white and trimmed in black and burl walnut.

Studio I from Telex — styled for the Seventies, quality engineered for profits.

STUDIO I



You'll hear more from Telex

Write or Call Today!

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TELEX[®]

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Cartridge Tape Machines

or six "D" cells. Response 80-8000 Hz; 0.75 W/ch dynamic power (EIA). Has inputs for mic & aux and outputs for earphones & ext. 4-ohm speakers. Built-in 4" x 2" speakers with detachable case; automatic record-level control. With remote-control microphones\$139.95

2707 Stereo Cassette Recorder

Has automatic record-level control and includes two separately housed 4" speak-



er systems. Output 1½ W/ch dynamic (EIA); response 100-8000 Hz. Inputs for mic & aux. and outputs for 8-ohm speakers. 14¾" x 7¾" d. x 3¼". Speaker case size 7¾" x 8¾" x 3¼" d. With two mics\$169.95

2708 Cassette Recorder Deck

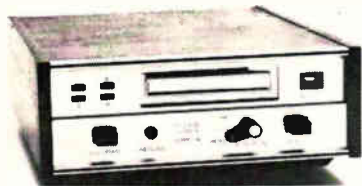
Same basic design as Model 2707 but different styling & supplied with line outputs without speakers 9" x 7¾" d. x 3¼"\$94.95

2804 Stereo Player Deck

Same as Model 2708 except does not have record facilities\$64.95

3302 8-Track Recorder Deck

Stereo design. Features automatic level control, a.c. bias, automatic stop after 1



or 4 programs or repeat. Response 50-10,000 Hz. Wow & flutter 0.25%. Has mic & two aux. inputs and line (0.8 V) outputs. 9½" x 4" x 11½" d. Walnut cabinet\$154.95

2705 AM/Stereo-FM System

Combines an AM-stereo FM receiver, a stereo cassette recorder, and two 4" x 6"



speaker systems. Response 50-10,000 Hz; 2½ W/ch dynamic power (EIA). Has mic & aux. inputs and 8-ohm speaker outputs. With two mics. 15¾" x 4½" x 10¼" d. Speaker case size 7" x 10" x 6" d.\$239.95

3205 8-Track Player System

Stereo design with two separately housed 5" speaker systems. Response 70-10,000 Hz; output 3½ W/ch dynamic power (EIA). 8¾" x 5" x 10½" d. Speaker case size 8¾" x 11" x 4½" d.\$119.95

3207 Same except deck only ...\$69.95

3206 AM-FM/8-Track System

Stereo playback design features an AM-stereo FM receiver, an 8-track stereo player, and two 5" speaker systems. Response 70-10,000 Hz; 3½ W/ch dynamic power (EIA). Has ceramic phono input & 8-ohm speaker outputs. 11¾" x 5" x 10½". Speaker case size 8¾" x 11" x 4½"\$199.95

2609 Cassette Radio/Recorder

Stereo design combining cassette recorder & an AM-FM radio; wow & flutter



0.35% r.m.s.; 1½ W/ch peak output; S/N ratio 40 dB; response 80-8000 Hz. Has a.c. bias & erase, automatic level control, two 4" speakers & will operate from 6 "D" cells or 120 V a.c. Supplied with 2 mics. 12¼" w. x 6¾" x 8¾" h. ...\$189.95

3303 8-Track Recorder/Radio

Stereo design combining AM-FM radio, an 8-track cartridge player/recorder, and



pair of speaker systems. Features 120 V a.c. operation; automatic level control; a.c. bias & erase; two 6" speakers; wow & flutter 0.25% r.m.s.; output 6 W/ch peak; S/N ratio 40 dB; response 50-10,000 Hz. Has 2 mic & phono inputs. 19" x 10½" x 4¾" h. Speaker cabinets 9½" w. x 5¾" d. x 9¼" h. Supplied with 2 mics ...\$249.95

DENON

TRC-798 Cassette Changer Deck/Preamp

Stereo design will play 12 cassette tapes automatically. Also features stereo rec-



ord; end-of-play shut-off; wow & flutter 0.2%; output 0.6 V at 1000 Hz & 0 dB. Response 50-10,000 Hz. With cabinet. 13½" x 8½" x 6¾"\$249.95

ELECTROHOME

SC452 Cassette Recorder

Response 50-10,000 Hz ± 3 dB; flutter &



wow 0.3%. Features dual vu meters & digital counter\$159.50

FISHER

RC-70 Stereo Cassette Tape Deck

Frequency response 30-12,000 Hz; S/N ratio 43 dB; wow & flutter 0.25% r.m.s.;



dual vu meters; dual record level controls; all push-button operation; two dynamic microphones with "on-off" sw. 5¼" x 2¾" x 11¾"\$149.95
12-UW Walnut base\$9.95

RC-80 Dolby Stereo Cassette Deck

Frequency response 30-12,000 Hz; S/N ratio 50 dB; Dolby noise reduction sys-



tem; wow & flutter 0.2% r.m.s.; dual vu meters; dual sliding record-level controls, all push-button operation; two dynamic mics with "on-off" sw. 10½" x 2¾" x 11¾"\$199.95
15-UW Walnut base\$9.95

GENERAL ELECTRIC

TA755 Cassette Recorder Deck

Features stereo record/playback; pause control; record level meter. Supplied with two dynamic mics & walnut cabinet. 8¼" x 3¾" x 13¾" d. Price range\$119.95-\$139.95

M8630 AM-FM/8-Track Cartridge Player

Features conventional 8-track stereo cartridge system, an AM-FM stereo receiver



with 9 W/ch (EIA) dynamic power amplifier & two speaker enclosures each with 5" x 7" speaker. Cabinets are closed-box design. Walnut finish \$179.98

GRUNDIG

SCR-100 AM-FM/ Cassette Recorder
Combines AM/stereo-FM receiver, a cassette record/play assembly & pair of



matching speaker systems. Has dual vu meters; automatic monitoring. Includes microphones. Walnut finish. 16 1/4" x 18" x 5 1/2"\$269.95

SCR-500 AM-FM/ Cassette Recorder
Features a stereo-FM/AM receiver, a cassette record/play assembly & pair of



speaker systems. Has tape & phono inputs & 37 1/2 W/ch dynamic (EIA) power. With two mics. 22" x 12" x 5 1/2" \$495.00

HAMMOND

950 Cassette Recorder
Designed for auto or marine use. Features mono record & stereo playback.



Has 4 W/ch music power (EIA). Supplied with dynamic mic\$99.95

930 Modular "Add-A-Sound"
Basically an 8-track stereo tape player for auto or marine use. Unit serves as an am-



1971 EDITION

plifier for "slave" radios including a stereo-FM radio and an AM-FM radio. Power output is 5 W/ch music power (EIA). Slave units are attached to amplifier with two machine screws.

Amplifier\$79.95
Slave units\$59.95

952 Stereo Cassette Player
Features 4 W/ch music power (EIA) and has fast-forward/rewind with stop at ei-



ther end of tape. For auto & marine applications\$89.95

HARMAN-KARDON

CAD-4 Cassette Tape Deck/Preamp
Solid-state stereo design for record & playback; 1 1/8 ips; HD 1.5%; response 30-

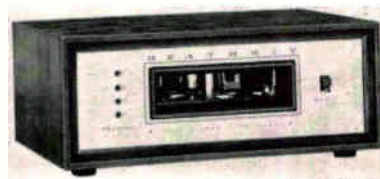


12,500 Hz ± 2 dB; a.c. bias; sensitivity: high level 200 mV, low level 0.2 mV; output 0.8 V r.m.s. Has two vu meters; mono/stereo mic sw. & two mic inputs. Walnut\$159.50

CAD-5 Cassette Recorder
Tape cassette deck with Dolby noise reduction system; records and plays back; response 30-12,500 Hz ± 2 dB; HD 1%; wow & flutter 0.15%. Dual meters for record & two sliding pots for record level. Mono/stereo mic inputs. Adjustments for bias & new chromium-oxide tape\$229.95

HEATH

GD-28 8-Track Stereo Player
Playback only with solid-state preamps; to be used with any music system. Fully



automatic with track selector feasibility. 3 3/4 ips; output 300 mV; HD 3%; response 50-10,000 Hz ± 6 dB. 10 3/8" x 4 1/2" x 8 3/4" d. Simulated walnut case. Kit\$59.95

HITACHI

KP-1100E FM Tuner Pack
Converts any 8-track tape player into an FM-stereo radio. Fits into player in place of cartridge & magnetically couples tuner output to tape player. For use with any pos.- or neg.-car batteries. 4" x 7/8" x 5 1/16"\$49.95

CS-1100E 4- & 8-Track Car Player
Stereo design will play 4- & 8-track cartridge tapes; 12 V negative-ground operation. Response 50-10,000 Hz; wow & flutter 0.3%. 5 1/4" x 2 3/8" x 6 3/8" ..\$79.95

TPQ-115 8-Track Player
Has separately housed speaker systems; 117 V a.c. operation. 16" x 11 1/2" x 16 3/8" d.\$129.95

TRQ-242 Cassette Tape Deck
Features stereo record & playback: re-



sponse 40-12,000 Hz; S/N ratio 45 dB. Has mic input\$99.55

JVC

1624 Stereo Cassette Deck
Will play & record 4-track stereo or 2-track mono. Has pause control & head-



phone monitoring. Has line outputs. 3 1/2" x 8 3/8" x 11" d.\$159.95

1100 8-Track Deck
Playback only with line inputs. Features automatic operation & program indicator lights. 3 3/8" x 6 3/4" x 9 3/8" d.\$59.95

1250 8-Track Deck
Stereo record/playback design. Features repeat program play. Has program indicator lights\$169.95

9450 AM-FM/Cassette Recorder
Stereo design containing an AM-FM stereo receiver with 10 W/ch dynamic power (EIA), a 4-track stereo cassette recorder & a pair of separately housed speaker systems (each with 6 1/2" woofer & 2" tweeter). 16 3/4" x 5 1/2" x 13" d. Speaker cabinet size 8 3/4" x 15" x 6" d.\$269.95

1250 8-Track Record/Play Deck
Stereo design with dual level record meters; channel indicator lights; automatic



program changer. Response 30-15,000 Hz; wow & flutter 0.2%; has a.c. bias & erase. 4 1/8" x 15 1/4" x 9 3/4" d. With walnut cabinet, less mics\$169.95

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Cartridge Tape Machines



1660 Cassette Record/Play Deck
Stereo design with dual vu meters; response 30-15,000 Hz; wow & flutter 0.25%; has a.c. bias & erase; 3-digit tape counter. 3 1/2" h. x 11 1/4" x 9" d. . \$139.95

1310 8-Track Stereo Car Player
6 W/ch output; response 50-10,000 Hz; wow & flutter 0.2%. 3" x 8 1/8" x 6 1/2" d. Optional stereo speakers available \$89.95

KENWOOD

KX-7010 Cassette Recorder Deck
Features stereo record/playback; pause control; h.f. filter; dual vu meters; 3 digit



counter. Response 40-10,000 Hz; S/N ratio 45 dB; wow & flutter 0.2%. Has mic/line inputs; h.f. filter (-6 dB at 10,000 Hz). 10 1/2" x 9" d. x 4". With walnut base . . . \$149.95

LAFAYETTE

RK-510 Cassette Stereo Recorder
4-track record/playback with 5 W/ch (EIA) power amps. Features vu meters, inputs for mics, tuners, ceramic phono; has preamp & 8-ohm speaker outputs. Response 30-12,000 Hz; wow & flutter 0.2%; with mics, less speakers. 14 3/8" w. x 8 1/2" x 4 1/2" h. . . . \$149.95

RK-760 Cassette Deck/Preamp
Stereo design; 4-track record/playback with preamps. Features vu meters, tape



counter, multiple inputs and outputs. Response 45-12,000 Hz; wow & flutter 0.3%. 8 3/4" w. x 12 3/8" d. x 5" . . . \$99.95

"Profile 80" AM-FM/8-Track Player
Stereo design with AM-FM stereo receiver and 8-track stereo cartridge player. Inputs for record changer with ceramic cartridge or external cassette deck. Main/remote speaker outputs; output 9 W/ch dynamic power, FM sensitivity (IHF) 5 μV. Includes walnut metal enclosure. Less speakers . . . \$139.95



LR-818 AM-FM/8-Track Player
Has two 8" air-suspension speakers; AM-FM stereo receiver; 8-track stereo player. Features a.f.c.; phono or tape inputs; tape outputs; front-panel stereo headphone jacks; volume/tone/balance controls; balanced AM and FM antennas . . . \$119.95

LR-890 8-Track Recorder Deck
Stereo record/playback design. Features "Remove Tape" indicator light; fast-forward; two mic inputs; 2 aux. inputs; a.c. erasing system. Response 30-12,000 Hz; wow & flutter 0.3%; dual level meter; dual mic & input level control; sound-with-sound. 12" x 3 3/4" x 9 1/8" . . \$119.95



RK-850 8-Track Stereo Player
8 W/ch (IHF) dynamic; "Remove Tape" indicator; 8-track stereo playback; illuminated track indicator lights; push-button track selector. Inputs: phono, tuner, aux.; tape outputs. Response 30-10,000 Hz; S/N ratio 50 dB; wow & flutter 0.3% r.m.s. HD 0.2%. Simulated walnut-wood metal case. . . . \$79.95



RK-800 8-Track Stereo Playback Deck
Push-button track selector; individual illuminated track indicator lights; S/N 38 dB; wow & flutter 0.3%; 4-pole a.c. capacitor motor . . . \$59.95

LEAR JET

A-50 8-Track Stereo Player
Battery-operated 12 V d.c. negative-ground; output 4 W/ch dynamic (EIA);



wow & flutter 0.35%. Has cartridge dust cover; automatic & manual program selector. 7" w. x 6 1/2" x 3" h. . . . \$59.95

P-550 Portable 8-Track Player
Stereo design with detachable second speaker. Will operate from 117 V. 60 Hz,

batteries, or 12 V d.c. supply. 10 1/4" w. x 5 3/8" x 7 3/8" h. . . . \$79.95

A-110 8-Track Stereo Player
Similar to A-50 except has different styling & lighted program indicator. 6 1/4" w. x 7 3/4" x 3" h. . . . \$79.95



A-130 8-Track AM/Stereo-FM Player
Battery-operated design similar to Model



A-50 but has an AM/stereo-FM receiver. 8 1/4" x 7 1/4" d. x 3 3/4" . . . \$155.00

A-220 Deluxe 8-Track Stereo Player
Automotive design 12 V negative/positive ground; wow & flutter 0.3%; output 4



W/ch dynamic power. Features lighted program indicators; fine-tuning control; cartridge eject button; fast forward. 8" w. x 7 1/2" d. x 3 3/8" . . . \$99.95

A-230 8-Track/AM Player
Deluxe stereo design. Same as A-220 but includes an AM radio . . . \$119.95

A-240 8-Track FM Player
Deluxe stereo design. Same as A-220 but includes a stereo-FM radio . . . \$149.95

P-560 8-Track AM/FM Player
Portable stereo design. Same as P-550 except has AM-FM mono radio . . . \$99.95



A-250 8-Track AM/Stereo-FM Player
Deluxe design combining 8-track cartridge tape player and an AM-FM radio. 4 W/ch dynamic power; wow & flutter 0.3%; operates from 10-16 V d.c. negative-ground source. Has program indicator



tor lights; fast forward. 8½" w. x 8½" x 3¼"\$225.00

A-260 8-Track Stereo Recorder

Automatic design with 4 W/ch dynamic power. Will play/record in mono or



stereo. Has program indicator & record-level indicator. Supplied with low-imp. mic with built-in "on-off" switch. 7" w. x 6½" d. x 3"\$139.95

H-350 8-Track Recorder/Deck

Features stereo play/record design with fast-forward tape indexing; automatic



stops at track end in record mode; single & double track erase. Has walnut case & twin dynamic mics\$189.95

H-310 8-Track Cartridge Deck

For home use; will play through your existing home stereo system. Features auto-



matic or manual track change; 3¼ ips; lighted program indicator; output 0.5 V. 7⅞" w. x 9⅞" d. x 3¼"\$59.95

H-340 8-Track Cartridge Player

Basically same as H-330 except supplied



with matching twin speaker systems separately housed instead of being built-in\$129.95

H-360 8-Track Cartridge Recorder

Can record mono or stereo on all 8
1971 EDITION



tracks. Comes complete with 2 mics & matching speaker systems. Output 13 W/ch dynamic power (EIA). Walnut finish.\$289.95

H-330 8-Track Cartridge Player

Stereo design with built-in speakers; 6 W/ch dynamic power (EIA). Inputs for tuner or phono 0.1 V min., otherwise same as H-310\$99.95

H-410 8-Track Cartridge/AM-FM Player

Stereo design; automatic or manual tape program change; FM stereo indicator



light; 6 W/ch dynamic power (EIA). Supplied with two matching speaker systems\$219.95

H-460 8-Track Music System

Combines an 8-track cartridge player, an AM-FM stereo tuner, a four-speed auto-



matic record changer & 6 W/ch dynamic (EIA) power amplifier. Supplied with two matching speaker systems and dust cover.\$289.95

MERCURY

50-9008 Cassette Stereo Recorder

Supplied with separately housed bookshelf speakers. Response 80-10,000 Hz; output 1½ W/ch dynamic power (EIA); has vu meters & counter. 13½" x 9⅞" x 4". Speaker case size 10⅞" x 7½" x 5½". Supplied with two mics. Walnut finish.\$169.95

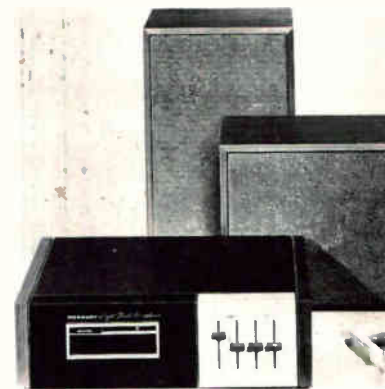


50-8008. Same as 50-9008 except deck only (without power amps & speakers)

.....\$129.95

PX201 8-Track Stereo Tape Player

Features automatic channel switching for continuous play or manual operation.



Has 4 channel indicator lights & 2 speaker systems, each with 5" speaker. 14" x 4⅞" x 9⅞" d. Speaker cab. size 9⅞" x 7⅞" x 6⅞" d. Walnut cabinet\$99.95

PX501 AM-FM/8-Track Player

Stereo design includes 2 speaker systems (12⅞" x 8" x 5½" d.) ea. with 5" speaker & an AM/stereo-FM receiver. 8-track stereo player has automatic switching for continuous play or manual operation. 18" x 4⅞" x 10" d. Walnut cabinet ..\$149.95

PX503 AM-FM/8-Track Player

Deluxe version of PX501. Has 6¼"



speakers in cab. 11¼" x 8⅞" x 6¼" d. Walnut finish. 22⅞" x 5¼" x 12⅞" d.\$179.95

PX505 AM-FM/8-Track Player

Similar in design to PX503. Has lever-type tone & volume controls. Speaker cabinet 12¼" x 8⅞" x 6¼"\$199.95

MIDLAND

12-154 Stereo Cassette Deck

117 V a.c. design; will record/play back 4-track stereo/mono. Does not have



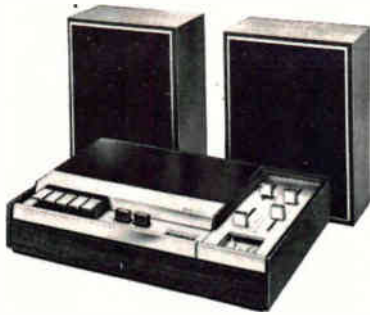
power amps or speakers. Has 4-pole hysteresis synchronous motor. Response 40-15,000 Hz; wow & flutter 0.1%. Walnut cabinet & mics. Size 13½" x 2⅞" x 9½"\$119.95

12-157 Cassette Recorder

117 V a.c. stereo design; will record/play back 4-track stereo/mono. 2½ W/ch dynamic power; response 40-15,000 Hz; wow & flutter 0.1%. Has 4-pole hysteresis

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Cartridge Tape Machines



synchronous motor. 13 1/2" x 9 1/2" x 2 7/8". Supplied with 2 mics & separately housed speaker systems, each with 4" x 6" speaker \$159.95

12-627 8-Track System

117 V a.c. stereo playback design; supplied with two separately housed speaker



systems, each with 5" speaker. 2 W/ch r.m.s.; 50-8000 Hz. 12 1/4" x 4 1/4" x 9 1/8". Speaker cab. size 9" x 6 1/8" x 5". Walnut cabinet \$119.95

12-630 8-Track Recorder Deck

117 V a.c. stereo design. Has preamp for record/playback. Response 30-12,000



Hz; line output 200 mV/ch; wow & flutter 0.3%. Has line, aux. and mag. phono inputs. With walnut cab. 16 5/8" x 6 5/8" x 8 7/8" \$199.95

12-632 8-Track Stereo Deck

Will record/play back 8-track cartridges. Response 30-10,000 Hz; wow & flutter



0.3%; 117 V a.c. design. Has mic & aux. inputs; sensitivity: 1.4 mV at 10 kohms for mic & 70 mV for aux. Walnut cabinet. 15 1/2" x 4 1/4" x 8 3/4" \$179.95

19-538 AM-FM/Cassette System

Stereo design combining an AM/stereo-FM receiver, a cassette stereo record/playback deck & separately housed speaker systems, each with 8" woofer & cone-type super tweeter. 20 W/ch dynamic (IHF) power (12 W/ch r.m.s.). Re-

sponse 25-30,000 Hz \pm 1.5 dB; input sensitivity: mag. phono 3 mV; aux. 200 mV. HD 1%; FM sensitivity 2 μ V. Cassette response 70-11,000 Hz. With walnut cabinet 19" x 12" x 3 3/4". Spkr. cab. size 9 3/4" x 13 1/8" x 6 1/8" \$295.00

MILOVAC

AC-303 8-Track Stereo Auto Player

Playback only; 5 W/ch (EIA) dynamic power; response 100-8000 Hz; 4 ohms:



11-16 V (negative ground) battery operated; wow & flutter 0.3%. 6 1/8" x 7 1/4" x 2 7/8" \$64.95
AC-302 Same size and performance as in AC-303. Has different styling \$59.95

AC-301 8-Track Stereo Auto Player

Playback only; features Staar system cartridge mechanism; 11-16 V (negative ground) battery operation; 6 W/ch dynamic (EIA) power \$79.95

SC-200 Cassette Stereo Record Deck

Features dual vu meters; digital counter; a.c. erase & bias; response 40-12,000 Hz.



Has mixing facilities for mic & line inputs & 500 mV line outputs. With walnut case & dynamic microphone. 3 1/2" x 7 3/8" x 10 3/4" d. \$99.95

SC-220 Cassette Stereo Recorder

Features dual vu meters; 2 matching walnut speaker systems with 6" dual-cone



speakers; a.c. bias & erase; 6 W/ch dynamic (EIA) power. Response 50-10,000 Hz. Has mic & line inputs. With two dynamic mics \$149.95

SC-240 Cassette Stereo Recorder

Features swing-out detachable speaker system with 5" speakers; a.c. bias & erase; battery operated (6 "D" cells) and 117 V a.c.; 1 1/2 W/ch dynamic (EIA) power output; response 60-10,000 Hz. Has mic & line inputs. With two dynamic



mics \$139.95

MONARCH

SAT-825X AM-FM/8-Track Player

Same basic design as SAT-180X AM-FM receiver but has 8-track stereo player.



18 1/2" x 4 3/4" x 10" \$276.00

HST-80 8-Track Stereo Player

Features 20 W/ch dynamic (EIA) power. Response 30-20,000 Hz \pm 0.5 dB. Input



sensitivity: mag. phono 5 mV; tape 1 mV & aux. 150 mV. Will play conventional 8-track cartridges. 15 1/4" x 8 1/2" x 4" \$178.80

MOTOROLA

All models are stereo designs with 7 1/2 W/ch (EIA) dynamic power into 8 ohms. Features stereo-FM indicator light & black glass dial scale.

SK106GW AM/FM/8-Track System

Combines AM/stereo-FM receiver & an 8-track stereo cartridge player; includes



same speaker systems as in SK104GW. 19 3/4" x 10" d. x 4 7/8" \$259.95

SK107GW AM/FM/Cassette Player/Recorder

Similar to Model SK106GW with two speakers but has cassette system instead of 8-track. Supplied with 2 microphones for stereo recording on cassette. 22 1/2" x 4 1/2" x 8 3/4" d. \$259.95

MUNTZ

Company has a rather complete line of automobile 4 & 8 track cartridge players ranging in price from \$29.95 to \$139.95. For details on these units, write direct to the manufacturer.

H-5500 4 & 8 Track Home Player

Self-contained stereo, solid-state cartridge player with built-in stereo speakers. Response 50-10,000 Hz; with output of 10 W/ch dynamic power (EIA).



..... \$109.95

HW-150 "Royale" 4 & 8 Track Player
Solid-state stereo design with integrated circuit. Fully automatic 4 & 8 track car-



tridge player with 30 W/ch dynamic power (EIA) amplifier \$139.95

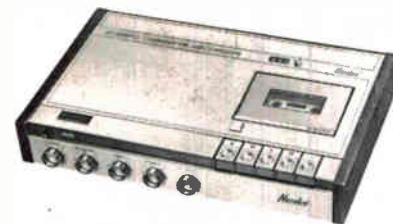
HW-512 4 & 8 Track Recorder
Features record/playback with integrated-circuit preamps; 50 W/ch dynamic



power (EIA); response 50-10,000 Hz \pm 3 dB; S/N ratio -49 dB (weighted). \$299.95

NORELCO

2400 Cassette Recorder
4-track stereo/2-track mono play & record. Response 60-10,000 Hz \pm 3 dB. Has



stereo mic & line input; output 4 W/ch r.m.s. 14" x 8 1/2" x 3". Supplied with 2-speaker systems each 10" w. x 13 3/4" x 7 3/8" d. Walnut finish. \$199.95
2400A Without speakers \$149.95

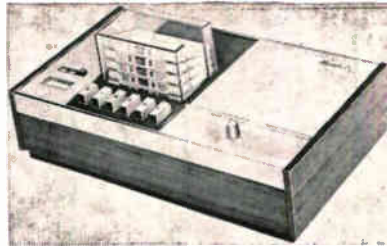
2401 Automatic Stereo Changer Record/Playback System
Twin walnut encased speakers; built-in cassette storage compartment; dynamic



stereo microphone; record level indicator; 60-10,000 Hz; 15 1/4" x 9 1/2" x 4 1/8" \$249.95
2401A In deck format, without speakers \$199.95

2502 Automatic Stereo Changer
Cassette-playback only; will handle 6 cassettes for up to 6 hours playing time.

1971 EDITION



Has preamps only; response 60-10,000 Hz \$129.95

2602 Car Cassette Player
Stereo design; playback only; has "on-off" indicator; pause control & cassette reject bar \$119.95

PANASONIC

RS820S AM-FM/8-Track System
Combines AM & FM stereo circuits with an 8-track stereo record/play cartridge system. 16 W/ch dynamic power (EIA). Supplied with separately housed 6 1/2" speaker systems. Has mic, phono & aux. inputs. With one mic. \$349.95

RS-252S AM-FM/Cassette System
Stereo design combining AM-FM stereo circuitry with a cassette stereo recorder



and separately housed 6 1/2" speaker systems; 10 W/ch dynamic power (EIA). Has mic, phono, aux. inputs. 18 1/2" x 4 1/2" x 12 3/8". With one mic. \$189.95

RS-256US Cassette Tape Deck
Stereo play/record design with preamps. Response 30-12,000 Hz. Has mic & aux.



inputs and line & headphone outputs. 10 7/16" x 3 3/4" x 10" \$109.95

RS-802US 8-Track Cartridge Deck
Stereo playback only with preamps. Has line outputs. 8-track, 2-channel, 3 3/4"-ips



operation. 8 1/4" x 4 1/4" x 9 1/4" \$59.95

PAX

50-8008 Cassette Recorder Deck
Has tape counter; dual vu meters; a.c. bias & erase. Response 80-10,000 Hz; S/N ratio 45 dB; wow & flutter 0.02%; output 0.5 V r.m.s. for 0 vu record level. 13 1/2" x 9 3/8" x 4". With two mics & walnut cabinet \$129.95

QATRON

48H Automatic Cartridge Changer
Stereo, 8-track design. Will play up to 12 8-track cartridges. Has four automatic



modes of operation: 1. play all channels of all tapes in sequence; 2. or 1st channel of all tapes, etc.; 3. or endless repeat of single tape; 4. or automatic selection of any tape and channel. Has inputs for tuner or phono. 7 1/2 W/ch dynamic power (EIA). Response 50-15,000 Hz \pm 3 dB. HD 1% at rated output \$329.95
Model 48A For automotive installation. Has remote control for dash while changer can be mounted in trunk \$329.95

REALISTIC

SCT-3 Cassette Tape Deck
4-track stereo cassette deck for record/playback; a.c. bias and erase systems. Has



mic and aux. inputs; output playback level above 500 mV; response 40-12,000 Hz. \$89.95

SCT-5 Cassette Tape Deck
Record/play with automatic shut-off & pause; a.c. erase & bias; switchable for low-noise and standard tape; mic & aux. inputs; variable output \$119.95

TR-8 8-Track Record/Play Deck
Stereo deck with fast-forward, automatic eject; concentric level controls; a.c. bias and erase; and lighted program indicator. \$159.95

ROBERTS

808D 8-Track Cartridge Record/Play Deck
Stereo design with 1 micron gap play head; response 50-15,000 Hz \pm 3 dB; wow & flutter 0.35% r.m.s. Input sensitivity: mic. 0.5 mV at 4700 ohms; line 50 mV. Line output -1.23V \pm 1 dB; does not

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Cartridge Tape Machines



have power amps or speakers. With walnut cabinet. 13½" x 9½" x 5½" . \$169.95

808 8-Track Cartridge Recorder

Basically same as 808D tape deck but has 10 W/ch dynamic power into 8 ohms; stereo amplifiers & 2 separately housed speaker systems ea. 9¾" x 13" x 4¾". \$229.95

SHARP

RD-423U Cassette Stereo Recorder Deck

Has end-of-tape audible signal; response 40-13,000 Hz; pause control; dual vu me-



ters. With two dynamic mics. 10½" x 3¾" x 10¾" d. Walnut cabinet \$109.95

STA-100 AM-FM/8-Track Cartridge Player

Stereo design with an AM-FM stereo tuner; a 10 W/ch (EIA) dynamic power



amp & conventional 8-track stereo cartridge player. Response 15-30,000 Hz. Has inputs for phono, tape recorder. 4¾" x 18¼" x 10¾" d. Is supplied with separately housed speaker systems (11¾" x 8¼" x 5¾" d.). Walnut cabinet . \$169.95

SONY/SUPERSCOPE

124 Cassette-Corder

A.c./d.c. rechargeable; with stereo outputs; built-in speaker; 2 W r.m.s. response 50-10,000 Hz; wow & flutter 0.28%; S/N ratio 45 dB; with carrying case and F-99S stereo mic \$169.50
124CS With two matching speakers & vinyl shoulder strap-type carrying case for all components \$199.50

TC-8 8-Track Record/Playback Deck

Solid-state stereo design for recording/playback @ 3¼ ips 8-track cartridges; re-



sponse 45-13,000 Hz; wow & flutter 0.17%. Has two low-impedance mic inputs; two high-level aux. inputs or mag. phono with RK-66 adapter (optional). \$135.00

125 Cassette-Corder Deck

Solid-state stereo design; a.c. powered; features "Tape Sentinel" end-of-cassette



alarm system, a light that blinks on and off as cassette nears end of each side; noise suppressor switch; response 50-10,000 Hz; wow & flutter 0.2%; S/N ratio 45 dB; walnut base \$129.50

TC-130 Cassette-Corder Console

System combining stereo cassette recorder; 7½ W/ch dynamic (EIA) power amp



& two matching speaker systems. Response 50-10,000 Hz; wow & flutter 0.2%. Has inputs for low-imp. mics & high-imp. line. Outputs for ext. speakers, line & earphones. Features auto record-level control, tape sentinel lamp, pause control, public-address capability. 13¾" x 13¾" x 9¾" \$199.50

122 Cassette Recorder Deck

Stereo design for record/playback featuring dual record level controls; head-



phone. & mic front-panel inputs. Walnut cabinet. \$94.95

127 Cassette Recorder Deck

Stereo design similar to Model 122 but deluxe version. Has pause control, straight-line graphic level controls & digital counter. Walnut cabinet \$139.95

20 Automobile Cassette Player

Features program search facilities; fast-forward & rewind; 4-track stereo; 6 W/ch



r.m.s. continuous output (9 W/ch (1HF); 12 V d.c. operation; response 50-10,000 Hz. Has outputs for two external speakers. 7¼" x 2¾" x 8¼" d. \$119.20

STANDARD RADIO

R-T390DK 8-Track Recorder/Deck

Two-channel stereo design with a.c. biasing & erase. Has stereo inputs for mic & aux. Wow & flutter 2%; r.m.s.; output 0.5 V; over-all response 100-10,000 Hz. Does not have power amps or speakers. 14" x 3¾" x 7¾". With walnut cabinet \$129.95

SR-T800P 8-Track Deck

Features 8-track, 4-channel playback only stereo operation; wow & flutter 0.3%; line output 100 mV. Response 50-10,000 Hz. Supplied with walnut cabinet \$79.95

SR-T178DK Cassette Recorder/Deck

Features 4-track, 2-channel stereo record/playback with a.c. bias & erase. Has



two vu recording level meters & 2 each mic & aux. inputs. Wow & flutter 0.2% r.m.s.; over-all response 30-15,000 Hz ± 1 dB. Sensitivity mic 0.1 mV/10,000 ohms; aux. 70 mV/100,000 ohms. Preamp output 0.775 V. Does not have power amps or speakers. 9" x 3¾" x 12¾". Walnut wood cabinet . . . \$169.95

TEAC

A-24 Stereo Cassette Deck

Features record/playback; dual vu meters; pause control. Response 40-12,000



Hz; S/N ratio 45 dB; wow & flutter 0.2% r.m.s. Input sensitivity: mic 0.3 mV (600 ohms); tuner & line 0.1 V. Output 0.3 V. Has automatic end-of-tape stop. 13³/₈" x 9⁵/₈" x 4³/₄"\$199.50

A-25 Stereo Cassette Recorder

Same as A-24 cassette deck but with 10 W/ch (IHF) dynamic power amps & two separately housed speaker systems. Also has mag. phono input (2 mV sensitivity). 13³/₈" x 9⁵/₈" d. x 4¹/₄". Spkr. cabinet size 9⁷/₈" x 7¹/₂" d. x 14¹/₂"\$279.50

TELEX

**Viking 811 Series
8-Track Recorders/Players**

Stereo design. Response 40-15,000 Hz; S/N ratio 50 dB; flutter & wow 0.3%. Automatic start when cartridge is inserted. Each unit measures 15" w. x 11" d. x 4¹/₂" h.

Model 811R. Record/playback design with built-in preamps (does not have



power amp). In record mode features automatic stop at end of single program or at end of tape; in playback mode features automatic stop at end of tape or continuous play. Walnut styling\$169.95

Model 811. Table top playback unit with built-in preamp. Push-button or automatic program selection with numerical indicator. Turns on automatically when cartridge is inserted. Walnut styling . \$99.95

Model 811A. Same as Model 811 but with 5 W/ch (IHF) dynamic power amplifiers (less speakers). Has stereo head-phone jack & speaker "on-off" sw. Includes push-button and automatic program selector. Walnut styling. . \$129.95

Model 811W. Same as Model 811A but includes two 5¹/₄" high-compliance



speaker systems. Walnut styling. Each speaker 11" x 3³/₄" d. x 7¹/₂" h. . \$159.95
Model 811P. Same as Model 811W except portable design. Speakers are detachable from tape case. Over-all size 15" w. x 11" d. x 8¹/₄" h.\$159.95

700 AM-FM/8-Track Player

Stereo design for playback only with separately housed speaker system; 12¹/₂ W/ch dynamic (EIA) power; has phono inputs. 20" x 6" x 9¹/₂" d. Speaker cabs. 9" x 10¹/₄" x 9" d. Walnut\$219.95

814-S AM-FM/8-Track System

Features 8-track stereo record & playback system; an AM-FM stereo receiver & pair of bookcase speaker systems. Has 25 W/ch (EIA) dynamic power amplifier; response 40-15,000 Hz; wow & flutter 0.3% r.m.s. Has auto/manual channel selector; phono, tape & mic inputs. 18" x 6" x 11" d. Speaker cases 8" x 12" x 7" d.\$349.95

1971 EDITION



Model 814 Less speakers\$309.95
Model 812S Includes speaker but without AM-FM tuner\$299.95
Model 812 Same as 812S less speakers.\$259.95

9144 8-Track Deck

Playback only with stereo preamps. Has automatic program selector. 7¹/₂" x 4¹/₂" x 10" d.\$64.95

9155 8-Track Cartridge Player

Features stereo design; 10 W/ch (EIA) dynamic output & 2 separately housed speaker system (each with 6" speaker). Has phono & aux. inputs. Walnut cabinets. 4¹/₄" x 9¹/₂" d. x 15¹/₄". Speaker cases are 11¹/₂" x 11¹/₂" x 5 d.\$139.95

VIVITAR

RC-710 Cassette Recorder Deck

Stereo design features automatic end-of-tape stop; response 50-10,000 Hz; wow &



flutter 0.28%. Has dual mic & aux. inputs; line output; dual record-level meters. 12¹/₈" x 4¹/₈" x 8¹/₄" d.\$119.95

RC-720 Stereo Cassette Recorder

Features automatic end-of-tape stop; record-level meters; 5 W/ch (EIA) dynamic



power; pause control; dual mic & aux. inputs. Response 50-10,000 Hz; wow & flutter 0.28%. 19¹/₄" x 15¹/₂" x 8³/₈" d. Supplied with two separately housed speaker systems, each 6¹/₂" speaker (8¹/₄" x 15¹/₂" x 8³/₈" d.) & with 2 dynamic mics\$199.95

RC-730 Same as RC-720 except has additional AM/FM-stereo tuner ..\$279.95

V-1 Cassette Stereo Recorder

Deluxe design with high-freq. record

bias; 1-micron gap magnetic head; automatic end-of-tape shut-off. Response 20-15,000 Hz; dual vu meters\$179.95

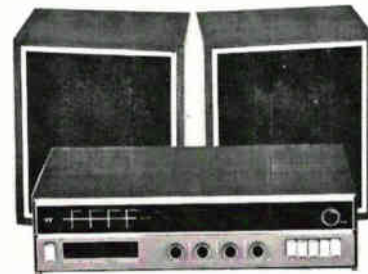
V-2 Cassette Stereo Recorder

Same as V-1 except includes Dolby noise-reduction system\$279.95

WEBCOR

WFX-155 AM-FM/8-Track System

Combines an AM/stereo-FM receiver, an 8-track cartridge player, and two sepa-



rately housed speaker systems. FM sensitivity 8 μV for 30 dB quieting; power output 5 W/ch dynamic power (EIA)\$199.95

WFX-154 Music System

Combines an AM/stereo-FM receiver, 10 W/ch dynamic (EIA) power amplifi-



er, a cassette playback/recorder, and separately housed 2-way stereo speaker system. Has record level indicator, blackout tuning dial, stereo indicator light. Records stereo directly from built-in receiver. 6¹/₂" woofers & 2¹/₂" tweeters are housed in 7¹/₂" x 10¹/₂" x 6" cabinet; main housing 15³/₈" x 4³/₄" x 9³/₈". Supplied in walnut with 2 dynamic mics\$199.95

4860 Stereo Cassette Recorder

Heavy-duty stereo cassette recorder; 4 W/ch dynamic (EIA) power; dual vu met-



ters; noise filter; pause control; end-of-tape sensing. Speaker package optional. Response 60-12,000 Hz ±3 dB; wow & flutter 0.25%; S/N ratio -46 dB; preamp output 0.5 V/ch; preamp input 25-50 mV; mic input 0.1 mV; low imp. 8¹/₈" x 13¹/₂" x 4¹/₈"\$239.95

4800 Same as Model 4860, less end-of-tape sensing & dust cover but with acoustic suspension speakers\$239.95

4750 Same as Model 4860 except deck version\$199.95

4700B Same as Model 4800 except deck version\$179.95



Wharfedale...ALL NEW FOR 1971

Achromatic and Variflex Speaker Systems... all with unitized construction... all built to take power



VARIFLEX® W80A

A NEW CONCEPT... ELIMINATES THE USUAL LIMITATIONS INVOLVING SPEAKER PLACEMENT

Two W80A Speaker Systems may be placed end to end as a console, or spaced at any distance from each other or from the wall, at almost any height between ceiling and floor, to project flawless stereophonic sound to all areas of the room. Decorator designed to add elegance to any setting.

- Speakers: All professional grade components. Woofer: Heavy duty 12½" with 9½ lb. magnet assembly; mid-range: 5" acoustically isolated; two different treble speakers: 3" domed for sub-treble; 1" domed for extra highs
- Controls: Individual for each treble; variplanular disc on a swivel mount to adjust sound projection
- Minimum power required: 20 watts (per channel) IHF
- System impedance: 4 to 8 ohms
- Dimensions: 28"x17¼"x17" deep (Two W80A's can be used for a single 56" console. Removable bumpers add 1" to height.)
- Shipping weight: 81 lbs.
- Finish: Oiled walnut
- Price: \$317.60. B-69 roll-out base for individual speaker, \$18.50. B-68 pedestal for use when two speakers are end to end in console arrangement, \$25.75.



ACHROMATIC W70E

VERSATILE HIGH AND LOW BOY DE LUXE 3-WAY SPEAKER SYSTEM WITH ACOUSTIC SUSPENSION

One of the industry's most popular and versatile floor-standing systems, a W70E combines the finest components to provide the ultimate in home stereo reproduction. Superbly styled, the versatile W70E can be used vertically or horizontally. Either way, it creates a decorative end table to complement any room setting.

- Speakers: Woofer: Long throw, heavy duty 15"; mid-range: Acoustically isolated 5"; tweeters: Omnidirectional 3"; 1" mylar dome tweeter with phase compensating diffuser
- Controls: Separate, continuously variable controls for mid and treble ranges
- Minimum power required: 15 watts (per channel) IHF
- System impedance: 8 ohms
- Dimensions: 24"x22¾"x13¾" deep
- Shipping weight: 72 lbs.
- Finish: Oiled walnut
- Price: \$223.00

ACHROMATIC W45 3-WAY SHELF SPEAKER SYSTEM WITH ACOUSTIC SUSPENSION



A new speaker system engineered specifically to meet today's challenging musical requirements. Truly an outstanding value. A multiple speaker assembly yielding a carefully tailored ultra-linear response.

- Speakers: Woofer: Heavy duty 8". Oversized voice coil and long-travel cone for extended bass; mid-range: Acoustically isolated 3¼"; tweeter: Ultra-curvilinear 2½" provides wide angle dispersion and smooth responses at high output levels
- Controls: Continuously variable mid-range and treble
- Minimum power required: 10 watts (per channel) IHF
- System impedance: 8 ohms
- Dimensions: 22"x12"x10" deep
- Shipping weight: 37 lbs.
- Finish: Oiled walnut
- Price: \$117.00



ACHROMATIC W60E

3-WAY SPEAKER SYSTEM WITH ACOUSTIC SUSPENSION FOR BOOKSHELF OR FLOOR LOCATION

The remarkable W60E is the new version of Wharfedale's most popular speaker system. New 3-way configuration and upgraded components, make the sound more impressive than ever before.

- Speakers: Woofer: Heavy duty 12½"; 9½ lb. magnet assembly, distortion-free bass; mid-range: Acoustically isolated 5"; super tweeter: 3" omnidirectional mylar dome and phase compensating diffuser for clean high response
- Controls: Individual and variable for mid-range and treble
- Minimum power required: 10 watts (per channel) IHF
- System impedance: 4 to 8 ohms
- Dimensions: 24"x15"x12" deep
- Shipping weight: 56 lbs.
- Finish: Oiled walnut
- Price: \$153.00

ACHROMATIC W25 2-WAY SPACE-SAVER SPEAKER SYSTEM WITH ACOUSTIC SUSPENSION



The remarkable performance of this small speaker system is even more amazing when you consider its compact size and modest cost. It is designed specifically to handle today's musical demands from percussive hard-rock to full symphonic material.

- Speakers: Woofer: High compliance 8" for base and mid-range; tweeter: Ultra-curvilinear 2½"
- Control: Variable treble
- Minimum power required: 10 watts (per channel) IHF
- System impedance: 8 ohms
- Dimensions: 15½"x10"x8" deep
- Shipping weight: 14 lbs.
- Finish: Oiled walnut
- Price: \$58.75

ACHROMATIC W35 3-WAY SHELF/CORNER SPEAKER SYSTEM WITH ACOUSTIC SUSPENSION



A new, highly versatile shape in speaker systems for today's special decorative needs. May be used free-standing on shelf or at shelf corners, or suspended in room corners with optional corner mounting bracket. Exceptionally robust and highly articulate performance results from the 3-way speaker configuration. Ideal for four-channel stereo application.

- Speakers: Woofer: Heavy duty 8". Low resonance, high compliance cone suspension for deep, faithful bass reproduction; mid-range: Acoustically isolated 3¼"; tweeter: 2½" ultra-curvilinear for undistorted wide-angle response
- Controls: Individual and variable mid-range and tweeter
- Minimum power required: 10 watts (per channel) IHF
- System impedance: 8 ohms
- Dimensions: 15"x15"x8" deep
- Shipping weight: 24 lbs.
- Finish: Oiled walnut
- Price: \$82.00. B-66 Mounting Bracket, \$4.00

WHARFEDALE, DIV. BRITISH INDUSTRIES CO., WESTBURY, N.Y. 11590

Prices and specifications subject to change without notice.

CIRCLE NO. 14 ON READER SERVICE CARD



Speakers & Cabinets



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ACOUSTIC RESEARCH

Model AR-2X Speaker System

Has 10" acoustic suspension woofer & a 2 1/2" cone tweeter. HD 2% down to 60



Hz (3% down to 50 Hz @ 10 W); dispersion 90°. Impedance 8 ohms. Use with amplifier 20 W/ch. or more. 24" x 11 1/2" d. x 13 1/2" h. Mahogany or birch\$96.00
Walnut or cherry\$102.00
Unfinished pine\$ 89.00

Model AR-2AX Speaker System

Same as Model 2X except a 3/4" dome-type super tweeter is added. Crossover



7500 Hz. Has level controls for midrange and super tweeters.
Mahogany or birch\$122.00
Walnut or cherry\$128.00
Unfinished pine\$109.00

Model AR-3

Acoustic suspension three-way system; usable range down to 30 Hz; one 12" woofer, one 2" and one 1 1/4" dome radiator for mid and high frequencies; built-in three-way crossover with level controls for mid and high ranges; 4 ohms impedance; less than 2% harmonic distortion



from 60 to 20,000 Hz at 20 watts input, less than 3% to 42 Hz; recommended amplifier power, at least 25 watts per stereo channel; 14" x 11 3/8" x 25"; 60 lbs; 3/4" hardwood veneer.

Mahogany or birch\$216.00
Walnut, oiled walnut, cherry ...\$225.00
Unfinished pine\$203.00

Model AR-4X Speaker System

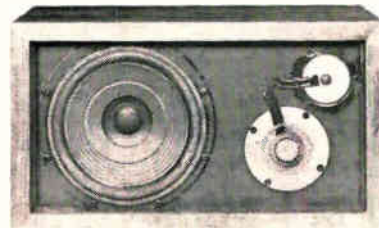
Two-way design. An 8" acoustic suspension woofer and a 2 1/2" direct-radiator



tweeter with level control. Crossover 1000 Hz, 8 ohms. For use with amplifiers of 15 W/ch or higher. 19" x 9" d. x 10".
Walnut\$63.00
Unfinished pine\$57.00
Unfinished birch\$63.00

AR-3A Speaker System

Features 3 drivers: a 12" bass unit in 1.7 cu foot sealed enclosure, a 1 1/4" hemi-



spherical mid-range radiator, and a 3/4" high-freq. hemispherical radiator. Output of smaller units is independently adjustable. Power output 25 W r.m.s./ch required to drive speakers. Will tolerate 11 W r.m.s. at any freq. indefinitely, 23 W for 30 sec. & 400 W for 2 sec. Glossy or oiled walnut, cherry, or oiled teak

.....\$250.00
Mahogany or birch\$240.00
Unfinished pine\$225.00
Factory conversion of AR-3\$90.00

AR-5 Speaker System

Has 10" acoustic suspension woofer, 1 1/2" midrange hemispherical dome, and 3/4" high-freq. hemispherical dome. Has separate midrange & high-freq. level controls. Recommended 20 W r.m.s. min. power; 8 ohms imp. Response 48 Hz to beyond 20,000 Hz ± 3 dB. Glossy or oiled walnut, cherry, or oiled teak\$175.00
Mahogany, birch\$168.00



Unfinished pine\$156.00

ACOUSTRON

LWE-11 Speaker System

Has two 15" woofers, two 6" midrange, 5" horn tweeter. Response 20-20,000 Hz



± 5 dB; capacity 100 W program material; 4 or 8 ohms. 24" x 34" x 16". \$469.00
Unfinished version\$330.00

LWE-1A Speaker System

Has 15" woofer, 6" midrange, 5" horn tweeter. Response 22-20,000 Hz ± 5 dB; capacity 50 W program material; 4 ohms imp. Has an inverse feedback circuit & low-freq. gain control. 17" x 25" x 12".
Oiled walnut\$270.00
Kit\$225.00

LWE-111 Speaker System

Has 12" woofer, 6" midrange, 3 1/2" tweeter. Response 25-17,000 Hz ± 5 dB; capacity 40 W program material; 4 ohms. 15" x 22 1/2" x 9 1/2". Oiled walnut \$180.00
Kit version\$130.00

LWE-VI Speaker System

Has 8" woofer, 3 1/2" tweeter; response 29-15,000 ± 5 dB; capacity 25 W program material; 8 ohms. 10" x 19" x 9".
Oiled walnut\$82.50
Kit version\$66.00

LWE-VII Speaker System

2-way design with 10" woofer & 3 1/2" tweeter; response 28-18,000 Hz ± 5 dB; 4 ohms; 35 W program capacity. 22 1/2" x 15" x 9 1/2". Walnut finish\$130.00
Kit\$105.00
Walnut bases available.



Speakers & Cabinets

ADC

Model 303AX Speaker System

Bookshelf design with 10" high-compliance woofer, with wide-dispersion, high-flux Mylar dome tweeter. Response 37-20,000 Hz ± 3 dB; power requirements 10 W min.; 8 ohms. 23 $\frac{3}{4}$ " x 13" x 11 $\frac{1}{4}$ ". Oiled walnut\$100.00

404 Speaker System

Two-way system using Audio Dynamics' wide-dispersion Mylar dome tweeter &



special 6" air-suspension type woofer. Response 45-20,000 Hz ± 3 dB; 8 ohms; 10 W min. power requirements. 11 $\frac{1}{8}$ " h. x 7 $\frac{1}{8}$ " w. x 8 $\frac{3}{8}$ ". Walnut finish ...\$55.00

400 "Brookfield" System

Three-way system using 10" high-compliance woofer, 5 $\frac{1}{4}$ " mid-range, and wide-dispersion Mylar dome tweeter; response 30-22,000 Hz ± 3 dB; 8 ohms & 10 W min. power requirements. Oiled Walnut. 25" x 14 $\frac{1}{2}$ " x 12 $\frac{5}{8}$ ". ...\$160.00

210 Speaker System

Two-way bookshelf design with 8" high-compliance woofer & 2 $\frac{1}{2}$ " cone tweeter. Response 40-20,000 Hz; 8 ohm imp. Walnut cabinet. 20" x 11" x 10" d.\$75.00

450 Speaker System

Three-way system using $\frac{3}{4}$ " Mylar dome tweeter; 1 $\frac{1}{2}$ " dome midrange, and 12" high-compliance woofer. Has treble & mid-range level controls. Response 25-30,000 Hz ± 3 dB; power requirement 10 W min.; 8 ohms. Oiled walnut. Removable grille for simple interchange of grille cloth. 25" x 14 $\frac{1}{2}$ " w. x 12 $\frac{5}{8}$ ". ...\$220.00

410 Speaker System

Two-way system using 1 $\frac{1}{2}$ " Mylar dome high-dispersion tweeter & 12" high-compliance woofer. Has three-position treble control switch. Response 35-20,000 Hz ± 3 dB; power requirement 10 W min.; 8 ohms. 25" x 14 $\frac{1}{2}$ " w. x 12 $\frac{5}{8}$ " d. . \$130.00

ADVENT

"The Advent" Loudspeaker

Two-way design; 8 ohms; with 10" acoustic-suspension woofer & a 2" phenolic-impregnated paper cone tweeter in an infinite cabinet. 25 $\frac{3}{8}$ " x 14 $\frac{1}{4}$ " x 11 $\frac{1}{2}$ ". Has high-freq. level control. Response 20-15,000 Hz ± 5 dB. Can be used with amp. having 20 to 120 W r.m.s./channel output. Walnut cabinet\$115.00 Walnut finish vinyl clad utility cabinet.\$102.00

AIR COUSTIC

PC-8 3-Way Speaker System

Bookshelf design. Features a pneumatic-

coupled speaker system that is claimed to use a unique design in which the woofer section moves three times as much air as a conventional 8" acoustic-suspension speaker: a special rectangular diaphragm, three times the area of an 8" speaker, is suspended in front of the woofer & is pneumatically coupled to the woofer cone. Has an 8" low-frequency, a 5" mid-range & a $\frac{7}{8}$ " dome tweeter. Response 40-15 000 Hz ± 4 dB; crossovers at 300 & 5000 Hz; 4 ohm imp.; max. power capacity 25 W r.m.s. (min. 15 W r.m.s.). 11" x 19" x 9" d. Oiled walnut ...\$99.00

PC-12 3-Way Speaker System

Features same pneumatic coupled speaker principle as described for Model PC-8 system. Has 12" woofer, an elliptical mid-range cone driver with a special 1" center dome radiator. Response 30-15,000 Hz ± 4 dB; 4 ohms; crossovers at 400 & 5000 Hz. Max. power capacity 35 W r.m.s. Recommended power 20 W r.m.s. 15 $\frac{1}{2}$ " w. x 27" h. x 13 $\frac{1}{2}$ ". Oiled walnut\$239.00

ALLIED

2325K 3-Way Speaker System

Has 12" woofer, 8" mid-range & 3 $\frac{1}{2}$ " cone-type tweeter. Response 35-18,000 Hz; 8 ohms. 50 W peak capacity. Bass-reflex bookshelf design. Includes h.f. level control. 24" x 14 $\frac{1}{2}$ " x 9 $\frac{3}{8}$ ". Supplied with finishing oil. 20B9766UKit \$59.95

2345 3-Way Speaker System

Floor model design with 12" woofer, 4" mid-range & 3 $\frac{1}{2}$ " cone-type tweeter; crossover at 5000 Hz mechanical & 1000 Hz electrically; capacity 70 W peak; 8 ohms. Supplied with oiled walnut matching base. 26 $\frac{1}{2}$ " x 16 $\frac{1}{2}$ " x 10 $\frac{1}{2}$ ". 20B9764U\$99.95

2373K 3-Way Speaker System

Bookshelf design with 12" woofer, a die-cast compression driver with diffraction horn as mid-range & a die-cast tweeter, also with diffraction horn. Has mid-range & h.f. level controls; 70 W peak capacity; 8 ohms. $\frac{3}{4}$ " walnut veneer. With finishing oil. 14" x 25" x 13 $\frac{1}{2}$ " d. 20B9757ZKit \$99.95 20B9749Z Factory finished & assembled.\$139.95

2395 3 Way Speaker System

Features 15" woofer, a die-cast horn-loaded compression type mid-range & a wide dispersion dome tweeter; crossovers at 1000 & 8000 Hz. Has mid-range & h.f. level controls; 100 W peak capacity; 8



ohms. Walnut finish with black base. 29 $\frac{3}{8}$ " x 20 $\frac{1}{4}$ " x 14". 20B9716Z\$159.95

2760 Speaker System

Has 10" low-frequency speaker with free

suspension phase inverter (passive radiator) and a 3" cone-type high-freq. speaker. Has h.f. level control. Response 20-20,000 Hz; 80 W peak capacity; 8 ohms; RC-type crossover at 2500 Hz. Walnut finish. 14 $\frac{1}{2}$ " x 25 $\frac{1}{2}$ " x 12 $\frac{3}{4}$ ". 20B9713U\$149.95

3040K 3-Way Speaker System

Features tuned-port bass-reflex bookshelf design with 12" woofer, 6" mid-range & 3 $\frac{1}{2}$ " cone tweeter; crossovers at 2000 & 5000 Hz. Response 45-16,500 Hz; 50 W peak capacity; 8 ohms. Has h.f. level control. $\frac{3}{4}$ " walnut veneer panels. Supplied with finishing oil. 14" x 22" x 9". 20B9760UKit \$44.95 20B9759U Assembled & finished \$69.95

3017K Three-Way Speaker System

Bass-reflex type with tuned ducted port; over-all response 40-17,000 Hz. 10" woofer (40-800 Hz); 6" mid-range with sealed back (800-5000 Hz); 3 $\frac{1}{2}$ " cone-type tweeter (5000-17,000 Hz). Electrical capacitor crossover at 800 and 5000 Hz; power handling 20 W program. 40 W peak; imp. 8 ohms. $\frac{3}{4}$ " wood with five-ply walnut veneer & $\frac{1}{2}$ " thick fiber glass acoustic insulation. 12" x 22" x 8" deep. Kit includes finishing oil. 20A9742U. Kit\$34.95 20A9741U. Factory assembled and finished\$49.95

ALTEC LANSING

811B "Sectoral" Horn

Similar to Model 511B except cut-off is at 800 Hz; used with 806A driver and 800 Hz crossover to complement either one 416A or one or two 414A bass speakers\$28.00

419-8B "Biflex" Speaker

A 12-inch cone-type speaker with a second compliance ring in the center of the



cone to give mechanical crossover at 1000 Hz and permit 2-way performance with a single voice coil; 25 watts; 30-15,000 Hz; 8-ohms impedance; 3-inch edge-wound ribbon voice coil; cast aluminum frame\$66.00

420A "Biflex" Speaker

A 15-inch cone-type speaker with a second compliance ring in the center of the



cone to give mechanical crossover at 1000 Hz and permit 2-way performance with a single voice coil; 25 watts; 25 to 14,000 Hz; 8 ohms impedance; 3-inch edge-wound ribbon voice coil; cast aluminum frame; free-air resonance 25 Hz.\$76.00

511B "Sectoral" Horn

Designed to load 802D driver down to 500 Hz with upper limit at 22,000 Hz; cast of heavy resonant-free aluminum; dispersion 90° horizontal and 40° vertical.



.....\$44.50

416-8A Woofer

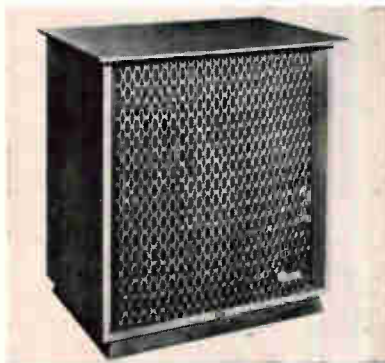
15-inch woofer; power rating 30 watts; 16-ohms impedance; response 20-1600



Hz; special rim compliance prevents cone breakup; 3" edge-wound copper ribbon voice coil; cast aluminum frame; free-air resonance 25 Hz\$62.00

846A "Valencia" Speaker System

2-way system combining 811B sectoral horn with 860A h.f. driver & a 416A low-



freq. spkr. (800 Hz crossover). Response 30-22,000 Hz; 30 W capacity; 8 or 16 ohm operation. 29 3/4" h. x 27 1/2" w. x 19" d. Cabinet is walnut with fretwork grille\$339.50
Cabinet only (Model 859A)\$156.00

414-8B Bass Speaker

A 12" equivalent of Model 416-8A; response 30-4000 Hz depending on crossover used\$58.00

755E 8" "Pancake" Speaker

Wide-angle sound dispersion; 15 watts;



response 40-15,000 Hz; 8 ohms; 2" voice coil; cone resonance 52 Hz; depth 2 1/4"\$30.75

A7-8 "Voice of the Theatre" System

Utility model of the Altec 2-way theatre system; employs a direct radiating exponential horn enclosure combined with a modified bass reflex principle; 15" 416-8A woofer N-801-8A 800 Hz crossover network, and 807-8A driver with 811B horn; frequency range from 35 to 22,000

1971 EDITION



Hz; 30 watts power rating; 8 ohms impedance; horizontal dispersion 90°; vertical dispersion 40°; 6 dB adjustable high-frequency attenuation; 30" w x 24" d x 52 1/4" h; gray finish\$346.50

A7-500-8 Speaker System

Similar in design & appearance to A7-8. Has 808-8A driver & 511B sectoral horn, with 500 Hz crossover. 54 1/4" h. x 30" w. x 24" d. Theatre gray.\$382.00

A7-500W-II Speaker System

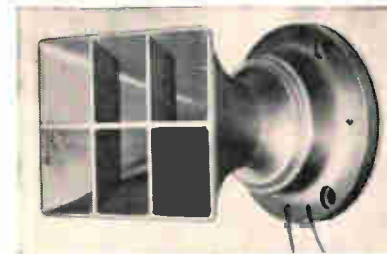
Same as Model A7-500 except housed in walnut cabinet with fretwork grille; horn



is internally mounted. 42" h. x 32" w. x 24" d.\$512.50

3000H H. F. Speaker

Aluminum diaphragm; multicell-type horn; 20 watts when used with N-3000E



network; response 3000-22,000 Hz; 8 ohms impedance; edge wound voice coil; dispersion 90° horizontal, 40° vertical; 3 3/16" h. x 4 7/8" w. x 4 5/16"\$39.50

N-3000E Dividing Network

Designed especially for 3000H h.f. speaker; 8 ohms; attenuation 10 dB continuously variable; 3000 Hz crossover; 2 5/16" h. x 4 7/8" w. x 2 5/16" d.\$20.50

605B "Duplex" Speaker

Basically the same as the 604E with efficiency just 3 dB less\$163.00

892A "Madera" Speaker System

Bookshelf design features a wideband freq. response of 45-18,000 Hz with wide angular distribution and 50 W power-handling capability. Infinite baffle design with Altec 406 low-frequency 10" speaker for optimum bass response; high frequency end includes compression-driven

**ADC:
WORLD'S MOST
PERSNICKETY
SPEAKER MAKER.**



We make 303AX speakers for fussy audiophiles. Each one is crafted by hand and contains a two-way acoustic suspension system that's accurate enough to please even the most discriminating listener. The ADC 303AX lacks the distortion and coloration often found in speakers in its price range. Which makes it a superb value in a full-sized bookshelf speaker.

Of course, there's only one way to find out how really accurate our speaker system is. Go to your nearest ADC dealer and compare it to other models. After all, hearing is believing!

SPECIFICATIONS

Type . . . Bookshelf.
Cabinet . . . Oiled Walnut.
Dimensions . . . 23 3/4" H x 13" W x 11 3/4" D.
Weight . . . 37 lbs. each.
Frequency Response . . . 33Hz-20kHz ± 3 db (measured in average listening room).

Speakers (2) . . . High accuracy, wide dispersion tweeter with Hi Flux Magnet and 10" high compliance woofer.

Nominal Impedance . . . 8 ohms.

Power Required . . . 10 watts min.

Price . . . \$100 suggested resale.

Write for details about other ADC speaker systems. From \$55-\$350.



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Z

Speakers & Cabinets

exponential horn; crossover frequency 2500 Hz. Size 13" h. x 23 $\frac{3}{4}$ " w. x 11 $\frac{1}{4}$ " d.\$145.00

604E Super "Duplex" Speaker

15" speaker with freq. range 20-22,000 Hz; power rating 35 W (50 W peak dy-



amic power); 8-16 ohm imp.; resonance 25 Hz; crossover 1500 Hz.\$195.00

848A "Flamenco" Speaker System

Standard model contains A-7 components: 416A 15" bass speaker, 811B 800-



Hz sectoral horn, and 800-Hz crossover network. Cabinet is oak; grille is simulated wrought iron, 19 $\frac{1}{8}$ " d. x 27 $\frac{1}{4}$ " h. x 28 $\frac{3}{8}$ " w.\$339.00
860A Cabinet only\$156.00

871AL/R "Milano" Speaker System

Featuring Italian Provincial styling in pecan-finished hickory, system incorpo-



rates "The Voice of the Theatre" components—a 416A 15" bass speaker, an 811B 800-Hz sectoral horn, an 806A high-frequency driver, and an 800-Hz crossover network. 29 $\frac{1}{4}$ " h. x 27 $\frac{1}{2}$ " w. x 19 $\frac{1}{4}$ " d.\$395.00
866AL/R Cabinet only\$225.00

890C "Bolero" Speaker System

Bookshelf design with fretwork grille. The 406-8B woofer is reinforced by an Altec 10" free-suspension phase inverter.

104

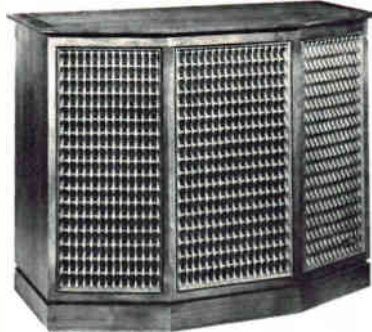
Response 40-20,000 Hz; power rating 50 W; 8 ohms; 2000 Hz crossover. 14 $\frac{3}{4}$ " h. x 25 $\frac{3}{4}$ " w. x 12" d.\$179.00

770A Electronic Crossover Bi-Amp

Combines an electronic crossover & 2 power amps. Designed to be mounted inside speaker enclosure. Bass amp 60 W r.m.s. crosses over to a high-freq. amp 30 W r.m.s. at 500 or 800 Hz. HD 0.3% from 20-20,000 Hz; crossovers (12 dB/octave); 8 ohms. Power bandwidth (IHF) 15-25,000 Hz; input sensitivity: 0.5 V r.m.s. Has special signal sentry switching. Amp will turn on or off automatically with or without signal\$258.00

2873A "Barcelona" Powered Speaker System

Combines "The Voice of Theatre" components with 770A electronic crossover



Bi-Amp; crossover 500 Hz. 29 $\frac{3}{4}$ " x 38 $\frac{1}{2}$ " x 24" d. Walnut cabinet\$750.00
873A Without the 770A electronic crossover. Response 20-20,000 Hz; 8 ohms; 60 W capacity\$550.00

2875A "Granada" Powered Speaker System

Similar to 2873A except smaller. Size 29 $\frac{3}{4}$ " x 27 $\frac{1}{2}$ " x 24" d. Crossover at 800 Hz\$650.00
875A Without the 770A electronic crossover; response 20-20,000 Hz; 8 ohms. 60 W capacity\$450.00

893A "Corona" Speaker System

Two-way bookshelf system has continuous power rating up to 40 W but may be used with amplifiers rated as low as 15 W/ch. 50-18,000 Hz; 8 ohm imp.; crossover freq. 2500 Hz. 12 $\frac{1}{4}$ " h. x 22" w. x 9 $\frac{1}{2}$ " d.\$85.50

879A "Santana" Speaker System

Two-way system with 15" bass speaker with high-freq. tweeter. Cabinet is con-



temporary oiled walnut with composition slate top; 8 ohms. Will handle 45 W continuous power\$195.00

N-501-8A Dividing Networks

12 dB/octave for use with amp. rated up to 100 W continuous power; 500 Hz crossover; 8 ohms. Has variable L pad\$61.00

N-801-8A Same except for 800 Hz crossover\$53.80

411-8A Low-Freq. Speaker

15" design specifically for infinite baffle



enclosures; 8 ohms; response 20-1000 Hz; power rating 60 W r.m.s. 5 $\frac{1}{2}$ " d.\$99.50

807-8A H.F. Driver

Response 500-20,000 Hz with crossover at either 500 or 800 Hz. For use as a 2-



way system with Altec 511A, 511B (500 Hz) or 811B (800 Hz) Sectoral horn. Dividing network N501-8A (500 Hz) or N801-8A (800 Hz) & 414, 515, or 416-8A low-freq. speaker. Max. power 30 W r.m.s.; 8 ohms\$67.00
809-8A Same except has larger magnet. Is more efficient for speech & music\$78.50
All prices shown are audiophile net.

AZTEC

"Petite 1000" Speaker System

2-way bookshelf design with 8" air-suspension woofer & 3 $\frac{1}{2}$ " closed-back tweeter. Has 2000-Hz adjustable LRC crossover. Response 40-20,000 Hz. 50 W (dynamic power) capacity; 8 ohms. 20" x 10 $\frac{1}{2}$ " x 9 $\frac{1}{2}$ ". Oiled walnut\$69.95

"Gauguin III" Speaker System

3-way ducted port bass-reflex system with 12" woofer, 3" x 9" mid-range horn,



and 2" x 6" high-frequency horn. Has adjustable LRC crossovers at 2000 Hz & 10 kHz. Response 30-20,000 Hz; 60 W (dynamic power) capacity; 8 ohms. 20" x 27 $\frac{1}{4}$ " x 15 $\frac{1}{8}$ ". Oiled walnut\$229.95
With various decorative walnut fronts.

STEREO HI-FI DIRECTORY

.....\$249.50

"Coquette 500" Speaker System

Two-way bookshelf design with 8" air-suspension woofer & 3" closed-back tweeter. Has 5000-Hz RC crossover; response 45-18,000 Hz; 50 W dynamic power capacity; 8 ohms. 15 7/8" x 10" x 7 7/8". Oiled walnut\$49.95

"Cezanne II" Speaker System

Two-way bookshelf design with 10" air-suspension woofer & two 3 1/2" closed-back tweeters. Has 2000-Hz adjustable LRC crossover. Response 37-20,000 Hz; 50 W dynamic power capacity; 8 ohms. Size 22" x 12 1/2" x 9 1/2" Oiled walnut \$99.95

"Monet" Speaker System

Four-way, five-speaker, ducted-port bass reflex system with 15" woofer, separately enclosed 8" mid-range, two 3 1/2" self-enclosed tweeters for upper mid-range & 3 1/2" super tweeter for ultra highs. Has adjustable LRC crossovers at 800 Hz, 2000 Hz, and 10 kHz. Response 25-20,000 Hz; 75 W dynamic power capacity; 8 ohms. 25 1/2" x 36 3/4" x 15 7/8". Oiled walnut\$299.95

"Seurat V" Speaker System

Four-way, seven-speaker, ducted-port bass reflex system with two 15" woofers, separately enclosed 8" mid-range, three 3 1/2" self-enclosed tweeters for upper mid-range, and 3 1/2" super tweeter for ultra highs. Has adjustable crossovers at 450 Hz, 2000 Hz, 10 kHz, and 12 dB per octave slopes throughout. Response 20-20,000 Hz; 120 W dynamic power capacity; 4 ohms. 28 1/2" x 48" x 20". Oiled walnut\$449.95

"Rembrandt I" Speaker System

Two-way bookshelf design with 10" woofer & 2" x 6" compression horn in bass-reflex cabinet. Has 3-position treble control. Walnut finish. 23 7/8" x 13 1/2" x 11 1/8" d.\$139.95

"Sombras 101-2" Speaker System

Console floor design in Spanish Colonial style with snap-on grille. Has 12" low-freq. driver, a mid-range horn & an ultra-high-freq. horn. LCR crossovers (12 dB/octave) at 2000 & 10,000 Hz. Includes 3-pos. 4 dB/step level control. Ducted port design. 20 1/2" x 21" d. x 28". \$379.95

"Sombras 101-1" Speaker System

Deluxe console floor design with 75" of internal folded horn. Spanish Colonial style in hand-rubbed walnut with snap-on grille. Has 12" low-freq., a 4" x 10" mid-range horn & 2" x 6" high-freq. horn; crossovers (LRC, 12 dB/octave) at 800 & 10,000 Hz. Sizes 36 1/2" x 28" x 21" d.\$499.95

"Renoir V" Speaker System

3-way bookshelf or console design with separate base. Has 12" woofer, a 4 1/2" mid-range & 3" x 6" horn tweeter. Includes 3-pos. treble sw. 17 1/8" x 26" x 11 1/8" d. Oiled walnut\$179.95

BELL & HOWELL

630 Speaker System

Has dual-cone 8" two-way speaker with mechanical crossover. Response 50-18,000 Hz; 8 ohms; 50 W peak capacity. 10" x 19" x 8 1/2" d. Polymer-coated walnut veneer\$66.50

640 Speaker System

Has dual cone 10" 2-way speaker with mechanical crossover; response 30-20,000 Hz; 8 ohms; 60 W peak capacity. 12 1/4" x 21 3/4" x 10 3/8" d. Polymer-coated walnut veneer \$88.00

1971 EDITION

BOGEN

LSX "Row 10" Bookshelf System

4" full-range speaker with ducted port. Response 60-18,000 Hz; 8 ohms. 12" x 5 3/4" x 8 7/8". Oiled walnut cabinet with black grille cloth\$27.50

LS10A "Row 10" Bookshelf System

6" acoustic-suspension woofer & 2" tweeter; 8 ohms; 45-20,000 Hz. Handles



30 W. 15" x 8 3/4" x 7". Oiled walnut cabinet with black grille cloth\$49.95

LS20A "Row 10" Bookshelf System

8" acoustic-suspension woofer & 2 1/2" tweeter with level control; 8 ohms; 30-20,000 Hz; handles 40 W. 19" x 10 1/2" x 9". Oiled walnut cabinet with black grille cloth\$59.95

LS-30 Speaker System

3-way, factory-sealed bookshelf design with 10" woofer, 5" cone mid-range & 3" cone tweeter. Has both mid-range & tweeter level controls. Response 28-20,000 Hz. Capacity 50 W dynamic power. 22" x 14" x 11". Oiled walnut. \$109.95

BOSE

501 Speaker System

Direct reflecting design with woofer & 2 tweeters balanced for direct & reflected



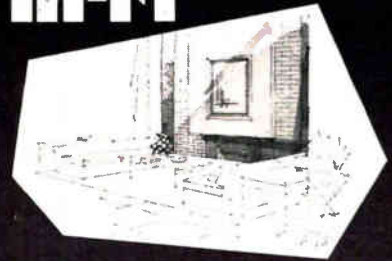
sound; 4 ohms; 20 W r.m.s. required. 24" x 14 1/2" x 14 1/2" d. Walnut finish. \$124.80

901 Speaker system

Direct-reflecting design with 11% of sound direct & 89% reflected from rear



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Speakers & Cabinets

wall. Has separate solid-state active equalizer network (over 100 components) which provides flat radiated acoustic power into the room. Front-panel controls permit adjustment to recorded curves and room acoustics. Features nine identical high-compliance, long-excursion speakers driven simultaneously without crossovers. 12 $\frac{3}{4}$ " h. x 20 $\frac{5}{8}$ " w. x 12 $\frac{7}{8}$ " d. 8 ohms. Price for two speakers & equalizer\$476.00
With bamboo grillespair \$491.00
Pedestals, white or black ...pair \$ 39.90

BOZAK

B-200Y Tweeter

Twin-cone tweeters for use with amplifiers 20 watts or more; 1500-20,000 Hz;



8-ohm impedance (two 16-ohm sections in parallel); direct-radiating dual cones; 120° radiation; rubber damping prevents peaking and metallic harshness. ...\$36.50

B-209B Mid-Range Speaker

Mid-range speaker; 6 $\frac{1}{2}$ " diameter 3" deep; unique "sandwich" cone; for 20- to 40-watt systems with Bozak crossover network; 200 to 3500 Hz; 8- and 16-ohm models available; rubber suspension gives superb transient response.\$54.50

B-199A Woofer

12" woofer; 4 $\frac{7}{8}$ " deep; variable-density cone; for use with amplifiers 20 W r.m.s. or more; 40-4500 Hz; 8 or 16 ohm impedance; unique voice-coil construction.\$59.50

B-300 Speaker System

Infinite baffle enclosure; $\frac{3}{4}$ " plywood; one B-207B coaxial speaker; 40-20,000 Hz; can convert to model B-302A.
B-300 Italian Provincial; 24" w. x 18 $\frac{1}{2}$ " d. x 30" h.; cherry\$234.50
E-300 Italian Provincial (Enclosure only).\$135.00
B-300 Century; 24" w. x 20" d. x 27 $\frac{7}{8}$ " h.\$199.50
E-300 Century (Enclosure only) . \$99.50
B-300 Moorish; 27" w. x 16 $\frac{1}{8}$ " d. x 30" h.\$238.00
E-300 Moorish (Enclosure only) \$140.00
B-300 French Provincial; 28" w. x 19" d. x 31" h.\$264.50
E-300 French Provincial (Enclosure only)\$165.00
B-300 Mediterranean\$259.50
E-300 Mediterranean (Enclosure only).\$160.00

B-800 Full-Range Speaker

8" speaker; 8 or 16 ohm impedance 50-10,000 Hz; 8 $\frac{1}{2}$ " dia. x 3 $\frac{3}{4}$ " deep; for use with amplifiers 15 watts dynamic power or more\$57.50

"Concert Grands"

Both have 4-199A bass, 2 16-ohm B-209B mid-range, 4 pair B-200Y treble speakers, with N-104 (or N-10102A with N-25) crossovers (400 & 2500 Hz). Response 28-20,000 Hz; 8 ohms; 60 W

r.m.s. capacity; 36" w. x 19" d. x 52". Matte walnut B310B has slot-loaded vertical tweeter array with broader horizontal dispersion. Moorish design ..\$897.00
B410 Same as B310B except cabinet has front doors (simulated)\$880.00

B-4000A "Symphony No. 1"

Has two B-199A woofers, one B-209B midrange 6" speaker; 8 B-200Y single tweeters; and N-104 crossover network; useful frequency 35-20,000 Hz; crossovers at 400 and 1500 Hz; 8 ohms; for use with amplifiers 30 W r.m.s. or more; 44" h. x 28" w. x 16" d.; available in walnut. Moorish enclosure\$595.00
B-4000A Modern enclosure\$499.50
B-4000A Classic enclosure\$575.00

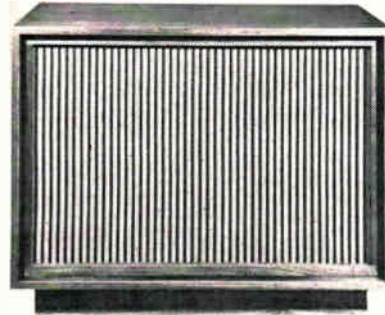
B-302A Speaker System

Similar to B-300 with addition of B-209B mid-range speaker and N-10102A crossover network.

B-302A Italian Provincial; 24" w. x 18 $\frac{1}{2}$ " d. x 30" h.; cherry\$322.50
B-302A Century\$287.50
B-302A Moorish\$326.00
B-302A French Provincial\$352.50
B-302A Mediterranean\$347.50

B-305 Speaker System

Infinite-baffle enclosure; 35-20,000 Hz; 3-way speaker system; 800 Hz and 2500

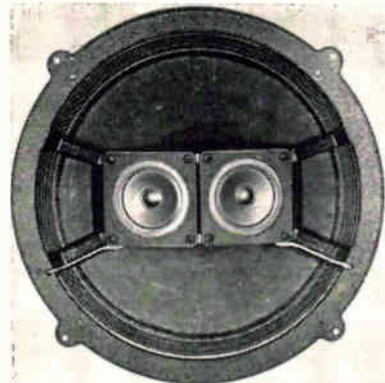


Hz crossover frequencies; two B-207B coaxial speakers, one B-209B mid-range speaker; 16-ohm impedance.

B-305 Century\$425.00
B-305 Moorish\$499.50

B-207B Two-Way Coaxial Speaker

Two-way speaker system; 12" o.d., depth 6"; for use with amplifiers 20 W r.m.s. or



more; 40-20,000 Hz; 8-ohm impedance; composed of B-199A woofer and B-200Y dual-tweeter; crossover at 2500 Hz; infinite baffle enclosure recommended, minimum 5 cu. feet, optimum 9 cu. feet.\$99.50

B-1000 "Bard" Outdoor Speaker

Rigid 18" dia. hemispheric housing; 21" high, 12" front-to-back; 22 lbs.; input by phone jack (plug supplied); 8 ohms; power input 40 watts max; response 50-10,000 Hz; B-800 driver; adjustable fric-

tion-type trunnion; weatherproof cone; sandalwood beige or white eggshell with gold trim\$89.50

N-107 Passive Crossover

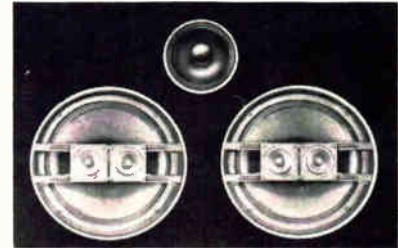
Designed to separate high-frequency speaker system from midrange units. Low-freq. response not altered. Crossover at 2500 Hz\$13.00

Bozak Panel Systems P-302AP

Contains one B-207B, one B-209B, and crossover networks mounted on a $\frac{3}{4}$ " panel; 5 cu. foot cavity required; panel 27 $\frac{1}{2}$ " h. x 23" w.\$196.00

P-305P

Contains two B-207B, one B-209B and crossover network mounted on a $\frac{3}{4}$ " pan-



el; 8 cu. foot cavity required; panel 24" h. x 34 $\frac{1}{2}$ " w.\$301.50

P-310BP

Contains four B-199A, two B-209B, one B-200YA and crossover network mounted on a 1 $\frac{1}{2}$ " panel; 16 cu. foot cavity required; panel 47" h. x 31" w. ...\$614.00

P-4000P

All components same as in Model B-4000A, mounted on $\frac{3}{4}$ " panel ..\$380.00

B-312 "Concerto II"

Includes a B-207B coaxial speaker; 45-16,000 Hz; crossover 6 dB/octave at 2500 Hz; 8 ohms; 20 W r.m.s. power. 24 $\frac{1}{2}$ " x 17 $\frac{1}{4}$ " x 12 $\frac{1}{4}$ " d. Walnut \$159.50

B-313 "Concerto III"

3-way system includes one B-207B coaxial & a B-209B, mid-range speaker; N-10102A crossover, 6 dB/octave at 800 & 2500 Hz. Response 45-16,000 Hz; 8 ohms, 20 W r.m.s. rating. Cabinet same as B-312 system\$234.50

N-10102A Crossover Network

Universal dividing network; convertible for B-302A or B-305 system; 800 and 2500 Hz crossover; 8 or 16 ohms; can be converted to 400 and 2500 Hz crossover for 8-ohm system by addition of N-25.\$33.50

N-104 Crossover Network

Crossover 400 and 2500 Hz; 8 ohms; used on B-310A-B-310B and B-410 systems\$42.50

N-25 Crossover Network

Capacitor bank for use with N-10102 when 400-2500 Hz crossover and 8 ohms is desired\$13.50

N-106 Electronic Crossover

Has high-imp. inputs & outputs; crossover at 400 Hz (6 dB/octave). Designed to be used between each channel of a stereo preamp output and into separate power amps (2 required). Dual-channel power amps are then used for ea. channel. Each power amp thus divides output into low & high freq. speaker systems.\$55.00

BSR McDONALD

SS-2 Speaker System

Sealed acoustic-suspension design with 2-way system; a 6" woofer & 2 $\frac{1}{2}$ " tweeter. 14" x 8" x 7". Walnut cabinet. .pair \$70.00

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Speakers & Cabinets

CLARK MUSIC

CMS-124 Speaker System

Four-speaker, 3-way design with 12" woofer, 4 1/2" mid-range, and two 3" tweeters in air-tight oiled walnut cabinet. Response 30-20,000 Hz ± 5 dB; crossovers at 300 & 4000 Hz (LC 12 dB/octave networks); 100 W dynamic power rating; 8 ohms imp. Has brilliance control. 24" x 14 1/2" x 12" d.\$90.00

ELECTROHOME

SC-507 Speaker System

Has 8" woofer & an 8" inverted cone treble radiator. Response 50-15,000 Hz ± 3 dB.\$99.95

SC-508 3-Way Speaker System

Tuned-port reflex design with 10" woofer, 6" mid-range, and an exponential horn tweeter. Crossovers at 800 & 10,000 Hz (12 dB/octave); response 40-18,000 Hz ± 3 dB.\$149.50

SC-510 3-Way Speaker System

Six speaker, tuned-port reflex design with 12" woofer, 8" coax mid-range, and four 3 1/2" cone tweeters; crossovers 800 & 10,000 Hz (12 dB/octave); response 30-18,000 Hz ± 3 dB.\$199.50

ELECTRO-VOICE

Model MC8 8" Speaker

Dual-cone design; response 50-13,000 Hz; 24 watts peak capacity; 75 Hz reso-



nance; crossover—mechanical at 6000 Hz; 8 ohms; 3 1/8" deep\$17.95

Wolverine LS8 8" Speaker

Dual-cone 8" wide-range speaker; response 45-14,000 Hz; power rating 40 W peak; resonance 75 Hz; impedance 8 ohms; 3 1/2" deep\$19.95

Wolverine LT8 8" Speaker

Has 3 separate radiating elements with an electrical crossover at 5000 Hz and a me-



chanical crossover at 2000 Hz. Resonant freq. 65 Hz; response 45-18,000 Hz; 8 ohms; 40 watt peak power. Woofer has 2" v.c. & dome horn tweeter 1" v.c. Sensitivity 45 dB. Has a high-freq. level control\$35.95

Model SP8B "Radax Super-Eight"

8" dual-cone; capacity 40 watts peak; response 35-13,000 Hz; resonance 60 Hz; 8

ohms impedance; sensitivity 47 dB; 1 lb., 6 oz. ceramic magnet; crossover 4500 Hz; required baffle opening 7"; depth 4 3/8"\$32.50

LS12A 12" Speaker

Response 40-14,000 Hz; EIA sensitivity rating 45 dB; free-air resonance 65 Hz;



power handling capacity 40 watts peak, impedance 8 ohms; mechanical crossover 6000 Hz; 12 1/4" dia., 3 1/8" deep; 11" baffle opening\$25.50

Model LT12 12" Speaker

Three-way speaker; combines design features of Wolverine full-range speakers plus "deep-dish" cone and HF1 tweeter; response 40-18,000 Hz; power handling capacity 40 watts peak; free-air resonance 60 Hz; EIA sensitivity 45 dB; impedance 8 ohms; mechanical crossover 2000 Hz; electrical crossover 3500 Hz; 12 1/8" dia., 5 1/2" deep\$39.95

Model SP12B "Radax Twelve"

12" dual-cone; capacity 60 watts peak; response 35-15,000 Hz; resonance 40-50 Hz; 8 ohms impedance; sensitivity 49 dB; 1 lb., 6 oz. ceramic magnet; crossover 4500 Hz; baffle opening 11"; depth 6 3/4"\$37.95

Model SP12 "Radax Super-Twelve"

12" dual-cone; capacity 80 watts peak; response 35-13,000 Hz; resonance 35-45



Hz; 8 ohms impedance; sensitivity 53 dB; crossover 4000 Hz; baffle opening 11"; depth 7 1/2"\$72.00

Model 12TRXB 3-Way Speaker

Combines SP12B, T35-type high-frequency driver, and integral 6 dB/octave crossover with level control; response 35-20,000 Hz; 60 watt peak; 8 ohms; resonance 40-50 Hz; sensitivity 52 dB; crossovers: 2000 Hz mechanical and 3500 Hz electrical; woofer magnet 1 lb., 6 oz. ceramic; tweeter 3.16 oz. Alnico V . \$74.95

Model 12TRX

12" three-way combines SP12, T35 high-frequency driver, and integral X36 crossover with level control; 80 watts peak; response 30-20,000 Hz; resonance 35-45 Hz; 8 ohms impedance; sensitivity 53 dB; mechanical crossover at 2000 Hz; electrical crossover 3500 Hz\$119.95

MC12 Dual-Cone 12" Speaker

Features 2" voice coil & dual-cone design. Response 40-14,000 Hz; 8 ohms; capacity 20 W program; 60 Hz resonance; EIA sensitivity rating 46 dB\$20.95

MT12 12" Speaker

Combines a dual-cone assembly with a ring radiator tweeter. Response 40-18,000 Hz; 8 ohms; capacity 20 W program; resonance 60 Hz; EIA sensitivity rating 46 dB; electrical crossover 4000

Hz\$31.50

SRO/12 12" Speaker

Heavy-duty, wide-frequency-range musical instrument design; power capacity 60 W continuous sine wave; 8-16 ohms.\$88.00

Model LS15 15" Speaker

Wide-range design 35-14,000 Hz; 40 watts peak capacity; free-air resonance



50 Hz; crossover-mechanical at 4500 Hz; 8 ohms impedance; 6 1/2"\$29.95

LT15 "Wolverine" 3-Way Speaker

Combines a 15" design with cone suspension in three planes for stability and lin-



earity with a Sonophase tweeter. Response 35-18,000 Hz; resonance 40 Hz; crossovers at 2000 Hz mechanical, 4000 Hz electrical. With brilliance control. 40 W peak; 8 ohms. 6 1/2"\$49.95

Model SP15B "Radax Fifteen"

15" dual-cone; capacity 60 watts peak; response 30-15,000 Hz; resonance 30 Hz; 8 ohms impedance; sensitivity 51 dB; 1 1/2 lb. ceramic magnet; crossover 3500 Hz; baffle opening 13 1/2"; depth 7 3/4" . \$49.50

Model 15TRXB

Combines an SP15B with 2000 Hz mechanical crossover and integral T35-type high-frequency driver. 6 dB/octave high-pass filter; level control built-in ..\$79.50

Model SP15 "Radax Super-Fifteen"

15" dual-cone; capacity 80 watts peak; response 25-15,000 Hz; resonance 25 Hz; 8 ohms impedance; sensitivity 53 dB; 4 1/4 lb. ceramic magnet; crossover 3500 Hz; baffle opening 13 1/2"; depth 8 1/4" . \$89.95

Model T35

Compression type driver with horn; frequency response to 20 kHz; 8 ohms impedance; sensitivity 56 dB; 6.8 oz. magnet; crossover 3500 Hz; size 2" h. x 5 1/4" w. x 2 1/4" d.; driver diameter 2 1/4" \$29.95

Model 15TRX

15" three way; capacity 80 watts peak; frequency response 30-15,000 Hz; resonance 25 Hz; 8 ohms impedance; sensitivity 55 dB; magnet 4 lb., 10 oz. ceramic; mechanical crossover 2000 Hz; electrical crossover 3500 Hz; AT37 level control and X36 crossover included; depth 8 1/4"; shipping weight 27 lbs.\$129.95

SRO/15 15" Speaker

Heavy-duty, wide-frequency-range musical instrument design; power capacity 60 W continuous sine wave; 8-16 ohms; 8 1/8" d.\$99.00

Model 30W Woofer

30" woofer; 9 lb., 4 oz. ceramic magnet; power capacity up to 200 watts peak; frequency response 15-300 Hz; 8 ohms im-

pedance; free-air resonance 15 Hz; recommended crossover 100 Hz ...\$249.95

Model T350

Compression-type driver with horn; response to 23,000 Hz; 8 ohms impedance; sensitivity 60 dB; 1 lb. magnet; crossover 3500 Hz; 2 7/8" h. x 7 1/2" w. x 4 1/2" d.; driver diameter 3 1/2"\$59.50

Model 8HD Diffraction Horn

Diffraction principle effects 120° dispersion; crossover 700-800 Hz; cut-off 600 Hz; intended specifically for T10A & T25A drivers; 15" h. x 4 1/2" w. x 8 1/4" d.\$19.95

Model XT1 Stereo Mixer Transformer

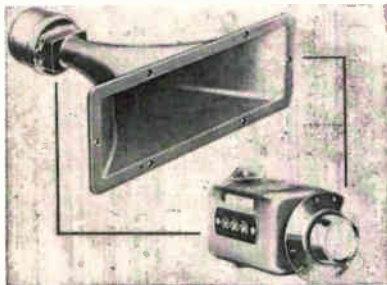
Combines 2-channel (stereo) program material into monophonic output; can be used to combine bass frequencies of two channels into a single full-range system; it is a 1:1 phase transformer connected between amplifier & speaker; for use with 4, 8, or 16 ohm systems.\$17.95

Model T25A

High-frequency driver; capacity 60 watts peak; response 700-10,000 Hz; 8 ohms impedance; sensitivity 57 dB; 1 lb. Alnico V magnet; 3 3/4" dia.; depth 4 1/8", throat dia. 1 3/8"\$49.50

Model MF1 Mid-Range Step-Up Kit

Provides increased output in presence range; consists of MR10 driver and CR10



crossover-level control; requires baffle opening 9 1/2" x 3"\$31.50

Model HF1 Wolverine High-Frequency Step-Up Kit

Extends range beyond audible limit; consists of TW35 tweeter and CR35 crossover-level control; response 3500-18,000 Hz; requires opening 1 3/4" x 4 1/4" . \$28.95

Model BB1 & BB4 Building Block Kits

Additive kits to expand mid- and high-frequencies of existing system; each package is complete with matched crossover unit, AT38 level control, wiring harness, and full instructions.

BB1 Tweeter (T35, X36)\$53.95

BB4 Mid-Range design (T25A, 8HD, X8).\$112.50

Model X8 Crossover

Single crossover, 800 Hz; 8 ohms impedance in and out\$35.95

Model X36 Crossover

For use with v.h.f. drivers; crossover 3500 Hz; impedance 8 ohms in and out.\$13.50

Model X1020 Crossover

For use with 30 W woofers; crossover of 100 or 200 Hz allowing speakers to be used as "super woofers" with any existing system; 8 ohms impedance in and out.\$67.50

The "E-V FOUR-A"

Three-way system with 12" woofer, compression driver & diffraction horn for mid-range and 2 1/2" cone tweeter; 3-way crossover (400 & 2500 Hz) & two level controls; response 30-20,000 Hz; 8 ohms;

1971 EDITION

70 watts peak power capacity; 14" h. x 25" w. x 13 1/2" d.; complete in oiled walnut\$199.95

"Sonocaster I" Speaker

Portable design for outdoor applications. All parts are weatherproof. Has dual-



cone 8" speaker. Response 70-13,000 Hz; 30 watts peak power; 8 ohms. 16 3/4" h. x 17" d.; Steel gray\$22.50

"Musicaster IA" Outdoor Speaker

Weatherproof speaker for outdoor use; frequency response 80-10,000 Hz; impedance 8 ohms; dispersion 120°; uses bass reflex design; 21 1/2" h. x 21 1/4" w. x 8 1/2" d.; shipping weight 34 lbs. ..\$67.50

"Musicaster IIA"

Same features as "Musicaster" except has v.h.f. driver to extend range to 16,000 Hz\$84.95

"E-V SEVEN-B" Speaker System

2-way acoustic-suspension system with high-compliance 8" bass driver, 3 1/2" cone tweeter (2000 Hz crossover). Response 50-20,000 Hz; 50 W peak; 8 ohms. Has variable h.f. level control. 10" h. x 19" x 9" d. Walnut four sides \$62.95

"E-V FIVE-C" Speaker System

Combines 10" high-compliance woofer & 2 1/2" cone-type tweeter with electrical crossover. Response 30-20,000 Hz; 60 W peak; 8 ohms. Has variable h.f. level control. Bookshelf design. 12 1/4" x 21 1/4" x 10 3/8" d. Oiled-walnut four sides . \$99.95

"E-V NINE" 3-Way System

Bookshelf design with 10" acoustic-suspension woofer with sealed half-roll surround, a 5" mid-range speaker acoustically isolated to prevent interaction with woofer, and a 3 1/2" cone tweeter. Has brilliance control. Response 30-20,000 Hz; 60 W peak; 8 ohms. Oiled walnut veneer cabinet\$139.95

"Aires" 12" Three-Way System

Available in three styles: Traditional, finished in cherry; Contemporary with pe-



can; Spanish in rugged oak; incorporates a 12" woofer with a mid-range speaker mounted in its own sealed enclosure; v.h.f. tweeter. Has a crossover with My-

Empire's newest Grenadier is the only high powered omni-directional wide angle lens down facing woofer speaker system priced under \$100

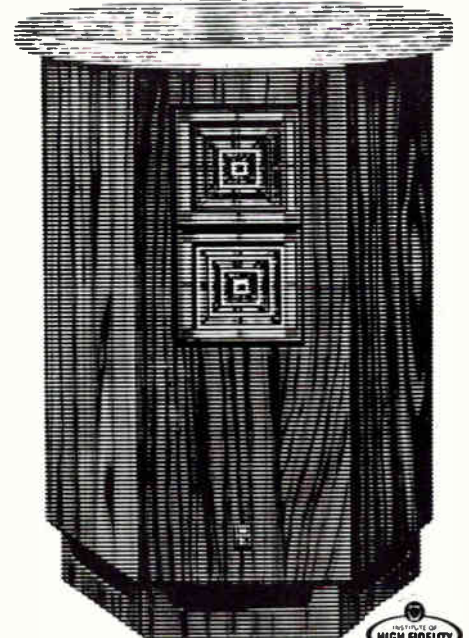
Wait till you hear the difference a true stereophonic design can offer. The kind of sound *no box can deliver*, and at a spectacularly low price.

In Empire's stereo cylinder, the woofer faces down, for bass so "live" it gives you goosebumps, while our exclusive acoustic lens spreads the highest of highs through a full 160 arc.

There is no ugly grill cloth; the walnut finish goes all the way around; the marble top is meant to be used; and the sound is superb no matter where you put it.

If you're talking at least \$100 for a speaker system, think about this great Grenadier value. Nothing else in the world comes close.

Model 6000 Grenadier Specifications: Height — 24 inches, diameter — 18 inches 3 way System up to 75 watts per channel Price \$99.95; with imported marble top \$109.95



For information and further details write Empire Scientific Corp., 1055 Stewart Ave., Garden City, N.Y. 11530

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Speakers & Cabinets

lar tweeter capacitor, iron-core woofer inductor, and 5-position rotary level switch. Response 25-20,000 Hz; 8 ohms; 70 W peak. 22 1/4" x 27 1/2" w. x 16 1/4" d.\$269.95

"Sentry IA" Speaker System

Designed specifically for monitor use in recording & broadcast studios; wall or ceiling mounting with 12" speaker, diffraction horn high-frequency driver; response 30-20,000 Hz; 16 ohm impedance. Walnut finished; 21 3/4" x 37" x 17" d.\$180.00

"Sentry IIA" Speaker System

Same design as "Sentry I" except cabinet is rectangular for floor, table, or shelf mounting; walnut finished all four sides; 32" x 20" x 13"\$180.00

"E-V SIX-B" Three-Way System

A four-speaker, three-way system combines two 12" woofers, an 8" mid-range driver, and a dome tweeter. Has LC crossover and level control. Response 25-20,000 Hz. 8 ohms; 80 W peak. Size 25" x 29 1/2" x 15" d. Oiled walnut veneer.\$269.95

Enclosure Construction Plans

"Aristocrat"\$2.00
"Marquis"\$2.00
"Patrician"\$2.00

"Patrician 800" Speaker System

Uses Model 30W woofer to achieve high efficiency in the 20 Hz region, responds down to 15 Hz and lower; mid-bass is achieved by use of 100-Hz first crossover frequency with 12 dB/octave attenuation on either side; 12" mid-bass speaker in padded, separate enclosure provides uniform response from 100-800 Hz; T250 treble driver using 8HD diffraction horn, covers frequency above 800 Hz; T350 tweeter extends response to an upper limit of 23,000 Hz; although designed for corner operation, can be used in almost any room location; bass enclosure consists of an air-tight 15 cu. ft. chamber behind woofer; 10 1/2" straight-axis horn with 300 sq. in. throat area and mouth area of 464 sq. in.; occupies 5.3 sq. ft. of floor space; 51" h. x 33" w. x 27 3/4" d.; shipping weight 315 lbs.; available in walnut, mahogany, cherry in traditional or contemporary style.\$1250.00

"E-V EIGHT-A" Speaker System

Ultra-miniature bookshelf. 2-way system with 6" high-compliance woofer & 2 1/2" tweeter; response 60-20,000 Hz; capacity 50 W; 8 ohms; crossover 2000 Hz. 8 1/4" x 15 1/4" x 6 1/2" d. Walnut.\$49.95

EMI

All EMI speakers have brilliance control; removable front grilles; 8 ohms impedance; LC crossovers & oiled walnut cabinets.

Model 92 Speaker System

Bookshelf type with 13 1/2" x 8 1/8" elliptical woofer & 3 3/8" cone-type tweeter; response 50-20,000 Hz; 5 1/2" cabinetry. 23 3/8" x 11 13/16" x 10 3/4"\$109.95

Model 62 Speaker System

Bookshelf type with 10" x 6 3/8" elliptical woofer & 3 3/8" cone-type tweeter; response 60-20,000 Hz; 3/4" cabinetry. 20 1/2" x 13 1/4" x 10"\$79.95

Model 55 Speaker System

Bookshelf 2-way design using an elliptical 10" x 6 3/8" woofer & 3 3/8" tweeter. Response 60-20,000 Hz. Has LC crossover. 18" x 10 1/4" x 7 1/2"\$54.95

Model 205 Speaker System

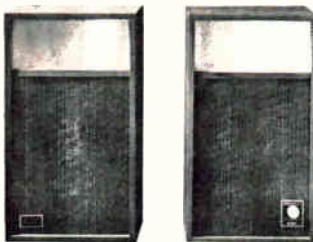
Bookshelf 3-way design using an elliptical 13 1/2" x 8" woofer, two 5" mid-range & 3 3/8" tweeter. Response 25-22,000 Hz. Has mid-range & tweeter level controls. 24 3/4" x 14 1/4" x 13 1/4"\$225.00

300 Series Speaker Systems

3-way, 4-speaker design using a 15" woofer, 7" x 10" elliptical mid-range & two compression-type tweeters. Has mid-range & tweeter level controls. Response 10-30,000 Hz. 27 1/2" x 26" x 19". Available in contemporary and traditional styles.\$350.00

"Sonoglo 5" Speaker/Light Display

Combines hi-fi speaker system with frequency sensitive psychedelic color light

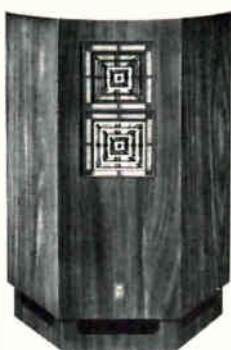


display. Sold in pairs with one master unit (with electronic circuits) and one slave. Two-way speaker design with 8" woofer & 3 3/8" tweeter. 10 1/4" x 18" h. x 7 1/2" d. Light display area is 37 sq in. Walnutpair \$149.50

EMPIRE

6000M "Grenadier" Speaker System

3-way design with 10" woofer, a mid-range radiator & an ultrasonic tweeter;



response 30-20,000 Hz; 8 ohms; 75 W dynamic power capacity. 18" dia. x 24 3/8" h. Satin walnut finish with marble top\$109.95
6000 With walnut wood top\$ 99.95

7000M "Grenadier" Speaker System

3-way design; response 25-20,000 Hz. Has 12" woofer, a direct radiator mid-range & a domed tweeter. Mid-range & tweeter are coupled to wide-angle acoustic lenses; 90 W dynamic power capacity; 8 ohms. Has treble level control. 19" dia. x 26 1/2" h. Satin walnut with marble top\$209.95
Model 7000 with walnut top\$209.95

9000M "Grenadier" Speaker System

3-way design combines 15" high-compliance 4" voice-coil woofer, direct-radiator mid-range & an ultrasonic domed tweeter.

er. Infinite baffle system. Response 20-20,000 Hz; 8 ohms; capacity 125 W dynamic power. 60 W sine-wave power (20-450 Hz), 40 W (450-5000 Hz) & 20 W (5000 to 20,000 Hz). 29" h. x 22" dia. Walnut finish with marble or walnut top.\$299.95
All prices quoted are "List Prices".

FISHER

XP-55-B Speaker System

2-way bookshelf type; completely enclosed baffle design; has 8" bass speaker & a 3" cone tweeter. Response 37-20,000 Hz; recommended power 10-30 W; crossover @ 1500 Hz; 8 ohms. 10" x 20" x 7 1/2" d. Walnut\$49.95

XP-18 4-Way Speaker System

18" woofer with free resonance of 14 Hz; 8" lower mid-range, 5 1/4" upper mid-range, 8" lower mid-range, 5 1/4" upper mid-range, two 2" cone tweeters with 150° dispersion; crossovers at 150, 1500, 3000 Hz. Has 3 separate level controls. 30 1/2" w. x 29 1/2" x 16 1/2". Oiled walnut.\$359.95

XP-44B Speaker System

Two-way system; 6" low-freq. (38 Hz free-air resonance) speaker & 3" tweeter. 90° sound dispersion; 25 W max. dynamic power input; 1000 Hz crossover. Response 30-19,000 Hz; 8 ohms. 8 1/4" x 15 1/4" x 6 1/2" d. Walnut finish, pair \$89.90

XP-60B Speaker System

Two-way system with 10" woofer (20 Hz free-air resonance) & 3" tweeter. 90° sound dispersion; 30 W max dynamic power input; 1000 Hz crossover. Response 32-20,000 Hz; 8 ohms. 13" x 23" x 10" d. Walnut\$79.95

XP-66B Speaker System

Three-way system with 12" woofer (15 Hz free-air resonance), 5" mid-range & 3" tweeter. 90° sound dispersion; 40 W max. dynamic power input; 500 & 1000 Hz crossovers. Response 32-20,000 Hz; 8 ohms. 13 1/8" x 24 1/8" x 12" d. Walnut.\$99.95
XP-66K same as XP-66B except has deluxe fretwork grille\$109.95

XP-9C Speaker System

Four-way system with 15" woofer (10 Hz free-air resonance), two 5" mid-range, 1 1/2" dome treble, and 1 1/2" dome super tweeter. 120° sound dispersion; 100 W max. dynamic power input; 500, 1200 & 5000 Hz crossovers. Response 28-22,000 Hz; 8 ohms. 16 1/4" x 27 1/2" x 13" d. Walnut\$199.95

XP-7B Speaker System

Four-way system with 12" woofer (15 Hz free-air resonance), 5 3/4" mid-range, 5 3/4" for upper mid-range & two 3" tweeters. 90° sound dispersion; 80 W max. dynamic power input; 350, 800 & 3500 Hz crossovers. Response 30-20,000 Hz. 8 ohms. 14" x 24 1/2" x 12" d. Walnut finish.\$149.95
XP-7K same as XP-7B except has deluxe fretwork grille\$159.95

XP-16 Speaker System

Console in three finishes: Mediterranean in pecan, Country French in cherry, and Contemporary in walnut. Four-way



system with two 12" woofers (15 Hz free-air resonance); 8" mid-range; 1 1/2" dome tweeter; 3/4" horn super tweeter; 100 W max. dynamic power input. Response 28-24,000 Hz. Size 27 1/2" x 31 1/2" x 19 1/16".\$299.95

WS-70 Omnidirectional Speaker
Two-way system with 6" woofer & 3" wide-dispersion top-firing tweeter; woof-



er slot-loading deflector; 20 W max. dynamic power input; fine furniture styling. Response 39-19,000 Hz. 15 1/8" x 16 1/4" x 9 1/2" d.\$79.95

WS-80 Omnidirectional Speaker
Similar in styling to WS-70. Three-way system with 8" woofer & top-firing 5 3/4" mid-range, and 3" wide-dispersion tweeter; true 360° dispersion; 30 W max. dynamic power input; fine furniture styling; response 35-20,000 Hz. 18" x 18 3/4".\$99.95

FRAZIER

"Mediterranean" Speaker System
Combines a 12" woofer, an 8" mid-range & your choice of two 3" tweeters or compression-type horn tweeter. Response 25-14,000 Hz \pm 5 dB; crossovers at 800 & 3300 Hz. Has level controls. 8 ohms. 30 1/8" h. x 27 1/4" w. x 16 3/8" d. Dark oak. Model F12-8M\$295.00

"Mark VI" Speaker System
Same as the Mediterranean except different cabinet style. 29" h. x 25 3/4" w. x 16 3/8" d. Oiled walnut. Model F12-8W\$295.00

"Mark V" Speaker System
Combines a 12" woofer, two 4" mid-range & a 3" x 7" high-freq. horn. Has mid-range & treble level controls. Response 30-16,000 Hz \pm 5 dB; crossovers at 800 & 3300 Hz. Will handle 25 W at 8 ohms continuous power. 14" w. x 25 3/4" h. x 12". Oiled walnut. Model F12-2-5T\$189.95
Black utility cabinet\$159.95

"Manhattan" Speaker System
A modified Helmholtz system combines an 8" woofer & 3" tweeter. Response 40-15,000 Hz \pm 5 dB. Will handle 12 W continuous power, 8 ohms. 23 3/8" w. x 19" h. x 11 1/8". Oiled walnut. Model F8-3M\$114.95
Same, but without base\$109.95

"Super Monte Carlo" System
Two-way modified Helmholtz design with 8" woofer & 3" cone tweeter. Response 90-12,000 Hz \pm 5 dB; crossovers at 3000 Hz; 8 ohms. Will handle 12 W continuous power. 19" w. x 10 3/4" x 11 1/8" d. Oiled walnut. Model F8-1S\$59.95
Unfinished walnut\$52.00

"Mark IV" Speaker System
Combines a 10" woofer & a 3" x 7" compression horn tweeter. Response 70-

13,000 Hz \pm 5 dB; 8 ohms. 14" w. x 12" d. x 24". Oiled walnut. Model F-10H\$99.95

"Super Six" Speaker System
Will handle 10 W continuous power; 8 ohms. Has 6" wide-range speaker. 19" h. x 10 1/2" w. x 8". Oiled walnut. Model F-S6\$44.95

"Buckaroo" Speaker System
Combines a 10" woofer & 2 3" cone-type tweeters. Response 70-12,000 Hz \pm 5 dB. Will handle 20 W continuous power; 8 ohms. 23 3/8" x 11 1/8" w. x 9 1/2" d. Oiled walnut. Model F1023\$89.95

"Model XX" Speaker System
Combines a 12" woofer & 2 3" cone-type high-freq. drivers; response 30-13,000 Hz \pm 5 dB; 8 ohms. 24" h. x 14" w. x 12". Pecan finish.\$149.95

"Super Midget" Speaker System
Features 4" dia. cone wide-range speaker. Response 100-12,000 Hz \pm 5 dB. Will handle 10 W; 8 ohms. 15 1/8" w. x 7 1/4" x 9 1/2" d. Oiled walnut. Model F5-2\$32.95
Unfinished walnut\$29.95

"Patio" Speaker System
Indoor-outdoor two-way design. Features 8" woofer & 3" cone tweeter. Response 50-15,000 Hz \pm 5 dB; crossover at 3000 Hz; 12 W capacity; 8 ohms. 15 1/8" h. x 15 1/8" x 8 3/4" d. Finished in multi-color pigment. Model F8-1K\$49.75

"Capsule" Speaker System
Utility design combining a 10" woofer (28 Hz free-air resonance) & two 3" cone tweeters; crossover at 1500 Hz; response 30-15,000 Hz \pm 5 dB. Will handle 25 W continuous; 8 ohms. 19" x 16" w. x 16" d. Flat black finish. Model F-10-2T\$75.00

"Jr. Dixielander" System
Folded low-freq. horn with 8" woofer and 3" x 7" horn tweeter; 1500 Hz crossover. Response 80-15,000 Hz \pm 5 dB. Will handle 15 W continuous; 8 ohms. 20 1/2" x 20 3/8" x 15 1/8" d. Slate grey finish. Model F-815H\$99.95

"New Dixielander" System
Response 70-15,000 Hz \pm 5 dB. Folded low-freq. horn with 10" woofer & high-freq. horn equipped with compression-type high-freq. driver. 8 ohms. 22 1/4" w. x 26 1/8" h. x 15 3/4" d. Utility slate grey. Model F-333-1037\$250.00

"Texas" Speaker System
Response 30-15,000 Hz \pm 5 dB; crossover at 600 Hz. Folded low-freq. horn with 12" woofer & high-freq. horn equipped with compression-type high-freq. driver; 8 ohms. 36 3/8" w. x 33" h. x 24" d. Utility slate grey. Model F-333-1290\$375.00

SEE-24 Environmental Equalizer
Has twelve 3/8 octave-tuned circuits for each two channels to reduce speaker or room peaks by a factor of 15 dB. Completely passive device to be used between preamp & power amp. Has 0 phase shift. 7" x 15" w. x 12" d.\$795.00

HARMAN-KARDON

HK-10 Speaker System
Bookshelf design with 6" extended-range speaker; 20 W capacity. 9" x 14" x 7 1/2"\$35.00

HK-12 Omnidirectional Speaker
Employs same principle of dispersion as HK-50. Sound from 6" twin-cone extended-range driver is directed into an inert reflector which disperses sound 360°. Re-

the Enticer

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TF-25

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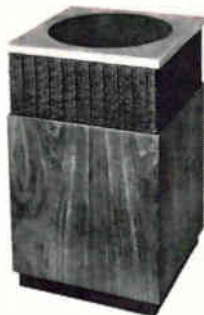


Speakers & Cabinets

sponse 40-16,000 Hz; 8 ohm imp.; will handle 20 W dynamic power. 13 $\frac{1}{4}$ " high x 9 $\frac{1}{2}$ " dia. Walnut finish\$44.95

HK-50 Hemispheric Speaker System

Has 8" woofer (25 Hz resonance) & 2 $\frac{1}{4}$ " tweeter. With 360° dispersion pattern for



all frequencies; sound is produced in vertical plane. Response 35-18,000 Hz; cap. 40 W. Has tweeter level adj.; crossover at 2500 Hz. Oiled walnut. 10 $\frac{1}{4}$ " square x 18" high\$99.95

HK-40 Speaker System

Features 10" high-compliance woofer & a 3 $\frac{1}{2}$ " curvilinear tweeter. Response 30-18,000 Hz; power capacity 50 W music power; free air resonance 22 Hz; 4 ohms impedance. Has 1500 Hz LC crossover & high-freq. level control. Oiled walnut cabinet 22 $\frac{1}{8}$ " x 13 $\frac{3}{8}$ " x 19 $\frac{1}{2}$ " ...\$89.95

HK-20 Speaker System

Features 8" high-compliance woofer & a 3" curvilinear tweeter. Response 40-18,000 Hz; power capacity 50 W music power; free air resonance 30 Hz; 4 ohms impedance; has 2000 Hz LC crossover & high-freq. level control. Oiled walnut cabinet 16 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ " x 8" d.\$55.00

"Citation" Speaker

Omnidirectional radiator with six drivers: three woofers, two domed mid-range drivers, and two tweeters. Speakers mounted on top of cabinet and throw sound in a fountain effect. Double-chamber reflex design develops clean, low-frequency response without doubling to 30 Hz. Power capacity over 60 watts, r.m.s.; response 22-25,000 Hz. Oiled walnut cabinet finished on four sides ...\$295.00

HARTLEY

Model 207MS 7" Speaker

Designed specifically to cover the mid-range and high frequencies (1000-25,000 Hz, ± 2 dB). Has tri-polymer cone with magnetic suspension\$110.00

Model 218MS 18" Woofer

Response 15-3000 Hz. Has heavy cast aluminum frame, 14 lb. Alcomax III magnet, tri-polymer cone with magnetic suspension\$225.00

Model 224MS 24" Woofer

Same as Model 218MS except for size & increased output below 50 Hz ..\$275.00

Model 220 MS 10" Speaker

Full-range speaker; dual voice coil & cone; heavy cast-aluminum basket; 6.1 lb Alcomax II magnet; 16,000 lines/sq in flux density; tri-polymer cone with magnetic suspension; 8-ohm voice coil; response 16 to 25,000 Hz\$145.00

Concertmaster Junior

Combines Model 210MS 10" woofer and Model 207MS 7" mid-range and high-



frequency speakers with 1500 Hz crossover in walnut Mediterranean cabinet. 34" h. x 24" w. x 14"\$425.00
Enclosure also available with 220MS full-range speaker\$295.00

Concert Jr.

Same as Concertmaster Junior except has a smaller cabinet. 30" h. x 15" x 12"\$350.00

Holton "A" Speaker System

For use with 220MS speaker; heavily braced, damped cabinet in natural woods; 24" x 13" x 34" over-all dimensions including legs.
Cabinet with 220MS speaker ...\$275.00

Holton, Jr. Speaker System

Uses Model 220MS speaker; oiled, rubbed walnut finish with cane front grille; also available with new 310 speaker which is chemically-treated version of Model 220MS; frequency response 25-25,000 Hz; power capacity 25 watts; Model 310 speaker has dome-shaped center high frequency radiator; 10" diameter; 30" x 15" x 12" over-all dimensions. With Model 220MS speaker ...\$225.00

Concertmaster Speaker Systems

Mark III-a Oiled-walnut modern design with Models 218MS, 220MS, and 207MS speakers. Has 3-way 12 dB/octave crossovers at 300 & 3000 Hz. Acoustically treated with Soundorbors; 38" h. x 29" w. x 16"\$695.00
Mark IV-a Same as Mark III-a except with Mediterranean cabinet ...\$725.00
Mark V-a Combines 224MS 24" woofer, a 220MS 10" full-range, and a 207MS 7" mid/high range speaker. Has 3-way 12 dB/octave crossovers at 225 & 3000 Hz. 39" h. x 29" w. x 18" d.\$775.00
Model VI-a Combines a 24" woofer, 10" midrange & 7" tweeter with crossovers at 225 & 3000 Hz; 12 dB/octave roll-off\$795.00

Model 300 Crossover

Has 12 dB/octave roll-off with crossovers at 300 & 3000 Hz. Imp. 16 ohms\$85.00

Model 350 Crossover

Has 12 dB/octave roll-off at 350 Hz and 16 ohms\$50.00

Model 1500 Crossover

Has 12 dB/octave roll-off at 1500 Hz and 8 ohms\$45.00

Capri Shelf Model Enclosure

Totally enclosed cabinet containing 35' absorbent material; 24" x 13" x 12"; in oiled natural walnut with bamboo grille, finished on all sides.
With Model 220MS speaker. ...\$195.00

HEATH

AS-10 Acoustic Suspension System

Utilizes acoustic suspension principle; 10" acoustic suspension bass speaker and two 3 $\frac{1}{2}$ " cone-type high-frequency speakers, housed in infinite baffle enclosure, covering 30-15,000 Hz; "dispersal-array" of tweeter permits either upright or horizontal operation; high-frequency control allows adjustment of highs; cabinets are factory-assembled and finished on four sides; kit assembly involves wiring simple crossover network and installing speakers.

Kit AS-10U (unfinished)\$59.95
Kit AS-10W (walnut)\$64.95

AS-16 Speaker System

Two-way bookshelf-type acoustic suspension system using Electro-Voice 8" woofer & 3 $\frac{1}{2}$ " tweeter. Response 45-20,000 Hz; will handle 10 to 25 W of program material. Has 1500-Hz RC crossover & high-frequency level control; 8 ohms. Speakers are shipped mounted to walnut veneer pressed-wood base. Crossover network has to be wired. 10" x 19" x 8 $\frac{1}{2}$ " d.

Kit\$49.95

AS-37A Speaker System

Has 8" woofer & compression-type exponential horn tweeter in a factory-assembled walnut cabinet. 50-12,000 Hz; crossover 1600 Hz; power rating 25 W; 8 ohm imp. 11 $\frac{1}{2}$ " x 23" x 11 $\frac{1}{8}$ " d.

Kit\$41.95

AS-18 Miniature Speaker System

Acoustic suspension, infinite-baffle two-way design combining Electro-Voice 6" woofer & 2 $\frac{1}{2}$ " tweeter. Response 60-20,000 Hz. Has high-freq. level control & will handle 25 W continuous program material (50 W peak). 8 ohms imp. Walnut cabinet is shipped assembled. 8 $\frac{1}{4}$ " x 15 $\frac{1}{4}$ " x 6 $\frac{1}{2}$ " d.

Kit\$34.95

AS-38 Speaker System

Two-way tuned-port, damped-reflex bookshelf design combining JBL 12" woofer & 2" tweeter. Response down to 45 Hz with crossover at 2500 Hz. Has high-freq. level control; will handle 40 W program material. 8 ohms imp. Walnut cabinet is shipped assembled. 14" x 23 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ " d. Kit.....\$129.95

AS-48 Speaker System

Two-way, high-efficiency, tuned-port damped reflex bookshelf design combining JBL 14" woofer & direct-radiating 2" tweeter. Response 40-20,000 Hz; crossover 2000 Hz; will handle 50 W program material. 8 ohms imp. 14" x 23 $\frac{1}{2}$ " x 12" d. Cabinet is shipped assembled.

Kit\$169.95

HITACHI

HS-201 Two-Way Speaker System

Has 8" dia. woofer crossing over at 4000 Hz to horn-type tweeter; 8 ohms; 20 W max. power. Response 40-20,000 Hz. Bass-reflex design with oiled walnut cabinet. 22" x 12" x 11 $\frac{1}{4}$ " d.\$89.95

HS-200 Two-Way Speaker System

Bookshelf infinite-baffle design using 8" dia. woofer crossing over at 3000 Hz to a 2 $\frac{1}{2}$ " cone tweeter. Response 50-20,000 Hz; 8 ohms; 20 W max. power. Oiled walnut cabinet. 19 $\frac{1}{2}$ " x 11" x 9 $\frac{3}{4}$ " d.\$69.95

HS-500 Speaker System

Two-way bass-reflex design using an 8" dia. low-freq. speaker with 4" voice coil & a horn tweeter; 40 W max. power; crossover at 3000 Hz. Response 40-21,000 Hz; 8 ohms. 24 $\frac{1}{2}$ " x 14 $\frac{1}{2}$ " x 13 $\frac{1}{4}$ " d.\$269.95

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Speakers & Cabinets

HS-250 Three-Way Speaker System

Bass-reflex bookshelf design with 10" high-compliance low-freq., a 6 1/2" mid-range & horn tweeter; crossovers at 800 & 4000 Hz; response 35-20,000 Hz; 30 W max. power capacity, 8 ohms; oiled walnut cabinet. 27 1/2" x 15 3/4" x 11 3/4" d.\$149.95

IMF

"TLS" Monitor System

Features dual transmission line system; one for bass & one for mid-range. Four-way design. 43" h. x 20" w. x 17" d. Lab grey Formica\$660.00 Rosewood Formica\$660.00

"TLS" Studio System

Dual transmission line; four-way drive system with crossovers at 750, 3500 & 13,000 Hz. Response 25-40,000 Hz; min. 25 W amp required. 35 1/2" h. x 15" w. x 14" d.\$300.00

INFINITY

"Servo-Statik" I Speaker System

Features electrostatic speakers for mid & treble ranges & a 16" dia. piston low-freq.



speaker with sensing element built into the voice coil which acts as a feedback loop to power amplifier. Has a solid-state 110 W r.m.s. power amplifier that drives bass system; response 10-30,000 Hz \pm 2 dB; Dist. 0.5% from 20-20,000 Hz at listening levels. Has crossovers at 120 & 2200 Hz. The feedback bass system & crossovers are all housed in separate amplifier assembly. Also supplied as separate units are two electrostatic screens 28" x 37" x 6 1/2" d. & bass speaker 22" x 22" x 19" h. Contemporary style in walnut\$1995.00 Brazilian rosewood\$2094.75 Bass unit with amplifier, as a separate component. Walnut\$795.00 Rosewood\$834.75

"Servo-Statik" II Speaker System

Same as Servo-Statik I except has single stereo amplifier to drive mid-range & tweeters (servo bass amplifier is supplied). One could still tri-amplify system at later date by adding another amplifier as is used in Servo-Statik I. Walnut finish\$1195.00 Brazilian rosewood\$1254.00

2000 Speaker System

Features electrostatic strip tweeters in special cavity covering 2200 Hz and up. Response 2200-35,000 Hz \pm 2 dB at 0.5% dist. Mid-range covered by 4" cone driver. Bass system is heavily damped & has controlled impedance curve (4 ohms \pm 10%). Response 30-35,000 Hz \pm 4 dB; crossovers at 375 & 2200 Hz; 20 W r.m.s. minimum; THD 0.75% from 50-25,000

Hz at normal listening levels. 26" x 18" x 12" d. Walnut\$279.00 Rosewood\$306.90

1000 Speaker System

Bookshelf design similar to 2000 except for tweeter section; an ultra-light cone-type is used with built-in acoustic damping device. Response 30-20,000 Hz \pm 4 dB; crossovers at 375 & 3500 Hz; 4 ohms; 20 W r.m.s. min. 25" x 15" x 12" d. Walnut\$179.00

JANSZEN

33 Electrostatic Speaker System

Mid- and high-range only; 1200 to beyond 30,000 Hz; less than .5% HD @ 50 watts input below 10,000 Hz; will handle 100 watts music power; includes built-in power supply; 8 ohms impedance. Model 33OW Oiled walnut\$69.95 Model 33U Unfinished, black ...\$63.95

71 Z-600 Speaker System

350B woofer with two 130 electrostatic speakers sealed in a fiberglass-filled enclosure; includes power supply and high-pass filters; response 30 to beyond 30,000 Hz; LRC high-pass filter; has mechanical woofer roll-off & broad crossover region (1000-2000 Hz); 70° h.f. dispersion; 8 ohms; 26 3/4" h. x 20" w. x 13" d.; oiled-walnut finish\$219.95

130 Tweeter

Push-pull, constant charge electrostatic tweeter; capacity 50 watts; frequency re-



sponse 500 to 30,000 Hz; harmonic distortion less than 0.5% at 50 watts input below 10,000 Hz; dispersion 120°; a.c.-operated bias supply, LRC high-pass filter; power supply draws 2 watts, 120 volt 60 cycle a.c.; size 7 1/4" x 22" x 13"; shpg. wt. 16 lbs.

Model 130OW (Oiled Walnut) ..\$198.00 Model 130UA (Flat Black)\$179.00 Model 130U (Flat Black) in rectangular cabinet 7 1/4" x 23 1/2" x 10"\$171.00 Specify imp. 8 or 16 ohms on Models 130OW & 130UA

350A Dynamic Woofer

11" cone woofer designed for use with 2.2-cubic foot (or larger) fiberglass-filled enclosure; frequency range 30 to 2000 Hz; fundamental woofer resonance 45 Hz; magnet structure weighs 3 1/4 lbs; flux density 10,800 gauss; power handling; up to 100 watts peak on complex music; impedance 8 ohms\$37.00

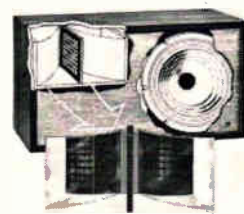
Z-700 Speaker System

Includes one 350C cone woofer integrally sealed in a fiberglass-filled enclosure with two 130 electrostatic radiators, power supply & high-pass filter. Response 30-30,000 Hz; 8 ohms; music power 100 watts. Has LRC high-pass filter for electrostatic only. Mechanical roll-off on woofer with broad (1000-2000 Hz) crossover. 120 V, 50-60 Hz operation; 44 lbs. Sizes 15" x 26" x 13 1/4". Oiled walnut\$179.95 Z-700U Unfinished birch\$164.95

Z-500 Speaker System

Single push-pull radiator version of elec-

trostatic mid/high-range tweeter com-



bined with 11" dynamic woofer; response 30-30,000 Hz; 72° sound dispersion of tweeters; sound from both sides of flat radiator deflects toward listener from parabolic curved walls that form tweeter housing; built-in power supply and high-pass filter drive electrostatic tweeter; 24 3/4" l. x 13 1/2" x 11 3/4" d. Z-500OW Oiled walnut\$149.95 Z-500U Unfinished birch\$139.95

Z-900 Speaker System

Combines four electrostatic radiators for mid- and high-freq. range & two 350D woofers. Response 27-30,000 Hz. Has built-in power supply & high-pass filter. Size 28" x 31 1/4" x 15 1/2" d. Oiled walnut.\$399.95

JanKit41

Consists of electrostatic two-element model mid/high frequency driver sup-



plied in cabinet and 350 woofer both mounted on single panel mounting board; designed for custom installations; cabinet should be at least 2 cubic feet in volume; over-all dimensions 19 1/2" h. x 16" w. x 7 1/2" d.\$124.95

JZ-800 Bookshelf Speaker System

Combines 350A (11") cone woofer & 3 1/4" cone tweeter in a fiberglass-filled enclosure. Response 30 to 14,000 Hz. Has very broad crossover region with mechanical roll-off designed into woofer & high-pass filter for tweeter with 3-pos. level adjusting sw. 8 ohms. 50 W max & 15 W min. 13 1/2" x 23 1/2" x 11 1/4". Oiled walnut\$139.95 JZ-800U Unfinished birch\$129.95

Z-960 Speaker System

Combines three 130 electrostatic radiators, a high-pass filter, power supply & a 350D cone woofer; sealed in a fiberglass-filled enclosure. Response 30-30,000 Hz. Imp. 8 ohms. Has LRC high-pass filter for electrostatic only. Mechanical roll-off on woofer. Broad 800-2000 Hz crossover region for woofer-tweeter blending. 26 3/4" x 27 1/2" x 14 1/2". Oiled walnut\$279.95

65 Electrostatic Speaker

Combines two electrostatic elements in push-pull with high-pass filter, power supply, and cabinet. Response 700-30,000 Hz; HD 0.5% @ 50 W input below 10,000 Hz; h.f. dispersion 60 degrees; 8 ohms. Max. input 50 W r.m.s. Has LCR type crossover. Requires same type woofer as in 130. 6 3/4" x 11 1/2" x 7 1/4" d. Black utility\$80.00

JENSEN

1200XL Speaker System

Features a seven-speaker, 4-way system combining four 15" woofers, a compression-driver horn-loaded mid-range, a compression-driver horn super-tweeter, and a direct-radiating dome ultra-tweeter. Response 15-25,000 Hz; crossovers at 4000 & 10,000 Hz; 100 W power rating; 8 ohms. Has mid-range & high-frequency balance controls. 30 1/8" x 40" x 22 3/4". Contemporary styling\$895.00

Mid-Range Speakers

All speakers are 8 ohms and, unless otherwise indicated, lowest recommended crossover point is 600 Hz.
 MH-6 Horn-loaded compression driver; frequency range 600-15,000 Hz; power rating 30 W\$24.50
 MQ8-R 8" direct radiator with closed back; frequency range 600-4000 Hz; 40 W rating\$23.25
 ME-20 "Sono-Dome" design with closed back; lowest recommended crossover is 2000 Hz; frequency range 2000-15,000 Hz; 35 W rating\$36.90

Dividing Networks

A6/8 Two-way unit provides crossover at 600 Hz for 2-, 3-, or 4-way systems; 8 ohms; 100 W power rating\$39.75
 A20/8 Two-way unit provides crossover at 2000 Hz for multi-way systems; 8 ohms; 100 W power rating\$29.95
 A40/8 Two-way unit provides crossover at 4000 Hz for 3- or 4-way systems; 8 ohms; 100 W power rating\$26.50
 A6410/8 Three- or four-way multiple-frequency crossover network; crossover frequencies 600, 4000, and optionally 10,000 Hz; 8 ohms; 100 W power rating\$44.50

Low-Frequency Speakers

All woofer designs are 8 ohm impedance & resonances shown are free-air figures. Recommended crossover is 2000 Hz.
 W15-LF 15"; 45 W rating; 16 Hz \$102.50
 W15-NF 15"; 40 W rating; 20 Hz \$ 62.50
 W12-LF 12"; 40 W rating; 20 Hz \$ 98.25
 W12-NF 12"; 35 W rating; 20 Hz \$ 58.50
 W12-RF 12"; 30 W rating; 25 Hz \$ 42.00
 WS10-NF 10"; 30 W rating; 25 Hz; 3 3/8" deep\$53.50
 W10-PF 10"; 30 W rating; 25 Hz \$ 43.50
 W8-PF 8"; 30 W rating; 35 Hz ..\$ 42.85
 W8-RF 8"; 25 W rating; 35 Hz ..\$ 35.50

Z-3422 Autotransformer

For matching any two of 16/8/4 ohm impedances. Power rating 45 W\$11.50

TF-15 "Mini-Mite" System

A 2-way, 2-speaker system with edge-damped 8" woofer & 3" cone tweeter. Response reasonably flat from 35 to 16,000 Hz. Power rating 15 W ...\$44.40

TF-25 Speaker System

A 2-speaker, 2-way system with 10" air-suspension woofer & compression-driver, horn-loaded tweeter. Response 25-19,000 Hz. Power rating 25 W ...\$89.50
 Two for\$166.50

Balance Controls

BCL-2 Wirewound two-deck L pad with knob and escutcheon. For m.f. or h.f. balance adjustment in multi-way systems; 8 ohms; 45 W power rating\$8.95
 BCP-1 Wirewound pot with knob and escutcheon. For m.f. or h.f. balance adjustment in multi-way systems; power rating 30 W; 8 ohms\$5.75

Model TF-3C 3-Way Speaker System

Bookshelf system; has 10" woofer, 2-3/4" midrange units, and spherical sector tweeter; crossovers at 2000 and 10,000 Hz; power rating 25 watts; high frequen-

cy control on rear; impedance 8 ohms; 13 1/2" x 23 3/4" x 11 3/8"; 38 lbs. Dura-syn walnut veneer\$128.00

Model G-600

Triaxial 15" 3-way speaker; 35 watts; response 30 Hz to upper hearing limit; 16-



ohm impedance; 3 1/2 lb. DP-Alnico-V magnet; 15" cone woofer; thurbone compression-driver mid-channel unit with separate horn for 1000 to 4000 Hz range; compression super-tweeter; tweeter and midrange controls; depth 11 1/8"; shipping weight 33 lbs.\$197.50

Model G-610B

Triaxial 15" 3-way speaker; 40 watts; 16-ohm impedance; crossovers at 600 and 4000 Hz; heavy duty curvilinear diaphragm unit for lows, compression driver unit for mid-range and compression driver for high end; baffle opening 13 1/4"; depth 10 3/4"; crossover and control networks\$370.00

700XLW Speaker System

4-way bookshelf design. Features 12" woofer, a horn-loaded mid-range, a super-tweeter & a dome-type ultra-tweeter; crossover 400, 4000, and 10,000 Hz; response 20-20,000 Hz; 40 W power rating; 8 ohms. 16 1/4" x 25 1/2" x 12" d. Oiled walnut\$275.00
 FS-1 Decorator-styled walnut floor stand for 700 XLW\$19.95

Model SG-84 8" Coax

Flexair woofer combined with electrically independent direct radiator tweeter provides response 40-14,000 Hz; has h.f. balance control; built-in crossover at 2000 Hz; 15 watts; 8 ohms; 3 3/8" depth\$36.50

Model SG-88 8" Coax Speaker

Features low crossover compression driver horn-loaded tweeter in an 8" unit;



electrical crossover from high-compliance low-resonance Flexair woofer is 2000 Hz; frequency range 35-15,000 Hz; has h.f. balance control; 20 watts; 8 ohms\$51.50

"Delta" Series Loudspeakers

Model DL-220 3-element 12" coaxial design. Compression, omnidirectional h.f. horn, midrange secondary modulator, low frequency resonance 25 Hz; Response 25-16,000 Hz; 8 ohms; 20 W. 5 1/8" deep\$48.00
 Model DL-120 dual-cone, 12" speaker. Similar to DL-220 except without h.f. horn. Response 40-15,000 Hz; 8 ohms; 20 W\$25.75
 Model DL-80 dual-cone 8" speaker. Response 50-15,000 Hz; 8 ohms; 15 W;

3 1/8" deep\$17.50
 Model DL-84 coaxial 8" design with high-frequency control on 30" cable. Response 40-16,000 Hz; resonance 50 Hz; 8 ohms; 15 W power rating; 3 1/8" deep\$31.50
 Model DL-210 3-element 12" coaxial. Has mechanically coupled woofer & mid-range element & direct radiator tweeter. Has high-frequency balance control on 30" cable. Resonance 40 Hz; response 20-16,000 Hz; 20 W power rating; 8 ohms; 5 1/8" deep\$38.00

Model SG-80 Dual-Cone 8" Speaker

Has Flexair woofer with concentrically mounted auxiliary cone for high end; response 40-12,000 Hz; 15 watts; 3 3/8" depth; 8 ohms\$22.75

Model SG-210 3-Element 12" Coax

Two-way, 3-element system; Flexair woofer provides high compliance and low resonance; has curvilinear-radiator separate tweeter & mechanically coupled mid-range radiator; electrical crossover at 2000 Hz; h.f. control on cord for external mounting; frequency range 20-14,000 Hz; 20 watts; 8 ohms\$54.75

Model SG-220 3-Element 12" Coax

Features compression-driver horn-loaded super-tweeter in conjunction with mechanically coupled mid-range radiator and Flexair high-compliance low resonance woofer; electrical crossover at 4000 Hz; frequency range 20-15,000 Hz; h.f. balance control; 20 watts; 8 ohms\$63.50

SG-222 Multicell Horn 12" Coax

Compression driver tweeter horn extends through woofer core and terminates in



six-cell mouth for wide angular dispersion of high frequencies; has low electrical and acoustical crossover frequency of 2000 Hz; h.f. level control; response 30-15,000 Hz; 25 watts; 8 ohms\$80.50

Model SG-223 Reflex Horn 12" Coax

Two-way coaxial speaker with horn-loaded low-crossover tweeter and high-compliance low-resonance Flexair woofer; electrical crossover to reflex horn tweeter 2000 Hz; has h.f. control; response range 20-15,000 Hz; 25 watts; 8 ohms ..\$88.75

SG-300 "Triaxial" Speaker

12" design with 3 independent speakers. SG-300 woofer (20 Hz resonance), 6" long midrange horn & tweeter. Has a balance control to either boost or attenuate high frequencies. Response 20-20,000 Hz; crossovers 600 & 4000 Hz; power capacity 30 W; 8 ohms; 8 1/2" deep . \$125.00

PR-200A Speaker System

Bookshelf, 3-speaker, 3-way system with 12" woofer, MH-400 mid-range, and E-100 ultra-tweeter. Response 25-20,000 Hz, 8 ohms, capacity 35 watts. 14" h. x 25" w. x 10 3/8" d.\$198.00

High-Frequency Speakers

TH-40 Horn-loaded compression driver; response 4000-18,000 Hz. Use above 4000 Hz in 3- or 4-way systems; lowest recommended crossover point 4000 Hz; power rating 45 W; 8 ohms\$41.85
 TH-20 Horn-loaded compression driver unit for 2- and 3-way systems. Response 2000-20,000 Hz; power rating 30 W; 8

Z

Speakers & Cabinets

ohms \$19.95
TE-40 "Sono-Dome" design; frequency range 4000-25,000 Hz. Use above 4000



Hz in 3- or 4-way systems. Power rating 35 W; 8 ohms \$29.95
TW30-V Direct radiator with 3" diaphragm; closed-back design; freq. range 2000-16,000 Hz; power rating 25 W; 8 ohms \$13.85
TP35-V Direct radiator with 3" diaphragm; closed-back design; freq. range 2000-16,000 Hz; power rating 25 W; 8 ohms \$6.50
TP30-V Direct radiator with 3" diaphragm & closed back; freq. range 2000-16,000 Hz; power rating 25 W; 8 ohms \$5.50

JVC

5304 4-Way Speaker System

Same as Model 5340 except response 30-20,000 Hz and crossovers at 1500 Hz instead of 1000 Hz and 6 1/2" mid-range. 24 3/4" x 15 5/8" x 13 3/8" d. \$149.95

5320 3-Way Speaker System

Infinite cabinet design. Has 8" woofer, 3 1/2" cone mid-range, and 2" cone tweeter. Response 35-20,000 Hz; 8 ohms; crossovers at 5000 & 10,000 Hz; 30 W r.m.s. capacity. Has high-freq. level control \$99.95

5310 3-Way Speaker System

Compact infinite cabinet design. Has 6 1/2" woofer, 2" horn, and 2" cone speakers. Will handle 18 W r.m.s.; crossovers at 7000 & 10,000 Hz; 8 ohms. 17" x 11" x 7 3/4" d. \$69.95

5303 Omni Speaker System

Will radiate 360°; has two 5" woofers & 2" horn tweeters in each sphere; capacity 40 W r.m.s.; 8 ohms. Response 20-20,000



Hz; crossover at 5000 Hz. Can be hung from ceiling; is supplied with floor stand. 13 1/2" dia. pair \$199.95

5340 4-Way Speaker System

Infinite cabinet design combining 12" woofer, a cellular horn-type mid-range, 3 1/2" cone tweeter, and 2" horn super tweeter. Will handle 80 W dynamic power; 8 ohms. Response 20-20,000 Hz; crossovers at 1000, 7000 & 10,000 Hz; 40 W r.m.s. capacity. Has level controls for middle & high-freq. ranges. Multi inputs permit separate amplifiers to be connected to woofer, mid-range & tweeter. 28 1/2" x 16 1/2" x 15 1/4" d. Walnut \$259.95

KENWOOD

KL-5060 3-Way Speaker System

4-speaker design with 12" woofer, 6 1/4" cone mid-range & two horn-type tweeters; response 30-22,000 Hz; crossovers 600 & 5000 Hz (12 dB/octave); capacity 60 W; 8 ohms. Has mid-range & h.f. level controls. 15" x 25 1/2" x 11 5/8" d. Oiled walnut \$139.95

KLIPPSCH

Model Nine Electrostatic

Electrostatic speaker system that reproduces entire audio range; for adequate reproduction of very low frequencies total radiating area of 28 sq ft is used (14 sq ft in rear); radiation front and rear is equal; consists of two complete full-range speakers with built-in power supplies and step-up transformers; two sections can be joined or separated completely for use in stereo systems; impedance nominal 16 ohms and is primarily resistive in audio range; maximum 30 ohms, minimum 16 ohms; recommended amplifier power per section 40 to 75 watts; 70" x 23 1/2" x 2 3/8" each panel; mahogany, walnut, oiled walnut. Recommended to be used in pairs; one for ea. channel (each) \$1140.00

Model Five Speaker System

Four-speaker, three-way system of acoustic suspension design housed in a 26" x 13 3/4" x 11 1/2" oiled walnut cabinet. Low-frequency driver is 12" acoustic-suspension type; two 3" mid-range drivers are housed in sub-enclosure; 1 3/4" direct radiator tweeter. Provided with two 3-pos. switches that adjust the 2500-7000 and 7000-20,000 Hz ranges. Finished on all four sides. 8 ohms. \$189.95

Model Six Speaker System

Full-range, two-way system housed in 23 1/2" w. x 12 5/8" h. x 11 1/4" d. cabinet; low-frequency speaker is 12" acoustic suspension type; high-frequency section contains single direct radiator with 1 3/4" cone; LCR crossover network is integral part of system and has provisions to increase or decrease high-frequency level 2 1/2 dB; impedance 8 ohms; hardwood enclosures finished all four sides. Oiled walnut, cherry \$134.00

Model Twelve Speaker System

A 3-way, 4-speaker system in a 4 cu ft enclosure. Speakers used are a 12" woofer, 2 mid-range in individual sub-enclosures & a cone tweeter. Crossovers at 600 & 2500 Hz. Has four switched level controls (300-800, 800-2500, 2500-7000 & 7000-20,000 Hz). 8 ohms imp. 29" x 22 1/4" x 15" d. Oiled walnut \$275.00

Model Seventeen

Full-range, two-way system with 10" long-excursion acoustic suspension woofer and 1 3/4" direct-radiator tweeter with elastomeric suspension; LCR crossover network is integral part of system and permits an increase or decrease of 2 1/2 dB

in high-frequency level without shelving in crossover region; grille cloth is removable to permit user to change as desired. 11 3/4" w. x 23 1/4" h. x 8 3/4" d.; finished all four sides; oiled walnut \$74.95

Model Twenty-Two /A Speaker System

Two-way, two-speaker system of acoustic suspension design housed in an 18" x 10 1/4" x 7 1/8" oiled walnut cabinet. Low-frequency driver is 8" acoustic-suspension type, 2" direct radiator for the mid-range and highs. Finished on all four sides. 8 ohms \$54.95

Model Thirty-Three Speaker System

Two-way bookshelf system using a Controlled Acoustic Compliance design. Low-frequency driver is a 10" high-compliance design with built-in high-frequency damping strips and 1 3/4" direct radiator with integral center dome as tweeter. Oiled walnut cabinet finished all four sides. 8 ohms. 13 3/4" x 23 3/8" x 10 1/16" d. \$99.95
All prices are suggested list.

KLIPPSCH

Klipschorn Corner Speaker System

Employs folded corner horn bass section, straight axis mid-range, and tweeter horns; response 32.7-17,000 Hz; ideal for mono or stereo especially when used with compatible third speaker bridged for center speaker use; over 30 acoustic watts output can be delivered; priced from \$571 for "Decorator's Model" in unfinished fir to \$1020 for hand-rubbed systems. All models are functionally identical.

Model H (Heresy) 3-Way System

Features Klipsch K-22 woofer, K-55-V midrange driver & K-77 tweeter. Re-



sponse 70-17,000 Hz ± 5dB; 16 ohm imp. Finished all four sides in four finishes. Compatible with Klipschorn and Cornwall for stereo. Available at no extra charge with speaker special network for center speaker use. 21 1/8" x 15 1/2" x 13 3/8" deep. Price \$252 in furniture finishes to \$209 for theater black fir.

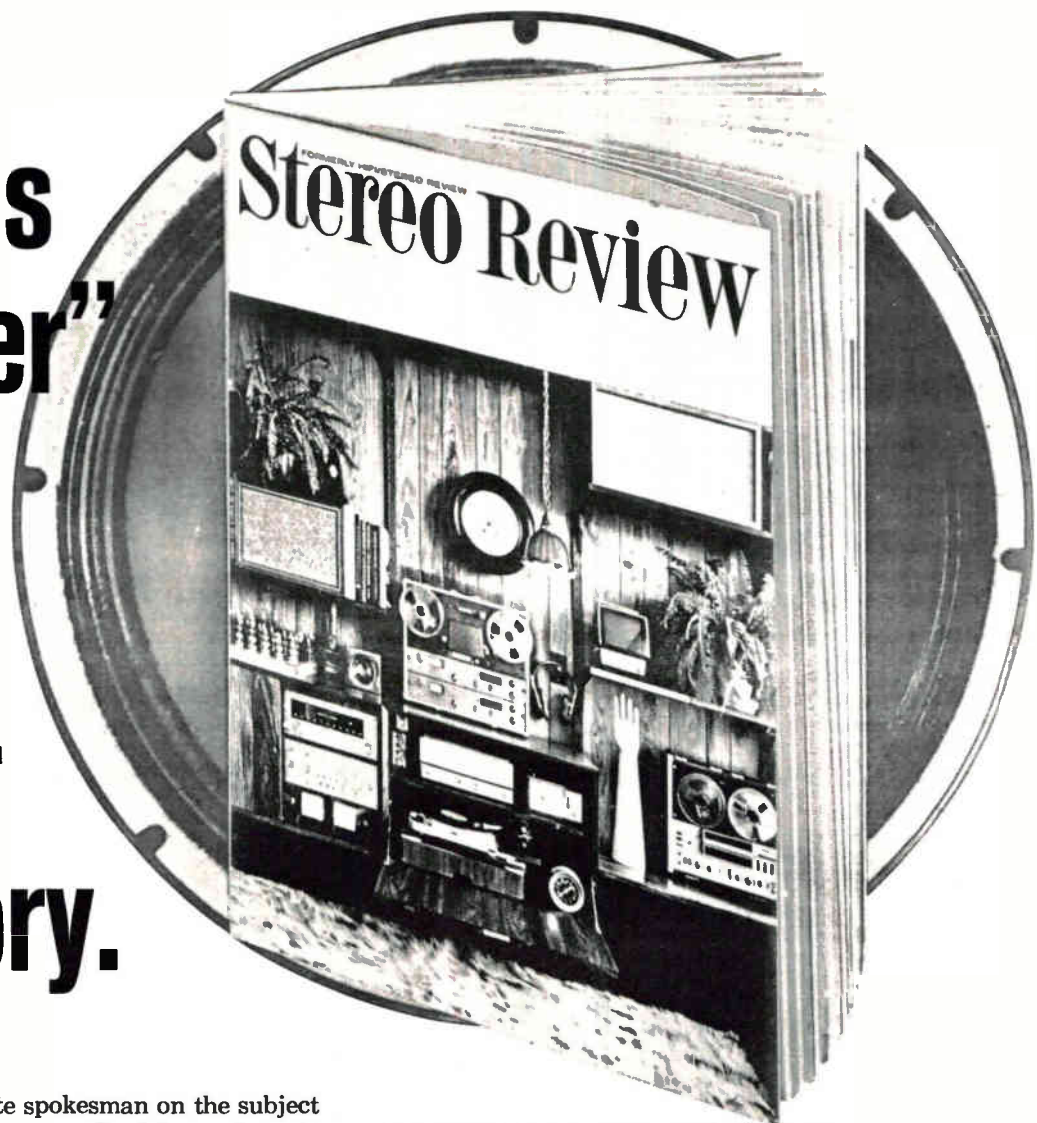
Cornwall II 3-Way Speaker System

Smooth response down to 38 Hz; ported exhaust unloading at approximately 8 Hz. Has Klipsch K-33 woofer, K-55-V mid-range driver, and K-77 tweeter. Response 38-17,000 Hz ± 5 dB; 16 ohm imp. Transient response is excellent and distortion is minimal above 16 Hz. Available upright or in lowboy 36" x 25 1/2" x 15 1/4". Price from \$460 in choice of four furniture finishes to \$342 for theater black fir.

"La Scala" K-447 Speaker System

Horn-type design. Features K-33 woofer, K-55-V midrange driver & K-77 tweeter. Response 45-17,000 Hz ± 5 dB; handles 70 W program input; 16 ohms imp.; crossover at 400 & 6000 Hz. 23 3/4" w. x 34 1/4" h. x 24 1/8". Theater black finish

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Speakers & Cabinets

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LAFAYETTE

"Criterion" 150A Speaker System

Bookshelf, acoustic-suspension system with 3-way, 10" woofer, 3" mid-range, 1 1/2" tweeter; LC crossover at 1600 & 10,000 Hz; response 30-20,000 Hz; 40 W capacity; 8 ohms. Has brilliance control; finished four sides in oiled walnut. 19" w. x 11" h. x 8 7/8" d.\$59.95

"Criterion VI" Speaker System

Bookshelf tuned sonic tube, bass-reflex design; 4-way, 12" woofer, 5" mid-range, two 3" tweeters, two 1 1/2" super tweeters. Response 20-20,000 Hz; 50 W; crossovers 800, 5000 & 12,000 Hz. 8 ohms. 24" x 14 1/2" x 12" d. Oiled walnut.\$89.95

"Omni II" Speaker System

10", 2-way, 360° multi-directional speaker system. Response 50-20,000 Hz; capacity 40 W. 2600 Hz crossover; 8 ohms. Has brilliance control. Oiled walnut cabinet. 13" x 13" x 19 1/4"\$59.95

"Criterion" 4X Speaker System

4-speaker, 4-way system; 12" woofer, 5" mid-range, 3" tweeter, 1 1/2" super tweeter; crossovers 800, 5000 & 10,000 Hz; response 25-20,000 Hz; 50 W capacity; 8 ohms. High & mid-range frequency controls. Oiled walnut finished on 4 sides. 22" w. x 14 1/4" h. x 11 3/8" d.\$69.95

"Criterion" 100B Speaker System

3-way system with 10" woofer, 3 1/2" enclosed-conc tweeter, 1 1/2" super tweeter. Has high-frequency control (3500 & 10,000 Hz crossover); response 30-19,000 Hz; 40 W capacity; 8 ohms. 21 1/2" w. x 11 1/4" h. 9 3/4" d. Oiled walnut cabinet\$49.95

"Criterion" 5XB Speaker System

Bookshelf-type, 4-way, 4-speaker acoustic-suspension system, 12" woofer, 6 1/2" mid-range, 3" tweeter, 1 1/2" super tweeter. Mid & high-frequency controls; response 18-25,000 Hz; crossovers at 800, 4500 & 10,000 Hz; capacity 75 W dynamic power; 8 ohms. Oiled walnut cabinet. Overall size 23 3/4" w. x 14 3/8" h. x 11 1/8" d.\$129.95

"Criterion" 80 Speaker System

Floor-standing, 4-way, 6-speaker acoustic-suspension design; 12" woofer, 6 1/2" mid-range, two 3" tweeters, and two 1 1/2" super tweeters. Mid and hi-frequency level controls. Response 18-25,000 Hz; crossovers at 800, 4500 & 10,000 Hz. Capacity 100 W dynamic power, 8 ohms. Oiled walnut cabinet. 18" x 12" d. x 30".\$159.95

LANSING, JAMES B.

S7R Speaker System

Consists of LE15A low-frequency transducer, PR15 passive radiator, LE85 high-frequency driver, HL91 horn & acoustic lens & LX5 dividing network ...\$429.00

S8R Speaker System

Added to the LE15A & PR15 passive radiator is a mid- & high-frequency system consisting of Model 375 driver and HL93 horn & acoustical lens, a 075 ring radiator, ultra-high-frequency driver . \$639.00

LE15A 15" Low-Freq. Speaker

For use in 6-8 cu ft closed cabinets or ported cabinets as small as 3.5 cu ft; can

be combined with PR15 passive radiator as in "Olympus"; 8 ohms\$135.00

LE14A 14" Low-Freq. Speaker

For use in cabinets as small as 1.5 cu. ft.: 4" edgewound ribbon voice coil; 8 ohms\$108.00

130A 15" Low-Freq. Speaker

Designed for use with LE175DLH high-freq. assembly in reflex or horn-loaded enclosures. 8 ohms\$108.00

LE10A 10" Low-Freq. Speaker

For enclosures as small as 1 cu ft. 3" edgewound ribbon voice coil. 8 ohms\$60.00

075 High-Freq. Speaker

Ring radiator for use with any extended range speaker from 2500 Hz up. Can be used with any 2-way system to augment response beyond 7000 Hz. 8 ohms\$66.00

"Olympus S7R" Speaker System

Massively built enclosure houses S7R components. Available with hand-carved wood fretwork grille. Furnished in oiled walnut 20" x 40" x 26 1/2". C50 enclosure only\$297.00 Complete with S7R components installed\$726.00 Also available with S8R speaker system installed\$936.00

LE12C 12" Speaker

Combines a low-frequency design with a phased piston-type direct radiator and a dividing network. For 2.2 cubic foot or larger enclosures\$114.00

C60 "Sovereign I"

Traditionally styled design; same internally as "Olympus". Has pedestal base. Finished in country oak or golden oak. Can be used with S7R or S8R speaker systems. 26 1/2" x 40" x 19 1/2" d. . \$297.00

"Sovereign II" S61

Smaller version of C60. Identical internally to the "Apollo". Available in country oak or golden oak with S7 speaker system. 26 1/2" x 26 1/2" x 19 1/2" d. \$660.00

"Sovereign II" S51

Smaller version of Olympus. Available in oiled walnut with S7 components. 26 1/2" x 26 1/2" x 18" deep\$660.00

C68 "Sovereign III"

Similar to Models "Sovereign I & II" with over-all dimensions 26 1/2" x 64 1/2" x 19 1/2" d.\$480.00

88 "Nova" Speaker System

Combines a 12" low-frequency speaker with heavily damped, long-travel cone assembly; 3" voice coil with a 2" piston-type direct radiator. Same high freq. unit as in Lancer 77. Oiled walnut. 14" x 23 1/2" x 11 3/4" d.\$186.00 88-1 "Cortina". The same components and enclosure as the 88 "Nova" but with full-size fabric grille\$186.00

D208 8" Speaker

Max. efficiency version of D130. Extended-range design to be used as an extension speaker and for general use. 2" aluminum ribbon voice coil. 7 1/8" rear mounting hole. 3" depth\$42.00

L75 "Minuet" Speaker System

Uses LE8T and PR8 combination, occupying less than one cubic foot of space. Finished on all four sides, oiled walnut. 9" x 16 1/2" x 7 3/4" deep\$114.00

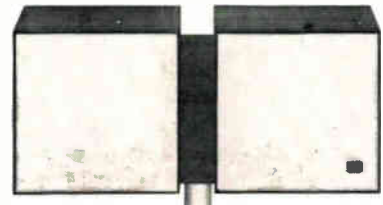
S99 "Athena" Speaker System

Uses 14" low-frequency speaker & 2" high-frequency direct radiator. Oiled walnut cabinet with hand-carved wood fretwork grille. 14" x 23 1/2" x 11 3/4" deep.

.....\$237.00 SC99 "Athena". Same as S99 "Athena" except has a full fabric grille instead of Oriental fretwork\$225.00

L80 "Caprice" Speaker System

Finished on five faces of each cube in either rosewood or walnut. Has aluminum



grille panels, an LE8T 8" extended-range speaker and matching passive radiator. 22" x 22" x 10" deep.

Oiled walnut\$195.00 Rosewood\$213.00

D130 15" Extended-Range Speaker

Extended-range with 4" edgewound aluminum ribbon voice coil and dural high-frequency dome. Resonance 37 Hz. 25 watts continuous power, 8 ohms \$108.00

D131 12" Extended-Range Speaker

Same as Model D130 except 12" dia.\$99.00

D123 12" Extended-Range Speaker

Designed for compact enclosure 2 1/2 cu. ft. or more and shallow enough for wall installations. 8 ohms\$78.00

Passive Radiators

Speaker cone assembly without voice coil. Use in conjunction with other JBL speakers to provide more bass, smoother response, and greater range.

PR15 Complements LE15A in 5 to 8 cu. ft. cabinets\$27.00

PR10 Complements LE10A in 1.25 to 3 cu. ft. cabinets\$15.00

PR8 Complements LE8T in 0.75 to 2 cu. ft. cabinets\$12.00

"Libra D53LE14C" System

Features LE14C speaker system and LX2-1 crossover network installed. Finished four sides in oiled walnut or tawny walnut. 23 1/2" x 14" x 11 3/4" deep.

C53 enclosure only\$ 54.00 Complete with LE14C installed . \$216.00 Could also house S11 and S12 systems.

"Lancer 101" Speaker System

Has marble top, wood fretwork grille, and S1 speaker system. The cast aluminum horn is coupled to a 14-element acoustic lens. Available in oiled walnut; 24 1/2" x 17 1/2" x 12 3/4"\$396.00

S1 2-Way Speaker System

Model LE14A 14" Linear Efficiency woofer is matched to LE175DLH high-frequency assembly by LX10 crossover network. System delivers full-range response in enclosures as small as 2 cubic feet. Power capacity 30 watts, 8-16 ohms\$294.00

"Lancer 77" Speaker System

Two-way loudspeaker system uses transducers identical in performance to LE10A 10" Linear Efficiency woofer, LE20 tweeter, and LX4-2 crossover with adjustable high-frequency control. In addition, a PR10 10" passive radiator doubles the radiating area of the woofer in the 30-150 Hz region for improved low-frequency performance. Available in oiled walnut finish. 14" x 23 1/2" x 11 3/4" d.\$171.00

"Lancer 44" Speaker System

Bookshelf design using LE8T speaker &

PR8 passive radiator. 23 1/2" x 12 3/4" x 11 3/4" d. Oiled walnut\$114.00

"Viscount S36" Speaker System

A reflex design using the LE175DLH high-freq. assembly, a 130A 15" woofer, and N1200 crossover network. Oiled or tawny walnut. 28 3/4" x 19 3/8" x 15 7/8" d.\$423.00

"Baron S38" Speaker System

Uses D130 15" speaker, a D75 high-frequency unit and N2400 crossover network. Oiled walnut. 24 3/8" x 23 3/4" x 15 7/8" d.\$315.00

"Dorian C56" Speaker System

Enclosure features top panel of solid polished Adriatic Travertine marble. Side panels of oiled walnut, with chocolate grille. 24 1/2" x 17 1/2" x 12 3/8" d. C56 enclosure only\$78.00
Is popular with S12 system.

Dividing Networks

LX5 500 Hz crossover to match 375, LE175, LE85 to LE15A\$75.00
N1200 1200 Hz crossover to match LE175 to D130, D131, 130A\$48.00
LX10 1500 Hz crossover to match LE175 to LE14A\$30.00
LX8 2000 Hz crossover to match LE20 to LE14A\$27.00
LX2 2500 Hz crossover to match LE20 to D123, D208\$27.00
N2400 2500 Hz crossover to match 075 to D130, D131, D123\$30.00
N7000 7000 Hz crossover to match any two-way system\$30.00

001 2-Way Speaker System

Consists of 15" 130A low-frequency driver with LE175DLH high-frequency



assembly and N1200 (1200 Hz) crossover network. High-frequency assembly has heavy driver with edgewound aluminum ribbon voice coil, cast aluminum exponential horn and 14-element acoustic lens for 90° uniform dispersion. 25 watts continuous power, 8 ohms, efficient system for use in horns or reflex enclosures\$312.00

"Alpha I" S70 Speaker System

Augmented two-way system consisting of specially designed 12" low-freq. transducer, 12" Passive Radiator, LE5-2 mid-range, and LE20-1 high-freq. direct radiator. Has midrange & high-freq. level controls. Russet oak enclosure designed to match "Alpha II" C78 equipment cabinet. Blends equally well with period and contemporary decor. 35" w. x 26 1/2" h. x 17 7/8" d.\$336.00
"Alpha III" Same as "Alpha I" S70 except oiled walnut in contemporary styling\$336.00

375 High-Freq. Driver

Has 4" diaphragm & 2" horn throat. For reproducing mid-range & highs. 16 ohms\$249.00

LE20 High-Freq. Speaker

Adds brilliance to extended-range speakers such as D208 & D123; also balances well with LE14A & LE10A bass speak-

ers. 8 ohms\$39.00

LE175DLH High-Freq. Speaker

A driver/horn/lens assembly consisting of LE175 driver & 1217-1290 horn/lens.



8 ohms\$156.00

LE85 H.F. Driver

Response is linear from 500 Hz to beyond audibility. Has 1" horn. Impedance 8 ohms\$150.00

LE175 High-Freq. Driver

For use from 500 Hz & up. Normally furnished with 1217-1290 horn/lens as LE175DLH. 8 ohms\$120.00

LE14C Extended-Range Speaker

Has 4" dia. ribbon voice coil & a concentric mounted, independently driven high-freq. radiator. Uses LX2-1 crossover network. For use with enclosures of 1.5 cu. ft. or larger; 8 ohms; 12 1/8" mtg. hole\$162.00

LE8T 8" Extended-Range Speaker

Suitable for in-wall installation. 8 ohms\$72.00

S12 2-Way Speaker System

Linear Efficiency components are similar to those used in Lancer 99. Model LE14A 14" woofer has 4" copper ribbon voice coil and specially treated cone for peak-free response. LE20 direct-radiator tweeter gives smooth distribution of high frequencies over wide angle. The two units are controlled by LX8 crossover for imperceptible transition through crossover region. Power capacity 30 watts, 8 ohms. For use in enclosures as small as 1.5 cubic feet\$174.00

1217-1290 Horn

Cast aluminum horn with acoustic lens for 90° h.f. dispersion. Used with LE175



or LE85 driver where space does not permit HL91 horn/lens\$36.00

Aquarius 1 Speaker System

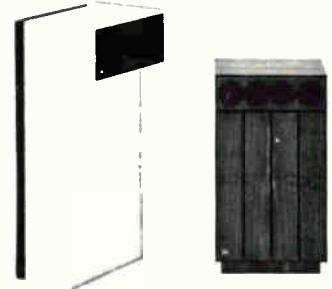
Two complementary radial diffraction slots on front panel interact with each other to deliver a wide stereo field. Has a



high-freq. direct radiator to provide sound localization. Includes 10" high-compliance radial horn-loaded low-freq. driver, a 5" radial horn-loaded high-freq. driver & 2" direct radiator localization transducer from 3500 Hz & up. 20" x 20" x 13 1/4" d. Oiled walnut or satin white\$288.00
Matching base\$ 27.00

Aquarius 2 Speaker System

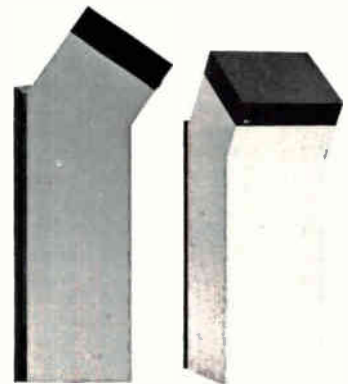
Has a common radial diffraction slot that spans the entire perimeter of the rear en-



closure panel. Sound waves generated by low-freq. drivers expands between the enclosure and the dispersive devices, emerging from the radial diffraction slot in a diffused sound pattern. Direct radiator on front panel augments high-freq. reproduction. Includes 12" high-compliance radial horn-loaded high-freq. drivers & a 2" direct localization radiator. Low-freq. driver covers up to 800 Hz; high-freq. units cover 300 to 5000 Hz; localization driver operates above 3000 Hz. 32" x 18" x 16" d. Oiled walnut. \$387.00
Aquarius 2A Same except in satin white or bright red. 40" x 18" x 15 1/2" d. \$447.00

Aquarius 3 Speaker System

Low & high-frequency drivers located on rear panel make use of a common radial



diffraction slot to create a wide fundamental sound image. In addition, compression driver and multi-lobed radial diffraction horn are mounted on a 45° panel at top of cabinet. Has 14" high-compliance radial horn-loaded low-freq. driver, a combination of two 5" radial horn-loaded drivers, and an LE85 radial horn-loaded compression driver as high-frequency transducers. Low-freq. driver operates below 800 Hz while 5" drivers cover 300-5000 Hz. LE85 operates from 1500 Hz up. 8 ohms. Oiled walnut or satin white. 50" x 18" x 20" d.\$657.00

Aquarius 4 Speaker System

An 8" high-compliance radial horn-loaded low-freq. driver is directed upward into radial horn spreading sound through a 360° horizontal radial diffraction slot. High frequencies emerge in a 360° vertical plane from a 2" driver separately loaded by radial horn located on the upper-rear panel. The 8" driver operates be-



Speakers & Cabinets



low 8000 Hz, while h.f. driver works from 300 Hz & up. 8 ohms. Oiled walnut or satin white. 40" x 10" x 10" ..\$168.00

HL93 Exponential Horn

Similar to HL91 but for use with 375 driver. Is part of S8 speaker system\$57.00

030 Speaker System

Combines D130 15" extended-range speaker & a 075 h.f. transducer with a ring-shaped diaphragm driven by a 1 3/4" edgewound aluminum ribbon voice coil coupled to a machined aluminum horn. A N2400 (2500 Hz) crossover is used\$204.00

HL91 Exponential Horn

Cast aluminum with slant-plate acoustic lens for use with LE175 or LE85 driver.



120° horizontal dispersion & 45° vertically\$42.00

"Paragon" Stereo Reproducer

Two sets of professional loudspeaker components are combined with unique Radial Refraction enclosure to make "ultimate" stereo loudspeaker system suitable for professional stereo monitoring or elaborate home music systems. Each channel uses LE15A bass driver, 375 mid-range and high-frequency driver, and 075 ring radiator for upper overtones. Crossover frequencies 500 and 7000 Hz. System almost 9 feet wide and weighs over 500 lbs.\$2500.00

LEAK

"Mk III Sandwich" Speaker System

Completely sealed, air-tight enclosure with dual high-efficiency speakers (13" l.f. & 3 1/2" h.f.); response 30-18,000 Hz ±2.5 dB; 70 watts continuous power capacity; 8 ohms impedance; free-air resonance 19 Hz; crossover 900 Hz. 15" x 26" x 12" d.; oiled walnut.\$215.00

LOUDSPEAKER DESIGN

"Ezekiel I" 3-Way System

Totally enclosed, high-efficiency bookshelf system employing two 6 1/2" linear-compliance woofers and an exponential high-frequency horn. Woofers are rear-

loaded into a 4 3/4 ft. folded bass horn. Response 30-21,000 Hz; crossovers at 175 & 1000 Hz; 50 W r.m.s. continuous capacity; 4 ohms. Oiled walnut. 26" x 16" x 11"\$159.95

"Ezekiel II" 4 Way System

Totally enclosed, high-efficiency system with three 6 1/2" linear-compliance woof-



ers, an exponential high mid-horn, and an exponential high-frequency horn. Woofers are rear-loaded into a 57" folded bass horn. Response 27-23,000 Hz; crossovers at 175, 800 & 5000 Hz; 85 W r.m.s. continuous capacity; 4 ohms. Oiled walnut. 22" x 27" x 18" d.\$279.00

"Ezekiel VI" 3-Way System

Totally enclosed, high-efficiency bookshelf system with 6 1/2" low-resonance woofer and a compound-flare compression tweeter. Woofer is rear-loaded into a 42" folded bass horn and front-loaded to reproduce the critical mid-range frequencies. Response 34-19,000 Hz; crossovers at 225 & 2500 Hz. 35 W r.m.s. continuous capacity; 8 ohms. Oiled walnut. 10" x 20" x 9"\$79.00

"Ezekiel IX" 3-Way System

Totally enclosed, high-efficiency bookshelf design with two 6 1/2" linear-compliance woofers & a massive exponential high-frequency horn. The woofers are rear-loaded into a 4-foot folded bass horn which operates from the lowest frequencies to 185 Hz and front-loaded to reproduce the mid-range (185-1200 Hz). Compression driver coupled to exponential horn with over 40 square inches of mouth area; response 32-21,000 Hz; crossovers at 185 & 1200 Hz. 45 W r.m.s. continuous capacity; 4 ohms. Oiled walnut. 13" x 22" x 12"\$119.00

MAGNAVOX

1S8741 Speaker System

Chairside contemporary design with 12" high-efficiency woofer & 5" mid/high freq. driver. Has room for record storage. Walnut\$110.00

1S8742 Early American design, Salem maple\$110.00

1S8743 Mediterranean design. Pecan\$110.00

1S8706 Speaker System

Early American design with 15" high-compliance, air-suspension woofer & a 1000-Hz horn. 20" w. x 19 1/4" d. Salem maple\$125.00

1S8753 Speaker System

Bookshelf design with 8" high-compliance, air-suspension & 3 1/2" speaker. Walnut.(pair) \$109.90

1S8754 With 10" high-compliance, air-suspension woofer & 1000 Hz horn.(pair) \$139.90

1S8755 With 12" high-compliance, air-suspension woofer & 1000 Hz horn.(pair) \$159.90

1S8731 Speaker System

Contemporary design with 12" high-compliance, air-suspension woofer & 1000 Hz horn. Has vinyl top and swivel ball casters. 18 1/4" w. x 17 1/2" d. Walnut.(pair) \$199.90

1S8732 Speaker System

Features 15" high-compliance, air-suspension woofer & 1000 Hz horn. Overall size 26 3/4" w. x 12 3/4" d. x 17 1/2" h. Walnut.(pair) \$199.90

1S8756 Supplied with treble control.(pair) \$229.90

MARANTZ

"Imperial III" Speaker System

3-way system with 12" acoustic-suspension woofer, 2" dome mid-range & 1" dome tweeter crossing over at 1500 & 6000 Hz (12 dB/octave RC-type crossovers). Response 30-20,000 Hz, 8 ohms; min. power 25 W r.m.s. continuous (max. 100 W). Has separate variable presence & brilliance controls. 23" x 13 1/2" x 12" d. Walnut\$199.00

MARTIN

840 "Sound Tower"

Features two 2" flare dome plastic tweeters, two 4" direct-radiating mid-range & four 8" pneumatic-load woofers each in its fiber glass filled, hermetically sealed chamber. Response 28-20,000 Hz. Will handle 100 W of integrated program material. Has mid & high freq. balance controls. 52" h. x 16 1/4" w. x 7 3/4" d. Walnut-grained Formica finish\$350.00

Prismatic Reflector

Features a 9" pneumatic-load woofer with 1 1/2" voice coil & capable of cone movements of more than 1", a 6 1/2" acoustic-suspension mid/bass, a 3" curvilinear mid-range & two 2 1/2" closed-back, wide-dispersion center dome curvilinear tweeters. Cabinet is fiber glass damped, hermetically sealed, infinite baffle with each system individually damped to a null factor. Crossover is a patented phase-controlled LCR with mid & high freq. balance controls. Response 28-18,000 Hz; 6 ohms. Capacity 60 W. 25" h. x 16 1/4" w. x 16 1/4" d. Walnut woodgrain Formica\$300.00

221 Lab Series

Bookshelf two-way design with 10" acoustic suspension woofer & 2" dome tweeter, 8 ohms. Response 35-18,000 Hz; capacity 60 W program. Has LCR crossover at 1000 Hz (6 dB/octave) with h.f. balance control. Completely fiber glass damped, hermetically sealed infinite baffle. 22" x 12 1/4" x 9 3/4" d. Walnut-grained Formica\$99.00

441 Super Spectrum Slope

Features 3-way design with fiber glass damped, hermetically sealed infinite baffle. Has two 10" acoustic-suspension woofers, a 5" acoustic-suspension mid-range, and a 2" dome tweeter. Has LCR crossover at 1000 & 5000 Hz (12 dB/octave) with mid/high freq. balance control. Power capacity 75 W program; response 30-18,000 Hz; 4 ohm imp. 24" x 14" x 12" d. Walnut-grained Formica.\$199.00

OAKTRON

Twin-Cone Speakers

FE6W 6"; response 40-15,000 Hz; 8 ohms; 12 W max., 3 1/4" d.\$14.85

FE8W 8"; response 40-16,000 Hz; 8 ohms; 12 W max., 4 1/2" d.\$17.85

FE8KW 8"; response 30-14,000 Hz; 8

ohms; 20 W max.; 4¹/₂" d.\$22.65
 12K8W 12"; response 25-13,000 Hz; 8
 ohms; 20 W max.; 6¹/₈" d.\$26.85
 15K8W 15"; response 20-13,000 Hz; 8
 ohms; 20 W max.; 7¹/₈" d.\$37.35
 FE69UW 6" x 9"; response 35-16,000
 Hz; 8 ohms; 10 W max. 3¹/₄" d. ..\$13.65

Coaxial Speakers

CA8 8" woofer with 3" tweeter; response
 60-14,000 Hz; 8 ohms; 8 W max.; 4¹/₂" d.
\$15.45
 CA8HD 8" woofer with 3" tweeter; re-
 sponse 50-14,000 Hz; 8 ohms; 12 W max.
 4¹/₂" d.\$19.95
 CA12 12" woofer with 3¹/₂" tweeter; re-
 sponse 35-14,000 Hz; 8 ohms; 12 W
 max.; 6¹/₈" d.\$22.65
 CA12HD 12" woofer with 3¹/₂" tweeter;
 response 25-14,000 Hz; 8 ohms; 20 W
 max.; 6¹/₈" d.\$29.85
 CA15HD 15" woofer with 5" tweeter; re-
 sponse 20-13,000 Hz; 8 ohms; 20 W max.
 7¹/₈" d.\$39.95
 CA69 6" x 9" woofer with 3" tweeter;
 response 70-14,000 Hz; 8 ohms; 6 W
 max. 3¹/₈" d.\$13.95
 CA69HD 6" x 9" woofer with 3" tweet-
 er; response 60-14,000 Hz; 8 ohms; 10 W
 max.; 4³/₈" d.\$18.75

ST-124 Speaker System

3-way design includes 12" woofer, a 6" x
 9" mid-range & 4" x 6" tweeter. Re-
 sponse 35-15,000 Hz; 8 ohms; 12 W max.
\$32.55

OLSON ELECTRONICS

S-845 5" Woofer

Response 30-5000 Hz; power capacity 15
 W program; 8 ohms; resonant freq. 48 Hz
\$4.98

S-23 3-Way Speaker System

Features high-compliance 16" woofer &
 2¹/₂" horn-type tweeter; coupled through
 LC crossover network. Contemporary
 walnut cabinet has removable ribbed
 front panel. Response 25-30,000 Hz; 8
 ohms; crossovers at 700 & 3000 Hz.
 20¹/₈" x 12⁵/₈" x 14¹/₈"\$230.00

S-24 3-Way Speaker System

Features 19" multi-cellular mid-range
 horn, a 12" high-compliance woofer & 3"
 horn tweeter with LC-type crossover.
 Has level controls on mid-range & tweet-
 er. Power capacity 50 W; 8 ohms. Re-
 sponse 25-22,000 Hz. 30" w. x 14" h. x
 11". Walnut cabinet\$199.99

S-36 2-Way Speaker System

Features Mediterranean design with 10"
 woofer coupled to 4" tweeter by LC-type
 crossover. Response 40-18,500 Hz; pow-
 er capacity 35 W; 8 ohms. 13" w. x 22¹/₂"
 h. x 11¹/₈". Walnut finish\$75.00

S-43 2-Way Speaker System

Features Mediterranean styling with 10"
 woofer & 2¹/₂" tweeter coupled through
 LC-type crossover. Response 45-20,000
 Hz; power capacity 30 W; 8 ohms. 11¹/₄"
 x 15" x 9³/₄". Walnut finish\$65.00

S-52 2-Way Speaker System

Features environmental control; 8" air
 suspension woofer & 5" direct radiator.
 Response 25-20,000 Hz; power 50 W; 8
 ohms. 10⁵/₈" x 17¹/₂" x 8³/₄" d. Oiled wal-
 nut finish\$100.00

S-853 3-Way Speaker System

Features 12" low-frequency driver LC-
 coupled to 8" mid-range & 4" tweeter.
 Both tweeter & mid-range have separate-
 ly adjustable level controls. Power 40 W;
 8 ohms; response 30-20,000 Hz. 14" w. x
 23¹/₂" h. x 11¹/₈". Oiled walnut cabinet
\$120.00
 Stereo pair\$200.00

S-930 Speaker System

Bookshelf design with 10" woofer & 4"
 extended-range tweeter. Response 40-
 18,000 Hz; dynamic power capacity 35
 W; 8 ohms. Walnut finish. 11¹/₂" w. 22¹/₂"
 x 13" d.\$70.00

S-996 Speaker System

"Angle Mount" two-way system. Angle
 mounting the speakers permits the use of
 10" woofer in compact enclosure. LC
 crossover; response 40-20,000 Hz; capaci-
 ty to 35 W music power. 17¹/₂" x 10¹/₄" x
 8³/₄". 8 ohms\$60.00

OXFORD

All wattage figures are max. peak pro-
 gram material & resonance frequencies
 are free-air ratings. All speakers are 8
 ohms impedance unless indicated other-
 wise.

Musical Instrument Speakers

10K5S8 10", 25 W, 55 Hz resonance, re-
 sponse 45-8000 Hz\$13.19
 10L6S8 10", 35 W, 55 Hz resonance, re-
 sponse 45-8000 Hz\$15.88
 12K5S8 12", 30 W, 100 Hz resonance. re-
 sponse 70-8000 Hz\$16.63
 12L6S8 12", 35 W, 55 Hz resonance, re-
 sponse 45-8000 Hz\$18.98
 12M6S8 12", 40 W, 50 Hz resonance, re-
 sponse 35-8000 Hz\$21.84
 12T6S8 12", 45 W, 55 Hz resonance, re-
 sponse 40-8000 Hz\$25.87
 15M6S8 15", 40 W, 85 Hz resonance, re-
 sponse 65-8000 Hz\$28.14
 15T8S8 15", 60 W, 85 Hz resonance, re-
 sponse 65-8000 Hz\$32.76
 G12U10S8 12", 75 W, 50 Hz resonance,
 response 35-7500 Hz\$55.44
 G15U10S8 15", 75 W, 30 Hz resonance,
 response 30-8000 Hz\$62.16

"Tempo" High-Compliance Hi-Fi Speakers

HCT-12 12" coax, 30 W, response 25-
 18,000 Hz\$26.26
 HCW-12 12" dual-cone, 30 W, response
 25-15,000 Hz\$22.06
 HCT-8 8" coax, 15 W, response
 30-18,000 Hz\$17.86
 HCW-8 8" dual-cone, 12 W, response
 30-15,000 Hz\$11.02
 HCW-69 6" x 8" dual cone, 12 W,
 response 45-15,000 Hz\$11.34

"Tempo" Hi-Fi Speakers

C12J408 12" coax, 20 W\$21.74
 C8T 8" coax, 20 W\$16.80

"Tempo" Woofers

W12J408 12", 20 W\$11.34
 W12M608 12", 25 W\$26.56
 W15M608 15", 30 W\$36.22

"Tempo" Horn Tweeters

CH26SB08 2" x 6"\$9.46
 CH39SB08 3" x 9"\$10.72
 CH26SQ08 2" x 6"\$9.98
 CH39SQ08 3" x 9"\$11.34
 CH26SR08 2" x 6"\$12.92
 CH39SR08 3" x 9"\$14.50
 All 2" x 6" designed for 2000 Hz cross-
 over while 3" x 9" have 1000 Hz cross-
 over. All are rated at 20 W.

"Tempo" Cone Tweeters

T3C208 3¹/₂" square, 6 W\$5.14
 T5C208 5" round, 6 W\$5.56

"Tempo" Crossover Networks

OXN1K8 Two-way, 1000 Hz, 8/8 ohms,
 40 W\$9.76
 OXN2K8 Two-way, 2000 Hz, 8/8 ohms,
 40 W\$8.92

Weatherproof Hi-Fi Speaker Systems

OH10-G Forest green, 20 W \$40.32
 OH10-W Bone white, 20 W \$40.32
 OH10-CG Forest green with L-pad
\$45.95

OH10-CW Bone white with L-pad. \$45.95
 OH10-G70 Forest green with 70 V trans.
\$47.04
 OH10W-70 Bone white with 70 V trans.
\$47.04
 The OH series are dual speaker systems
 with built-in crossover between woofer &
 tweeter. All speakers are 8 ohms.

Hi-Fi Extended-Range Speakers

LA42J4S8 4", 8 W, response 50-17,000
 Hz\$10.60
 LA52J4S8 5 1/4", 8 W, response
 40-16,000 Hz\$10.82
 LA60J4S8 6 1/2", 8 W, response
 40-16,000 Hz\$12.92

Woofers

LA80J4S8 8", 12 W, response 30-4000
 Hz\$15.02
 LA12T8S8 12", 30 W, response 25-4000
 Hz\$36.64
 LA15T8S8 15", 35 W, response 20-3500
 Hz\$45.58

Full-Range Coaxial Speakers

CO12T8S8 12", 30 W, response 35-
 20,000 Hz\$44.52
 CO15T8S8 15", 35 W, response
 30-20,000 Hz\$54.50

PANASONIC

SB-22 Two-Way Speaker System

With 8" woofer & 3" tweeter; response
 38-19,000 Hz; 8 ohms; crossover 2500
 Hz; 10¹/₂" x 20¹/₂" x 9¹/₄". Walnut cabi-
 net.\$79.95

SB-33 Three-Way Speaker System

With 10" woofer, 3¹/₂" mid-range & 2"
 tweeter; response 30-20,000 Hz; 8 ohms;
 crossovers 1300 & 6000 Hz. Has h.f. lev-
 el control. 11¹/₄" x 22¹/₂" x 11¹/₈". Walnut
 cabinet.\$125.00

SB-66 Two-Way Speaker System

With 8" woofer & 2" tweeter; response
 37-19,000 Hz; 8 ohms; crossover 8000
 Hz. 11¹/₈" x 17¹/₈" x 8³/₄". Walnut cabi-
 net.pair \$119.95

SB-77 Three-Way Speaker System

With 10" woofer, 5" mid-range, 2" tweet-
 er; response 28-21,000 Hz; 8 ohms;
 crossovers at 800 & 6000 Hz. Has mid-
 range & treble level controls. 13¹/₈" x
 23³/₈" x 11¹/₄". Walnut cabinet. . \$179.95

SB-88 Three-Way Speaker System

With 12" woofer, two 5" mid-range &
 two 2" tweeters; response 24-22,000 Hz;
 8 ohms; crossovers 800 & 6000 Hz. Has
 mid-range & treble level controls. 15¹/₈" x
 26³/₄" x 13¹/₈". Walnut cabinet. . \$249.95

PIONEER

CS-88 Speaker System

3-way, 5-speaker design with 12" woofer,
 5" midrange & two 2¹/₂" tweeters with
 one horn-type tweeter; 8 ohms. Oiled
 walnut 14³/₈" x 13" x 24¹/₁₆". Has walnut
 lattice grille\$175.00

CS-5 Speaker System

Bookshelf, air-suspension design with 8"
 woofer & 2¹/₂" cone tweeter; crossover at
 2500 Hz; 8 ohms; max. input 25 W; re-
 sponse 35-21,000 Hz. Oiled walnut. 19"
 x 11" x 9" d.\$59.00

CS-44 Speaker System

Bookshelf, air-suspension design with 8"
 woofer & 2¹/₂" cone tweeter; crossover at
 2500 Hz; 8 ohms; response 35-20,000
 Hz; max. input 25 W. Oiled walnut. 19"
 x 11" x 9³/₈" d.\$67.50

CS-63DX Speaker System

Infinite baffle; 4-way design with 15"
 woofer, two 5" midrange horn tweeters &
 two horn super tweeters. Response 20-



Speakers & Cabinets

22,000 Hz; 8 ohms; max. power 80 W; crossovers at 770, 3300 & 12,000 Hz. Oiled walnut. 28 $\frac{1}{8}$ " x 18 $\frac{7}{8}$ " x 13 $\frac{1}{16}$ " d.\$259.00

CS-66 Speaker System

Combines a 10" woofer, a 6 $\frac{1}{2}$ " midrange & a 3" cone-type tweeter. Response 35-20,000 Hz. Has 3-pos. level control. Oiled walnut. 22" x 12 $\frac{3}{16}$ " x 11 $\frac{1}{16}$ " d.\$109.00

CS-99 Speaker System

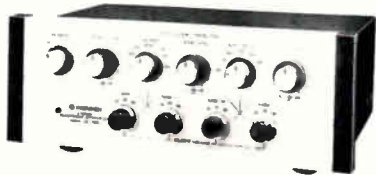
Five-way, 6-speaker system in infinite baffle design. Combines 15" woofer, 5" midrange, horn tweeter, cone super-tweeter, and two dome supersonic tweeters; 8 ohms; response 25-22,000 Hz; max. power input 80 W. 16" x 25" x 11 $\frac{3}{8}$ " d.\$215.00

CS-A500 Speaker System

Combining an infinite cabinet speaker design with 3-way system 10" woofer, 4 $\frac{3}{4}$ " mid-range, 3" cone tweeter. Speaker connections are such that they could be operated as normal full-range system driven by a single amp or separated with each speaker driven from separate amp. An electronic crossover similar to the SF-700 would then be needed. Speakers could be wired for either a 2- or 3-way system. Response 40-20,000 Hz; 8 ohms; 50 W max. program power; normal crossovers at 800 & 6000 Hz; crossovers for 2-way multi-amp system anywhere between 500-1000 Hz; for 3-way system 500-1000 Hz & 4000-6000 Hz. Has built-in level control on front panel. Oiled walnut cab. 22 $\frac{1}{2}$ " x 13" x 12 $\frac{3}{4}$ " d. . \$149.00

SF-700 Electronic Crossover

Features 3-channel stereo design to be used between preamp 2- or 3-channel



multi-power amp & speaker system. Output voltage 3.5 mV each channel: HD 0.3%. Crossover frequency for 3-channel: low-mid 125, 250, 500, 700, or 1000 Hz; mid-high 1,2,4,6, or 8k Hz. For 2-channel: 125, 250, 500, 700, 1000, 2000, 4000, 6000, or 8000 Hz. Attenuations of 6, 12, or 18 dB available. Has center-channel output & universal power supply, 110, 120, 130, 220, or 240 V. 11 $\frac{7}{8}$ " x 4 $\frac{1}{2}$ " x 10"..... \$179.95

CS-05 Speaker System

Two-way omnidirectional 4-speaker design with 8" woofer, three 3" cone-type tweeters. Response 60-20,000 Hz; 8 ohms. Crossover 3000 Hz; capacity 40 W. Features 360° sound radiation. 14 $\frac{1}{4}$ " dia. x 20 $\frac{1}{4}$ " h. Walnut finish\$119.95

POLY-PLANAR

P20 Speaker

Wafer-thin design made up of a light-weight acoustic panel supported by a frame of plastic material; 30-20,000 Hz response; completely moistureproof; 25 W peak capacity; 8 ohms. 1 $\frac{1}{16}$ " x 11 $\frac{3}{4}$ " x 14 $\frac{1}{16}$ ".....\$11.95

P5 Speaker

Same basic design as P20 except 1 $\frac{3}{16}$ " x 122

4 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ "; 5 W peak capacity; response 60-20,000 Hz\$7.95

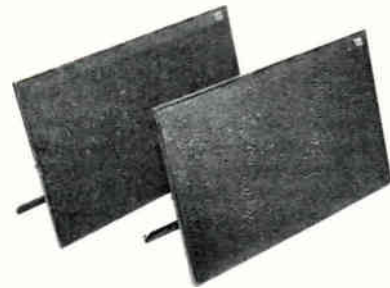
G201P Speaker/Grille

Pre-assembled units incorporating P20 speaker system with acoustically designed grille panel, ready to insert into walls, doors, cabinets, etc. Response 40-20,000 Hz; power handling 20 W peak; 8 ohms. Finish: plastic ivory white or walnut brown. 1 $\frac{1}{16}$ " x 13 $\frac{1}{4}$ " x 16 $\frac{1}{4}$ "\$15.95

G51P Same principle as in G201P except P5 speaker system is used. Includes plastic grille in color (black, white, or brown) and special mounting brackets for surface and flush mounting. Response 60-20,000 Hz; power handling 5 W peak. $\frac{7}{8}$ " x 5 $\frac{3}{16}$ " x 9 $\frac{3}{16}$ "\$10.50

"Twin XX Twenty" Speaker

Hinges on wall or stands on shelf or floor. Four-way acoustical reproducers are used



for bidirectional (figure-8) radiation pattern. Capacity 40 peak watts. Response 40-20,000 Hz; imp. 4 to 8 ohms. 1 $\frac{3}{4}$ " x 17 $\frac{1}{4}$ " x 26 $\frac{1}{2}$ ". Walnut finish frame with solid brass & walnut stand. Pair ..\$99.95

E21 "Poly-Sonic" Speaker

All-weather design; 20 W peak capacity; response 50-20,000 Hz; 8 ohms imp. 2" x 13 $\frac{1}{4}$ " x 16 $\frac{1}{4}$ ". Finish ivory white & walnut brown.\$19.95

E51. Same as E21 except power handling 5 W peak; response 70-20,000 Hz. 1 $\frac{3}{8}$ " x 6" x 10". Also available in black . \$14.95

A-500 Auto Speaker/Grille

Same as G51P in black with chrome trim. For custom flush and surface mounting.



$\frac{7}{8}$ " mtg. depth required. Response 60-20,000 Hz; power handling 5 W peak; 8 ohms. $\frac{1}{8}$ " x 6" x 10". Incorporates RP-8 Poly-Planar speaker. Pair\$11.95

RP-8 Roly-Poly Series

20 W peak wide-range 8" round wafer-type speaker; response 40-20,000 Hz; 8 ohm imp.; sensitivity 90 dB/m for 1 W input. Over-all depth 1.05"\$9.95

QUAM-NICHOLS

All speakers are 8 ohm & response figures are ± 5 dB. Wattage shown is max. dynamic power capacity.

Coaxial Speakers

15C12CO 15" woofer with tweeter; has built-in crossover; 25-18,000 Hz; 25 W; 50 Hz resonance; 7 $\frac{3}{4}$ " d.\$58.85
12C10CO 12" woofer with tweeter; has built-in crossover; 50-15,000 Hz; 65 Hz resonance; 14 W; 6 $\frac{3}{8}$ " d.\$38.80

8C6CO 8" woofer with tweeter; has built-in crossover; 50-15,000 Hz; 10 W; 70 Hz resonance; 4 $\frac{3}{8}$ " d.\$25.70

Extended-Range Speakers

12C12X 12"; 30-16,000 Hz; 55 Hz resonance; 18 W; 4 $\frac{1}{2}$ " d.\$25.70
8C12X 8"; 50-14,000 Hz; 65 Hz resonance; 15 W; 3 $\frac{1}{8}$ " d.\$19.10
69C6X 6" x 9"; 50-15,000 Hz; 90 Hz resonance; 12 W; 3" d.\$15.60

Tweeters

5A15T 5"; 2000-15,000 Hz; 1400 Hz resonance; 10 W; 2 $\frac{3}{8}$ " d.\$7.30
3A15T 3 $\frac{1}{2}$ "; 2000-15,000 Hz; 1100 Hz resonance; 10 W; 2 $\frac{1}{8}$ " d.\$6.45

Woofers

15C12L 15"; 20-4000 Hz; 50 Hz resonance; 15 W; 7 $\frac{1}{2}$ " d.\$39.30
12C12L 12"; 30-3000 Hz; 55 Hz resonance; 15 W; 4 $\frac{1}{2}$ " d.\$25.70

Crossover Network

CO5-25 Connects Quam tweeters with woofers or extended-range speakers for 2-way system\$0.80

REALISTIC

"Electrostat-2a" Speaker System

Features 4-element electrostatic tweeter; hi-frequency attenuator control; crossover network; bass-energized equalizer; 8" woofer; response 45-25,000 Hz. Will handle 60 watts; 8 ohms. 22 $\frac{1}{2}$ " x 13 $\frac{1}{2}$ " x 12". Oiled walnut cabinet. 40-288\$66.00

"Optimus-1" Speaker System

2-way acoustical speaker suspension system; features 3-way switch that adjusts tweeter to room acoustics; response 20-25,000 Hz; 8 ohms; 1000 Hz crossover. 23" x 12" x 11 $\frac{1}{4}$ ". Walnut enclosure. 40-1969\$79.95

"Optimus-6" Speaker System

Features 12" woofer, two 4 $\frac{1}{2}$ " tweeters with electrical crossover. Response 20-20,000 Hz; 8 ohms; 10 W minimum inputs. Octagonal sound column & circular top 19" dia. x 23 $\frac{3}{4}$ " h. Walnut. Mediterranean styling. 40-1970\$119.95

"Optimus-3" Speaker System

Floor model in oiled walnut. Has 3 tweeters, switch-selected for tailoring stereo to



any room: 12" woofer; 25 W (IHF) min, 100 W max. Tweeter level control; bass compensation switch; response 20-20,000 Hz. 29" x 24 $\frac{3}{8}$ " x 13"\$149.95

"Optimus-4" Speaker System

"Sit-upon" design with removable vinyl cushion. Has two tweeters on adjacent sides of woofer. Response 20-20,000 Hz. 10 W minimum power; 8 ohms. Oiled

walnut, 14 1/2" square x 19" high.
40-1974\$89.95

"Optimus-5" Speaker System

Bookshelf or floor design featuring 12" acoustic-suspension woofer and 3 tweeters with crossover network. One 3-way switch for high-freq. adjustment, another for mid-frequencies. 20-20,000 Hz response; 8 ohms. Oiled walnut. 14" x 25" x 11 1/8"\$99.95

RECTILINEAR

Model III Speaker System

A 4-way design with a 12" woofer, a 5" mid-range driver (encapsulated in a non-resonant fiber chamber), 4 high-frequency drivers consisting of two 2 1/2" cone tweeters and two 2" cone super tweeters. All six speakers are bonded with an epoxy resin to the front panel. Has crossovers at 500, 3000 & 11,000 Hz. Response 22-18,500 Hz ±4 dB; min. r.m.s. power requirements 20 W (100 W max.); 8 ohms. 35" x 18" x 12" d. Oiled walnut\$279.00

Model Xa Speaker System

Three-way acoustic suspension system with 10" woofer, 5" mid-range, and 2 1/2" tweeter. Has separate mid-range and tweeter controls. Crossovers at 100 & 8000 Hz. Response 30-18,500 Hz ±4 dB at 4 ohms. Min. r.m.s. power requirements are 30 W; max. power is 100 W 14" x 25" x 10 3/4" deep. Oiled walnut\$199.00

"Mini III" Speaker System

Three-way acoustic suspension system with 8" woofer, 5" mid-range, and 2" tweeter. Has separate mid-range & tweeter controls. Crossovers at 400 & 8000 Hz; response 50-18,500 Hz ±4 dB at 4 ohms; minimum r.m.s. power 20 W; maximum power is 100 W. 12" x 19" x 9 1/2" deep. Oiled walnut\$89.50

XI Speaker System

A two-way bass-reflex system with 10" woofer & 3" tweeter. Has separate tweeter control; crossover at 1800 Hz; response 45-17,000 Hz ±3 dB; min. r.m.s. power 10 W, max. power 70 W (1HF). 23" x 12" x 10 1/4" d. Oiled walnut. \$69.50

RGF

RGF-100 Speaker System

Three-way design with 12" woofer, 6 1/2" mid-range, and two 3 1/2" tweeters. Response 24-22,000 Hz with crossovers at 650 & 5000 Hz; 8 ohm imp. Oiled walnut. 15 3/4" x 23 3/4" x 11 1/4" d. ...\$229.50

RGF-101S Speaker System

Infinite-type design with M-500 speakers. 22 3/4" x 26 3/4" x 19 1/2". Walnut\$239.00
With legs\$279.00

RGF-222X Speaker

Coax type with 12" woofer & two tweeters. Response 18-22,000 Hz; LC crossover at 2400 Hz\$119.50

M-500 Speakers

3-way, 4-speaker combination includes 12" woofer, 7" mid-range & two tweeters; LC crossovers at 650 & 5000 Hz. Response 18-22,000 Hz\$189.00

M10 10" Speaker

Bifacial type. Response 28-20,000 Hz.\$79.50

RGF-3 Speaker System

Three-way design combining a 10" high-compliance woofer, 3 1/2" closed-back mid-range & 3 1/2" treble speaker. Crossovers at 4000 & 10,000 Hz. Freq. range

35-20,000 Hz; 8 ohms. Bookshelf design. 22" x 12 3/4" x 9 1/2". Oiled walnut . \$99.50

RGF-4 Speaker System

Two-way design combining an 8" high-compliance woofer & 3 1/2" closed-back tweeter. Freq. range 40-18,000 Hz with crossover at 4000 Hz. 8 ohms imp. Bookshelf design 18" x 11" x 9" d. Oiled walnut\$69.50

RGF-2 Speaker System

Two-way bookshelf design with two 10" high-compliance woofers & two tweeters; 8 ohms; 2400 Hz crossover; response 24-22,000 Hz. 13 1/2" x 23 3/4" x 11 1/2" d. Walnut\$159.50

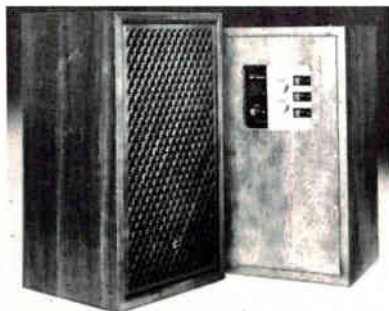
SANSUI

SP-2001 Speaker System

Three-way, 5-speaker system with 12" cone woofer, 6 1/2" cone mid-range, 5" cone mid-range, two 1" dome tweeters. Cabinet is ducted port design; max. input 50 W; imp. 8 ohms; response 35-20,000 Hz; crossovers 600 & 5000 Hz. Features electronic crossover system terminals for 2- and 3-channels; special level controls. Walnut. 25 3/4" x 15" x 12 3/4" d. . \$179.95

SP-1001 Speaker System

Three-way, 3-speaker system with 10" cone woofer, 6 1/2" cone mid-range, 1"



dome tweeter. Cabinet ducted port design; input 40 W max.; 8 ohms. Response 35-20,000 Hz; crossovers 600 & 5000 Hz. Features electronic crossover system terminals for 2-and 3-channels; special level controls. Walnut. 24 1/4" x 14" x 11 1/4" d.\$139.95

SP-50 Speaker system

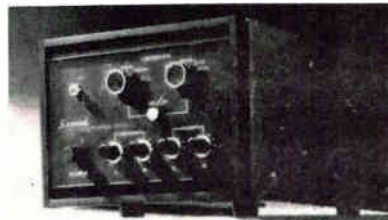
2-way ducted port design with 8" woofer & 2" horn-type tweeter; capacity 25 W; 8 ohms; response 50-20,000 Hz; crossover 7000 Hz. Walnut 12 3/4" x 19 3/4" x 9 3/4".\$79.95

SP-30 Speaker System

2-way design with 6 1/2" mid-range woofer & 2" horn tweeter; ducted port design; response 50-20,000 Hz; capacity 20 W; input imp. 8 ohms; crossover 7000 Hz; 16 3/4" x 10 3/4" x 7 3/8". Walnut finishPair \$119.95

CD-5 Electronic Crossover

Features 2 or 3 individually adjustable channels; crossovers at 200, 340, 560,



900, 2500, 3600, 5000, and 7000 Hz ±20%. Cut-off characteristic 6 & 12 dB/octave; HD 0.3% at rated output, 9 3/4" x 6 1/4" x 9 1/4" d.\$99.95

SCOTT, H.H.

All Scott speakers are air-suspension types; 8 ohms impedance; and supplied with oiled-walnut contemporary cabinets. The S-10B and S-15 have both mid-range and tweeter level controls.

S-10B Speaker System

Three-way design featuring 10" woofer & 3 1/2" dual-cone mid-range and tweeter; response 40-20,000 Hz; power capacity 50 W (7 W min.). Size 23 1/2" x 11 3/4" x 9"\$89.95

S-14V Speaker System

2-way design with LC crossover (2000 Hz); 6" woofer & 3" cone tweeter; response 50-20,000 Hz; power capacity 25 W; 16" x 10" x 6 1/2"\$49.95

S-15 Speaker System

Three-way system featuring 10" (26 Hz resonance) woofer, 4 1/2" cone mid-range & 3 1/2" cone tweeter. Response 35-20,000 Hz; crossovers at 750 & 3800 Hz; 8 ohms. Walnut finished. 23 1/4" x 11 3/4" x 9"\$119.95

S-17V Speaker System

Combines an 8" woofer & 3" tweeter; response 40-20,000 Hz; imp. 8 ohms; power capacity 35 watts; crossover at 2000 Hz. Walnut finish. 18" x 12 1/2" x 8 1/2".\$59.95

"Quadrant Q-100" Speaker System

Features two 8" woofers, four 3" tweeters; frequency range 40-20,000 Hz; omnidirectional polar response; power capacity 80 W; crossover at 2000 Hz; Tweeter level control. 10 W minimum input. 14 1/4" w. x 14 1/4" d. x 22" h.\$149.95

Q-101 Omnidirectional Speaker System

3-way design with two 10" woofers, four 4 1/4" mid-range & four 3" tweeters. Re-



sponse 35-20,000 Hz; 8 ohms; 100 W continuous power capacity. Has h.f. level control and 360° sound radiation. In contemporary walnut. 17 3/8" x 17 3/8" x 22".\$229.95

Q-102 Omnidirectional Speaker System

2-way design with 8" woofer & three 3" tweeters; response 40-20,000 Hz; 8



ohms; 35 W continuous power capacity. Has tweeter level control. In contemporary walnut. 360° sound radiation. 10" x



Speakers & Cabinets

19" x 10 1/2".....\$89.95

S-20 Speaker System

Two-way design with 10" woofer and 3 1/2" mid-range/tweeter; response 38-20,000 Hz; 8 ohms; 50 W continuous power capacity. Has high-freq. level control. In antiqued pecan, Mediterranean. 20" x 11 3/4" x 11".....\$109.95

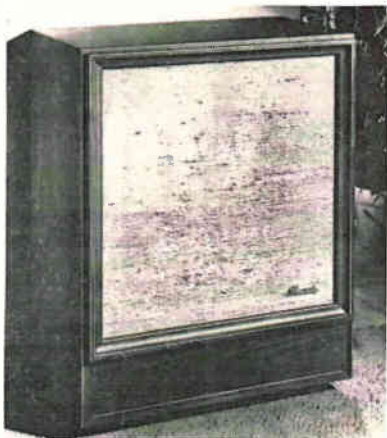
SHERWOOD

"Ravinia II" Speaker System

Three-way, bookshelf design using a 15" acoustic-suspension woofer; a 5" sealed-back, wide-dispersion mid-range; and a 3 1/2" "omni-polar" convex radiator, 160° dispersion tweeter. Crossovers at 600 & 5000 Hz. Response 24-22,000 Hz; capacity 70 W program (10 W min. IHF); 8 ohms imp. Has tweeter level control. Oiled walnut. 25" x 17" x 11 1/2" d. SR6W.....\$169.95

"Tanglewood" Speaker System

4-way system: two 10" woofers with staggered resonance (17 1/2 & 18 1/2 Hz reso-



nance); crossover 200 Hz to an 8" mid-woofer; crossover 600 Hz to 5" mid-range & crossover 3500 Hz to a 3 1/2" omni-polar tweeter. Each speaker individually chambered. Response 29-17,500 Hz ± 2 1/2 dB; 75 W capacity; 8 ohms; has brilliance level control; 24" w. x 31" h. x 13" d.

SR4-W Walnut.....\$239.95
SR4-B Birch unfinished.....\$209.50

"Berkshire II" Speaker System

Slimline design, 3-way system using 12" acoustic-suspension woofer; a 5" sealed-



back, wide-dispersion mid-range & a 3 1/2" "omni-polar" convex radiator, 160° dispersion tweeter. Response 28-22,000 Hz; capacity 60 W program (8 W min. IHF); 8 ohms imp. Has tweeter level control & crossovers at 600 & 5000 Hz. Oiled walnut. Over-all size 24" x 14" x 9" SR5W.....\$129.95

SINCLAIR

Model Ten Speaker System

Bookshelf 2-way design with 10" woofer and 3 3/4" mid/high freq. driver. Response 38-13,000 Hz ± 5 dB; 70 W dynamic power capacity. 24 1/4" x 14" x 10 1/2". Walnut veneer particle board; 8 ohms.\$69.95
Model Ten A. Same except 3-way system with dome tweeter.....\$89.95

SONY

TA-4300 3-Channel Spkr. Crossover

Solid-state electronic design with crossover between low & mid ranges; can be



switch-selected to 150, 250, 400, or 600 Hz. Crossover between mid & high freq. can be selected to 3, 4, 5, or 6.5 kHz. Has 18 dB-per-octave attenuation at low crossovers & 12 dB/octave at high crossover. HD 0.1% at 3 V output; max. input 3.5 V. Normal placement is between preamps & power amp. Over-all size 5 3/4" x 11 5/8" x 6 7/16".....\$199.50

SS-2800 Speaker System

Bass reflex, 3-way design with 10" woofer, 6 1/2" mid-range, 2 1/2" horn-type tweeter; response 40-20,000 Hz; capacity 50 W. 13 3/4" x 23 1/4" x 9 1/16". Walnut cabinet.....\$124.50

SS-3100 Speaker System

Bass reflex, 3-way design with 12" woofer, 6 1/2" mid-range, 2 1/2" horn-type tweeter. Has separate switch for multi-channel use; response 30-20,000 Hz; capacity 50 W. Over-all size 15 3/4" x 26 3/4" x 11 3/16". Walnut cabinet.....\$229.50

SS-9500 Speaker System

Features "barrel" motif with six acoustic-suspension speakers sealed in an air-tight



cylindrical enclosure. They are radially located around the perimeter of the enclosure to produce omnidirectional sound in the horizontal plane. Will handle 50 W of program material & impedance is 6 ohms min. from 18-21,000 Hz. 24" high x 16" dia. Has foam-filled top cushion. Available in oiled walnut or ash.....\$149.50

SOUNDCRAFTSMEN

Lancer SC-6 Speaker System

Features a 12" Triaxial 3-way full-range speaker. Has a diffusion-design mid-

range & a reciprocating-flared h.f. horn. In addition, it has an aerodynamic bass energizer driven by the rear radiation of the Triaxial woofer section; above 15 Hz it adds 8 dB to low end, below 15 Hz it acts 180° out-of-phase and cancels all response below 15 Hz. Eliminates all undesirable turntable rumble below 15 Hz. Response 18-22,000 Hz; cap. 60 W dynamic power; 8 ohms. Has variable brilliance control. Size 27" x 16" x 14 1/16".....\$219.50

Lancer SC-3X Speaker System

Three-way bookshelf ducted-port type system with 12" woofer, mid-range dif-fuser & h.f. reciprocating-flared horn radiator. Has variable treble control. 8 ohms; 10 W min; cap. 60 W. Crossover mechanically at 1000 Hz & electronically at 3000 Hz. Oiled walnut four sides. 23 1/2" x 15 3/4" x 12 1/2" d.\$179.50

Lancer 9535-2 Speaker System

Two-way bookshelf ducted-port type system with 12" woofer & molded-horn metal cased h.f. radiator. Crossover at 3000 Hz. Oiled walnut four sides. 8 ohms. 5 W min. cap. 35 W. 25" x 14 1/4" x 11 1/4" d.\$89.50

Lancer 9534-X Speaker System

Ducted-port bookshelf design with woofer & tweeter & crossover at 3000 Hz. Response 40-18,000 Hz. 8 ohms. 5 W min.; cap. 30 W. Oiled walnut four sides. 23 1/2" x 11 1/4" x 11 1/4" d.\$59.50

Lancer 9711 Speaker System

Ducted-port bookshelf design with 8" full-range speaker. 8 ohms. 3 W min; cap. 20 W. Oiled walnut four sides. 20 3/4" x 10" x 9 1/2" d.\$47.50

SC-5 Speaker System

Features dual tuned, bass-accentuation ports with 12" woofer, a coaxial mid-range (covers 1000-3500 Hz) and a coaxial exponential flared horn tweeter with compression-driven u.h.f. driver. Response 28-20,000 Hz; crossovers at 1000 Hz (mechanical) & 3500 Hz (electrical); 8 ohms; 40 W capacity. 23 1/2" x 15 3/4" x 12 1/2" d. Oiled walnut, 4 sides. ..\$139.50

SYLVANIA

Except for Model FS40BT, all systems are bookshelf designs with walnut-grained veneer on wood composition. All are 8 ohms impedance and response figures are ± 6 dB.

AS61W Speaker System

6" bass driver & 3" super tweeter; response 50-20,000 Hz; crossover 2500 Hz; 50 W peak capacity. 8 3/4" x 14 1/4" x 7 1/2" d.\$79.95

AS81W Speaker System

8" bass driver & 3" super tweeter; response 40-20,000 Hz; crossover 1500 Hz; 100 W peak capacity. 11 1/4" x 19 1/4" x 11" d.\$99.95

AS101W Speaker System

10" bass driver, a 4" high-compliance mid-range & dome super tweeter; response 25-25,000 Hz; crossovers at 1500 & 9000 Hz; 200 W peak capacity. 13 3/4" x 24 1/4" x 11 3/4" d.\$179.95

AS121W Speaker System

12" bass driver, a 4" air-suspension mid-range & a dome super tweeter; response 20-25,000 Hz; crossovers at 700 & 8000 Hz; 400 W peak capacity. 15 5/8" x 26 3/4" x 12 3/4" d.\$249.95

FS40BT Speaker System

Floor-standing design with butternut veneers and select solids. 10" bass driver, a

6" mid-range & 3" tweeter; response 25-25,000 Hz; crossovers at 1500 & 9000 Hz; 400 W peak capacity. 21 $\frac{3}{8}$ " x 25" x 20 $\frac{1}{4}$ " d.\$349.95

TANDBERG

HiFi 10 Speaker System

Two-way system with a 6 $\frac{1}{2}$ " low-freq. & 2" tweeter crossing over at 3000 Hz: 4 ohms imp.; 8 W max. continuous power; 90 Hz bass resonance; response 60-16,000 Hz: 7 $\frac{1}{8}$ " x 9 $\frac{1}{8}$ " x 9 $\frac{1}{4}$ " d. Teakwood\$53.85

HiFi 11 12 $\frac{3}{8}$ " l. x 8 $\frac{1}{2}$ " x 6", teakwood\$53.85

HiFi 11 in rosewood\$58.30

HiFi 12 17 $\frac{13}{16}$ " x 7 $\frac{1}{2}$ " x 8 $\frac{1}{2}$ ", teakwood\$58.50

HiFi 7 Speaker System

Two-way coaxial design with a 10" x 6" low-freq. & a 2" tweeter crossing over at 3000 Hz; response 60-16,000 Hz: 3.2 ohms imp.; 8 W max. continuous power; bass resonance 85 Hz; 20 $\frac{1}{2}$ " x 10 $\frac{1}{4}$ " x 10" d.

Teakwood\$79.50

HiFi 7 in rosewood\$88.50

HiFi 15 Speaker System

Two-way coaxial design with 12" woofer & 5" mid-range & 2 $\frac{1}{2}$ " tweeter; response 35-16,000 Hz; 4 ohms imp.; 30 W max. continuous power; bass resonance 65 Hz: 27 $\frac{1}{2}$ " x 13 $\frac{3}{4}$ " x 11" d.

Teakwood\$134.95

Rosewood\$144.95

TANNOY

Monitor Gold Speakers

Dual concentric, coaxial designs with crossover network & adjustable high-frequency control. 8 ohm imp.

10" Response 27-20,000 Hz; crossover 1200 Hz; resonance 30 Hz; 20 W capacity. Recommended for infinite-baffles down to 1 $\frac{1}{2}$ cu ft.\$127.00

12" Response 25-20,000 Hz; crossover 1000 Hz; resonance 28 Hz; 30 W capacity\$147.00

15" Response 23-20,000 Hz; crossover 1000 Hz; resonance 26 Hz; 50 W capacity\$195.00

"Belvedere" Speaker System

Designed for use with 15" Dual-Concentric Monitor Gold speaker in stereo reproduction; baffle available for use with 12" speaker; 31 $\frac{1}{2}$ " x 23 $\frac{3}{4}$ " x 16"; walnut.

Enclosure only\$111.00

Enclosure with 12" Dual-Concentric Monitor Gold speaker\$258.00

Enclosure with 15" Dual Concentric Monitor Gold speaker\$307.00

"Standard Autograph" System

15" Dual-Concentric Monitor Gold speaker in a front- & rear-loaded cabinet. The rear horn radiates all frequencies below 350 Hz (down to 30 Hz) while the front-loaded horn radiates frequencies up to 1000 Hz. The high-frequency unit of the Dual-Concentric horn then takes over. Response 30-20,000 Hz; efficiency 10%. 4 & 16 ohms, 50 W capacity, 60" h. x 39" w. x 24" d. Walnut\$645.00

Enclosure only\$450.00

"Tudor Autograph" decorator styling.\$780.00

Enclosure only\$585.00

Model "GRF" Speaker System

Rear loaded horn expanding sound source, with 15" Dual-Concentric Monitor Gold speaker; 35-20,000 Hz \pm 3 dB; 50 watts power handling capacity; 8% approx. efficiency; effective loading down to 35 Hz. 42" h. x 17" x 23 $\frac{3}{4}$ " w. Oiled

1971 EDITION

walnut, 8 ohms\$420.00

Enclosure only\$225.00

GRF "Windsor" Same as Model GRF, but decorator design cabinet. With 15" Monitor Gold speaker\$477.00

Enclosure only\$282.00

"Lancaster" Speaker System

Enclosure for 12" or 15" Monitor Gold speakers. 29" x 26" x 19 $\frac{3}{8}$ ".

With 12" Monitor Gold speaker \$318.00

With 15" Monitor Gold speaker \$366.00

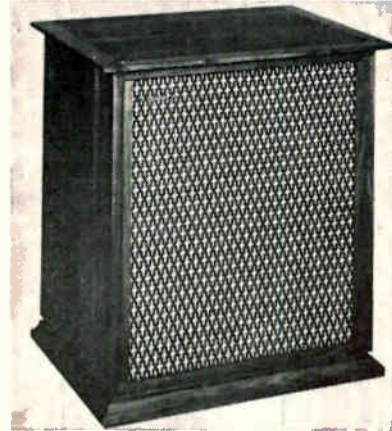
Enclosure only\$171.00

"Cadet" Speaker System

Infinite-baffle approx. 1 $\frac{1}{2}$ cu feet; operates on principle of pressure loading and acoustic absorption of back radiation; designed to be used with 10" Dual-Concentric Monitor Gold speaker; 23 $\frac{3}{4}$ " x 13 $\frac{1}{2}$ " x 11"; oiled-walnut only; with speaker.\$177.00

"Stuart" Speaker System

Enclosure for 10" or 12" Monitor Gold



speakers; same styling as "Lancaster"; 25 $\frac{1}{2}$ " x 24 $\frac{1}{8}$ " x 16 $\frac{1}{8}$ ".

With 10" Monitor Gold speaker \$273.00

With 12" Monitor Gold speaker \$294.00

Enclosure only\$147.00

"Mallorcan" Speaker System

Port-loaded bass reflex design with special version of 12" Monitor Gold Dual-Concentric speaker. Response 35-20,000 Hz. 23 $\frac{1}{2}$ " x 14 $\frac{3}{8}$ " x 11 $\frac{1}{2}$ " d. ...\$219.00

"Orbitus I" Speaker System

New version of 12" Monitor Gold speaker is designed for horizontal mounting.



When used with a curvilinear orbital deflector plate produces omnidirectional sound pattern. Response 35-20,000 Hz; crossover 1000 Hz; 8 ohms; 30 W power capacity. Has h.f. level control. 29" h. x 17" x 17". Oiled walnut 4 sides & top\$245.00

"Studio Professional Monitor" System

Special wide-range version of 15" Dual Concentric speaker in an enclosure based



on a direct-radiating exponential horn & bass-reflex principle. Response 35-20,000 Hz; capacity 50 W program material; crossover 1000 Hz; 16 ohms. Walnut vinyl finish. 43" x 30 $\frac{1}{2}$ " x 24" d.\$425.00

TEAC

LS-350 3-Way Speaker System

Features 12" woofer, a 4" cone-type mid-range & a 2" horn-type tweeter (with h.f. level control); crossovers at 700 & 5000 Hz; response 35-20,000 Hz; 40 W capacity; 8 ohms. 16" x 25 $\frac{1}{2}$ " x 11 $\frac{1}{4}$ ". Oiled walnut\$134.50

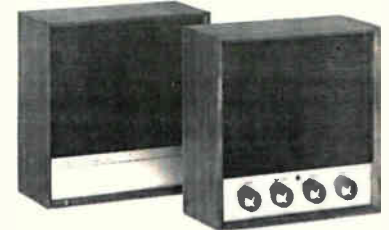
LS-400 3-Way Speaker System

Features 12" woofer, two 4" cone-type mid-range & two 2" horn-type tweeters with level control; crossovers at 500 & 5000 Hz; response 30-20,000 Hz; 50 W capacity; 8 ohms. 17 $\frac{1}{2}$ " x 27 $\frac{3}{4}$ " x 14 $\frac{1}{4}$ ". Oiled walnut\$199.50

TELEX

Stereo 70 Speaker/Amplifier System

Sold in pairs; 6 W/ch dynamic (EIA) power amplifier with stereo preamps; 6"



full-range speakers. Can be used with phono, or radio inputs. Also has preamp outputs. 11 $\frac{1}{4}$ " x 11 $\frac{1}{4}$ " x 5". Walnut cabinetspair \$69.95

4400 Speaker/Amplifier

Sold in pairs, each has 2-way speaker system: 8" woofer & 3 $\frac{1}{2}$ " tweeter with 2500 Hz crossover network. One of the speaker cabinets houses a 30 W/ch dynamic power @ 8 ohms stereo power amplifier with bass boost switch & volume control. Sensitivity 1 V; HD 1% at rated output. 16" x 14" x 5"\$149.95

TRUSONIC

50FR 5" Full-Range Speaker

Free cone suspension with response 80-15,000 Hz; 8 ohm imp.; free-air resonance 85 Hz & 20 W max. dynamic power input. Depth 1 $\frac{1}{8}$ "\$14.95

80FR 8" version; response 40-15,000 Hz; free-air resonance 50 Hz & 25 W max. dynamic power input. 4" deep ...\$42.00

120FR 12" version; response 30-15,000 Hz & free-air resonance 30 Hz; 30 W max. dynamic power input. 6 $\frac{1}{8}$ " deep\$75.00



Speakers & Cabinets

150FR 15" version; response 20-14,000 Hz; free-air resonance 23 Hz; 35 W max. dynamic power input. 7 $\frac{1}{8}$ " deep \$105.00

80CX 8" Coaxial Speaker

Combines an 8" full-range free cone suspension speaker with coaxially mounted



horn-loaded tweeter. Includes crossover (5000 Hz) & brilliance control. Response 40-25,000 Hz; free-air resonance 50 Hz; 8 ohm imp.; 25 W max. program material. 4 $\frac{1}{2}$ " deep\$75.00
120CX 12" version; response 25-30,000 Hz; free-air resonance 30 Hz; 30 W max. program material. 7 $\frac{1}{8}$ " deep\$119.00
150CX 15" version; response 21-30,000 Hz; free-air resonance 23 Hz; 35 W max. program material. 8 $\frac{7}{8}$ " deep\$149.00

120W 12" Woofer

Response 35-5000 Hz; 8 ohms; free-air resonance 30 Hz; power 30 W max. program material. 6 $\frac{1}{8}$ " deep\$75.00
150W 15" version; response 20-5000 Hz; free-air resonance 20 Hz; power 35 W max. program material. 7 $\frac{7}{8}$ " deep\$99.00

80M 8" Mid-Range Speaker

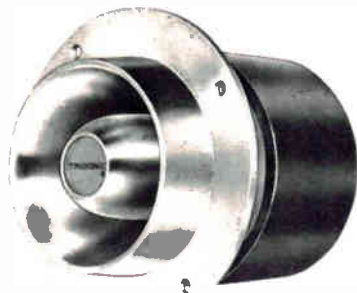
Response 40-5000 Hz; 8 ohms; free-air resonance 50 Hz; 25 W max. program material. 4" deep\$42.00

5CX Crossover

500-Hz crossover with 12 dB/octave attenuation. Completely encapsulated. 6 $\frac{1}{4}$ " x 3 $\frac{3}{4}$ " x 2" d\$27.00

5KT Toroid Super Tweeter

Dispersion 100°; response 2500-30,000 Hz; 35 W max. program material; 8



ohms. Includes 5000 Hz crossover/brilliance control. 2 $\frac{13}{16}$ " dia. x 4 $\frac{1}{8}$ " d. \$66.00

RT-1 Horn-Loaded Ring Radiator

Dispersion 120°; response 5000-25,000 Hz; 8 ohms; 25 W max. program material. Includes 5000 Hz crossover brilliance control. 2 $\frac{13}{16}$ " dia. x 2 $\frac{1}{8}$ " d.\$39.00

Recommended Combinations

80FR & RT-1\$81.00
120FR & 5KT\$141.00
150FR & 5KT\$171.00
120W, 80M, 5KT, 5CX\$210.00
150W, 80M, 5KT, 5CX\$234.00

T-28 Speaker System

Features ducted-port reflex design with an 8" woofer (free-air resonance 23 Hz) and a 2" x 6" compression tweeter. Has crossover & level control. Response 40-19,500 Hz. Overall size 11" x 18" x 9"\$59.95

UNIVERSITY SOUND

All prices shown are "selling price."

Diffusicone-8 2-Way "Diffaxial"

Wide-range speaker with 8" woofer & Diffusicone mid-range tweeter; response from 30-15,000 Hz; power rating 35 watts; 8-16 ohms; 4 $\frac{1}{2}$ " deep\$32.50

Model 6201 Coaxial Speaker

Compression loaded horn tweeter and 12" woofer; response 28 Hz to beyond audibility; built-in crossover network with "Brilliance" control; power rating 35 watts; 8-16 ohms; 6 $\frac{3}{8}$ " deep ..\$69.50

312 3-Way "Diffaxial" Speaker

Sphericon tweeter is projected through the center of the 12" woofer; mid-range reproduction is handled by "Diffusicone" section; built-in crossover network and variable "Brilliance" control; mechanical crossover at 1000 Hz and electrical at 3000 Hz; response 28-40,000 Hz; power rating 35 watts; 8-16 ohms; 6 $\frac{3}{8}$ " deep\$88.74

Model 315-C 3-Way Wide-Range Speaker

15" woofer with Diffusicone mid-range & T-50 "Hypersonic" driver and horn; response 25 Hz to beyond audibility; adjustable mid-range and tweeter balance; 6 $\frac{1}{2}$ lbs. of Alnico V magnet material; power rating 50 watts; 8-16 ohms; 12" deep\$204.65

1212 3-Way Wide-Range

"Diffaxial" Speaker

12" woofer with Diffusicone mid-range & Sphericon super tweeter; built-in cross-



over network; mechanical crossover at 1000 Hz & electrical at 3000 Hz; response 35-30,000 Hz; 30 W.\$62.96

Model UXT-5 Super Tweeter

Response from 4500 Hz to beyond audibility; dispersion 120° horizontal and 50° vertical; 8 ohms; power rating 50 watts\$29.50

Model HF-206 Hypersonic Tweeter

Response 2500 Hz to beyond audibility; dispersion 120° horizontal and 50° vertical; power rating 50 watts; 8 ohms; 6" x 3 $\frac{1}{16}$ " x 6 $\frac{9}{16}$ "\$39.50

"Mustang" Speakers

Model M-8 8" high efficiency; 8 ohms, 2 $\frac{1}{2}$ " deep. Response 50-12,000 Hz. Han-



dles 30 W\$18.36

Model M-8D 8" high-efficiency dual-cone speaker. 8 ohms, 2 $\frac{1}{2}$ " deep; response 50-15,000 Hz; crossover at 1500 (mechanical). Handles 30 W\$22.58

Model M-12 12" high efficiency; 8 ohms; 3 $\frac{3}{8}$ " deep; response 35-12,000 Hz. Handles 30 W\$23.64

Model M-12D 12" high-efficiency dual-cone speaker. 8 ohms, 3 $\frac{3}{8}$ " deep. Response 35-15,000 Hz; crossover at 1500 Hz (mechanical). Handles 30 W ..\$29.34

Model M-12T 12", 3-way Diffaxial. 8 ohms, 3 $\frac{3}{8}$ " deep Sphericon tweeter; response 35-40,000 Hz. Crossovers at 1500 & 4500 Hz. Handles 30 W\$42.68

M-15T 15" 3-way Diffaxial with reciprocating flare horn tweeter; 8 ohms; 7" deep; response 30-20,000 Hz; crossovers at 1500 & 3000 Hz; brilliance control; 35W.\$76.94

Model MS "Sphericon" super-tweeter; 8 ohms; 3 $\frac{1}{16}$ " d., 3 $\frac{13}{16}$ " dia.; response 3000-40,000 Hz. Maximum capacity 30 watts\$20.96

"Project M" Speaker System

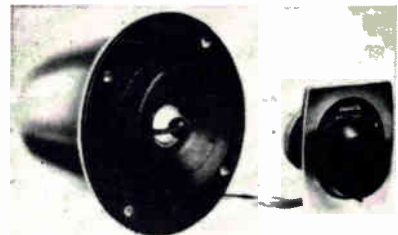
Features 11" very-low-resonance woofer & a 2 $\frac{1}{2}$ " closed-back direct radiator cone tweeter. The enclosure is a 1.324 cubic foot acoustic-suspension design. Response 30-20,000 Hz; power max. 60 W. Has crossover at 1000 Hz & is recommended for use with a 30 W dynamic power amp. 8 ohms. Finished all four sides; oiled walnut. 23 $\frac{1}{2}$ " x 12 $\frac{1}{4}$ " x 11 $\frac{7}{8}$ "\$109.95

Model 4401 Tweeter

One-piece die-cast horn with 120° horizontal and 50° vertical dispersion; hermetically sealed construction; response 2000 Hz to beyond audibility; 8 ohms; power rating 50 watts; 6" x 2 $\frac{3}{4}$ " x 6 $\frac{9}{16}$ "\$22.50

T-202 "Sphericon" Super Tweeter

Domed phenolic diaphragm and spherical diffractor; frequency response 3000-



40,000 Hz; 120° dispersion; 4 $\frac{1}{8}$ " diameter; built-in crossover network & brilliance control; 2 $\frac{1}{2}$ lbs.\$28.62

Model T-50 Hypersonic Driver

Heavy duty high efficiency driver for use with H-600 or Cobreflex horn; response



from 700 Hz to inaudibility; 8 ohms; 1 $\frac{1}{8}$ "-18 throat; 4 1/2" diameter; 4 $\frac{1}{8}$ " deep\$53.20

Model T-30 Driver

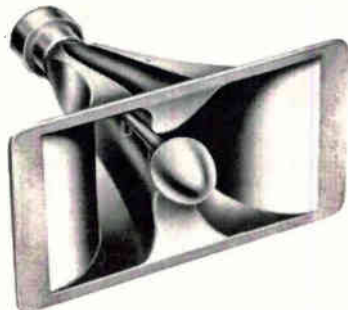
Mid-range and high-frequency driver for



use in 2, 3, or 4-way systems; response 350 Hz to beyond audibility; use with H-600 or "Cobreflex" horns; 8 ohms; 3 1/2" diameter; 3 3/4" deep\$33.40

Model H-600 Horn

Mid-range and high-frequency horn with 600 Hz cut-off; die-cast design with re-



ciprocating flare design for uniform dispersion; fits any driver with standard 1 3/8" -18 throat\$23.80

"Cobreflex" Horn

Designed for use as mid-range horn in three-way systems or as high frequency horn in two-way systems; crossover as low as 350 Hz; 120° horizontal and 60° vertical dispersion\$31.73

Model C-8M 8" Mid-Range Speaker

Response 500-5000 Hz; sealed back; power rating 50 watts program material; depth 4 1/4"\$19.11

C-12SW Dual Voice-Coil Woofer

12" adjustable response woofer; high end may be limited to 700, 2500 or 5000 Hz to complement tweeter; 1 1/2 lb. Alnico V magnet; response 30 to 6000 Hz; 8 ohms; power rating 30 watts; 6 7/8" deep . \$47.21

Model C-15W Woofer

15" dual impedance woofer; may be used in any system from 4 to 20 ohms; response from below 25 to 1500 Hz; power rating 50 watts; 3-lb Alnico V magnet structure; 10 1/2" deep\$118.26

C-12HC Dual Voice-Coil Woofer

High compliance 12" woofer; "Uniferrox-7" magnet material; response to 3000 Hz permits use in two-way systems; dual impedance coil; 4-20 ohms; power rating 50 watts; 6 7/8" d.\$59.85

C-15HC Dual Voice-Coil Woofer

High compliance 15" woofer; "Uniferrox-7" magnet material; response to 800 Hz; dual impedance coil; 4-20 ohms; 60 W power rating. 8 1/8" deep\$97.50

DRC Aerodynamic Bass Energizer

Ultra-high-compliance 12" mass-loaded non-electrical woofer cone designed to be driven mechanically by rear waves of high-quality 12" speakers such as Models 1212, 312, 6201, C-12HC. Adds up to 8 dB in lowest bass register. For use in 2 1/2 to 4 cubic foot enclosures\$24.42

N-1 Adjustable High Pass Filter

Built-in tweeter control; crossovers at 2500, 5000, and 10,000 Hz at 8 ohms; 1250, 2500, 5000 Hz at 16 ohms; 5000 and 10,000 Hz at 4 ohms; fits panels up to 3/4" thick; 3 3/8" x 3 3/4" x 3"\$16.50

Models N-2A and N-2B Networks

Adjustable L/C dividing networks; N-2A is 6 dB/octave two-way L/C network; may be used in pairs as 12 dB/octave network or singly as 12 dB/octave low or high-pass filter; crossover 350 or 700 Hz at 8-16 ohms; 700 Hz at 4 ohms; N-2B is 6 dB/octave two-way L/C network; may be used in pairs as 12 dB/octave network or singly as 12 dB/octave low or high-

1971 EDITION



WHAT'S
IN A
TANNOY
ENCLOSURE?



Over forty years of knowledge and experience in loudspeaker design and manufacture, when it's the new TANNOY omni-directional speaker system, the "ORBITUS I".

This system embodies an entirely new version of the famous 12" Monitor Gold Dual Concentric loudspeaker, specifically designed for orbital sound reproduction. The enormous advantages of the integrated sound source of the Tannoy Dual Concentric loudspeaker are put to full use when used with an acoustically designed orbital deflector. The resultant sound pattern is completely omni-directional providing absolute spectrum integration between the high and low frequency systems of the Dual Concentric unit, thus producing a spacial effect unobtainable in any other system: ideal for stereo and quadraphonic applications.

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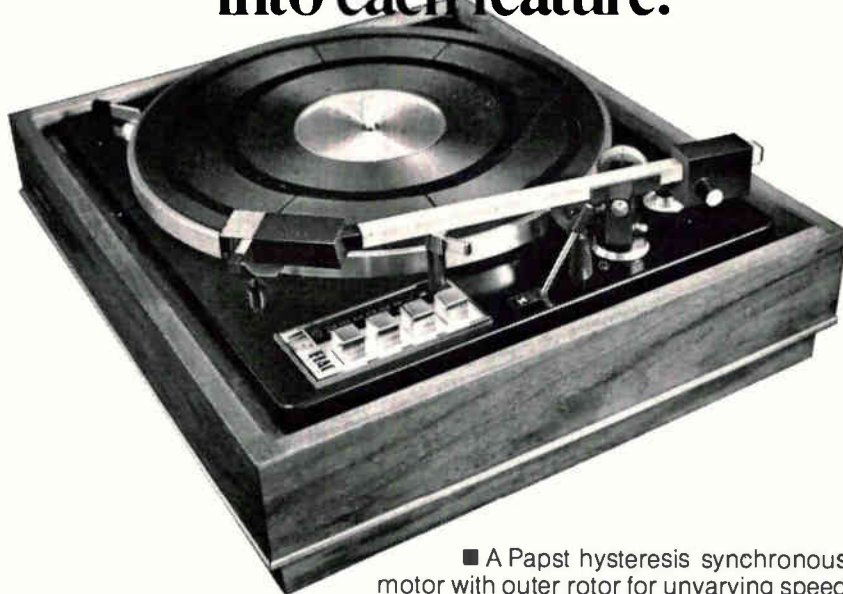
TANNOY (AMERICA) LIMITED
1756 Ocean Avenue, Bohemia, N.Y.

TANNOY (CANADA) LIMITED
36 Bentley Avenue, Ottawa, Ont., Canada



CIRCLE NO. 55 ON READER SERVICE CARD

We put a little more feature
into each feature.



■ A Papst hysteresis synchronous motor with outer rotor for unvarying speed accuracy. ■ Precise stylus overhang adjustment with built-in gauge—no shifting, no guesswork, no templates. ■ Silicone-damped cueing in both automatic and manual play. ■ And, those exclusive light touch pushbuttons to make it easy to enjoy all those other wonderful 50H features \$175.00 at your hi-fi dealer. Benjamin Electronic Sound Corp., Farmingdale, N.Y. 11735, a division of Instrument Systems Corp.

MIRACORD 50H

CIRCLE NO. 63 ON READER SERVICE CARD



Speakers & Cabinets

pass filter; crossovers are 1250, 2500, or 5000 Hz at 8 ohms; 2500 or 5000 Hz at 16 ohms; 2500 Hz at 4 ohms; N-2A and N-2B may be used in combination for three-way systems.

Model N-2A\$24.11
Model N-2B\$19.76

Model S-9S-U 15" Speaker System

3-way horn-loaded theater system consisting of C-15W, T-30/"Cobreflex," HF-206 speakers; assembled and wired; unfinished; 23 $\frac{3}{4}$ " x 40 $\frac{1}{2}$ " x 31 $\frac{1}{2}$ "\$402.45

Model AP-8 Balance Control

Attenuator pad to regulate speakers of different efficiencies and for balancing sound for room acoustics and personal taste; ideal for N-2A and N-2B networks\$9.00

Model N-3 "Acoustic Baton"

Three-way L/C dividing network with variable controls for high and mid-range;



crossover between woofer and mid-range either at 350 or 700 Hz; tweeter crossover at 5000 Hz; fits panels up to $\frac{3}{4}$ " thick; 8 ohms; 7" x 5" x 3"\$41.75

MLC Outdoor Speaker System

Weatherproof coaxial, with horn tweeter & separate woofer, speaker for outdoor use; frequency response 150-15,000 Hz; power rating 15 watts; impedance 8 ohms; dispersion 120 degrees; 12 $\frac{3}{4}$ " x 9 $\frac{1}{4}$ " x 10 $\frac{3}{4}$ "\$45.05

Model CLC Outdoor Speaker

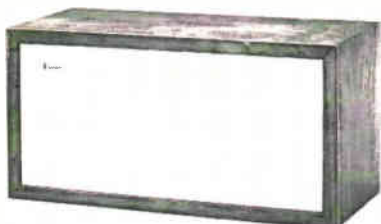
Balanced "compression" folded-horn design; completely waterproof; 2-way 8" speaker; response 55-14,000 Hz; 30-watt power capacity; 8 ohms; 22 $\frac{3}{4}$ " x 12 $\frac{1}{16}$ " deep\$76.89

Model ELC Outdoor Speaker

Weatherproof speaker for outdoor use; frequency response 150-11,500 Hz; power rating 15 W; 8 ohm imp.; dispersion 120°. 12 $\frac{3}{4}$ " x 9 $\frac{1}{8}$ " x 10 $\frac{3}{8}$ "\$36.51

Ultra-D Speaker System

10" Ultra-Linear response woofers; 4" direct-radiator mid-range cone; 3 $\frac{1}{2}$ " super



tweeter; crossover @ 1000 and 5000 Hz. Has brilliance/presence control; 8 ohms. Handles 32 watts dynamic power, 23 $\frac{1}{16}$ " x 11 $\frac{1}{8}$ " x 9 $\frac{3}{4}$ " deep. Oiled walnut\$89.95

UW-30 Underwater Speaker

Completely waterproof for use in swimming pools. Polypropylene plastic housing; heavy 18-foot cable with third wire for grounding; power capacity 30 watts; impedance 16 ohms; bracket or flush mounted\$47.97

Laredo 4-Way Speaker System

Incorporates Mustang 12" woofer, 8" 2-way mid-range & Sphericon tweeter. Response 30-30,000 Hz; 40 W IPM power capability; 8 ohms impedance. Has LC crossovers at 350 & 3000 Hz with brilliance control. Totally sealed cabinet design. 24" x 15 $\frac{3}{4}$ " x 12 $\frac{1}{16}$ "\$129.95

Estoril 4-Way Speaker System

Incorporates the Model 312, a 3-way 12" speaker, and an aerodynamic bass energizer. The bass energizer is a separate inert 12" diaphragm in a heavy-duty basket and is driven by internal pressure of the enclosure. Functions as an in-phase supplementary low-frequency radiator. Response 25-40,000 Hz; power handling 40 W IPM; 8 ohm impedance; crossovers 1000 & 3000 Hz; has brilliance control. Rear acoustic compliance loading cabinet design. 27" x 16" x 14 $\frac{1}{16}$ ". Oiled walnut\$192.44

312 Presidio Speaker System

Houses three-way 12" speaker & Model



DRC bass energizer which has separate inert 12" diaphragm driven by internal pressure of enclosure. Functions as in-phase supplementary low-freq. radiator. Response 25-40,000 Hz; power handling 40 W IPM; 8 ohm imp.; crossovers 1000 & 3000 Hz; has brilliance control. Rear acoustic compliance loading cabinet design. 23" x 24" x 15" d. Oiled walnut\$199.95

Vegas Speaker System

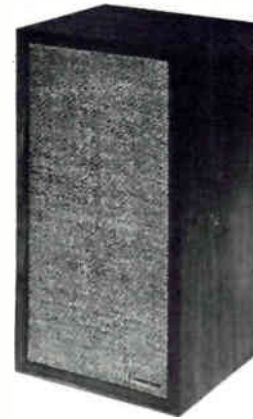
15" three-way Mustang M-15T high-compliance speaker; response 25-20,000



Hz; power handling 35 W IPM; 8 ohm imp.; has variable brilliance control. 23" x 24" x 15" d. Oiled walnut\$169.95

El Paso Speaker System

Two-speaker, three-way high-compliance system; response 35 Hz to beyond audi-



bility; power handling 30 W IPM; 8 ohm imp. Has 8" high-compliance woofer/mid-range with 3" rigid diaphragm tweeter. 19" x 10 $\frac{1}{2}$ " x 9 $\frac{3}{8}$ " d. Oiled walnut\$62.95

GS-100 Musical Instrument Speaker

High-power 12" speaker; 8 ohms; for



electronic organ, guitar, etc. 100 W r.m.s.\$62.69

UTAH

Coaxial Speakers

Dual-cone speakers with single voice coil and magnet structure; impedance 8 ohms.

D8JC (8" full range, 40-17,000 Hz, 20 W)\$11.95
D12JC (12" full range, 40-15,000 Hz, 30 W)\$13.95
D12P (12" full-range; 30-14,000 Hz; 40 W)\$16.95
D15PXC-HF (15", 3-way with compression tweeter; 30-20,000 Hz; 45 W)\$39.95

All power ratings are peak audio watts.

Crossover Networks

LC type designs for 2- or 3-way systems; air-core coils; potted can assembly; use one 600 Hz and one 5000 Hz for 3-way system; 8-ohm crossover; 2 $\frac{3}{8}$ " x 2" x 2". X-608 (8 ohms, 600 Hz)\$9.90
X-5008 (8 ohms, 5000 Hz)\$9.90

"Celesta" Series Speakers

C8HC-2 Two-way 8" coax; 45-18,500 Hz Res. freq. 65 Hz; 24 W peak audio \$12.95



C8JC-2A Two-way 8" coax; 35-19,000 Hz Res. freq. 55 Hz; 30 W peak audio.\$14.95
C8JC-3A Three-way 8" coax; 35-20,000 Hz Res. freq. 55 Hz; 30 W peak audio.

.....\$15.50
 C12JC-2 Two-way 12" coax; 30-17,500 Hz Res. freq. 45 Hz; 35 W peak audio.
\$19.95
 C12PC-2A Two-way 12" coax; 25-19,000 Hz. Res. freq. 25 Hz; 45 W peak audio\$26.50
 C12PC-HF Three-way 12" coax; 25-20,000 Hz. Res. freq. 25 Hz; 45 watts peak audio\$35.50
 All 8" speakers are 3¹/₁₆" deep and all 12" 5¹/₁₆" deep.

H208 Horn Tweeter

Mtg. flange 7¹/₈" x 3", depth 6¹/₁₆". Response 2000-17,500 Hz; 8 ohms; 15 W capacity\$ 9.60
 With crossover\$10.50
 With crossover & level control ...\$12.00

H-068 Mid-Range Horn

Mtg. flange 10¹/₂" x 4", depth 11". Response 600-12,000 Hz, 8 ohms, 15 W capacity\$10.20
 With crossover\$11.40
 With crossover & level control ...\$12.90

AS-1 Bookshelf System

2-way design with 10" woofer & 3¹/₂" tweeter with sealed back. Has tweeter level control. Response 32-18,500 Hz; 8 ohms; 20 W capacity. 12" x 24" x 12" d. Oiled walnut\$79.95

HS-4 Speaker System

3-way ducted port design with 12" woofer, midrange/tweeter horn & 3¹/₂" h.f. tweeter with sealed basket. Has high-freq. level control. Response 30-18,000 Hz; 20 W capacity; 8 ohms. 15" x 25³/₄" x 14" d. Oiled walnut\$94.50

AS-12 Bookshelf System

2-way design with 8" woofer & 3¹/₂" tweeter with closed back. RC crossover. Response 40-18,000 Hz; 12¹/₂ W capacity; 8 ohms. 11" x 18" x 9" d. Oiled walnut\$49.95

AS-6 Bookshelf System

3-way design with 12" woofer, 4" x 10" die-cast midrange horn & compression tweeter with 1³/₈" dia. mouth. Has LC crossovers; separate midrange & tweeter level controls. Response 35-20,000 Hz; 30 W capacity. 14" x 25" x 13¹/₂" d. Oiled walnut\$120.00

OM-1 Omni Speaker System

Radiates sound 360° with 8" woofer & 3" dia. tweeter mounted coaxially. Cross-



over 4500 Hz; capacity 15 W program material; 8 ohms; response 35-18,500 Hz. 9³/₄" x 9³/₄" x 14¹/₂" h.\$69.95

V-M

85 Speaker System

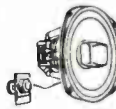
A variation of a ducted-port design; the back wave is tunneled in a spiral configuration through four chambers & porting in the rear. Features 8" woofer, 3¹/₂" cone tweeter; response 35-20,000 Hz; 8 ohms;

1971 EDITION

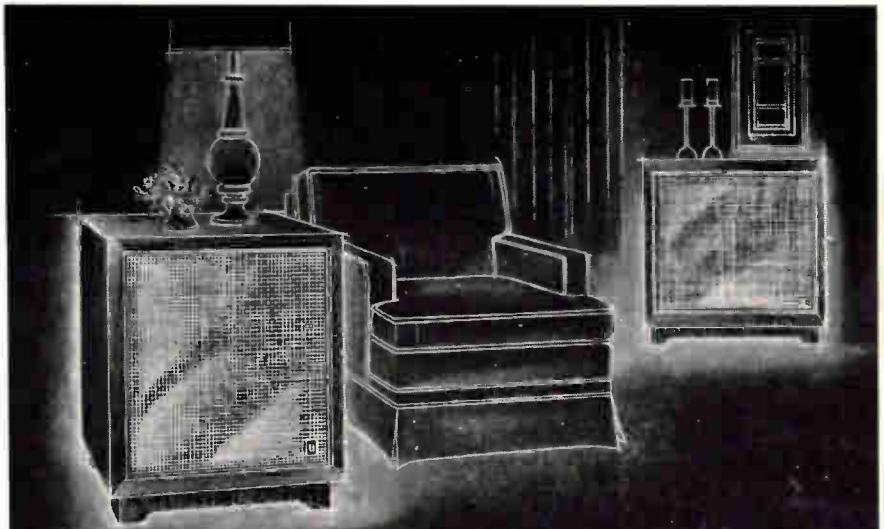
*In 1948, University Sound
 made home high fidelity possible.*

In 1970, we made it perfect.

In 1948 University unveiled the world's first popularly priced, full fidelity speaker—the 6201—and home high fidelity was born.



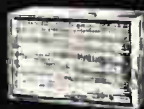
In 1970 University unveils the finest, fullest line of high fidelity products in the world—and home high fidelity is finally perfected.



THE VEGAS

Twice as big as a good-sized bookshelf speaker. With four times the sound. For about the same kind of money. 15" woofer and large enclosure mean the biggest, sharpest bass you've ever heard—regardless of price. Specifications: Free-standing, three-way speaker system

- Frequency Response: 25-20,000 Hz
- Power Handling Capacity: 35 watts IPM
- Impedance: 8 ohms
- Components: University M-15T, 15" three-way full-range speaker
- Controls: Continuously variable brilliance control recessed in back
- Finish: oiled walnut
- Dimensions: 23" x 24" (W) x 15" (D)
- Walnut base optional



PROJECT M



EL PASO



LAREDO



ULTRA D



EL DORADO



PRESIDIO

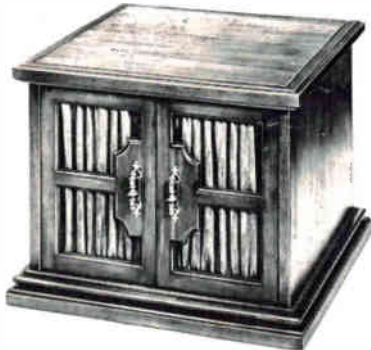


UNIVERSITY SOUND: the finest, most complete line of high fidelity speaker systems in the world from the world's leading manufacturer of electroacoustic products.

P.O. Box 26105, Oklahoma City, Oklahoma • A quality company of LTV Ling Altec, Inc.

7

Speakers & Cabinets



crossovers 600 Hz acoustically & 2000 Hz electrically. Capacity 40 W r.m.s. 20 3/4" h. x 26" x 26". Mediterranean motif in pecan panels\$210.00

84 Speaker System

Same as Model 85 except styling. Can be used as a pedestal or end table. Comes in contemporary design with pecan panels & has casters. 12" h. x 19 1/2" x 19 1/2".\$195.00

38 Speaker System

Same principle as Model 85 except 6 chambers & has 5 1/4" wide-range speaker. Response 60-15,000 Hz: 8 ohms; capacity 10 W r.m.s. 12" h. x 18" x 12" d. Oiled walnut\$95.00

WEBCOR

SP-5 3-Way Speaker System

Bookshelf type with 8" woofer, a mid-range, a tweeter, and LCR-type crossover network. Has mid-range/treble control. Response 40-20,000 Hz. 10" x 18" x 8". Walnut\$79.95

SP-7 3-Way Speaker System

Features 12" woofer, 4 1/2" mid-range, 3" tweeter with LCR-type crossover network. Has mid-range/treble control. Response 30-23,000 Hz. 15" x 24" x 10". Walnut\$99.95

WHARFEDALE

W25 Two-Way Speaker System

Has 8" woofer & ultra-curved tweeter with 12 dB/octave crossover in an airtight enclosure. Response 35-18,500 Hz: 8 ohms; 10 W min. power, 35 W max. (IHF). 15 1/2" x 10" x 8" d. Oiled walnut.\$58.75

W35 Three-Way Speaker System

Has 8" woofer, a 3 1/4" mid-range, and a 2 1/2" ultra-curved tweeter with a 12



dB/octave crossover in air-tight enclosure. Response 35-18,500 Hz: 8 ohms; 10 W min. power, 40 W max. (IHF). Includes mid & h.f. level controls. 15" x 15" x 8" d. Oiled walnut\$82.00
Wall mounting brackets\$ 4.00

W45 Three-Way Speaker System

Has 10" woofer, a 3 1/4" mid-range, and an ultra-curved tweeter with 12 dB/octave crossover in an air-tight cabinet. Response 30-18,500 Hz: 8 ohms; 10 W min. & 40 W max. (IHF). Includes mid & h.f. level controls. 22" x 12" x 10" d. Oiled walnut\$117.00

W60E Three-Way Speaker System

Has 12 1/2" woofer, a 5" mid-range in an isolated non-reflecting cylindrical cham-



ber & a 1" Mylar dome tweeter with a phase-compensating diffuser—all in an airtight enclosure. Response 30-20,000 Hz: 8 ohms; 10 W min. & 50 W max. (IHF). 24" x 15" x 12" d. Oiled walnut.\$153.00

W70E Three-Way Speaker System

A 15" woofer, a 5" mid-range in a separate cylindrical chamber, a 1" Mylar



dome omnidirectional super-tweeter with compensating diffuser—all in airtight cabinet. Response 25-20,000 Hz: 8 ohms; 15 W min. & 50 W max. (IHF). Includes mid & h.f. level controls. 24" x 22 3/4" x 13 3/8" d. Oiled walnut\$223.00

W80A Speaker System

Features a variable disc mounted adja-

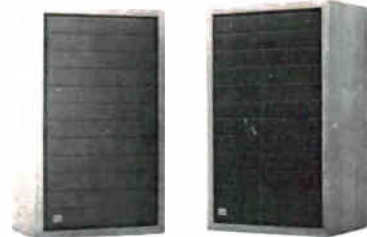


cent to system's rear & upward facing speakers. Disc acts as reflector bending sound waves in any desired direction. Has 12 1/2" woofer, a 5" curved cone mid-range in a separate chamber, a sub-treble high freq. speaker & another for extreme highs. Response 20 Hz to inaudibility: 8 ohms. 25 W min., 80 W max. (IHF). Includes mid-range & treble level controls. 29" x 17 1/4" x 17" d. Oiled walnut\$317.60

WOLLENSAK

A-2000 Speaker System

Special woofer design provides low 1M dist. in mid-range: exclusive radial decou-



plers in woofer cuts woofer out at crossover frequency: three high-quality speaker controls for precision adjustments. Response 40-18,000 Hz: 4 ohms. Power requirements 15 W r.m.s.; acoustic suspension. 13 1/2" d. x 10 1/4" x 23"\$159.95

A-1050 Speaker System

Acoustic suspension cube style speaker on pedestal. Exclusive "Thermo Over-



load Protection." Response 80-12,000 Hz: 8 ohms; amplifier power requirements (min.) 6 W. 7 3/4" cube on pedestal\$79.95

YAMAHA

All speakers are 8 ohms with cabinets of open back design. All power figures are max. continuous input. The foam polystyrene diaphragms are revolutionary in design in that they utilize the bending vibration-multiple resonance principle of sound production as used in pianos and other musical instruments.

NS-10 Two-way system with 12 1/2" x 18" woofer & 2" tweeter. 10 W. 20" x 14" x 7". Oiled walnut\$69.50

NS-15 Two-way system with 15" x 20" woofer & 2" tweeter; variable level control: 15 W. 23 1/2" x 16 1/2" x 7 1/2". Oiled walnut\$115.00

NS-18 Two-way system with 18" x 23" woofer & 2 1/2" tweeter; 18 W; 3-position level control: 28 1/4" x 21 1/4" x 10". Oiled walnut\$169.50

NS-20A Three-way system with 20" x 27" woofer, 8" mid-range & 2" tweeter. Has 3-position level control: 20 W, 26" h. x 33" w. x 14" d. Satin walnut ..\$225.00

NS-20B Same except oiled walnut\$225.00

NS-30A Three-way system with 25" x 35" woofer, 12" mid-range & 2" tweeter. Has 3-position level control: 30 W, 29" h. x 39" w. x 14" d. Oiled walnut ..\$330.00



Hi-Fi Systems



ALLIED

1450 AM-FM Stereo Receiver/ Cassette Recorder/Phono

Solid-state AM-FM receiver in walnut wood case with 4-speed automatic turn-



table and stereo tape cassette recorder. Features tuning meter, FM indicator light. 22½ W/ch (IHF), 16 W/ch continuous sine wave. Stereo/mono switch; tape & aux. inputs. Response 40-18,000 Hz ±2 dB. Imp. 4-16 ohms. Turntable has mag. stereo cartridge with diamond stylus; anti-skating, cueing, and pause control. Recorder tapes direct from FM-AM or records, or mics (optional). Plays back cassettes, stereo or mono. Pop-up cassette loading with level meter, mic inputs. 20" x 16" x 17" h. 14A5050U. 1450 compact, less speakers.\$349.95

ALTEC LANSING

912A Music System

Combines 714A (44 W/ch r.m.s.) AM/FM stereo receiver, Garrard SL95B auto-



matic turntable. Shure M93E cartridge with 0.4 x 0.7 mil elliptical diamond stylus & Starr cassette stereo tape recorder. Response 50-10,000 Hz. Has mic input; wow & flutter 0.4% r.m.s. Does not include speakers. 6¾" x 21½" x 19½"\$650.00

911A Music System

Same as 912A except does not have cassette recorder. 6¾" x 19¾" x 19½"\$499.00

AMPEX

985A Tape/AM-FM Music System

Combines a 4-track, automatic threading & reverse stereo tape recorder with an 1971 EDITION

AM-FM stereo tuner. Recorder is basically same as Model 2161. Supplied with walnut cabinet with tambour doors & two matching speaker systems. Response 50-15,000 Hz ±4 dB; wow & flutter 0.15% @ 7½ ips. Features mic & mag. phono inputs and 6 W/ch continuous sine-wave power outputs. Size 32¾" x 15¾" x 9¾".\$695.00

MX1000 Music System

Includes 12½ W/ch dynamic power stereo amp, an AM-FM stereo tuner, a cassette record/play system, an automatic turntable with Shure cartridge, and two separately housed speaker systems (each with 6" x 9" speaker). Cab. size 14¾" x 12" x 9¾". Response 40-12,000 Hz. Console size 14¾" x 9¾" x 31¾". Walnut cab. Supplied with 2 mics & 45 rpm spindle\$489.95

BELL & HOWELL

3600K Modular Receiver System

Combines Model 3600 AM-FM stereo receiver, a 30 W/ch dynamic (IHF) power amp, a Model 3100 stereo cassette play/record deck, a Model 3800 record changer & two Model 610 speaker systems (each with dual 6" 2-way speakers with mechanical crossovers). Walnut cabinet.\$395.85

3600KR Modular Receiver System

Same as Model 3600K except a Model 2423 reel-to-reel tape play/record deck in place of cassette recorder\$405.85

BENJAMIN

Compact Line

Complete line of stereo systems consisting of four distinct models. Each includes a Miracord automatic turntable. Models 1025, 1035, and 1045 include the Elac STS-244-17 magnetic cartridge with diamond stylus; Model 1050A has the STS-344-1 cartridge, a pair of EMI air-suspension speaker systems & an FM-stereo receiver with automatic stereo/mono switching and stereo indicator light. Features oiled walnut cabinets, solid-state design with IC's in i.f. strip & remote speaker switch.

Model 1025. 16 W/channel IHF; response 10-100,000 Hz ±1 dB; FM sensitivity 1.7 μV for 20 dB quieting; aux. sensitivity 190 mV; power bandwidth 25-30,000 Hz. Has Model 620B changer & Model 55 speakers (woofer is 8" round with 3¾" tweeter). 9¾" h. x 16¾" w. x 16¾" d. Speaker size is 17" x 10¼" x 8½"\$299.95
Model 1035. Similar to Model 1025 except has 22½ W/ch IHF power output; FM sensitivity 1.6 μV; aux. sensitivity 200 mV. It includes an AM receiver &



Model 620 changer.\$349.95

Model 1045. 30 W/ch IHF power output; response 10-100,000 Hz ±1 dB;



power bandwidth 25-30,000 Hz, aux. sensitivity 250 mV; FM sensitivity 1.6 μV for 20 dB quieting. Includes AM receiver, Model 62 speaker systems with high-freq. control, Model 50B changer. 9½" h. x 18¼" w. 17" d. Speaker size 20½" x 11¼" x 10"\$449.95
Model 1050A. Same as Model 1045 except has speaker system 24½" x 13½" x 12¾" with 14¼" x 8¾" woofer, 5" mid-range, and 3¾" tweeter. 50 W/ch IHF power output; response 5-100,000 Hz ±1 dB; power bandwidth 15-30,000 Hz; aux. sensitivity 400 mV; FM sensitivity 1.5 μV for 20 dB quieting. Has mic & guitar input jacks with separate volume controls\$599.50

BOGEN

VP25A Portable Phono Player



8

Hi-Fi Systems

Mono 20 W r.m.s. design. Bogen B52 turntable is used with a G-E variable reluctance cartridge & dual sapphire styli. Amp. response 45-18,000 Hz ± 1 dB; inputs: 5 mic., radio/tape. Has 4, 8, 16 ohm & 25 V balanced, 70 V outputs for multiple speaker operation. Single portable case with 12" speaker in lid. 15 $\frac{3}{4}$ " w. x 16 $\frac{1}{2}$ " d. x 10 $\frac{3}{4}$ ". 40 lbs. 120 V operation\$196.90

VP50A-DS Portable Phono Player

Same as VP25A except 40 W r.m.s. & supplied with dual speaker system



mounted in separate cabinet . . . \$273.45
Note: Models VP25A & VP50A-DS amplifiers could operate from 12-15 V d.c. but an inverter is required to operate phono.

VP18A Portable Phono Player

Mono. 10 W r.m.s. design. Bogen B52 turntable is used with a ceramic car-



tridge. Amp has high-impedance mic input & 8-ohm output. Response 45-18,000 Hz $\pm 1\frac{1}{2}$ dB. Speaker is a 12". 15 $\frac{3}{4}$ " w. x 16 $\frac{1}{2}$ " x 10 $\frac{3}{4}$ " h.\$149.60

BC420 Compact AM-FM/Phono Stereo System

Features 25 W/ch IHF (15 W/ch continuous sine wave into 4 ohms with one



channel driven). Has ceramic i.f. filters; integrated circuits; stereo minder light & local/remote speaker sw. THD at rated power. 0.5%; 1M dist. 0.7% (1M dist. at 1 W is 0.35%); power bandwidth 20-20,000 Hz. Response at 1 W is 20-35,000 Hz.

FM sensitivity 1.5 μ V for 30 dB quieting. Supplied with Garrard changer; Pickering cartridge & two LSX speaker systems. Oiled walnut\$279.95 Also available with LS-20A speaker systems. Tinted dust cover optional.

BC460 Compact AM-FM/Phono Stereo System

Similar to Model BC420 except 40 W/ch IHF (30 W/ch continuous sine wave into



4 ohms with one channel driven). Supplied with same Garrard changer & Pickering cartridge & LS-20A speaker systems. Features "Crescendo Control" a built-in all-electronic expander & compressor. Oiled walnut\$339.95 Also available with LS-10A and LSX speaker systems.

BC460-W. Same except decorator white with tangerine accents. Tinted dust cover optional.

BC500 Compact AM-FM/Phono System

Similar to Model BC420 except 60 W/ch (IHF); 45 W/ch continuous sine wave



into 4 ohms with one channel driven. Supplied with automatic record changer, Pickering cartridge, and LSX speaker system. Features exclusive "Crescendo Control" all-electronic expander-compressor\$329.95 Also available with LS10A or LS20A speakers. Tinted dust cover optional.

BSR McDONALD

RTS-40 AM-FM/Phono System

Stereo design with BSR Model R-40



AM-FM receiver, a 310/X total turntable & a pair of SS-2 speaker systems.\$329.95
RT-40 Same as RTS-40 except without speakers\$259.95

CLARICON

35-460 AM-FM/Phono System

Stereo design with 30 W/ch dynamic

(EIA) power into 8 ohm amp., an AM-FM tuner, and Garrard 40MKII automatic changer. FM sensitivity 2.5 μ V for 20 dB S/N ratio. Response 25-25,000 Hz. Has mag. cartridge & is supplied with 2 separately housed speaker systems, each with an 8" woofer & 3" tweeter. Speaker case size 15" x 10" x 7". Walnut.\$219.95

35-220 AM-FM/Phono System

Features AM/stereo-FM tuner, Garrard 40B changer, and Pickering V-15 mag. cartridge. Has 60 W/ch dynamic (EIA) power. 30-30,000 Hz ± 3 dB response. Supplied with 2 separately housed speaker systems, each with 8" woofer & 3 $\frac{1}{2}$ " tweeter. Speaker cabinet size 11" x 17" x 9"\$229.95

35-190 AM-FM/Phono System

Features an AM/stereo-FM tuner, Garrard 40 MKII automatic turntable, Pick-



ering mag. cartridge, 45 W/ch dynamic (EIA) power amp. & two speaker systems, each with 8" woofer & 3" tweeter. Response 40-25,000 Hz. Speaker cabinet overall size 11 $\frac{1}{4}$ " x 17 $\frac{1}{4}$ " x 8 $\frac{1}{4}$ " d. Walnut finish\$279.95

CONCERTONE

SAT-1010X AM-FM/Phono System

Stereo design with top-mounted Dual turntable & AM/stereo-FM circuitry. 15 W/ch dynamic (EIA) power with FM sensitivity 2.5 μ V for 20 dB quieting. In-



put sensitivity; mag. phono 3.5 mV; aux. & tape 200 mV. Response 20-25,000 Hz ± 1 dB. 16" x 5 $\frac{1}{2}$ " x 16 $\frac{1}{4}$ "\$299.95 Is also available with pair of matching SP-1010C speaker systems, each with 8" woofer & 3 $\frac{1}{2}$ " tweeter. 10 $\frac{1}{2}$ " x 15 $\frac{3}{4}$ " x 7 $\frac{3}{4}$ "pair \$75.00

CONCORD

HES-35 AM-FM/Cassette Tape System

Features same combination of AM/stereo-FM receiver & stereo cassette recorder as in HES-50 design. Does not include record changer & power amp is 17 $\frac{1}{2}$ W/ch dynamic power (EIA). 18 $\frac{1}{4}$ " x 4 $\frac{1}{2}$ " x 13" d. Each speaker is 9 $\frac{1}{2}$ " x 13" x 8 $\frac{1}{2}$ " d.\$279.95
HES-30. Without speakers\$239.95

F-600 Portable Stereo System

Combines an AM/stereo-FM receiver with a stereo cassette recorder. Is supplied with two detachable speaker sys-

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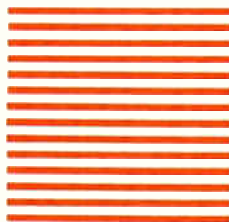
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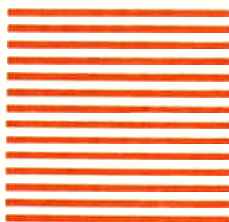
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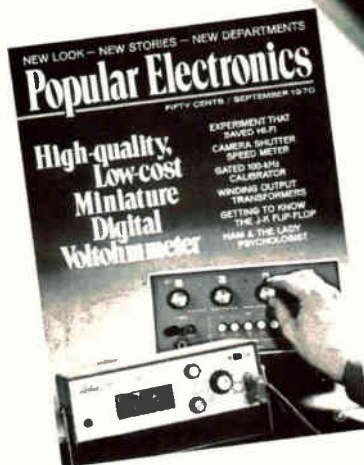
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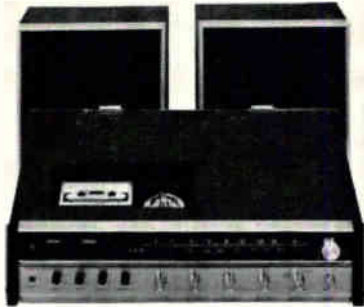
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POPULAR ELECTRONICS

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tems. 17½ W/ch dynamic power (EIA); response 20-25,000 Hz ±3 dB; FM sensitivity 1.9 µV for 30 dB quieting. Has mic & ceramic phono inputs. 9" x 18¼" x



12½" d. Each speaker 12½" x 9" x 4½" d. With mic\$249.95

HES-50 AM-FM/Cassette Tape System

Combines an AM/stereo-FM receiver, a stereo cassette recorder, a Garrard 4-speed record changer with Pickering mag. cartridge with diamond stylus, 20 W/ch dynamic power (EIA) amplifier, and two CE-20 speaker systems. Can record directly from receiver or phono or from ext. source. Response 20-25,000 Hz ±2 dB; FM sensitivity 1.9 µV for 30 dB quieting. Tape deck wow & flutter 0.2%. Has mic & two aux. inputs. 18¼" x 9¼" x 20" d.

HES-50. Less speakers\$359.95



HES-55. With speakers\$419.95

DENON

MX-2030 AM-FM/Phono System

Features AM-FM stereo receiver with 20 W/ch (EIA) dynamic power amplifiers; a



4-speed record changer with mag. cartridge & diamond stylus & two separately housed speaker systems (15¼" x 10¾" x 6¾" d.) each with 8" woofer & 2½" tweeter. Has anti-skating & cueing devices. Walnut cabinet. 8¾" x 17¾" x 15¾" d.\$279.95

ELECTROHOME

SC407-1210 AM-FM/Phono System

10 W/ch continuous r.m.s. at 1% HD into 8 ohms with both channels driven (18 W/ch dynamic power); response 30-50,000 Hz ±3 dB; FM sensitivity (IHF) 2.5 µV. Features varactor FM tuner. Has 4- or 8-ohm switching, permitting dual speaker system operation. Supplied with 3 speed (Dual 1210) automatic turntable

1971 EDITION



& cartridge.\$349.50

SC412-1215 AM-FM/Phono System

Same as SC407-1210 except 20 W/ch continuous power (30 W/ch dynamic power) and has Dual 1215 automatic turntable. Special feature is a varactor tuner with four "touch-tuning" pre-selector.\$429.50

FISHER

115 AM-FM/Phono System

Features 37½ W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; a



4-speed automatic turntable with anti-skating adjust; magnetic cartridge; and pair of XP-44B speaker systems each with 6" woofer & 3" tweeter. 8¾" x 16" x 14¾" d. Speaker size 8¾" x 6½" d.\$299.95
PC-3 Dust cover.\$6.95

3056 AM-FM/Phono System

Features 45 W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; 4-speed automatic turntable with cueing; stylus & anti-skating adjust; magnetic cartridge & pair of XP-56 speaker systems each with 8" woofer & 3" tweeter. 8¾" x 17½" x 16" d. Spkr. size 11" x 21" x 9" d.\$369.96
PC-4 Dust cover\$14.95

3070 AM-FM/Phono System

Features 45 W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; 4-



speed automatic turntable with cueing; stylus & anti-skating adjust; magnetic cartridge & pair of WS-70 omnidirectional speakers each with 6" woofer & 3" tweeter. 8¾" x 17½" x 16" d. Spkr. size 15½" x 16½" x 9½" d.\$369.95

PC-4 Dust cover\$14.95

125B AM-FM/Phono System

Features 40 W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; 4-speed automatic turntable with cueing; anti-skating adjust; magnetic cartridge; pair of XP-55B speaker systems each with 8" woofer & 3" tweeter. 8¾" x 16" x 14¾" d. Spkr. size 10" x 20" x 7½" d.\$329.95

PC-3 Dust cover.\$6.95

3560K AM-FM/Phono System

Features 50 W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; 4-speed automatic turntable with cueing; stylus gauge; anti-skating adjust; magnetic cartridge & pair of XP-60K speaker systems each with 10" woofer & 3" tweeter. 8¾" x 17½" x 16" d. Spkr. size 13" x 23" x 10" d.\$399.95
PC-4 Dust cover\$14.95

3580 AM-FM/Phono System

Features 50 W/ch dynamic (EIA) power into 8 ohms; AM-FM stereo tuner; 4-



speed automatic turntable with cueing; stylus gauge; anti-skating adjust; magnetic cartridge; pair of WS-80 omnidirectional speakers, each with 8" woofer, 5¾" mid-range. 8¾" x 17½" x 16" d. Spkr. size 18" x 18¾" x 11" d. ...\$399.95
PC-4 Dust cover\$14.95

5055 AM-FM/Phono/Cassette

Features 45 W/ch dynamic (EIA) power into 8 ohms; stereo cassette deck with



dual meters & controls; two mics; blank C-60 cassettes; automatic turntable; magnetic cartridge; pair of XP-55B speakers, each with 8" woofer & 3" tweeter. 8" x 23¾" x 16"; Spkr. size 10" x 20" x 7½".\$469.95
PC-4 Dust cover\$14.95

GENERAL ELECTRIC

C751 AM-FM/Phono System

Features AM-FM stereo receiver with 37½ W/ch (EIA) dynamic power amplifier, a 4-speed record changer with magnetic cartridge & diamond stylus, smoked dust cover & 2 free-standing omnidirectional speaker enclosures each with 8" woofer and four 2½" high-dispersion

8

Hi-Fi Systems



tweeters with level control. Receiver & phono housed separately \$449.95

P775 AM-FM/Phono System

Features AM-FM stereo receiver with 10 W/ch (EIA) dynamic power, deluxe



changer, ceramic cartridge with GE man-made diamond stylus, hinged dust cover & 2 speaker enclosures each with 6" woofer & two 3" tweeters. Price range \$199.95-\$229.95

GRUNDIG

Studio 260 AM-FM/Phono System

Combines AM/stereo-FM stereo receiver with shortwave bands, a Dual 1210 automatic changer with cartridge & diamond stylus. Has six preset FM push-buttons. Does not include speakers. 26" x 7 1/2" x 15" \$299.95

HARMAN-KARDON

HPS6645 Stereo Music System

Features an AM-FM receiver, with 45 W/ch (IHF) dynamic power into 8 ohms



(25 W/ch continuous with 0.5% HD); response 7-40,000 Hz ± 1 dB at 1 W; IM dist. 0.5%; FM (IHF) sensitivity 2.5 μ V. Has automatic AM-FM station tuning; touch tuning bar on front panel moves

stations left or right & tuning light that indicates on/off station; ceramic i.f.'s; main/remote speaker selection; tape monitoring facilities; mid-frequency tone adjustment. Includes cassette tape recorder/player, a 4-speed record changer with mag. cartridge & two acoustic-suspension speaker systems. 20 1/4" w. x 19" d. x 4 3/4" \$529.95
HPS6345 Same as HPS6645 except does not have cassette recorder \$429.95

HPS3635 Stereo Music System

Combines an AM-FM receiver, a cassette tape recorder/player (equivalent to CAD4), a 4-speed record changer with magnetic cartridge & two separately housed speaker systems (8" woofer & 2 1/4" tweeter). 35 W/ch (IHF) dynamic power into 8 ohms (18 W/ch continuous at 0.8% HD). Has center-of-channel tun-



ing meter; main/remote speaker sw.; automatic end-of-record shut-off; tape monitoring facilities. FM sensitivity (IHF) 2.7 μ V; power amp. response 7-40,000 Hz ± 1 dB. Overall size of main unit 20 1/4" x 19" d. x 4 3/4" \$399.95
HPS3335 Same except does not include cassette recorder. \$299.95
HPS3345 Same as HPS3335 but has larger speaker systems; 10" woofer & 3" tweeter. \$349.95
HPS3645 Same as HPS3635 but has larger speaker systems; 10" woofer & 3" tweeter. \$449.95

HEATH

AD-27 FM-Stereo Compact

Combines a BSR McDonald "500" 4-speed automatic record changer with



solid-state FM-stereo receiver; 15 W/ch dynamic power; Shure M44MB magnetic cartridge with 20-20,000 Hz response; adjustable antiskating control; vernier stylus pressure; stereo indicator light; a.f.c.; HD less than 1%; IM dist. less than 0.5%; response 12-60,000 Hz ± 1 dB; sensitivity 5 μ V. Has oiled walnut cabinet with sliding tambour door. 12 1/8" w. x 14 1/16" x 7 7/8" \$169.95
Kit \$169.95

Model AD-17 Stereo Compact

Combines a BSR McDonald "400" 4-speed automatic changer, a solid-state 15 W/ch (IHF) stereo amplifier (10 W/ch continuous power), and a Shure magnetic cartridge with 0.7-mil diamond stylus. Features 4-16 ohm outputs; frequency response at 1 W is 12-16,000 Hz ± 1 dB; power bandwidth 5-90,000 Hz; input sen-

sitivity: aux. & tuner 300 mV each; THD 1% at rated output. 21 3/4" x 8 3/4" x 14 1/8".



Kit \$109.95

HITACHI

DPK-321 AM-FM/Phono System

Combines an AM-FM stereo receiver with a 22 W/ch (IHF) dynamic power



(into 8 ohms) amplifier, a BSR MA-65 record changer with a Pickering V-15/AC-2 mag. cartridge & a pair of separately housed speaker systems (12" x 20 7/8" x 10" d.) each with an 8" woofer & an exponential horn tweeter. FM sensitivity 2.5 μ V for 20 dB S/N ratio. Features mechanical filters in i.f.'s; center-of-channel tuning meter; interstation muting. Amp. response 20-30,000 Hz; HD 0.1%. Oiled walnut cab. 20" x 10" x 16 7/8" d. \$379.95

KS-3200 AM-FM/Phono System

Combines an AM/stereo-FM receiver, a Garrard 4-speed automatic changer with



mag. cartridge, and two separately housed speaker systems. Features 15 W/ch dynamic power (EIA). Walnut cabinet \$349.95

DPK-310 Stereo Music System

Combines an AM-FM receiver, a BSR record changer & a pair of speaker systems. Output 15 W/ch (EIA) dynamic power. With walnut cabinet & dust cover. 14" w. x 8 7/8" x 16". Speaker size 9 1/2" x



14½" x 7½" d.\$229.95

KS-2450 AM-FM/Phono System

Stereo design combining an AM-FM radio, a 15 W/ch dynamic (EIA) power



amplifier; a BSR deluxe UA-65 4-speed record changer & pair of separately housed 2-way speaker systems ..\$249.95

JVC

4450 AM-FM/Phono System

Features 20 W/ch (EIA) dynamic power stereo amplifiers; an AM-FM stereo tuner; a deluxe 4-speed automatic changer with mag. cartridge & diamond stylus & two separately housed, 2-way speaker systems (18½" x 10½" x 8½" d.) each with 8" woofer & 2" tweeter. Features special 5-zone (SEA) tone control circuits; main unit 7¾" h. x 19¼" x 17¼" d.\$329.95

KENWOOD

KS-505P AM-FM/Phono System

Stereo design combining a 20 W/ch (IHF) dynamic power amp into 8 ohms



(24 W/ch into 4 ohms); 16 W/ch continuous into 8 ohms (20 W/ch into 4 ohms); an AM-FM tuner; a Perpetuum-Ebner PE2010 automatic turntable; a Pickering V-15/AT-3 cartridge with diamond stylus; a Dustomatic brush & a pair of separately housed speaker systems, each with 6½" woofer & 3" cone tweeter (8¼" x 15" x 8" d.). Power bandwidth 20-20,000 Hz; FM sensitivity 2.5 μV; capture ratio 4 dB. Has main/remote speaker facilities. 17¼" x 8" x 18" d. Walnut cabinets.\$329.95

KS-606P AM-FM/Phono System

Same as KS-505P except 26 W/ch (IHF)



dynamic power into 8 ohms (35 W/ch into 4 ohms); 22 W/ch continuous power into 8 ohms (30 W/ch into 4 ohms); power bandwidth 20-30,000 Hz. Has PE2034 automatic turntable & separately housed speakers (11" x 21" x 10" d.) with 8" woofer & 3" cone tweeter\$449.95

KS-707P AM-FM/Phono System

Same as KS-606P except does not include speaker systems & power output is



57 W/ch (IHF) dynamic into 8 ohms (75 W/ch into 4 ohms); 45 W/ch continuous power into 8 ohms (60 W/ch into 4 ohms). FM sensitivity 1.8 μV; capture ratio 2.5 dB.\$329.95

KLH

Model Twenty Stereo Music System

Complete system consisting of master control center & two speaker systems;



control center contains KLH automatic turntable with low-mass tonearm & Pickering cartridge with diamond stylus; transistorized stereo preamp with 50 W stereo dynamic power output, 100 watts peak; FM multiplex tuner with zero-center tuning meter, stereo signal beacon, built-in antenna, and vernier planetary tuning. Rotary controls: loudness-compensated volume, balance, bass, treble, and program selector. Slide switches: mono/stereo mode and power on/off. Output jacks for stereo headphones, stereo tape recording, speakers; two aux. inputs plus ext. 300-ohm antenna connection. Loudspeakers: 10" acoustic suspension woofer with special cone and magnetic circuit, 1¾" direct-radiator tweeter, plus special LCR crossover to permit increase or decrease of 2½ dB in high-frequency level without shelving in crossover region; speakers must be used only with Model Twenty amplifier. Dimensions; control center-8¾" h. x 18¼" w. x 14" d.; each speaker enclosure-23⅞" h. x 11¼" w. x 9" d.; oiled walnut.\$399.95

Model Twenty With AM

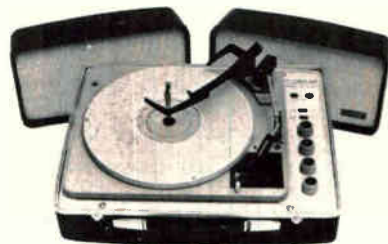
Has same features and performance as Model Twenty but also incorporates a high-performance AM tuner. ...\$429.95

Model Eleven-W Phono System

Cabinet version of the Model Eleven portable; designed for permanent placement; components are identical to those in Model Eleven. Dimensions: control center 8¾" h. x 18" w. x 14" d.; speaker enclosures (each)-8¾" h. x 15" w. x 4" d.\$209.95

Model Eleven Portable Phono

Transistorized stereo design with 4-speed KLH automatic turntable (built by Garrard), a Pickering V-15 pickup, integrated



amplifiers, two sealed speaker systems, each using KLH, full-range 3" speaker. Case of vinyl-clad "Contourlite". Stereo auxiliary inputs (high-level), 40' of speaker cable. 28 lbs.\$199.95

Model Twenty-Four Music System

Solid-state stereo design combining a KLH 3-speed true-synchronous motor, automatic turntable, a Pickering V-15 magnetic cartridge with diamond stylus, an FM stereo tuner, a pair of speaker systems, and 35 W dynamic power preamp/amp. Has inputs for phono, aux. & tuner; an 8" acoustic suspension woofer & a 2" tweeter are used in each system. 18" x 10¼" x 7½" enclosure. Control center size 18" w. x 8¾" x 14". Oiled walnut.\$319.95

Model Twenty-Four With AM

Has same features and performance as Model Twenty-Four but also incorporates high-performance AM tuner. Oiled walnut.\$349.95

Model Twenty-Six Phono System

Stereo phono with 3-speed KLH automatic turntable (built by Garrard) with Pickering V-15/AT-3 diamond magnetic cartridge; 12½ W/ch dynamic power amplifier. Has inputs for phono, tuner-auxiliary, and tape. Speakers each have 8" acoustic-suspension woofer & 2" stiff-paper direct-radiator tweeter in oiled walnut enclosure finished on four sides. 18"



x 10¼" x 7½" d. Control unit 8¾" x 18" x 14¾" d.\$269.95

Accessories

Model 700 Deluxe cover for Models 11W, 15, 19, 20 & 24\$29.95
 Model 701 Plastic cover for the same models\$9.95
 Model 702 Plastic cover for Models 11 & 11FM\$5.95
 All prices are suggested list.



Hi-Fi Systems

LAFAYETTE

LRG-70 AM-FM Stereo Receiver/Turntable/Control Center

Solid-state 40 W/ch dynamic (IHF) power at 4 ohms. Features Garrard 40B 4-speed turntable with Pickering V15/AC-3 cartridge; stereo mic inputs (functions as p.a. amp); main/remote speaker outputs; tape monitor; tape input & output jacks. Response 20-20,000 Hz ± 1.5 dB with 1% HD at rated outputs. 17" x 9" x 16 $\frac{1}{8}$ " d.\$249.95

LRK-1600 AM-FM Stereo/Cassette/Receiver

Has AM-FM stereo receiver with built-in 4-track cassette stereo record/playback unit; wow & flutter 0.3%; response 45-10,000 Hz. Records from receiver and mics simultaneously; FM sensitivity 1.7 μ V; response 20-20,000 Hz ± 1 dB; wow & flutter 0.3% r.m.s. Will record 4-track stereo & 2-track mono; plays back 4 & 2 track stereo or mono. With simulated walnut-finish metal cabinet and walnut wood side panels. 21 $\frac{1}{2}$ " w. x 14" d. x 5 $\frac{1}{4}$ "\$279.95

MAGNAVOX

All following systems are stereo designs with "Micromatic" record player, diamond/sapphire stylus, and AM-FM tuner. Power figures are EIA dynamic power ratings.

1K0883 AM-FM/Phono System

Features 20 W/ch power amplifier. Tuner & record player mount side-by-side with gliding top panel. 32" w. x 15 $\frac{1}{4}$ " d. x 9 $\frac{1}{8}$ ". Walnut\$269.90

1K8901 AM-FM/Phono System

Features 25 W/ch power amplifier. Record player mounted atop tuner. Has dust cover & walnut finish\$269.90

1K8856 AM-FM/Phono System

Features 50 W/ch power amplifier. Cart-type mounting with swivel casters & tambour top panel. 20 $\frac{1}{2}$ " x 30" d. x 25 $\frac{1}{4}$ ". Walnut\$369.90

1E8858 AM-FM/Phono System

Features 75 W/ch power amplifier. Has total remote-control for loudness, "on-off", station select, and record reject. Mounted side-by-side. 38 $\frac{3}{4}$ " w. x 30 $\frac{1}{4}$ " d. x 18 $\frac{1}{2}$ ". Supplied with mobile cart. Walnut\$479.90

1E9294 AM-FM/Phono System

Features 25 W/ch power amplifier. Is supplied with separately housed stereo speaker systems, each with an 8" & 3 $\frac{1}{2}$ " speakers. Record player is mounted atop receiver. Walnut\$379.90

1E9293 AM-FM/Phono System

Features 25 W/ch power amplifier. The record player and AM-FM receiver are mounted in separate cabinets. Separately housed speaker systems each hold an 8" & 3 $\frac{1}{2}$ " speakers. Walnut\$379.90

1E9295 AM-FM/Phono System

Same type assembly as 1E9293 but with 50 W/ch power amplifier and two 10" high-compliance speakers & two 1000-Hz horns are used.\$459.90

1E9296 AM-FM/Phono System

Same type assembly as 1E9293 but with 75 W/ch power amplifiers and two 12" high-compliance speakers & two 1000-Hz horns are used\$529.90

MARANTZ

25C AM-FM/Phono System

Stereo design with Model 27 AM/stereo-FM receiver, Garrard SL95B automatic



turntable, and Shure M93E cartridge. In walnut case\$429.00
25CS With pair of "Imperial IV-A" speaker systems\$499.00

28 AM-FM/Phono System

Includes Model 26 AM/stereo-FM receiver, Garrard SL55B automatic turn-



table, a Shure M71 mag. cartridge, and 2 "Imperial IV-A" two-way speaker systems\$349.00

MIDLAND

19-602 AM-FM/Phono System

Stereo design combining an AM-FM receiver, deluxe BSR 4-speed changer with



Shure diamond-stylus mag. cartridge, and two separately housed speaker systems, each with an 8" woofer & 3 $\frac{1}{2}$ " tweeter. 20 W/ch dynamic (IHF) power (12 W/ch r.m.s.). Response 25-30,000 Hz ± 1.5 dB; HD 1%; FM sensitivity 2 μ V (IHF); input sensitivity: mag. phono 2.5 mV; aux. 180 mV. With walnut cabinet & dust cover. Receiver size 16 $\frac{3}{8}$ " x 7 $\frac{3}{4}$ " x 9 $\frac{1}{2}$ ". Spkr. cab. size 17 $\frac{1}{8}$ " x 10" x 5 $\frac{1}{2}$ " \$319.95
19-650 Same but without speakers\$259.95

PACKARD BELL

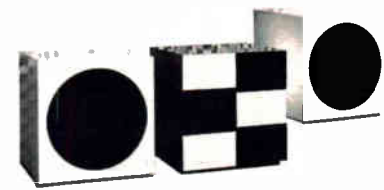
RPS-02 "Malibu" AM-FM/Phono System

Stereo design with AM/stereo-FM tuner, 25 W/ch dynamic (EIA) power amp, a Garrard 4-speed automatic turntable with ceramic cartridge and diamond stylus, plus two speaker systems each with a 10" low freq. & 3 $\frac{1}{2}$ " tweeter. 18 $\frac{1}{4}$ " w. x 10" x 18 $\frac{1}{4}$ " d. (with dust cover). Spkr. cab. size 13 $\frac{1}{2}$ " x 22 $\frac{3}{4}$ " x 12 $\frac{1}{2}$ ". Walnut cabi-

net\$299.95

RPS-06 "Checkmate" AM-FM/Phono System

Stereo design with AM-FM tuner, a 9 W/ch dynamic (EIA) power amp, a Gar-



rard 4-speed automatic turntable with ceramic cartridge and diamond/sapphire stylus, plus two speaker systems each with 6" low-freq. & 3 $\frac{1}{2}$ " tweeter. Top panel of control cube opens for phono & front panel drops to reveal tuner. Each cube 13 $\frac{1}{4}$ " w. x 13 $\frac{1}{8}$ " h. x 13 $\frac{1}{4}$ " d. Hardwood cabs. in white with black trim.\$229.95

RPS-05 AM-FM/Phono System

Four-piece stereo ensemble with AM-FM tuner, a 9 W/ch dynamic (EIA)



power amp, a separately housed Garrard 4-speed automatic turntable with ceramic cartridge and diamond sapphire stylus, plus 2 speaker systems each with 6" x 3 $\frac{1}{2}$ " speakers. Cab. size: tuner 5 $\frac{1}{8}$ " w. x 12 $\frac{1}{8}$ " h. x 11 $\frac{1}{2}$ "; turntable with cover: 16 $\frac{3}{4}$ " w. x 14 $\frac{1}{4}$ " x 8 $\frac{3}{8}$ ". Speaker: 11" x 17 $\frac{1}{4}$ " x 9 $\frac{1}{4}$ " d. Walnut cabinets. \$229.95

PANASONIC

SC-555 Music System

Combines a 15 W/ch at 8 ohms & 1% HD (IHF) dynamic power stereo amplifier with an AM tuner, an FM stereo tuner with 2.9 μ V (IHF) usable sensitivity (capture ratio 2.5 dB), a BSR MA55 turntable, a Panasonic 35TTAD cartridge with diamond stylus & a pair of separately housed speaker systems (6 $\frac{1}{2}$ " & 2 $\frac{1}{2}$ " speakers are used). Aux. input sensitivity is 200 mV. 17 $\frac{1}{8}$ " x 8 $\frac{3}{8}$ " x 15 $\frac{1}{8}$ ". speaker size 9 $\frac{1}{4}$ " x 15 $\frac{1}{8}$ " x 8 $\frac{1}{4}$ " each. With cabinet\$299.95

SC-666 Music System

Basically same combination as in SC-555 except 20 W/ch at 4 ohms. FM sensitivity (IHF) 2.8 μ V. Features a BSR MA65 turntable, a Pickering V15 cartridge, and speakers are 8" & 2" in each. 11 $\frac{3}{8}$ " x 17 $\frac{1}{8}$ " x 8 $\frac{3}{8}$ ". With cabinet\$379.95

SC-777 Music System

Basically same as SC-555 except has Garrard 2025 turntable; a Pickering V-15 cartridge & cassette record/play system. Main unit 18 $\frac{1}{8}$ " x 9 $\frac{1}{4}$ " x 19". Oiled walnut cabinets\$429.95

PILOT

MC 41 AM-FM/Phono System

Features 40 W/ch (EIA) dynamic stereo power amplifiers; an AM-FM stereo tuner; a Garrard 3500 4-speed changer; Pickering mag. cartridge with diamond



stylus & two separately housed speaker systems, each with 10" woofer, 4" x 11" exponential horn, and 3 1/2" tweeter all in an infinite baffle cabinet. 13 1/2" x 21" x 11" d. Response 25-70,000 Hz; HD 0.5%; FM sensitivity 3 μV. Walnut cabinet. 18" x 6" x 17 1/4" d.\$349.95

PIONEER

C-5600 AM-FM/Phono System

Stereo design combining an AM-FM receiver, automatic 2-speed (33 & 45 rpm)



turntable, and pair of 2-way multi-amplifier speaker systems. 30 W/ch dynamic (EIA) power (24 W/ch continuous). Speakers used are 8" & 2.5" cone tweeter. FM sensitivity: 2.5 μV (IHF); wow & flutter 0.1%. Has belt-driven turntable with mag. cartridge and 0.6-mil diamond stylus. 21 3/4" w. x 14 1/4" d. x 8 1/2". Speaker cabs. 22" d. x 12 1/4" x 9 1/4". Walnut finish\$500.00

REALISTIC

MC-2000 AM-FM-Phono System

Stereo design with Realistic "Lab 12A" changer; AM-FM stereo tuner; 15 W/ch amplifier; oiled walnut cabinet and two acoustic suspension speakers. Has inputs and outputs for a stereo tape deck\$299.95

MC-3000 Stereo Music Center

Features a stereo cassette tape recorder with vu meters & level controls; a Realistic "Lab 12A" automatic changer with Shure diamond magnetic stereo cartridge; an FM-stereo tuner; and 17 1/2 W/ch audio system. Amplifier response is 20-20,000 Hz ± 1 dB; HD is below 1%; FM sensitivity 3.5 μV for 20 dB quieting. Supplied with two 2-way acoustic suspension speakers, each with 8" woofer & 3" tweeter\$429.95

SCOTT, H.H.

2516 Compact Stereo System

Combines an AM-FM stereo receiver and automatic turntable with a choice of matching speakers. IHF dynamic power 20 W/ch at 4 ohms and 0.8% THD; power bandwidth 20-20,000 Hz; response 18-25,000 Hz ± 1 dB. S/N ratio 60 dB; usable sensitivity 2 μV. Garrard changer; Pickering magnetic cartridge with dia-

mond stylus. Inputs for mic/guitar (for mixing, aux. & tape recorder).

- 2516-18 with S-18 speakers\$299.95
 - 2516-14 with S-14 speakers\$339.95
 - 2516-17 with S-17 speakers\$359.95
 - 2516-10 with S-10 speakers\$399.95
 - 2516-15 with S-15 speakers\$449.95
- Model 2505** Same as 2516 except AM radio is omitted.
- 2505-18 with S-18 speakers\$279.95
 - 2505-14 with S-14 speakers\$299.95



- 2505-17 with S-17 speakers\$319.95
- 2505-10 with S-10 speakers\$379.95
- 2505-15 with S-15 speakers\$429.95

3610 Compact Casseiver System

Combines an AM-FM stereo receiver, a cassette stereo recorder. 22 W/ch contin-



uous sine wave power at 0.8% dist. into 4 ohms (both channels driven); 18 W/ch at 8 ohms; IHF dynamic power 52 1/2 W/ch at 4 ohms. Response 20-20,000 Hz ± 1 dB; FM usable (IHF) sensitivity 2.5 μV; capture ratio 2.5 dB. Phono sensitivity 4 mV. Can record direct from radio or external phono, mic, or tape. Speakers not included. With walnut cabinet ..\$349.95

2506 Compact Stereo System

Deluxe design. Includes AM-FM stereo receiver & automatic turntable. Plug-in



printed-circuit modules; full complementary output circuit; 25 W/ch dynamic power into 4 ohms at 0.8% THD; power bandwidth 20-20,000 Hz; response 18-25,000 Hz ± 1 dB. S/N ratio 65 dB; usable sensitivity 2 μV. Garrard changer. Pickering magnetic cartridge with diamond stylus. With walnut cabinet.

- 2506-17 with S-17 speakers\$399.95
 - 2506-10 with S-10 speakers\$429.95
 - 2506-15 with S-15 speakers\$489.95
 - 2506-100 with Q-100 speakers ..\$549.95
- Model 2508** Same as 2506 except has Dual 71SB magnetic cartridge.
- 2508-10 with S-10 speakers\$499.95
 - 2508-15 with S-15 speakers\$559.95
 - 2508-100 with Q-100 speakers ..\$629.95

SEARS ROEBUCK

7424 "Virtuoso II" AM-FM/Phono Player

Features AM-FM stereo receiver with a 50 W/ch (EIA) dynamic power amp & a

GET MORE and BETTER FM Stereo Multiplex BROADCASTS

WITH

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Award Winning FM Components

FM ANTENNA Model FM-4G

\$28.50 list

FM BAND PASS FILTER Model 3007 \$7.30 list

FM INDOOR AMPLIFIER Model 65-7 \$24.95 list



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Hi-Fi Systems

4-speed automatic turntable with mag. cartridge & diamond stylus. Response 20-25,000 Hz; FM usable sensitivity 3.5 μ V; 8 ohms. Has connection for a remote-control; main/remote speaker sw; automatic (motorized) station locator.



Has impact-plastic cabinet with oiled-walnut veneer overlay on bottom shell. 4 $\frac{3}{8}$ " x 20 $\frac{1}{4}$ " x 19" d. (8" high with automatic spindle)\$299.95

7434 "Virtuoso III"

Same as Model 7424 except has cassette tape record/playback unit.\$399.95

SHERWOOD

S-6000 Stereo Sound System

Combines AM/stereo-FM receiver with 40 W/ch (IHF) dynamic power amp & at 8 ohms (60 W/ch @ 4 ohms), two Sherwood Berkshire II or Newport speaker systems, and your choice of automatic turntable. Choices include Sherwood SEL-100, Dual 1009,1015,1019, or Garrard Series 40, SL-55 & SL-65. R.m.s. power is 28 W/ch @ 8 ohms measured with one channel driven (40 W/ch with 4 ohms). HD 0.75% @ 8 ohms & rated output (0.15% @ 10 W). Power bandwidth aux. 20-20,000 Hz \pm 1 dB; input sensitivity 1.5/3.6/6.2 mV (rear selection); aux. 300 mV. FM sensitivity 1.8 μ V IHF (30 dB quieting); capture ratio 2.4 dB. Features main/remote speaker facility & front-panel tape dubbing jack. 18 $\frac{3}{4}$ " x 17 $\frac{3}{4}$ " d. x 5 $\frac{3}{4}$ "\$419.50 Receiver is sold with pre-cut turntable board to mount turntables listed above. Speakers & turntable including cartridge are optional & available at extra cost.

SONY

HP-460 Phono System

Combines a Dual automatic turntable with cartridge; 19 W/ch (IHF) stereo power amplifier & a pair of bass reflex speaker systems. Each has 6 $\frac{1}{2}$ " woofer & 3" tweeter. Response at 1 W 20-50,000



Hz \pm 1 dB; THD at rated output 1%. Enclosure size 14 $\frac{3}{16}$ " x 7 $\frac{1}{2}$ " x 14 $\frac{3}{16}$ "\$249.95

HP-480 Phono-Stereo-FM System

Same as HP-460 except has a stereo-FM tuner added. FM sensitivity 2.6 μ V

(IHF); has automatic mono/stereo switching\$319.95

HP-550 Phono-FM Stereo System

Combines a Garrard automatic turntable with cartridge. 33 W/ch (IHF) stereo



power amplifier, a stereo-FM tuner & a pair of infinite design speaker systems. Each has a 10" woofer & 4" tweeter. THD of amp at rated output is 0.6% with IM at 1.5%. Response at 1 W 20-50,000 Hz \pm 1 dB. FM sensitivity 2.8 μ V (IHF). Enclosure size 16 $\frac{1}{16}$ " x 7 $\frac{1}{2}$ " x 16 $\frac{1}{16}$ "\$379.95

SYLVANIA

MS150W Phono System

Combines 20 W/ch (IHF) dynamic power amp (10 W/ch r.m.s.), Garrard 2025TC automatic turntable, mag. cartridge, and separately housed speaker systems, each with 6" woofer & 2 $\frac{1}{2}$ " super tweeters. Power bandwidth 50-18,000 Hz; HD 0.7% at 10 W r.m.s.; 1M dist. 1% at 10 W r.m.s. With dust cover. Walnut vinyl finish. Phono size 9 $\frac{1}{2}$ " x 20" x 14 $\frac{3}{4}$ " d. Speaker size 14 $\frac{3}{8}$ " x 9 $\frac{1}{2}$ " x 4 $\frac{3}{8}$ " d.\$199.95

MS220W AM-FM/Phono System

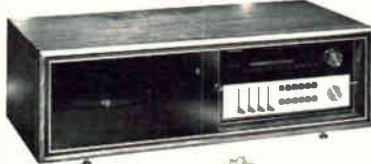
Combines 24 W/ch (IHF) dynamic stereo power amp, an AM-FM stereo



tuner, a Sylvania 7000 automatic turntable, mag. cartridge & two separately housed speaker systems, each with 8" woofer & a dome tweeter. Power bandwidth 25-30,000 Hz; HD 0.5%; 1M dist. 0.6%; FM sensitivity 2.4 μ V (IHF); capture ratio 5.1 dB. 10 $\frac{1}{4}$ " x 17 $\frac{1}{2}$ " x 18 $\frac{1}{2}$ " d. Speaker cabinet size 18 $\frac{3}{8}$ " x 10 $\frac{3}{8}$ " x 10 $\frac{1}{2}$ " d. With dust cover\$379.95

CS20W AM-FM/Phono System

Combines 50 W/ch (IHF) dynamic stereo power amp (30 W/ch r.m.s. @



0.2% HD), a Dual 1015 $\frac{1}{2}$ automatic turntable, magnetic cartridge, and AM-FM

stereo tuner. Power bandwidth 10-45,000 Hz; HD 0.3% @ 30 W/ch r.m.s.; 1M dist. 0.5% @ 30 W/ch r.m.s.; FM usable sensitivity (IHF) 2.1 μ V; capture ratio 1.6 dB. 10 $\frac{1}{2}$ " x 32 $\frac{1}{4}$ " x 15 $\frac{1}{8}$ " d. 23 $\frac{1}{2}$ " h. with top open. Walnut finish\$399.95

CS3W AM-FM/Phono System

Contemporary style. 20 W/ch dynamic power at 8 ohms; power response 35-17,000 Hz; response 40-20,000 Hz \pm 3 dB at tape inputs; HD 0.5% at 10 W/ch; FM usable sensitivity 2.5 μ V. Has Garrard automatic changer. Speakers extra. Walnut\$229.95

MS150W Phono System

Contemporary 20 W/ch (IHF) design; power bandwidth 30-18,000 Hz; response



50-30,000 Hz \pm 3 dB. HD 0.5% & 1M dist. 0.1% at 5 W/ch. Supplied with Garrard Custom II deluxe automatic changer & magnetic cartridge. Walnut. Speaker optional\$199.95

YAMAHA

MC-600E AM-FM/Phono System

Combines an AM-FM receiver, a PE-2036 (Perpetuum-Ebner) automatic

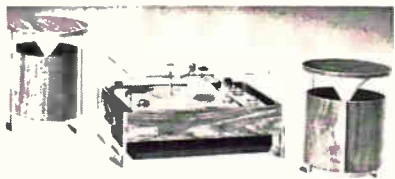


changer with mag. cartridge, 22 W/ch dynamic power (IHF) at 8 ohms (15 W/ch continuous sine wave power). Sensitivity: phono 3 mV; aux. 170 mV; tape monitor 200 mV. HD 0.15%. Response 30-20,000 Hz \pm 1 dB; FM usable sensitivity 2.5 μ V (IHF). Stylus is 0.7-mil diamond & 2.5 g pressure. 117 V, 60 Hz operation. 16 $\frac{3}{4}$ " x 5 $\frac{1}{4}$ " x 12 $\frac{1}{2}$ " d. Oiled walnut.\$299.50

ZENITH

"Circle of Sound" Modular Stereo

Combines phono-amplifier & two remote speaker systems. Features 4-speed record



changer—will intermix 10" & 12" records & Zenith's "Micro-Touch" 2G tonearm. Response 40-15,000 Hz; 20 W/ch dynamic power (EIA). Speakers are circular in design & reflect sound upwards and outwards (360°). Supplied with cabinet 20 $\frac{1}{4}$ " x 15" d. x 10 $\frac{1}{2}$ ". Speaker enclosures are 13 $\frac{3}{8}$ " in height and 10 $\frac{1}{8}$ " in diameter.

Model Z565\$199.95

Other models similar in design but different power outputs (8, 10, 20 & 25 W/ch) are also available.

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1971 EDITION

FURN-a-KIT® FINE EQUIPMENT FURNITURE



Designed by Robert Fellner and Mark J. Furst

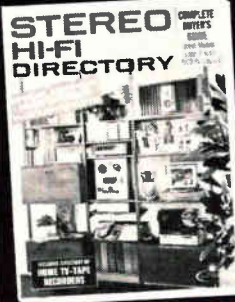
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STEREO HI-FI DIRECTORY



TAPE RECORDER ANNUAL 1970

STEREO/HI-FI DIRECTORY

Giant 180 page buyer's guide listing more than 1,600 individual Stereo/Hi-Fi components by 176 manufacturers. Nine individual sections complete with specs, photos, prices—the works!

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1969 #82 \$1.25

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Over 130 pages covering every aspect of tape recording. Complete buyer's guide to the brands and models on the market. Expert tips on equipment—making better tapes—editing—copying—everything you want and need to know about tape recording.

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A** **SSS**

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The Koss Pro 4/Double A is all new from sound element to headband. It looks better and feels more comfortable, but the greatest improvement is in the sound.

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KOSS ELECTRONICS INC./ 2227 N. 31st Street/ Milwaukee, Wis. 53208



Accessories



ADVENT

Graphic Equalizer

An active frequency balance control covering usable audio spectrum octave by



octave from 40 to 20,480 Hz; 10 steps; two-channel design. Inputs sensitivity switchable 350 mV, 700 mV, or 1.4 V r.m.s. Max. output 4.5 V r.m.s. 12" x 7 1/4" x 3 3/4"\$225.00

100 Noise Reduction Unit

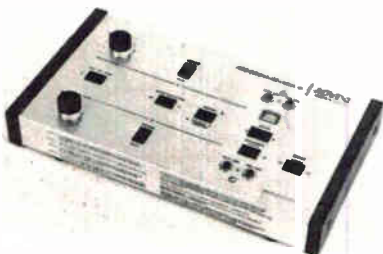
Dolby system circuitry for use with home tape recorders & pre-recorded commer-



cial tapes. Operates on both record & playback. Designed to reduce tape hiss in mid- and high-frequency portion of audio spectrum. S/N ratio improves 3 dB at 600 Hz, 6 dB at 1200 Hz & 10 dB over 4000 Hz. Unit is basically a control center with a record section with mic & line preamp & record Dolby circuits and a playback section with line preamps & playback Dolby system. 12 1/8" x 5" x 8 3/4" d. Walnut cabinet optional . \$250.00

101 Noise Reduction Unit

Is a switchable Dolby system that can be used in either record or playback mode but not both simultaneously . . . \$120.00



1971 EDITION

AKG

K-60 Stereo Headphones

Dynamic, moving coil driver units; frequency compensated to match hearing characteristics; response 20-20,000 Hz ± 3 dB; imp. each driver 600 ohms; designed for use on 4 to 10,000 ohms without matching transformer; requires 0.001 W input for sound pressure level of 112 dB. Ear cushions rotatable for comfort.\$39.50

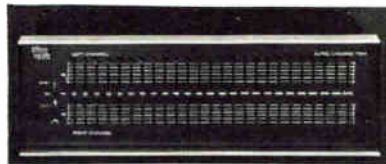
K-120 Stereo Headphones

Budget version of K-60. Same response, sensitivity, and wide-range impedance matching features of K-60\$22.50

ALTEC LANSING

729A "Acousta-Voicette"

Designed to be used to modify the combined response of room and speaker as



required for optimum flatness of frequency response at a specific listening area. Has narrow-band adjustable filters, each covering 1/3 octave. Stereo design with 24 filters for each channel covering center frequencies between 63 & 12,500 Hz. Loss/octave adjustable from 0-12 dB. Each channel has 17 dB gain to compensate for equalization losses \$799.00

AUDIOTEX

Phono Accessories

Record brush; designed to be attached to any tonearm; swivel feature permits easy



adjustment for best results; made of imported camel's hair. 30-000\$0.75 Record stylus brush cleans needle after every play; may be installed on any record player so that each time tonearm is moved from rest position, stylus passes through brush; metal base has pressure-

sensitive adhesive base which is attached to turntable. Brush height is adjustable.

30-004\$1.40
Record stylus weight gauge slips under tonearm and measures force needed to lift tonearm from record; calibrated in grams & has expanded scale in lower weight range. 30-220\$2.80
Stylus pressure gauge measures from 1 to 10 grams within 1/2 gram. 30-222 \$1.65
Test record combines stereo/mono 12" unbreakable LP for checking stereo balance, pickup alignment & channel separation; frequency response & RIAA equalization tests for both channels; turntable rumble tests; mono tests include stylus wear; frequency response; RIAA equalization test; tests IM distortion; turntable rumble & tonearm resonance. 30-200\$4.98
Strobes and discs; calibrated to show correct speed ± 2 & ± 4 % deviation. Kit includes miniature metal strobe disc & neon test light. 30-246\$2.25
All prices are "list."

Tape Accessories

Deluxe tape splicer handles all sizes of splicing tape; tape dispenser simplifies operation; cuts & trims splicing tape with indented cut. 30-106\$8.95
Standard tape splicer has curved cutting blades which give splice two rounded indentations; for use on all 1/4" tapes. 30-103\$5.00
Tape splicer for editing or repairing broken tape; all-aluminum construction; cutting blade included. 30-100\$2.75
Professional taperase will demagnetize tape reels of any size up to 10" diameter and 1/2" wide; erasing leaves no low-frequency spikes or thump. With 6' cord and momentary "on-off" switch 30-140.\$18.50
Tape recorder care kit includes tape splicer, splicing tape, tape head cleaner & lu-



bricant, tape reel holder, tape end clips, cleaning brush, cotton swabs, cleaning cloth, tape cueing & indexing labels. 30-125\$14.95
Tape head care kit includes cleaner, lubricant, and cleaning swabs. 30-124-3.\$1.95
Cartridge head cleaner can be used for

9

Accessories



both home & auto tape players. Cartridge is inserted in unit and cleaned in 30 seconds. Kit includes cleaner cartridge, cleaning fluid, and replacement belts. 30-620\$5.95
 Tape recorder strobe; designed to check speed of 7½ & 3¾ ips tape recorders. 30-234\$5.95
 Head demagnetizer with extra long head for use on reel-to-reel & cartridge machines (4 or 8 tracks and cassettes). 30-112-2\$12.95
 Cassette "Musi-Kleen" cassette tape head cleaner. Is impregnated with exclusive nonabrasive Kleen tape fluid. Kit contains cleaner, bottle of fluid, and eye dropper. 30-618\$4.95
 Auto tape player kit for 4- & 8-track players. Kit contains tape head lubricant, tape head cleaner, two 6" cleaning brushes, and 10 plastic pouches for storing tape cartridges. 30-636\$3.49
 Compact bulk tape eraser completely erases program material from tapes. Can be used on table or hand-held. 30-140.\$18.30
 Head demagnetizer designed to be used without removing head cover. Tip is covered with soft plastic to prevent head damage. 30-112\$12.10
 Cartridge machine head demagnetizer plugs into car cigarette lighter. Designed for all 12-volt negative-ground system automobiles. 30-142\$9.90
 "Blast Off" aerosol tape head cleaner removes harmful dust and oxide particles from auto/home tape cartridge players. 30-630\$1.95
 "Musi-Kleen" cassette tape head cleaner uses a nonabrasive fluid to impregnate cleaning tape in the cassette. Comes complete with cleaning fluid and dropper applicator. 30-618\$4.95
 All prices are "list."

BOGEN

EP10 "Row 10" Stereo Headphones
 Dynamic type offering flat response from 20-15,000 Hz. Contemporary design with adjustable headband & washable vinyl ear cushions\$29.95

CASTLE

C403CS "Tri-Clopse" Color Organ
 Transforms sound waves into light waves



through three frequencies (low, mid & high). Handles 900 W (300 W/ch). Can be used with any light source such as color wheels, lava lamps, strobes, Christmas-tree lights, incandescent bulbs. With wal-

nut cabinetunder \$30.00
 C403CSKT Kit version ...under \$30.00
 Company has many other color organs including a single-channel design. In addition, other products include strobe lights, 35-mm psychedelic full-color slides & kaleidoscope projectors.

CLARK, DAVID

Model 100A Stereo Headset

Moving-coil (dynamic) design with plastic diaphragms; response 20-10,000 Hz ±3 dB; distortion less than 2% @ 100 phon level; sensitivity 1 mW @ 1000 Hz produces 100 dB (reference .0002 microbar); max. input 1 W/phone; 17 ohms; has 20 dB av. cushion attenuation to white noise; stereo or mono; supplied with 8' coil cord and 2-circuit plug. \$50.00
 300, 600, and 1200 ohm models also available.

Model 200 Stereo Headset

Permanent magnet design; response 20-17,000 Hz. Sensitivity 1 mW input @ 1000 Hz produces 105 dB per earpiece (reference .0002 μbar). Max. input 1 W/phone; 8 ohms. Has 2-circuit stereo plug\$29.00

Model 250 Stereo Headset

With volume control, otherwise same as Model 200\$34.00

Model 300 Stereo Headset

Response 20-17,000 Hz; 8 ohms imp.; with 10' coiled cord\$21.00

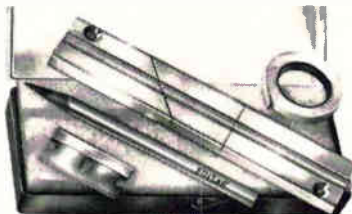
EDITALL

KP-2 Editing Kit

Complete kit includes splicing block, 30 splicing tapes, demagnetized razor blade, grease pencil\$3.50

KS-2 Editing Kit

For ¼" tape. Includes 4" x ¾" x 1¼" block, marking pencil, roll of splicing

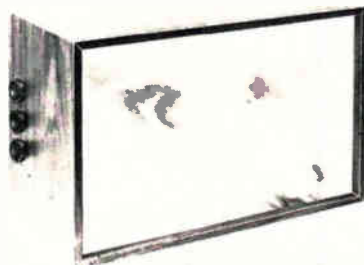


tape & cutting blade\$8.50
 KS-3 Same except larger block (5¾" x 1" x ¾")\$10.00

EICO

"Sound n'Color" 3440 Audio-Color Organ

Solid-state, 3-channel all-electronic sound in color. Blue lamp activated up to



250 Hz, red lamp 250-1500 Hz, green lamp above 1500 Hz. Intensity is controlled by silicon drivers. Has two external frequency controls. 15" x 10" x 6". Kit\$49.95
 Factory wired\$79.95

Model 3445. Same as Model 3440 except 4-channel. 24" x 12" x 10". Kit

.....\$64.95
 Factory wired\$99.95

Model 3450. Same as Model 3445 except 30" x 15" x 11". Kit\$79.95

Factory wired\$109.95

Company has a rather extensive line of color-image devices including audio-color organs, strobe lites, audio-activated strobe lites, one & three channel sound/lite translators.

ELECTROHOME

"Environment I" Reverb Unit

Dual torsion-type reverberation system with 30 W dual-channel amplifier; warped response 50-4000 Hz; initial time delay 25 milliseconds; decay time 1.8 sec.\$89.95

ELECTRO-VOICE

502B Matching Transformer

For use in series with mic line; 150-ohm input matches all low-Z mic to high-Z



output. Response 30-20,000 Hz ±1 dBNet \$10.50

FISHER

HP-60 Stereo Headphones

Response 30-18,000 Hz; sensitivity 1 mW for 100 dB ±5 dB sound level; max. input 0.5 W; 8 ohms. Has individual level controls on each earcup. 8' cable\$24.95

HP-100 Headphones

Uses unique foam cushion and slot loading with reverse driven microphone elements. Response 18-22,000 Hz; sensitivity 2 mW for 100 dB ±5 dB sound level; max input 0.7 W. 50 ohms. 8 foot cable.\$39.95

HAMMOND

980 Stereo Reverberator

For auto or marine applications. Unit delays separate sound from each channel &



re-amplifies sound over separate speaker system. Has ½ reverberation control. 1½" x 7" x 3¼"\$29.95

JENSEN

HS-2 Stereo Headphones

For stereo or mono listening; response 20-17,000 Hz, 4 ohms, 1 mW input required for adequate listening, 8-foot input cable and 3-conductor phone plug.\$24.95

KNIGHT-KIT

Knight-Kit/Koss KG-802 Headphones

In easily assembled kit form. Response 20-16,000 Hz; 3½" dynamic elements; separate volume controls in each earpiece (for right & left channels); adjustable headband; foam-cushioned earcups; 4-16 ohms imp. 8-foot cord with ¼" plug.

STEREO HI-FI DIRECTORY

Comes with solder and instructions.
22A3380X Kit\$17.95

KOSS

ESP-6 Electrostatic Stereophones

World's first self-energized electrostatic phones do not require any special amplifiers or power supplies. Operates from any 4-16 ohm outputs. Calibrated machine-run response curve supplied with each set. Response 35-10,000 Hz $\pm 2\frac{1}{2}$ dB. Sensitivity 90 dB at 1 kHz ± 1 dB referred to 0.0002 dyne/cm² with 1 V input. HD 0.2% at 110 dB. Power capacity 12 watts (10 V) max. Has fluid-filled cushions: 4-conductor, 3-foot (coiled), 10-foot (extended) cord. Dynamic level indicators (flicker at 10th row full orchestra volume). Supplied with T3 accessory adapter (for connection to amp. output if needed) and P/N 11-110U carrying case\$95.00

ESP-7 Electrostatic Stereophones

Same as ESP-6 except has coupling transformers & biasing circuits externally located instead of in headphone cups. Reduces weight of headset from 27 to 17 ounces. Response 35-13,000 Hz ± 6 dB. Supplied with SE-7 self-energizer which includes dynamic level-indicator lamp; 20-foot 5-cond. input cable & energizing circuits\$90.00
ESP-A. Accessory stereophones permit two sets of phones to operate from one SE-7 energizer\$69.00
Carrying case P/N 16-168. Will accept any headset, energizer, and extension cords\$9.95

ESP-9 Electrostatic Stereophones

Refinement of the Model ESP-6 with most important feature being a response



range of 10 octaves. Response 15-15,000 Hz ± 2 dB. Headset weighs 19 oz. Supplied with E-9 energizer which includes circuitry for direct 117 V a.c. operation. Ideal as a test instrument for precise low-level signal measurements\$150.00

K-6 Stereophones

4 ohms (can be used with 4, 8, 16 ohm outputs); 10-15,000 Hz. Sensitivity 1 V at 400 Hz; will produce 127 dB sound pressure (0.0002 dyne/cm²). Max. input 10 W/ch r.m.s. (60 W/ch dynamic power). Weight 15 oz (less cord)\$26.50

Model SP-3XC "Stereophones"

Extremely sensitive $3\frac{1}{2}$ " sound reproducers mounted in each earpiece; response 10-15,000 Hz; impedance 4-16 ohms; comes complete with adapter plate that connects to any system that will drive speakers\$24.95

Model SP-5SM "Stereophones"

Stereo and monaural phones in one; switch in lavalier changes operation from stereo to monaural or vice versa ..\$24.95

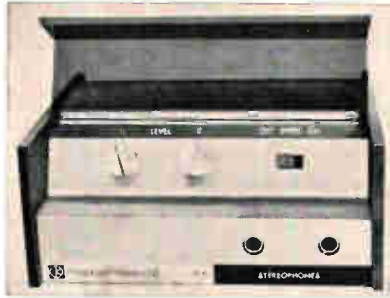
KO-727 "Stereophones"

Wide-range 10-15,000 Hz design; 4-ohm imp but can be used for 4, 8, or 16 ohms. Sensitivity 1 V applied to driver will develop 127 dB of sound pressure relative to 0.0002 dyne/cm². Max. input 60 W/1971 EDITION

ch music power. Dist. 1% at max. output. Supplied with 10' 4-cond. cable ..\$34.95

t-10 Listening Station

Wires to amplifier; will accept two sets of stereo phones with separate volume con-



trols. Has speaker "on-off" sw. Walnut cabinet. 4-16 ohms\$24.95

Model T-5 Remote-Control Listening Station

Junction box for connecting Stereophones to existing stereo or mono sys-



tem; impedance 4-16 ohms; has jacks for two sets of Stereophones; one volume control for each ear; on-off speaker switch for personalized listening ..\$9.95

t-4 Connecting Box

Junction box for five stereo headsets. Has



10' cord\$6.95

Model Pro-4A Headset

Response 30-20,000 Hz; max. input 10 watts/channel (60 W/channel music power); distortion less than 1% at maximum output; 4 ohms (600 ohms available); 10-foot coiled cord; rugged, shock-proof and fluid-filled ear cushions. \$50.00

Model T-1 Junction Box

Contains matching transformers for monitoring; 600-10,000 ohm outputs; two output jacks for Stereophones\$7.95

LAFAYETTE

Stereo Mixer/Preamp

Low-drain, battery-operated unit designed for amps without low-level magnetic phono, tape head, or low-Z mic inputs. Preamps provide necessary gain and equalization. Also provides mixing facilities. With 9 V battery. Over-all size 7" w. x 5 $\frac{1}{2}$ " d. x 2 $\frac{1}{2}$ " h.\$14.95

F-990 Stereo Headphones

Dynamic design with 2 $\frac{1}{2}$ " transducers; adjustable air-cushioned headband; foam



AKG "HUMANIZED" HEADPHONES

Humanized because . . . research on the physiological reaction of the human ear to sound pressure led to the development of a headphone driver which functions with the human ear as a unit, and is capable of generating full fidelity sound at close proximity to the entrance of the ear.

Humanized because . . . of their seeming weightlessness.

Humanized because . . . of their comfortable fit which allows you to enjoy hours of listening pleasure without discomfort.

Humanized because . . . it permits you to enjoy transparent reproduction of music and voice and still remain in partial contact with your surroundings.

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"Superior musically to six other types tested."

"Best sound yet."

"Best headphone at any price."

"Very comfortable to wear."

"Pleasure is now mine."

"Excellent sound and comfort."

"The Best!"

"Prefer it to speakers."

"Very realistic sound."

Listen to the AKG K-120 or K-60 at your dealer and convince yourself. AKG-150



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CIRCLE NO. 36 ON READER SERVICE CARD



Accessories

cushions. Response 30-15,000 Hz \pm 2 dB, 8 ohms. With 6 1/2' cord\$29.95

F-880 Stereo Headphones

Dynamic design with 2 1/2" transducers; response 25-15,000 Hz; max. input 1/2 W. Adjustable headband with soft rubber air-cushioned ear pads; 8 ohms. Includes 5 ft cord & plug\$17.95

SP-55 Stereo Headphones

Dynamic design with 2 1/2" transducers; adjustable air-cushioned headband; foam cushions. Response 30-15,000 Hz \pm 2 dB, 8 ohms. With 5' cord\$11.95

MIDLAND

14-580 8-Track Head Demagnetizer

117 V a.c. operation; will also remove



dirt & oxide deposits\$5.95

19-014 8-Track Head Cleaner

An abrasive tape that cleans as it passes over heads\$1.75

14-579 8-Track Head Demagnetizer

Same as 14-580 except 12 V d.c. operation\$7.95

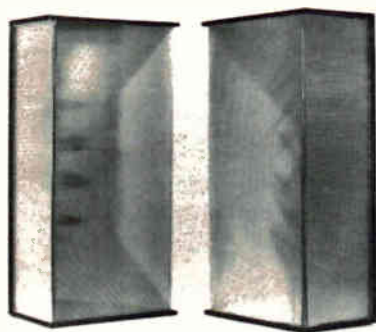
19-013 Cassette Head Cleaner

An abrasive tape that cleans as it passes over heads\$0.59

MUNTZ

LC-715 Psychedelic Lights

Features 3-channel light-control circuit with light effects achieved by audio mod-



ulation from any speaker output\$49.90
LC-715S. Slave unit\$29.90

NORTRONICS

Nortronics has replacements for over 2400 domestic and foreign recorders including all of the following: Airline, Aiwa, Bell & Howell, Bell Sound, Columbia, Concertone, Concord, Dukane, Ekotape, Emerson, Grundig, Heath, Knight, Luxor, Panasonic, Pentron, RCA, Recordio, Revere, Rheem-Califone, Roberts, Silvertone, Sony, Symphonic, Tandberg,

Telectro, Viking, VM, Webcor, Webster Electric, Westinghouse, Wollensak, and most 8-track automobile tape players. Dealers have replacements and conversions listed by recorder model number and head number. All replacement heads and "Quik-Kits" (mounting hardware) come with complete instructions for easy installation.

Model T60E Oscillator Transformer

65-kHz bias for recording and erase current for either high or low impedance heads; one-tube oscillator circuit diagram included\$7.70

Model T60-T2 Oscillator Transformer

Similar to Model T60E but designed for transistor circuitry; 40-100 kHz; will deliver 25 to 150 volts to erase and record heads\$7.30

Model T70-T2 Oscillator Transformer

For printed-circuit board; has plug-in, dip-solder terminals with nylon case; efficient ferrite E-core construction; operating frequency 60-110 kHz; secondary voltage 40-120 V\$7.30
T70-T6 Osc. transformer for printed-circuit board. Same as T70-T2 except operating frequency 250-500 kHz for duplicators & secondary voltage 70 V ...\$14.50

Model AT-100 Alignment Tape

7 1/2 ips full-track for checking record/play heads of all types; 40-10,000 Hz; recorded for checking azimuth, equalization, and head wear\$9.90

1000 Series Record/Play Heads

Four-track stereo, laminated core, high-quality heads with all-metal hyperbolic face construction; replaces older CSQ, TLB & TLD-1 designs.

#1000—High impedance; 800 mH inductance; 100 μ in. gap; for use with vacuum-tube circuits; no-mount type\$21.60
#1001—Medium impedance; 400 mH, inductance; 100 μ in. gap; for use with vacuum-tube or transistor circuits; no-mount type\$21.60
#1002—Low impedance; 100 mH inductance; 100 μ in. gap; for use with transistor circuits; no-mount type\$21.60
#1009 Medium impedance; 500 mH; 200 μ in. gap; for vacuum-tube or transistor circuits; no-mount type only\$21.60

5600 Series Quadrasonic Record/Play Heads

Four-track, four-channel; laminated core heads with all-metal hyperbolic face construction. #5601 Special record-only head; low impedance 50 mH; 500 μ in. gap spacer; for use with vacuum-tube or transistor circuits; no-mount type\$115.50
#5602 Low imp.; 90 mH; 100 μ in. gap spacer; for use with vacuum-tube or transistor circuits; no-mount type\$115.50
#5603 Med. imp.; 370 mH; 100 μ in. gap spacer; for use with vacuum-tube or transistor circuits; no-mount type\$115.50

1400 Series Erase Heads

Four-track stereo; laminated core; double gap; premium quality with full metal face construction; replaces older SEQ and SE-50 styles.

#1400—High impedance; 80 mH inductance 30,000 ohms impedance at 60 kHz; for use with vacuum-tube circuits; 60 kHz operating voltage: 90-150 volts; no-mount type\$9.50
#1401—Medium impedance; 10 mH inductance; 2800 ohms impedance at 60 kHz; for use with vacuum-tube or transistor circuits; 60 kHz operating voltage: 28-42 volts; no-mount type\$9.50
#1402—Low impedance, 0.13 mH, 40 ohms imp. at 60 kHz; for use with transistor circuits; 60 kHz operating voltage

3-6; no-mount type\$9.50
#1408—Low impedance, 2.0 mH, 500 ohms at 60 kHz; for use with transistor circuits; 60 kHz operating voltage 15-25; 100 kHz operating voltage 20-30; no-mount type\$9.50

1200 Series Premium Record, Record/Play Heads

Four-track stereo, laminated-core heads with all-metal, hyperbolic face construction; replaces older T1.B, CSQ, and 1100 styles.

#1200 High impedance; 800 mH inductance; 100 μ in gap; for use with vacuum-tube circuits. No-mount type\$27.30
#1201 Medium impedance; 400 mH inductance; 100 μ in. gap; for use with vacuum-tube or transistor circuits. No-mount type\$27.30
#1202 Low impedance, 100 mH inductance; 100 μ in. gap; for use with transistor circuits. No-mount type\$27.30
#1203 Low impedance record only; 50 mH inductance; 500 μ in. gap; for use with vacuum-tube or transistor circuits. No-mount type\$27.30
#1205 Medium impedance; 200 mH inductance; 500 μ in. gap; for use with vacuum-tube circuits. No-mount type\$27.30
#1207 Medium-low impedance; 200 mH inductance; 100 μ in. gap; for use with transistor circuits. No-mount type\$27.30

5800 Series Record/Play Heads

8 tracks on 1/4" tape; 2-channel 8-track hyperbolic metal face heads; use in automotive & background music players.
#5800 Medium imp. record/play; 400 mH; 100 μ in. gap; no-mount type\$10.80
#5810 Low imp. record-only; 10 mH; 500 μ in. gap; no-mount type\$19.80
#5813 Low imp. record-only; 50 mH; 500 μ in gap; no-mount type\$19.80

5830 Series Record/Play Heads

Four-channel, 8-track hyperbolic metal faced heads.
#5832 Medium low impedance record/play; 200 mH; 100 μ in gap; no-mount type\$82.95
#5834 Low impedance, record only; 50 mH; 500 μ in gap; no-mount type\$82.95
#5836 Special low impedance record only for duplicating; 2.5 mH; 500 μ in gap; no-mount type\$82.95

6000 Series "Combo"

Four-track stereo/mono combination record/play/erase in a single head; laminated core; full metal face; deposited quartz gap; double-erase.
#6002—4-track stereo; equiv. record/play specifications #1201; equiv. erase specifications #1401; no-mount type\$29.50
#6003—4-track stereo; equiv. record/play specifications #1000; equiv. erase specifications #1402; no-mount type\$29.50

6800 Series "Z-Combo"

Eight-track stereo; combination record/play/erase in a single head; polished hyperbolic head face; deposited quartz gap; erase gap and R/P gap 0.030" apart in same pole structure for accurate alignment and tracking. Erase bias is internally coupled to R/P section for record bias.
#6800—8-track stereo, R/P medium imp.; R/P inductance 400 mH; R/P gap 100 μ in; playback response to 12 kHz at 3 3/4 ips; erase low imp.; erase ind. 12 mH; 60 kHz operating voltage 40; no-mount type\$22.90
Rear mount for above (order #6850).\$27.90

9200 Series "Professional"

Two-track stereo, laminated core; hyperbolic face construction; finer laminations

for increased frequency response; great depth-of-metal for longer head life.
 #9202-Play only; high imp.; 800 mH; 160 μ in gap; no-mount type\$44.30
 #9203-Record only; low imp.; 10 mH; 500 μ in gap; no-mount type\$45.10
 #8209-Record only; low imp.; 4.5 mH; 500 μ in gap; no-mount type\$44.30

8600 Series "Professional"

Four-track stereo; laminated core; hyperbolic face construction; finer laminations for increased frequency response; greater depth-of-metal for longer head life.
 #8600-Play only; high imp.; 800 mH inductance; 100 μ in gap; no-mount type.\$31.20
 #8604-Record only; low imp.; 10 mH inductance; 500 μ in gap; no-mount type.\$27.50
 #8608-Record/Play; med. imp.; 400 mH inductance; 100 μ in gap; no-mount type.\$31.20

8300 Series Erase Heads

Two-track stereo; laminated core; double gap; increased depth-of-metal for longer head life; hyperbolic face construction; full metal face; 56 dB erasure of saturated tape.
 #8301 High imp.; 50 mH inductance; 20,000 ohms imp. at 60 kHz; 60 kHz operating voltage 100-150; 100 kHz operating voltage 160-200; no-mount type.\$22.70
 #8302-Low imp.; 0.2 mH inductance; 50 ohm imp. at 60 kHz; 60 kHz operating voltage 5-8; 100 kHz operating voltage 8-15; no-mount type\$22.70
 #8304-Med. imp.; 8 mH inductance; 2000 ohms imp. at 60 kHz; 60 kHz operating voltage 32-48; 100 kHz operating voltage 50-70; no-mount type ...\$22.70

8700 Series Erase Heads

Four-track stereo; laminated core; double gap; increased depth-of-metal for longer head life; hyperbolic face construction; full metal face; 56 dB erasure of saturated tape.
 #8701-Med. imp.; 10 mH inductance; 2800 ohms imp at 60 kHz; 60 kHz operating voltage 28-42; 100 kHz operating voltage 45-60; no-mount type ...\$18.90
 #8702-Low imp.; 0.13 mH inductance; 40 ohms imp. at 60 kHz; 60kHz operating voltage 3-6; 100 kHz operating voltage; 5-12; no-mount type\$18.90
 #8704-High imp.; 80 mH inductance; 30,000 ohms imp at 60 kHz; 60 kHz operating voltage 90-150; 100 kHz operating voltage 150-200; no-mount type.\$18.90

"Quik-Kit" 74 Adjustable

Head Mounting Assembly

For updating tape decks to use Nortronics no-mount heads. Includes provision for adjustment of tape head for wrap, height, tilt, and azimuth\$2.35

"Quik-Kit" Mounting Brackets

For base or side-mounting of no-mount heads. Nortronics heads are supplied in two basic mounting styles: no-mount and rear-mount. Six basic kits are available to adapt the basic no-mount style to base-mount or side-mount. Complete detailed instructions are included with each kit. "Quik-Kits" are available from your Nortronics supplier at \$1.25 each. To order rear-mount type for Models 1000, 1200, 5600, 5700, 1400, 4400, add "50" to model number (i.e., 1000 rear mount is 1050, etc.). Slightly higher cost.

5130 Series Mono Cassette Heads

Two-track; laminated core heads; hyperbolic face construction; for transistor circuits; includes mount with tape guide.
 #5130 Med. imp.; record/play; 200 mH;

1971 EDITION

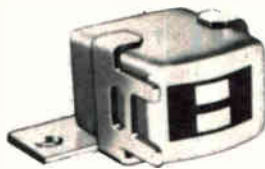
50 μ in gap\$13.00
 #5131 Low imp.; record-only; 10 mH; 200 μ in gap\$13.00

5200 Series Dual-Channel Cassette Heads

Two-track; laminated core heads; hyperbolic face construction; for transistor circuits; includes mount with tape guide.
 #5200 Med. imp.; record/play; 200 mH; 50 μ in gap\$23.30
 #5201 Low imp.; record-only; 10 mH; 200 μ in gap\$23.30
 #5202 Low imp.; record/play; 20 mH; 100 μ in gap\$23.30
 #5203 Med. imp.; record-only; 100 mH; 200 μ in gap\$23.30
 #5204 Med. imp. record/play; 100 mH; 200 μ in gap\$23.30
 #5205 Low imp.; record/play; 20 mH; 50 μ in gap\$23.30

5230 Series Stereo Cassette Heads

Two-track, laminated core heads; hyper-



bolic face construction; for transistor circuits; includes mount with tape guide.
 #5230 Med. imp.; record/play; 80 mH; 50 μ in gap\$13.65
 #5231 Med. imp.; record/play; 400 mH; 50 μ in gap\$13.65

5400 Series Quadrasonic Cassette Heads

Four-track, four-channel; laminated core heads; hyperbolic face construction; for transistor circuits; includes mount with tape guide.
 #5400 Med. imp.; record/play; 80 mH; 50 μ in gap\$68.00
 #5401 Low imp.; record-only; 10 mH; 200 μ in gap\$68.00

Professional Tape/Head Cleaner

A fluorocarbon solvent formulated to clean without leaving any residue. There is no silicon lubricant, allowing use on capstans and pressure rollers. Safe for plastics, rubber, metals, painted surfaces, and elastomer parts. Meets all standards of MSFC No. 237A. Chemicals used in this cleaner have low surface tension and high density to penetrate into small crevices. Its high dielectric strength and quick-drying qualities allow use during equipment operations. Is relatively non-toxic and non-flammable.
 #HC-100-8 8-oz liquid can\$2.25
 #HC-100-32 32-oz liquid can\$7.50
 #HC-200-16 16-oz spray can\$2.75

NUCLEAR

Model 2U500 w/BFI Positioner

Flexible arm with heavy base holds model 2U500 ionizing unit over playing record. For use with professional turntables; neutralizes static while the record is playing. Is supplied complete with ionizing unit\$19.75

Model 3C500 "Staticmaster"

Soft hair retractable brush with extra-strength polonium element. Designed to



neutralize static and remove dust from records\$14.95
 Replacement cartridge\$ 9.95

OLSON ELECTRONICS

PH-173 Stereo Headset

Deluxe design with vinyl-covered air-filled cushions. Includes 20' of cable with $\frac{1}{4}$ " three-circuit phone plug. Response 15-25,000 Hz; 4-16 ohms\$24.98

PH-174 Stereo Headset

Features molded acoustic chambers; built-in volume controls; air-filled ear cushions. Has 10' retractable cord and $\frac{1}{4}$ " stereo plug. Response 15-23,000 Hz; 8-16 ohms\$19.98

PIONEER

SR-202 Reverberation Amp

Combines solid-state electronics with spring mechanism. It can be coupled in



various ways to provide reverberation effects to the speakers only or to the recorded sound or both. Can control two tape recorders. Reverb time 1.9 to 3.2 sec. Max. input 3 V; output 330 mV with 200 mV input. 11 $\frac{13}{16}$ " w. x 4 $\frac{1}{8}$ " x 9 $\frac{13}{16}$ "\$99.95
 Walnut cabinet\$9.95

SE-20A Stereo Headphone

Response 20-18,000 Hz; 0.5 W max. input per phone; 8 ohms imp/phone. Has 8' cord\$24.95

SE-30 Stereo Headphone

Response 20-20,000 Hz; 0.5 W max. input/phone; 8 ohms imp/phone. ..\$29.95

SE-50 Stereo Headphone

Response 20-20,000 Hz; 0.5 W max. input/phone. Features two-way earpiece elements: a 3" cone for low freq. & a 1 $\frac{1}{16}$ " horn-type for highs. Has both tone & volume controls to adjust reception in each earpiece independently\$49.95

PML

D-42 Headphones

Dynamic type for mono or stereo; response 30-20,000 Hz; dist. 2% @ 5 mW; impedance 200 ohms/phone (400 ohms in series; 100 in parallel)\$29.95

REALISTIC

Professional Stereo Headset

Carefully shaped spring-steel headband with padding. Acoustically shaped earpieces, specially constructed driver as-

ALWAYS

take along your copy of this Directory when shopping for hi-fi components. It is a comprehensive reference to technical details and complete prices.



Accessories

semblies with separate volume control on each earpiece. Response 20-20,000 Hz. Cushions are removable for cleaning. 10' coiled cord; 8 ohm imp.\$29.95

Custom Pro Stereo Headset

Features exclusive bass port for extended response; 20-20,000 Hz response; 4-16 ohms imp.\$22.95

ROTRON

"Whisper Venturi Fan"

A specially designed cooling fan for preventing overheating of component hi-fi equipment. It can be placed or mounted within cabinet. Will move 60 cubic feet of air a minute. Draws 7 watts. 5 $\frac{3}{16}$ " x 5 $\frac{3}{16}$ " x 1 $\frac{1}{8}$ " deep\$15.95

SANSUI

Model SS-2 Stereo Headphone

High-moving-coil design; imp. 8 ohms; response 20-18,000 Hz; dist. 1% at 1 mW. 6' cord. Features right & left channel balance. Input 1 mW\$19.95

SHARPE

10-Mk II Dynamic Headphones

Stereo design, with liquid-filled noise attenuating ear seals. Response 30-15,000 Hz \pm 3 dB; input power max 2 W ea. phone; 8 ohms ea. phone; sensitivity 115 dB reference .0002 dyne/cm.² at .05 volt input; max. HD 0.8%. 10' coiled cord. Forest green. 500 ohms impedance optional\$45.00

660/Pro Stereo Headphones

Features dynamic drivers with response 20-20,000 Hz \pm 3.5 dB. Impedance 8 ohms standard, 500 ohms optional. Fuses are used to protect headphones from overload. Liquid-filled with volume control on each cup. 10' coiled cord. Walnut grain finish\$65.00

Stereo Control

Combines a remote control with a stereo



headphone. Features independent volume & balance control.

SC-1 Has 1 set of volume controls (R + L channels) with storage for one headphone\$19.95

SC-3 Has all of above plus stereo phase switch\$39.95

770 Dynamic Headphones

Stereo design; 20-20,000 Hz \pm 3 dB; 8 ohms/phone (500 ohms optional); max. input 1.5 watts/phone per channel; matched, individually calibrated drivers,

configured dampers & attenuators; liquid-filled ear cushions; volume controls and overload fuses; 24 k white-gold finish; individually run response curves furnished with each unit\$95.00

9 Stereo Dynamic Headphones

Response 20-20,000 Hz \pm 3 dB 8 ohms each phone; sensitivity: 90 dB re 0.0002 dyne/cm.² at 0.013 V input; max. input 2 W/phone, 6' cord, color grey\$25.95

10A Stereo Headphones

Liquid-filled ear cushions. Response 30-15,000 Hz \pm 3 dB; max. input 2 W/phone; 8 ohms each phone; sensitivity 115 dB re 0.0002 dyne/cm.² at 0.5 V input. 6' cord, color grey\$35.95

SHERWOOD

Model SL-1 "Stereo-Lite"

Will provide instant identification of FM station broadcasting stereo multiplex programs; can mount inside cabinet; $\frac{5}{8}$ " dia. hole is required; sensitivity adjustable; will operate with any FM tuner ..\$29.50

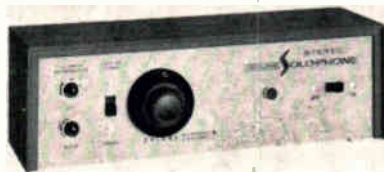
SHURE

Model M65 Conversion Preamp

Provides equalization with amplification for converting ceramic cartridges to magnetic inputs; 60 dB of amplification without equalization; provides preamplification and equalization functions for phono, tape, microphone; gain (phono) 44 dB, (special) 45 dB, (tape) 40 dB, (mic.) 63 dB; input impedance 47,000 ohms; output impedance 5000 ohms\$30.00

SA-1 "Solo-Phone"

Stereo amplifier for headphones permits 2 sets of headphones to be used simulta-



neously; has its own balance control; dual input for tape/tuner or phono; phono input 47,000 ohms equalized for mag. cartridge. Tuner input 250,000 ohms; output 8 ohms, 100 mV; with walnut case. 10 $\frac{1}{4}$ " x 3 $\frac{1}{2}$ " x 3 $\frac{3}{4}$ " d.\$48.00
SA-1F "Solo-Phone" Same basic performance as Model SA-1 except panel mtg. Panel opening 10 $\frac{1}{8}$ " x 4 $\frac{3}{8}$ " x 3 $\frac{1}{8}$ " deep\$57.00

SA10 "Solo-Phone" Portable

Combines a 4-speed record changer & a stereo amplifier specifically for head-



phone listening. Plays up to 8 records intermixed 7", 10" & 12" and may be used manually; two sets of headphone jacks are provided. 120 V operation ..\$120.00
SA-10M Same as Model SA10 except has Garrard 4-speed manual turntable. Accommodates 7", 10", and 12" records at 4 speeds\$120.00

M67 Mic Mixer

Has 4 low-imp. balanced mic inputs & one line input. Has built-in tone oscillator



as a calibration signal to balance signal levels. Response 20-20,000 Hz \pm 2 dB. Automatic switchover to battery if a.c. fails. Gain 90 dB max. (150-ohm mic into 600-ohm line). Size 11 $\frac{1}{8}$ " x 7 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ "\$270.00
Battery pack\$25.00

M63 Audio Control

Designed to be used in conjunction with mic mixers. Provides volume, bass, treble & high and low freq. roll-off. Has vu meter, two high-level inputs accepting signals from mic mixer, tape recorder, tuner, or phono with A68P phono preamp. Has 5 different outputs: 600-ohm balanced line, high imp. high level, high imp. mic level, low imp. mic level (balanced), and headphone\$160.00

M62 Audio Level Controller

An automatic mic volume control; prevents "close-up" blasting. Output can be



adjusted to predetermined level. Response 20-20,000 Hz \pm 2 dB. Compression action 40 dB input change, 6 dB output change. For single mic. Has "on-off" sw. for bypass. Can be battery operated or from M68 mixers. 11 $\frac{1}{8}$ " x 5 $\frac{1}{4}$ " x 2 $\frac{1}{2}$ "\$95.00

Model M-64 Stereo Preamp

Designed to provide gain & equalization to operate mag. phono cartridges & tape



playback heads with amplifiers that do not have equalization. Response flat 20-20,000 Hz \pm 2 dB; phono RIAA curve 40-15,000 Hz \pm 2 dB; tape for 7 $\frac{1}{2}$ ips NAB curve 50-15,000 Hz \pm 2 dB. Max. input phono & tape 100 mV. Flat 250 mV.\$34.00

Model M-61 Stereo Preamp

Transistorized unit with choice of a.c. line or battery powered supply; slide-se-

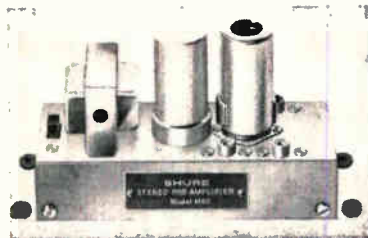


lector sw. provides choice of three equalization inputs; phono RIAA equalization for conversion of ceramic to magnetic input; tape, NAB equalization; and flat amplification for microphone use; gain 45 dB phono, 40 dB tape, 63 dB microphone.

Model M61-1 (for 105-125 V operation) \$27.50
 Model M61-3 (for 30 V battery, included) \$26.50

Model M-60 Stereo Preamp

Permits turntable location up to 50 feet from preamplifier; gain 17 dB; frequency



response 30-80,000 Hz ± 1 dB; input impedance 47,000 ohms; output impedance 5000 ohms; hum & noise level better than 64 dB below rated output; channel separation better than 30 dB; channel balance ± 1 dB; Uses 1-ECC83 & selenium rectifier \$19.95

SINCLAIR

Open chassis-type construction. Modules ideal for construction projects or for use with present equipment.

Z30 Power Amplifier

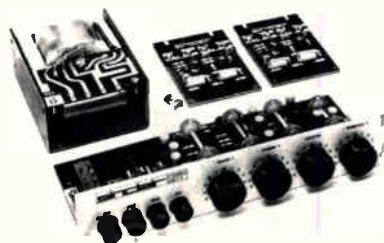
Single-channel 15 W r.m.s. into 8 ohms; response 30-300,000 Hz ± 1 dB; 0.02% HD at any level; input sensitivity: 250 mV into 100,000 ohms; 4-16 ohms output. Power requirements 8-35 V d.c. \$15.95

Z50 Power Amplifier

Same as Z30 except 30 W and power requirements 16-45 V d.c. \$18.95

Stereo 60 Control Center

Input sensitivity: radio 3 mV; mag. phono (RIAA equalization) 3 mV; output 250



mV min. depending on voltage used. Has tone controls. 8 1/4" x 1 1/4" x 4" ... \$29.95

Power Supplies

PZ-5 28-30 V d.c. at no load, 1.5 A max. \$13.95
 PZ-6 35 V d.c. at 1.5 A. \$23.95
 PZ-8 40-50 V d.c. at 3 A. \$37.95

SONY/SUPERSCOPE

HE-2 Head Demagnetizer

Designed with a high flux density to provide max. reduction of residual magnet-



ism \$12.95

FS-5 Foot Switch

Adapts Models 910, 800-B, 70, 80, 120, 124, 100, 222-A for use in transcribing

1971 EDITION

dictation. Remote, foot-operated stop/start control leaves hands free. Less than \$7.95

MX-6S Stereo/Mono Mixer

Connects to all Sony solid-state recorders. Provides mixing facilities for up to



three microphones and three high-level sources. Used for both stereo & mono. Required for sound-on-sound recording with Models 252-D, 666-D, 560D, 225. Less than \$29.95

BE-7 Cassette Bulk Eraser

Erases all cassettes without a.c. power or batteries \$24.95

MX-12 Stereo/Mono Mixer

Six-channel, battery-operated solid-state design. Has straight-line graphic level controls; level reset indicators; dual outputs for driving both p.a. & tape record; mono/stereo selector; battery condition/vu meters. 117 V a.c. operation optional. Has mic & high-level inputs. Response 30-25,000 Hz ± 1.5 dB. 15 3/4" x 7 7/8" x 7" d. \$99.50

RK-66 Magnetic Phono Adapter

Provides proper RIAA phono equalization for direct connection of a mag. phono cartridge to any Sony tape recorder. Not required for Models 230, 560, or 630. Two required for stereo ... ea. \$2.95

DR-6A, DR-6C Headphones

Dynamic stereo design provide full-range frequency response. Complete with adj. headband; vinyl-covered foam ear cushions. Supplied with connecting cord and binaural phone plug.

DR-6A (8 ohms) \$27.50
 DR-6C (10,000 ohms) \$29.50

SOUNDCRAFT

"Magna-See"

A non-toxic, non-inflammable chemical solution that lets you see the magnetic track recorded on tapes.

Complete kit \$12.00
 Can of solution (1/2 pint) \$4.25

SOUNDCRAFTSMEN

20-12 Sound Equalizer

Stereo design with each channel consisting of a bridge-type configuration with 10 parallel arms; each with an LC series filter tuned to the specific frequency bands. Bands are at one octave intervals from 20



to 20,400 Hz. Response 20-20,480 Hz $\pm 1/2$ dB at zero setting; HD 0.1%; 12 dB boost & cut for each band. Input sensitivity switchable (hi & lo); output imp. variable up to 10,000 ohms. Walnut case. 5 1/4" x 17 1/4" x 11". \$259.50

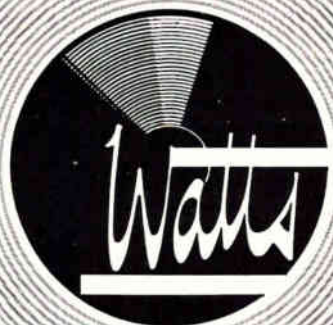
SUPEREX

ST-S Stereo "Standard" Headset

Dynamic reproducer for 30-15,000 Hz response; adjustable headband and plastic ear cups; has built-in surge protection

..... \$24.95
Model ST-SH Same as ST-S except high impedance \$29.95
 600, 2000 & 50,000 ohms also available.

The only positive way to clean, maintain and protect records



RECORD CARE EQUIPMENT

Quality sound reproduction calls for clean records. Protect your investment in records the same way broadcasters and professional musicians do—with Watts' Record Care Equipment. Extend the life of your records by keeping new records new and revitalizing old records.



HI-FI PARASTAT

For new records, or those in like-new condition. Routes last bit of dust and dirt from grooves. Vital when using low tracking cartridge or elliptical styl. Complete 5 piece kit, \$15.00

MANUAL PARASTAT

For old records. Removes accumulations of dust, dirt, grit, anti-static sprays. A heavy duty cleaner for deep down groove penetration. Complete kit, \$15.00



DUST BUG

Keeps clean records clean — as they play. Inhibits static build-up. Attach to any transcription turntable, or automatic used in single play. \$6.50

PREENER

Most popular Watts cleaning tool. Humidifies, applies anti-static control, gathers dirt on new records. \$4.00



HUMID MOP

One-way street for dust and dirt. Prevents reintroduction of dirt after removal by Parastats and Preener. \$3.50

STYLUS CLEANER

Removes accumulated pollution from stylus. Perfectly safe, extends stylus life. \$1.25

Two classic books on record care by Cecil E. Watts.



"HOW TO CLEAN, MAINTAIN AND PROTECT RECORDS" 25¢

"PROFESSIONAL METHODS FOR RECORD CARE & USE" 50¢

Watts Record Care equipment is available at leading high fidelity dealers.



ELPA MARKETING INDUSTRIES, INC.
 NEW HYDE PARK, NEW YORK 11040

CIRCLE NO. 23 ON READER SERVICE CARD



Accessories

ST-M Stereo "Masters" Headset

Low-impedance; 8-16 ohms; has two-way sound reproducers each phone—dynamic low freq. & ceramic high freq.; response 20-20,000 Hz; frequency response adjustable by control on ea. phone; complete with crossover network\$29.95
Model STM-2H 15,000 ohm.\$35.00
600, 2000, or 50,000 ohms also available.

ST-PRO-B Stereo Pro Headset

Coaxially mounted dynamic reproducer for low frequency and ceramic for high frequency in each earpiece; 4 to 6 ohms; 18-22,000 Hz, 30 mW, maximum power 2 watts\$50.00

ST-PRO-H High-impedance 600, 2000, 15,000, 50,000 ohms\$55.00

"The Communicator" Headphones

Mono design using dynamic elements. Response 100-10,000 Hz; 4 to 16 ohms imp. Supplied with 7' two-cond. cable & phone plug. Model COM-S\$13.95

ST-C "The Challenger"

Stereo design; 4-16 ohms imp. with response 40-15,000 Hz. Max. power 2 W. Dynamic type with 7' cord\$19.95

ST-VC Stereo Headset

Designed for the hard-of-hearing; has separate volume controls; response 30-15,000 Hz; nominal power 15 mW; max. 2 W; has 7' cable & standard stereo plug; dynamic design\$27.95

ST-PRO-BV Stereo Headset

Features woofer/tweeter concept, utilizing a calibrated and matched 2-way speaker system in each cup. System is tuned & ported. 4-16 ohms. Response 16-25,000 Hz; max. power handling 2 W. Has full crossover network & 10-foot retractable coiled cord\$59.95

SW-2 "Swinger" Stereo Headset

Features full-range dynamic transducer 4-16 ohm impedance. Response 30-16,000 Hz; max. power 2 W. Has 10-foot coiled cord\$24.95

SWITCHCRAFT

307TR 4-Channel Mixer/Amplifier

Solid-state stereo design. Has battery-level indicator, master gain control & separate channel gain controls; 4 low-level inputs with 60 dB gain; 2 mag. phono with 40 dB gain & 4 aux. inputs with 20 dB gain. Response 20-20,000 Hz ± 0.5 dB; output up to 2 V. Ideal for mixing line level signals, mag. or ceramic phono system, and mics of all types. Battery operated (2 "D" cells). 3 1/2" h. x 12" w. x 7 1/4"\$87.00

308TR Same as 307TR except 117 V, 60 Hz operation. Output up to 4 V ..\$96.00

308TRP Same as 308TR except for rack-panel mounting. 19" x 3 1/2"\$96.00

"Mini-Mix" Mic Mixer

Has 2 high-impedance inputs with separate volume controls. Is a resistance type with 3 dB loss factor. Available with various input & output terminals\$9.95

501 "Mix-Amp" Solid-State Amplifier

Ideal for phono pickups (mag. or ceramic) and high- and low-imp. mics. Has low & high imp. switch. Is a single input & single output amp. Response 20-20,000 Hz, 6 dB gain with 200,000 ohm input & 25 dB gain with 5000 ohms. 9 V battery. Available with various input and output

150

terminals\$20.00

301 4-Channel Mixer

Mono design will feed up to four signals into a single output to a tape recorder or amplifier. Ideal for mixing four mics or signals from tuners, phonos, or tape recorders. Has separate gain controls. Accepts signals up to 1.5 V. Resistive type\$13.20

306 Similar to 301 except for stereo operation; accepts up to 2 high-imp. inputs in stereo & 4 high-imp. inputs in mono\$15.00

301TR Same as 301 except 9 V battery operation with 6 dB gain. Has single solid-state amplifier\$19.50

306TR Similar to 306 except 9 V battery operation with 6 dB gain. Has two solid-state amplifiers\$24.00

Company also has a complete line of plugs, sockets, adapters, switches, speaker volume controls, cables, etc. for interconnecting hi-fi equipment.

TELEX

"Studio 1" Stereo Headphones

Features tone & volume controls on each ear cup; response 20-22,000 Hz; 3-16 ohms imp.; 1 W max. continuous power.\$99.95

"Studio 2" Same except does not have tone & volume controls\$84.95

"Serenata" Stereo Headset

Features tone control; comfort control buttons to adjust earphone pressure; liquid cushions; Mylar cone drivers. Response 20-20,000 Hz; 4-16 ohms; 8' detachable cord & plug; caddy included.\$59.95

"Serenata II" Same except without tone control & detachable cord. Also available in 600 ohms\$44.95

ST-20 Stereo Headset

Revised version of former design features one-piece headband & remote control of stereo balance & volume. Response 16-15,000 Hz; 4-16 ohms; 8' cord & plug.\$34.95

ST-10 Same except does not include individual controls\$24.95

"Adjustatone" Stereo Headset

Features 3 1/2" speakers; plastic earcups; comfort foam cushions; response 10-15,000 Hz; 4-16 ohms, 8' cord & plug.\$15.95

"Combo" Stereo Headset

Same as "Adjustatone" but with removable foam-filled vinyl cushions ...\$19.95

"Encore" Stereophone

Response 50-18,000 Hz. Has 8' cord, 3-circuit molded plug & removable foam-filled cushions\$ 9.95

Stereo Control Kit

Remote control of stereo program; allows speakers to be switched on or off and sound level to be adjusted at each earpiece; comes complete with instructions for installation and 15 ft. cord. STC-1.\$10.50

WATTS, C.E.

"Dust Bug"

An easy mounting record cleaner which



tracks over the grooves. Antistatic agent used with "bug" supplied\$6.50

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