Working together, there's no problem we can't solve, no schedule we can't meet, no project we can't take to a higher level of excellence, from the White House to the Olympic SuperDome, from corner churches to major metropolitan concert halls. Much as we love technology, our greatest satisfaction comes through helping people communicate through music, dance, theater, or the power of a new idea brilliantly expressed. When we make those kinds of connections, there's nothing more exciting – or more powerful.

Here are some of the unique technologies we use to help people communicate:

Patented CoEntrant Topology integrates midrange and high frequency drivers into wideband point sources.

System Specific Electronics integrate pre-configured signal processing and protection with high performance amplifiers.

Complex Conic Topology, the first new approach to horn design in decades, has proven its superior performance worldwide.

The R-Control Remote System Supervision Network is based on Echelon's LonWorks® protocol (ANSI/EIA 709.1).

TRAP (TRue Array Principle) design aligns acoustic centers so loudspeaker clusters produce coherent output.

PowerNet Series loudspeakers incorporate System Specific Electronics and can be upgraded for R-Control remote operation.

Reference Point Array engineering optimizes the entire signal chain from line level to listener for unprecedented performance.

EASE, EASE JR and EARS are the industry standard modeling programs for acoustic environments and sound system performance.

CobraNet routes 64 channels of 20-bit digital audio over CAT 5 copper or UTP optical fiber using Ethernet protocols

For more information on the latest integrated sound reinforcement innovations from R-H Engineering, visit us on our website. www.rh.com.

RENKUS-HEINZ
ADVANCING SOUND. PROVIDING SOLUTIONS.

19201 Cook Street, Foothill Ranch, CA 92610, USA. Phone 949-588-9977, Fax 949-588-9514
Fjärtursvägen 3, 18746 Täby, Sweden. Phone +46 8 544 72588, Fax +46 8 544 72589
www.rh.com   e-mail: sales@renkus-heinz.com

ST·STX SERIES

The most intelligent sound reinforcement system on the planet.

RENKUS-HEINZ
ADVANCING SOUND. PROVIDING SOLUTIONS.

Complex Conic Horns

Designed around the spherical expansion of the acoustic pressure wave, Complex Conic Horns control dispersion more accurately at both the upper and lower extremes of their pattern bandwidth. Not only are they more effective than rectangular horns, they also sound far more natural.

Patented CoEntrant Transducers

The CoEntrant Mid-High driver is the first new method for converting electrical impulses into acoustic energy in decades. It combines a mid-range cone and high frequency compression driver into a wideband true point source with low distortion and high power. CoEntrant drivers loaded with Complex Conic horns offers numerous measurable advantages over dual horn and Co-Axial topologies, including smaller size, lower weight, inherent phase coherency and smoother frequency response.

ST4 Cutaway

TRAP (TRue Array Principle) Design

By placing the acoustic center as far back in the enclosure as possible, TRAP design closely aligns the acoustic centers of arrayable loudspeakers. This unique design minimizes interference in multi-loudspeaker clusters.

RPA: The Plug 'n Play Array

Because each element of every ST sound reinforcement system can be addressed individually, ST is the ideal platform for Reference Point Array (RPA) systems integration.

RPA design is a complex process that integrates and optimizes signal processing, hanging hardware, drivers, waveguides and enclosures. RPAs deliver near-perfect array performance right out of the box.

Transparent Tri-Amplification

ST loudspeakers incorporate third-generation Class D digital amplification for ultra-low noise and distortion.

Extremely efficient, Class D amplifiers dissipate less heat allowing us to use compact, lightweight heat sinks and to dispense with cooling fans.

CobraNet Digital Audio Network

The ST Series CobraNet input selects from 64 channels of digital audio, delivered from CAT 5 copper or UTP optical fiber cable. ST systems are inter-operable with dozens of CobraNet products from over 20 major pro audio manufacturers.

R-Control Remote Systems Supervision Network

R-Control is built on industry standards like Echelon LonWorks and Microsoft Visual Basic. R-Control and CobraNet can use the same CAT 5 cable for a "single connector solution."

Event Scheduler, Fault Logger, Operator Alerts for critical conditions, Scene Store and Recall and more, make the management of large Complex systems easy.

Loudspeaker Specific Processing

All loudspeaker specific parameters are carefully and precisely adjusted in our test and measurement facility.

They include:

- Lo/Mid and Mid/Hi crossovers with independent slopes and shoulders.
- Multi-band parametric EQ.
- Instantaneous over-excursion protection, peak limiting and RMS thermal protection limiting triggered by amplifier voltage (not by input level, which can be fooled).
- Driver alignment delay.

For You: Unsurpassed Simplicity.

- **Faster, foolproof installation** because the "tricky bits" that optimize system performance have been painstakingly optimized in our test and measurement facility.
- **Easier system commissioning** because you can focus on tuning the system, not getting it to work in the first place.
- **Fewer wiring errors** because audio and control can share the same CAT 5 cable.
- **Solid reliability** because each driver has its own calibrated peak and RMS protection limiters.
- **Greater flexibility** because signals can be routed to accommodate different venue requirements.

For Your Clients: Lower Installation Costs.

- **NO dedicated amplifier/speaker electronics room:** all amplification and processing is integrated into the loudspeaker system.
- **NO dedicated air handling system for amplifiers & electronics:** our advanced Class D amplifiers are so efficient even the 1200W (peak) Lo Band amp requires no fan cooling.
- **NO separate technical ground:** digital audio does not pick up induced hum from lighting, HVAC or other building systems.
- **LOWER conduit, cable and wire pulling costs** with CobraNet's 64 audio channels plus R-Control Remote Supervision on one CAT 5 cable.

For The Audience: Reference Quality Audio

- **All digital signal path:** CobraNet has high-resolution digital audio.
- **Patented Point Source CoEntrant Transducers** and purpose designed-woofers produce unprecedented sound quality.
- **Unique Complex Conic Array-guides** for superior pattern control with natural, undistorted sound.
- **TRue Array Principle (TRAP)** design for coherent, seamless arrays in the horn's operating band.
- **Reference Point Array system** integration for wide bandwidth array optimization and "plug 'n play" simplicity.

| ST/STX5L | ST/STX7 | ST/STX4 ST/STX4L | ST/STX6M ST/STX6 | STX2 | ST/STX5M2 ST/STX5 | ST/STX8 ST/STX9 |

ST SERIES

PM-3 POWERNET INTELLIGENT AMPLIFICATION
ADVANCED 3RD GENERATION CLASS D TECHNOLOGY
INTEGRAL DRIVER-SPECIFIC PROCESSING
REMOTE SYSTEM MANAGEMENT · FLEXIBLE CONFIGURATIONS

High Output Tri-Amplified Power
- 1200 Watt Peak (850 Watt RMS) Lo Band Amplifier delivers rock solid bass
- 600 Watt Peak (425 Watt RMS) Mid Band Amplifier projects the vocal range cleanly
- 250 Watt Peak (175 Watt RMS) Hi Band Amplifier for clear smooth transients

Audiophile Performance
- < 0.01% distortion typical
- < -100 dB noise, 20 to 20 kHz
- > 90 dB CMRR
- Flat response from 20 Hz to 20 kHz

Advanced Class D Digital Technology
- Smaller, lighter, cooler
- High efficiency reduces AC power requirements, eliminates the need for fan cooling

Flexible Audio & Control Network Technologies
- High CMRR Analog Input, or
- CobraNet® 64 channel digital audio network (1 digital input, 6 individual analog outputs)

R-Control Echelon LonWorks® Remote Control & Supervision
- Controls: Volume, Polarity, Mute, etc.
- Monitors: Signal Levels, Temperature, Impedance, etc.
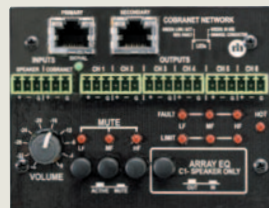- Manages Scene Store/Recall, Event Scheduling, Fault Logger

Speaker Specific Signal Processing
- Provides Crossover, Equalization, Thermal Protection, Peak Limiting, Excursion Control, Alignment Delays

Analog Input Module
- Looping XLR input connectors
- Optional Jensen Input Transformer
- 1 dB stepped volume control
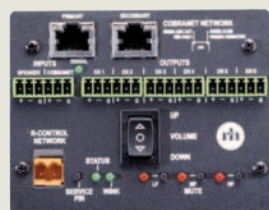- Hi, Mid & Lo band mutes
- LED status indicators

CobraNet® Digital Audio Network Input Module
- 64 audio channels over CAT 5 cable
- 1 input (digital)
- 6 outputs (analog)

Analog With R-Control
- All Analog Input features Plus
- R-Control Remote Control and Supervision

CobraNet With R-Control
- All CobraNet Digital Audio Network Input features Plus
- R-Control Remote Control and Supervision

**TRAP [TRUE ARRAY PRINCIPLE]**
a unique design innovation
RPA [REFERENCE POINT ARRAY]
a total design solution

THE PHYSICAL FOUNDATION: TRAP [TRUE ARRAY PRINCIPLE] DESIGN

Electronics can improve the performance of any array. But only TRAP (TRue Array Principle) loudspeakers make a single source of sound even in large arrays. Ordinary loudspeakers can't help interfering with each other in clusters, because their acoustic centers are widely spaced. That's why we designed TRAP horns and enclosures to align the acoustic centers. The horn angles are matched to the trapezoidal enclosures, which are designed to place the drivers as close together as physically possible. All sound originates in the same spot, so interference between adjacent horns is practically eliminated. Arrays of TRAP loudspeakers produce a phase aligned wavefront with uniform frequency response across the coverage area. Below the horn's cutoff frequency, RPA signal processing eliminates low frequency interference and can improve pattern control. The result is great sound at every seat.
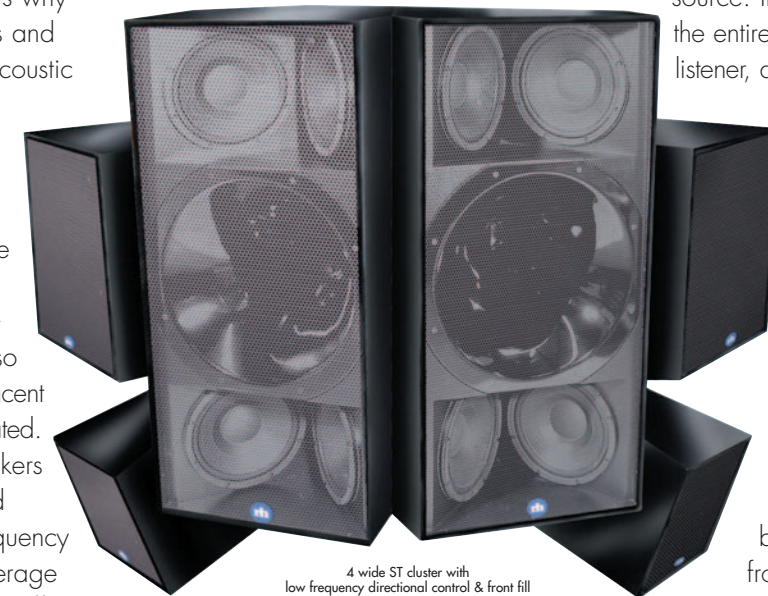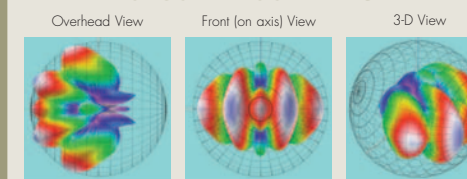
4 wide ST cluster with low frequency directional control & front fill

THE PLUG 'N PLAY ARRAY: RPA [REFERENCE POINT ARRAY] INTEGRATION

Using either self powered loudspeakers or external electronics and pre-configured cabling, RH Engineering's RPA design process integrates the entire system – even the hanging hardware – to produce "plug 'n play arrays" that act as a single broad-band acoustic source. In our test center, we optimize the entire signal chain from line level to listener, adjusting crossover, equalization, delay and limiting parameters for each Reference Point Array. We also configure hardware and cabling assemblies to ensure precise loudspeaker placement and correct signal flow. The result of this painstaking, complex design effort is a range of complete systems that install quickly and act as coherent acoustic sources "out of the box." ST and STX arrays deliver from 80° to 160° of smooth, seamless horizontal coverage. They will save you hours of installation and troubleshooting time, while delivering results that are superior to "handmade" arrays using conventional components.

CONVENTIONAL CLUSTER COVERAGE

Overhead View   Front (on axis) View   3-D View

TRAP (TRUE ARRAY PRINCIPLE) CLUSTER COVERAGE

Overhead View   Front (on axis) View   3-D View

IN CLUSTERS, CONVENTIONAL LOUDSPEAKERS CAN'T HELP INTERFERING WITH EACH OTHER.
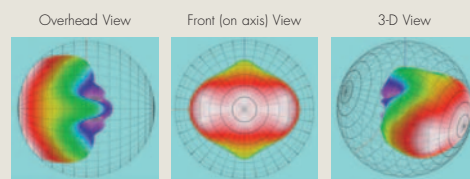
TRAP LOUDSPEAKERS WORK TOGETHER TO PRODUCE A COHERENT WAVEFRONT.

COMPACT NEAR FIELD AND MID FIELD LOUDSPEAKERS

When 3-way reference quality sound is required, but the extended pattern bandwidth of larger format horns is not needed, the CDT-1 based STX2 is the answer. Probably the world's smallest 12" 3-way system, the non-powered STX2 delivers surprisingly high output levels while maintaining all the detail of the source material. Their mid/high horns may be rotated 90 degrees for horizontal mounting applications or for use in TRAP (TRue Array Principle) Arrays.

STX2 & STX2

MODEL	FREQ (Hz)	DISPERSION (degrees)	MID/HI driver	MAX SPL (pgm / peak)	W X H X D (inches / centimeters)	WEIGHT (lbs. / kg)	PGM POWER (Watts)
STX2/64	50 - 18K	60°H - 40°V	CDT-1	LF – 125/128 db MF – 125/128 db HF – 128/130 db	14" x 26.5" x 16.62" 35.6 cm x 67.3 cm x 42.2 cm	75 Lbs. 34 Kg	300 W M/H 1000 W LO
STX2/94	50 - 18K	90°H - 40°V					
STX2M/64	600 - 18K	60°H - 40°V	CDT-1	MIDS – 125 / 128 db HIGHS – 128 / 130 db	14" x 13.25" x 16.62" 35.6 cm x 34 cm x 42.2 cm	40 lbs. 18.2 Kg	300 W
STX2M/94	600 - 18K	90°H - 40°V					

ST4/STX4

ST4 AND STX4 QUAD-8" MID FIELD LOUDSPEAKERS

The PowerNet ST4 and non-powered STX4 set new standards for compact 3-way loudspeaker systems. The unique Quad-8 doublet design outperforms conventional dual 12" systems with superior low frequency directionality in both horizontal and vertical planes. The CDT-1 CoEntrant Transducer provides smooth, natural reference quality reproduction. The ST4/44 & STX4/44 are 40 degree TRAP loudspeakers that combine into arrays with an absolute minimum of lobing.

PowerNet ST4 models include the advanced PM-3 tri-amplified power amplifier. Non-powered STX models are designed for bi-amping and include a passive mid/high crossover.

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID/HI (driver)	MAX PROG/PEAK SPL ST	STX	W X H X D (inches/centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX4/44	50 - 18K	40°H - 40°V	CDT-1	LF – 128/130 db MF – 125/128 db HF – 128/130 db	130/133 db 125/128 db 128/130 db	16.62" x 30.25" x 23.5" 42.2 cm x 76.8 cm x 59.7 cm	(ST) 147.5 / 66.9 (STX) 110 / 49.9	(ST) 115/230 V AC (STX) 300 W M/H, 1600 W LO
ST & STX4/64	50 - 18K	60°H - 40°V						
ST & STX4/94	50 - 18K	90°H - 40°V						

ST4L AND STX4L DUAL 12" LOW FREQUENCY MODULES

The ST4L and STX4L low frequency modules are companions to the full range ST4 and STX4 loudspeakers. They are the same size and shape as the ST4 and STX4 and designed to be used with them in vertical stacks or arrays. Together the combination provides superior low frequency directional control in the vertical plane and greatly reduced low frequency feedback problems in "overhead" applications in churches, live theaters, performing arts centers and other similar venues. The ST4L is powered by its self-contained PM-1L PowerNet Amplifier. The STX4L is non-powered.

ST4L/STX4L

MODEL	FREQ (Hz)	MAX SPL (pgm / peak)	W x H x D (inches / centimeters)	WEIGHT (lbs. / kg)	POWER REQUIREMENT
ST4L	40 - 500	128 / 129 db	16.62 x 30.25 x 23.5 / 42.2 x 76.8 x 59.7	130 / 59	115 / 230 V AC
STX4L	40 - 500	130 / 133 db	16.62 x 30.25 x 23.5 / 42.2 x 76.8 x 59.7	100 / 45.4	1600 W @ 4 Ohms

ST5 AND STX5 DUAL 12" HIGH POWER LOUDSPEAKERS

Compact, powerful and flexible, the ST5 PowerNet and STX5 externally powered loudspeakers are a total solution for sound rental companies. They deliver reference quality performance in small venues as well as the largest touring rigs. 20 degree Complex Conic ArrayGuides and high power CDT-2 Coentrant Transducers provide "pin-point" control at extremely high SPL. The ST5/42-2 and STX5/42-2 with their 40° by 20° long throw coverage are TRAP modules that array seamlessly in either horizontal or vertical configurations. 90° ST5 and STX loudspeakers are ideal for downfill use in vertical arrays or for compact horizontal arrays.

ST5 & STX5

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID-HI driver	MAX PROG/PEAK SPL ST	STX	W X H X D (inches/centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX5/42	40 - 18K	40°H - 20 V	CDT-2	LF – 131/132 db MF – 132/135 db HF – 131/133 db	134/137 db 132/135 db 131/133 db	24" x 32" x 32.25" 61 cm x 81.3 cm x 81.9 cm	(ST) 200 / 90.9 (STX) 163 / 73.9	(ST) 115 / 230 V AC (STX) 600 W M/H, 2000 W LO
ST & STX5/92	40 - 18K	90°H - 20 V						

ST5M2 AND STX5M2 MID-HIGH MODULES

The ST5M2 and STX5M2 mid-high modules has a CDT-2 CoEntrant transducer plus a 10" mid-range driver loaded on 20 degree ArrayGuides. In arrays with full range ST5 and STX5 loudspeakers they add the throw and power needed to cover even the largest audience.

The ST5M2 and STX5M2 can also be paired with the ST5L and STX5L Quad-12 low frequency cabinet to form extremely powerful 2-box systems with exceptional directional control across the full frequency spectrum.

ST5M2 & STX5M2

ST5 & ST5M2

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID-HI driver	MAX PROG/PEAK SPL ST	STX	W X H X D (inches/centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX5M2/42	350 - 18K	40°H - 20°V	CDT-2	MF – 135/138 db HF – 131/133 db	135/138 db 131/133 db	24" x 32" x 32.25"/ 61 cm x 81.3 cm x 34.9cm	(ST) 180/81.6 (STX) 150/68	(ST) 115/230 V AC (STX) 1200 W
ST & STX5M2/92	350 - 18K	90°H - 20°V						

ST5L & STX5L QUAD-12" LOW FREQUENCY MODULES

These low frequency modules with their Quad-12 doublet design add low frequency output and directional control when used with ST5M2 and STX5M2 mid-high modules and ST5/STX5, ST6/STX6, ST7/STX7, ST8/STX8 and ST9/STX9 full range loudspeakers. They share the same footprint and offer the same high performance. Their unique Quad-12 doublet design provides outstanding bass performance and excellent directional control in both the vertical and horizontal planes. The ST5L is powered by the PM-1L PowerNet Amplifier. The STX5L is non-powered.

ST/STX5L

MODEL	FREQ (Hz)	MAX SPL (prog / peak)	W X H X D (inches / centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST5L	40 - 500	134 / 135 db	24" x 32" x 32.5"/ 61 cm x 81.3 cm x 81.9 cm	200 / 90.7	115 / 230 V AC
STX5L	40 - 500	140 / 143 db	24" x 32" x 32.5"/ 61 cm x 81.3 cm x 81.9 cm	170 / 77.1	4000 W

ST6 & STX6

ST-STX6 AND ST-STX7 DUAL 12" HIGH POWER LOUDSPEAKERS

When higher output levels or tighter directional control is needed, the ST6/STX6 and ST7/STX7 series deliver. Medium format Complex Conic horns offer consistent directional contol down to 350 Hz. Dual 12" woofers extend LF response down to 40 Hz with added horizontal directivity. ST6 and STX6 models feature the CDT-1 CoEntrant driver with 1" HF and 8" MF drivers and a 2" throat. ST7 and STX7 models feature the CDT-2 with 2" HF and 10" MF drivers and a 3" throat and deliver even higher output levels than the ST6/STX6 models. ST7/44AS and STX7/44AS models also feature asymmetrical (+15, -25) vertical coverage that permits "dead hanging" in many installations.

The CDT-1 and CDT-2 transducers are loaded on Complex Conic horns that can be rotated 90 degrees for horizontal mounting or for use in in TRAP TRue Array Principle arrays. ST models include the PM-3 PowerNet Tri-Amplifier, while STX models have a passive mid/high crossover and are suitable for use in bi-amped systems.

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID-HI driver	MAX PROG/PEAK SPL ST	STX	W X H X D (inches / centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX6/44	40 - 18K	40°H - 40°V		LF −131/132 db	133/136 db	24" x 40" x 32.25"	(ST) 223/101.2	(ST) 115/230 V AC
ST & STX6/64	40 - 18K	60°H - 40°V	CDT-1	MF −126/129 db	126/129 db	61 cm x 101.6 cm x 81.9 cm	(STX) 186/84.4	(STX) 300 W M/H,
ST & STX6/94	40 - 18K	90°H - 40°V		HF −128/130 db	128/130 db			1600 W LO
ST & STX7/44AS	40 - 18K	40°H - 40°V (ASM)		LF −131/132 db	134/137 db	24" x 40" x 32.25"	(ST) 243/110.2	(ST) 115/230 V AC
ST & STX7/64	40 - 18K	60°H - 40°V	CDT-2	MF −131/132 db	132/135 db	61 cm x 101.6 cm x 81.9 cm	(STX) 206/93.4	(STX) 600 W M/H,
ST & STX7/94	40 - 18K	90°H - 40°V		HF −131/133 db	131/133 db			2000 W LO

ST-8/STX-8 & ST-9/STX-9

ST8-STX8 AND ST9-STX9 QUAD 12" HIGH POWER LOUDSPEAKERS

The ST8/STX8 and ST9/STX9 combine the high power CDT-1 and CDT-2 CoEntrant transducers and medium format Complex Conic horns with a Quad-12" doublet low frequency design. The Quad-12" doublet design provides superior low frequency directional control in both horizontal and vertical planes. The result is outstanding directional control across the entire frequency spectrum along with exceptionally high output levels and reference quality reproduction.

ST8/STX8 models feature the CDT-1 Coentrant transducer while ST9/STX9 models have the larger CDT-2 for even higher output levels. The ST9/44AS and STX9/44AS also feature asymmetrical (+15, -25) vertical coverage that permits "dead hanging" in many installations. All have Complex Conic horns that can be rotated 90 degrees for use in horizontal mounting applications or in TRAP TRue Array Principle arrays. ST8/ST9 models include the PM-3 Tri-Amplifier, while STX8/STX9 models have a passive mid/high crossover and are suitable for use in bi-amplified systems.

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID-HI driver	MAX PROG/PEAK SPL ST	STX	W X H X D (inches / centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX8/44	40 - 18K	40°H - 40°V		LF −134/135 db	139/142 db	24" x 50" x 32.25"	(ST) 250/113.4	(ST) 115/230 V AC
ST & STX8/64	40 - 18K	60°H - 40°V	CDT-1	MF −126/129 db	126/129 db	61 cm x 127 cm x 81.9 cm	(STX) 212.5/96.4	(STX) 600 W M/H,
ST & STX8/94	40 - 18K	90°H - 40°V		HF −128/130 db	128/130 db			3200 W LO
ST & STX9/44AS	40 - 18K	40°H - 40°V (ASM)		LF −134/135 db	139/142 db	24" x 50" x 32.25"	(ST) 270/122.5	(ST) 115/230 V AC
ST & STX9/64	40 - 18K	60°H - 40°V	CDT-2	MF −131/132 db	132/135 db	61 cm x 127 cm x 81.9 cm	(STX) 232.5/105.5	(STX) 600 W M/H,
ST & STX9/94	40 - 18K	90°H - 40°V		HF −131/133 db	131/133 db			4000 W LO

ST-STX6M AND ST-STX7M MID-HIGH MODULES

ST6M/STX6M and ST7M/STX7M Mid-High Modules include the medium format Complex Conic horns and CoEntrant Mid-High driver used in the ST6/STX6, ST7/STX7, ST8/STX8 and ST/STX9 loudspeakers and have the same footprint. They easily add side, down fill or delay coverage. They can be arrayed with ST5L Quad-12" low frequency systems or used as high output, high performance paging systems. All ST models are powered by the PM-2MH PowerNet Bi-Amplifier. STX models are non-powered and include a passive crossover.

ST6M/STX6M & ST7M/STX7M

MODEL	FREQ (Hz)	COVERAGE (degrees)	MID-HI driver	MAX PROG/PEAK SPL ST	STX	W X H X D (inches / centimeters)	WEIGHT (lbs./kg)	POWER REQUIREMENT
ST & STX6M/44	500 - 18K	40°H - 40°V		MF −126/129 db	126/129 db	24" x 24" x 32.25"	(ST) 150/68	(ST) 115/230 V AC
ST & STX6M/64	500 - 18K	60°H - 40°V	CDT-1	HF −128/130 db	128/130 db	61 cm x 61 cm x 81.9 cm	(STX) 120/54.5	(STX) 300 W
ST & STX6M/94	500 - 18K	90°H - 40°V						
ST & STX7M/44AS	350 - 18K	40°H - 40°V (ASM)		MF −131/132 db	132/135 db	24" x 24" x 32.25"	(ST) 170/77.1	(ST) 115/230 V AC
ST & STX7M/64	350 - 18K	60°H - 40°V	CDT-2	HF −131/133 db	131/133 db	61 cm x 61 cm x 81.9 cm	(STX) 140/63.5	(STX) 600 W
ST & STX7M/94	350 - 18K	90°H - 40°V						

ST AND STX RPA (REFERENCE POINT) ARRAYS

ST/STX9 Array

ST/STX9 Array

ST PowerNet Reference Point Arrays (RPA's) are self-contained, fully integrated, network-ready electro-acoustic systems. The network-ready PowerNet loudspeakers and R-Hang mounting hardware are fully assembled and tested before the array leaves our factory. At the job site, all you need to do is to put the array into place and plug in the signal and power cables. Then walk the room and enjoy flawless array performance. STX Reference Point Arrays offer the same advantages in externally powered systems. Refer to our RPA Brochure for complete details. For custom arrays, call us for assistance.

MATCHING SUBWOOFERS

Renkus-Heinz also offers an extensive line of both powered and non-powered 12", 15" and 18" subwoofers.

For details, check out our free configurator software or our website www.rh.com.

ROTATING HORNS

ST and STX Series Complex Conic horns (except for those used in the ST4/STX4 and ST5/STX5) can easily be rotated 90 degrees within the enclosure, allowing the loudspeaker to be mounted either horizontally or vertically. We'll do this at our factory at your request, or you can rotate the horn in the field to accommodate unexpected installation changes simply, cost effectively and conveniently.

In portable systems, you can fly ST and STX Series loudspeakers horizontally one night and stack them the next, just by rotating the horn.

Coverage Patterns

Standard Coverage | With Horn Rotated 90°

Low ———————————— High
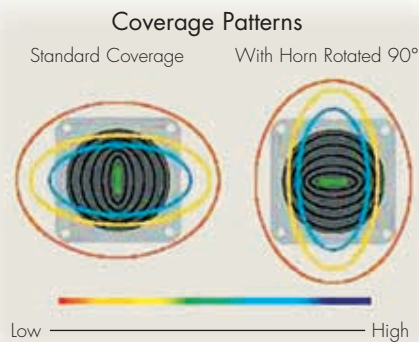
PORTABLE OPTIONS

All portable ST and STX models include looping (in and out) Neutrik 4-pin Speak-on connectors. Handles are also provided.

AeroQuip Fly-track is another popular option available on all models.

INSTALLATION OPTIONS

Installation models are normally provided with twelve 3/8 -16 attachment points which allow the enclosures to be easily flown in any plane using eye bolts.

R-Hang array mounting hardware is available for a wide range of ST and STX arrays. Call us for details.

FINISHES

The standard ST and STX Series finish is black. Optional finishes include white, "natural" ready-to-stain (sanded, unfinished) and TuffTex. Custom colors are also available to match any decor.

WEATHER RESISTANT

All ST and STX Series loudspeakers are also available with weatherized woofer cones and connectors, in weather resistant fiberglass or TuffTex Elastomer finishes that are practically impervious to the elements.

INPUT MODULES

ST PowerNet loudspeakers offer a choice of Analog or Digital Input Modules:
- Analog
- Analog with R-Control
- Digital with a CobraNet Input and 6 Analog Outputs
- Digital with a CobraNet Input, 6 Analog Outputs and R-Control

Renkus-Heinz's free System Configurator Software takes the guesswork out of ordering single loudspeakers or loudspeaker arrays. The software walks users through each order, clarifying options that are available, and ensuring that when Renkus-Heinz receives the order it is complete and accurate. You can access the Configurator on our website at www.rh.com.

SYSTEM SPECIFIC ELECTRONICS

Whether we're integrating PM Series PowerNet amplifiers inside our ST Series or configuring external rack mount devices, making R-H electronics System Specific means is a time-consuming, data-intensive process. Renkus-Heinz Engineering precisely measures and carefully adjusts critical parameters to maximize the performance of single loudspeakers or multi-element Reference Point Arrays. The results are worth it – to the designer, the installer, the operator, and most of all the listeners.

The PM Series Intelligent Amplifiers built into ST PowerNet loudspeakers include system specific EQ and protection circuitry. They are available with CobraNet digital inputs and R-Control or high-CMRR analog inputs with optional Jensen transformers.

For externally powered STX Series loudspeakers, we integrate electronics using Loudspeaker Specific Processor Modules that plug into our P Series System Specific Power Amplifiers and X Series rack-mount analog controllers. They can be configured for anything from "last resort" limiting (tied to amplifier output, so it cannot be "fooled" by adjusting input controls) to complete loudspeaker output protection and optimization.

For room equalization, delay and other commissioning or setup functions, the D26A Digital Controller is a two-in, six-out processor with comprehensive EQ, crossover, delay and limiting functions. The D26A can be controlled via MIDI from SMAART LIVE's dual-FFT EQ window, making it an ideal tool for fine tuning a sound system.

R-CONTROL REMOTE SYSTEM SUPERVISION

The R-Control Remote System Supervision Network is based on Echelon's LonWorks® protocol (ANSI/EIA standard 790.1) and Microsoft Visual Basic.® Comprehensive monitoring, control and scheduling functions are available on the same CAT 5 cable used for CobraNet.

AMPLIFIER MODEL	WATTS/CH 8 OHMS	WATTS/CH 4 OHMS	BRIDGE MODE POWER
P2400	250	350	700 W @ 8 Ohms
P2700	350	500	1000 W @ 8 Ohms
P2850	500	750	1800 W @ 4 Ohms
P2950	800	1200	3200 W @ 4 Ohms
P3500	500	750	1500 W @ 4 Ohms
P3501	500	750	1500 W @ 4 Ohms

All power ratings given in Watts RMS.)