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REA

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OPERATIONS MANUAL

ASTP VIDEO TAPE RECORDER GROUND SUPPORT EQUIPMENT (AUDIO/CTE SPLITTER/INTERLEAVER)

NASA CONTRACT
NAS9-15767

ADDENDUM 2
CTE SPLITTER/OUTPUT BUFFER

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OPERATIONS MANUAL

ASTP VIDEO TAPE RECORDER
GROUND SUPPORT EQUIPMENT
ADDENDUM 1
ADDENDUM 2
(CTE SPLITTER/BUFFER)

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PARTS LISTS

GTE Splitter
Board Assembly, Video/Audio Input (A2)
Board Assembly, Splitter Timing (A3)
Board Assembly, External Sync (A4)
Board Assembly, Bessel Filter/Equalizer (A10)
Board Assembly, GTE Demux (A11)
Board Assembly, GSE Display (CTE) (A12)
Board Assembly, CTE Output Buffer (A13, A14, A15)

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SECTION 1

INTRODUCTION

1.1 GENERAL DESCRIPTION

The CTE Splitter, RCA Part No. 8673734-503 Addendum 1, -504 Addendum 2, is designed to extract time data from an interleaved video/audio signal.

The CTE Splitter is a rack mounting unit 7 inches high, 19 inches wide and 20 inches deep, mounted on slides for retracting from the rack. The unit weights approximately 40 pounds. The unit contains all operator controls on the front panel.

1.2 UNIT DESCRIPTION

The basic function of the CTE Splitter is to extract CTE time data from an interleaved video/audio/CTE signal and to supply the CTE time data to the CTE display on the front panel. The -504 Series also provides a buffered CTE output for three remote displays. Front panel test jacks are provided for monitoring SPLITTER V/A INPUT.

A Front Panel SYNC switch selects the source of sync signal used in the splitter. Either internal (INT) or external (EXT) may be selected. If INT SYNC is selected, the source of the sync signal is the Splitter Video (V/A) input signal. If EXT SYNC is selected, the source of the sync signal is the REGEN SYNC output of a processing amplifier (RCA TA-19).

Front panel display of the CTE TIME CODE is also provided in day, hour, minutes and seconds.

The CTE Splitter provides a front panel POWER On-Off Switch, a Power ON indicator and an indicator lamp that illuminates when the fuse is open.

All inputs and outputs, interfacing the unit with the rest of the system are

made through connectors on the rear panel of the unit.

The unit contains plug-in modules mounted in a module nest, a wired-in module located on the rear chassis and a wired-in module on the front panel. The three unit power supplies are also mounted on the rear chassis.

1.3 OPERATING REQUIREMENTS

One power source is required for operating the CTE Splitter; 115VAC, 60 cycle, single phase. The power interface is made through the 115 V ac connection (J27) located at the rear of the unit. All inputs and outputs are contained on connectors mounted on the rear panel of the unit. The unit contains a POWER On-Off switch, a Power ON Indicator and an Indicator fuse, all mounted on the unit front panel.

1.4 EQUIPMENT CHARACTERISTICS

Table 1-1 lists pertinent physical characteristics and Table 1-2 electrical characteristics for the CTE Splitter.

1.5 EQUIPMENT REQUIRED

The CTE Splitter is a self-contained unit. No external equipment is required for the operation of the unit when operated in the Internal Sync mode.

When operated in the External Sync mode, a processing amplifier (i.e., RCA TA-19) is required.

TABLE 1.1. PHYSICAL CHARACTERISTICS

ITEM	CHARACTERISTICS
Size	19 inches wide, 7 inches high, 20 inches deep (plus handles)
Weight	Approximately 40 pounds
Indicators Power On Indicator Fuse	Dialco 95408-9 (with 220K resistor) Littelfuse 344125
Lamps Power On	NE51
Power Switch	DPST Toggle
Test Jacks Video Ground 15V 5V -15V	Tip Jack, metal clad type MS16108 Red Black Red Red Red
Power Supplies	Lambda, type LXS
Plug-In Modules A2 - 8372840 A3 - 8372842 A4 - 8373015 A11 - 8375682 A13 - 8376197 A14 - 8376197 A15 - 8376197	Video/Audio Input Splitter Timing External Sync CTE Demultiplexer CTE Output Buffer CTE Output Buffer CTE Output Buffer
Wired-In Modules A10 - 8673757 A12 - 8676341	Bessel Filter/Equalizer CTE Display

TABLE 1.2. ELECTRICAL CHARACTERISTICS

ITEM	CHARACTERISTICS
Power requirements:	115 volts, 60 cycles, 1 phase, 2 amperes
<u>SPLITTER</u>	
V/A Input	
Level	1 V pp \pm 0.3 V pp
Impedance	75 ohms \pm 10%
Sync Input	
Level	4.5 V pp
Impedance	75 ohms

SECTION 2

INSTALLATION

2.1 INSTALLATION

2.1.1 General

The CTE Splitter should be installed in a clean, dust-free area. An air-conditioned area with low humidity and moderate temperature is preferred. Refer to Figure 2-1 (Installation Clearance) for diagram.

2.1.2 Installation in Rack (Refer to Figures 2-1, 2-2)

1. The unit is shipped with the chassis section of the slides mounted on the sides of the unit as shown in Figure 2-2.
2. Assemble extender bracket to slide (cabinet section) as shown in Figure 2-2, using #10 screw and two bars supplied.

Note: Extender bracket mounting position should be varied according to requirement of particular rack.
3. Mount assembled cabinet section into rack.
4. Insert unit (chassis section slides) into intermediate section slides.

2.1.3 Power Connection

The CTE Splitter is supplied with a power cord 7 feet +6 inches long. The power cord contains a 3-wire grounding type plug for mating with a standard 3-wire grounding type convenience outlet. Since the unit may be retracted from the rack on slides, the AC power cord should be dressed in the rack to allow the unit to operate in either normal or fully extended position.

2.1.4 Signal Connection

Signal outputs and inputs are made through connectors located on the rear panel of the unit. Sufficient room should be allowed for external connections (refer to Figure 2-1 for installation clearances).

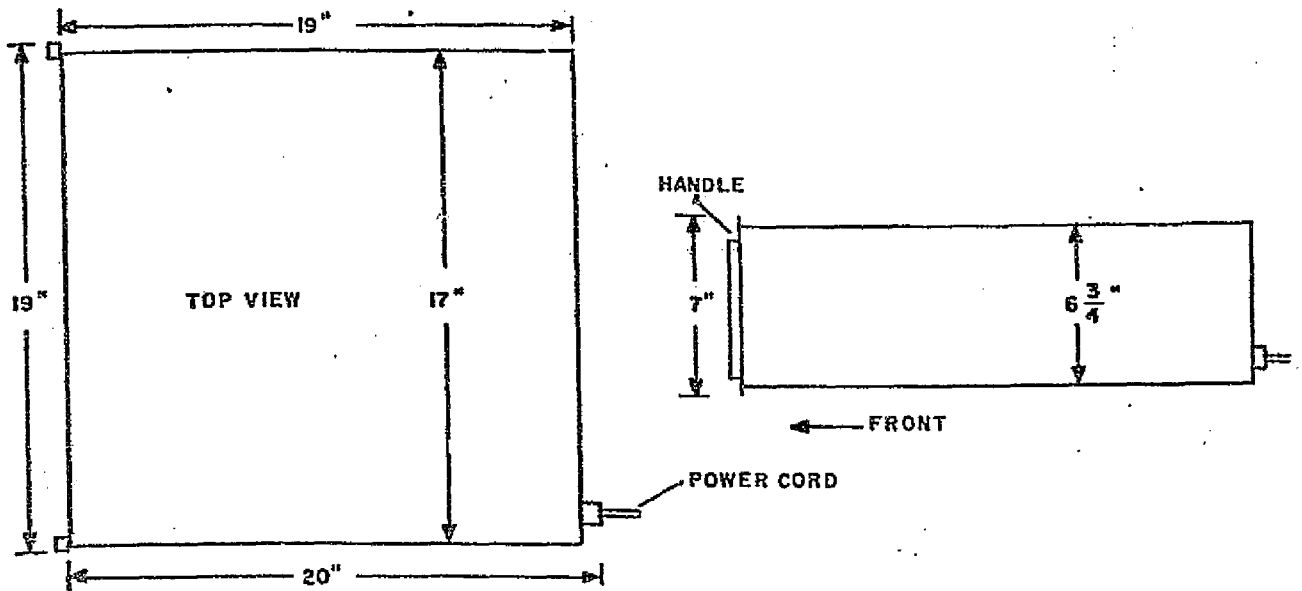


Figure 2-1. Installation Clearance

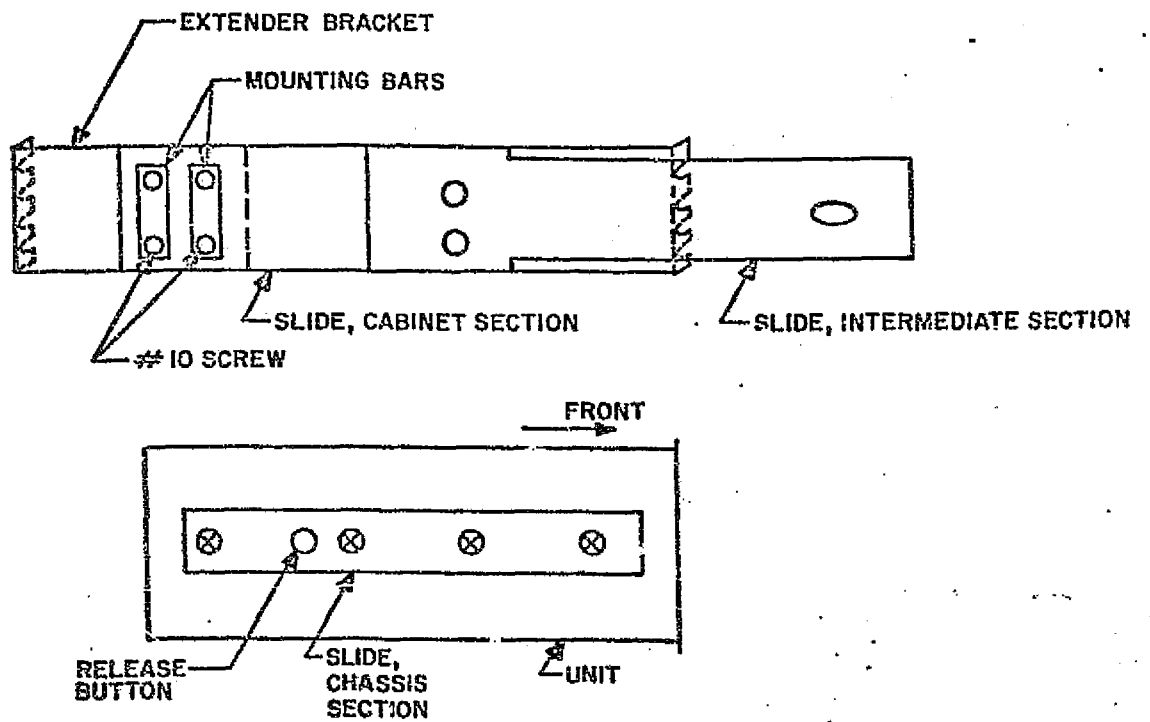


Figure 2-2. Slide, Mounting

2.2 INITIAL ADJUSTMENTS AND TESTS

To ensure that the equipment is performing properly, conduct tests outlined in Operational Procedures, paragraph 3.3

If the unit does not perform as specified, refer to Alignment Procedure, paragraph 5.3.1.

SECTION 3

OPERATION

3.1 INTRODUCTION

The splitter section extracts time data from an interleaved Video/Audio/CTE input.

Front panel test jacks are provided for monitoring splitter V/A Input. CTE TIME CODE information is displayed on the front panel in DAY, HOUR, MINUTE, and SECOND.

A front panel selector is provided to allow selection of either internal or external sync (REGEN SYNC from a processing amplifier).

3.2 CONTROLS AND INDICATORS

The location of the controls and indicators for the Audio Splitter/Interleaver are shown in Figure 3-1. These controls and indicators are tabulated in Table 3-1.

3.3 OPERATING PROCEDURES

3.3.1 Starting Procedure

Place POWER switch(S3) in the ON position. POWER ON indicator DS5 should illuminate. Indicator fuse holder (XF1) should not be illuminated.

3.3.2 Operation

3.3.2.1 Setup

Before operating the Splitter from a Downlink signal the CTE Splitter should be set up as described below:

TABLE 3-1. AUDIO/CTE SPLITTER/INTERLEAVER
FRONT PANEL CONTROLS AND INDICATORS

ITEM	NAME	FUNCTION
DS5	ON	115 V ac applied to unit power supplies.
F1	Fuse	Indicator fuse, lights when fuse is open.
S3	Power	Power On-Off switch.
S4	Sync	Selector switch, selects Splitter Clamp and Sample Pulse from Internal or External source.
A12	CTE Display	Displays CTE Time code data.

Test Equipment

The following test equipment (or equivalent) is required:

1. TV Signal Generator (Telemet Stairstep generator model 3502).
2. Processing Amplifier (RCA Model TA-19).
3. Oscilloscope (Tektronix 547 with type 1A1 plug-in).

3.3.2.1.1 Splitter Setup

1. Monitor the signal at the front panel SPLITTER V/A INPUT test jacks. A composite video signal level of 1.0 V pp should be present at the test jacks (refer to Figure 304).
2. Set front panel SYNC select switch in the INT position.
3. The front panel CTE DISPLAY should indicate the CTE Time Code.
4. Set front panel SYNC select switch in the EXT position. Perform Clamp Delay Adjustment as described in Section 5, Maintenance, paragraph 5.3.1.3.6.1.

The front panel CTE DISPLAY should indicate the CTE Time Code.



Figure 3-2. SPLITTER V/A INPUT 3-step test signal with no interleaved audio

Scope Sync - A3TJ3
 Vert. Scale - 0.2 V/cm dc
 Hor. Scale - 10 μ s/cm

-Gnd

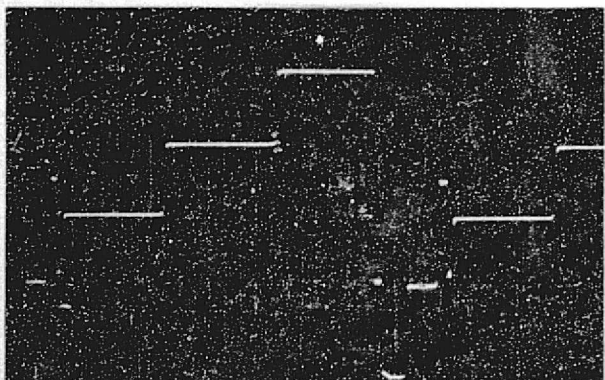


Figure 3-3. SPLITTER V/A INPUT 3-step test signal with interleaved pedestal only, no audio modulation

Scope Sync - A3TJ3
 Vert. Scale - 0.2 V/cm dc
 Hor. Scale - 10 μ s/cm

-Gnd

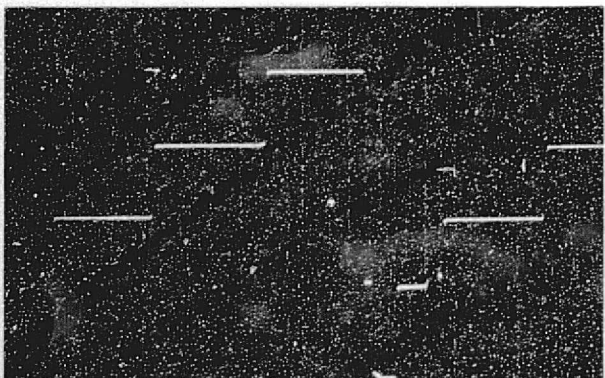
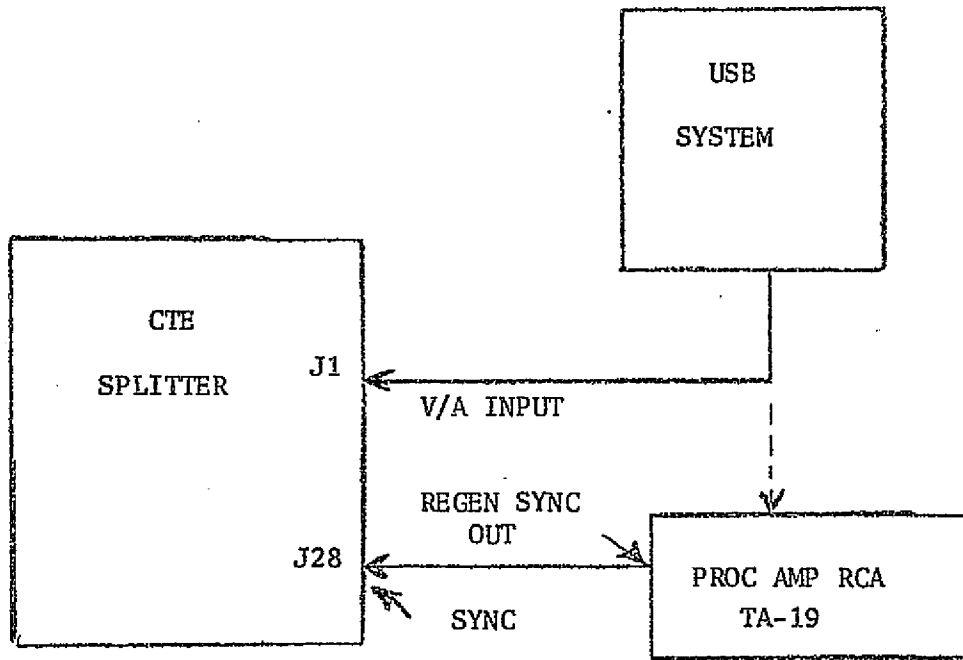


Figure 3-4. SPLITTER V/A INPUT 3-step test signal with interleaved audio

Scope Sync - A3TJ3
 Vert. Scale - 0.2 V/cm dc
 Hor. Scale - 10 μ s/cm

-Gnd

FIGURE 3.11. CTE SPLITTER USB SYSTEM CONNECTIONS (SETUP)



SECTION 4
PRINCIPLES OF OPERATION

4.1 GENERAL

The CTE Splitter detects the CTE Time Code on line 17 of the incoming VTR video signal and displays this data on a front panel display. The -504 unit also provides this signal as an output to remote indicators.

All the controls and indicators are located on the unit front panel. All inputs and outputs are made through the rear panel.

The electronic circuits associated with the above functions are located on plug-in modules accessible from the top of the unit and two board assemblies, one wired into the front panel and the other into the rear chassis.

4.2 SYSTEM OPERATION

(Refer to Figure 4-1).

4.2.1 CTE Splitter

The CTE Splitter circuit receives Video/CTE (interleaved). The CTE time data is displayed on the front panel CTE display.

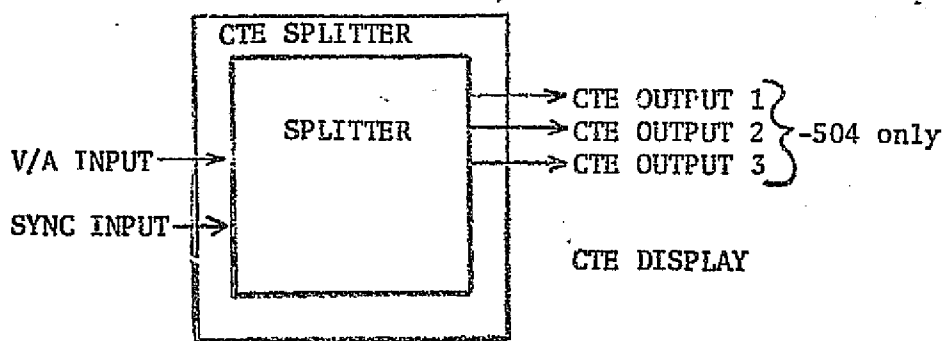
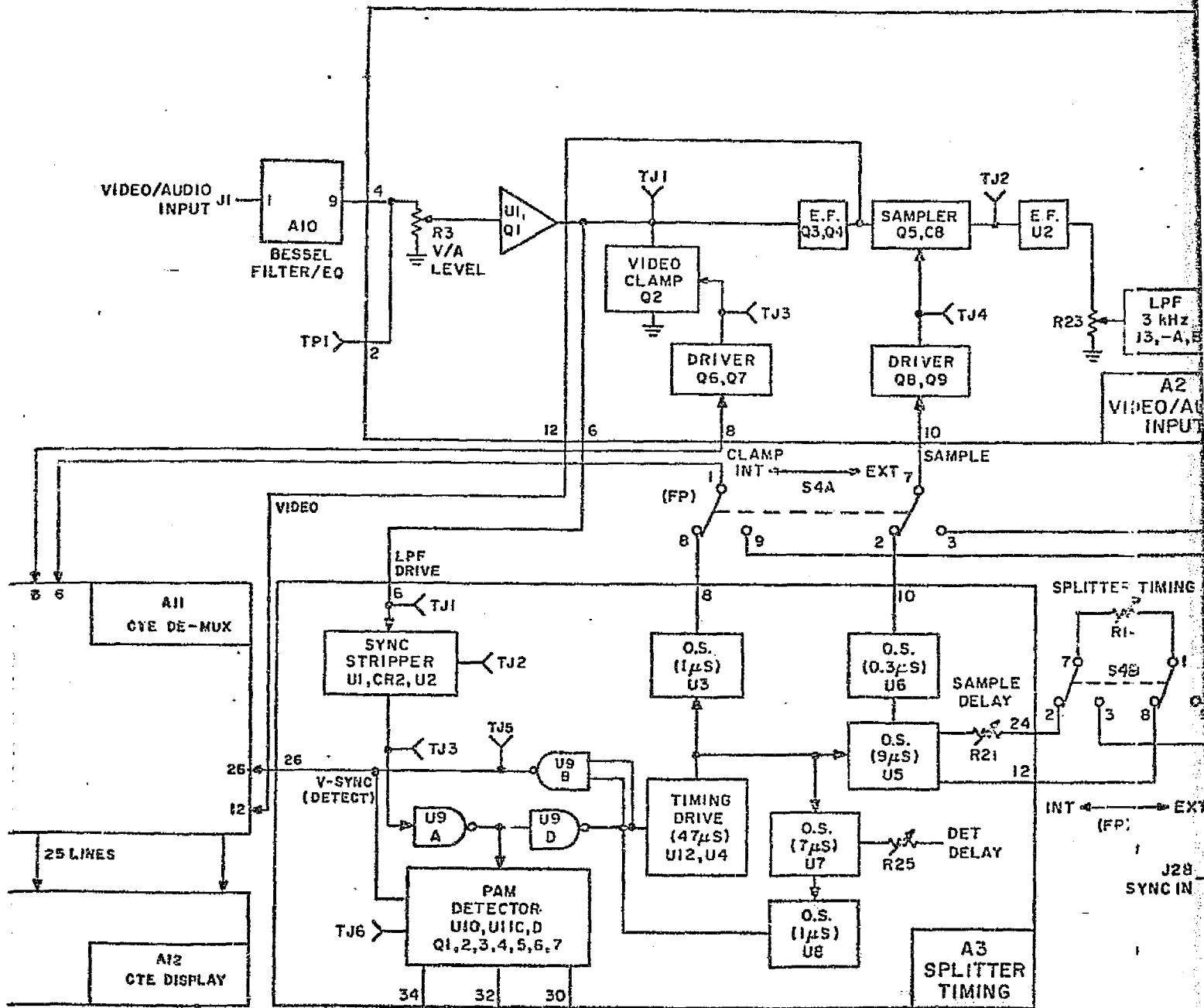


FIGURE 4.1. CTE SPLITTER SYSTEM
FUNCTIONAL BLOCK DIAGRAM.



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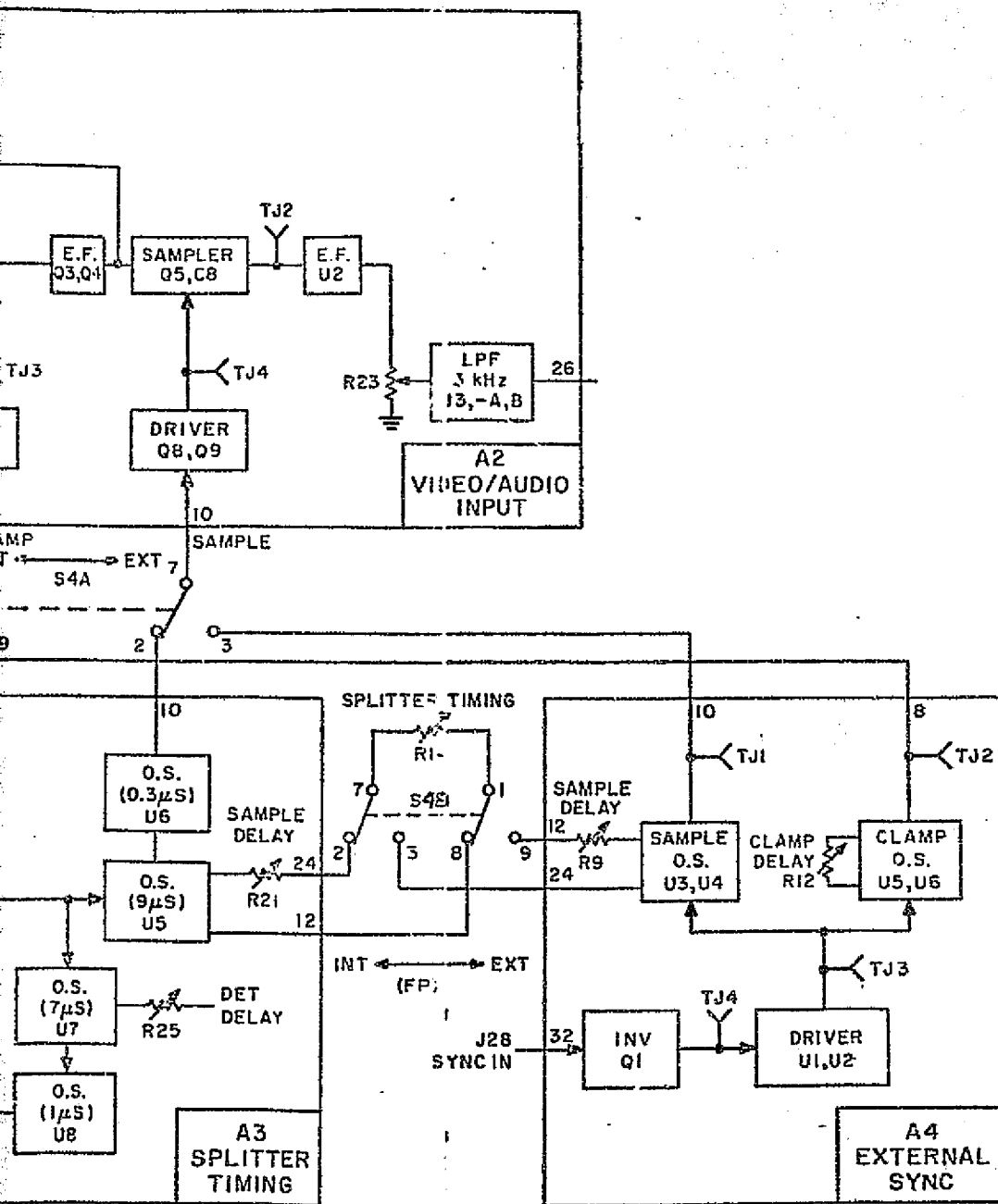


Figure 4-2. Splitter Functional Diagram.

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4.3 FUNCTIONAL OPERATION

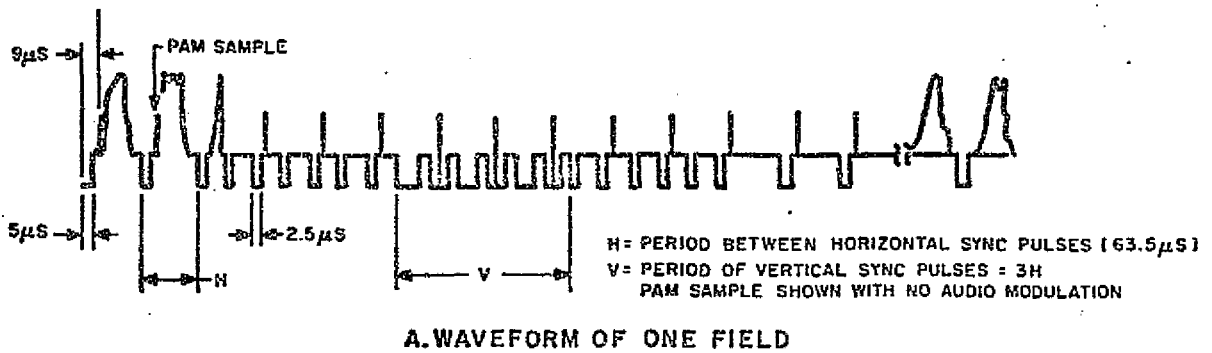
4.3.1 CTE Splitter

(Refer to Splitter functional diagram, Figure 4-2; Video/Audio Waveform Figure 4-3; and schematic diagram, Figure 6-1).

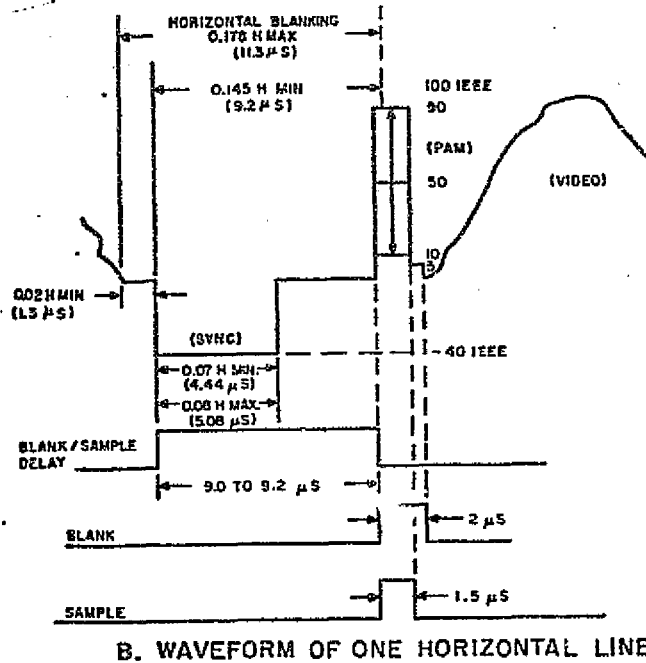
4.3.1.1 Video/CTE

The Video/CTE input jack (J1) is a BNC connector, located on the rear panel. The signal at J1 may be either a real time (R/T) video signal (standard TV signal) or a video/audio/CTE (VTR, interleaved) signal. (Refer to Figure 4-3).

The video signal is fed from connector J1 through coupling capacitor C1, to the Bessel Filter/Equalizer module (A10) located on the splitter chassis. The signal enters the A10 module at pins 1 and 2 (Ground) (Refer to schematic diagram, Figure 6-11). The Bessel Filter determines the bandwidth of the splitter (1.0 MHz).



A. WAVEFORM OF ONE FIELD



B. WAVEFORM OF ONE HORIZONTAL LINE

FIGURE 4.3. VIDEO/AUDIO/CTE WAVEFORM

The video signal from the output of the Bessel Filter/Equalizer A10-9 and A10-10 (Ground) is fed to the V/A Input, pin 4 and pin 3 (Ground) of the Video/Audio Input module (A2). In the Video/Audio Input module (A2) (refer to schematic diagram, Figure 6-3), the signal is fed through the V/A LEVEL control (R3), which is adjusted for the proper level at the Video Clamp (Q2), test jack TJ1. (Refer to Table 5-1 for signal levels). From the level control the video signal is fed through an amplifier stage (U1, Q1); the gain of the stage is determined by resistors R4 and R6. The signal at the output of the amplifier follows two paths, one through the sync stripper circuit and the other to the video clamp.

4.3.1.1.1 Sync Stripper Circuit

(Refer to functional diagram, Figure 4-4, and timing diagram, Figure 4-5).

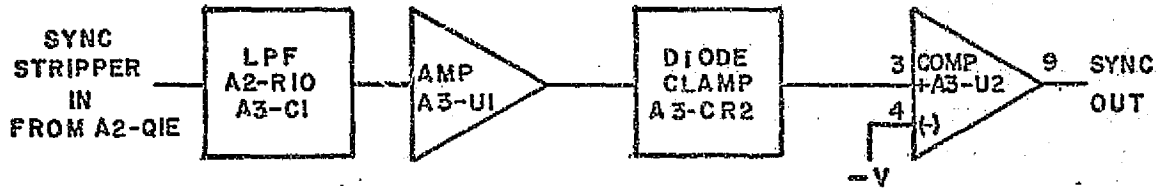


Figure 4-4. Splitter Sync Stripper Functional Diagram

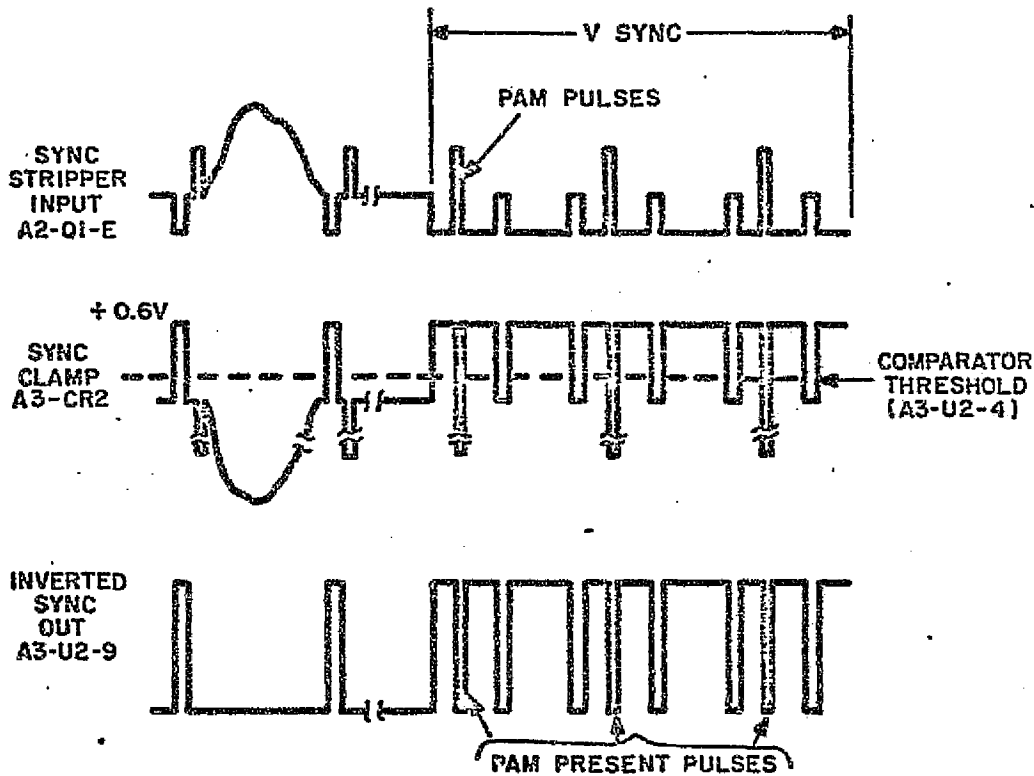


Figure 4.5. Sync Stripper Timing Diagram (Splitter)

The sync stripper detects sync from the composite TV signal (real time or V/A) and provides signal to the video clamp, timing circuits, and the PAM detector circuits. When interleaver video (V/A) is received by the unit, the output signal of the sync stripper will contain a pulse (PAM present) coincident with the PAM pulse during the vertical sync period (refer to Figure 4-5).

The sync stripper consists of a low pass filter, an amplifier, a diode clamp and a comparator.

The low pass filter, consisting of A2-R10 and A3-C1, reduces the noise bandwidth of the sync stripper, thereby allowing the sync stripper circuit to detect sync in a low signal-to-noise signal. The output of the low pass filter is fed to the amplifier stage (refer to Splitter Timing (A3) schematic diagram, Figure 6-4).

The amplifier consists of U1 and its associated circuitry. The output of the amplifier is fed to a diode clamp (C15 and CR2) which clamps the sync tips at +0.6V.

From the diode clamp, the signal is fed to the comparator circuit consisting of U2 and its associated circuitry. The signal is fed through R11 to the non-inverting input of U2. The inverting input is biased, through resistors R12 and R13, to a negative reference voltage, which causes the comparator output to be high when the input is more positive than the reference.

When the level at the comparator input becomes more negative than the reference, the comparator output saturates (goes to zero). The transition takes place very rapidly due to the positive feedback, formed by resistors R11 and R16.

The signal from the output of the sync stripper (U2) is fed to the input of inverter U9A. The output of the inverter U9A is fed to two paths, one to the Timing Circuit and the other to the PAM Detector Circuit.

4.3.1.1.2 Timing Circuit

(Refer to Splitter Timing (A3) schematic diagram, Figure 6-4). The timing circuit, consisting of one-shots U12 and U4, generates a pulse to drive the PAM detector, the sample delay circuit and the clamp circuit. The pulse is at horizontal (line) rate.

The signal into U12 is inverted sync from the output of inverter U9D. This signal is identical to that from the sync stripper U2 (refer to sync stripper, paragraph 4.3.1.1.1, and Figure 4-5).

The leading (positive-going) edge of the sync signal triggers one-shot U12 which generates a 4- μ s (positive-going) pulse. The 4- μ s pulse from U12 is fed to the input of one-shot U4. U4 is a non-retriggering 47- μ s one-shot. The time constant of U4 is set longer than twice horizontal rate so that retrigger will not occur at this rate (during the vertical intervals).

The 47- μ s pulse from the output of the timing circuit follows three paths, one to the Video Clamp circuit (Internal), one to the PAM Detector circuit, and one to the Sampling circuit (Internal).

4.3.1.1.3 Video Clamp Circuit

The Video Clamp circuit clamps the video signal (sync tip) to ground. The video clamp may be operated in two modes: Internal or External. In the Internal mode, the clamp driver source is the sync stripper (Splitter Timing module A3) output. In the External mode, the clamp driver source is the REGEN SYNC signal from an RCA TA-19 Processing Amplifier.

4.3.1.1.3.1 Internal Sync

(Refer to V/A Input (A2) schematic diagram, Figure 6-3; Splitter Timing (A3) schematic diagram, Figure 6-4; and Splitter Clamp and Sample timing diagram Figure 4-6).

The Video Clamp circuit (Internal Sync) consists of one-shot A3-U3, driver A2-Q6,7 and clamp A2-Q2. The clamp one-shot (A3-U3) receives a 47- μ s pulse from A3-U4. The leading (positive-going) edge of the input signal triggers the one-shot which generates a 1- μ s pulse (refer to timing diagram, Figure 4-6). The 1- μ s pulse from

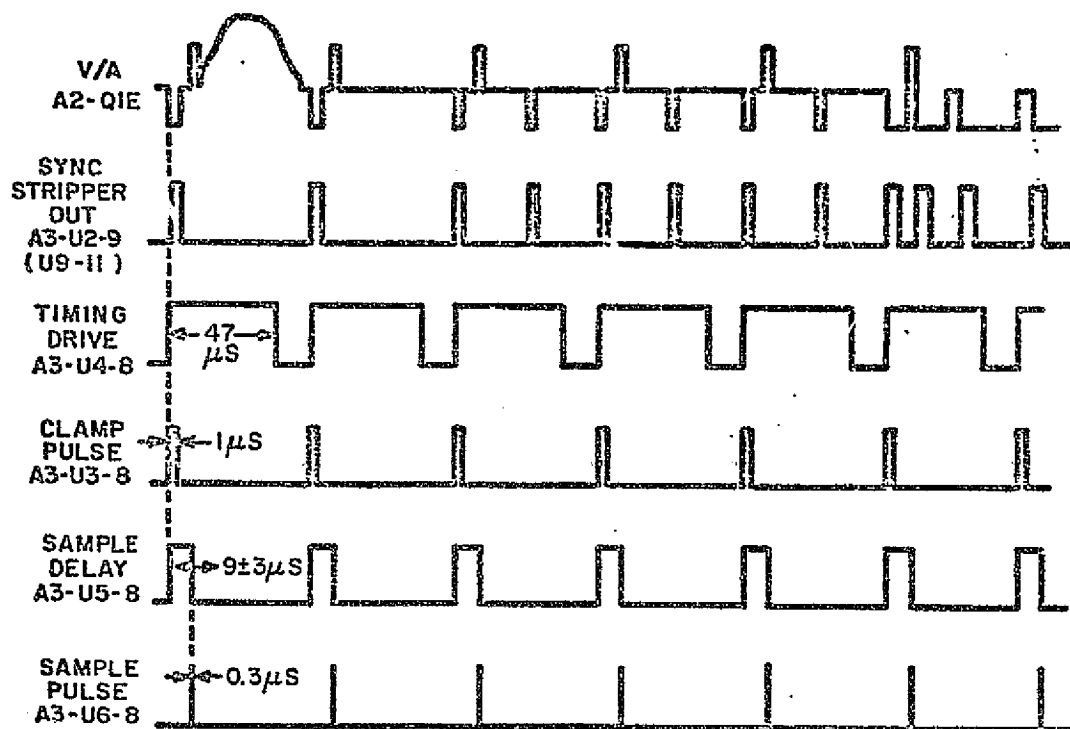


Figure 4-6. Splitter, Clamp and Sample Timing Diagram
(internal sync)

the output of U3 is fed out of the Splitter Timing module on connector pin 8 (clamp pulse). From A3-8 the clamp pulse is fed to pin 8 of the sync switch (S4A) located on the front panel. When the sync switch is in the INT position, the internal clamp pulse is fed through the switch to the Video/Audio Input module (A2). In A2 the clamp pulse is fed from connector pin 8 to the clamp driver (Q6,7) which drives the video clamp (Q2). The video clamp is turned ON during the duration of the 1-μs pulse and is turned OFF when the pulse is not present. Therefore, the video signal is clamped to ground for 1 μs at the leading edge of each horizontal pulse (and at horizontal rate during the vertical interval).

The signal from the video clamp (Q2) is fed through dual emitter follower (Q3,4) to the sampling switch (Q5).

4.3.1.1.3.2 External Sync

(Refer to External Sync (A4) schematic diagram, Figure 6-5; V/A Input (A2)

schematic diagram, Figure 6-3; and Splitter, Clamp and Sample timing diagram, Figure 4-7).

The external clamp circuit consists of an inverter (Q1), timing driver (U1,2), clamp delay one-shot (U5) and clamp pulse one-shot (U6) on the A4 module, sync switch (S4A on the front panel, and clamp driver (Q6,7) and clamp (Q2) on the A2 module.

The External Sync signal enters the Audio/CTE Splitter/Interleaver at the SPLITTER SYNC IN connector (J28) located on the rear panel. The sync signal is fed from J28 to A4-32 and 33 (Ground).

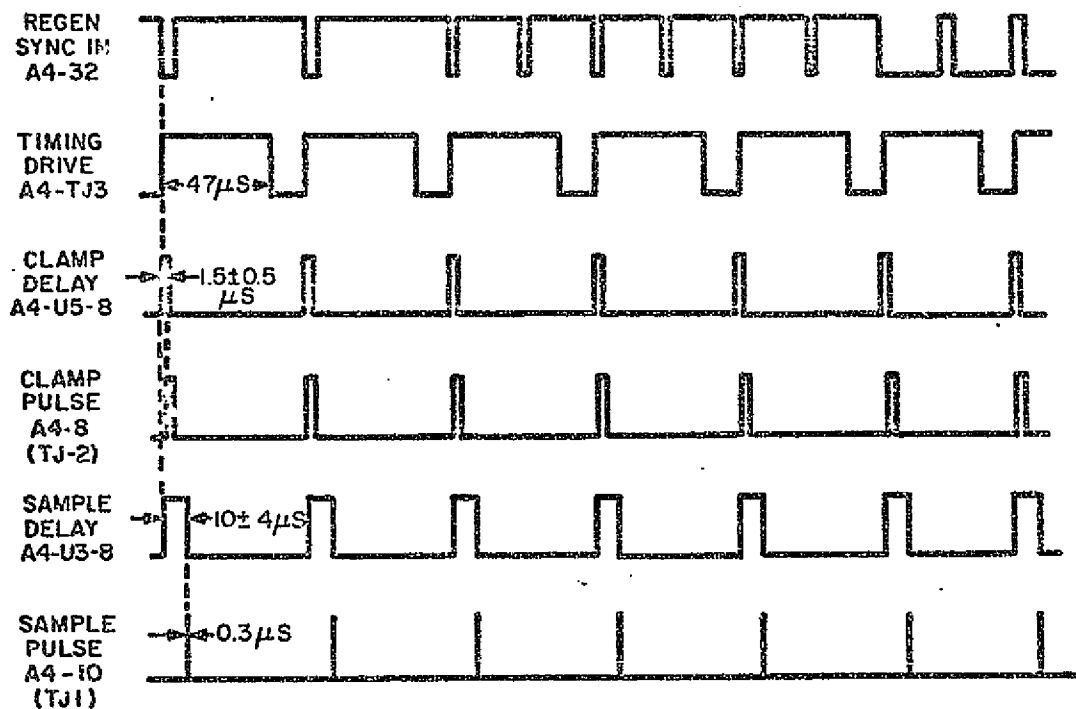


Figure 4-7. Splitter, Clamp and Sample Timing Diagram (external sync)

In the A4 module the signal is fed to inverter Q1. The output of Q1 is fed to one-shot U1. U1 triggers on the leading (positive-going) edge of the input pulse and generates a 4- μ s pulse. This 4- μ s pulse is fed to one-shot U2. U2 is a non-retriggering, 47- μ s one-shot, so that output pulses occur only at the horizontal rate. The output signal from U2 follows two paths, one to the Clamp delay one-shot (U5) and the other to the Sample delay one-shot (U3).

Clamp delay one-shot (U5) triggers on the leading (positive-going) edge of the 47- μ s input pulse and generates a positive-going pulse. The width of the pulse at the output of U5 is determined by the setting of CLAMP DELAY control R12 (approximate range 1.0 to 2.0 μ s). The Clamp delay pulse is fed to the input of Clamp pulse one-shot U6. The Clamp one-shot pulse (U6) triggers on the trailing (negative-going) edge of the Clamp delay pulse; therefore, the clamp pulse one-shot (U6) generates a 1- μ s wide pulse delayed by 1.5 \pm 0.5 μ s from the leading edge of the SPLITTER SYNC input pulse.

The clamp pulse is fed from U6 to connector pin 8. From A4-8 the clamp pulse is fed to pin 9 of the SYNC switch S4A, located on the front panel. When the SYNC switch is in the EXT position, the External clamp pulse is fed through the switch to the Video/Audio Input module (A2). In A2 the External clamp pulse follows the same path as described above for the Internal clamp pulse, paragraph 4.3.1.1.3.1.

4.3.1.1.4 Sampling Circuit

The function of the Splitter Sampling circuit is to sample the V/A signal during the PAM interval, to hold the sample between PAM intervals, and to filter the sampled signal, thereby recovering the audio information.

The Sampling circuit may be operated in two modes: Internal or External. In the Internal mode, the Sampler driver source is the sync stripper (Splitter Timing module A3) output. In the External mode, the sampling circuit driver source is the REGEN SYNC signal from the RCA TA-19 Processing Amplifier.

4.3.1.1.4.1 Internal Sync

(Refer to V/A Input (A2) schematic diagram, Figure 6-3; and Splitter Timing (A3) schematic diagram, Figure 6-4).

The sampling circuit consists of dual emitter follower A2-Q3, sampler switch A2-Q5, hold capacitor A2-C8, isolation amplifier A2-U2, AUDIO LEVEL control A2-R23, active low pass filter A2-U3A, B sampler driver A2-Q8, 9, sample delay one-shot A3-U5, sample delay control A3-R21, sample pulse one-shot A3-U6, SPLITTER TIMING control (R14) and SYNC switch (S4A,B).

The Sample delay one-shot A3-U5 receives a 47- μ s pulse from A3-U4 (refer to paragraph 4.3.1.1.2 for description of Timing Circuit). The leading (positive-going) edge of the input signal, triggers the one-shot (refer to timing diagram, Figure 4-6) which generates a 9 \pm 3 μ s pulse (adjusted by SAMPLE DELAY control A3-R21 and SPLITTER TIMING control R14). The Sample Delay pulse is fed from A3-U5 to the input of Sample pulse one-shot U6. One-shot U6 triggers on the trailing (negative-going) edge of the sample delay pulse. Therefore, the sample pulse one-shot U6 generates a 0.3- μ s pulse, delayed by approximately 9 μ s from the leading edge of the splitter sync stripper output pulse.

The sample pulse signal is fed from U6-8 to connector pin 10. From A3-10 the Sample pulse is fed to pin 2 of the SYNC switch S4A located on the front panel. When the SYNC switch is in the INT position, the Internal sample pulse is fed through the switch to the Video/Audio module (A2 pin 10). In A2 the Sample pulse is fed from connector pin 10 to the sampling switch driver (Q8,9) which drives the sampling switch (Q5). The sampling switch is turned ON during the duration of the 0.3- μ s sampling pulse and is turned OFF when the pulse is not present.

During the 0.3- μ s period, when the sampling switch (Q5) is turned on, hold capacitor C8 is charged to the level of the PAM signal (at Video Clamp Q2), through emitter follower Q3,4. During the interval between sample pulses, Sampling Switch Q5 is OPEN and Capacitor C8 "holds" the sampled PAM level.

The sampled PAM signal is fed from hold capacitor Q8 through isolation amplifier U2 to AUDIO LEVEL control R23. From the arm of R23 the sampled PAM level is fed through the low pass filter (U3A,B). This is an active four-pole Butterworth low pass filter with a cutoff frequency of 3 kHz. From the output of the low pass filter (U3B) the sampled and filtered PAM signal (audio) is fed to connector pin 26 (VTR AUDIO OUTPUT).

4.3.1.1.4.2 External Sync

(Refer to V/A Input (A2) schematic diagram, Figure 6-3; External Sync (A4) schematic diagram, Figure 6-5; and Timing Diagram, Figure 4-7).

The external sampling circuit consists of dual emitter follower A2-Q3,4, sampling switch A2-Q5, hold capacitor A2-C8, emitter follower A2-U2, AUDIO LEVEL control A2-R23, active low pass filter A2-U3A,B, and sampler driver A2-Q8,9 (the above components are located on the V/A Input module (A2) and are also part of the Internal Sampling circuit described above, paragraph 4.3.1.1.2.1). The external sampling circuit also consists of A4-Q1, U1, U2 (also used in external clamp circuit), Sample Delay one-shot A4-U3 and Sample pulse one-shot A4-U4. Front panel SYNC switch (S4A,B) and SPLITTER TIMING control R14 is also used.

The external sync signal enters the Audio/CTE Splitter/Interleaver unit at the SPLITTER SYNC in connector (J28) located on the rear panel. The sync is fed from J28 to A4-32 and 33 (ground).

In the A4 module the signal is fed from connector pin 32 to inverter Q1. The output of Q1 is fed to one-shot U1. U1 triggers on the leading (positive-going) edge of the input pulse and generates a 4- μ s pulse. This pulse is fed to one-shot U2. U2 is a non-retriggering 47- μ s one-shot, so that output pulses occur only at the horizontal rate. The output signal from U2 follows two paths, one to the clamp delay one-shot (U5), described in paragraph 4.3.1.1.3.2 above, and the other to the sample delay one-shot (U3).

Sample delay one-shot (U3) triggers on the leading (positive-going) edge of the 47- μ s input pulse and generates a positive-going pulse. The width of the pulse at the output (U3-8) is determined by the setting of the SAMPLE DELAY control (A4-R9) and the SPLITTER TIMING control (R14), located on the front panel; the width is approximately 10 μ s. The sample delay pulse is fed to the input of sample pulse one-shot U4. U4 triggers on the trailing (negative-going) edge of the sample delay pulse. Therefore, the sample pulse one-shot (U4) generates a 0.3- μ s wide pulse delayed by approximately 10 μ s from the leading edge of the SPLITTER SYNC input pulse.

The sample pulse is fed from U4-8 to connector pin 10. From A4-10 the sample pulse is fed to pin 3 of the SYNC switch (S4A) located on the front panel. When the SYNC switch is in the EXT position, the External sample pulse is coupled through the switch to the Video/Audio Input module (A2). In A2 the External sample pulse follows the same path described above for the Internal Sample pulse, paragraph 4.3.1.1.4.1.

4.3.1.4 Video/CTE

Refer to Splitter functional diagrams Figure 4-2; CTE demux and display functional diagram, Figure 4-10; CTE demux schematic diagram, Figure 6-12; CTE display schematic diagram, Figure 6-13, and CTE mux and demux timing diagrams, Figures 4-11 and 4-12.

The CTE demux board (A11) accepts the clamp pulse and V-sync (detector) signals as timing references to operate counters which provide the controlled clock pulses for a shift register. The board also accepts the video signal which is fed into the shift register during line 17. The line 17 parallel output information is fed to the CTE display board (A12) which transfers the CTE data to LED numerical displays.

The basic clock pulses for the shift register are derived from the 629.37 kHz VCO (A11 U3). This VCO is part of a phase-locked-loop consisting of phase detector U1, active filter U2A, amplifier U2B and a $\frac{1}{40}$ counter U4 and U5. The reference signal

for this phase-locked-loop is obtained from the sync tip clamp pulse, at the horizontal line rate (15.73 kHz) after passing through inverter U6A and one-shot U7. The delay timing of U7 is approximately 10 microseconds and is controlled by R16. Pulses from U7 are also applied to one input of Nand gate U13A.

The other input to U13A is obtained from set-reset flip-flop U13C,D which is triggered by the externally applied V-sync (detector) signal. The pulses from U7 are also applied to one input of Nand gate U13A.

The other input to U13A is obtained from set-reset flip-flop U13C,D which is triggered by the externally applied V-sync (detector) signal. The pulses from the U7 are then applied through inverter U13B to a $\div 14$ counter (U15, U14A and U14B). Because the V-sync (detector) signal occurs at line 4, the output of the $\div 14$ counter identifies line 17, at which time flip-flop U13C,D is reset. At the start of line 17 gate U8B is turned on allowing the pulses from VCO U3 to pass on to the $\div 32$ counter (U9, U10, U12 and U11 D,E,F.). The output from the $\div 32$ counter passes through the low-to-high edge detector (U8D, U11A,B,C) to produce a strobe pulse which resets both counters.

Thus, a controlled group of 32 clock pulses synchronized to occur at line 17 passes on to shift register U17, U18, U19, U19. Simultaneously, the video signal is applied to the shift register data input through inverter U16 resulting in a serial-to-parallel conversion of the CTE information contained in line 17 of the video signal.

The parallel outputs of the shift register are connected to the LED display units located on the CTE Display Module (A12), which produces a numerical day-hour-minute-second display.

In the -504 version, the CTE information is also supplied to three remote indicators through three CTE Output Buffer modules (A13, A14, A15).

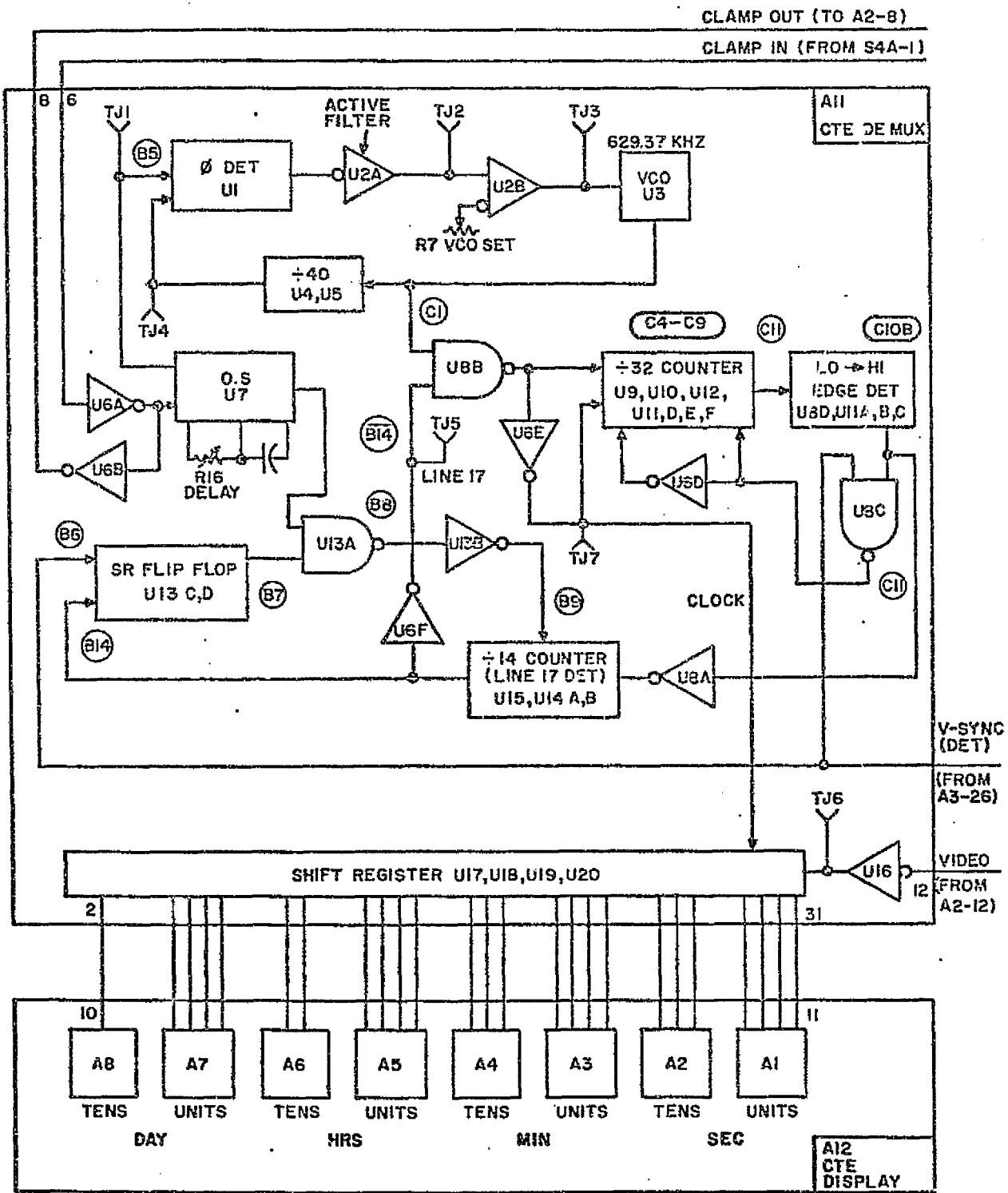


Figure 4-10. CTE Demux and Display Functional Diagram

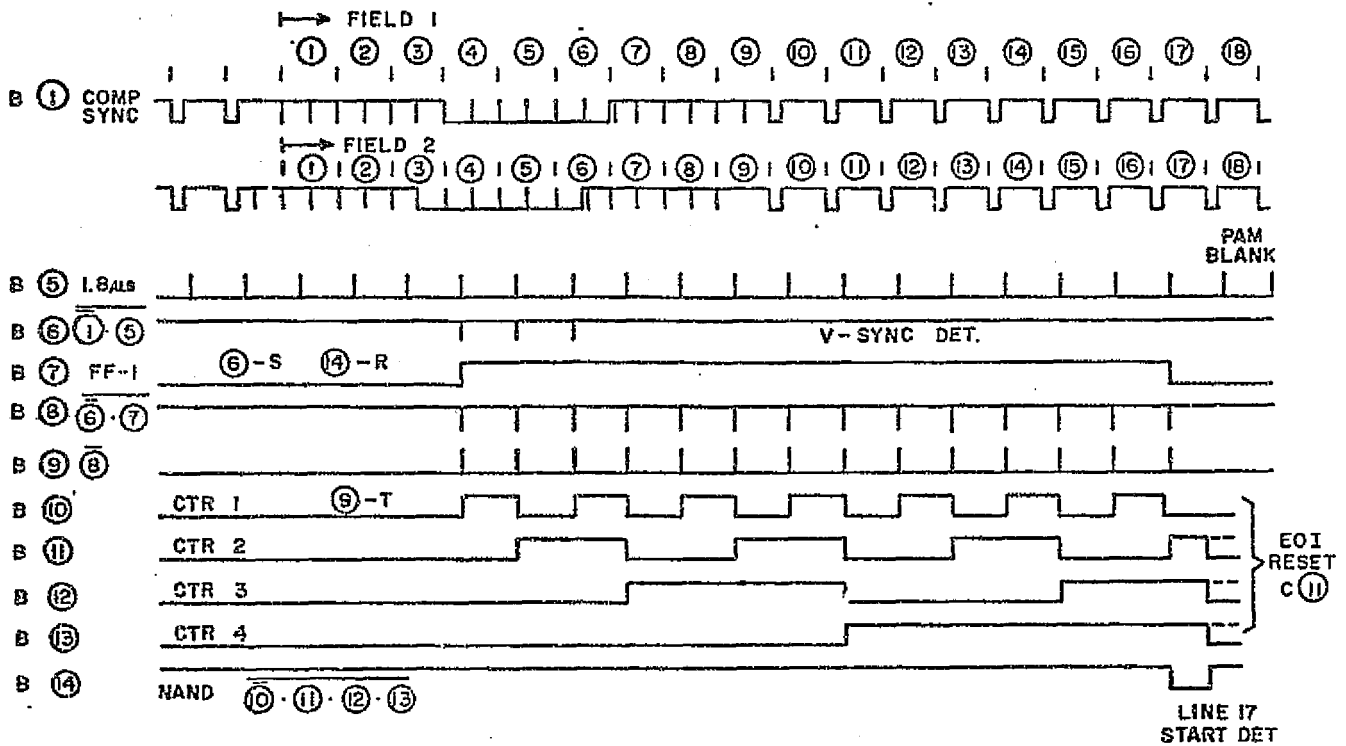


Figure 4-11. CTE Mux and Demux, Timing Diagram A

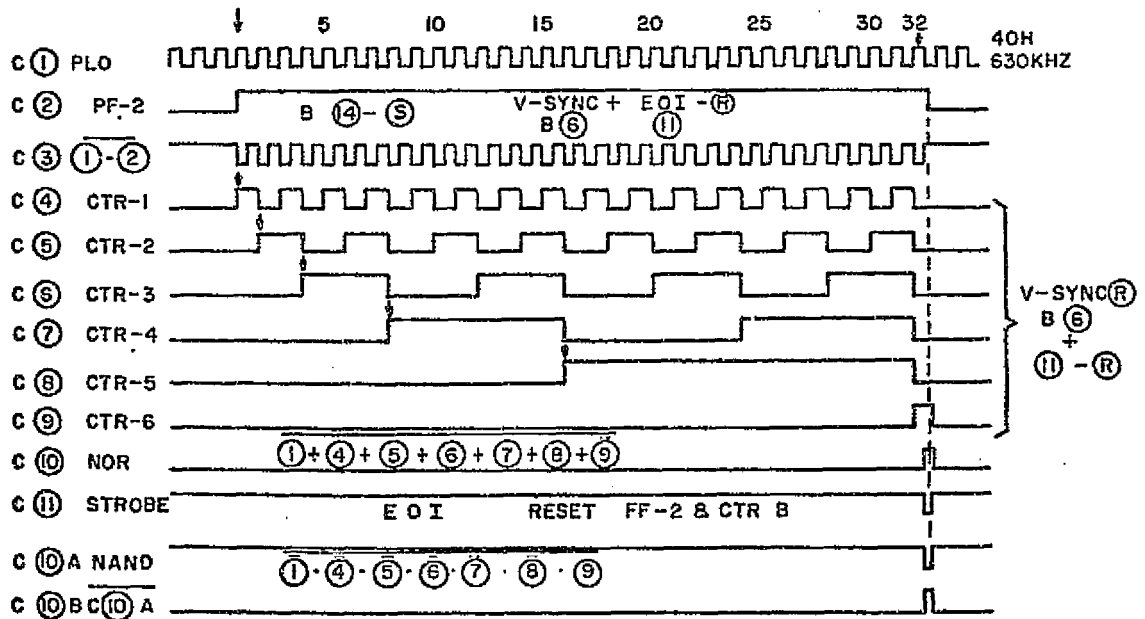


Figure 4-12. CTE Mux and Demux, Timing Diagram B

SECTION 5

MAINTENANCE

5.1 INTRODUCTION

Maintenance of the CTE Splitter is relatively simple since it may be readily checked while installed in a rack. Test jacks are provided on the plug-in modules so that key points in the circuits may be easily monitored by retracting the unit from the rack, on its slides and using an oscilloscope (refer to Figure 5-1).

This maintenance section consists of two parts: preventative maintenance and corrective maintenance.

5.2 PREVENTIVE MAINTENANCE

Very little preventive maintenance is required. No lubrication is required. Periodic cleaning of the unit while installed in the rack is recommended. Power supply voltages should be checked periodically at test jacks located at the rear of the unit.

The lamp of the Power On indicator is a neon type.

REPLACEMENT LAMPS

1. Power On Indicator: NB51

5.3 CORRECTIVE MAINTENANCE

5.3.1 Alignment Procedure

Refer to the following figures:

1. Figure 5-3. Top View of Unit, Test Jacks and Setup Controls

Test Equipment

The following test equipment (or equivalent) is required):

1. TV Signal Generator (Telemet Stairstep Generator Model 3502).
2. Processing Amplifier (RCA Model TA-19).
3. DC Voltmeter
4. Oscilloscope (Tektronix 547 with type 1A1 plug-in).

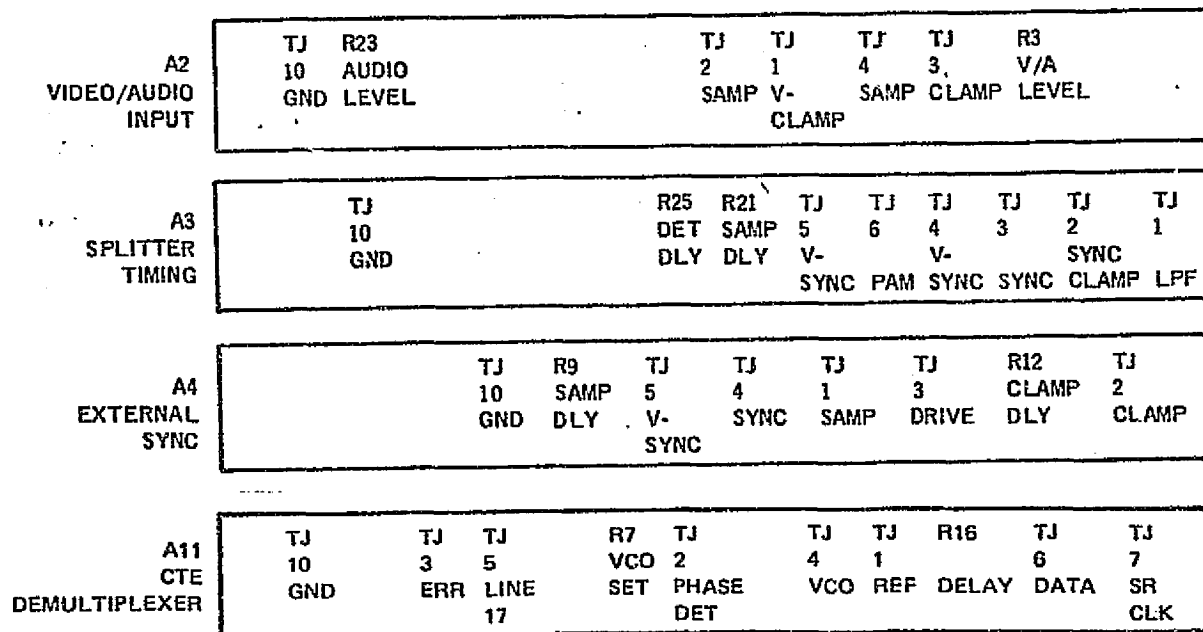


Figure 5-3. Module Nest Top View, Test Jacks and Setup Controls

5.3.1.1 DC Voltage Setup

Monitor dc voltages at test jacks on the rear panel. Voltage should be within 0.1 volt of specified voltage; if not, adjust corresponding power supply.

5.3.1.2 Splitter Alignment

(Refer to Figure 5-3 for location of module test jack and controls).

1. Connect the INTERLEAVED V/A/CTE to the SPLITTER V/A INPUT (J1), located on the rear panel.
2. Monitor the signal at the unit front panel SPLITTER V/A INPUT test jacks. Adjust the input for a composite video signal level of 1.0 V p-p at the test jacks (refer to Figure 3-4).

5.3.1.2.1 Video Clamp Level Adjustment (refer to Figure 5-8)

1. Set front panel SYNC select switch in the INT position.
2. Monitor the signal at test jacks A2-TJ1 (V-CLAMP). Sync scope from A3-TJ3 (SYNC).
3. Adjust A2R3 (V/A LEVEL) control for 2.0 V p-p at A2-TJ1.

5.3.1.2.2 Detector Timing Adjustment (refer to Figure 5-19)

1. Monitor signal at test jack A3-TJ6 (PAM). Set scope on internal SYNC.
2. Adjust A3-R25 (DET DLY) control fully clockwise. Observe waveform at test jack A3-TJ6 (PAM) and adjust A3-R25 (DET DLY control) counter-clockwise for a pulse width of 2 μ s.

NOTE: No pulse will appear until A3-R25 is rotated CCW from its extreme CW position.

5.3.1.2.3 External Sync Adjustments

5.3.1.2.3.1. Clamp Delay Adjustment (refer to Figure 5-9)

1. Set the front panel SYNC select switch in the EXT position.
2. Monitor the signal at test jack A2-TJ1 (V-CLAMP). Sync scope internally.
3. Adjust A4-R12 (CLAMP DLY) so that the leading edge of the clamp pulse is approximately 1 μ s after the beginning of the horizontal sync pulse (as shown in Figure 5-9).

5.3.1.2.3.2 Sample Delay Adjustment (refer to Figure 5-13)

1. Set SYNC select switch in EXT position.
2. Monitor the signal at test jack A2-TJ1 (V-CLAMP) using scope CH-1 and the signal at A2-TJ4 (SAMP) using scope CH-2. Use ALT sweep; sync scope from A3-TJ3 (SYNC).

3. Adjust A4-R9 (SAMP DLY) control to place the sample pulse (trailing edge) in the corner of the PAM sample.

NOTE: Sample pulse position may also be observed in the PAM pulse (A2TJ1). Sample pulse timing may, therefore, be adjusted by using only one channel of the scope.

5.3.1.2.4 CTE Demux Adjustment (refer to Figure 5-48)

1. Monitor signal at A11-TJ4 (VCO).
2. Connect shorting jumper between A11-TJ2 and A11-TJ4.
3. Adjust A11-R7 (VCO set) for a signal frequency of 15.74 kHz at A11-TJ4.
4. Remove shorting jumper.
5. Observe number sequence on the CTE Display (front panel.).
6. Adjust A11-R16 (Delay) for a number sequence presentation of 08 08 08 08.

5.3.2 Troubleshooting

For troubleshooting, refer to the following:

Functional description, Section 4, and functional diagrams, Figure 4-2 (Splitter).

Schematic diagrams, Figure 6-1 (Audio/CTE Splitter), and Figures 6-2 through 6-10 (module schematics).

Waveforms of signals at the front panel test jacks, Figures 3-2 through 3-10.

Waveforms of signals at module test jacks, Figures 5-6 through 5-54.

Location of module test jacks and controls, Figure 5-3.

Location of components on the modules, Figures 5-55 through 5-66.

Table 5-1, Splitter Signal Levels.

Table 5-2, Interleaver Signal Levels.

NOTE: Tables 5-1 and 5-2 are for use in troubleshooting and may be used in conjunction with the corresponding functional diagram (Splitter, Figure 4-2, and Interleaver, Figure 4-13).

The connectors and jacks are listed in same order as shown in the corresponding functional diagram.

Alignment Procedures, paragraph 5.3.1.

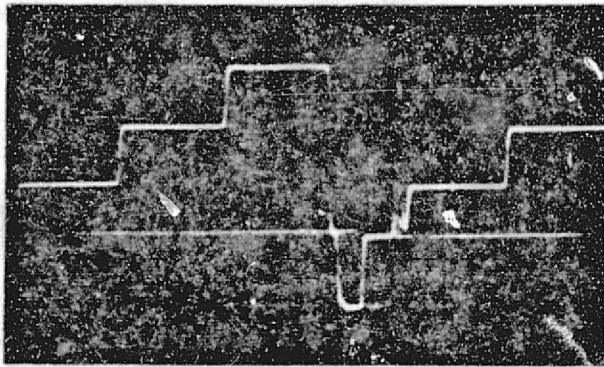


Figure 5-8. A2TJ1 V-Clamp

Scope Sync - A3TJ3
 Vert. Scale - 0.5 V/cm dc
 Hor. Scale - 10 μ s/cm

— Gnd

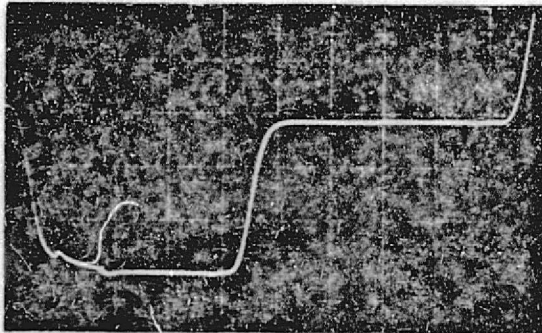


Figure 5-9. A2TJ1 V-Clamp (External Sync Clamp)

Scope Sync - INT
 Vert. Scale - 0.2 V/cm dc
 Hor. Scale - 1 μ s/cm

— Gnd

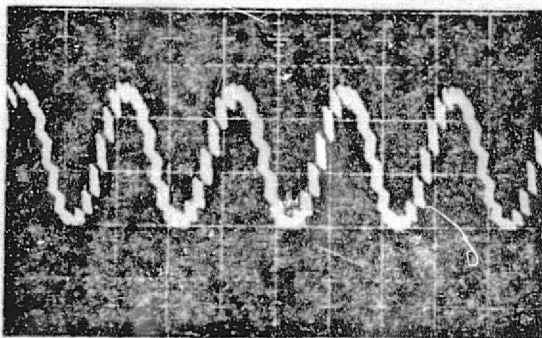


Figure 5-10. A2TJ2 Sample

Scope Sync - INT
 Vert. Scale - 0.5 V/cm dc
 Hor. Scale - 0.5 ms/cm

— Gnd



Figure 5-11. A2TJ3 Clamp

Scope Sync - A3TJ3
 Vert. Scale - 5 V/cm dc
 Hor. Scale - 1 μ s/cm

— Gnd

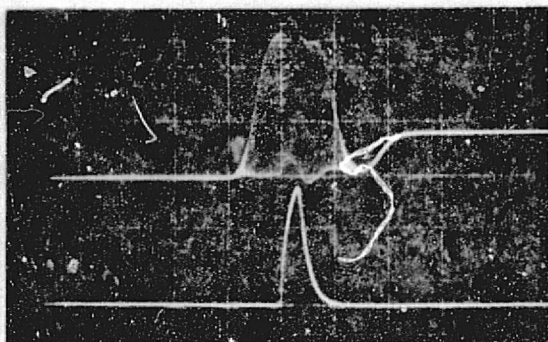


Figure 5-12. A2TJ1 V-Clamp (top)
A2TJ4 Sample (bottom), Internal

Scope Sync - A3TJ3
Vert. Scale - 0.5 V/cm (top)
5.0 V/cm (bottom)
Hor. Scale - 1 μ s/cm

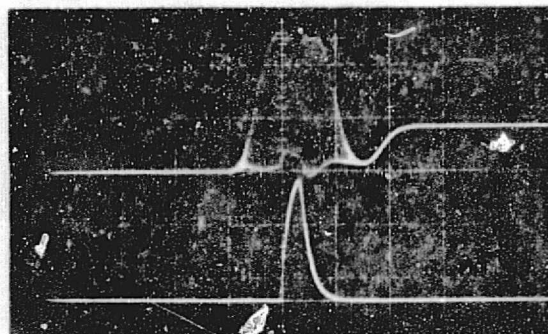


Figure 5-13. A2TJ1 V-Clamp (top)
A2TJ4 Sample (bottom), External

Scope Sync - A3TJ3
Vert. Scale - 0.5 V/cm (top)
5.0 V/cm (bottom)
Hor. Scale - 1 μ s/cm

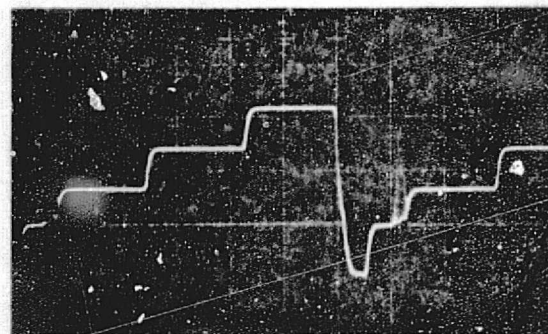


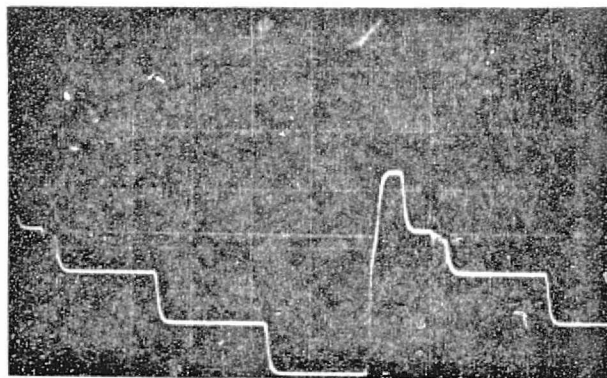
Figure 5-14. A3TJ1 LPF

Scope Sync - A3TJ3
Vert. Scale - 0.5 V/cm dc
Hor. Scale - 10 μ s/cm

Gnd

Figure 5-15. A3TJ2 Sync Clamp

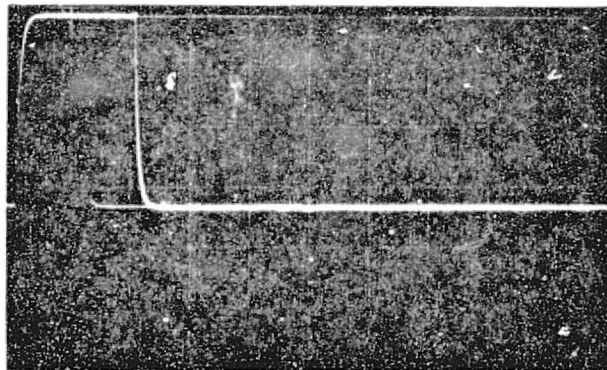
Scope Sync - A3TJ3
Vert. Scale - 2.0 V/cm dc
Hor. Scale - 10 μ s/cm



— Gnd

Figure 5-16. A3TJ3 Sync

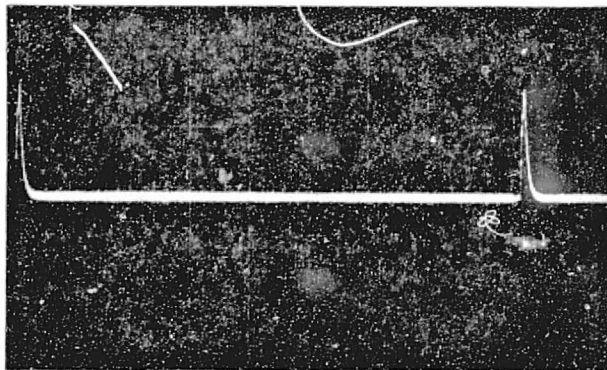
Scope Sync - INT
Vert. Scale - 1.0 V/cm dc
Hor. Scale - 2 μ s/cm



— Gnd

Figure 5-17. A3TJ4 V-Sync

Scope Sync - INT
Vert. Scale - 1.0 V/cm dc
Hor. Scale - 2 ms/cm



— Gnd

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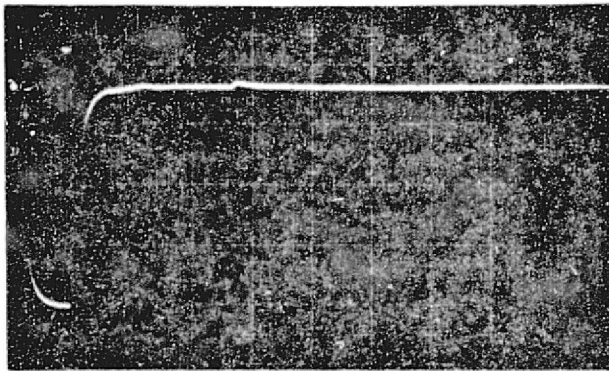


Figure 5-18. A3TJ5 V-Sync (Detector)

Scope Sync - INT
Vert. Scale - 1.0 V/cm dc
Hor. Scale - 1 μ s/cm

— Gnd

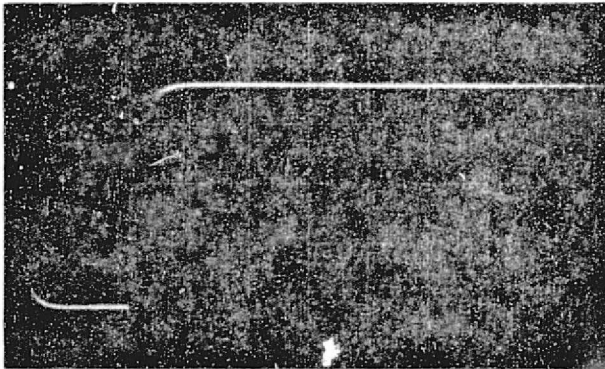


Figure 5-19. A3TJ6 PAM (Detector)

Scope Sync - INT
Vert. Scale - 1.0 V/cm dc
Hor. Scale - 1 μ s/cm

— Gnd

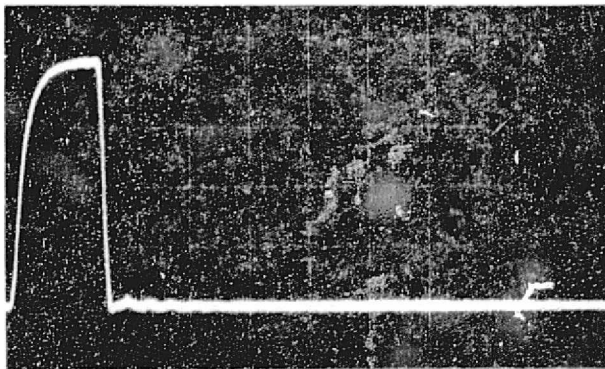


Figure 5-20. A4TJ1 Sample

Scope Sync - INT
Vert. Scale - 1.0 V/cm dc
Hor. Scale - 0.2 μ s/cm

— Gnd

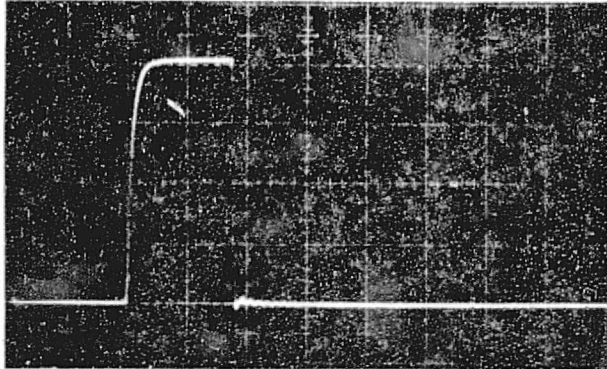


Figure 5-21. A4TJ2 Clamp

Scope Sync - INT
 Vert. Scale - 1.0 V/cm dc
 Hor. Scale - 0.5 μ s/cm

— Gnd

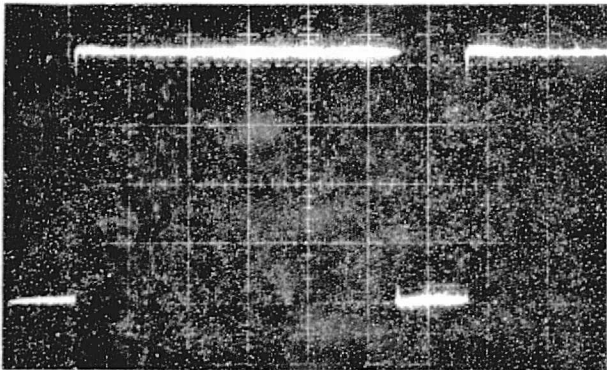


Figure 5-22. A4TJ3 Drive

Scope Sync - INT
 Vert. Scale - 1.0 V/cm dc
 Hor. Scale - 10 μ s/cm

— Gnd

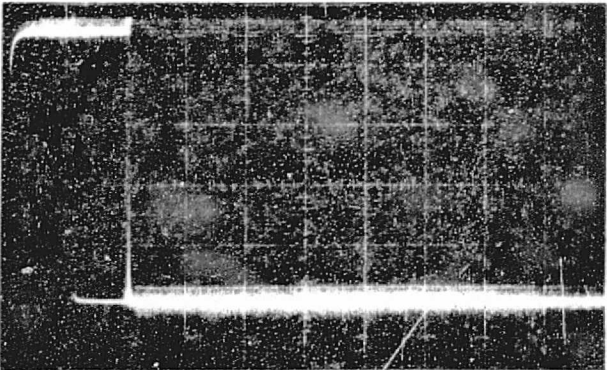


Figure 5-23. A4TJ4 Sync

Scope Sync - INT
 Vert. Scale - 1.0 V/cm dc
 Hor. Scale - 2 μ s/cm

— Gnd

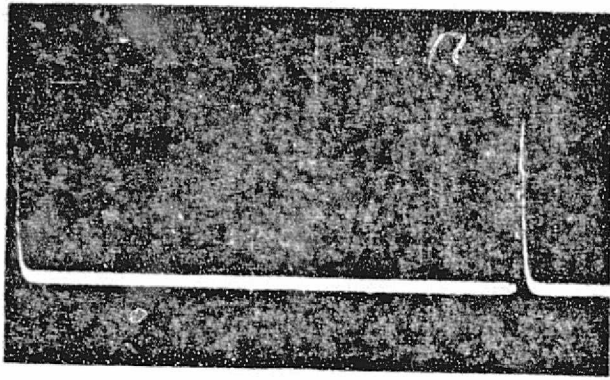


Figure 5-24. A4TJ5 V-Sync

Scope Sync - INT
 Vert. Scale - 1.0 V/cm dc
 Hor. Scale - 2 n. /cm

Gnd

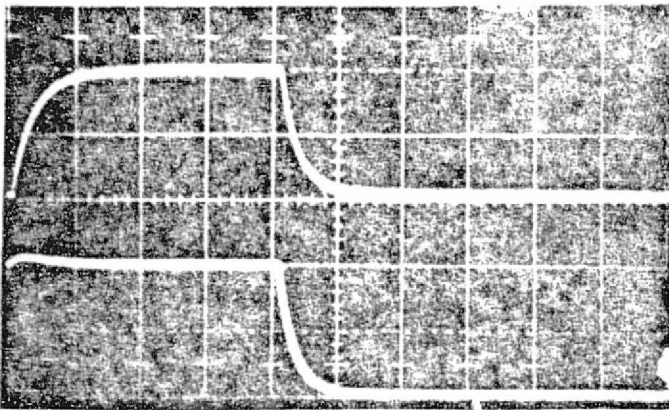


Figure 5-47. A5TJ1/A5TJ4 Reference/VCO
 (A11TJ1/A11TJ4 is similar)

Scope Sync - INT, Ch A, Chopped
 Vert. Scale - 2 V/cm dc
 Hor. Scale - 0.5 μ s/cm

Gnd

Gnd

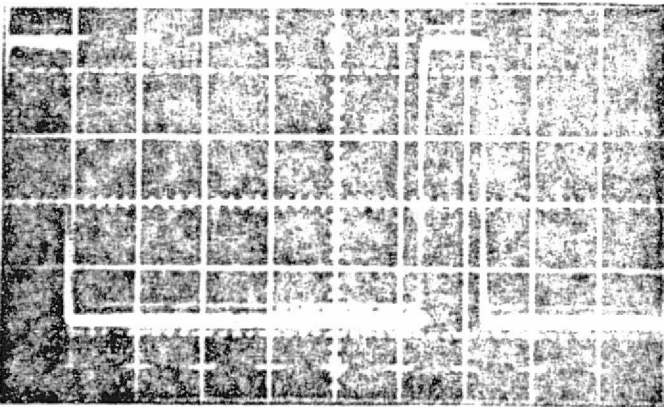


Figure 5-48. A11TJ1 Reference

Scope Sync - INT
 Vert. Scale - 1 V/cm dc
 Hor. Scale - 10 μ s/cm

Gnd

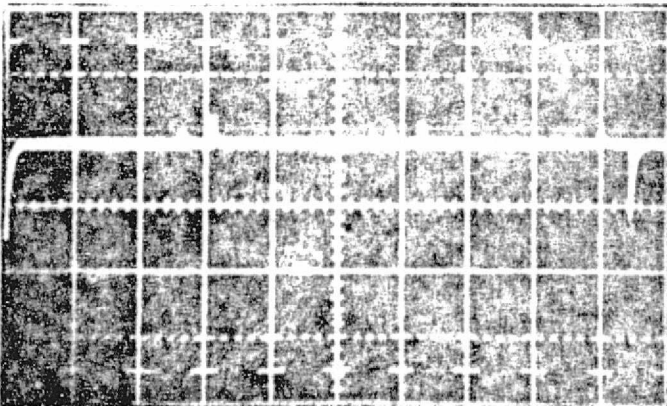


Figure 5-49. A11TJ2 Phase Detector

Scope Sync - INT
 Vert. Scale - 0.2 V/cm dc
 Hor. Scale - 20 μ s/cm

Gnd

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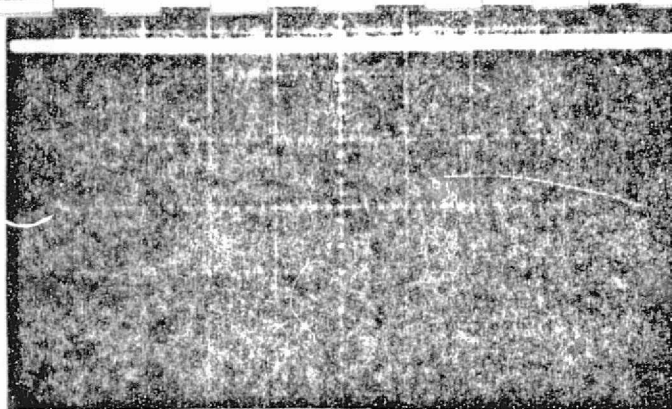


Figure 5-50. A11TJ3 Error

Scope Sync - INT
Vert. Scale - 1V/cm dc
Hor. Scale - 20 μ s/cm

Gnd

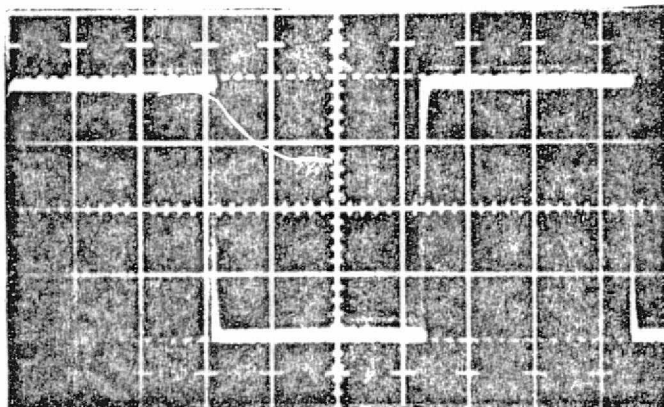


Figure 5-51. A11TJ4 VCO

Scope Sync - INT
Vert. Scale - 1 V/cm dc
Hor. Scale - 10 μ s/cm

Gnd

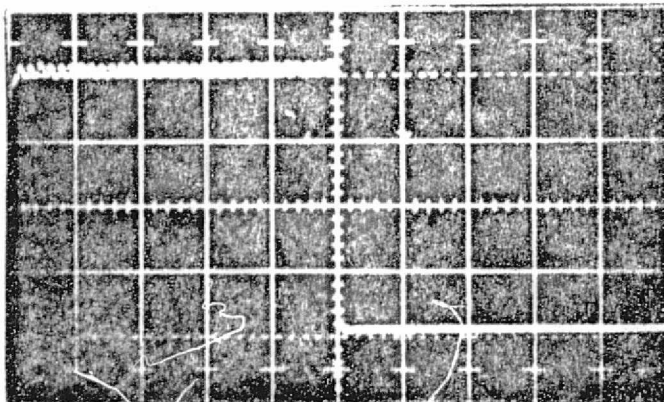


Figure 5-52. A11TJ5 Line 17

Scope Sync - INT
Vert. Scale - 1 V/cm dc
Hor. Scale - 10 μ s/cm

Gnd

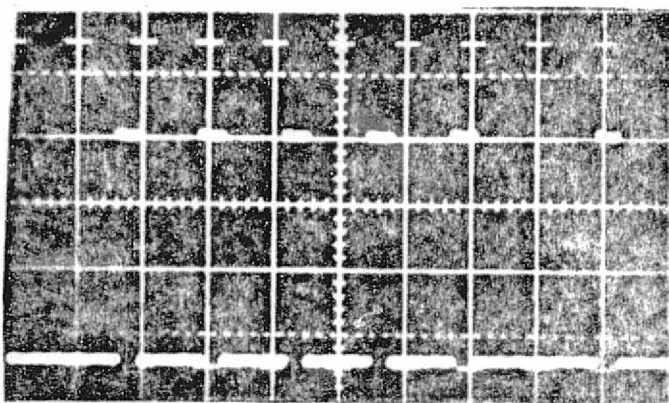


Figure 5-53. A11TJ6 Data

Scope Sync - A11TJ5
Vert. Scale - 1 V/cm dc
Hor. Scale - 5 μ s/cm

Gnd

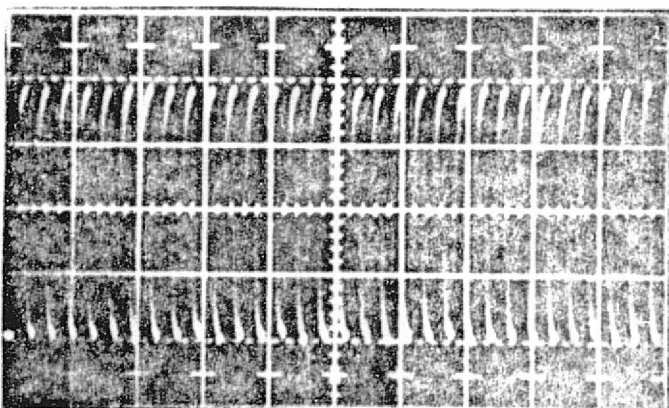


Figure 5-54. A11TJ7 Shift Register Clock

Scope Sync - A11TJ5
Vert. Scale - 1 V/cm dc
Hor. Scale - 5 μ s/cm

Gnd

TABLE 5-1. SPLITTER SIGNAL LEVELS

(Refer to Splitter Functional Diagram, Figure 4-2; Audio/CTE Splitter/Interleaver Schematic, Figure 6-1; and Module Schematics, Figures 6-2, 6-3, 6-4, 6-5, 6-10, 6-11, 6-12, 6-13)

Connector or Test Jack	Designation	Description	Level	Reference Figures	Remarks
J1	Splitter V/A Input	TV Signal	1.0 V p-p		Rear Panel BNC connector.
A10-1		TV Signal	1.0 V p-p		Same as J1 signal, except ac coupled.
TP1, TP2 (Gnd. A2-4)	Splitter V/A Input	TV Signal	1.0 V p-p	3-2, 3, 4	Front Panel test jacks. (ac coupled).
A2TJ1	V-Clamp	TV Signal	2.0 V p-p	5-8, 5-9	Sync Tip at 0 V dc.
A2TJ2	Sample	Recovered Audio (unfiltered)	1.3 V p-p	5-10	
A2-6	LPF Drive	TV Signal	2.0 V p-p		AC coupled.
A2-8	Clamp	1- μ s positive-going pulse	0 to +4.1 V p-p		
A2TJ3	Clamp	1- μ s positive-going pulse	-12 to 0 V p-p	5-11	
A2-10	Sample	0.3- μ s positive-going pulse	0 to +4.0 V p-p		

TABLE 5-1. SPLITTER SIGNAL LEVELS (Cont.)

Connector or Test Jack	Designation	Description	Level	Reference Figures	Remarks
A2TJ4	Sample	0.3- μ s positive-going pulse	-12 to 0 V p-p	5-12	
A3-6	LPF DRIVE	TV Signal	2.0 V p-p		Same as signal at A2-6.
A3-8	Clamp	1- μ s positive-going pulse	0 to +4.1 V p-p		
A3-10	Sample	0.3- μ s positive-going pulse	0 to +4.1 V p-p		
A3TJ1	LPF	TV Signal	1.6 V p-p	5-14	AC coupled.
A3TJ2	Sync Clamp	TV Signal	6.8 V p-p	5-15	Sync tip at approx. +0.6 V
A3TJ3	Sync	Stripped Sync positive-going pulses	3.1 V p-p	5-16	Base line at approx. -0.2 V
A3TJ4	V-Sync	200- μ s positive-going pulse	1.8 V p-p	5-17	Base line at approx. -0.2 V
A3TJ5	V-Sync(detector)	1- μ s negative-going pulse	0 to +3.7 V p-p	5-18	
J28	Splitter Sync In	TV Sync	+0.4 to -4.1 V p-p (75 ohm term)		Rear Panel BNC connector.
A4-32					Same as signal at J28.
A4 TJ4	Sync	TV Sync	0 to +4.5 V p-p	5-23	
A4 TJ5	V-Sync	200- μ s positive-going pulse	2.7 V p-p	5-24	Base line at approx. -0.6 V

TABLE 5-1. SPLITTER SIGNAL LEVELS (cont.)

Connector or Test Jack	Designation	Description	Level	Reference Figures	Remarks
A4 TJ3	Drive	47- μ s positive-going pulse	0 to +4.2 V p-p	5-22	Note: Duty cycle greater than 50%.
A4 TJ2	Clamp	1- μ s positive-going pulse	0 to +4.1 V	5-21	
A4-8	Clamp	1- μ s positive-going pulse	0 to +4.1 V p-p		Same as signal at A4 TJ2.
A4 TJ1	Sample	0.3- μ s positive-going pulse	0 to +4.1 V p-p	5-20	
A4-10	Sample		0 to +4.1 V p-p		Same as signal at A4 TJ1.
A11TJ1	Reference	9 μ sec pulse	0 to +4.3 V p-p	5-48	15.73 kHz prf
A11TJ2	Phase Detector	d. c.	-0.2 V d. c.	5-49	
A11TJ3	Error	d. c.	+4.2 V d. c.	5-50	
A11TJ4	VCO	15.734 kHz sq. wave	0 to 3.9 V p-p	5-51	
A11TJ5	Line 17	50 μ sec pulse	0 to +4 V p-p	5-52	
A11TJ6	Data	2 μ sec pulses	0 to +3.5 V p-p	5-53	08080808 pattern
A11TJ7	SR Clock	32 pulses	0 to +3.8 V p-p	5-54	629.37 kHz prf
J29 (-504 only)	CTE Outputs	TTL Logic	0 to +4V		25 Output Lines Per Module

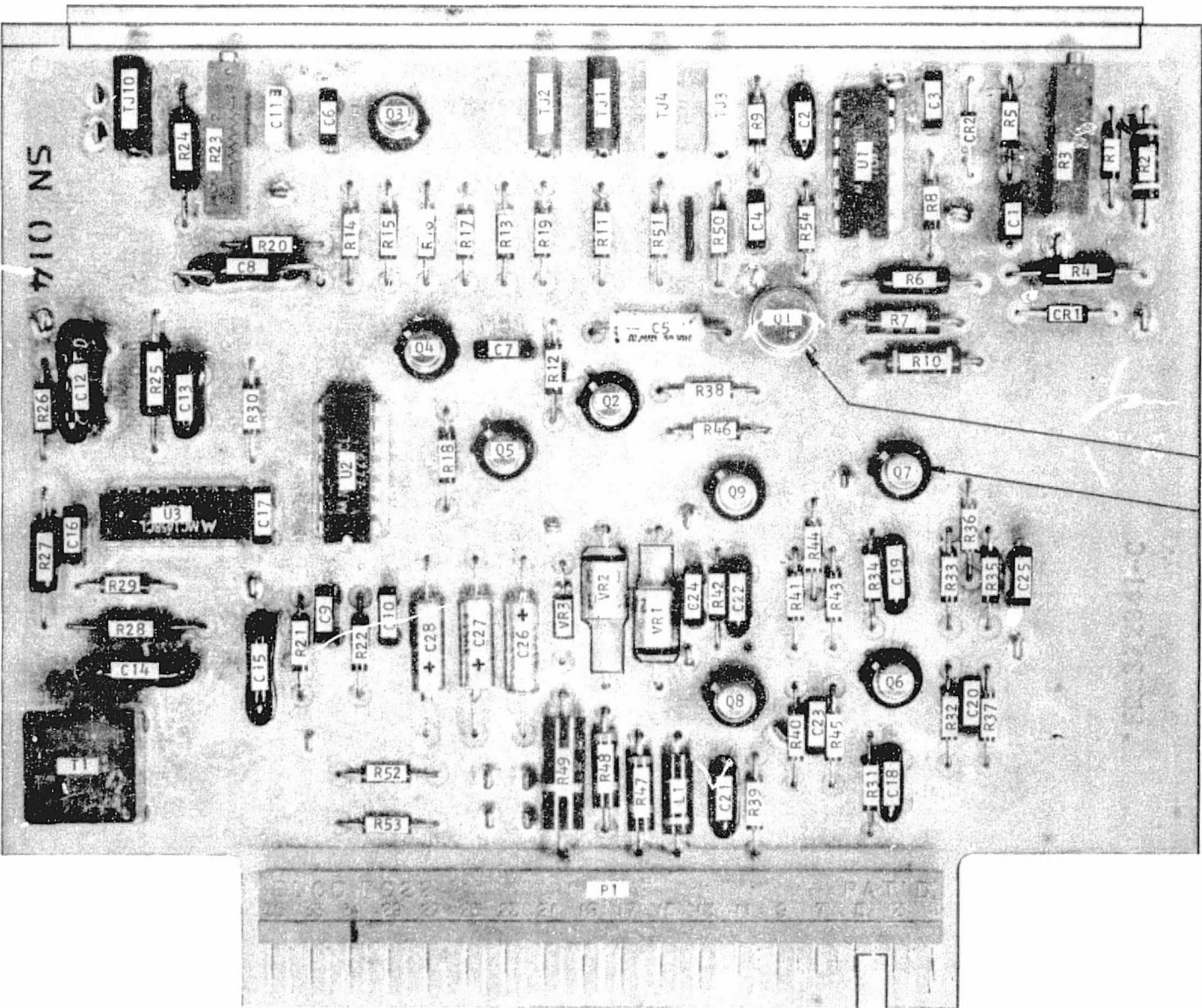


Figure 5-56. Module Layout, A2 (Video/Audio Input)

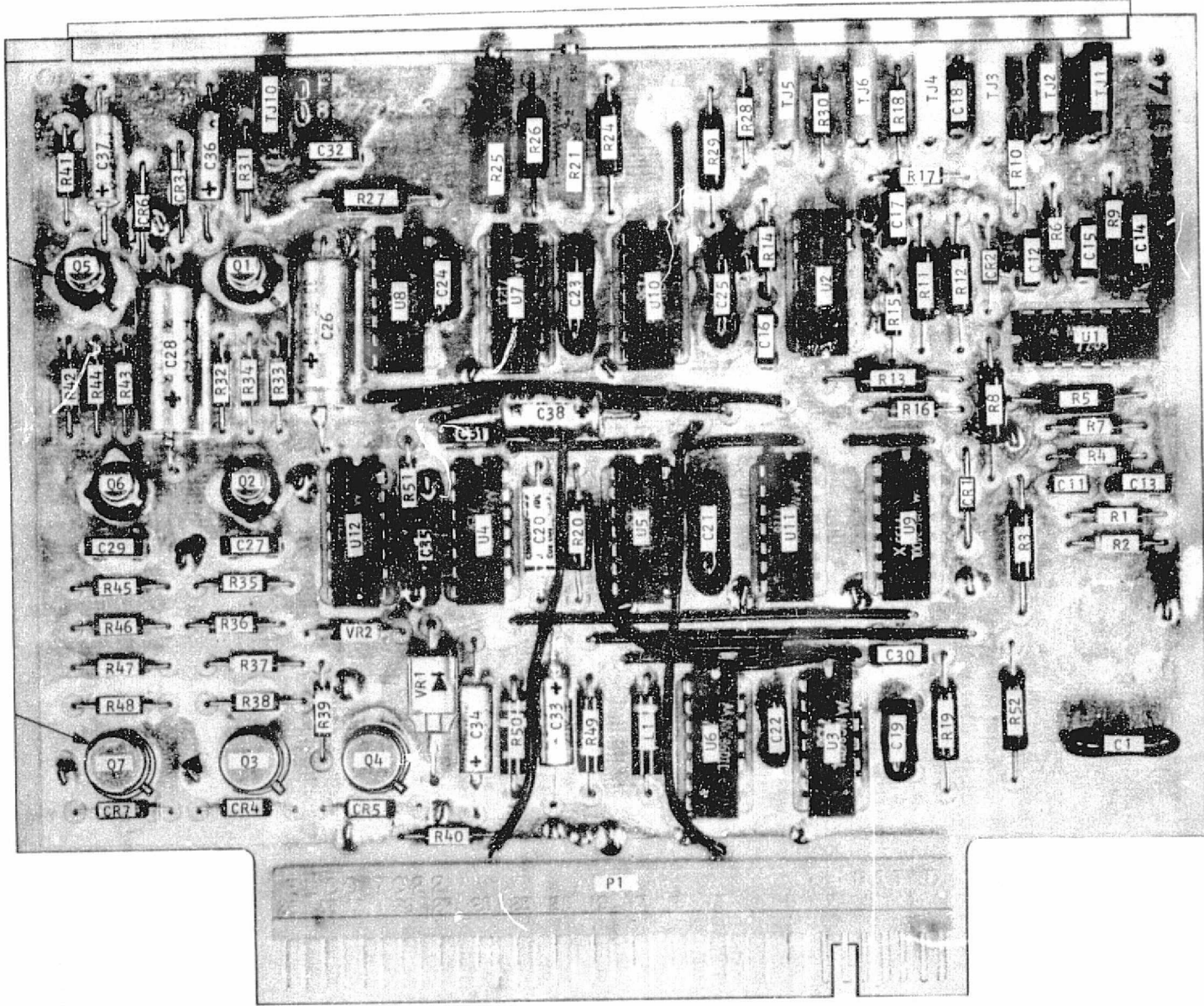


Figure 5-57. Module Layout, A3 (Splitter Timing)

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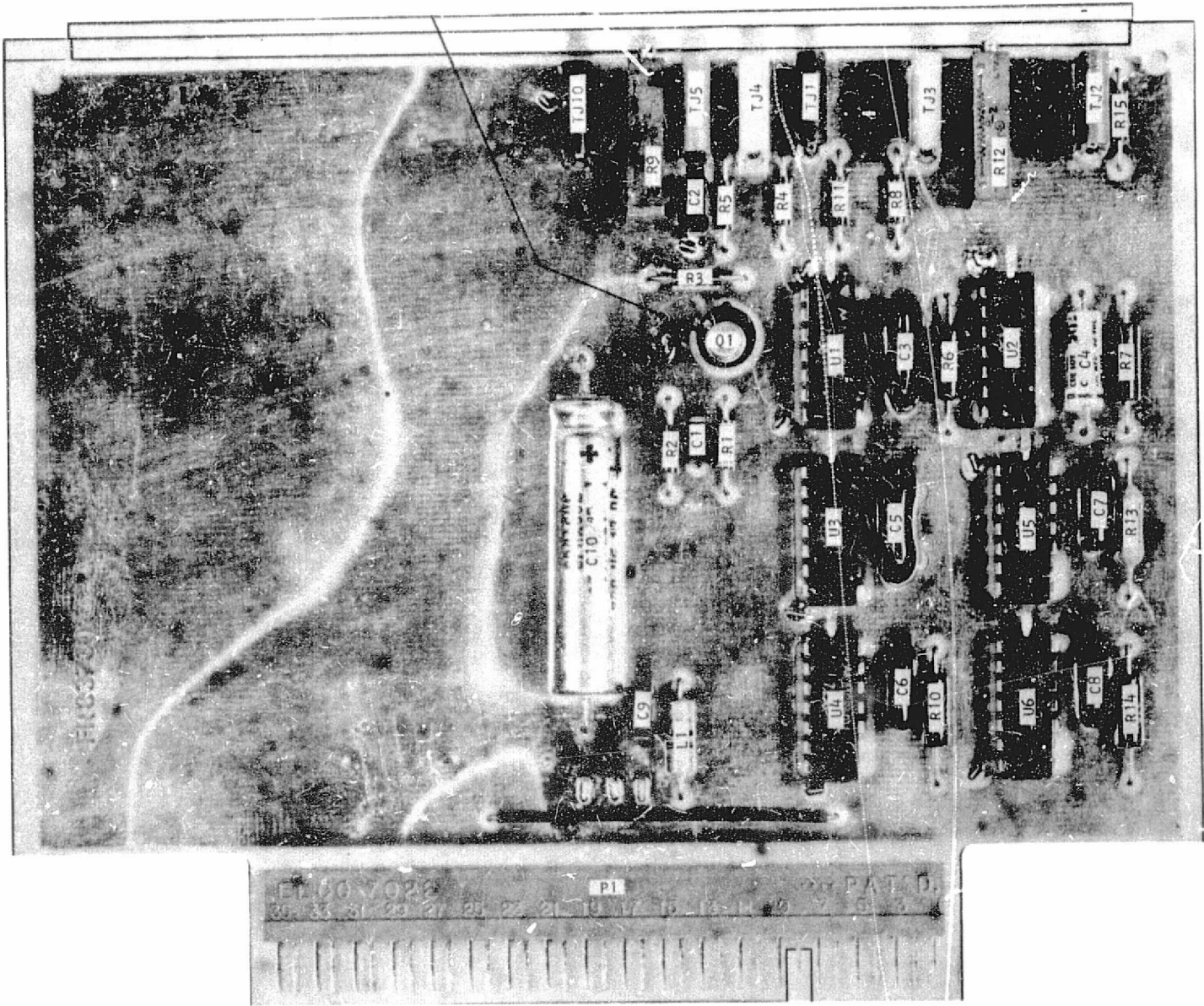


Figure 5-58. Module Layout, A4 (External Sync)

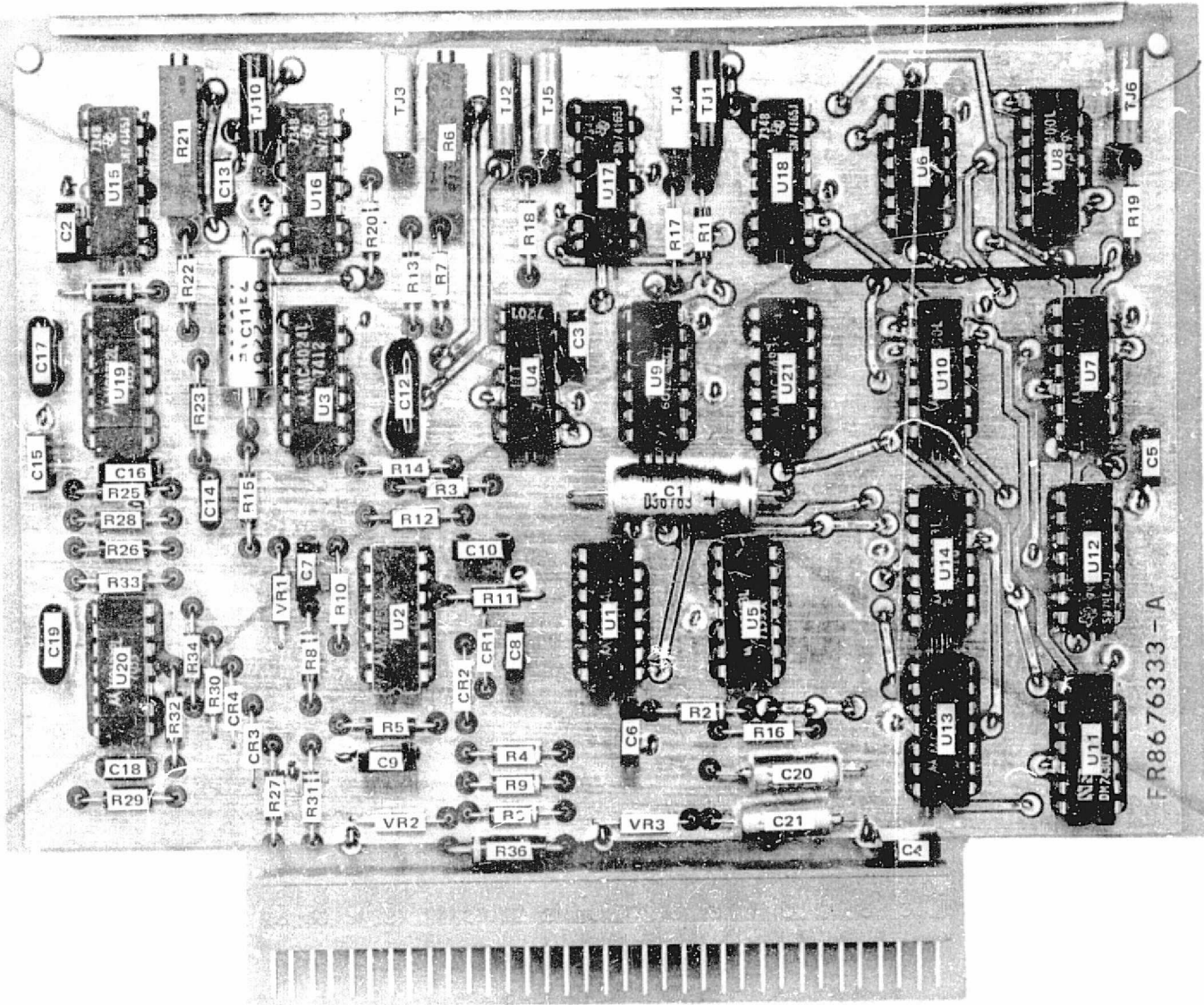


Figure 5-59. Module Layout, A5 (CTE Mux)

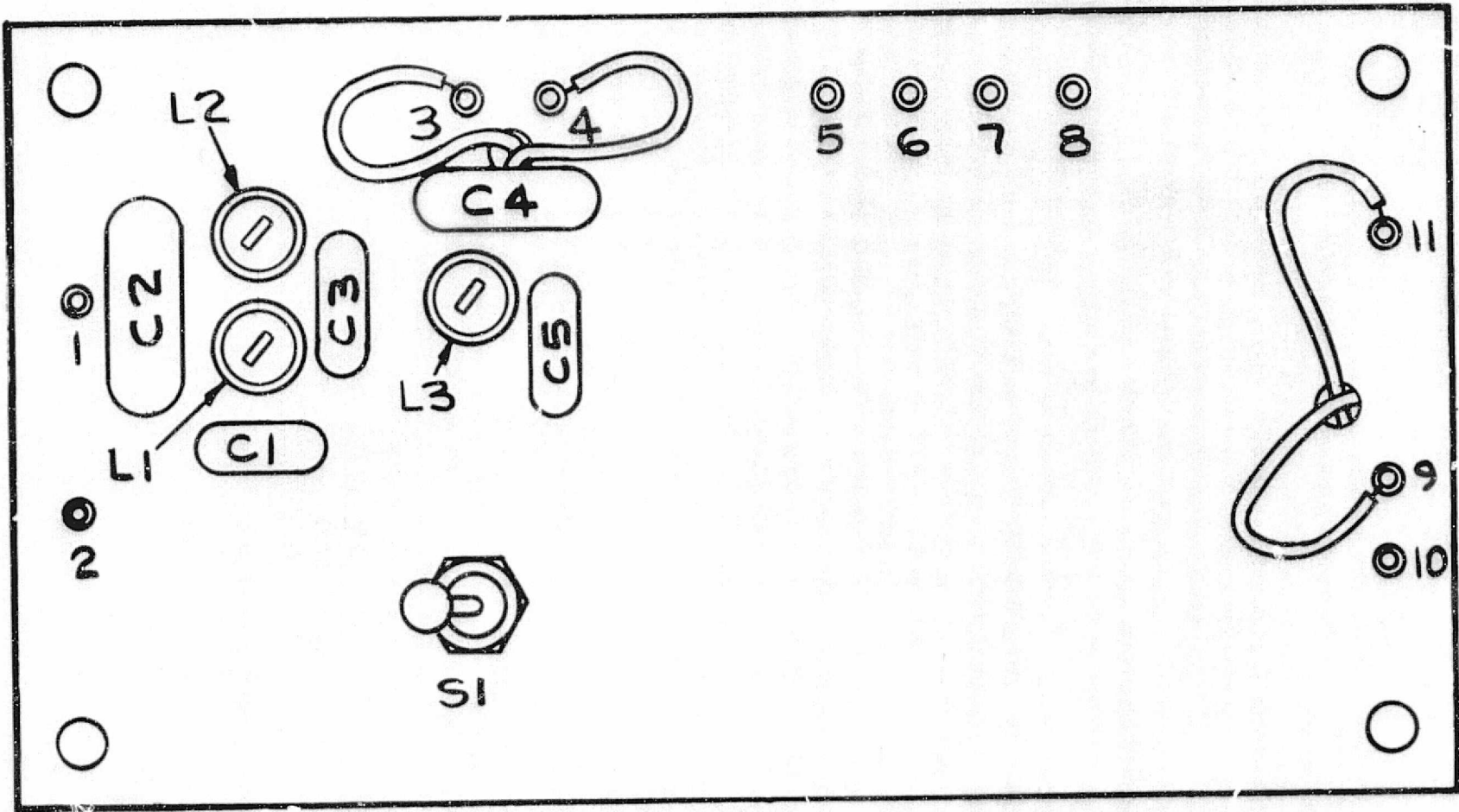


Figure 5-64. Module Layout, A10 (Bessel Filter/Equalizer)

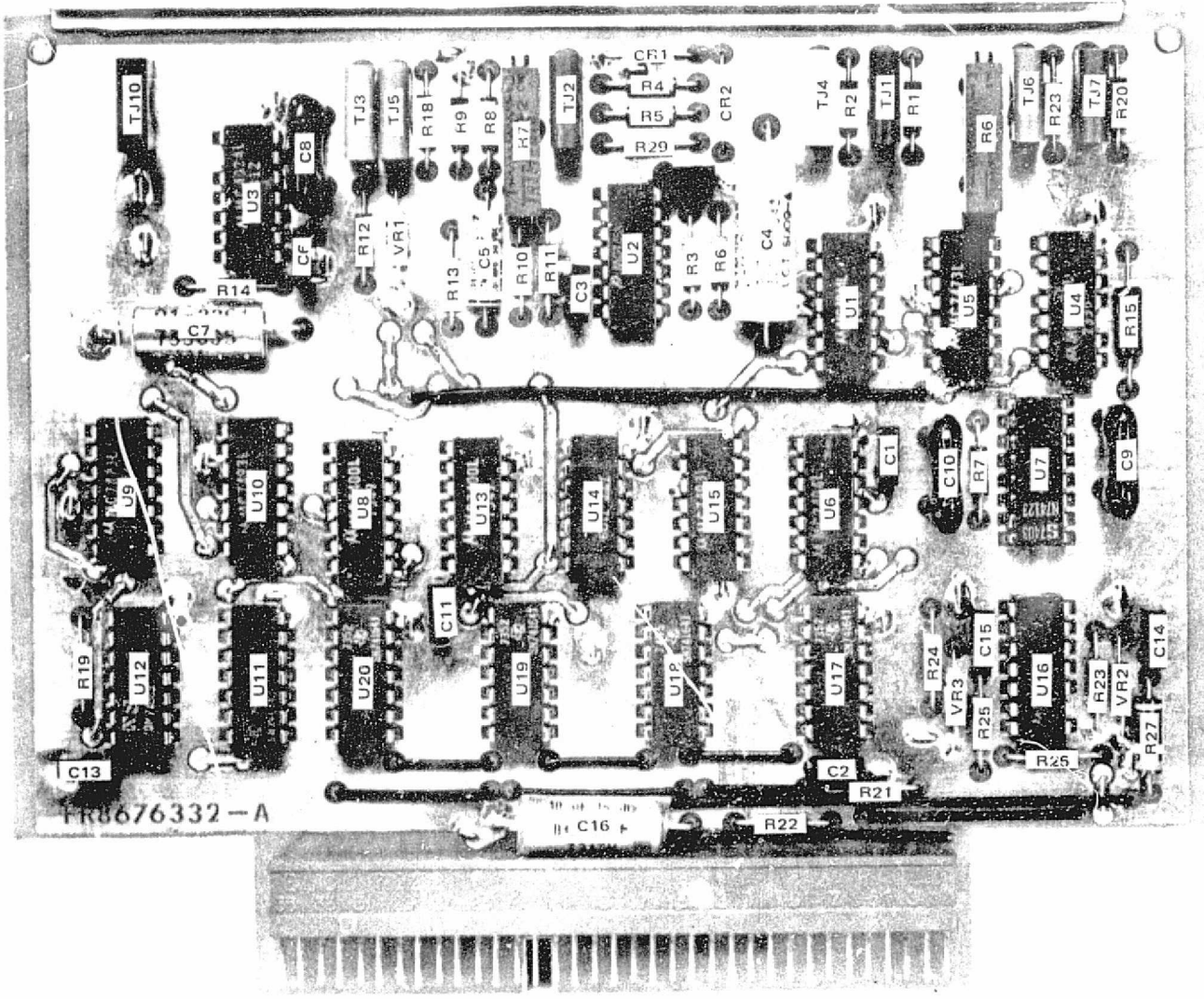
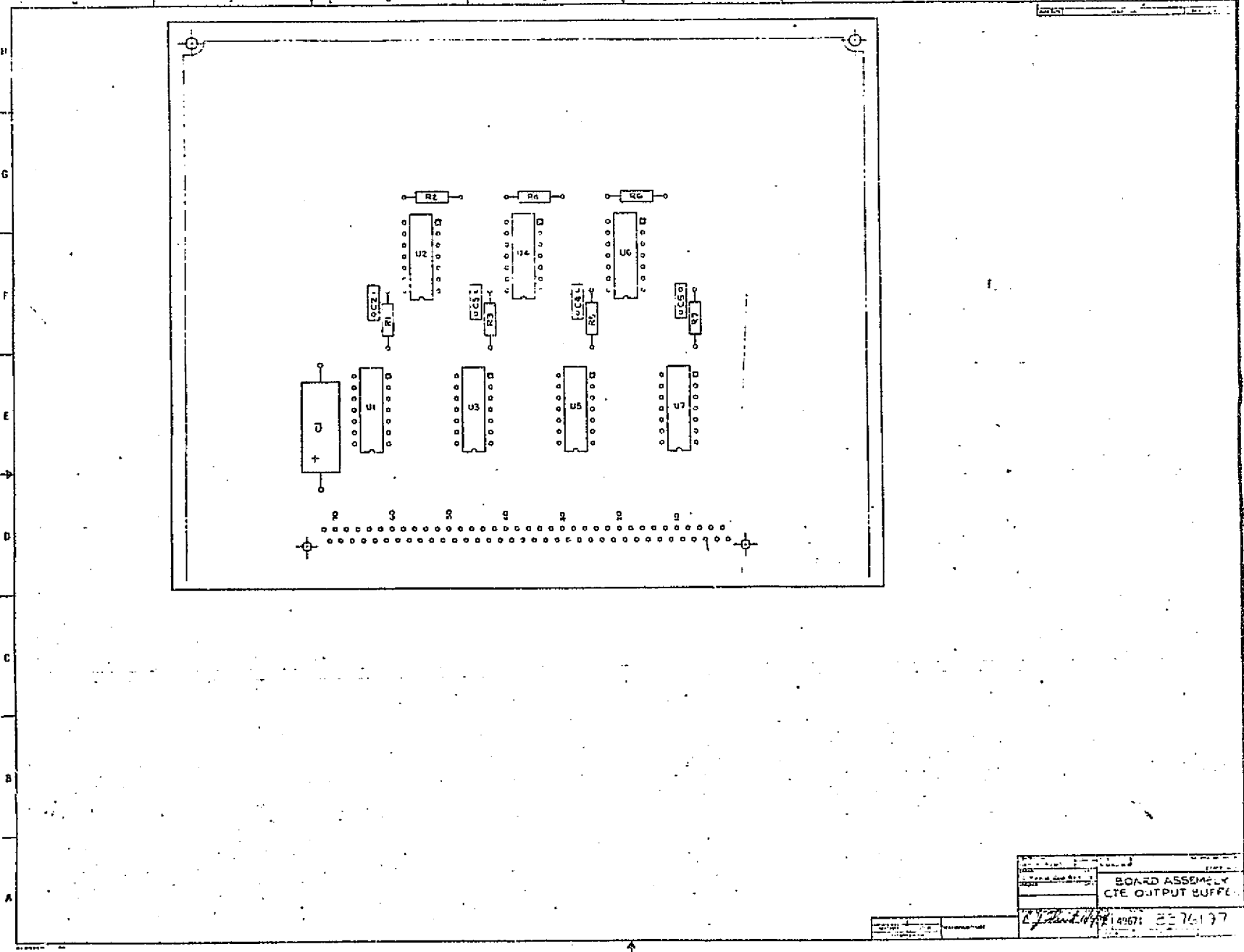


Figure 5-65. Module Layout, A11 (CTE Demux)

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REV	1	DATE	10/17/77
DESIGNED BY	E. J. ...		
CHECKED BY	...		
APPROVED BY	...		
DATE	10/17/77	REV	1
BOARD ASSEMBLY		CTE OUTPUT BUFFER	
14967	3376197		

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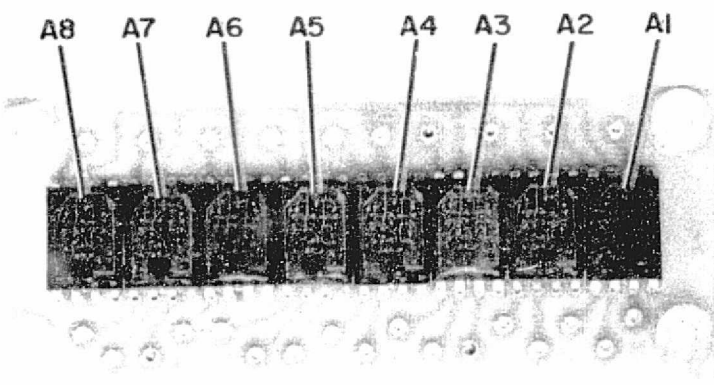


Figure 5-66. Module Layout A12 (CTE Display)

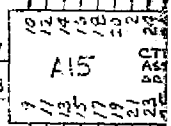
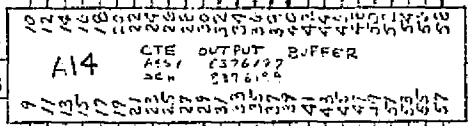
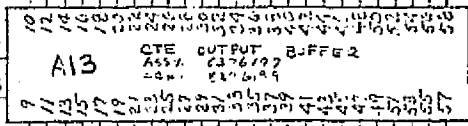
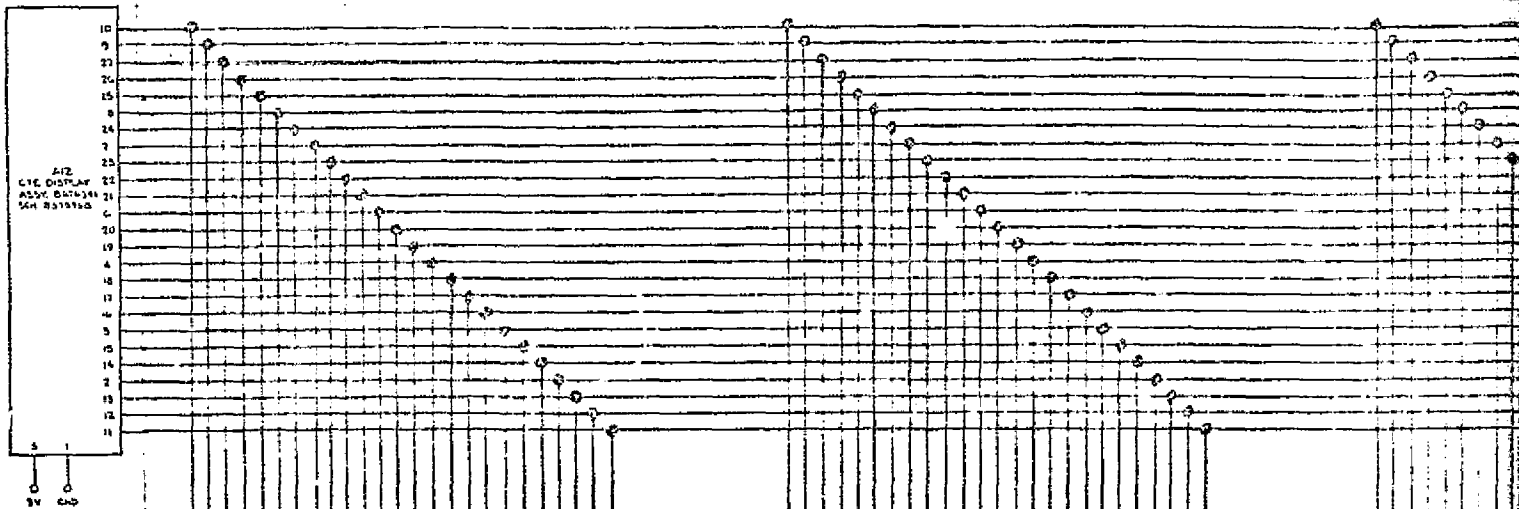
TABLE 5-1. SPLITTER SIGNAL LEVELS

(Refer to Splitter Functional Diagram, Figure 4-2; Audio/CTE Splitter/Interleaver Schematic, Figure 6-1; and Module Schematics, Figures 6-2, 6-3, 6-4, 6-5, 6-10, 6-11, 6-12, 6-13)

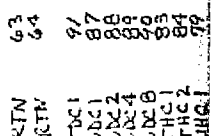
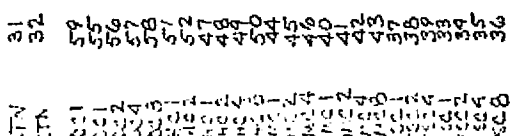
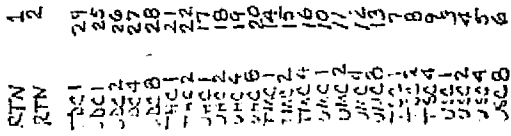
Connector or Test Jack	Designation	Description	Level	Reference Figures	Remarks
J1	Splitter V/A Input	TV Signal	1.0 V p-p		Rear Panel BNC connector.
A10-1		TV Signal	1.0 V p-p		Same as J1 signal, except ac coupled.
TP1, TP2 (Gnd. (A2-4)	Splitter V/A Input	TV Signal	1.0 V p-p	3-2, 3, 4	Front Panel test jacks. (ac coupled).
A2TJ1	V-Clamp	TV Signal	2.0 V p-p	5-8, 5-9	Sync Tip at 0 V dc.
A2TJ2	Sample	Recovered Audio (unfiltered)	1.3 V p-p	5-10	
A2-26	VTR Audio Output	Recovered Audio (filtered)	0.4 V p-p		AC coupled.
A2-6	LPF Drive	TV Signal	2.0 V p-p		AC coupled.
A2-8	Clamp	1- μ s positive-going pulse	0 to +4.1 V p-p		
A2TJ3	Clamp	1- μ s positive-going pulse	-12 to 0 V p-p	5-11	
A2-10	Sample	0.3- μ s positive-going pulse	0 to +4.0 V p-p		

SECTION 6

SCHEMATICS AND PARTS LISTS



J29
CTE
OUTPUT



OUTPUT 1

OUTPUT 2

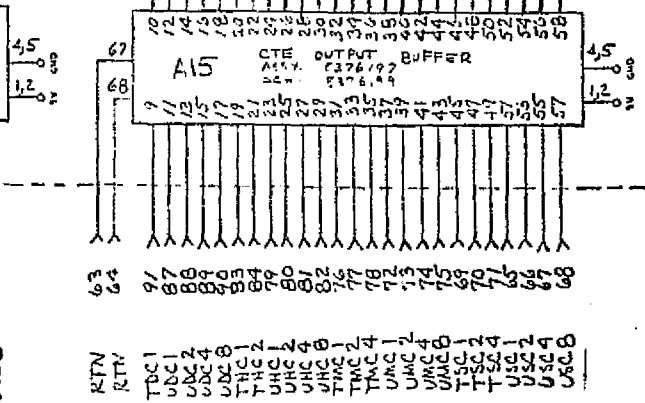
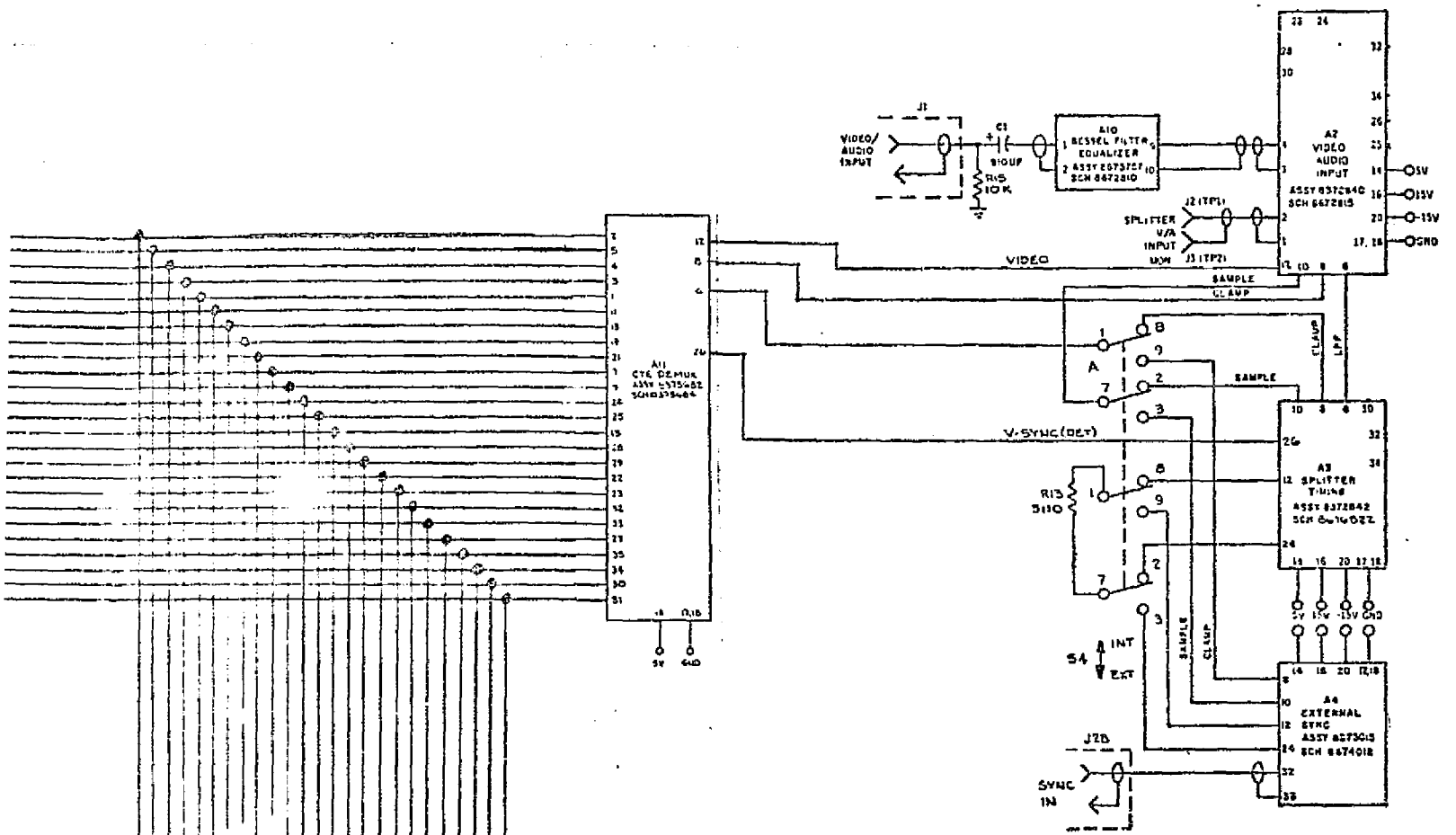
OUTPUT 3

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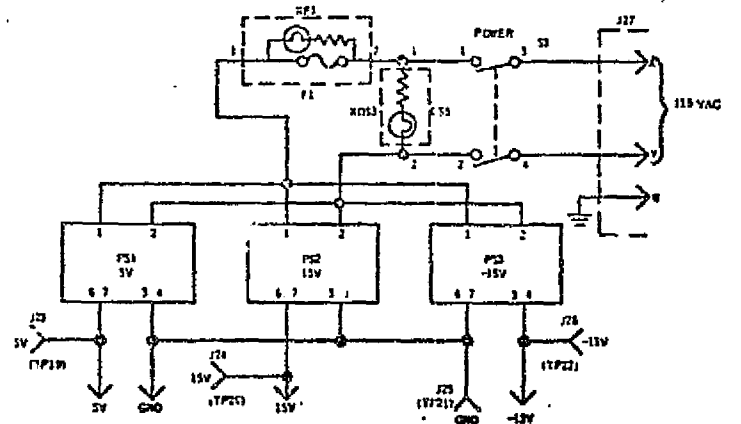
(-504 UNIT)

CTE SPLITTER & BU

FOLDOUT FRAME)

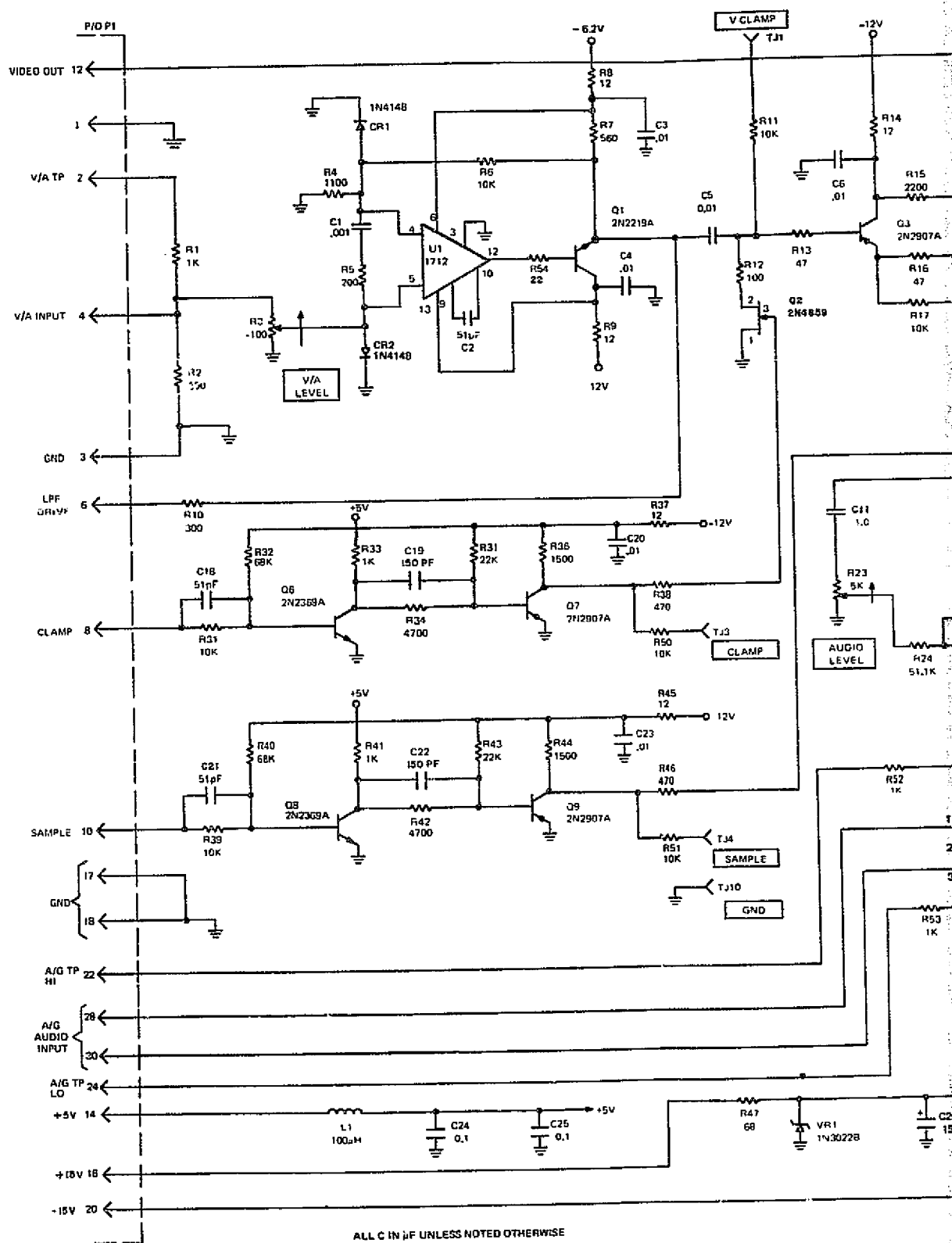


OUTPUT 3



TER & BUFFER SCHEMATIC

FIG. 6-1



ALL C IN µF UNLESS NOTED OTHERWISE
 ALL ODD NO. ON P1 GND

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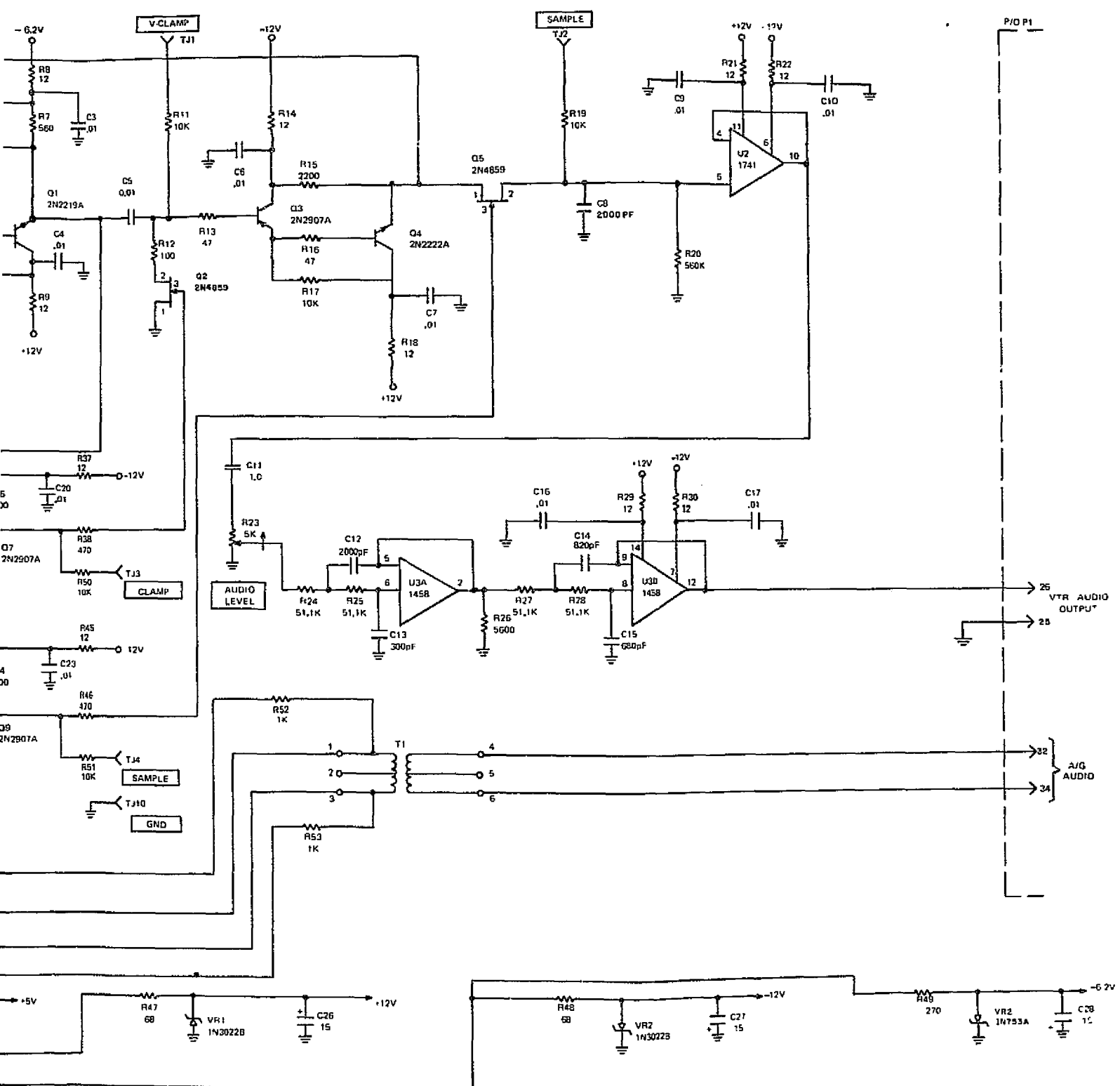
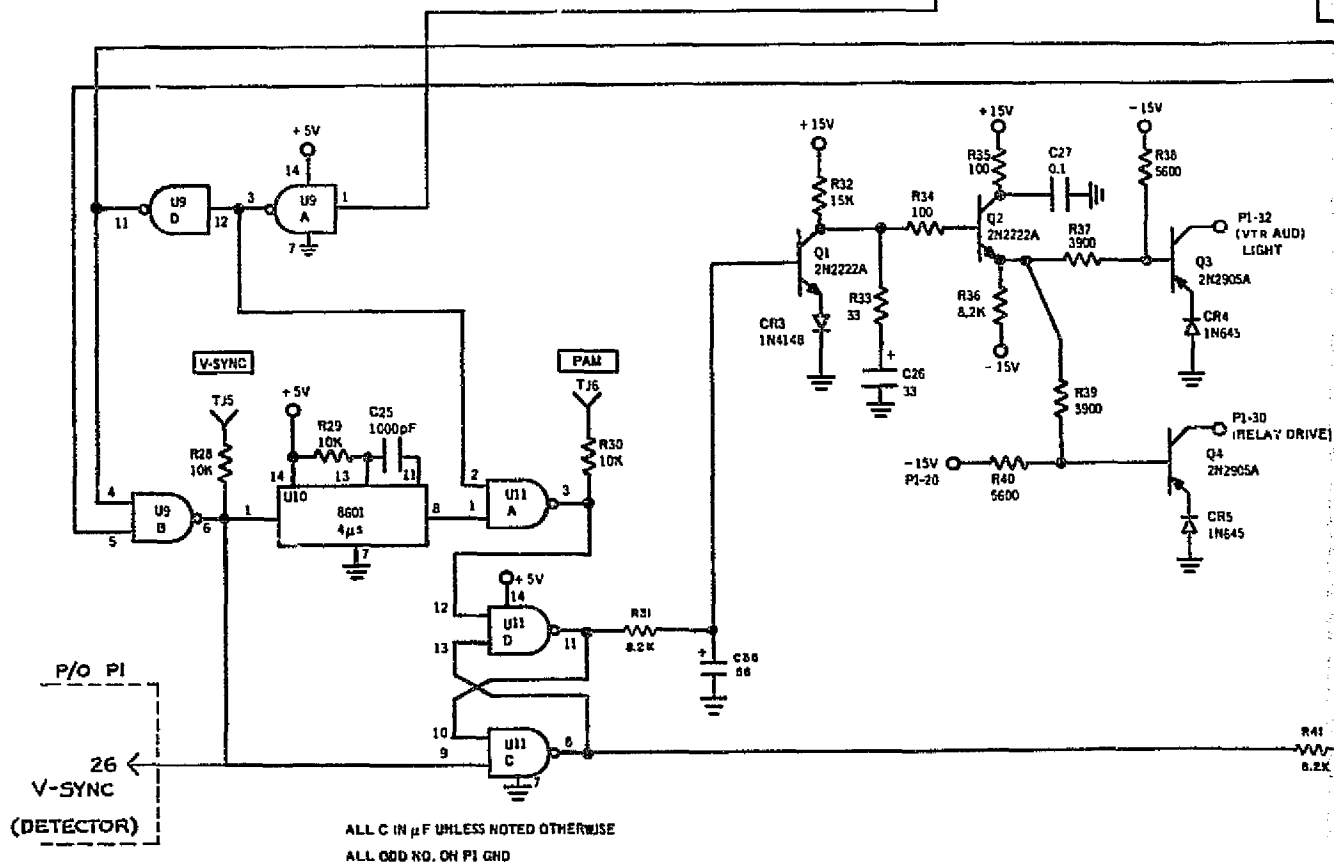
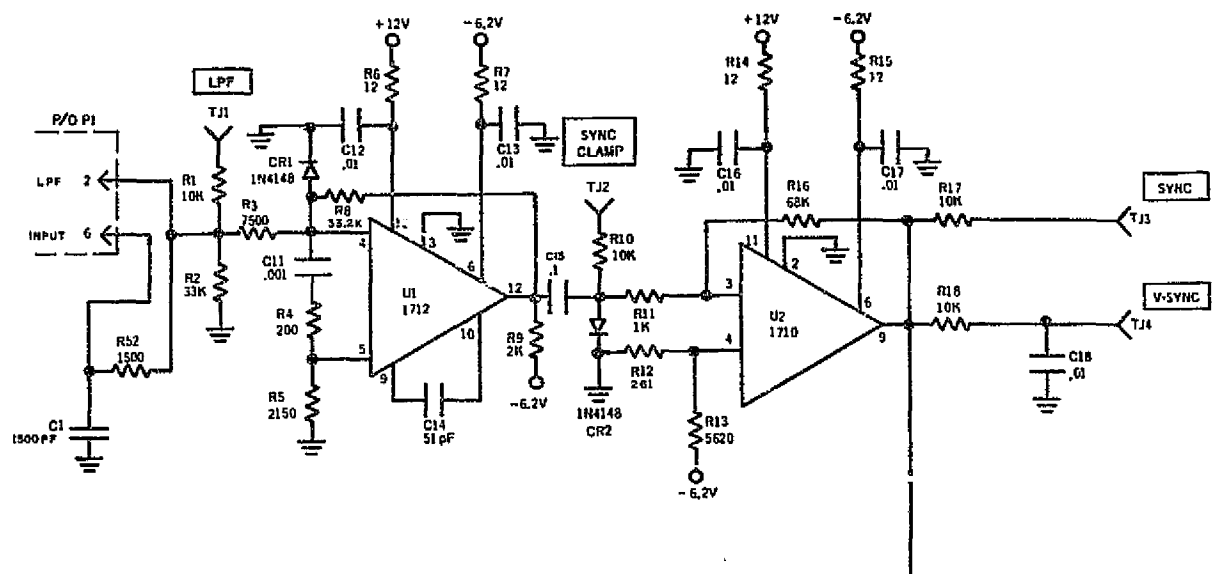


Figure 6-3. Video/Audio Input Schematic (A2)

6-7/6-8
 OLDOUT FRAME 2



ALL C IN μ F UNLESS NOTED OTHERWISE
 ALL ODD NO. ON P1 GND

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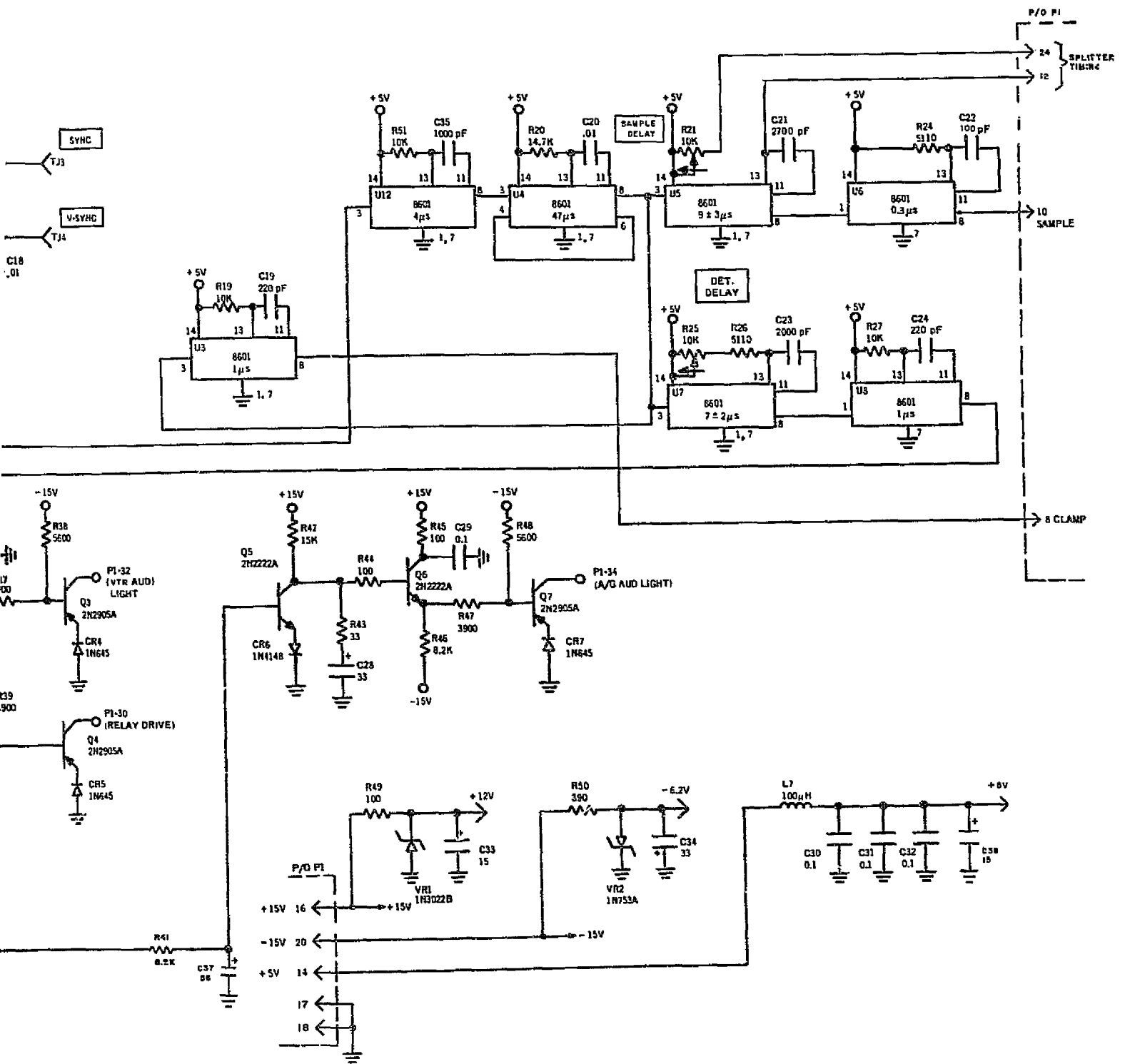
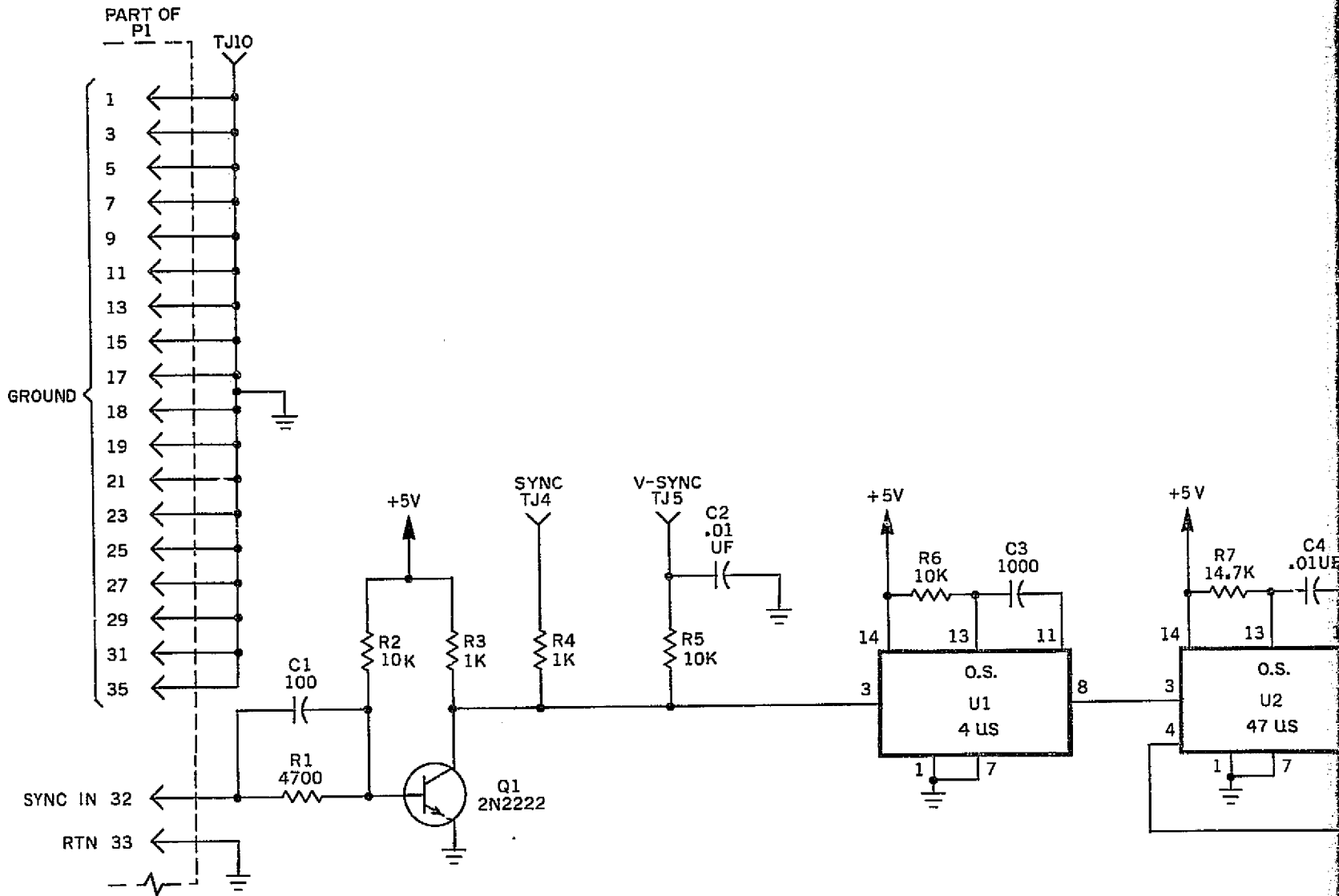


Figure 6-4. Splitter Timing Schematic (A3)

6-9/6-10



NOTES:

1. UNLESS OTHERWISE SPECIFIED
 ALL RESISTANCE VALUES ARE IN OHMS
 ALL CAPACITANCE VALUES ARE IN PICOFARADS
 ALL INDUCTANCE VALUES ARE IN MICROHENRYS
2. INTEGRATED CIRCUITS ARE
 U1 THRU U6 MC8601L

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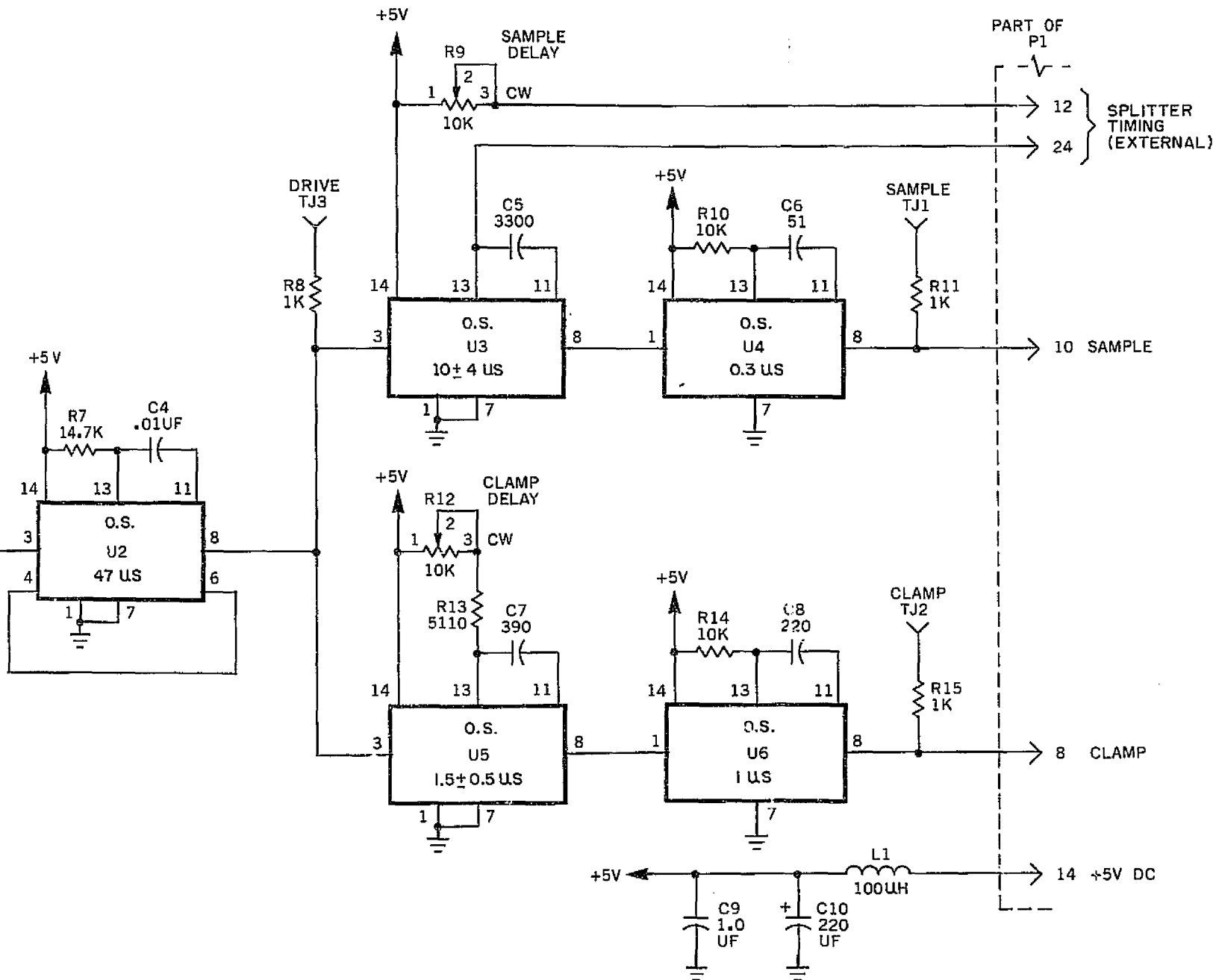


Figure 6-5. External Sync Schematic (A4)

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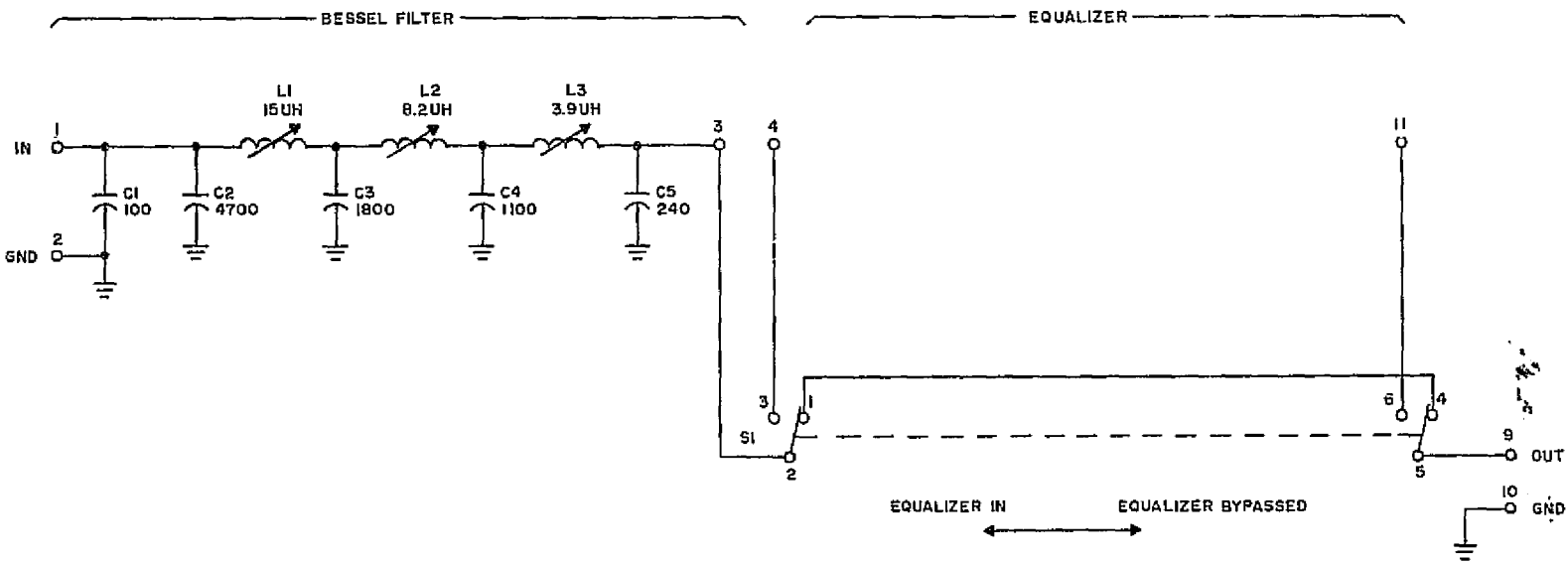
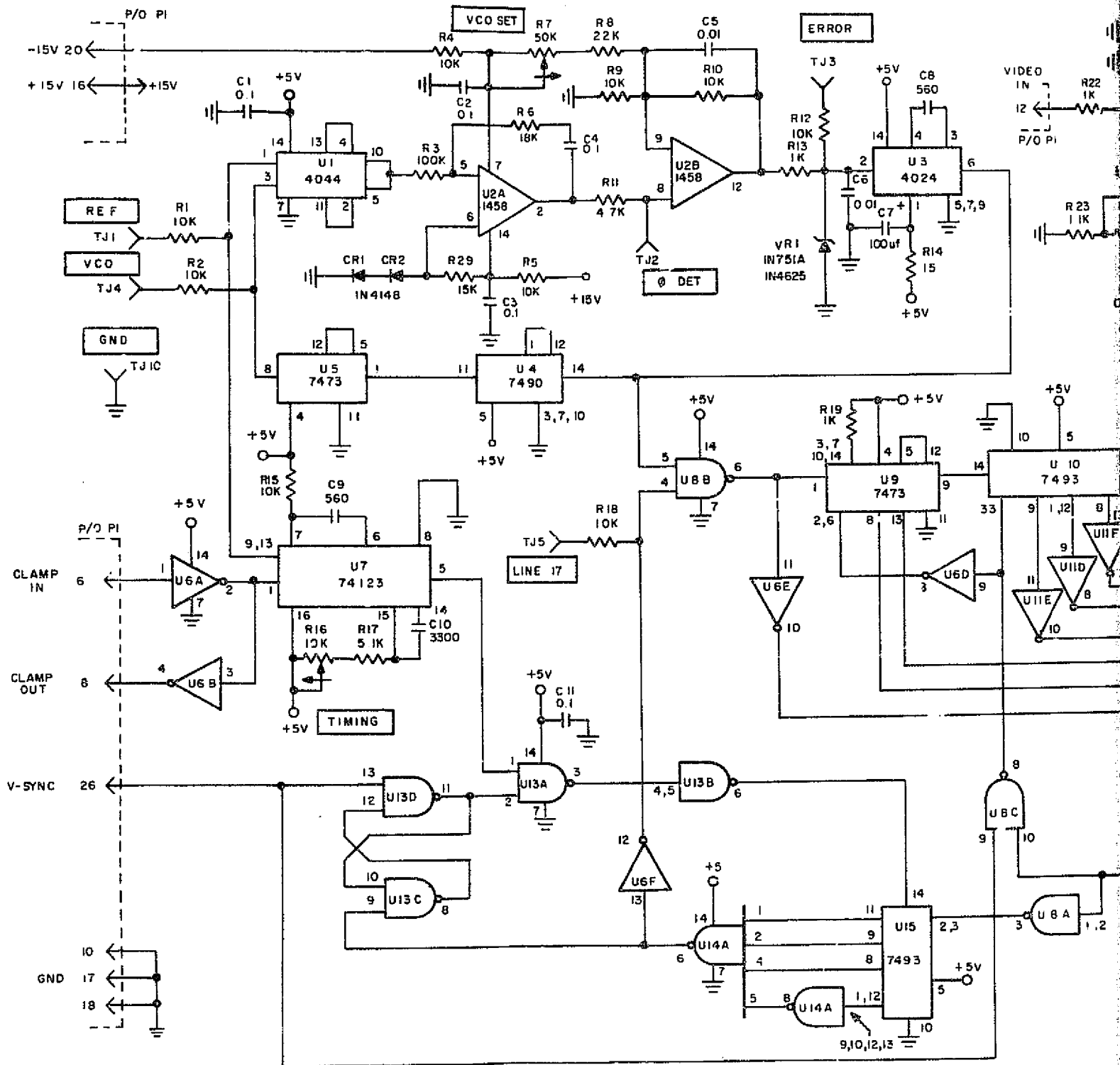


Figure 6-11. Bessel Filter, Equalizer Schematic (A10)



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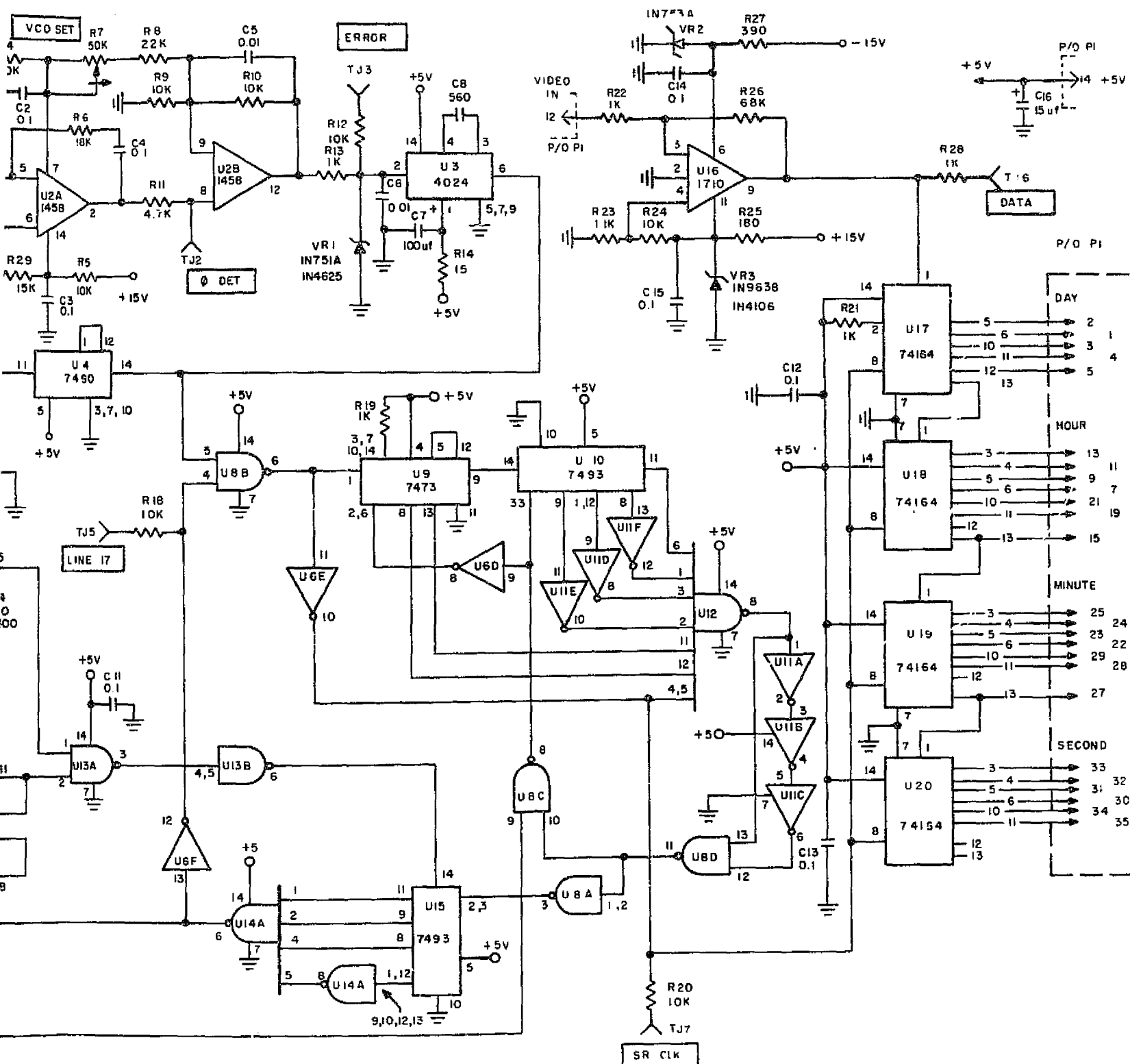


Figure 6-12. CTE Demux Schematic

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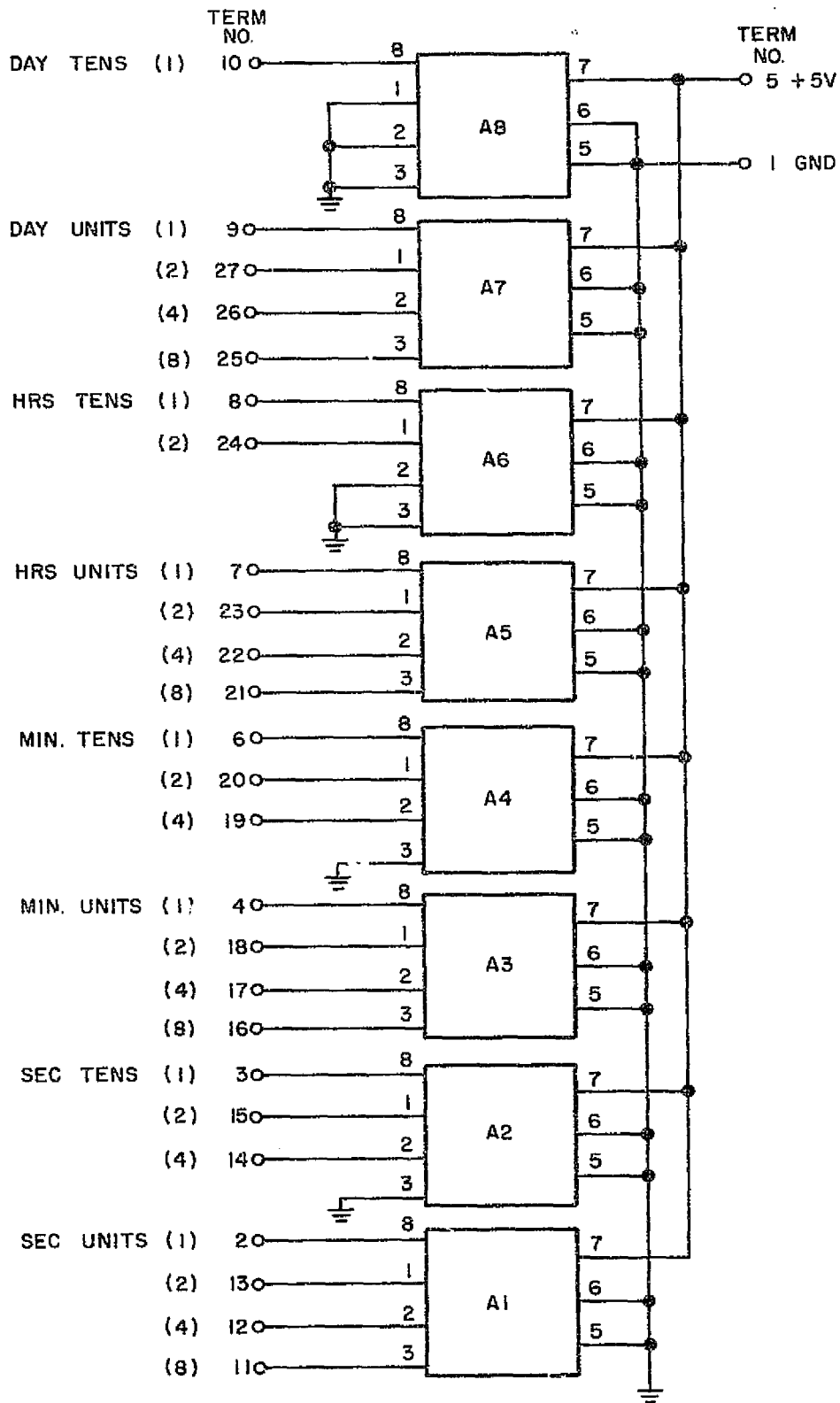
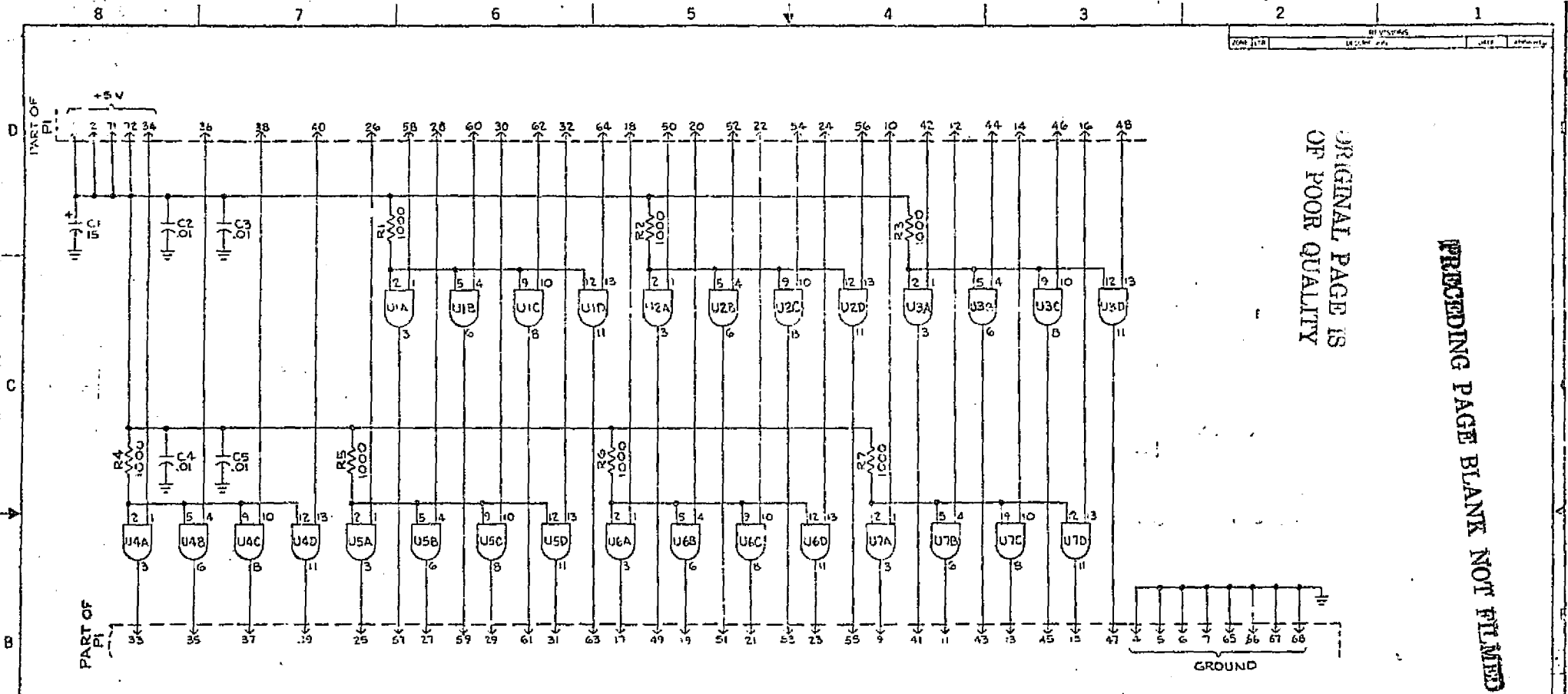


Figure 6-13. CTE Display Schematic (A12)



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- NOTES-
1. ALL RESISTANCE VALUES ARE IN OHMS
ALL CAPACITANCE VALUES ARE IN MICROFARADS
 2. ALL IC'S U1 THRU U7 HAVE V_{cc} (+5V) ON PIN 14
AND GROUND ON PIN 7.

CONTRACT NO. 4359-13767	DTIC REF ID: A68571	FORM 8-64	87637A
SCHEMATIC WIRING DIAGRAM		CAMDEN NJ	
CTE OUTPUT BUFFER			
DATE: 11/1/65		NO. 49671	8376199

REVISION	DATE	BY
1	11/1/65	RJ

PARTS LIST		RCA		RCA CORPORATION NEW YORK, NY		REVISION DATE		PL 8673734		REV LTR H	
		<i>CAMDEN PLANT</i>									
LIST TITLE: <i>AUDIO SPLITTER/INTERLEAVER AUDIO/CTE SPLITTER/INTERLEAVER</i>				PREPARED BY <i>A. W. Camp 23 Sept 1974</i>		DATE		REL		CODE IDENT NO. 49671	
				CHECKED BY		DATE		DESIGN ACTIVITY APPD		DATE	
NEXT ASSY		<i>ASTP-656</i>		USED ON				CONTRACT NO. <i>NAS 8-27968 NAS 9-13767</i>			
FIRST APPLICATION											
REVISIONS											
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED				
<i>A</i>	<i>REVISED</i>										
<i>B</i>	<i>REVISED</i>										
<i>C</i>	<i>REVISED</i>										
<i>D</i>	<i>REVISED</i>										
<i>E</i>	<i>REVISED</i>										
<i>F</i>	<i>REVISED</i>										
<i>G</i>	<i>REVISED</i>										
<i>H</i>	<i>REVISED</i>										
INTERPRET SYMBOLS USED AS FOLLOWS:											
UNITS OF MEASURE (UM)			QUANTITIES			SYMBOL					
A—Inches	H—Barrels	T—Each	X—Applicable document	U—Govt or customer furnished	*—Vendor item. See specification or source control drawing.						
B—Feet	J—Pounds			K—Govt or customer furnished and installed							
C—Yards	L—Pair										
D—Cans	M—Set		O—For ref only								
E—Pints	N—Kit		///—Not used								
F—Quarts	P—Roll										
G—Gallons	R—Box, Case										

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	P	0201	A1					1	1			8372838-501	SPLITTER OUTPUT		
	P	0202	A2		1	1		1	1			8372840-501	VIDEO/A4010 INPUT		
	P	0203	A3		1	1		1	1			8372842-501	SPLITTER TIMING		
	P	0204	A4		1	1		1	1			8373015-501	EXTERNAL SYNC		
	P	0205	A5					1				8375603-502	CYE MUX		
	P	0206	A6					1	1			8372844-501	AUDIO INPUT		
	P	0207	A7					1	1			8372846-501	VIDEO INPUT		
	P	0208	A8					1	1			8372848-501	INTERLEAVER OUTPUT		
	P	0209	A9					1	1			8372890-501	AUDIO POWER AMPL		
	P	0210	A10		2	2		1	1			8673757-501	BESSEL FILTER/EQUALIZER		
	P	0211	A11		1	1		1				8375682-501	CYE DEMUX		
	P	0212	A12		1	1		1				8676341-501	BD ASSY DISPLAY GSD		
41L-C-62/2	P	0213	C1		1	1		1	1	61349		CE13C9110	CAPACITOR		
41L-C-62/2	P	0214	C2		1	1		1	1	81349		CE13C9110	CAPACITOR		
	P	0215	A13		1							8376197-501	CYE OUTPUT BUFFER		
	P	0216	A14		1							8376197-501	CYE OUTPUT BUFFER		
	P	0217	A15		1							8376197-501	CYE OUTPUT BUFFER		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA CORPORATION, NEW YORK, N. Y.		CAMDEN PLANT	REV LTR H	CODE IDENT 49671	PL 867373A	SHEET 03
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	I	0301	CR1				1	1	00131	1N845	DIODE			
	I	0302	CR2				1	1	00131	1N845	DIODE			
	I	0303	CR3				1	1	00131	1N845	DIODE			
	I	0304	CR4				1	1	00131	1N845	DIODE			
	I	0305	CR5				1	1	00131	1N845	DIODE			
	I	0306	CR6				1	1	00131	1N845	DIODE			
	I	0307	CR7				1	1	00131	1N845	DIODE			
	I	0309	DS1				1	1		889065464	LAMP			
	I	0310	DS2				1	1		889065464	LAMP			
	I	0311	DS3				1	1		889065464	LAMP			
	I	0312	DS4				1	1		889065464	LAMP			
	I	0313	DS5		1	1	1	1		NE51	LAMP, NEON			
	P	0316	E1				1	1		813305641	TERMINAL BOARD			
	I	0317	E2				1	1		48904368	TERMINAL, STUD-INSULATED			
	I	0318	E3		1	1	1	1		48904368	TERMINAL, STUD-INSULATED			
	I	0319	E4		1	1	1	1		48904368	TERMINAL, STUD-INSULATED			

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	I	0401	E5	1	1	1	1			48004308	TERMINAL, SIJD-INSULATED		
	I	0402	E6				1	1		48004108	TERMINAL, SIJD		
	I	0403	E7				1	1		48004108	TERMINAL, SIJD		
	I	0404	E8				1	1		48004108	TERMINAL, SIJD		
		0410	F1	1	1	1	1			F026123V2.00A	FUSE		
	I	0415	J1	1	1	1	1	74888	310245		CONNECTOR		
41L-C-39024/10	I	0416	J2	1	1	1	1	96906	MS1610808A		JACK		
41L-C-39024/10	I	0417	J3	1	1	1	1	96906	MS1610808A		JACK		
41L-C-39024/10	I	0418	J4	1	1	1	1	96906	MS1610808A		JACK		
41L-C-39024/10	I	0419	J5	1	1	1	1	96906	MS1610808A		JACK		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV	CODE IDENT	PL 0473734	SHEET
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			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U	CODE	PART OR	NOMENCLATURE OR
	505	504	503	502	501	M	IDENT	IDENTIFYING NO.	DESCRIPTION	M		
41L-C-39024/10	I	0501	J6		1	1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0502	J7	1	1	1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0503	J8			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0504	J9			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0505	J10			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0506	J11			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0507	J12			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0508	J13			1	1	96906	MS16108-8A	JACK		
	I	0509	J14			1	1	74868	31-245	CONNECTOR		
41L-C-39024/10	I	0510	J15			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0511	J16			1	1	96906	MS16108-8A	JACK		
	I	0512	J17			1	1	74868	31-245	CONNECTOR		
	I	0513	J18			1	1	74868	31-245	CONNECTOR		
41L-C-39024/10	I	0514	J19			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0515	J20			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0516	J21			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0517	J22			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0518	J23			1	1	96906	MS16108-8A	JACK		
41L-C-39024/10	I	0519	J24			1	1	96906	MS16108-8A	JACK		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR H	CODE IDENT	PL 8873756	SHEET 06
			RCA CORPORATION NEW YORK, N. Y.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM			
			ITEM OR FIND NO.	QTY REQD PER DASH NO.											
			503	504	503	502	511								
41L-CU39024/10	I	0601	J25				1	1	96902	MS1610862A		JACK			
41L-CU39024/10	I	0602	J26				1	1	96906	MS16108610A		JACK			
	I	0603	J27		1	1	1	1	01295	7486		INTEGRATED CIRCUIT			
	I	0604	J28		1	1	1	1	74868	81-245		CONNECTOR			
	I	0605	J29		2					2013222		CONNECTOR (AMP)			
	I	0608	K1				1	1	49671	T154-4C(12VDC)		RELAY			
	I	0609	K2				1	1	49671	T154-4C(12VDC)		RELAY			
	I	0611	L51				1	1	49671	3A15		SPEAKER, 5IN, 6W			
	I	0613	M1				1	1	49671	10474		METER, VU, MODEL 1267			
	I	0615	P51		1	1	1	1	49671	LX56A5-0V		POWER SUPPLY, 5V			
	I	0616	P52		1	1	1	1	49671	LX56A15		POWER SUPPLY, 15V			
	I	0617	P53		1	1	1	1	49671	LX56A15		POWER SUPPLY, 15V			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR H	CODE IDENT	PL 8573799	SHEET 07
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				505	504	503	502	501						
MIL-R-11/3	I	0701	R1				1	1	81349	RC20GF162K	RESISTOR			
MIL-R-94/5	I	0702	R2				1	1	81349	RV4NAYS0102A	RESISTOR			
MIL-R-11/3	I	0703	R3				1	1	81349	RC20GF220K	RESISTOR			
MIL-R-11/3	I	0704	R4				1	1	81349	RC20GF220K	RESISTOR			
MIL-R-11/3	I	0705	R5				1	1	81349	RC20GF220K	RESISTOR			
MIL-R-11/3	I	0706	R6				1	1	81349	RC20GF220K	RESISTOR			
MIL-R-11/3	I	0707	R7				1	1	81349	RC20GF220K	RESISTOR			
MIL-R-11/3	I	0708	R8				1	1	81349	RC20GF330K	RESISTOR			
MIL-R-94/5	I	0709	R9				1	1	81349	RV4NAYS0102A	RESISTOR			
MIL-R-94/5	I	0710	R10				1	1	81349	RV4NAYS0102A	RESISTOR			
MIL-R-94/5	I	0711	R11				1	1	81349	RV4NAYS0501A	RESISTOR			
MIL-R-94/5	I	0712	R12				1	1	81349	RV4NAYS0501A	RESISTOR			
MIL-R-10509/1	I	0713	R13				1	1	81349	RN20D5111F	RESISTOR			
MIL-R-94/5	I	0714	R14				1	1	81349	RV4NAYS0102A	RESISTOR			
MIL-R-11/8	I	0715	R15		1	1	1	1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0716	R16				1	1	81349	RC07GF103K	RESISTOR			

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA CORPORATION NEW YORK, N. Y.		CAMDEN PLANT	REV LTR H	CODE IDENT	PL 8673724	SHEET 08
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				503	504	503	502	501						
	I	0801	S1					1	I	76854	398731JC	SWITCH, ROTARY		
	I	0802	S2					1	I	91929	130M1A1	SWITCH, PUSHBUTTON		
	I	0803	S3		1	1		1	I	96906	MS35059-22	SWITCH		
	I	0804	S4		1	1		1	I	76854	398641-513	SWITCH, ROTARY		
	I	0805	T81					1	I	75382	599-2004-9	TERMINAL BD, 9TLS		
	I	0806	T82					1	I	75382	599-2004-9	TERMINAL BD, 9TLS		
	I	0807	T83					1	I	75382	599-2004-9	TERMINAL BD, 9TLS		
	I	0808	T84					1	I	75382	599-2004-9	TERMINAL BD, 9TLS		
	P	0809	M1					1	I		8780661-501	CABLE ASSY		
	I	0810	XA1					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0811	XA2		1	1		1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0812	XA3		1	1		1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0813	XA4		1	1		1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0814	XA5					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0815	XA6					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0816	XA7					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0817	XA8					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0818	XA9					1	I	91662	00-7008-035-163-001	RECEPTACLE		
	I	0819	XA10				////				NA	NOT USED		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR H	CODE IDENT	PL 0673789	SHEET 07
			RCA CORPORATION NEW YORK N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
			ITEM OR FIND NO.	QTY REQD PER DASH NO.										
			505	504	503	502	501							
		0901	XA11		1	1	1			91662	0078038-035-163-001	RECEPTACLE		
	I	0903	X051				1	1		91929	2F203	LAMP HOUSING M30		
	I	0904	X052				1	1		91929	2F203	LAMP HOUSING M30		
	P	0905	X053		1	1	1	1			746936221	LAMP HOLDER		
	I	0908	XF1		1	1	1	1		75915	344125	FUSE HOLDER		
	I	0910	XK1				1	1		70309	30055-2	SOCKET, RELAY		
	I	0911	XK2				1	1		70309	30055-2	SOCKET, RELAY		
	I	0913	XA13		1					91662	0078219-722-722-001	RECEPTACLE		
	I	0914	XA14		1					91662	0078219-722-722-001	RECEPTACLE		
	I	0915	XA15		1					91662	0078219-722-722-001	RECEPTACLE		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR H	CODE IDENT	PL 4673739	SHEET 13
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				505	504	503	502	501						
	P	1001	1					X			8672818	SCHEM DIAG AUDIO SPLITTER		
	P	1002	2					X			8532893	W CONN. LIST AUDIO SPLITTER		
	P	1003	3					X			8376151	AUTO TIME BASE CORRECTOR SCH		
	P	1004	4					X			8538422	WCL AUDIO/CIB SPLITTER		
	P	1006	6		0	0	0	0			8673733	FRONT PANEL PT OF IT 9 ALTRD		
	P	1007	7		0	0	0	0			8673743-1	REAR PANEL PT OF IT 9 ALTRD		
	P	1008	8		0	0	0	0			8673746-1	CHASSIS PT OF IT 9 ALTRD		
	I	1009	9		1	1	1	1	26534	CCP6, 73019-3-10402-8-2, 3	CTN120-H09, CHASSIS: CARD FILE			
	P	1011	10		1	1	1	1			8673799-2	PRINTED CARD FILE (NEST MOD)		
	I	1013	11		14	5	20	10	26534	ZSP9-519-42	GUIDE			
	I	1014	12		1	1	1	1	26534	CTN120	SLIDE, SET			
	I	1015	13		1	1	1	1	26534	UCP4 1/4-19	TOP COVER			
	I	1016	14		1	1	1	1	26534	ZSPB-001-96	REAR SUPPORT-EXT BRACKET, SET			
	I	1017	15		1	1	1	1	26534	H099	HANDLES, SET			
	P	1018	16					1	1		8673749-1	GRILLE, SPEAKER		
	I	1019	17					1	1		8123404	BRACKET		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR H	CODE IDENT 49671	PL 0673786	SHEET 11
			ITEM OR FIND NO.	QTY RECD PER DASH NO.					U M	CODE IDENT	PART CR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
				303	304	303	302	501							
	P	1102	19		1	1	1	1					74003601	LENS, RED	
	I	1109	21				10	9	91062	60780063414				POLARIZING INSERT	
	I	1111	23					3	91929	2B1				BARRIER MICRO SWITCH	
	I	1112	24					2	91929	2A2B				DISPLAY SCREEN	
	I	1113	25					6	96906	MS91528102B				KNOB	
	I	1114	26		1	1	1	1	96906	MS91528272B				KNOB	
	I	1115	27					1	96906	MS915281K1B				KNOB	
	I	1116	28					1	49956	KL7C1G				LOCK, KNOB	
	I	1117	29		AR	AR	AR	AR		99912909				WIRE, ELECTRICAL	
	I	1118	30		AR	AR	AR	AR		99912909				WIRE, ELECTRICAL	
	I	1119	31		AR	AR	AR	AR		99912902				WIRE, ELECTRICAL	

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR H	CODE IDENT	PL 8673794	SHEET 12
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M		
				503	504	505	502	501							
41L-C-17/68	I	1202	33				AR	AR				999129-3		WIRE, ELECTRICAL	
	I	1203	34				AR	AR				999129-9		WIRE, ELECTRICAL	
	I	1204	35				AR	AR				999130-99		WIRE, ELECTRICAL	
	I	1205	36				AR	AR				999127-9		WIRE, ELECTRICAL	
	I	1205	37				AR	AR				999127-99		WIRE, ELECTRICAL	
	I	1207	38		AR	AR	AR	AR		81349	RG187A/U			COAX CABLE	
	I	1208	39				AR	AR		16428	83710			WIRE#24-BELDEN	
	I	1209	40				AR	AR			999128-80			WIRE, ELECTRICAL	
	I	1210	41				AR	AR			999128-9			WIRE, ELECTRICAL	
	I	1211	42				AR	AR			999128-99			WIRE, ELECTRICAL	
	I	1212	43		AR	AR			16	59730	TC105A			MOUNTING PLATE	
	I	1213	44		AR	AR	AR	AR		59730	TC110			SOLVENT	
	I	1214	45						16	06090	D131-06			THERMOFIT SOLDER DEVICE	
	I	1215	46						30	8992998-13				TERMINAL SOLDERLESS	
4325281	I	1216	47		1	1	2	2	96906	MS25281R10			CLAMP, CABLE		
4329281	I	1217	48				1	1	96906	MS25281R8			CLAMP, CABLE		
4325281	I	1218	49				1	1	96906	MS25281R3			CLAMP, LOOP		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST						RCA		CAMDEN PLANT	REV LTR H	CODE IDENT	PL 0573734	SHEET 13
			ITEM OR FIND NO.	QTY REQD PER DASH NO					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM		
				503	504	503	502	501							
NAS43	I	1301	51		4		4	4	80205	NAS43000-32	SPACER				
		1302	52				4	4	80205	NAS43001-48	SPACER				
	P	1303	53				1	1		8153438-1	SPACER				
	I	1304	54	AR	AR		2	2		57435-701	NUTS				
	I	1305	55	AR	AR		12	12	96906	MS20341-65	NUT, HEXAGON				
	I	1306	56	AR	AR		8	8	96906	MS20341-68	NUT, HEXAGON				
	I	1308	58	AR	AR		2	2	96906	MS20341-105	NUT, HEXAGON				
		1309	59	AR	AR		2	2	80205	NAS1635-04-6	SCREW				
		1310	60	AR	AR		2	2	80205	NAS1640-2	WASHER, LOCK				
NAS1640	I	1311	61	AR	AR		14	14	80205	NAS1640-4	WASHER, LOCK				
NAS1640	I	1312	62	AR	AR		10	10	80205	NAS1640-6	WASHER, LOCK				
NAS1640	I	1313	63	AR	AR		12	12	80205	NAS1640-8	WASHER, LOCK				
NAS1640	I	1314	64	AR	AR		2	2	80205	NAS1640-10	WASHER, LOCK				
	I	1316	66	AR	AR		2	2		8924401-6	WASHER				

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR H	CODE IDENT	PL 8673734	SHEET 14
			RCA CORPORATION NEW YORK N.Y.						49671			
			ITEM OR IND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION
505	504	503		502	501							
MS24693	I	1401	70	AR	AR	2	2	80205	NAS1635-02-6	SCREW		
	I	1402	71	AR	AR	8	8	80205	NAS1635-04-10	SCREW		
	I	1403	72	AR	AR	2	2	80205	NAS1635-06-6	SCREW		
	I	1404	73	AR	AR	4	4	80205	NAS1635-08-20	SCREW		
	I	1405	74	AR	AR	12	12	80205	NAS1635-08-6	SCREW		
	I	1406	75	AR	AR	2	2	86906	MS24693C52	SCREW		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR 0	CODE IDENT	PL 4972038	SHEET 07
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M	
				503	504	503	502	501						
	P	0701	1					X			8972870	SCHEM DIAG; SPLITTER OUTPUT		
	P	0702	2					X			8972839	HA PATT-PH; SPLITTER OUTPUT		
	I	0704	4					X			8030018	WORKMANSHIP SPEC, BASIC		
	P	0707	7						1		8679774-1	HANDLEBOARD		
	I	0714	14					AR			8928349-8	CEMENT		
	I	0713	13					AR			2010105-22	COPPER WIRE, ROUND, TINNED		
	I	0716	16					AR			2010909-812	INSULATING TUBING		
	I	0717	17					AR			2010890-320	SOLDER, TIN-LEAD ALLOY		
	I	0718	18					AR			2010575-1	FLUX, SOLDERING, ALCHL-ROSEN		

DEC 1320 16/69

PARTS LIST		RCA		RCA CORPORATION - NEW YORK, NY	REVISION DATE	PL 8372840	REV LTR E		
LIST TITLE: BOARD ASSEMBLY VIDEO/AUDIO INPUT				PREPARED BY	DATE	REL	CODE IDENT NO. 49671	SHEET OF 9 SHEETS	
				CHECKED BY	DATE		CONTRACT NO.		
				8673734-501	S: YLAB-GSE		DESIGN ACTIVITY APPD	DATE	NAS 8-27968
				NEXT ASSY	USED ON		FIRST APPLICATION		
REVISIONS									
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED		
A	REVISED								
B	REVISED								
C	REVISED								
D	REVISED								
E	REVISED								
INTERPRET SYMBOLS USED AS FOLLOWS:									
UNITS OF MEASURE (UM)			QUANTITIES	SYMBOL					
A - Inches	H - Barrels	Y - Each	X - Applicable document	U - Govt or customer furnished	* - Vendor item. See specification or source control drawing.				
B - Feet	J - Pounds		O - For ref only	K - Govt or customer furnished and installed					
C - Yards	L - Pair								
D - Ounces	M - Set								
E - Pints	N - Kit								
F - Quarts	P - Roll								
G - Gallons	R - Box, Case								

SPECIFICATION	STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR E	CODE IDENT 49671	PL 8372840	SHEET #2
			RCA CORPORATION NEW YORK N.Y.											
D1	D2	FIND NO.	DRAWING NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	Y M		
			503	504	505	502	501							
MIL-C-11015/18	I	0201	C1					1	81349	CK03B*102K	CAPACITOR			
MIL-C-8/18	I	0202	C2					1	81349	CM03ED910J03	CAPACITOR			
MIL-C-11015/19	I	0203	C3					1	81349	CK068X103K	CAPACITOR			
MIL-C-11015/19	I	0204	C4					1	81349	CK068X103K	CAPACITOR			
MIL-C-27287/1	I	0205	C5					1	81349	CTM103VAJ	CAPACITOR			
MIL-C-11015/19	I	0206	C6					1	81349	CK068X103K	CAPACITOR			
MIL-C-11015/19	I	0207	C7					1	81349	CK068X103K	CAPACITOR			
MIL-C-5/18	I	0208	C8					1	81349	CM06FD202J03	CAPACITOR			
MIL-C-11015/19	I	0209	C9					1	81349	CK068X103K	CAPACITOR			
MIL-C-11015/19	I	0210	C10					1	81349	CK068X103K	CAPACITOR			
	I	0211	C11					1	72982	8131-050-651-105M	CAPACITOR			
MIL-C-8/18	I	0212	C12					1	81349	CM06FD202J03	CAPACITOR			
MIL-C-5/18	I	0214	C13					1	81349	CM03FD301J03	CAPACITOR			
MIL-C-5/18	I	0215	C14					1	81349	CM06FD821J03	CAPACITOR			
MIL-C-5/18	I	0216	C15					1	81349	CM06FD681J03	CAPACITOR			
MIL-C-11015/19	I	0217	C16					1	81349	CK068X103K	CAPACITOR			
MIL-C-11015/19	I	0218	C17					1	81349	CK068X103K	CAPACITOR			

DEC 1320 16169.

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR E	CODE IDENT	PL 8372840	SHEET C3
			ITEM OR FIND NO.	QTY REQD PER DASH NO					U M	CODE IDENT	PART OR IDENTIFIED NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
				505	504	503	502	501							
MIL-C-5/18	I	0301	C18						1	81349	CM05E0510J03	CAPACITOR			
MIL-C-5/18	I	0302	C19						1	81349	CM05FD191J03	CAPACITOR			
MIL-C-11015/19	I	0303	C20						1	81349	CK06BX103K	CAPACITOR			
MIL-C-5/18	I	0304	C21						1	81349	CM05E0510J03	CAPACITOR			
MIL-C-5/18	I	0305	C22						1	81349	CM05FD191J03	CAPACITOR			
MIL-C-11015/19	I	0306	C23						1	81349	CK06BX103K	CAPACITOR			
MIL-C-11015/19	I	0308	C24						1	81349	CK06BX104K	CAPACITOR			
MIL-C-11015/19	I	0309	C25						1	81349	CK06BX104K	CAPACITOR			
MIL-C-26655	I	0310	C26						1	81349	CS138E156K	CAPACITOR			
MIL-C-26655	I	0311	C27						1	81349	CS138E156K	CAPACITOR			
MIL-C-26655	I	0312	C28						1	81349	CS138C336K	CAPACITOR			
	I	0313	CR1						1	81349	1N4148	DIODE			
	I	0316	CR2						1	81349	1N4148	DIODE			
	I	0318	C1						1	96906	MS90537-37	COIL			
	I	0319	P1						1	91662	DD-7022-035-000-001	CONNECTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR E	CODE IDENT	PL 8372840	SHEET 04
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				505	504	503	502	501						
	I	0401	Q1						1		2N2219A	TRANSISTOR		
	I	0402	Q2						1		2N4839	TRANSISTOR		
	I	0403	Q3						1		2N2907A	TRANSISTOR		
	I	0404	Q4						1		2N2222A	TRANSISTOR		
	I	0405	Q5						1		2N4859	TRANSISTOR		
	I	0406	Q6						1		2N2369A	TRANSISTOR		
	I	0407	Q7						1		2N2907A	TRANSISTOR		
	I	0408	Q8						1		2N2969A	TRANSISTOR		
	I	0409	Q9						1		2N2907A	TRANSISTOR		
MIL-R-11/B	I	0412	R1						1	81349	RC07GF102K	RESISTOR		
MIL-R-22684/2	I	0413	R2						1	81349	RL2NS301J	RESISTOR		
	I	0414	R3						1	80294	3009P1=101	RESISTOR		
MIL-R-55182/3	I	0415	R4						1	81349	RN60D1101F	RESISTOR		
MIL-R-22684.1	I	0416	R5						1	81349	RL075201J	RESISTOR		
MIL-R-10509/1	I	0417	R6						1	81349	RN60D1002F	RESISTOR		
MIL-R-11/B	I	0418	R7						1	81349	RC20GF361K	RESISTOR		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR E	CODE IDENT	PL 8372840	SHEET 05
			RCA CORPORATION NEW YORK N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
			ITEM OR FIND NO.	QTY REQD PER DASH NO.										
			505	504	503	502	501							
MIL-R-11/3	I	0501	R8					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0502	R9					1	81349	RC07GF120K	RESISTOR			
MIL-R-22684/2	I	0503	R10					1	81349	RL20S901J	RESISTOR			
MIL-R-11/8	I	0504	R11					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0505	R12					1	81349	RC07GF101K	RESISTOR			
MIL-R-11/8	I	0506	R13					1	81349	RC07GF470K	RESISTOR			
MIL-R-11/3	I	0507	R14					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/8	I	0509	R15					1	81349	RC07GF222K	RESISTOR			
MIL-R-11/8	I	0510	R16					1	81349	RC07GF470K	RESISTOR			
MIL-R-11/8	I	0511	R17					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/3	I	0512	R18					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/8	I	0514	R19					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0515	R20					1	81349	RC07GF564K	RESISTOR			
MIL-R-11/3	I	0516	R21					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0517	R22					1	81349	RC07GF120K	RESISTOR			
	I	0518	R23					1	80294	3009P1-502	RESISTOR			

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RF CORPORATION NEW YORK N Y					CAMDEN PLANT	REV LTR E	CODE IDENT 49671	PL 2972260	SHEET 66
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M	
				305	304	303	302	301						
MIL-R-10509/1	I	0601	R24					1	81349	RN60D9112F	RESISTOR			
MIL-R-10509/1	I	0602	R25					1	81349	RN60D5112F	RESISTOR			
MIL-R-11/8	I	0603	R26					1	81349	RC07GF562K	RESISTOR			
MIL-R-10509/1	I	0604	R27					1	81349	RN60D5112F	RESISTOR			
MIL-R-10509/1	I	0605	R28					1	81349	RN60D5112F	RESISTOR			
MIL-R-11/3	I	0606	R29					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0608	R30					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/8	I	0609	R31					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0610	R32					1	81349	RC07GF665K	RESISTOR			
MIL-R-11/8	I	0611	R33					1	81349	RC07GF102K	RESISTOR			
MIL-R-11/8	I	0612	R34					1	81349	RC07GF472K	RESISTOR			
MIL-R-11/8	I	0614	R35					1	81349	RC07GF223K	RESISTOR			
MIL-R-11/8	I	0615	R36					1	81349	RC07GF152K	RESISTOR			
MIL-R-11/3	I	0616	R37					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/8	I	0617	R38					1	81349	RC07GF471K	RESISTOR			
MIL-R-11/8	I	0618	R39					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0619	R40					1	81349	RC07GF687K	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR E	CODE IDENT	PL #272840	SHEET 07	
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM
				503	504	503	502	501					
MIL-R-11/B	I	0701	R41						1	81349	RC07GF102K	RESISTOR	
MIL-R-11/B	I	0702	R42						1	81349	RC07GF472K	RESISTOR	
MIL-R-11/B	I	0703	R43						1	81349	RC07GF223K	RESISTOR	
MIL-R-11/B	I	0704	R44						1	81349	RC07GF152K	RESISTOR	
MIL-R-11/B	I	0705	R45						1	81349	RC07GF120K	RESISTOR	
MIL-R-11/B	I	0706	R46						1	81349	RC07GF471K	RESISTOR	
MIL-R-11/B	I	0707	R47						1	81349	RC20GF680K	RESISTOR	
MIL-R-11/B	I	0708	R48						1	81349	RC20GF680K	RESISTOR	
MIL-R-11/B	I	0709	R49						1	81349	RC22GF271K	RESISTOR	
MIL-R-11/B	I	0710	R50						1	81349	RC07GF103K	RESISTOR	
MIL-R-11/B	I	0711	R51						1	81349	RC07GF103K	RESISTOR	
MIL-R-11/B	I	0712	R52						1	81349	RC07GF102K	RESISTOR	
MIL-R-11/B	I	0713	R53						1	81349	RC07GF102K	RESISTOR	
MIL-R-11/B	I	0714	R54						1	81349	RC07GF220K	RESISTOR	
	I	0716	T1						1	00348	VM14M	TRANSFORMER	
	I	0717	TJ1						1	00779	3-582340-1	JACK, TEST:BRN	
	I	0718	TJ2						1	00779	3-582340-2	JACK, TEST:RED	
	I	0719	TJ3						1	00779	3-582340-3	JACK, TEST:ORG	

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR E	CODE IDENT	PL 8372840	SHEET 08
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				503	504	503	502	501						
	I	0801	TJ4					1	00779	3-882340-4	JACK, TEST=VEL			
	I	0803	TJ10					1	00779	3-882340-0	JACK, TEST=BLK			
	I	0806	U1					1	04713	MC1712GL	INTEGRATED CIRCUIT			
	I	0807	U2					1	04713	MC1741CL	INTEGRATED CIRCUIT			
	I	0808	U3					1	04713	MC1458CL	INTEGRATED CIRCUIT			
	I	0810	VR1					1		1N3022B	DIODE, ZENER			
	I	0811	VR2					1		1N3022B	DIODE, ZENER			
	I	0812	VR3					1		1N753A	DIODE, ZENER			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR E	CODE IDENT	PL 8372840	SHEET 09
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
				503	504	505	502	501							
	P	0901	1					X				8372871		SCHEM DIAG; VIDEO/AUDIO INPUT	
	P	0902	2					X				8372841		MA PATT=PW; VIDEO/AUDIO INPUT	
	I	0904	4					X				8030018		WORKMANSHIP SPEC, BASIC	
	P	0907	7						1			8673774*2		HANDLE=BOARD	
	I	0909	9						1			8505806*4		MOUNTING PAD TD=5 PACKAGE	
	I	0910	10						8			8524995*1		SPACER, TRANSISTOR	
	I	0914	14					AR				8533343*8		CEMENT	
	I	0915	15					AR				2010105*22		COPPER WIRE, ROUND, TINNED	
	I	0916	16					AR				2010909*812		INSULATING TUBING	
	I	0917	17					AR				2010858*320		SOLDER, TIN=LEAD ALLOY	
	I	0918	18					AR				2010573*1		FLUX, SOLDERING, ALCHL=ROBIN	

C. 2

PARTS LIST		RCA		RCA CORPORATION NEW YORK, NY		REVISION DATE		PL 8372842		REV LTR G	
LIST TITLE: BOARD ASSEMBLY SPLITTER TIMING				CAMDEN PLANT		PREPARED BY	DATE	REL	CODE IDENT NO 49671		SHEET OF 10 SHEETS
				8673734-501	SKYLAB-GSE				CONTRACT NO. NAS 8-27968		
				NEXT ASBY	USED ON	CHECKED BY	DATE				
				FIRST APPLICATION				DESIGN ACTIVITY APPD	DATE		
REVISIONS											
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED				
A	REVISED										
B	REVISED										
C	REVISED										
D	REVISED										
E	REVISED										
F	REVISED										
G	REVISED										
INTERPRET SYMBOLS USED AS FOLLOWS:											
UNITS OF MEASURE (UM)			QUANTITIES		SYMBOL						
A - Inches	H - Barrels	T - Each	X - Applicable document	U - Govt or customer furnished	* - Vendor item. See specification or source control drawing.						
B - Feet	J - Pounds			K - Govt or customer furnished and installed							
C - Yards	L - Pair		O - For ref only								
D - Ounces	M - Set										
E - Pints	N - Kit										
F - Quarts	P - Roll										
G - Gallons	R - Box, Case										

68379

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR G	CODE IDENT	PL 8372842	SHEET 02
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				905	504	503	502	501						
MIL-C-5/18	I	0201	C1					1	81349	CM06FD152J08	CAPACITOR			
	I	0202	C2					////		N/A	NOT USED			
	I	0203	C3					////		N/A	NOT USED			
	I	0204	C4					////		N/A	NOT USED			
MIL-C-5/18	I	0205	C5					////	81349	CM05F0391J08	CAPACITOR			
	I	0206	C6					////		N/A	NOT USED			
	I	0208	C7					////		N/A	NOT USED			
	I	0209	C8					////		N/A	NOT USED			
	I	0210	C9					////		N/A	NOT USED			
	I	0211	C10					////		N/A	NOT USED			
MIL-C-11015/18	I	0213	C11					1	81349	CK05BK102K	CAPACITOR			
MIL-C-11015/19	I	0214	C12					1	81349	CK06BK103K	CAPACITOR			
MIL-C-11015/19	I	0215	C13					1	81349	CK06BK102K	CAPACITOR			
MIL-C-5/18	I	0216	C14					1	81349	CMC3ED510J08	CAPACITOR			
MIL-C-11015/19	I	0217	C15					1	81349	CK06BK104K	CAPACITOR			
MIL-C-11015/19	I	0218	C16					1	81349	CK06BK103K	CAPACITOR			
MIL-C-11015/19	I	0219	C17					1	81349	CK06BK103K	CAPACITOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR G	CODE IDENT	PL 8372842	SHEET 03
			RCA CORPORATION NEW YORK N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M
			ITEM OR FIND NO.	QTY REQD PER DASH NO.								
		909	904	903	902	901						
MIL-C-11015/19	I	0301	C18					1	81349	CK06BX103K	CAPACITOR	
MIL-C-5/18	I	0302	C19					1	81349	CM05FD221J03	CAPACITOR	
MIL-C-27287/1	I	0303	C20					1	81349	CTX103VAJ	CAPACITOR	
MIL-C-5/18	I	0304	C21					1	81349	CM06FD272J03	CAPACITOR	
MIL-C-5/18	I	0305	C22					1	81349	CM05FD101J03	CAPACITOR	
MIL-C-5/18	I	0306	C23					1	81349	CM06FD202J03	CAPACITOR	
MIL-C-5/18	I	0307	C24					1	81349	CM05FD221J0*	CAPACITOR	
MIL-C-5/18	I	0308	C25					1	81349	CM06FD102J03	CAPACITOR	
MIL-C-26655	I	0309	C26					1	81349	CS13BF336K	CAPACITOR	
MIL-C-11015/19	I	0310	C27					1	81349	CK06BX104K	CAPACITOR	
MIL-C-26655	I	0311	C28					1	81349	CS13BF336K	CAPACITOR	
MIL-C-11015/19	I	0312	C29					1	81349	CK06BX104K	CAPACITOR	
MIL-C-11015/19	I	0313	C30					1	81349	CK06BX104K	CAPACITOR	
MIL-C-11015/19	I	0314	C31					1	81349	CK06BX104K	CAPACITOR	
MIL-C-11015/19	I	0315	C32					1	81349	CK06BX104K	CAPACITOR	
MIL-C-26655	I	0316	C33					1	81349	CS13BE136K	CAPACITOR	
MIL-C-26655	I	0317	C34					1	81349	CS13BE336K	CAPACITOR	
MIL-C-11015/18	I	0318	C35					1	81349	CK05BX102K	CAPACITOR	
MIL-C-26655	I	0319	C36					1	81349	CS13BE566K	CAPACITOR	

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR G	CODE IDENT	PL #372842	SHEET 04
			RCA CORPORATION NEW YORK N Y		PER DASH NO.		U	CODE	PART OR		NOMENCLATURE OR	S
			ITEM OR FIND NO.	QTY REQD	503	504	502	501	M	IDENT	IDENTIFYING NO.	DESCRIPTION
HIL-C-2865B	I	0401	C27					1	81349	C51388566K	CAPACITOR	
	I	0402	C38					1	56289	TE1129	CAPACITOR	
	I	0403	CR1					1	81349	1N4148	DIODE	
	I	0404	CR2					1	81349	1N4148	DIODE	
	I	0405	CR3					1	81349	1N4148	DIODE	
	I	0406	CR4					1		1N645	DIODE	
	I	0407	CR5					1		1N645	DIODE	
	I	0408	CR6					1	81349	1N4148	DIODE	
	I	0409	CR7					1		1N645	DIODE	
	I	0410	L1					/////		N/A	NOT USED	
	I	0411	L2					/////		N/A	NOT USED	
	I	0412	L3					/////		N/A	NOT USED	
	I	0413	L4					/////		N/A	NOT USED	
	I	0414	L8					/////		N/A	NOT USED	
	I	0415	L6					/////		N/A	NOT USED	
	I	0416	L7					1	96906	MS90537-27	COIL	
	I	0418	P1					1	91662	00-7022-035-000-001	CONNECTOR	

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR G	CODE IDENT	PL 8372a42	SHEET 05
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				503	504	503	502	501						
	I	0501	Q1					1			2N2222A	TRANSISTOR		
	I	0502	Q2					1			2N2222A	TRANSISTOR		
	I	0503	Q3					1			2N2905A	TRANSISTOR		
	I	0504	Q4					1			2N2905A	TRANSISTOR		
	I	0505	Q5					1			2N2222A	TRANSISTOR		
	I	0506	Q6					1			2N2222A	TRANSISTOR		
	I	0507	Q7					1			2N2905A	TRANSISTOR		
MIL-R-11/8	I	0510	R1					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0511	R2					1	81349	RC07GF333K	RESISTOR			
MIL-R-10509/1	I	0512	R3					1	81349	RN60D7901F	RESISTOR			
MIL-R-22684/1	I	0513	R4					1	81349	RL07S201J	RESISTOR			
MIL-R-10509/1	I	0514	R5					1	81349	RN60D2151F	RESISTOR			
MIL-R-11/3	I	0515	R6					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0516	R7					1	81349	RC07GF130K	RESISTOR			
MIL-R-10509/1	I	0517	R8					1	81349	RN60D3322F	RESISTOR			
MIL-R-22684/1	I	0518	R9					1	81349	RL07S202J	RESISTOR			
MIL-R-11/8	I	0519	R10					1	81349	RC07GF103K	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR G	CODE IDENT	PL 8372962	SHEET 06
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				503	504	505	902	901						
MIL-R-10509/1	I	0601	R11					1	81349	RN60D1001F	RESISTOR			
MIL-R-10509/1	I	0602	R12					1	81349	RN60D2610F	RESISTOR			
MIL-R-10509/1	I	0603	R13					1	81349	RN60D5621F	RESISTOR			
MIL-R-11/3	I	0604	R14					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0605	R15					1	81349	RC07GF120K	RESISTOR			
MIL-R-11/3	I	0606	R16					1	81349	RC07GF683K	RESISTOR			
MIL-R-11/3	I	0608	R17					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/3	I	0609	R18					1	81349	RC07GF103K	RESISTOR			
MIL-R-10509/1	I	0610	R19					1	81349	RN60D1002F	RESISTOR			
MIL-R-10509/1	I	0611	R20					1	81349	RN60D1472F	RESISTOR			
	I	0612	R21					1	80294	3009Pi=103	RESISTOR			
MIL-R-10509/1	I	0614	R22					////	81349	RN60D5111F	RESISTOR			
	I	0615	R23					////		N/A	NOT USED			
MIL-R-10509/1	I	0616	R24					1	81349	RN60D5111F	RESISTOR			
	I	0617	R25					1	80294	3009Pi=103	RESISTOR			
MIL-R-10509/1	I	0618	R26					1	81349	RN60D5111F	RESISTOR			
MIL-R-10509/1	I	0619	R27					1	81349	RN60D1002F	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR G	CODE IDENT	PL 8372842	SHEET 07
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M	
				303	304	303	302	301						
MIL-R-11/8	I	0701	R28					1	81349	RC07GF103K	RESISTOR			
MIL-R-10509/1	I	0702	R29					1	81349	RC07GF1002F	RESISTOR			
MIL-R-11/8	I	0703	R30					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0704	R31					1	81349	RC07GF022K	RESISTOR			
MIL-R-11/8	I	0705	R32					1	81349	RC07GF193K	RESISTOR			
MIL-R-11/8	I	0706	R33					1	81349	RC07GF390K	RESISTOR			
MIL-R-11/8	I	0708	R34					1	81349	RC07GF101K	RESISTOR			
MIL-R-11/8	I	0709	R35					1	81349	RC07GF101K	RESISTOR			
MIL-R-11/8	I	0710	R36					1	81349	RC07GF022K	RESISTOR			
MIL-R-11/8	I	0711	R37					1	81349	RC07GF392K	RESISTOR			
MIL-R-11/8	I	0712	R38					1	81349	RC07GF562K	RESISTOR			
MIL-R-11/8	I	0714	R39					1	81349	RC07GF392K	RESISTOR			
MIL-R-11/8	I	0715	R40					1	81349	RC07GF562K	RESISTOR			
MIL-R-11/8	I	0716	R41					1	81349	RC07GF022K	RESISTOR			
MIL-R-11/8	I	0717	R42					1	81349	RC07GF193K	RESISTOR			
MIL-R-11/8	I	0718	R43					1	81349	RC07GF390K	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR G	CODE IDENT	PL 6372842	SHEET 00	
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM
				503	504	505	502	501					
MIL-R-11/8	I	0801	R44						1	81349	RC07GF101K	RESISTOR	
MIL-R-11/8	I	0802	R45						1	81349	RC07GF101K	RESISTOR	
MIL-R-11/8	I	0803	R46						1	81349	RC07DF822K	RESISTOR	
MIL-R-11/8	I	0804	R47						1	81349	RC07GF502K	RESISTOR	
MIL-R-11/8	I	0805	R48						1	81349	RC07GF562K	RESISTOR	
MIL-R-11/3	I	0806	R49						1	81349	RC20GF101K	RESISTOR	
MIL-R-11/3	I	0807	R50						1	81349	RC20GF991K	RESISTOR	
MIL-R-11/8	I	0808	R51						1	81349	RC07GF103K	RESISTOR	
MIL-R-10509/1	I	0809	R52						1	81349	RN60D1501P	RESISTOR	
	I	0811	TJ1						1	00779	3-582340-1	JACK, TEST-BRN	
	I	0812	TJ2						1	00779	3-582340-2	JACK, TEST-RED	
	I	0813	TJ3						1	00779	3-582340-3	JACK, TEST-ORG	
	I	0814	TJ4						1	00779	3-582340-4	JACK, TEST-YEL	
	I	0815	TJ5						1	00779	3-582340-5	JACK, TEST-ORN	
	I	0816	TJ6						1	00779	3-582340-6	JACK, TEST-BLU	
	I	0818	TJ10						1	00779	3-582340-0	JACK, TEST-BLK	

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR G	CODE IDENT	PL 8972842	SHEET 09	
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M
				505	504	503	502	501					
	I	0901	U1						1	04713	MC1712GL	INTEGRATED CIRCUIT	
	I	0902	U1						1	04713	MC1710CL	INTEGRATED CIRCUIT	
	I	0903	U3						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0904	U4						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0905	U5						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0906	U6						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0907	U7						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0908	U8						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0909	U9						1	04713	MC7400L	INTEGRATED CIRCUIT	
	I	0910	U10						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0911	U11						1	04713	MC7400L	INTEGRATED CIRCUIT	
	I	0912	U12						1	04713	MC8601L	INTEGRATED CIRCUIT	
	I	0913	VR1						1		1N9022B	DIODE, ZENER	
	I	0914	VR2						1		1N752A	DIODE, ZENER	

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR G	CODE IDENT	PL 8572842	SHEET 10
			RCA CORPORATION NEW YORK N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M			
			ITEM OR FIND NO.	QTY REQD PER DASH NO.											
			503	504	503	502	501								
	P	1001	1					X				8372872	SCHEM DIAG; SPLITTER TIMING		
	P	1002	2					X				8372843	MA PATT-PW; SPLITTER TIMING		
	I	1004	4					X				8030010	WORKMANSHIP SPEC, BASIC		
	P	1007	7						1			8673774-3	HANDLE-BOARD		
	I	1009	9						3			8505806-4	MOUNTING PAD TO-3 PACKAGE		
	I	1010	10						4			8524995-1	SPACER, TRANSISTOR		
	I	1014	14					AR				8533343-8	CEMENT		
	I	1015	15					AR				2010105-22	COPPER WIRE, ROUND, TINNED		
	I	1016	16					AR				2010909-812	INSULATING TUBING		
	I	1017	17					AR				2010858-320	SOLDER, TIN-LEAD ALLOY		
	I	1018	18					AR				2010573-1	FLUX, SOLDERING, ALCHL-ROBIN		

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PARTS LIST	RCA	RCA CORPORATION NEW YORK, NY	REVISION DATE	PL 8373015	REV LTR B
		CAMDEN PLANT			

LIST TITLE: BOARD ASSEMBLY EXTERNAL SYNC	PREPARED BY	DATE	REL	CODE IDENT NO. 49671	SHEET OF 6 1 SHEETS
	8673734	SKYLAB GSE		CONTRACT NO. NAS 8-27968	
	NEXT ASSY	USED ON	DESIGN ACTIVITY APPD	DATE	
FIRST APPLICATION					

REVISIONS							
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED
A	REVISED						
B	REVISED						

INTERPRET SYMBOLS USED AS FOLLOWS:			
UNITS OF MEASURE (UM)	QUANTITIES	SYMBOL	
A — Inches B — Feet C — Yards D — Ounces E — Pints F — Quarts G — Gallons H — Barrels J — Pounds L — Pair M — Set N — Kit P — Roll R — Box, Case T — Each	X — Applicable document O — For ref only	U — Govt or customer furnished K — Govt or customer furnished and installed	* — Vendor item, See specification or source control drawing.

65373

SPECIFICATION	DVG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR B	CODE IDENT	PL 8973015	SHEET 02
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
MIL-C-11013/18	I	0201	C1					1	81349	CK05BX101K	CAPACITOR			
MIL-C-11015/19	I	0202	C2					1	81349	CK06BX103K	CAPACITOR			
MIL-C-8/18	I	0203	C3					1	81349	CM06E0102J03	CAPACITOR			
MIL-C-27287/1	I	0204	C4					1	81349	CTH103VAJ	CAPACITOR			
MIL-C-5/18	I	0205	C5					1	81349	CM06E0352J03	CAPACITOR			
MIL-C-5/18	I	0206	C6					1	81349	CM05E0510J03	CAPACITOR			
MIL-C-5/18	I	0207	C7					1	81349	CM05E0391J03	CAPACITOR			
MIL-C-5/18	I	0208	C8					1	81349	CM05E0221J03	CAPACITOR			
MIL-C-11019/19	I	0209	C9					1	81349	CK06BX105K	CAPACITOR			
MIL-C-82/1	I	0210	C10					1	81349	CE11C221D	CAPACITOR			
	I	0213	L1					1	96906	HS90537-37	COIL			
	I	0216	P1					1	91662	00-7022-035-000-001	CONNECTOR			
	I	0219	Q1					1	04713	2N2222	TRANSISTOR			

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDPT PLANT	REV LTR B	CODE IDENT	PL 8973015	SHEET 03
			RCA CORPORATION NEW YORK N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M		
			ITEM OR FIND NO.	QTY RECD PER DASH NO.										
			505	504	503	502	501							
MIL-R-11/8	I	0301	R1					1	81349	RC07GF472K	RESISTOR			
MIL-R-11/8	I	0302	R2					1	81349	RC07GF103K	RESISTOR			
MIL-R-11/8	I	0303	R3					1	81349	RC07GF102K	RESISTOR			
MIL-R-11/8	I	0304	R4					1	81349	RC07GF102K	RESISTOR			
MIL-R-11/8	I	0305	R5					1	81349	RC07GF103K	RESISTOR			
MIL-R-10509/1	I	0306	R6					1	81349	RN60D1002F	RESISTOR			
MIL-R-10509/1	I	0307	R7					1	81349	RN60D1472F	RESISTOR			
MIL-R-11/8	I	0308	R8					1	81349	RC07GF102K	RESISTOR			
	I	0309	R9					1	32997	3009P1-103	RESISTOR			
MIL-R-10509/1	I	0310	R10					1	81349	RN60D1002F	RESISTOR			
MIL-R-11/8	I	0311	R11					1	81349	RC07GF102K	RESISTOR			
	I	0312	R12					1	32997	3009P1-103	RESISTOR			
MIL-R-10509/1	I	0313	R13					1	81349	RN60D5111F	RESISTOR			
MIL-R-10509/1	I	0314	R14					1	81349	RN60D1002F	RESISTOR			
MIL-R-11/8	I	0315	R15					1	81349	RC07GF102K	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR B	CODE IDENT	PL 8373015	SHEET 04
			ITEM OR FIND NO.	QTY REQD PER DASH NO					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				503	504	505	502	501						
	I	0401	TJ1					1	00779	3-582340-1	JACK, TEST-BRN			
	I	0402	TJ2					1	00779	3-582340-2	JACK, TEST-RFD			
	I	0403	TJ3					1	00779	3-582340-3	JACK, TEST-BUR			
	I	0404	TJ4					1	00779	3-582340-4	JACK, TEST-YEL			
	I	0405	TJ5					1	00779	3-582340-5	JACK, TEST-GRN			
	I	0407	TJ10					1	00779	3-582340-10	JACK-TEST, BLK			

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR B	CODE IDENT	PL 4973015	SHEET 05
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
	I	0503	U1						1	04713	MC8601L	INTEGRATED CIRCUIT		
	I	0504	U2						1	04713	MC8601L	INTEGRATED CIRCUIT		
	I	0505	U3						1	04713	MC8601L	INTEGRATED CIRCUIT		
	I	0506	U4						1	04713	MC8601L	INTEGRATED CIRCUIT		
	I	0507	U5						1	04713	MC8601L	INTEGRATED CIRCUIT		
	I	0508	U6						1	04713	MC8601L	INTEGRATED CIRCUIT		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR #	CODE IDENT	PL 097P015	SHEET 00
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M	
				503	504	503	502	501						
	P	0601	1					X			8674013	SCHEM DIAG; EXTERNAL SYNC		
	P	0602	2					X			8973014	MA PATT=PW; EXTERNAL SYNC		
	I	0604	4					X			8030014	WORKMANSHIP SPEC, BASIC		
	P	0607	7						1		0673774-8	HANDLE=BOARD		
	I	0610	10						1		8524993-1	SPACER, TRANSISTOR		
	I	0614	14					AR			8533343-8	CEMENT		
	I	0615	15					AR			2010109-22	COPPER WIRE, ROUND, TINNED		
	I	0618	16					AR			2010909-812	INSULATING TUBING		
	I	0617	17					AR			2010898-320	SOLDER, TIN-LEAD ALLOY		
	I	0618	18					AR			2010573-1	FLUX, SOLDERING, ALCHLOROSIN		

DEC 1320 (6-69)

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PARTS LIST		RCA		RCA CORPORATION NEW YORK, NY		REVISION DATE	PL 8673757	REV LTR A	
CAMDEN PLANT				PREPARED BY		DATE	REL	CODE IDENT NO. 49671	SHEET OF 3 SHEETS
LIST TITLE: BOARD ASSEMBLY BESSEL FILTER/ EQUALIZER				8673734-501		SKYLAB-GSE		CONTRACT NO. NAS 8-27968	
				NEXT ASSY		USED ON			
				FIRS' APPLICATION		DESIGN ACTIVITY APPD			
REVISIONS									
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED		
INTERPRET SYMBOLS USED AS FOLLOWS:									
UNITS OF MEASURE (UM)			QUANTITIES		SYMBOL				
A - Inches	H - Barrels	T - Each	X - Applicable document	U - Govt or customer furnished	* - Vendor item. See specification or source control drawing.				
B - Feet	J - Pounds			K - Govt or customer furnished and installed					
C - Yards	L - Pair		O - For ref only						
D - Quinces	M - Set								
E - Pints	N - Kit								
F - Quarts	P - Roll								
G - Gallons	R - Box, Case								

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR A	CODE IDENT	PL 8673737	SHEET 02
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				503	504	505	502	501						
MIL-C-8/18	I	0201	C1					1	81349	CM05FD101J03	CAPACITOR			
MIL-C-8/18	I	0202	C2					1	81349	CM06FD472J03	CAPACITOR			
MIL-C-8/18	I	0203	C3					1	81349	CM06FD102J03	CAPACITOR			
MIL-C-8/18	I	0204	C4					1	81349	CM06FD112J03	CAPACITOR			
MIL-C-8/18	I	0205	C5					1	81349	CM05FD241J03	CAPACITOR			
	I	0209	L1					1	72259	WEVL15	COIL			
	I	0210	L2					1	72259	WEVL8.2	COIL, VARIABLE			
	I	0211	L3					1	72259	WEVL3.9	COIL (NY TRONICS)			
	I	0218	S1					1		897789061	SWITCH, TOGGLE			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR	CODE IDENT	PL 8673757	SHEET 03
			RCA CORPORATION, NEW YORK, N Y					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M		
			ITEM OR FIND NO.	QTY REQD PER DASH NO.										
			505	504	503	502	501							
	P	0301	1					X			8672810	SCHEM DIAG, BESSEL FILTER/EQL		
	P	0203	2					X			8673761	NA PART-FW, BESSEL FILTER/EQL		
	P	0303	3					X			8673762	MARKING DWG, BESSEL FILTER/EQL		
	I	0304	4					X			8030018	WORKMANSHIP SPEC, BASIC		
	I	0305	5					X			2020463	MARKING METAL AND PLASTIC SH		
	I	0309	9					AR			9983173-1	PAINT, MARKING WHITE		
	I	0310	10					11			8550137-2	TERMINAL		
	I	0315	15					AR			999127-9	WIRE, ELECTRICAL		
	I	0317	17					AR			2010858-320	SOLDER, TIN-LEAD ALLOY		
	I	0318	18					AR			2010573-1	FLUX, SOLDERING, ALCHL-ROBIN		

DEC 1370 (6/69)

PARTS LIST	PROJ	RCA CORPORATION NEW YORK, NY	REVISION DATE	PL 8375682	REV LTR -	
LIST TITLE: CTE DE-MUX		CAMDEN NJ PLANT		CODE IDENT NO. 49671 SHEET OF 7 SHEETS CONTRACT NO. NAS-9-13767		
		PREPARED BY <i>John J. O'haner</i>	DATE 5 AUGUST 1974			REL
		CHECKED BY	DATE			
NEXT ASSY	ASTP	DESIGN ACTIVITY APPD	DATE			
		FIRST APPLICATION				

REVISIONS							
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED

UNITS OF MEASURE (UM)			QUANTITIES	SYMBOL
A — Inches	H — Barrels	T — Each	X — Applicable document	U — Govt or customer furnished
B — Feet	J — Pounds		O — For ref only	* — Vendor item. See specification or source control drawing.
C — Yards	L — Pair		/// — Not used	K — Govt or customer furnished and installed
D — Ounces	M — Set			
E — Pints	N — Kit			
F — Quarts	P — Roll			
G — Gallons	R — Box, Case			

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR	CODE IDENT	PL 8375682	SHEET 02
			RCA CORPORATION, NEW YORK, N. Y.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM			
			ITEM OR FIND NO.	QTY REQD PER DASH NO.											
			505	504	503	502	501								
MIL-C-11015/19	I	0201	C1						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0202	C2						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0203	C3						1	81349	CK06BX104K		CAPACITOR		
MIL-C-27287	I	0204	C4						1	81349	CTM104VAJ		CAPACITOR		
MIL-C-27287/1	I	0205	C5						1	81349	CTM103VAJ		CAPACITOR		
MIL-C-11015/19	I	0206	C6						1	81349	CK06BX103K		CAPACITOR		
MIL-C-39003/1	I	0207	C7						1	81349	CSR13C107KM		CAPACITOR		
MIL-C-5/18	I	0208	C8						1	81349	CM06F0561J03		CAPACITOR		
MIL-C-5/18	I	0209	C9						1	81349	CM06F0561J03		CAPACITOR		
MIL-C-5/18	I	0210	C10						1	81349	CM06F0332J03		CAPACITOR		
MIL-C-11015/19	I	0211	C11						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0212	C12						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0213	C13						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0214	C14						1	81349	CK06BX104K		CAPACITOR		
MIL-C-11015/19	I	0215	C15						1	81349	CK06BX104K		CAPACITOR		
		0216	C16						1	81349	CE11C150D		CAPACITOR		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		MCA		CAMDEN PLANT		REV LYR	CODE IDENT	PL 8375682	SHEET 03	
			ITEM OR FIND NO.	QTY REQD PER DASH NO					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM
				505	504	503	502	501					
MIL-S-19500/116	I	0301	CR1						1	81349	JAN1N4148	DIODE	
MIL-S-19500/116	I	0302	CR2						1	81349	JAN1N4148	DIODE	
	I	0305	P1						1	91682	00-7022-035-000-001	CONNECTOR	
MIL-R-11/8	I	0306	R1						1	81349	RC07GF103J	RESISTOR	
MIL-R-11/8	I	0309	R2						1	81349	RC07GF103J	RESISTOR	
MIL-R-11/8	I	0310	R3						1	81349	RC07GF104J	RESISTOR	
MIL-R-11/8	I	0311	R4						1	81349	RC07GF100J	RESISTOR	
MIL-R-11/8	I	0312	R5						1	81349	RC07GF100J	RESISTOR	
MIL-R-11/8	I	0313	R6						1	81349	RC07GF183J	RESISTOR	
	I	0314	R7						1	80294	3009p1-503	RESISTOR	
MIL-R-11/8	I	0315	R8						1	81349	RC07GF223J	RESISTOR	
MIL-R-11/8	I	0316	R9						1	81349	RC07GF103J	RESISTOR	
MIL-R-11/8	I	0317	R10						1	81349	RC07GF103J	RESISTOR	
MIL-R-11/8	I	0318	R11						1	81349	RC07GF472J	RESISTOR	
MIL-R-11/8	I	0319	R12						1	81349	RC07GF103J	RESISTOR	

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR	CODE IDENT	PL 8375682	SHEET 04
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
MIL-R-11/A	I	0401	R13					1	81349	RC07GF102J	RESISTOR			
MIL-R-11/B	I	0402	R14					1	81349	RC07GF150J	RESISTOR			
MIL-R-10509/1	I	0403	R15					1	81349	RN60D1002F	RESISTOR			
	I	0404	R16					1	80294	3009P1-103	RESISTOR			
MIL-R-22684/1	I	0405	R17					1	81349	RL07S512J	RESISTOR			
MIL-R-11/B	I	0406	R18					1	81349	RC07GF103J	RESISTOR			
MIL-R-11/B	I	0407	R19					1	81349	RC07GF102J	RESISTOR			
MIL-R-11/B	I	0408	R20					1	81349	RC07GF103J	RESISTOR			
MIL-R-11/B	I	0409	R21					1	81349	RC07GF102J	RESISTOR			
MIL-R-11/B	I	0410	R22					1	81349	RC07GF102J	RESISTOR			
MIL-R-11/B	I	0411	R23					1	81349	RC07GF112J	RESISTOR			
MIL-R-11/B	I	0412	R24					1	81349	RC07GF103J	RESISTOR			
MIL-R-11/B	I	0413	R25					1	81349	RC07GF181J	RESISTOR			
MIL-R-11/B	I	0414	R26					1	81349	RC07GF683J	RESISTOR			
MIL-R-11	I	0415	R27					1	81349	RC20GF391J	RESISTOR			
MIL-R-11/B	I	0416	R28					1	81349	RC07GF102J	RESISTOR			
MIL-R-11/B	I	0417	R29					1	81349	RC07GF153J	RESISTOR			

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA CORPORATION NEW YORK, N. Y.					CAMDEN PLANT	REV LTR	CODE IDENT	PL 0375682	SHEET 05
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
	I	0501	TJ1						1	00779	3-582340-1	JACK, TEST-BRN		
	I	0502	TJ2						1	00779	3-582340-2	JACK, TEST-RED		
	I	0503	TJ3						1	00779	3-582340-3	JACK, TEST-ORG		
	I	0504	TJ4						1	00779	3-582340-4	JACK, TEST-YEL		
	I	0505	TJ5						1	00779	3-582340-5	JACK, TEST-GRN		
	I	0506	TJ6						1	00779	3-582340-6	JACK, TEST-BLU		
	I	0507	TJ7						1	00779	3-582340-7	JACK, TEST-VIOLET		
	I	0510	TJ10						1	00779	3-582340-0	JACK, TEST-BLK		
	I	0512	U1						1	04713	MC4044L	INTEGRATED CIRCUIT		
	I	0513	U2						1	04713	MC1458L	INTEGRATED CIRCUIT		
	I	0514	U3						1	04713	MC4024L	INTEGRATED CIRCUIT		
	I	0515	U4						1	04713	MC7490L	INTEGRATED CIRCUIT		
	I	0516	U5						1	04713	MC7473L	INTEGRATED CIRCUIT		
	I	0517	U6						1	04713	MC7404L	INTEGRATED CIRCUIT		
	I	0518	U7						1	01295	SN74123J	INTEGRATED CIRCUIT		
	I	0519	U8						1	04713	MC7400L	INTEGRATED CIRCUIT		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA CORPORATION, NEW YORK, N. Y.		CAMDEN PLANT	REV LTR	CODE IDENT	PL 8375682	SHEET 06
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
	I	0601	U9						1	04713	MC7473L	INTEGRATED CIRCUIT		
	I	0602	U10						1	04713	MC7493L	INTEGRATED CIRCUIT		
	I	0603	U11						1	01295	SN74L04J	INTEGRATED CIRCUIT		
	I	0604	U12						1	04713	MC7430L	INTEGRATED CIRCUIT		
	I	0605	U13						1	04713	MC7400L	INTEGRATED CIRCUIT		
	I	0606	U14						1	04713	MC7420L	INTEGRATED CIRCUIT		
	I	0607	U15						1	04713	MC7493L	INTEGRATED CIRCUIT		
	I	0608	U16						1	04713	MC1710L	INTEGRATED CIRCUIT		
	I	0609	U17						1	01295	SN74164J	INTEGRATED CIRCUIT		
	I	0610	U18						1	01295	SN74164J	INTEGRATED CIRCUIT		
	I	0611	U19						1	01295	SN74164J	INTEGRATED CIRCUIT		
	I	0612	U20						1	01295	SN74164J	INTEGRATED CIRCUIT		
MIL-S-19500/127	I	0615	VR1						1	81349	JAN1N751A	DIODE, ZENER		
MIL-S-19500/127	I	0616	VR2						1	81349	JAN1N753A	DIODE, ZENER		
MIL-S-19500/117	I	0617	VR3						1	81349	JAN1N963B	DIODE		

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR -	CODE IDENT	PL 8375682	SHEET 07
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M	
				505	504	503	502	501						
	P	0701	1					X			8375684	SCHEMATIC CTR DEMUX		
	P	0702	2					X			8676332	MA PATT-PW, CTR DEMUX		
	I	0704	4					X			8030018	WORKMANSHIP SPEC, BASIC		
	P	0707	7								8673774	HANDLE-BOARD		
	I	0709	9					/////			8505806-4	MOUNTING PAD TO-5 PACKAGE		
	I	0710	10					/////			8524995-1	SPACER, TRANSISTOR		
	I	0714	14					AR			8533343-8	CEMENT		
	I	0715	15					AR			2010105-22	COPPER WIRE, ROUND, TINNED		
	I	0716	16					AR			2010909-812	INSULATING TUBING		
	I	0717	17					AR			2010858-320	SOLDER, TIN-LEAD ALLOY		
	I	0718	18					AR			2010573-1	FLUX, SOLDERING, ALCHL-ROBIN		

PARTS LIST	RCA	RCA CORPORATION NEW YORK, NY	REVISION DATE	PL 8676341	REV LTR -
CAMDEN N.J. PLANT					

LIST TITLE: <h2 style="text-align: center;">DISPLAY GSE</h2>	PREPARED BY <i>John G. Behrens</i> 5 AUGUST 1974 CHECKED BY DESIGN ACTIVITY AND DATE	REL	CODE IDENT NO. <h3 style="text-align: center;">49671</h3>	SHEET 1 OF 3 SHEETS							
<table border="1" style="margin: auto;"> <tr> <td>NEXT ASSY</td> <td>USED ON</td> </tr> <tr> <td></td> <td>ASTP</td> </tr> <tr> <td colspan="2" style="text-align: center;">FIRST APPLICATION</td> </tr> </table>	NEXT ASSY	USED ON		ASTP	FIRST APPLICATION				CONTRACT NO. <h2 style="text-align: center;">NAS-9-13767</h2>		
NEXT ASSY	USED ON										
	ASTP										
FIRST APPLICATION											

REVISIONS							
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED

INTERPRET SYMBOLS USED AS FOLLOWS:			
UNITS OF MEASURE (UM)	QUANTITIES	SYMBOL	
A — Inches B — Feet C — Yards D — Ounces E — Pints F — Quarts G — Gallons H — Barrels J — Pounds L — Pair M — Set N — Kit P — Roll R — Box, Case T — Each	X — Applicable document O — For ref only /// — Not used	U — Govt or customer furnished K — Govt or customer furnished and installed * — Vendor item. See specification or source control drawing.	

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA CORPORATION NEW YORK, N. Y.		CAMDEN PLANT		REV LTR -	CODE IDENT 49671	PL 6575341	SHEET 02
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM		
				505	504	503	502	501							
	I	0201	A1						1	28480	HP5082-7300		LED DISPLAY		
	I	0202	A2						1	28480	HP5082-7300		LED DISPLAY		
	I	0203	A3						1	28480	HP5082-7300		LED DISPLAY		
	I	0204	A4						1	28480	HP5082-7300		LED DISPLAY		
	I	0205	A5						1	28480	HP5082-7300		LED DISPLAY		
	I	0206	A6						1	28480	HP5082-7300		LED DISPLAY		
	I	0207	A7						1	28480	HP5082-7300		LED DISPLAY		
	I	0208	A8						1	28480	HP5082-7300		LED DISPLAY		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR	CODE IDENT	PL 8576341	SHEET 03
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM	
				505	504	503	502	501						
00-S-571		0302	2					X			8371958		SCHEMATIC GSE DISPLAY	
	I	0303	3				X	X			8030022		WORKMANSHIP, NASA COMPLIANT	
	I	0304	4				X	X			2020319		MPCZD & HNL SOLDERING PROCESS	
	I	0305	5					X			2020341		MSTR & FP COATING-ELEC PTS	
	I	0306	6					X			2020999		ADHESIVE-BONDING COMP TO PWB	
	E	0310	10					X			8676340		MA PATT DISPLAY, GSE	
	E	0311	11						I		8676341-502		DISPLAY GSE	
	E	0312	12						1		8676340-1		BD PW	
	I	0313	13					27			8153202-1		TERMINAL	
	I	0315	15					AR		81348	SN63WRAP2		SOLDER	
	I	0316	16					AR			2010573-1		FLUX, SOLDERING, ALCHL-RESIN	
	I	0317	17					AR			2016185		EPOXY-POLYAMIDE COATING	
	I	0318	18					AR			8533343		EPOXY FORMULATIONS	

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8376197

PARTS LIST		RECAT		RCA CORPORATION NEW YORK, NY		REV. ON DATE		PL 8376197		REV LTR —			
LIST TITLE: CTE OUTPUT BUFFER ASS'Y				CAMDEN PLANT		REL	CODE IDENT NO. 49671		SHEET OF <u>4</u> SHEETS				
				NEXT ASSY		USED ON		DESIGN ACTIVITY APPD	DATE	CONTRACT NO. NAS 9-13767			
				FIRST APPLICATION		AST P		CHECKED BY	DATE				
				PREPARED BY		DATE		CHECKED BY	DATE				
REVISIONS													
LTR	DESCRIPTION	DATE	APPROVED	LTR	DESCRIPTION	DATE	APPROVED						
Empty revision table													
INTERPRET SYMBOLS USED AS FOLLOWS:													
UNITS OF MEASURE (UM)			QUANTITIES		SYMBOL								
A — Inches	H — Barrels	T — Each	X — Applicable document	U — Govt or customer furnished	* — Vendor item. See specification or source control drawing.								
B — Feet	J — Pounds		O — For ref only	K — Govt or customer furnished and installed									
C — Yards	L — Pair		/// — Not used										
D — Ounces	M — Set												
E — Pints	N — Kit												
F — Quarts	P — Roll												
G — Gallons	R — Box, Case												

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST		RCA		CAMDEN PLANT		REV LTR	CODE IDENT	PL 2376197	SHEET 02	
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S Y M
				5-5	5-6	5-3	5-2	5-1					
MIL-C-11015/19	I	0201	C1						1	81349	CE11C1500	CAPACITOR	
MIL-C-11015/19	I	0202	C2						1	81349	CK068X103K	CAPACITOR	
MIL-C-11015/19	I	0203	C3						1	81349	CK068X103K	CAPACITOR	
MIL-C-11015/19	I	0204	C4						1	81349	CK068X103K	CAPACITOR	
MIL-C-11015/19	I	0205	C5						1	81349	CK068X103K	CAPACITOR	
	I	0208	P1						1	91662	00-8219-72-000-002	CONNECTOR	
MIL-R-11/8	I	0210	R1						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0211	R2						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0212	R3						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0213	R4						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0214	R5						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0215	R6						1	81349	RC07GF102J	RESISTOR	
MIL-R-11/8	I	0216	R7						1	81349	RC07GF102J	RESISTOR	

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SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT	REV LTR	CODE IDENT	PL 8376197	SHEET 03
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	S M	
				5-5	5-4	5-3	5-2	5-1						
	I	0301	U1						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0302	U2						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0303	U3						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0304	U4						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0305	U5						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0306	U6						1	01295	SN7408J	INTEGRATED CIRCUIT		
	I	0307	U7						1	01295	SN7408J	INTEGRATED CIRCUIT		

SPECIFICATION	DWG STATUS	SHEET/ LINE NO.	PARTS LIST					RCA		CAMDEN PLANT		REV LTR	CODE IDENT	PL 8376197	SHEET 04
			ITEM OR FIND NO.	QTY REQD PER DASH NO.					U M	CODE IDENT	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SYM		
				515	514	513	512	511							
	P	0401	1					X				8376199	SCHEM DIAG		
	P	0402	2					X				8376196-1	MA PATT-PW		
	I	0404	4					X				8030018	WORKMANSHIP SPEC, BASIC		
	P	0405	5						1			8376198-1	BOARD-PW		
	P	0407	7						1			8673774	HANDLE-BOARD		
	I	0409	9					////				8505806-4	MOUNTING PAD TO-3 PACKAGE		
	I	0410	10					////				8524995-1	SPACER, TRANSISTOR		
	I	0414	14					AR				8533343-8	CEMENT		
	I	0415	15					AR				2010103-22	COPPER WIRE, ROUND, TINNED		
	I	0416	16					AR				2010909-812	INSULATING TUBING		
	I	0417	17					AR				2010858-320	SOLDER, TIN-LEAD ALLOY		
	I	0418	18					AR				2010573-1	FLUX, SOLDERING, ALCL-ROBIN		