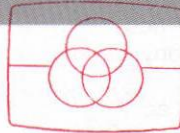


PCM-601ESD

SERVICE MANUAL



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US Model
AEP Model

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SPECIFICATIONS

Signal system	Conforms to CCIR television standard, PAL/SECAM (type1, 2) and NTSC (type 3) color
Code format	Conforms to the technical specifications of the EIAJ (standard format using 14-bit or 16-bit quantization)
Number of audio channels	2 channels
Sampling frequency	44.1 kHz
Quantization	14-bit linear quantizing, or 16-bit linear quantizing
Frequency response	5-20,000 Hz \pm 0.5 dB
Harmonic distortion	Less than 0.007% (14-bit format) Less than 0.005% (16-bit format)
Dynamic range	More than 86 dB (14-bit format) More than 90 dB (16-bit format)
Channel separation	More than 80 dB
Wow and flutter	Below measurable limit
Error correction	Error correction and concealment using CRCC and parity
Emphasis	Pre-emphasis (on recording): fixed at ON De-emphasis (on playback): automatically switched ON or OFF (by detecting pre-emphasis identification code) Time-constant: 50 μ sec, 15 μ sec

Inputs


	Type	Reference input level	Impedance	Minimum input level
LINE IN	Phono	0.24 V (-10 dBs)	50 kilo-hms	77.5 mv (-20 dBs)
VIDEO IN	Phono	1 Vp-p	75 ohms	—
DIGITAL IN	Phono	0.5Vp-p	75 ohms	—

Outputs

	Type	Reference output level	Load impedance
LINE OUT	Phono	0.24 V (-10 dBs)	More than 10 kilohms
MONITOR OUT	Phono	1 Vp-p	75 ohms
VIDEO OUT	Phono	1 Vp-p	75 ohms
COPY OUT	Phono	1 Vp-p	75 ohms
HEADPHONES	Stereo phone	0.9-0.003 mW Continuously Adjustable	32 ohms
DIGITAL OUT	Phono	0.5Vp-p	—

— Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.



DIGITAL AUDIO PROCESSOR

SONY®



General

Power requirements	Type 1: 220 V ac (or 240 V ac adjustable by authorized Sony personnel), 50/60 Hz Type 2: 240 Vac (or 220 V ac adjustable by authorized Sony personnel), 50 Hz Type 3: 120 V
Power consumption	29 W
Dimensions	Approx. 430×85×385 mm (w/h/d) (17×3 ³ / ₈ ×15 ¹ / ₈ inches) including projecting parts and controls
Weight	6.0 kg (net) (13 lb 3 oz) 7.0 kg (in shipping carton) (15 lb 3 oz)
Supplied accessories	Vido connecting cord (2) Type 1,2: phono→BNC plug Type 3: phono plug→phono plug Audio connecting cord (2)

FEATURES

The PCM-601 ESD Sony PCM digital audio processor reproduces a wide dynamic range of stereo sound with minimal distortion, low wow and flutter and a flat frequency response.

To obtain better sound quality, this equipment can also be used as an A/D (analog-to-digital) converter or as a D/A (digital-to-analog) converter.

DIGITAL IN/OUT jacks can be connected to a DA converter or a CD player with a DIGITAL OUT jack

Connect to Sony DAS-702ES DA converter unit, or a CD player with digital outputs such as the CDP-552ESD or CDP-650ESD, for quality sound reproduction.

Selectable format: 16-bit or 14-bit

Select the 16-bit format for a wide-dynamic range and low distortion, or the 14-bit format for error correction capability.

OVC (optimum video condition) control

Reads the VTR output signal and detects the VTR error condition caused by a stained head or unstable tape transport. Adjust this control to achieve a balance between the VTR and the unit for optimum performance in playback mode.

COPY OUT jack

Enables digital-to-digital tape copying with no deterioration in signal quality.

Other functions

- **Bright, easy-to-read peak program meters** enables precision setting of recording and playback levels.
- **Record muting function** enters a blank space between recordings.
- **MONITOR OUT jack** allows monitoring, regardless of the POWER switch setting.
- **AUTO PB MUTE (auto playback muting) button** enables continuous listening or double speed video playback monitoring.

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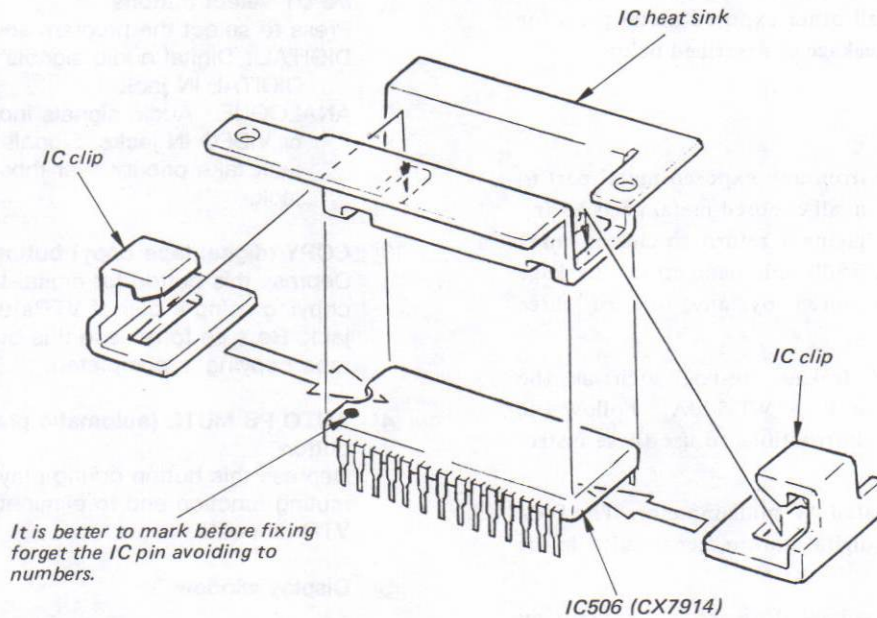
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SERVICING NOTES

NOTES ON IC506 (CX7914) REPRACEMENT

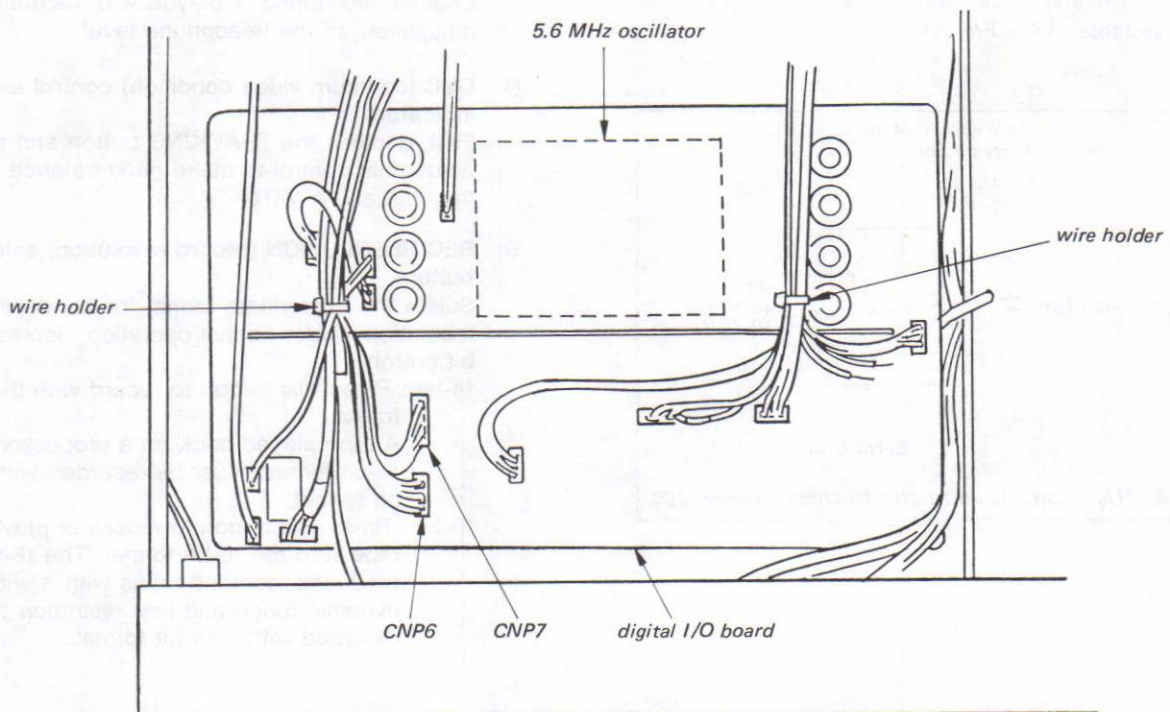
When replacing IC506, first clean the adhesive applying surface of the IC and of the heat sink with alcohol, then fix the heat sink on the IC with an epoxy type adhesive, and insert the IC clips to the claw locking.

Note: This CX7914 IC is fragile to static electricity. Be careful enough to handle this IC.



CNP6 AND CNP7 ON DIGITAL I/O BOARD DISPOSITION

Dispose the leads of CNP6 and CNP7 avoiding the 5.6 MHz oscillator as shown below. (Cause the noise generation.)



SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

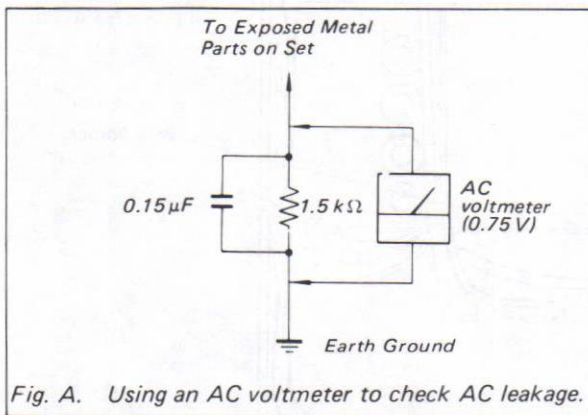


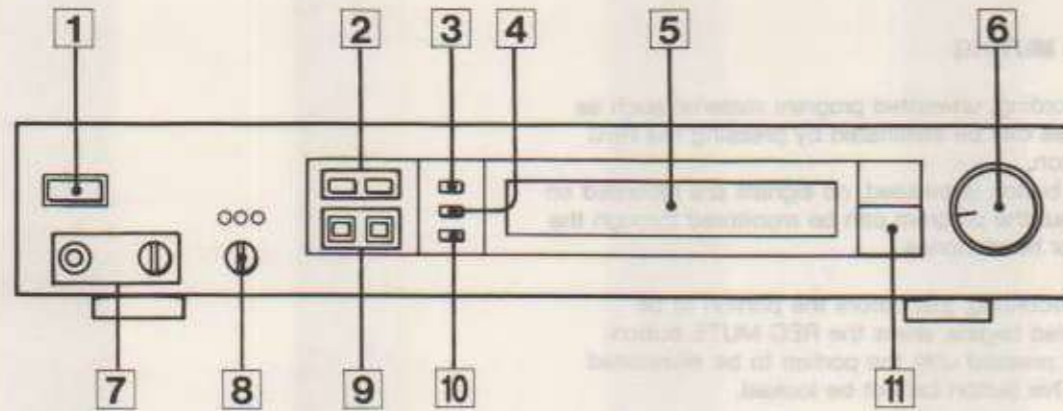
Fig. A. Using an AC voltmeter to check AC leakage.

FUNCTION OF CONTROLS

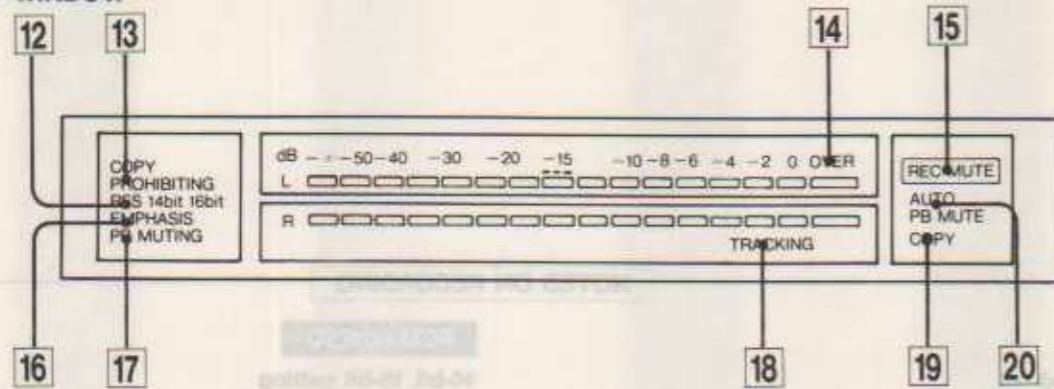
FRONT PANEL

- 1 **POWER switch**
- 2 **INPUT select buttons**
Press to select the program source to be recorded.
DIGITAL : Digital audio signals input from the DIGITAL IN jack.
ANALOGUE : Audio signals input from the LINE IN or VIDEO IN jacks. Signals from the VIDEO IN jack take priority over those from the LINE IN jack.
- 3 **COPY (digital tape copy) button**
Depress this button for digital-to-digital tape copying using a pair of VTRs and the COPY OUT jack. Be sure to release this button when digital tape copying is completed.
- 4 **AUTO PB MUTE (automatic playback muting) button**
Depress this button during playback to activate the muting function and to eliminate noise caused by VTR dropouts.
- 5 **Display window**
- 6 **REC LEVEL (recording level) controls**
Adjust the recording level. The outer control governs the left channel, and the inner control governs the right channel.
- 7 **HEADPHONES jack (stereo phone jack) and LEVEL (headphone level) control**
Enables monitoring of playback or recording, and adjustment of the headphone level.
- 8 **OVC (optimum video condition) control and indicators**
First, depress the TRACKING button and then adjust this control to make good balance between this unit and a VTR.
- 9 **REC RESOLUTION (record resolution) select buttons**
Select the appropriate format for the desired resolution. Under normal operation, depress the 16-bit button.
14-bit : Press this button to record with the 14-bit format.
A tape played back on a processor with a 14-bit format, must be recorded with the 14-bit format.
16-bit : Press this button to record or playback a tape with the 16-bit format. The 16-bit format produces recorded tapes with a wider dynamic range and less distortion than those recorded with a 14-bit format.

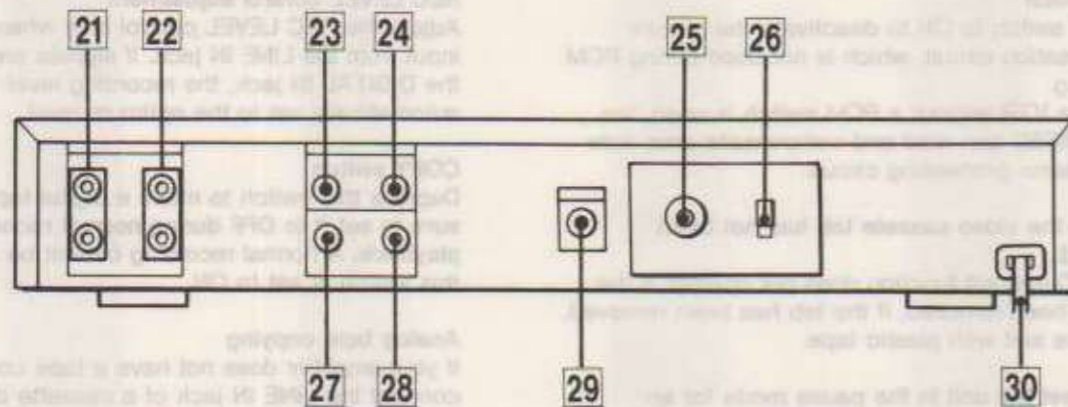
FRONT PANEL



DISPLAY WINDOW



REAR PANEL



10 TRACKING button
Depress this button before adjusting the tracking of the video tape on the VTR. The tracking meter appears in the display window in place of the peak program meters. Each time the button is pressed, the meter function changes.

11 REC MUTE (record muting) button
Keep this button depressed to eliminate unwanted material and to enter a blank space between recorded selections.

DISPLAY WINDOW

12 RES (resolution) indicator
During recording : Displays the record resolution (14-bit or 16-bit) selected by the REC RESOLUTION select button.
During playback : Displays the resolution of the tape being played, regardless of the setting of the REC RESOLUTION select button.

13 COPY PROHIBITING indicator
Lights up when playing back a tape with a tape copy prohibition code is played back or when a CD (compact disc) source input from the DIGITAL IN jack is played back.

14 OVER indicators
Light up when the recording level signals exceed "0" dB, to warn that the recording level is too high.

15 REC MUTE (record muting) indicator
Lights up while the REC MUTE button is depressed.

16 EMPHASIS indicator
Lights up when a tape recorded with emphasis* is played back or recorded.
*This unit's emphasis circuit automatically activates when a tape recorded with emphasis is recorded or played back. This function guarantees optimum sound and increases the signal-to-noise ratio of digital tapes.

17 PB MUTING (playback muting) indicator
Lights up, regardless of the AUTO PB MUTE button setting, when the VTR is not transporting the tape at the proper speed, such as at the beginning of tape playback, or when frequent dropouts occur.

18 TRACKING indicator
Lights up when the TRACKING button is depressed. The R meters indicate the VTR's tracking condition, and move to the right as tracking improves.

19 COPY indicator

20 AUTO PB MUTE (automatic playback muting) indicator

REAR PANEL

21 LINE IN (line input) jacks (phono jack)
Connect to REC OUT (recording output) jacks of an audio amplifier or to the LINE OUT jacks of a stereo microphone amplifier.

22 LINE OUT (line output) jacks (phono jack)
Connect to the TAPE IN (tape input) jacks or AUX IN (auxiliary input) jacks of an audio amplifier.

23 VIDEO IN (input) jack (phono jack)
Connect to the VIDEO OUT (output) jack of the VTR.

24 VIDEO OUT (output) jack (phono jack)
Connect to the VIDEO OUT (output) jack of the VTR.

25 DIGITAL OUT (output) jack (phono jack)
Connect to the DIGITAL IN (input) jack of equipment, such as the DAS-702ES DA converter unit.

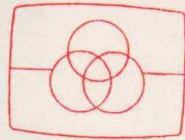
26 DIGITAL OUT switch
Set to ON when connecting the DIGITAL OUT jack. Set to OFF when not in use.

27 MONITOR OUT (output) jack (phono jack)
Connect to the VIDEO IN (input) jack of a component TV or a video monitor.

28 COPY OUT (output) jack (phono jack)
Connect to the VIDEO IN jack of a second VTR to make digital tape copies.
Note : Do not connect the COPY OUT jack during normal recording or playback. Connecting it instead of the VIDEO OUT jack may adversely affect recording or playback.

29 DIGITAL IN (input) jack
Connect to the DIGITAL OUT jack of a CD player, such as the Sony CDP-552ESD or CDP-650ESD.

30 Power cord

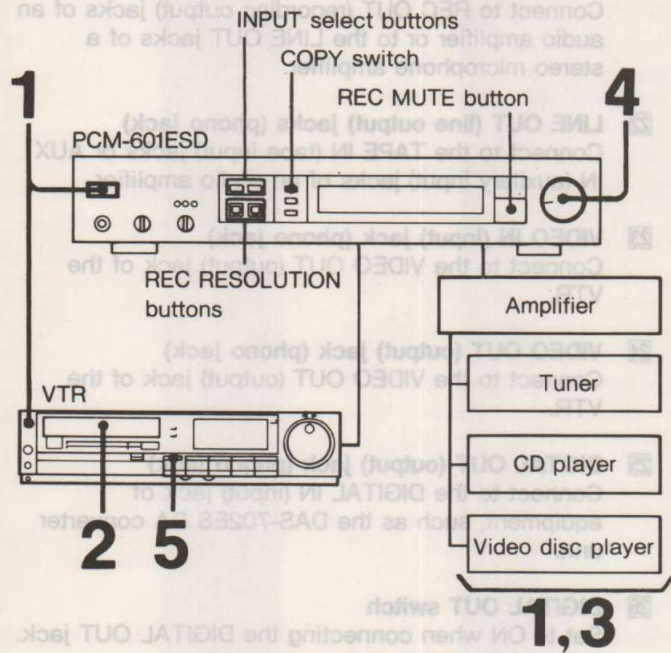


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Notes

- It is not necessary to adjust the REC LEVEL controls when recording a source input from the DIGITAL IN jack.
- When the DIGITAL IN jack is not connected, the incoming source from the LINE IN jack will be recorded as an analog source regardless of the INPUT select button setting.
- Refer to the VTR instruction manual on details on operation.

To monitor the recording

Be sure that the PCM-601ESD VIDEO IN jack is connected to the VTR VIDEO OUT jack. Otherwise, the peak program meters will not indicate the PCM-601ESD monitoring level and monitoring can not be made.

To record two tapes simultaneously

Connect the second VTR's VIDEO IN jack to the PCM-601ESD's COPY OUT jack.

RECORDING LEVEL ADJUSTMENT

Adjust the recording level with the REC LEVEL controls so that the peak program meters do not deflect over 0 dB.

The red illumination of the OVER indicators warns of an overload during recording. If the indicators illuminate frequently, the recording level is set too high (this will result in overload and distorted recording). As the peak program meters used in this unit are far more sensitive than conventional VU meters, also be careful not to set the recording level too low, as the signal-to-noise ratio will deteriorate. The correct recording level settings vary with the program source you are recording. Generally, adjust the level to about 15 dB.

The emphasis circuit automatically activates during recording and the peak program meters indicate the emphasized input signal levels.

Note : The OVER indicators may light up frequently when a digital recording is made from a CD player, which is equipped with the DIGITAL OUT jack such as the CDP-552ESD or CDP650ESD. The frequent lightning of the OVER indications shows that the highest CD level is being recorded, not that the sound is distorted.

Set the switches below to the appropriate position or press the appropriate button.

VTR	Input select switch (if equipped)	LINE
	PCM switch (if equipped)	PCM
PCM-601ESD	INPUT select buttons	DIGITAL or ANALOGUE (Select according to the input source.)
	COPY switch	OFF
	REC RESOLUTION buttons	16 bit (During normal use)

- 1 Turn on the connected equipment.
- 2 Insert a video cassette.
- 3 Press the appropriate function select button of an amplifier and play the program source.
- 4 Adjust the REC LEVEL controls so that the red OVER indicators on the peak program meters illuminate occasionally at the highest signal level (See "Recording level adjustment".)
- 5 Start recording on the VTR.

RECORD MUTING

During recording, unwanted program material such as commercials can be eliminated by pressing the REC MUTE button. When this button is pressed, no signals are recorded on the tape, but the program can be monitored through the speakers or headphones.

- 1 While recording, just before the portion to be eliminated begins, press the REC MUTE button. Keep it pressed until the portion to be eliminated ends. This button cannot be locked.
- 2 Release this button to begin recording again.

NOTES ON RECORDING

VTR

Tape speed

With the **II** VTR, we recommend using the **II** or **II** mode. PCM recording in long play mode is not recommended. Make trial recording.

PCM switch

Set this switch to ON to deactivate the picture compensation circuit, which is not used during PCM recording. Even if a VTR without a PCM switch is used, the PCM-601ESD can read and compensate error data with its error processing circuit.

Be sure the video cassette tab has not been removed.

The REC (record) function does not operate if the tab has been removed. If the tab has been removed, cover the slot with plastic tape.

Do not set the unit in the pause mode for an extended period of time.

If the VTR is set to the pause mode for a long time, the video tape may be damaged. We recommend that the pause button be used as little as possible. The playback muting function may not operate in the pause mode on some VTRs and the noise may be heard.

PCM-601ESD

14-bit/16-bit setting

Press either the 14-bit or the 16-bit button before making a recording. During playback the unit detects the format with which the tape was recorded and automatically selects the 14-bit or 16-bit setting.

REC LEVEL control adjustment

Adjust the REC LEVEL control only when signals are input from the LINE IN jack. If signals are input from the DIGITAL IN jack, the recording level is automatically set to the optimum level.

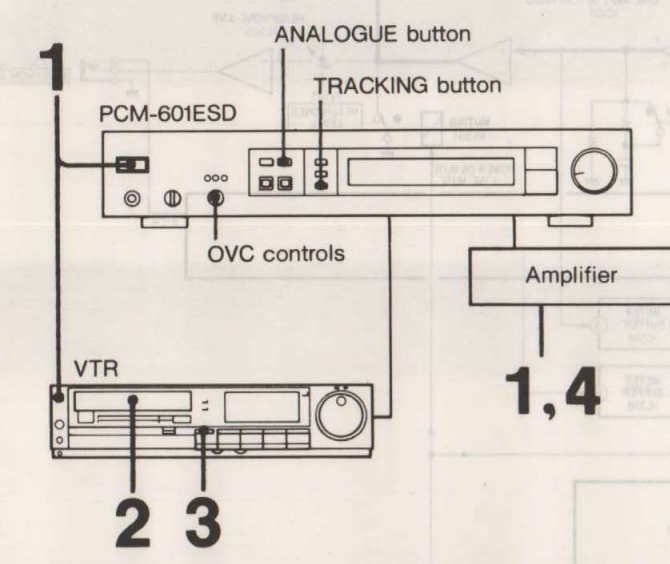
COPY switch

Depress this switch to make a digital tape copy. **Be sure to set it to OFF during normal recording or playback.** A normal recording cannot be made when this switch is set to ON.

Analog tape copying

If your amplifier does not have a tape copy function, connect the LINE IN jack of a cassette deck directly to the LINE OUT of the PCM-601ESD to copy a PCM-recorded tape. If you connect the cassette deck to the AUX or TUNER input jack of that amplifier, howling may occur and the speaker may be damaged.

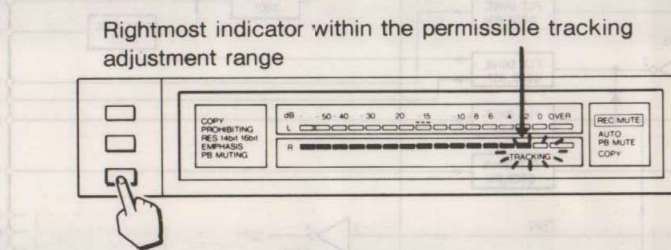
PCM DIGITAL TAPE PLAYBACK



TRACKING ADJUSTMENT OF THE VTR

When a video tape recorded on another VTR is played back, dropouts occasionally occur due to mistracking of the video heads. To obtain optimum sound reproduction, adjust the tracking of the VTR as follows.

- 1 Press the ANALOGUE button.
- 2 Press the PCM-601ESD TRACKING button. The TRACKING indicator lights up and the tracking meter appears in place of the peak level meters.
- 3 Insert a recorded video cassette into the VTR and set the unit to the playback mode.
- 4 After the PB MUTING indicator goes off, adjust the VTR tracking control so that the rightmost indicators light up within the permissible tracking adjustment range.



Set the switches below to the appropriate position or press the appropriate button.

VTR	Input select switch (if equipped)	LINE
Amplifier	Input selector	TAPE or CD (depending upon which is connected to the PCM-601ESD)
	Volume control	Minimum position
PCM-601ESD	INPUT select buttons	ANALOGUE

- 1 Turn on the connected equipment.
- 2 Insert a PCM recorded video cassette.
- 3 Start playback on the VTR.
- 4 Adjust the amplifier volume.

Note: Set the amplifier volume relatively low, and do not adjust it when no audio signals or a low level input are recorded. Otherwise, the speaker may be damaged when high-level signals are input, because PCM recording affords a wider dynamic range than is afforded by conventional analog recording.

AUTOMATIC PLAYBACK MUTING FUNCTION

Press the AUTO PB MUTE button during playback to activate the muting circuit, which automatically eliminates faulty sound reproduction caused when tape playback begins or when the unit is set to the fast forward or pause modes, or when frequent dropouts occur.

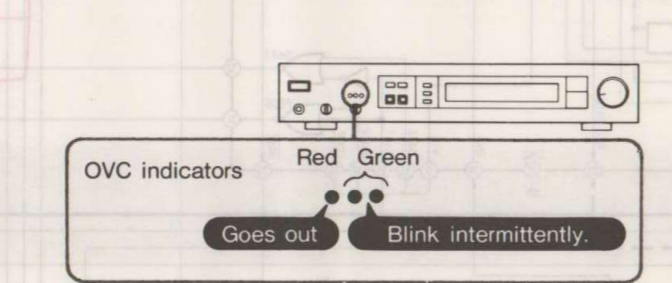
If the muting circuit activates so often as to make listening unpleasant, adjust the VTR tracking control and then press the AUTO PB MUTE button to release it. This will permit you to continue listening without interruption, although a certain amount of noise will be reproduced.

- Notes**
- Be sure to press the AUTO PB MUTE button when recording and playing back TV programs. Otherwise the video data could be misread as PCM data and clicking noise might occur, which could damage the speakers. Clicking may also occur when a blank video tape is played back.
 - The PB MUTING indicator lights up when dropouts occur, regardless of the AUTO PB MUTE button setting.

OVC CONTROL ADJUSTMENT

When playing back the tape recorded with the III or VHS long play mode, on which the recorded track is too narrow to correctly pick up the digital signals, set the OVC control as follows:

- 1 Press the ANALOGUE button.
- 2 Press the PCM-601ESD TRACKING button and adjust the VTR tracking function (see "Tracking adjustment of the VTR").
- 3 Turn the OVC control as follows:



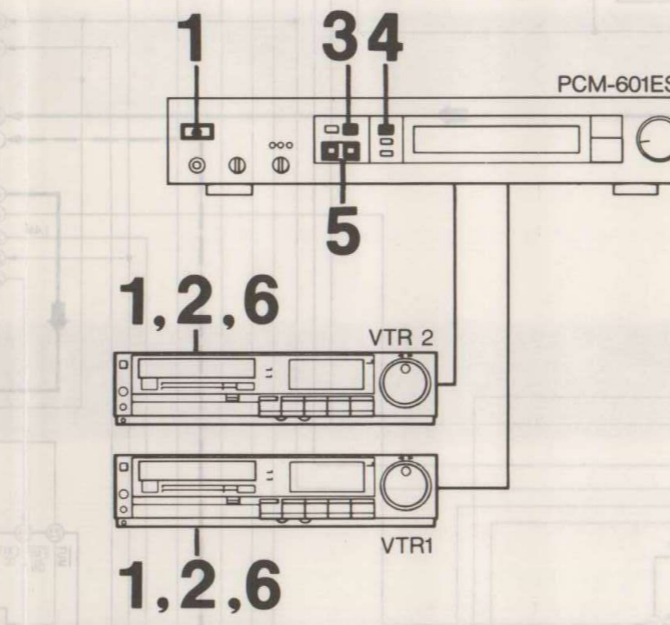
- 4 If you cannot make the adjustment this way, reset the OVC control to the center position and adjust the VTR's picture or sharpness control so that the OVC indicators light up in the manner described in step 3.

Once the optimum video condition is obtained, it is not necessary to readjust the OVC control even if red OVC indicator sometimes flashes or lights up. The built-in error correction circuit functions at that time. If the red OVC indicator frequently flashes, clean the head or replace the video tape.

Note: The OVC indicator shows the logically counted PCM data condition. Therefore, the VTR condition is checked only with the PCM data and it does not correspond to the video image condition. In general, PCM data error occurrence tends to decrease when no image or dropout compensation is applied.

MAKING DIGITAL TAPE COPIES

Recording can be made with no deterioration in sound quality, since the error data are detected and corrected in digital-to-digital copying. Recording level adjustment is not necessary. Two VTRs are required for copying: one for playback (VTR 1) and the other for recording (VTR 2). After making the connection illustrated on page 14, proceed as follows.



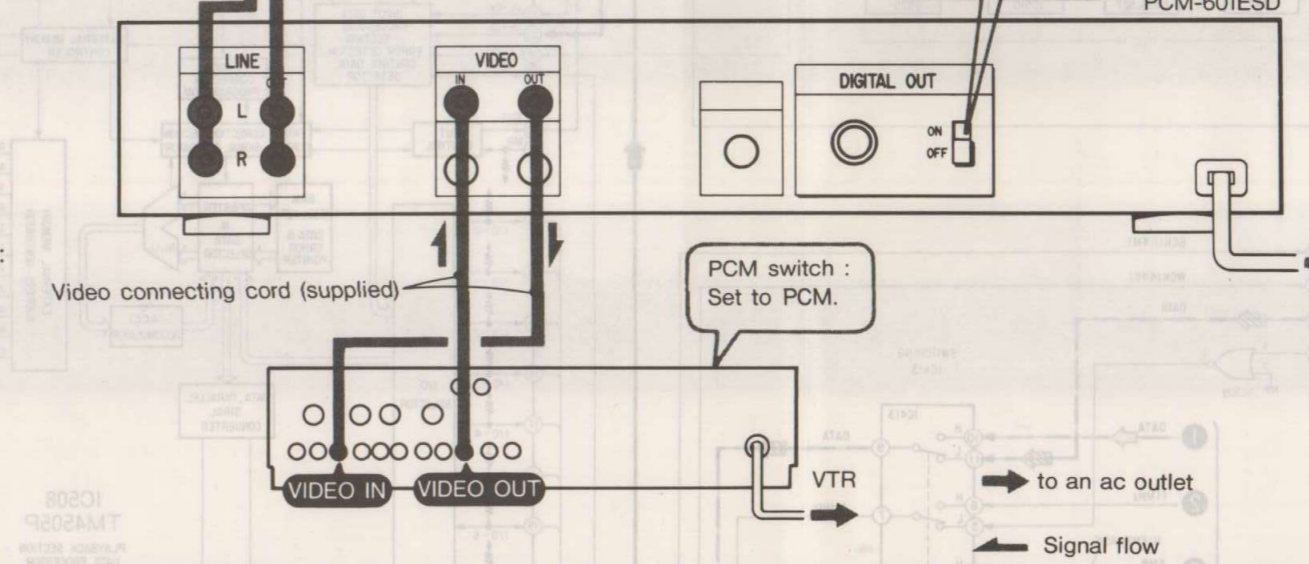
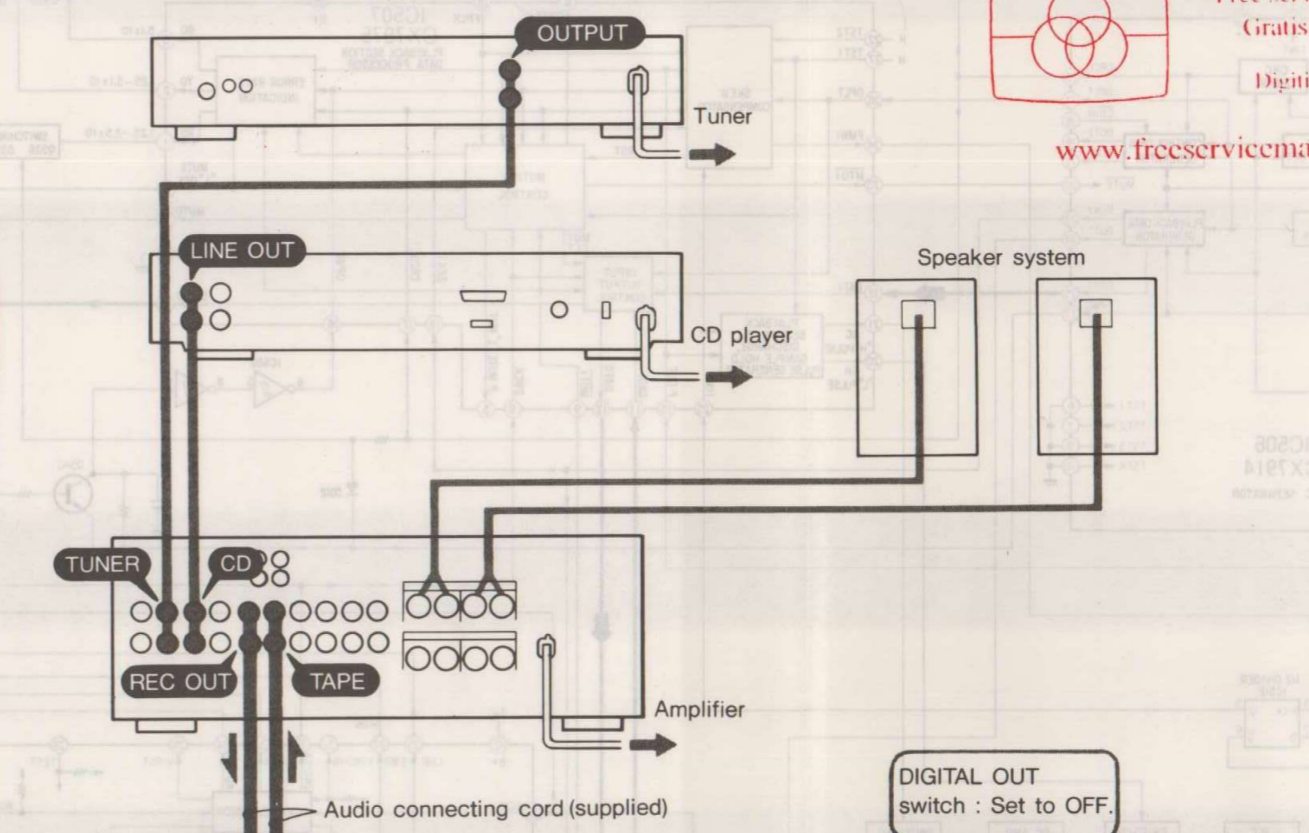
- 1 Turn on the connected equipment.
- 2 Insert a recorded tape into the VTR 1 and a blank tape into the VTR 2.
- 3 Depress the ANALOGUE button.
- 4 Depress the COPY button.
- 5 Depress either of the REC RESOLUTION select buttons: 14-bit or 16-bit. Depress the 16-bit button for normal use.
- 6 Start playback on the VTR 1 and recording on the VTR 2 to begin copying.

When copying is completed, press the COPY button again to release it.

- Notes:**
- Turn the amplifier volume down before depressing the COPY button. Otherwise, a clicking noise may be heard.
 - When the COPY PROHIBITING indicator appears in the display window, copies cannot be made even if the COPY button is depressed.
 - A tape will be copied with no deterioration in signal quality, even if sound heard through the headphones or speakers is distorted.

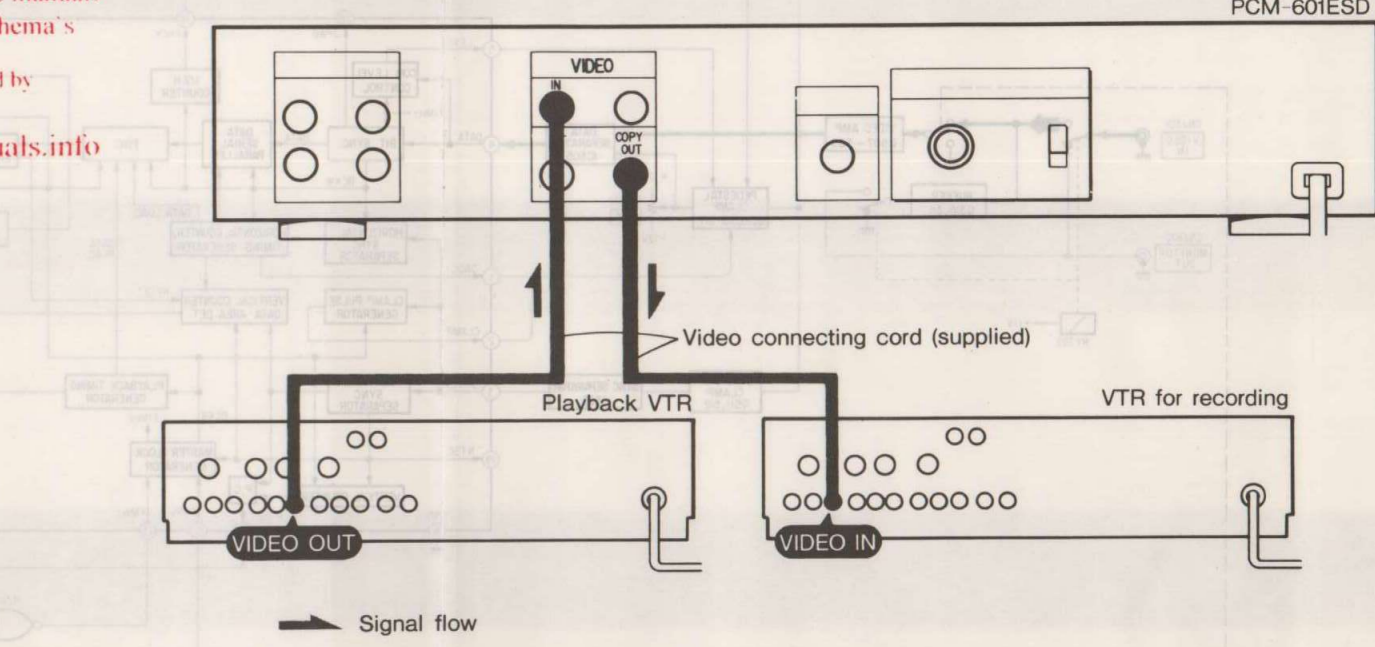
BASIC SYSTEM CONNECTIONS

BASIC CONNECTION



Power cord polarity
A white mark is visible on the lead of the power cord. This will help to operate the PCM-601ESD and the other system components of the system "in phase" by aligning the ac power cord polarities with the ac outlet polarities. In most cases, the marked plug of the PCM-601ESD power cord should be inserted into the grounded side of the ac outlet.

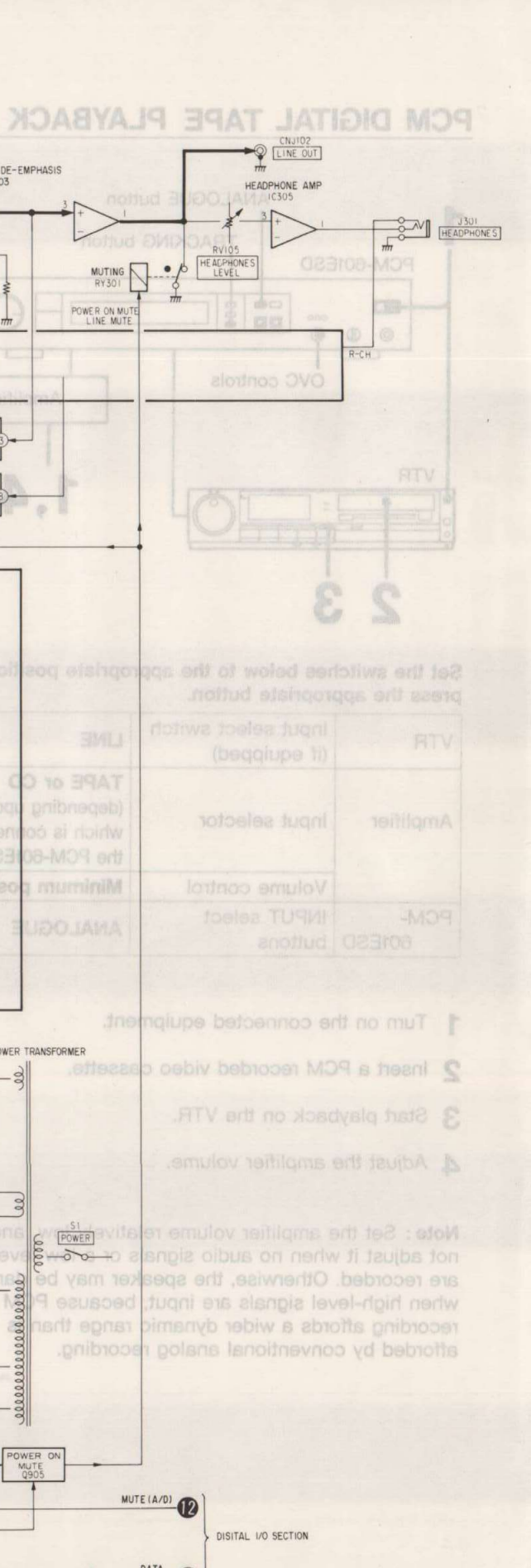
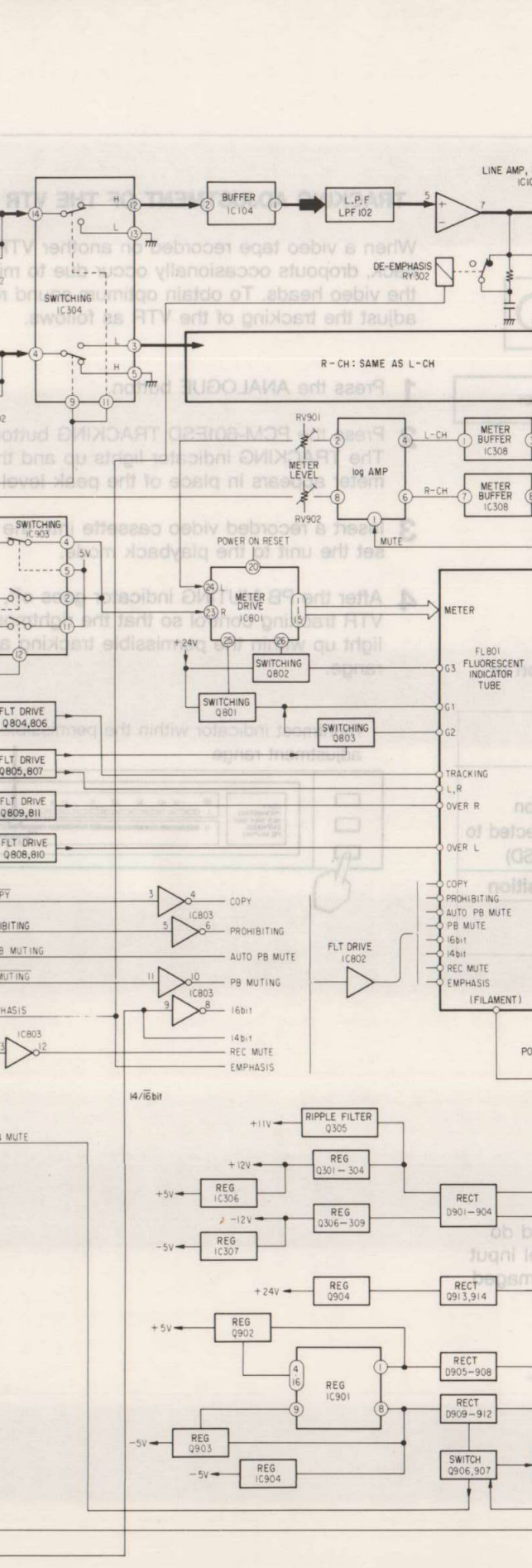
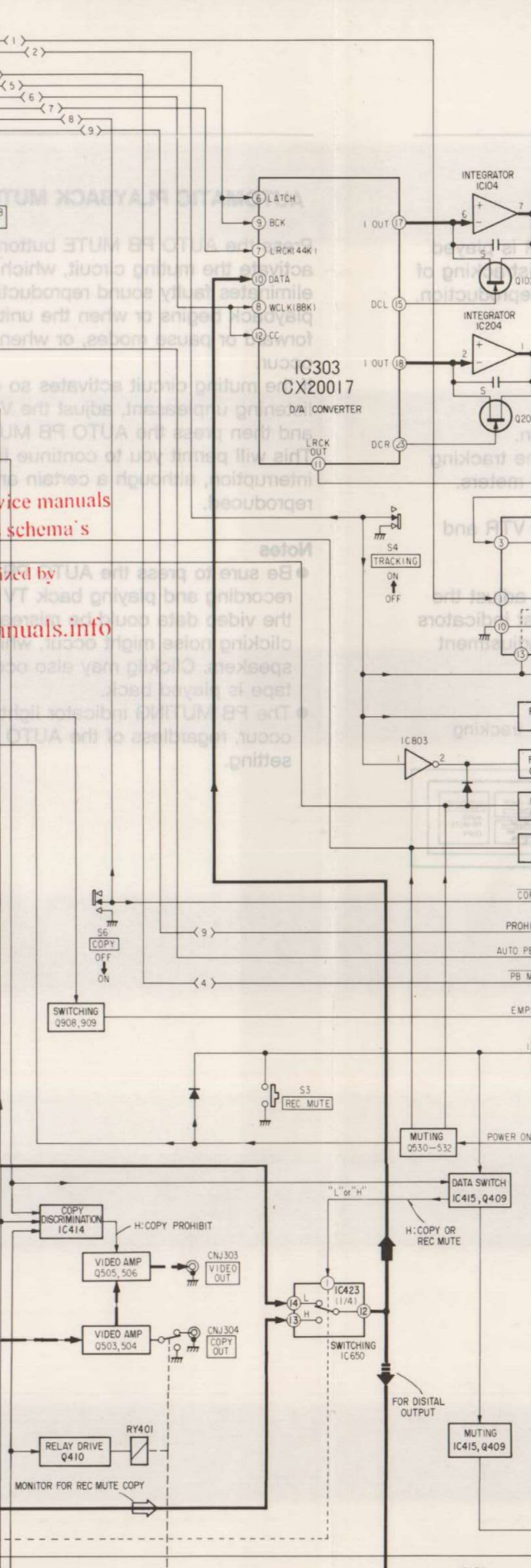
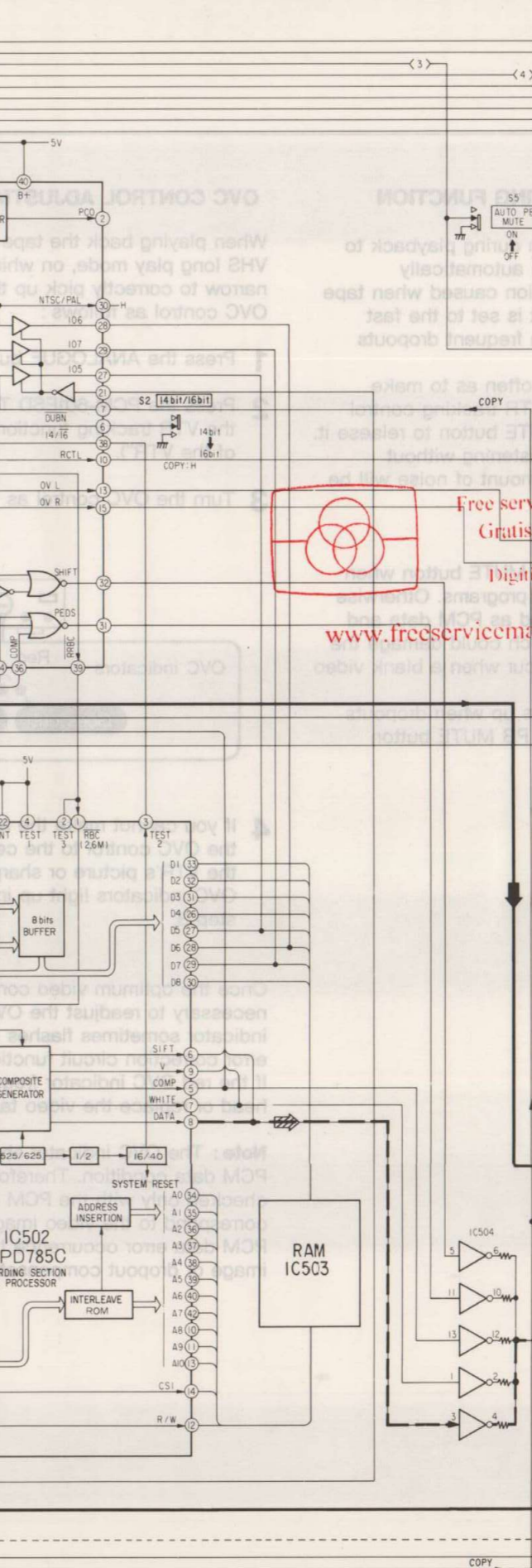
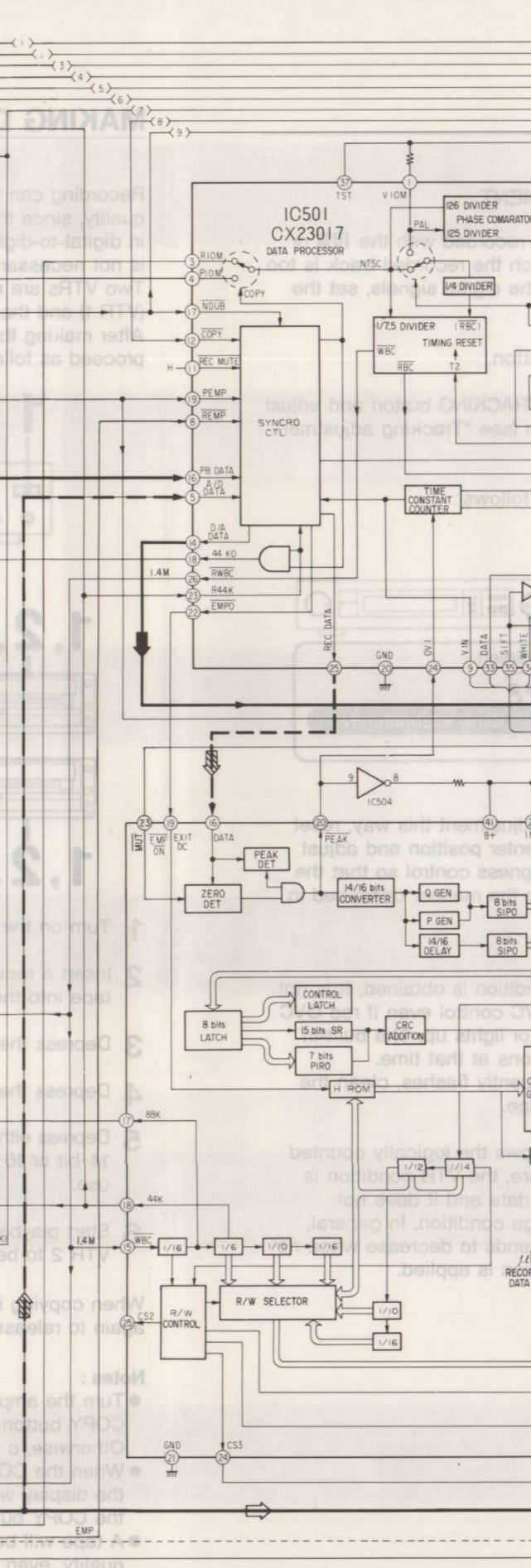
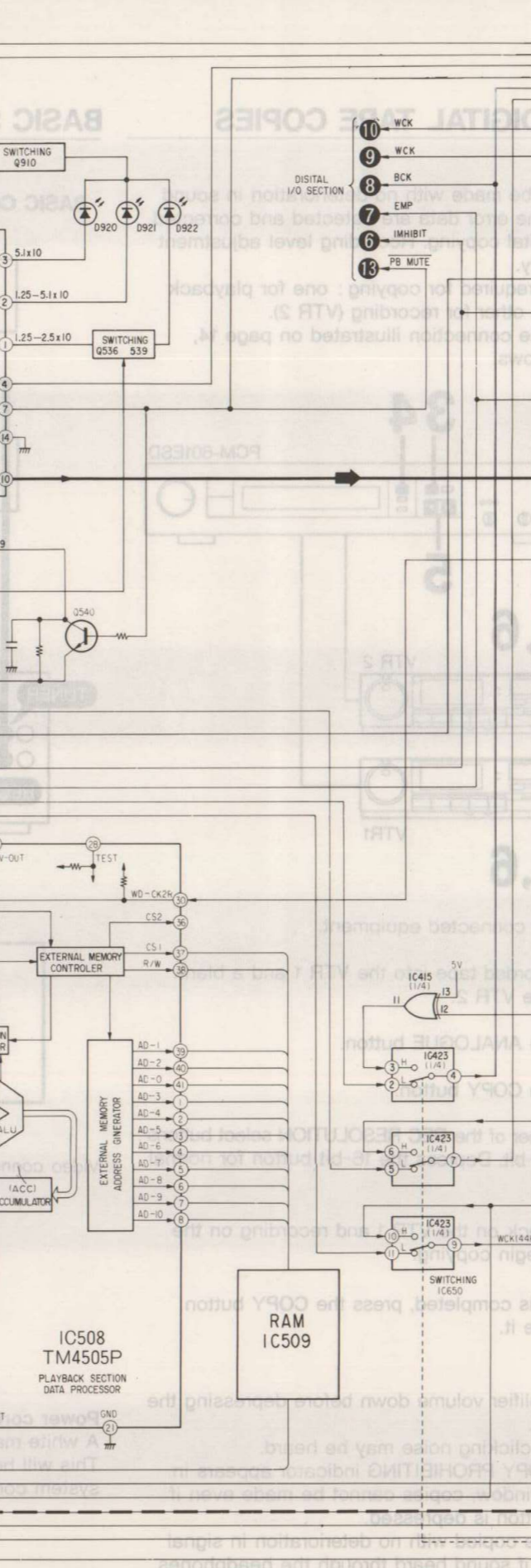
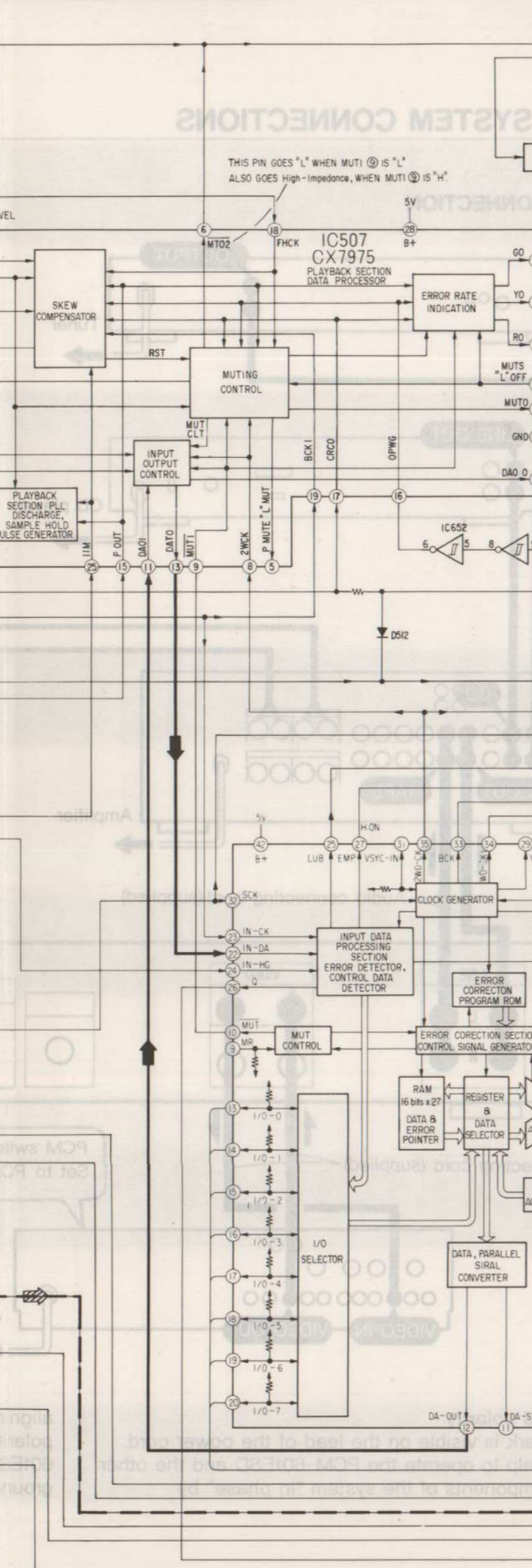
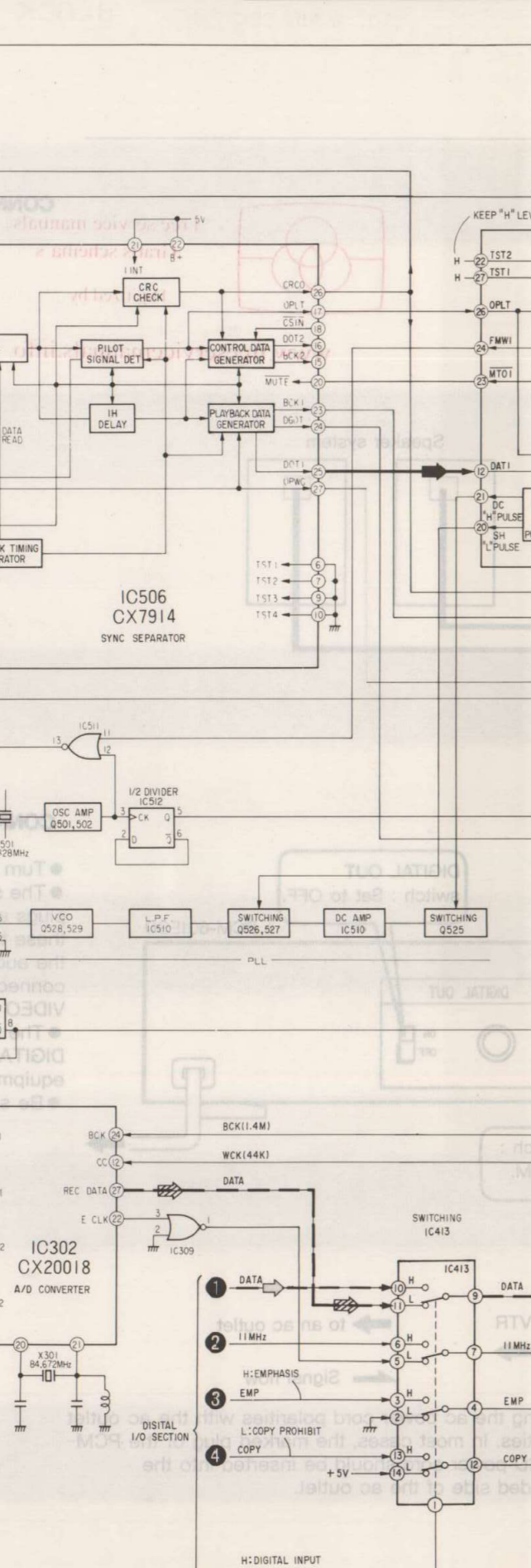
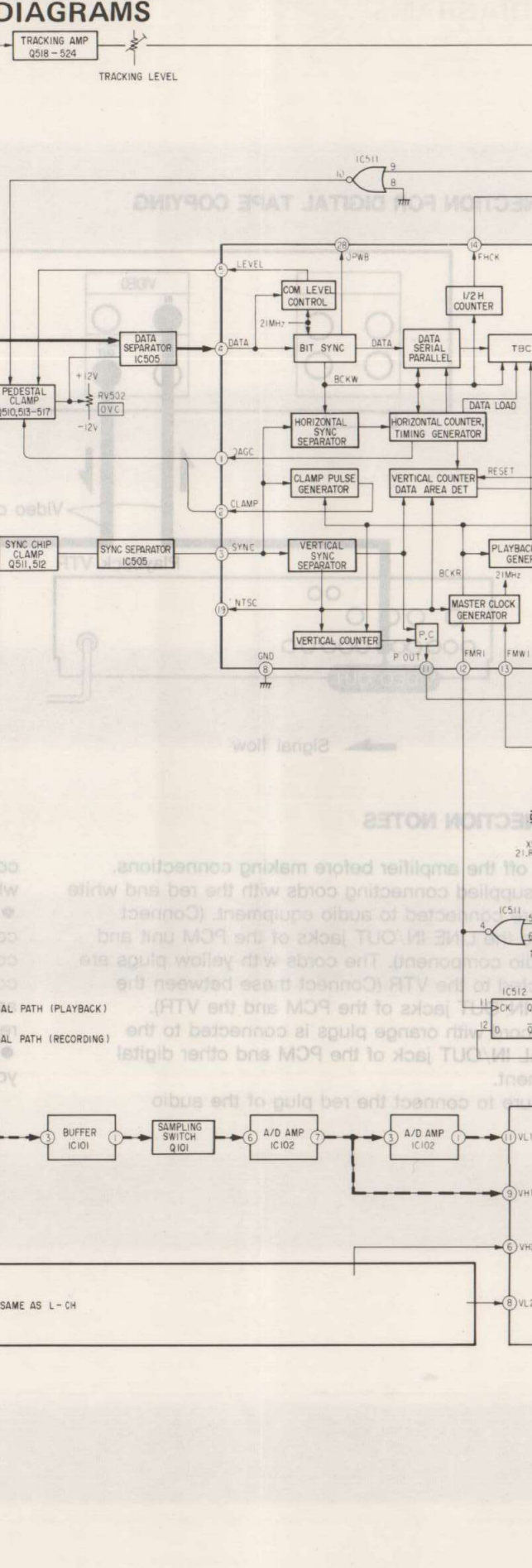
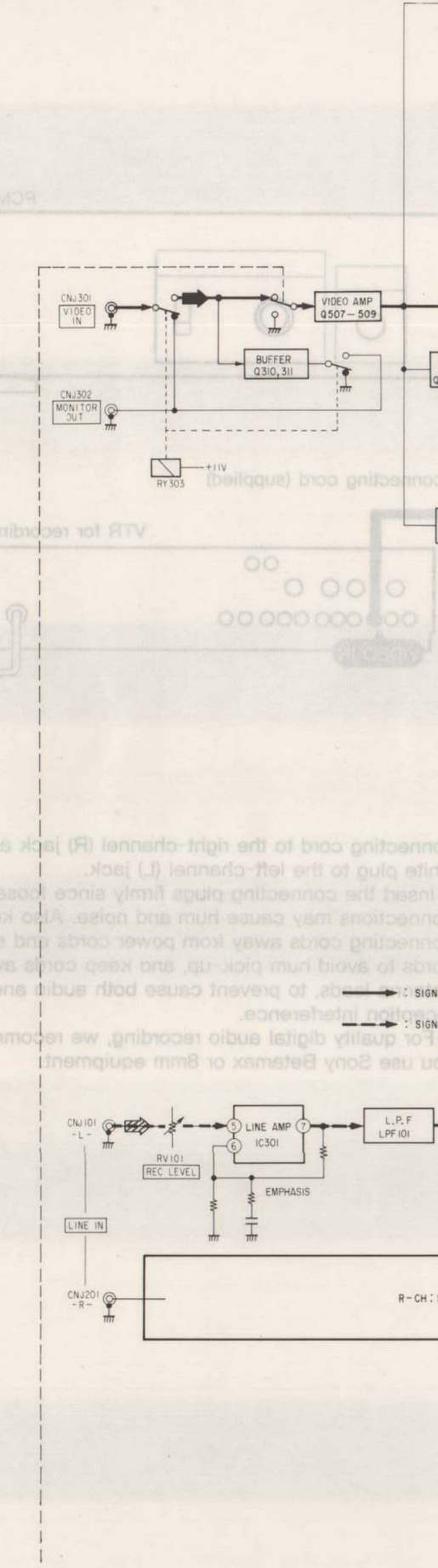
CONNECTION FOR DIGITAL TAPE COPYING



CONNECTION NOTES

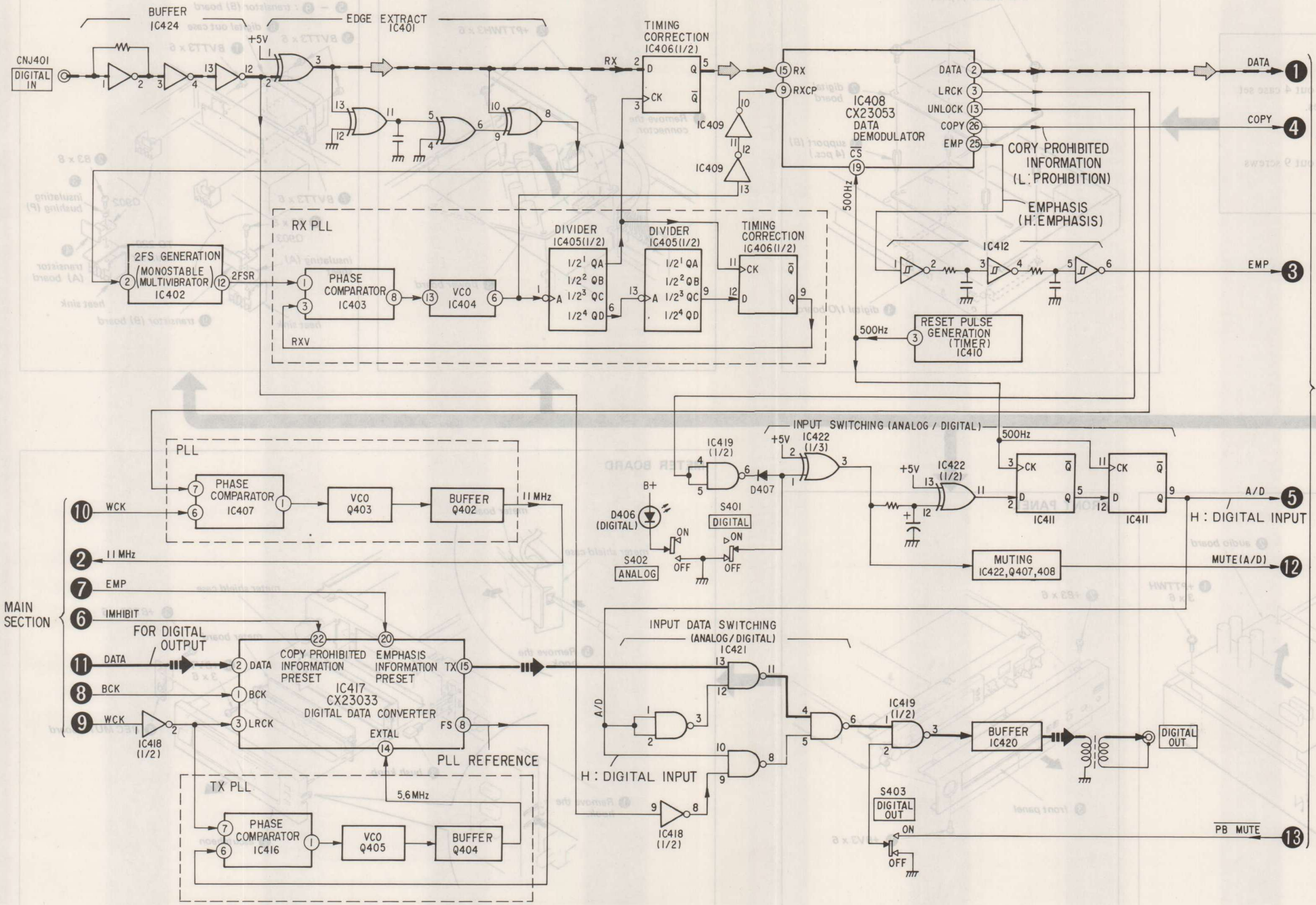
- Turn off the amplifier before making connections.
- The supplied connecting cords with the red and white plugs are connected to audio equipment. (Connect these to the LINE IN/OUT jacks of the PCM unit and the audio component). The cords with yellow plugs are connected to the VTR (Connect these between the VIDEO IN/OUT jacks of the PCM and the VTR).
- The cord with orange plugs is connected to the DIGITAL IN/OUT jack of the PCM and other digital equipment.
- Be sure to connect the red plug of the audio connecting cord to the right-channel (R) jack and the white plug to the left-channel (L) jack.
- Insert the connecting plugs firmly since loose connections may cause hum and noise. Also keep connecting cords away from power cords and speaker cords to avoid hum pick-up, and keep cords away from antenna leads, to prevent cause both audio and video reception interference.
- For quality digital audio recording, we recommend that you use Sony Betamax or 8mm equipment.

1-1. MAIN SECTION



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1-2. DIGITAL I/O SECTION



MAIN SECTION

MAIN SECTION

SECTION 2
DISASSEMBLY

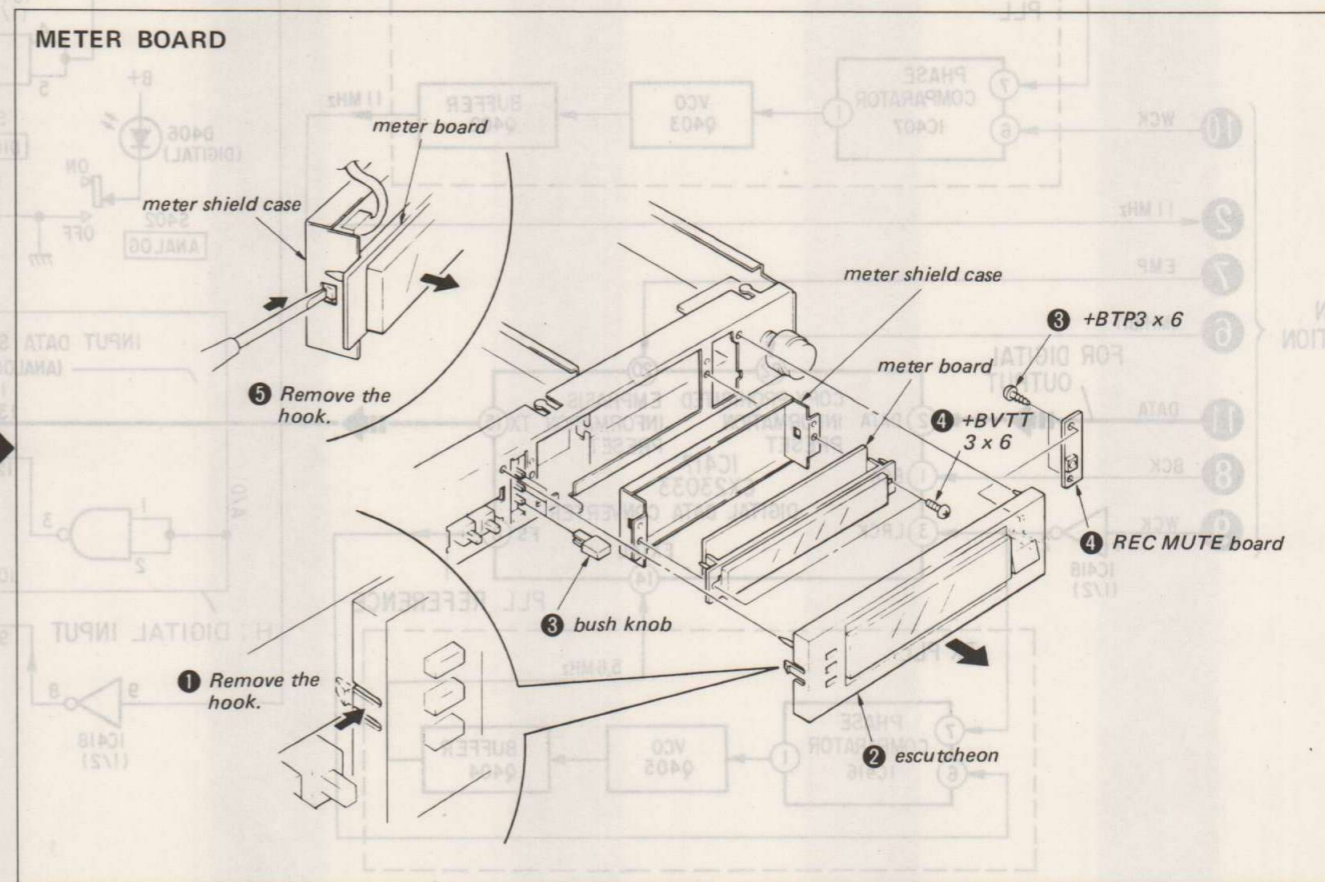
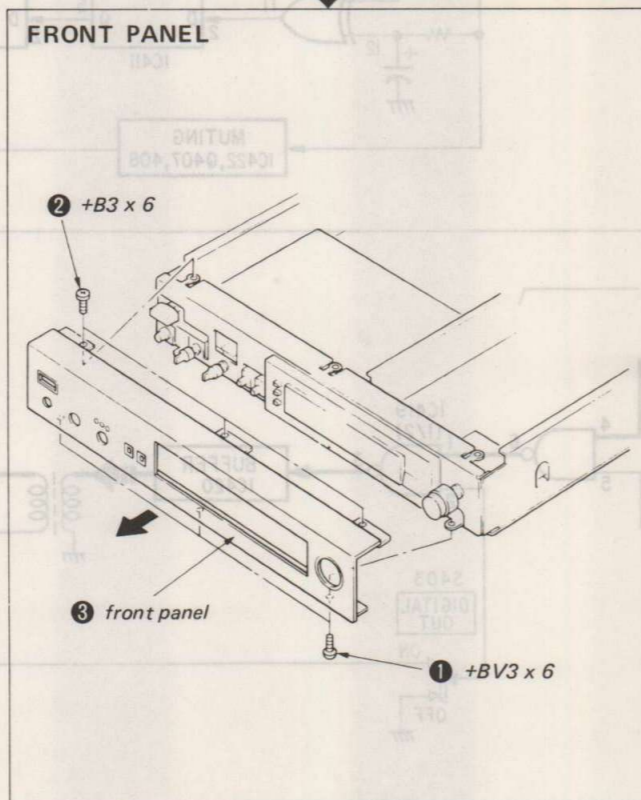
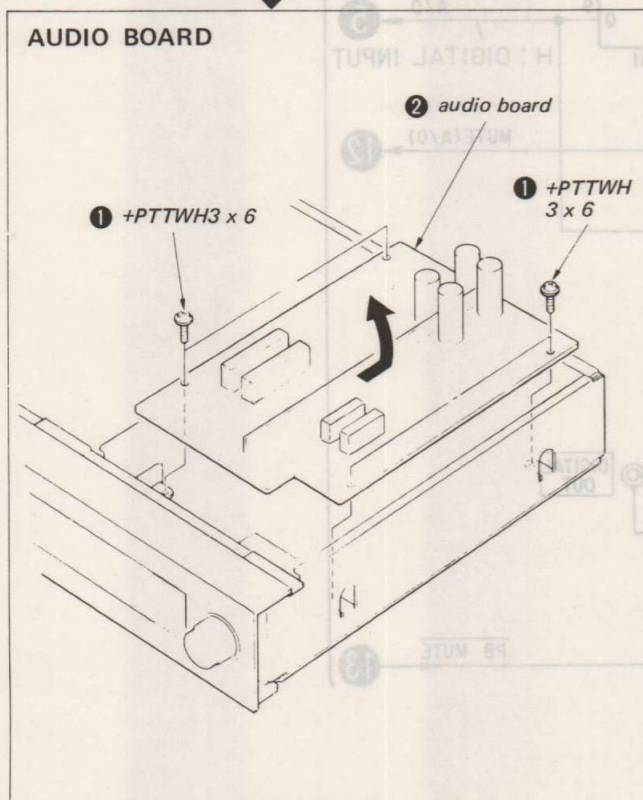
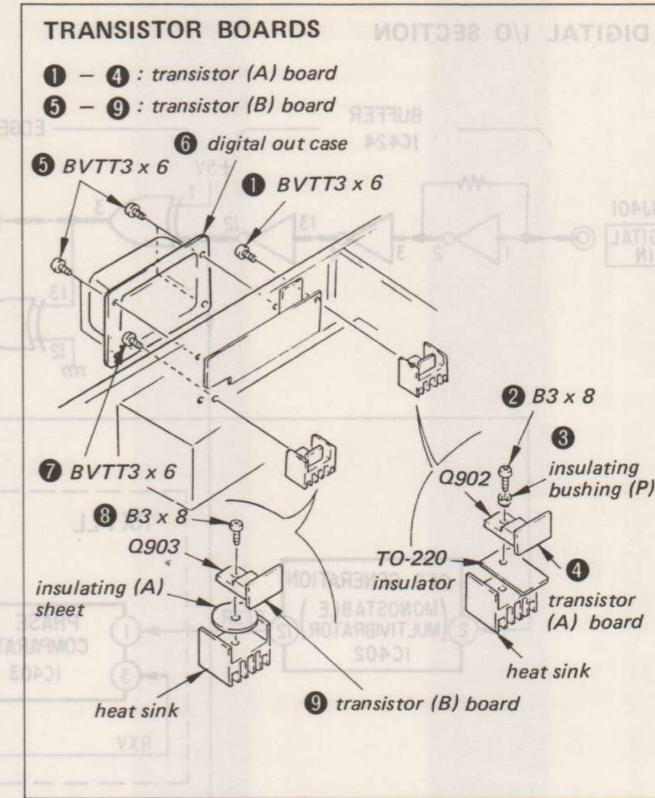
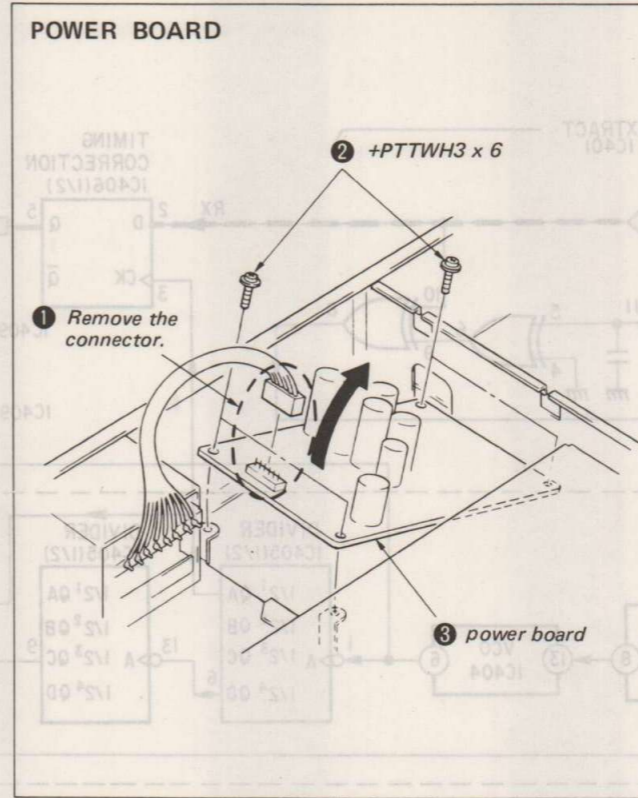
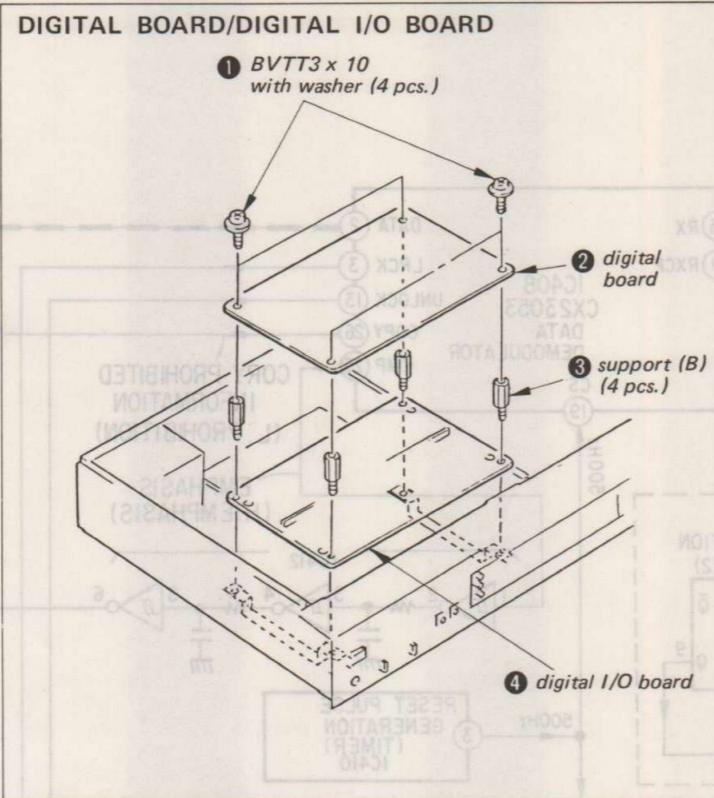
Note: Follow the disassembly procedure in the numerical order given.

- CASE

Remove by taking out 4 case set screws of both sides.

- BOTTOM PLATE

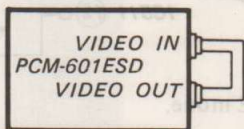
Remove by taking out 9 screws (+BVTT3 x 6).



SECTION 3 ELECTRICAL ADJUSTMENTS

- Switch Position (unless otherwise specified)
 - INPUT ANALOG
 - AUTO PB MUTE ON
 - COPY OFF
 - TRACKING OFF
 - REC RESOLUTION 16 bit
 - HEADPHONES LEVEL MAX
 - OVC control center click click

- E-E mode:
Short the terminals VIDEO IN and VIDEO OUT of the set.



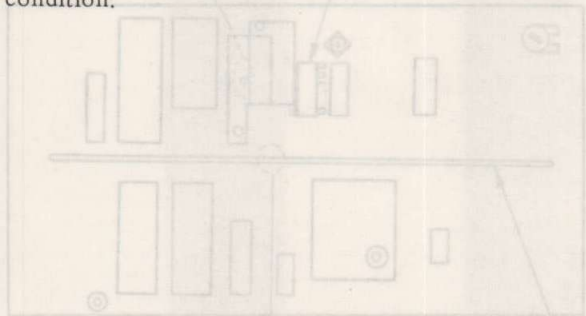
● INPUT

terminal	LINE IN	VIDEO IN
impedance	10 kΩ	75 Ω
level	0.24 V (-10 dB)	1 Vp-p

● OUTPUT

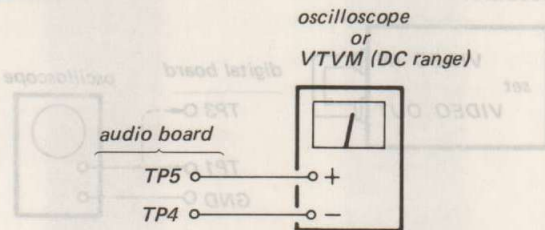
terminal	LINE OUT	VIDEO OUT
impedance	47 kΩ	75 Ω
level	0.24 V (-10 dB)	1 Vp-p

Adjust 30 minutes or more after the power switch is on for avoiding the drift according to the thermal condition.



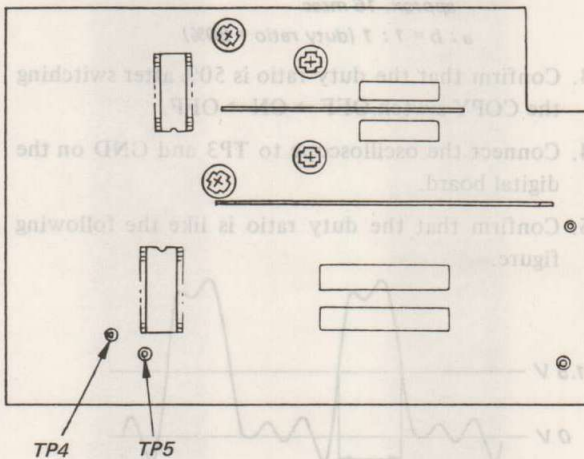
-5V Voltage Adjustment

Procedure:

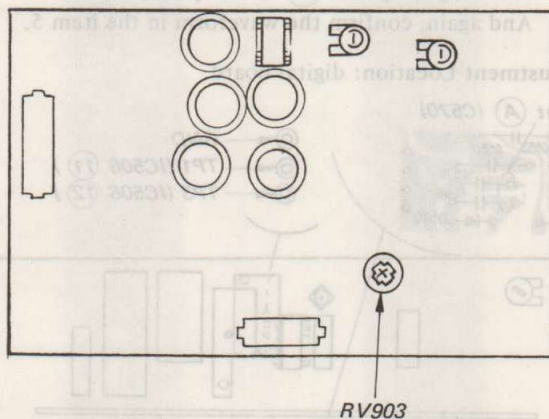


1. Connect an oscilloscope or a VTVM (DC range) to TP4 and TP5 on audio board.
2. Adjust RV903 so that the reading on the oscilloscope or the VTVM is 0 ± 10 mV.

Connection: audio board

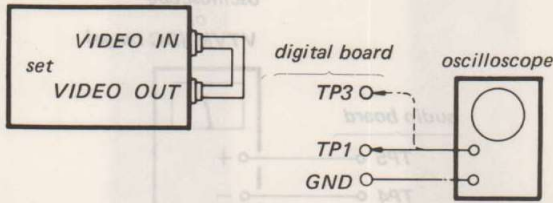


Adjustment Location: power board

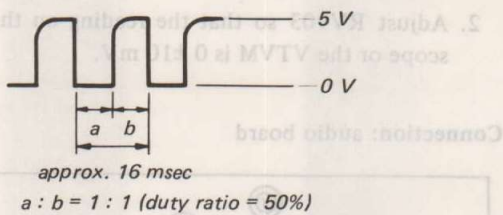


VCO Coil Adjustment

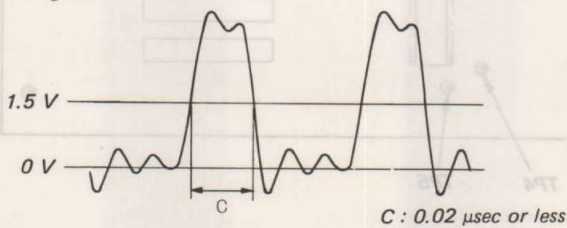
Procedure:



1. Set to the E-E mode and connect an oscilloscope to TP1 and GND on the digital board.
2. Adjust L501 so that the duty ratio is 50%.

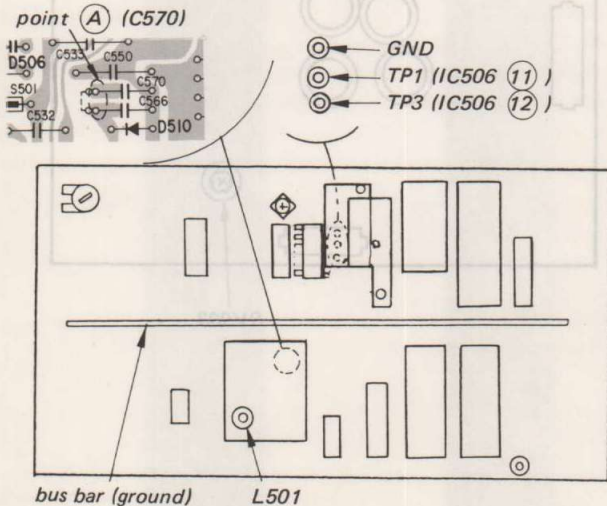


3. Confirm that the duty ratio is 50% after switching the COPY switch OFF → ON → OFF.
4. Connect the oscilloscope to TP3 and GND on the digital board.
5. Confirm that the duty ratio is like the following figure.



6. When C is 0.02 μsec or above, connect C570 by soldering the point (A) of the pattern. And again, confirm the waveform in the item 5.

Adjustment Location: digital board

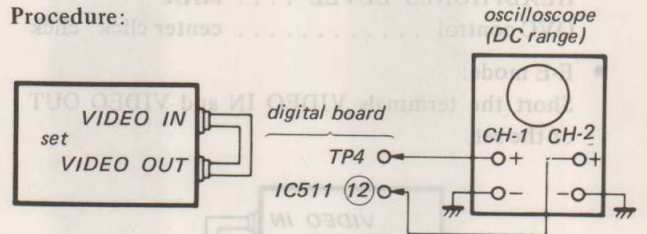


Skew Adjustment

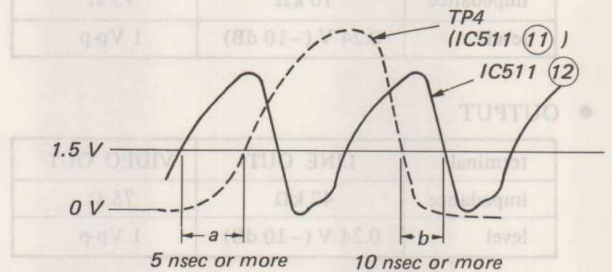
Condition:

- Make the ground levels of CH-1 and CH-2 on the dual trace oscilloscope same.
- Trigger: CH-1

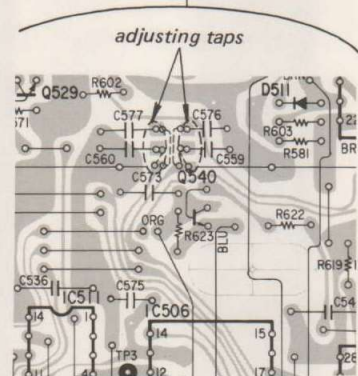
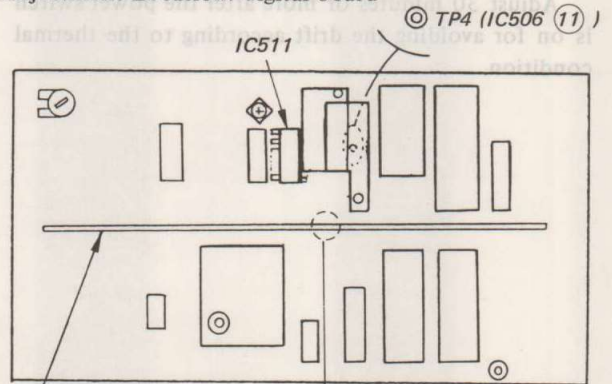
Procedure:



1. Set to the E-E mode.
2. Connect the oscilloscope to TP4 (IC511 (11)) and IC511 (12).
3. Adjust the taps so that the waveforms on the oscilloscope are like the following figure.

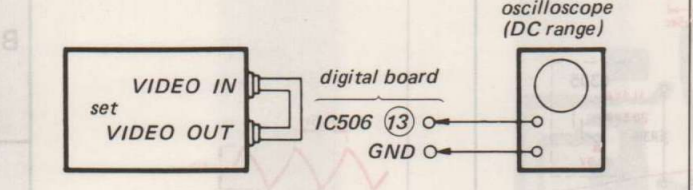


Adjustment Location: digital board

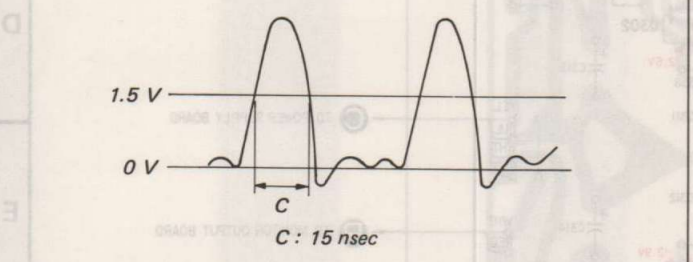


FMWI Adjustment

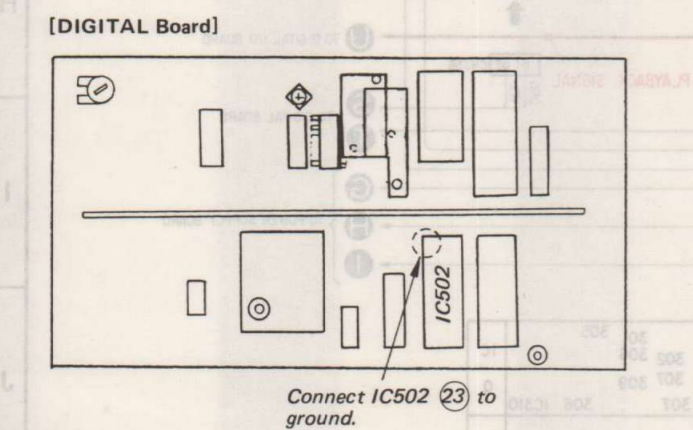
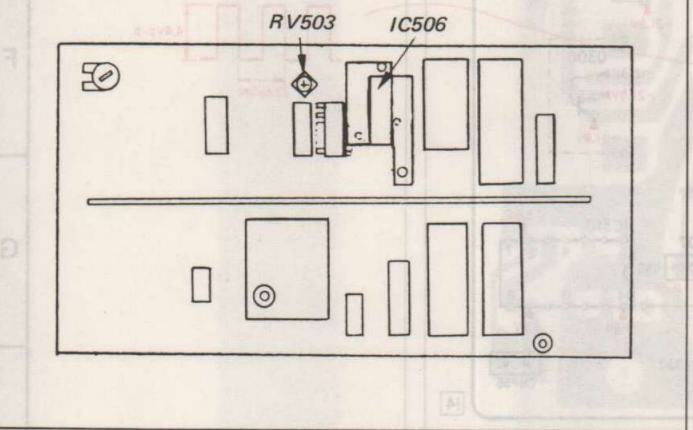
Procedure:



1. Set to the E-E mode.
2. Connect an oscilloscope to IC506 (13).
3. Adjust RV503 so that the waveform on the oscilloscope is like the following figure.

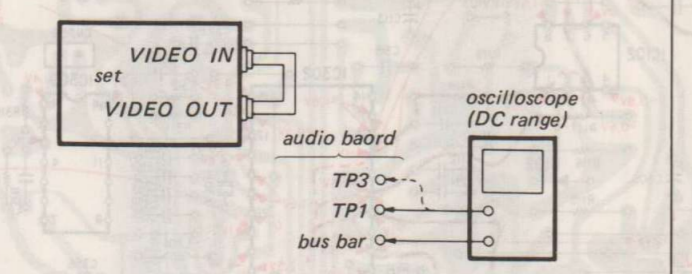


Adjustment Location: digital board



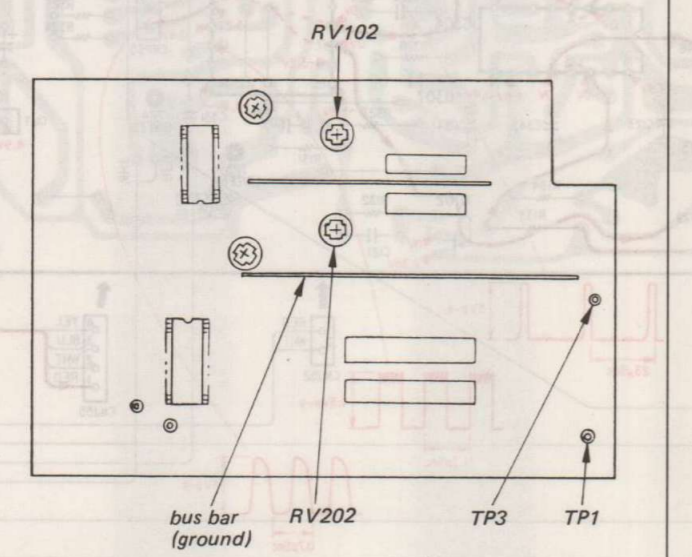
A/D Offset Adjustment

Procedure:



1. Connect IC502 (23) to ground. (Digital board) (For sending the data no sound condition to the A/D converter IC303.)
2. Set to the E-E mode. Connect an oscilloscope or a VTVM (DC range) to TP1 (L-CH), TP3 (R-CH) and the bus bar (ground point).
3. Confirm and remember the reading on the oscilloscope or the VTVM is 0.7 ± 0.5 V. A/D offset value
4. Adjust RV102 (L-CH) and RV202 (R-CH) so that the readings on the oscilloscope or the VTVM is $+10 \pm 5$ mV dc against the A/D offset value in the condition REC LEVEL is minimum.
5. After adjustment, disconnect the lead in between IC502 (23) and ground.

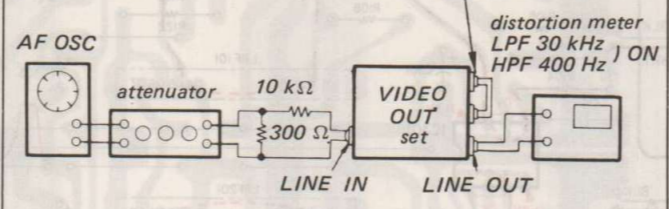
Adjustment Location: audio board



A/D Distortion Adjustment

This adjustment needs a low-distortion audio frequency oscillator and low-distortion measuring equipments.

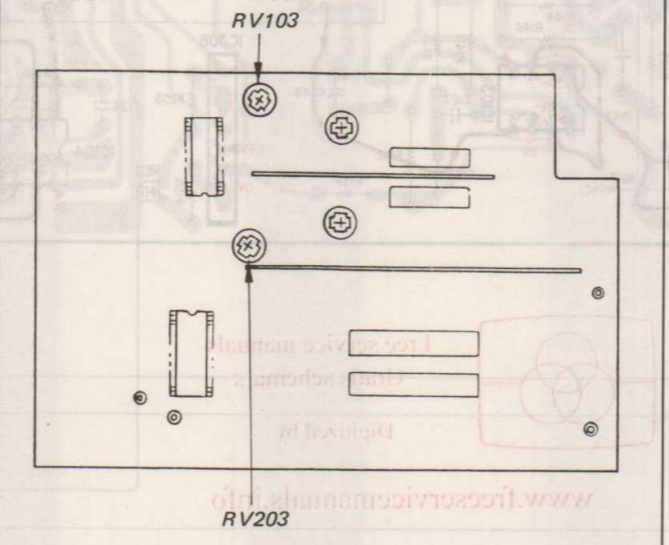
Procedure:



1. Set to the E-E mode. Input the 1 kHz, 0 dB signal to the LINE IN terminal and connect an distortion meter to the LINE OUT terminal.
2. Turn the REC LEVEL knob gradually so that the OVER indicator of the level meter lights up.
3. Make the input level -0.5 to -1 dB with the attenuator. The OVER indicator goes out.
4. Set the level of the distortion meter, and make it the DISTORTION mode.
5. Adjust RV103 (L-CH) and RV203 (R-CH) so that the distortion is minimum.

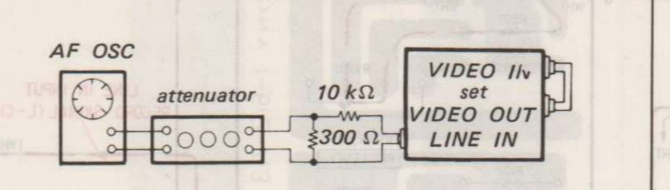
Specification:
 -84 dB or less

Adjustment Location: audio board



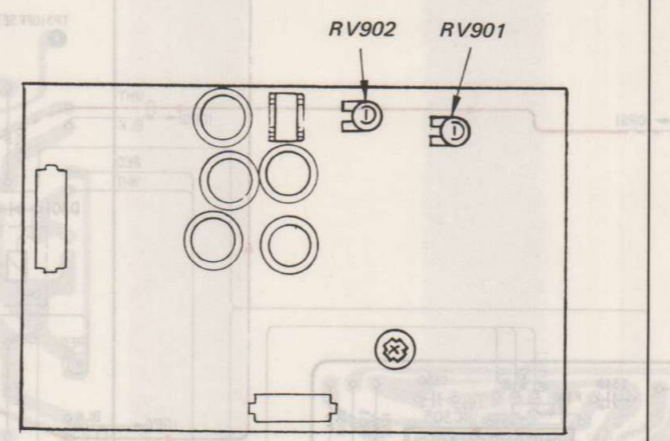
Peak Meter Adjustment

Procedure:



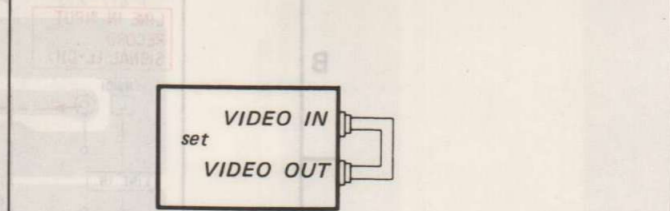
1. Set to the E-E mode. Input the 1 kHz 0 dB signal.
2. Turn the REC LEVEL knob gradually so that the OVER indicator of the level meter lights up.
3. Make the input level -0.5 to -1 dB with the attenuator. The OVER indicator goes out.
4. Adjust RV901 (L-CH) and RV902 (R-CH) so that the reading on the level meter is 0 dB.

Adjustment Location: power board

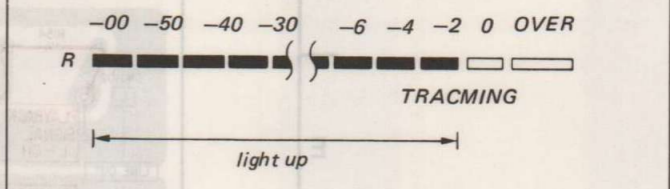


Tracking Level Adjustment

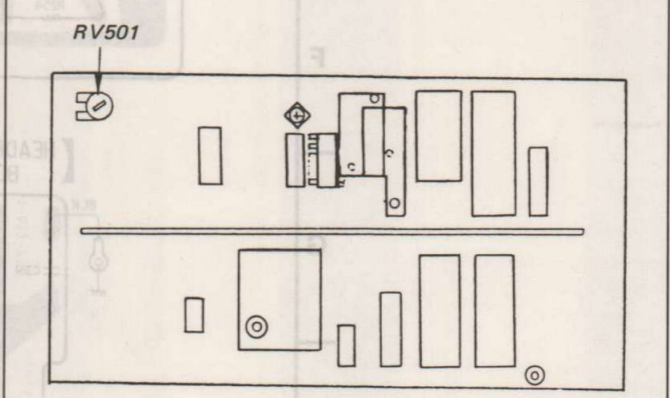
Procedure:



1. Set to the E-E mode. Put on the tracking switch.
2. Adjust RV501 so that the level meter indicates the following figure.



Adjustment Location: digital board



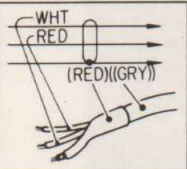
See page 58 for Semiconductor Lead Layout.

Notes:
 ● Color code or sleeve over the end of the jack.
 ○ Parts extracted from the component side.
 ● Parts extracted from the connector side.
 ○ Signal path.
 ● PB signal.
 ● L-CH PB signal.
 ● R-CH PB signal.
 ● REC signal.

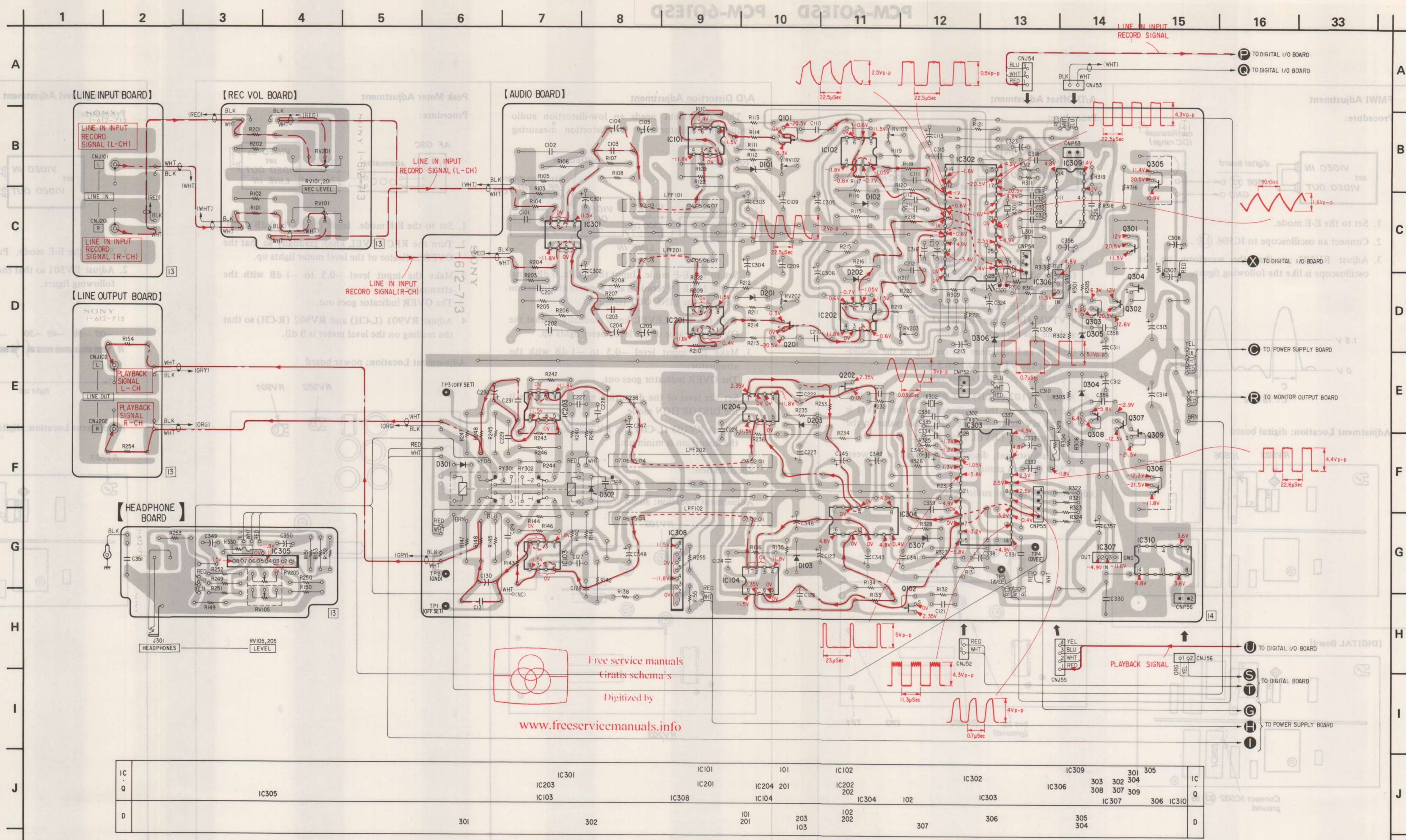
SECTION 4
DIAGRAMS

4-1. AUDIO SECTION MOUNTING DIAGRAM

• See page 56 for Semiconductor Lead Layouts.

Note:
• Color code or sleeving over the end of the jacket.


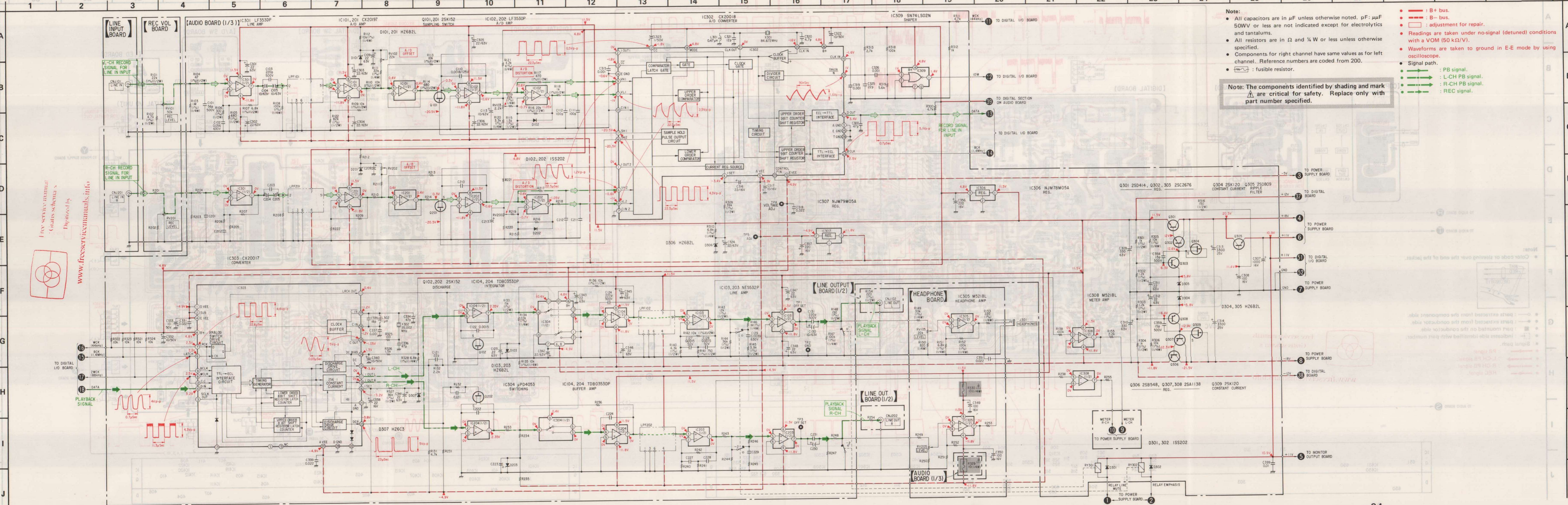
- : parts extracted from the component side.
- : parts extracted from the conductor side.
- Signal path.
- : PB signal.
- : L-CH PB signal.
- : R-CH PB signal.
- : REC signal.



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IC	IC305	IC301	IC101	IC102	IC302	IC309	IC305	IC
Q		IC203	IC201	IC202	IC303	IC306	IC304	Q
D		IC103	IC308	IC104	IC102	IC307	IC310	D
		301	302	101	203	307	306	
				201	103			
				102	202			
						306		
						305		
						304		

4-2. AUDIO SECTION SCHEMATIC DIAGRAM



- Note:**
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$ and tantalums.
 - All resistors are in Ω and $\frac{1}{2} \text{W}$ or less unless otherwise specified.
 - Components for right channel have same values as for left channel. Reference numbers are coded from 200.
 - FR : fusible resistor.
- : B+ bus.
 - : B- bus.
 - : adjustment for repair.
 - Readings are taken under no-signal (detuned) conditions with a VOM (50 $\text{k}\Omega/\text{V}$).
 - Waveforms are taken to ground in E-E mode by using oscilloscope.
 - Signal path.
 - : PB signal.
 - : L-CH PB signal.
 - : R-CH PB signal.
 - : REC signal.

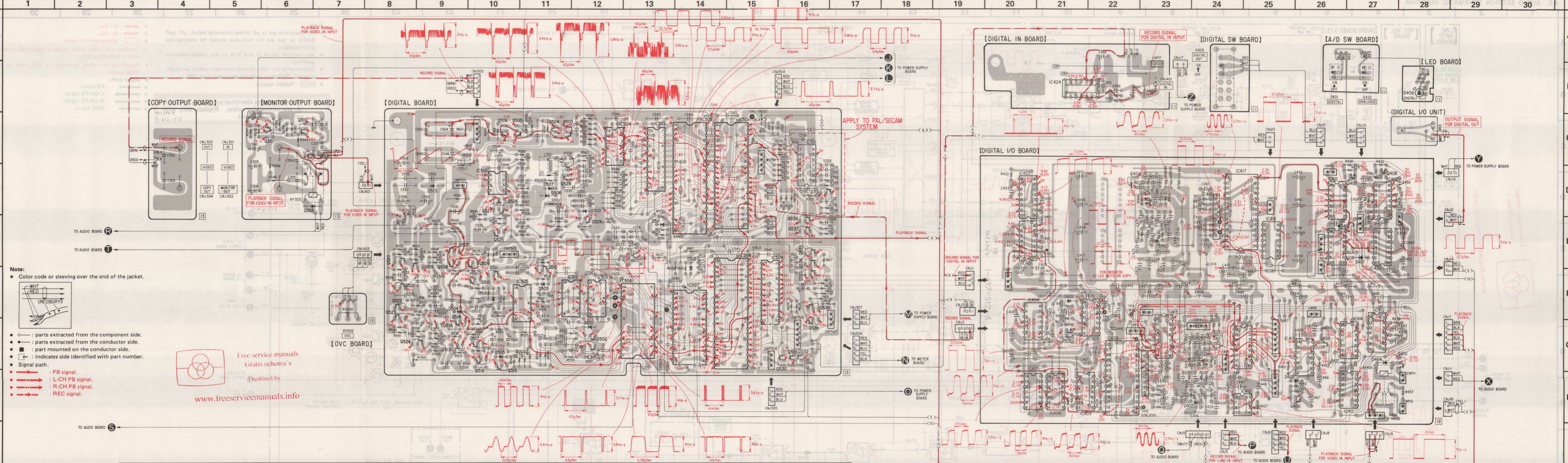
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

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See page 56 for Semiconductor Lead Layouts.

PCM-601ESD PCM-601ESD

PCM-601ESD PCM-601ESD

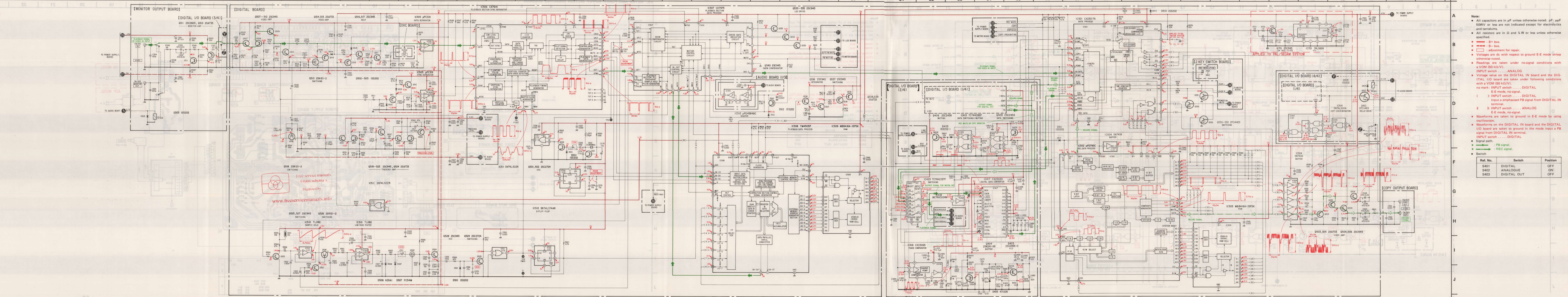


- Note:**
- Color code or sleeving over the end of the jacket.
 - WHT (RED) (RED/GRY)
 - : parts extracted from the component side.
 - : parts extracted from the conductor side.
 - : part mounted on the conductor side.
 - ⊖ : indicates side identified with part number.
 - Signal path.
 - Red line : PB signal.
 - Blue line : L-CH PB signal.
 - Green line : R-CH PB signal.
 - Black line : REC signal.

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IC	Q	651	IC651	IC650	650	311	310	520	519	507	509	506	505	504	503	IC504	IC503	IC502	IC501	IC701	536	537	701	IC	
								521	518	508	514	510	511	526	527	IC505	512	528	529	IC511	540	IC506	IC507	IC508	IC
								522	524	513	517	515									533	534	535	Q	
								523	513	516											539	538			
									513															D	
																								D	

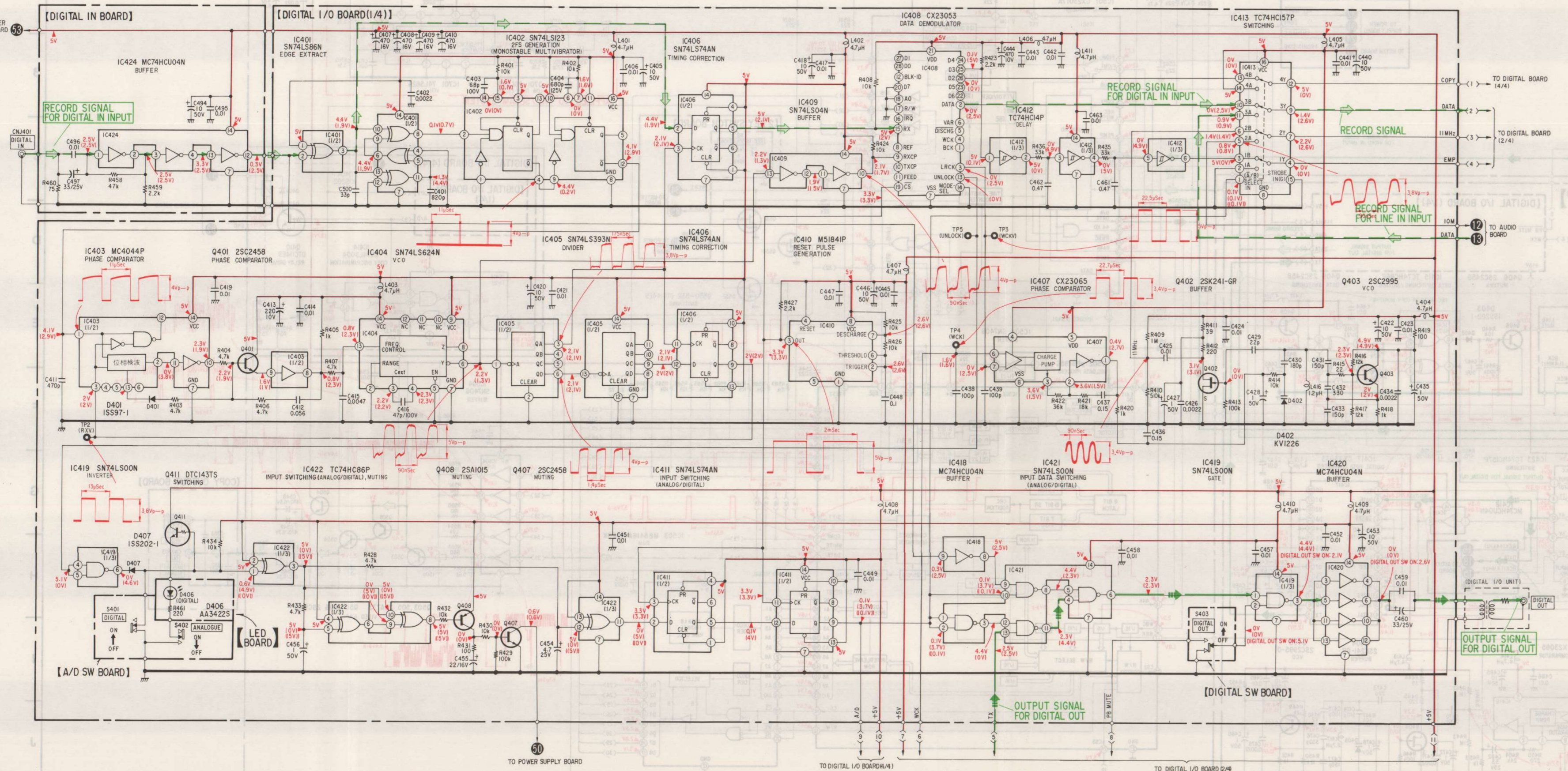
IC	Q	IC401	IC404	401	IC403	404	405	IC413	403	IC417	IC418	IC421	411	IC422	IC
															Q



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- Note:
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$.
 - All resistors are in Ω and W or less unless otherwise specified.
 - : B+ bus.
 - : B- bus.
 - : adjustment for repair.
 - Voltages are dc with respect to ground - E-E mode unless otherwise noted.
 - Readings are taken under no-signal conditions with a VOM (50 k Ω /V).
 - INPUT switch : ANALOG
 - Voltage value on the DIGITAL IN board and the DIGITAL I/O board are taken under following conditions with a VOM (50 k Ω /V).
 - no mark : INPUT switch DIGITAL
 - () : INPUT switch DIGITAL
 - () : Input a emphasized PB signal from DIGITAL IN terminal.
 - () : INPUT switch ANALOG
 - () : INPUT switch E-E mode, no-signal.
 - Waveforms are taken on ground in E-E mode by using oscilloscope.
 - Waveforms on the DIGITAL IN board and the DIGITAL I/O board are taken to ground in the mode input a PB signal from DIGITAL IN terminal.
 - INPUT switch DIGITAL
 - Signal path.
 - PB signal.
 - REC signal.
 - Switch

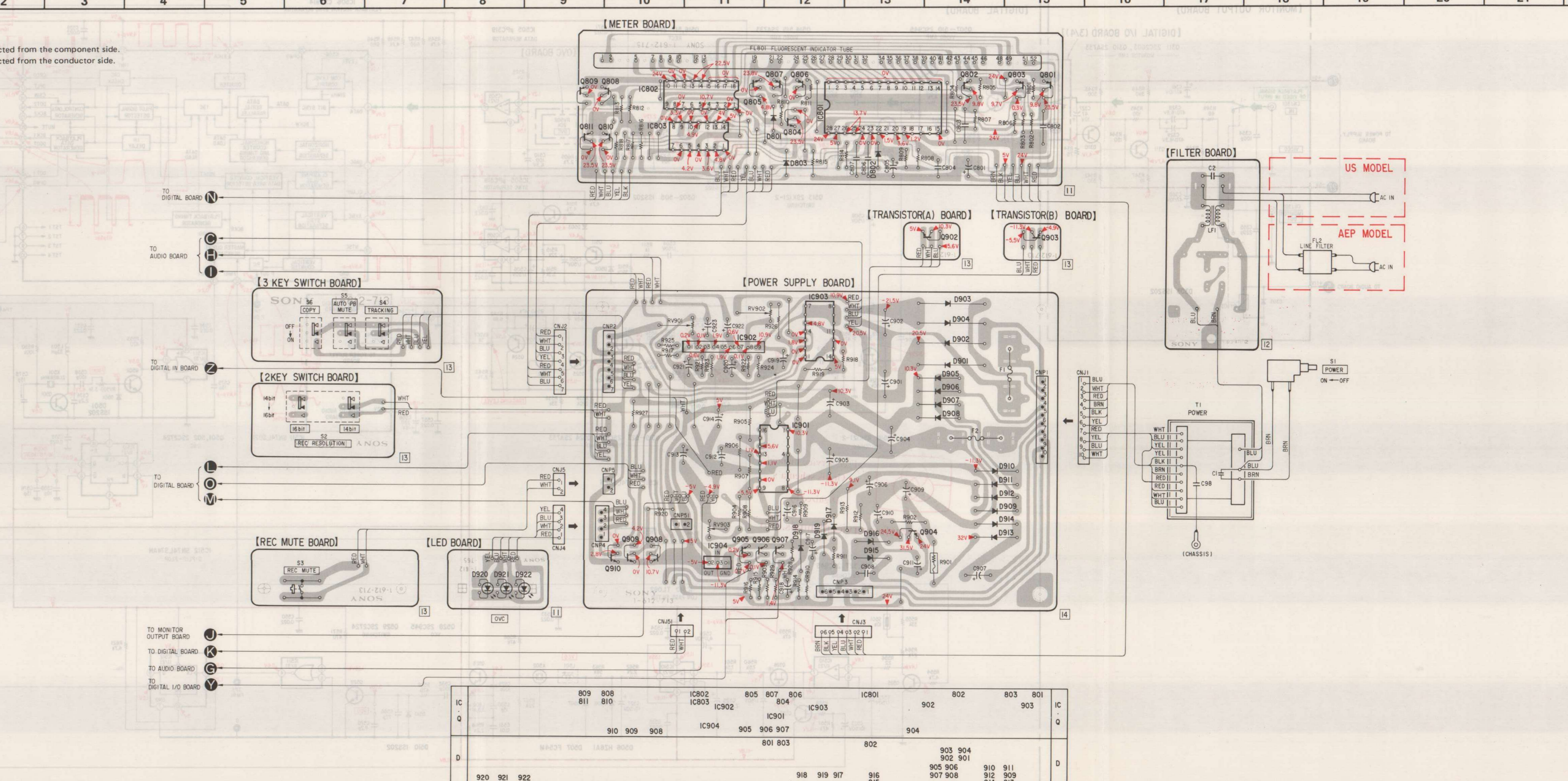
Ref. No.	Switch	Position
S401	DIGITAL	OFF
S402	ANALOGUE	ON
S403	DIGITAL OUT	OFF

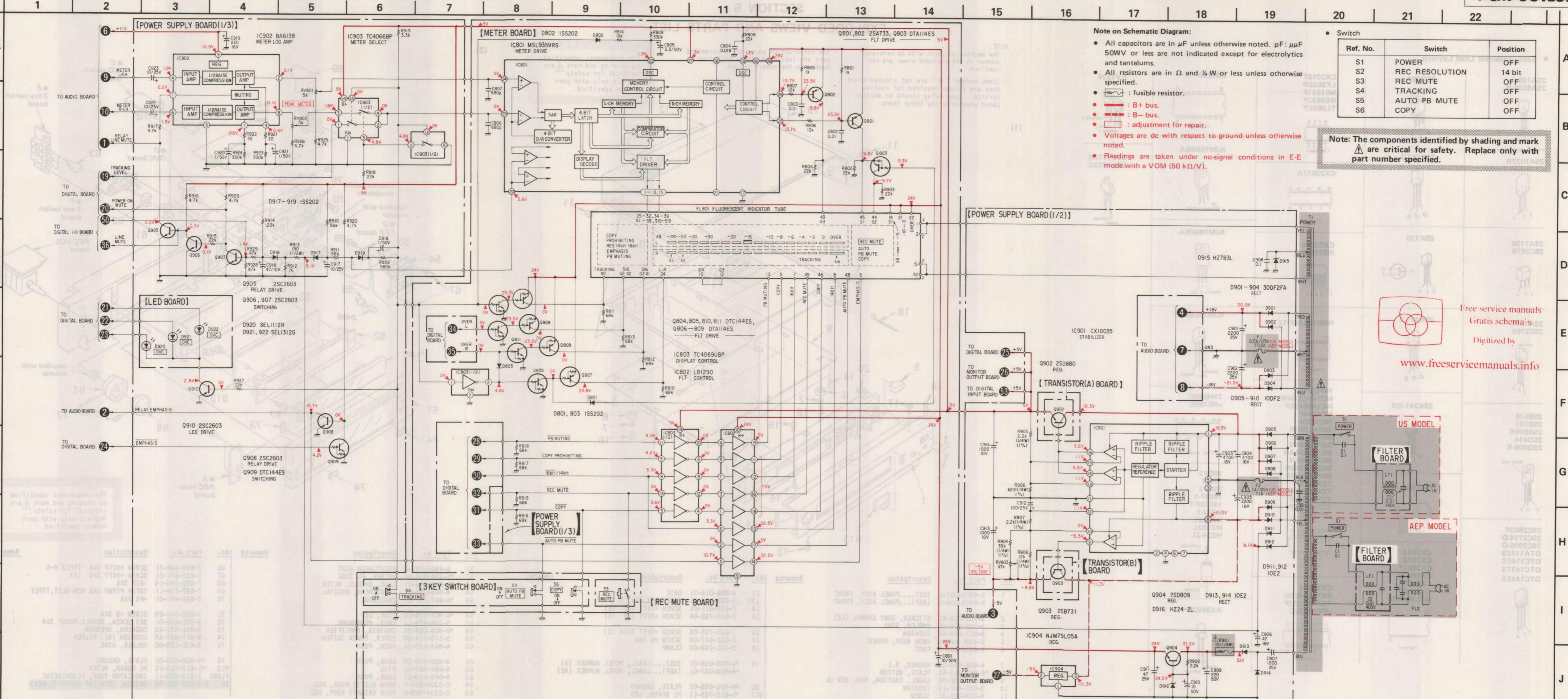


- Note:
- All capacitors are in μF unless otherwise noted, pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{2}\text{W}$ or less unless otherwise specified.
 - **B+** bus: —
 - **B-** bus: ---
 - Voltage value on the DIGITAL IN board and the DIGITAL I/O board are taken under following conditions with a VOM (50 k Ω /V):
 - ()**: INPUT switch DIGITAL E-E mode, no-signal.
 - ()**: INPUT switch DIGITAL Input an emphasized PB signal from DIGITAL IN terminal.
 - ()**: INPUT switch ANALOG E-E mode, no-signal.
 - Waveforms on the DIGITAL IN board and the DIGITAL I/O board are taken to ground in the mode input a PB signal from DIGITAL IN terminal. INPUT switch DIGITAL
 - Signal path.
 - : PB signal.
 - : REC signal.
 - Switch

Ref. No.	Switch	Position
S401	DIGITAL	OFF
S402	ANALOGUE	ON
S403	DIGITAL OUT	OFF

45. METER AND POWER SUPPLY SECTION MOUNTING DIAGRAM





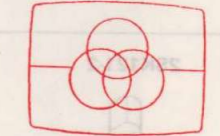
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} / 100$. 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4} \text{W}$ or less unless otherwise specified.
- $\text{---} \text{---} \text{---}$: fusible resistor.
- $\text{---} \text{---} \text{---}$: B+ bus.
- $\text{---} \text{---} \text{---}$: B- bus.
- $\text{---} \text{---} \text{---}$: adjustment for repair.
- Voltagess are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions in E-E mode with a VOM (50 $\text{k}\Omega/\text{V}$).

• Switch

Ref. No.	Switch	Position
S1	POWER	OFF
S2	REC RESOLUTION	14 bit
S3	REC MUTE	OFF
S4	TRACKING	OFF
S5	AUTO PB MUTE	OFF
S6	COPY	OFF

Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.



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SECTION 5

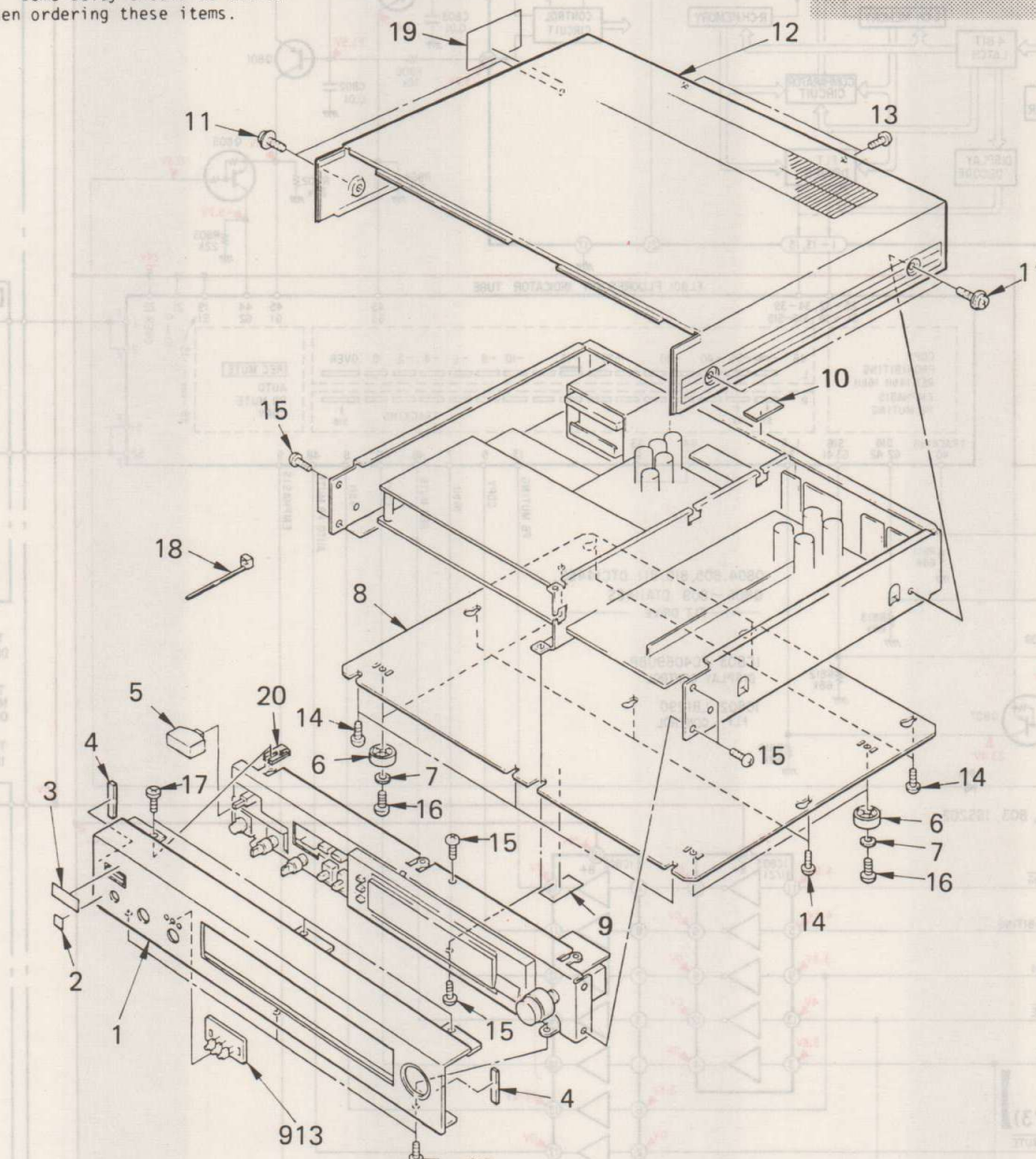
EXPLODED VIEWS AND PARTS LIST

● Semiconductor Lead Layouts

2SA733-P 2SA933S-R	2SD880	CX20197 LF353DP M51841P NE5532P TL082CP	LB1290	KV1226
2SA1027R	2SK152-3	CX23017A	NJM78M05A	SEL1112R SEL1312G
2SA1138 2SC2676	2SK120	CX23065 M5218L	NJM79M05A	
2SA1175 2SC2785	2SK121-2	HM6116ASP-12	NJM79L05A	
2SB548 2SB731 2SB809K 2SD414 2SD809-K	2SK241-GR	74F02PC MC74HC04N MC14584BCP MC4044P SN7406N SN74LS00N SN74LS02N SN74LS04N SN74LS74AN SN74LS86N SN74LS393N SN74LS624N TC4066BP TC4069UBP TC74HC14P TC74HC86P μPC319C	TM4505P μPD785C	
2SC2603F 2SC2724-D 2SC2995-O DTA114ES DTC114ES DTC143TS DTC144ES	BA6138	10DF2 10E-2 30DF2 1SS97-1 1SS202-1 HZ6A1 HZ6B2L HZ7B2L HZ24-2L	AA3422S	
	CX7914 CX7975 CX20017 CX20018 CX23033 CX23053 MSL9359RS	CX10035 SN74LS423N TC74HC157P μPD4053BC		

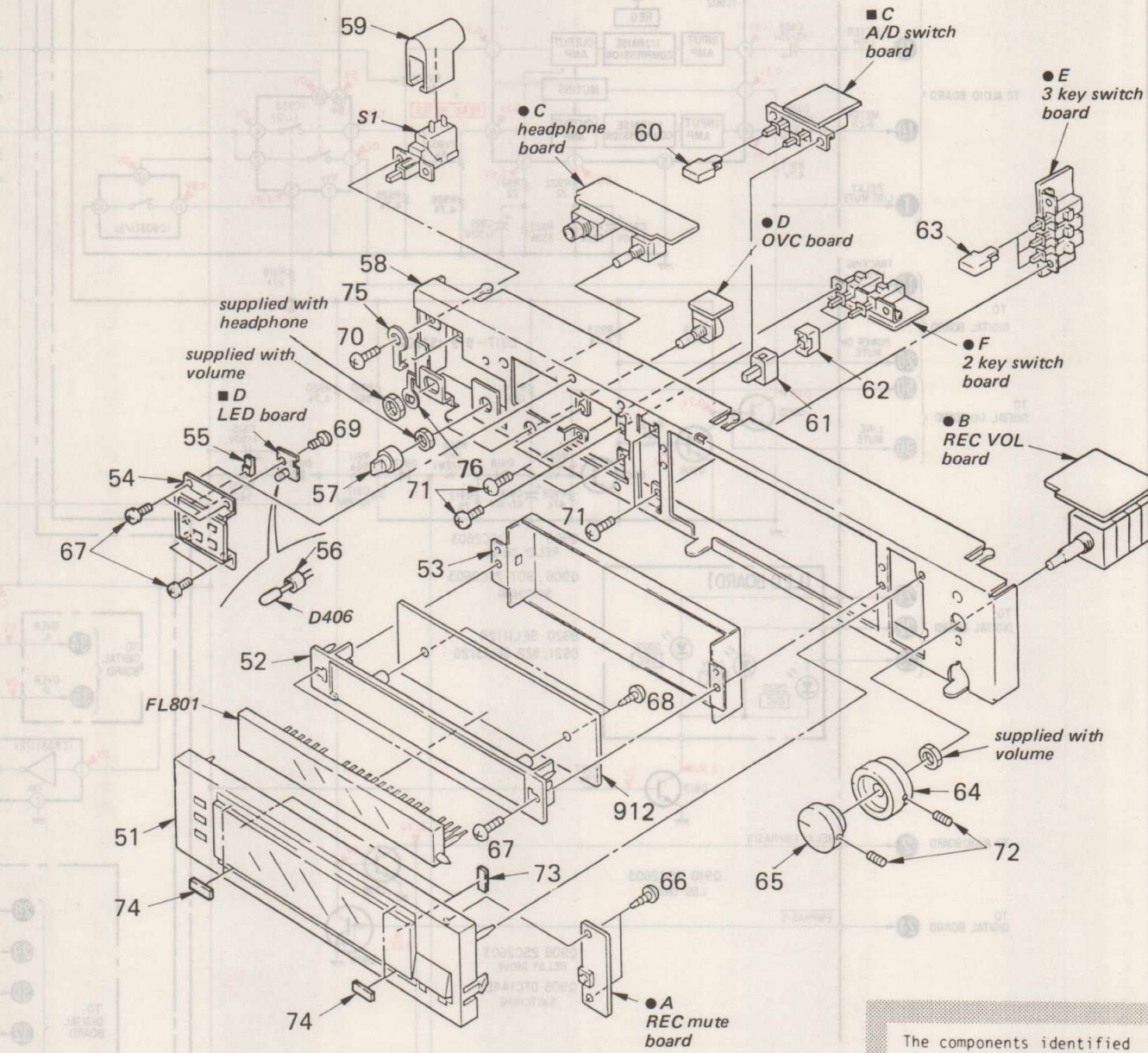
NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.
The construction parts of an assembled part are indicated with a collation number in the remark column.
Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

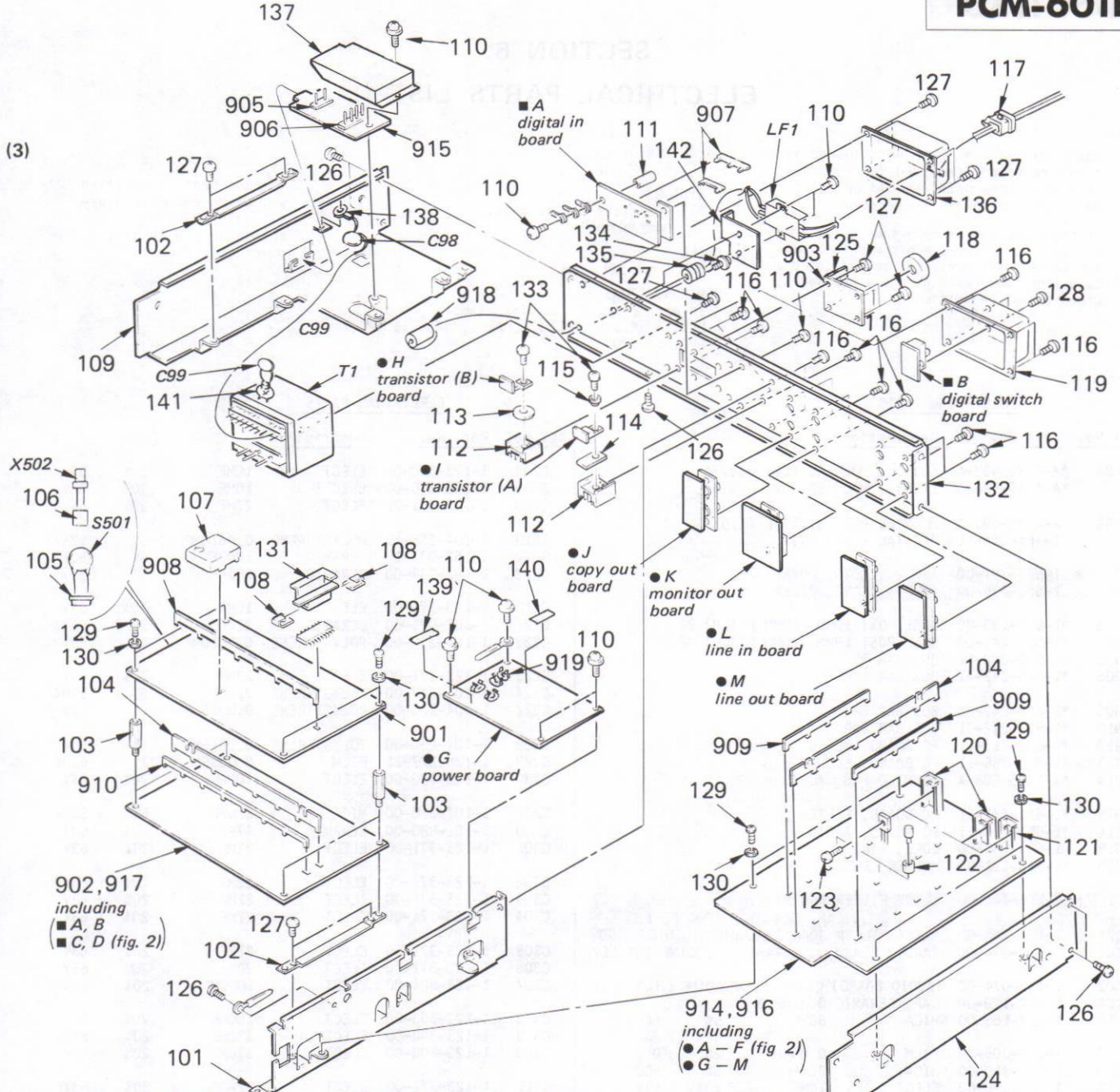


No.	Part No.	Description	Remarks
1	X-4906-007-1	(US)...PANEL ASSY, FRONT	
	X-4906-008-1	(AEP)...PANEL ASSY, FRONT	
2	3-703-710-41	STICKER, SONY SYMBOL (12)	
3	3-304-974-01	EMBLEM, SONY	
4	9-911-840-XX	CUSHION	
5	X-4881-408-0	KNOB ASSY, POWER	
6	X-4836-202-9	FOOT	
7	4-836-939-00	WASHER, 3.1	
8	*4-906-015-41	PLATE, BOTTOM	
9	3-703-680-00	LABEL, CAUTION, SUB, NEW UL	
10	3-831-441-11	CUSHION	
11	4-889-321-31	SCREW	
12	4-906-016-31	CASE	
13	3-703-108-21	SCREW +BV 3X6, S TIGHT	
14	7-685-871-01	SCREW +BVTT 3X6 (S)	
15	7-685-752-04	SCREW +BVTT 3X8 (S)	
16	7-685-755-04	SCREW +BVTT 3X14 (S)	
17	7-682-547-09	SCREW +B 3X6	
18	3-701-748-00	CLAMP	
19	*4-906-056-01	(US)...LABEL, MODEL NUMBER (U)	
	*4-906-057-01	(AEP)...LABEL, MODEL NUMBER (AE)	
20	*4-906-058-01	PLATE, GROUND	
913	*1-612-765-11	PC BOARD, LED	

(2)



No.	Part No.	Description	Remarks
51	X-4906-002-3	ESCUTCHEON ASSY	
52	*3-304-938-00	HOLDER, FL TUBE	
53	*4-906-006-01	CASE, SHIELD, METER	
54	4-906-054-01	ESCUTCHEON, DIGITAL	
55	*4-867-157-00	INDICATOR	
56	*4-902-124-00	TUBE, LED	
57	3-304-929-11	KNOB, HEADPHONE	
58	*4-906-007-01	CHASSIS, AMPLIFIER	
59	3-575-524-00	COVER, POWER SWITCH	
60	4-845-120-31	KNOB, PUSH	
61	4-886-509-00	KNOB, PUSH	
62	4-864-307-00	RING	
63	4-845-120-21	KNOB, PUSH	
64	X-3304-910-0	KNOB (LEFT) ASSY, REC	
65	X-3304-909-0	KNOB (RIGHT) ASSY, REC	
66	7-685-646-71	SCREW +BVTP 3X8 TYPE2 N-S	
67	7-685-871-01	SCREW +BVTT 3X6 (S)	
68	7-685-545-14	+BTP 3X6	
69	7-687-204-11	TOTSU PTPWH 2X6 NON-SLIT,TYPE2	
70	7-628-647-01	+PS 3X6	
71	7-682-547-09	SCREW +B 3X6	
72	3-701-506-01	SET SCREW, DOUBLE POINT 3X4	
73	3-831-441-XX	CUSHION, SPEAKER	
74	9-911-837-XX	CUSHION (B), FILTER	
75	3-401-179-00	HOLDER, WIRE	
76	*4-906-033-01	PLATE, GROUND	
912	*1-612-715-11	PC BOARD, METER	
FL801	1-519-320-11	INDICATOR TUBE, FLUORESCENT	
S1	Δ 1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)	



(3)

No.	Part No.	Description	Remarks
101	*4-906-012-01	PLATE, RELAY	
102	*4-906-051-01	BRACKET, PC BOARD	
103	*4-906-052-01	SUPPORT(B)	
104	*3-311-617-01	REINFORCEMENT, PCB	
105	*4-906-025-01	RUBBER, SPACER	
106	4-886-543-00	TUBE, CUSHION	
107	*2-362-376-11	CASE (2), SHIELD, VCO	
108	4-886-557-00	CLIP (B), IC	
109	*4-906-008-01	PLATE, SHED, LEFT	
110	3-703-249-01	SCREW, S TIGHT, +PTTWH 3X6	
111	2-066-111-08	STUD	
112	*4-863-132-00	HEAT SINK (SMALL)	
113	3-572-365-11	SHEET, INSULATING (A)	
114	3-703-037-00	INSULATOR, TO-220	
115	2-371-561-00	BUSHING (P), INSULATING	
116	3-703-108-21	SCREW +BY 3X6, S TIGHT	
117	3-703-244-00	BUSHING (2104), CORD	
118	4-908-991-01	ESCUTCHEON	
119	*4-908-975-11	CASE, DIGITAL OUT	
120	*4-886-555-00	HEAT SINK	
121	*3-312-615-11	HEAT SINK	
122	*4-886-504-00	SPACER	
123	2-259-121-00	SCREW, TR	
124	*4-906-011-01	PLATE, SIDE, RIGHT	
125	*4-906-059-01	PLATE, SHIELD, D/O	
126	7-685-752-04	SCREW +BVTT 3X8 (S)	
127	7-685-871-01	SCREW +BVTT 3X6 (S)	
129	7-685-873-01	SCREW +BVTT 3X10 (S)	
130	4-908-961-01	WASHER	
131	*4-906-029-02	HEAT SINK	
132	*4-906-061-01	PLATE (E), JACK	
133	7-682-548-09	+B 3X8	
134	3-703-249-11	SCREW, S TIGHT, +PTTWH 3X6	

No.	Part No.	Description	Remarks
135	3-434-216-00	BUSHING	
136	*4-906-060-01	CASE, POWER	
137	*4-906-063-01	INSULATOR (B)	
138	7-623-508-01	LUG, 3	
139	3-701-946-30	(US)...LABEL, FUSE 1A 125V	
	*3-701-948-14	(AEP)...LABEL, FUSE T 1A	
140	*3-701-946-32	(US)...LABEL, FUSE 0.5A 125V	
141	4-875-455-01	(AEP)...COVER (DIA.20), CAPACITOR	
142	*4-906-062-01	INSULATOR (A)	
901	*A-4335-492-A	(US)...MOUNTED PCB, DIGITAL	
	*A-4335-586-A	(AEP)...MOUNTED PCB, DIGITAL	
902	*A-4335-493-A	MOUNTED PCB, DIGITAL (I/O)	
903	1-464-454-11	DIGITAL (I/O) UNIT	
904	▲.1-555-701-00	(US)...CORD, POWER	
	▲.1-555-795-00	(AEP)...CORD, POWER	
905	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P	
906	*1-535-141-00	BASE POST 19MM (10MM PITCH) 4P	
907	*1-560-242-11	BUS BAR 3P	
908	*1-560-242-41	BUS BAR 11P	
909	*1-560-242-71	BUS BAR 6P	
910	*1-560-242-91	BUS BAR 10P	
914	*A-4335-588-A	MOUNTED PCB, AUDIO	
915	*1-613-471-11	PC BOARD, FILTER	
916	*1-612-713-11	PC BOARD, AUDIO	
918	1-543-140-00	CORE, RING	
919	1-533-131-00	HOLDER, FUSE	
C1	▲.1-61-744-00	CAP, CERAMIC 10000PF FZ	
C098	1-102-129-00	CAP, CERAMIC 0.01MF B	
LF1	1-421-878-11	(AEP)...FILTER, LINE	
	1-421-878-11	(AEP)...FILTER, LINE	
T1	▲.1-448-589-11	(US)...TRANSFORMER, POWER	
	▲.1-448-590-11	(AEP)...TRANSFORMER, POWER	

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

SECTION 6 ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

· MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:
 UA...: μA..., UPA...: μPA..., UPC...: μPC,
 UPD...: μPD...

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	*A-4335-492-A	(US)...MOUNTED PCB, DIGITAL
	*A-4335-586-A	(AEP)...MOUNTED PCB, DIGITAL
902	*A-4335-493-A	MOUNTED PCB, DIGITAL (I/O)
903	1-464-454-11	DIGITAL (I/O) UNIT
904	Δ 1-555-701-00	(US)...CORD, POWER
	Δ 1-555-795-00	(AEP)...CORD, POWER
905	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P
906	*1-535-141-00	BASE POST 19MM (10MM PITCH) 4P
907	*1-560-242-11	BUS BAR 3P
908	*1-560-242-41	BUS BAR 11P
909	*1-560-242-71	BUS BAR 6P
910	*1-560-242-91	BUS BAR 10P
912	*1-612-715-11	PC BOARD, METER
913	*1-612-765-11	PC BOARD, LED
914	*A-4335-588-A	MOUNTED PCB, AUDIO
915	*1-613-471-11	PC BOARD, FILTER
916	*1-612-713-11	PC BOARD, AUDIO
918	1-543-140-00	CORE, RING
919	1-533-131-00	HOLDER, FUSE
C1	Δ 1-161-744-00	(LINE FILTER BOARD) ...CAP, CERAMIC 1000PF FZ
C2	Δ 1-161-744-00	(LINE FILTER BOARD) CERAMIC 0.01MF 400V
C01	1-102-074-00	(AUDIO BOARD)...CERAMIC 0.001MF 10% 50V
C02	1-102-074-00	(AUDIO BOARD) CERAMIC 0.001MF 10% 50V
C098	1-102-129-00	CAP, CERAMIC 0.01MF B
C101	1-107-165-00	MICA 56PF 5% 500V
C102	1-136-305-11	FILM 0.056MF 2% 0
C103	1-107-310-00	MICA 220PF 5% 500V
C104	1-123-370-00	ELECT 10MF 20% 63V
C105	1-123-370-00	ELECT 10MF 20% 63V
C109	1-123-371-00	ELECT 22MF 20% 63V
C110	1-104-255-11	POLYSTYRENE 0.0018MF 5% 125V
C111	1-162-037-00	CERAMIC 100PF 5% 50V
C112	1-162-037-00	CERAMIC 100PF 5% 50V
C113	1-123-370-00	ELECT 10MF 20% 63V
C121	1-162-021-00	CERAMIC 22PF 5% 50V
C122	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C123	1-123-371-00	ELECT 22MF 20% 63V
C124	1-104-267-00	POLYSTYRENE 220PF 5% 500V
C127	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C128	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C129	1-136-277-11	FILM 0.0039MF 2% 630V
C130	1-123-370-00	ELECT 10MF 20% 63V
C131	1-107-310-00	MICA 220PF 5% 500V
C201	1-107-165-00	MICA 56PF 5% 500V
C202	1-136-305-11	FILM 0.056MF 2% 0
C203	1-107-310-00	MICA 220PF 5% 500V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C204	1-123-370-00	ELECT 10MF 20% 63V
C205	1-123-370-00	ELECT 10MF 20% 63V
C209	1-123-371-00	ELECT 22MF 20% 63V
C210	1-104-255-11	POLYSTYRENE 0.0018MF 5% 125V
C211	1-162-037-00	CERAMIC 100PF 5% 50V
C212	1-162-037-00	CERAMIC 100PF 5% 50V
C213	1-123-370-00	ELECT 10MF 20% 63V
C221	1-162-021-00	CERAMIC 22PF 5% 50V
C222	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C223	1-123-371-00	ELECT 22MF 20% 63V
C224	1-104-267-00	POLYSTYRENE 220PF 5% 500V
C227	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C228	1-104-230-00	POLYSTYRENE 0.0015MF 5% 50V
C229	1-136-277-11	FILM 0.0039MF 2% 630V
C230	1-123-370-00	ELECT 10MF 20% 63V
C231	1-107-310-00	MICA 220PF 5% 500V
C300	1-101-880-00	CERAMIC 47PF 10% 50V
C301	1-123-371-00	ELECT 22MF 20% 63V
C302	1-123-371-00	ELECT 22MF 20% 63V
C303	1-123-371-00	ELECT 22MF 20% 63V
C304	1-123-371-00	ELECT 22MF 20% 63V
C305	1-123-371-00	ELECT 22MF 20% 63V
C306	1-123-371-00	ELECT 22MF 20% 63V
C307	1-123-324-00	ELECT 1000MF 20% 16V
C308	1-123-333-00	ELECT 100MF 20% 16V
C309	1-123-390-00	ELECT 330MF 20% 63V
C310	1-123-390-00	ELECT 330MF 20% 63V
C311	1-123-371-00	ELECT 22MF 20% 63V
C312	1-123-371-00	ELECT 22MF 20% 63V
C313	1-124-636-00	ELECT 3300MF 20% 25V
C314	1-124-636-00	ELECT 3300MF 20% 25V
C315	1-162-110-00	CERAMIC 0.001MF 10% 50V
C316	1-131-520-00	TANTALUM 22MF 20% 16V
C317	1-131-371-00	TANTALUM 10MF 20% 16V
C318	1-161-494-00	CERAMIC 0.022MF 30% 25V
C319	1-162-110-00	CERAMIC 0.001MF 10% 50V
C320	1-162-040-00	CERAMIC 4.7PF 10% 50V
C321	1-162-046-00	CERAMIC 12PF 5% 50V
C322	1-123-384-00	ELECT 10MF 20% 50V
C323	1-123-380-00	ELECT 1MF 20% 50V
C324	1-123-371-00	ELECT 22MF 20% 63V
C325	1-162-021-00	CERAMIC 22PF 5% 50V
C326	1-162-110-00	CERAMIC 0.001MF 10% 50V
C327	1-123-306-00	ELECT 47MF 20% 10V
C328	1-123-298-00	ELECT 470MF 20% 6.3V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C329	1-123-298-00	ELECT	470MF	20%	6.3V
C330	1-161-494-00	CERAMIC	0.022MF	30%	25V
C331	1-161-494-00	CERAMIC	0.022MF	30%	25V
C332	1-123-384-00	ELECT	10MF	20%	50V
C333	1-123-384-00	ELECT	10MF	20%	50V
C334	1-162-029-00	CERAMIC	47PF	5%	50V
C335	1-162-050-00	CERAMIC	18PF	5%	50V
C336	1-162-029-00	CERAMIC	47PF	5%	50V
C337	1-162-110-00	CERAMIC	0.001MF	10%	50V
C338	1-131-520-00	TANTALUM	22MF	20%	16V
C339	1-161-494-00	CERAMIC	0.022MF	30%	25V
C340	1-123-384-00	ELECT	10MF	20%	50V
C341	1-123-371-00	ELECT	22MF	20%	63V
C342	1-123-371-00	ELECT	22MF	20%	63V
C343	1-123-371-00	ELECT	22MF	20%	63V
C345	1-123-371-00	ELECT	22MF	20%	63V
C346	1-123-371-00	ELECT	22MF	20%	63V
C347	1-123-371-00	ELECT	22MF	20%	63V
C348	1-123-371-00	ELECT	22MF	20%	63V
C349	1-123-333-00	ELECT	100MF	20%	16V
C350	1-123-333-00	ELECT	100MF	20%	16V
C351	1-161-494-00	CERAMIC	0.022MF	30%	25V
C352	1-162-110-00	CERAMIC	0.001MF	10%	50V
C353	1-162-110-00	CERAMIC	0.001MF	10%	50V
C354	1-162-037-00	CERAMIC	100PF	5%	50V
C355	1-162-102-00	CERAMIC	220PF	10%	50V
C356	1-123-321-00	ELECT	220MF	20%	16V
C357	1-123-321-00	ELECT	220MF	20%	16V
C358	1-107-311-00	MICA	15PF	5%	500V
C359	1-107-311-00	MICA	15PF	5%	500V
C360	1-123-306-00	ELECT	47MF	20%	10V
C361	1-123-306-00	ELECT	47MF	20%	10V
C399	1-162-306-31	CERAMIC	0.01MF	30%	16V
C401	1-162-293-31	CERAMIC	820PF	10%	50V
C402	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C403	1-107-296-00	MICA	68PF	5%	100V
C404	1-104-150-00	POLYSTYRENE	680PF	5%	125V
C405	1-123-356-00	ELECT	10MF	20%	50V
C406	1-162-306-31	CERAMIC	0.01MF	30%	16V
C407	1-123-323-00	ELECT	470MF	20%	16V
C408	1-123-323-00	ELECT	470MF	20%	16V
C409	1-123-323-00	ELECT	470MF	20%	16V
C410	1-123-323-00	ELECT	470MF	20%	16V
C411	1-102-824-00	CERAMIC	470PF	5%	50V
C412	1-136-162-00	FILM	0.056MF	5%	50V
C413	1-123-672-11	ELECT	220MF	20%	10V
C414	1-162-306-31	CERAMIC	0.01MF	30%	16V
C415	1-162-304-31	CERAMIC	0.0047MF	30%	16V
C416	1-107-292-00	MICA	47PF	5%	100V
C417	1-162-306-31	CERAMIC	0.01MF	30%	16V
C418	1-123-356-00	ELECT	10MF	20%	50V
C419	1-162-306-31	CERAMIC	0.01MF	30%	16V
C420	1-123-356-00	ELECT	10MF	20%	50V
C421	1-162-306-31	CERAMIC	0.01MF	30%	16V
C422	1-123-356-00	ELECT	10MF	20%	50V
C423	1-162-306-31	CERAMIC	0.01MF	30%	16V
C424	1-162-306-31	CERAMIC	0.01MF	30%	16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C425	1-162-294-31	CERAMIC	0.001MF	10%	50V
C426	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C427	1-131-450-00	TANTALUM	1MF	20%	50V
C428	1-131-450-00	TANTALUM	1MF	20%	50V
C429	1-102-959-00	CERAMIC	22PF	10%	50V
C430	1-102-976-00	CERAMIC	180PF	5%	50V
C431	1-102-531-00	CERAMIC	150PF	5%	50V
C432	1-102-820-00	CERAMIC	330PF	5%	50V
C433	1-102-531-00	CERAMIC	150PF	5%	50V
C434	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C435	1-131-450-00	TANTALUM	1MF	20%	50V
C436	1-136-167-00	FILM	0.15MF	5%	50V
C437	1-136-167-00	FILM	0.15MF	5%	50V
C438	1-162-282-31	CERAMIC	100PF	10%	50V
C439	1-162-282-31	CERAMIC	100PF	10%	50V
C440	1-123-356-00	ELECT	10MF	20%	50V
C441	1-162-306-31	CERAMIC	0.01MF	30%	16V
C442	1-162-306-31	CERAMIC	0.01MF	30%	16V
C443	1-162-306-31	CERAMIC	0.01MF	30%	16V
C444	1-123-310-00	ELECT	470MF	20%	10V
C445	1-162-306-31	CERAMIC	0.01MF	30%	16V
C446	1-123-356-00	ELECT	10MF	20%	50V
C447	1-162-306-31	CERAMIC	0.01MF	30%	16V
C448	1-136-165-00	FILM	0.1MF	5%	50V
C449	1-162-306-31	CERAMIC	0.01MF	30%	16V
C450	1-162-306-31	CERAMIC	0.01MF	30%	16V
C451	1-162-306-31	CERAMIC	0.01MF	30%	16V
C452	1-162-306-31	CERAMIC	0.01MF	30%	16V
C453	1-123-356-00	ELECT	10MF	20%	50V
C454	1-123-369-00	ELECT	4.7MF	20%	25V
C455	1-123-330-00	ELECT	22MF	20%	16V
C456	1-123-380-00	ELECT	1MF	20%	50V
C457	1-162-306-31	CERAMIC	0.01MF	30%	16V
C458	1-162-306-31	CERAMIC	0.01MF	30%	16V
C459	1-162-306-31	CERAMIC	0.01MF	30%	16V
C460	1-123-343-00	ELECT	33MF	20%	25V
C461	1-136-173-00	FILM	0.47MF	5%	50V
C462	1-136-173-00	FILM	0.47MF	5%	50V
C463	1-162-306-31	CERAMIC	0.01MF	30%	16V
C464	1-162-306-31	CERAMIC	0.01MF	30%	16V
C465	1-123-369-00	ELECT	4.7MF	20%	25V
C466	1-123-369-00	ELECT	4.7MF	20%	25V
C467	1-123-380-00	ELECT	1MF	20%	50V
C468	1-123-356-00	ELECT	10MF	20%	50V
C469	1-162-306-31	CERAMIC	0.01MF	30%	16V
C470	1-162-294-31	CERAMIC	0.001MF	10%	50V
C471	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C472	1-131-450-00	TANTALUM	1MF	20%	50V
C473	1-102-959-00	CERAMIC	22PF	10%	50V
C474	1-101-059-00	CERAMIC	510PF	5%	50V
C475	1-102-531-00	CERAMIC	150PF	5%	50V
C476	1-102-820-00	CERAMIC	330PF	5%	50V
C477	1-102-531-00	CERAMIC	150PF	5%	50V
C478	1-131-450-00	TANTALUM	1MF	20%	50V
C479	1-162-302-31	CERAMIC	0.0022MF	30%	16V
C480	1-131-450-00	TANTALUM	1MF	20%	50V
C481	1-136-167-00	FILM	0.15MF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C482	1-123-343-00	ELECT	33MF	20%	25V
C483	1-162-215-31	CERAMIC	47PF	5%	50V
C484	1-162-215-31	CERAMIC	47PF	5%	50V
C485	1-123-356-00	ELECT	10MF	20%	50V
C486	1-162-306-31	CERAMIC	0.01MF	30%	16V
C487	1-162-306-31	CERAMIC	0.01MF	30%	16V
C488	1-162-306-31	CERAMIC	0.01MF	30%	16V
C489	1-131-520-00	TANTALUM	22MF	20%	16V
C490	1-123-323-00	ELECT	470MF	20%	16V
C491	1-123-323-00	ELECT	470MF	20%	16V
C492	1-123-323-00	ELECT	470MF	20%	16V
C493	1-123-323-00	ELECT	470MF	20%	16V
C494	1-123-356-00	ELECT	10MF	20%	50V
C495	1-162-306-31	CERAMIC	0.01MF	30%	16V
C496	1-162-306-31	CERAMIC	0.01MF	30%	16V
C497	1-123-343-00	ELECT	33MF	20%	25V
C498	1-124-902-00	ELECT	0.47MF	20%	50V
C499	1-162-215-31	CERAMIC	47PF	5%	50V
C500	1-162-211-31	CERAMIC	33PF	5%	50V
C502	1-123-330-00	ELECT	22MF	20%	25V
C503	1-123-307-00	ELECT	100MF	20%	6.3V
C504	1-123-228-00	ELECT	1MF	20%	50V
C505	1-123-380-00	ELECT	1MF	20%	50V
C506	1-123-380-00	ELECT	1MF	20%	50V
C507	1-123-228-00	ELECT	1MF	20%	50V
C508	1-123-380-00	ELECT	1MF	20%	50V
C509	1-123-447-00	ELECT	0.22MF	20%	50V
C510	1-123-307-00	ELECT	100MF	20%	6.3V
C511	1-123-228-00	ELECT	1MF	20%	50V
C512	1-123-380-00	ELECT	1MF	20%	50V
C513	1-162-284-31	CERAMIC	150PF	10%	50V
C514	1-162-306-31	CERAMIC	0.01MF	20%	16V
C515	1-162-284-31	CERAMIC	150PF	10%	50V
C516	1-123-369-00	ELECT	4.7MF	20%	50V
C517	1-123-369-00	ELECT	4.7MF	20%	50V
C518	1-161-494-00	CERAMIC	0.022MF	30%	25V
C519	1-161-494-00	CERAMIC	0.022MF	30%	25V
C520	1-161-494-00	CERAMIC	0.022MF	30%	25V
C521	1-161-494-00	CERAMIC	0.022MF	30%	25V
C522	1-123-380-00	ELECT	1MF	20%	50V
C523	1-123-356-00	ELECT	10MF	20%	50V
C524	1-123-380-00	ELECT	1MF	20%	50V
C525	1-123-381-00	ELECT	2.2MF	20%	50V
C526	1-123-369-00	ELECT	4.7MF	20%	50V
C527	1-123-356-00	ELECT	10MF	20%	50V
C529	1-162-282-31	CERAMIC	100PF	10%	50V
C530	1-162-203-31	CERAMIC	15PF	5%	50V
C531	1-162-306-31	CERAMIC	0.01MF	20%	16V
C532	1-162-282-31	CERAMIC	100PF	10%	50V
C533	1-161-494-00	CERAMIC	0.022MF	30%	25V
C534	1-161-494-00	CERAMIC	0.022MF	30%	25V
C535	1-161-494-00	CERAMIC	0.022MF	30%	25V
C536	1-161-494-00	CERAMIC	0.022MF	30%	25V
C537	1-161-494-00	CERAMIC	0.022MF	30%	25V
C538	1-162-282-31	CERAMIC	100PF	10%	50V
C539	1-161-494-00	CERAMIC	0.022MF	30%	25V
C540	1-161-494-00	CERAMIC	0.022MF	30%	25V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C541	1-161-494-00	CERAMIC	0.022MF	30%	25V
C542	1-161-494-00	CERAMIC	0.022MF	30%	25V
C543	1-161-494-00	CERAMIC	0.022MF	30%	25V
C544	1-161-494-00	CERAMIC	0.022MF	30%	25V
C545	1-161-494-00	CERAMIC	0.022MF	30%	25V
C546	1-161-494-00	CERAMIC	0.022MF	30%	25V
C547	1-161-494-00	CERAMIC	0.022MF	30%	25V
C548	1-123-298-00	ELECT	470MF	20%	6.3V
C549	1-123-298-00	ELECT	470MF	20%	6.3V
C550	1-161-494-00	CERAMIC	0.022MF	30%	25V
C552	1-123-298-00	ELECT	470MF	20%	6.3V
C553	1-161-494-00	CERAMIC	0.022MF	30%	25V
C554	1-123-321-00	ELECT	220MF	20%	16V
C555	1-161-494-00	CERAMIC	0.022MF	30%	25V
C556	1-123-321-00	ELECT	220MF	20%	16V
C557	1-161-494-00	CERAMIC	0.022MF	30%	25V
C558	1-161-494-00	CERAMIC	0.022MF	30%	25V
C559	1-162-199-31	CERAMIC	10PF	5%	50V
C560	1-162-199-31	CERAMIC	10PF	5%	50V
C561	1-162-284-31	CERAMIC	150PF	10%	50V
C562	1-162-207-31	CERAMIC	22PF	5%	50V
C563	1-162-196-31	CERAMIC	5.6PF	10%	50V
C564	1-123-298-00	ELECT	470MF	20%	6.3V
C565	1-123-298-00	ELECT	470MF	20%	6.3V
C566	1-162-207-31	CERAMIC	22PF	5%	50V
C567	1-123-356-00	ELECT	10MF	20%	50V
C568	1-162-306-31	CERAMIC	0.01MF	20%	16V
C569	1-162-287-31	CERAMIC	270PF	10%	50V
C570	1-162-198-31	CERAMIC	8.2PF	10%	50V
C571	1-161-494-00	CERAMIC	0.022MF	30%	25V
C572	1-161-494-00	CERAMIC	0.022MF	30%	25V
C573	1-162-304-31	CERAMIC	0.0047MF	20%	16V
C574	1-162-191-31	CERAMIC	2.2PF	10%	50V
C575	1-162-203-31	CERAMIC	15PF	5%	50V
C576	1-162-203-31	CERAMIC	15PF	5%	50V
C577	1-162-203-31	CERAMIC	15PF	5%	50V
C578	1-162-203-31	CERAMIC	15PF	5%	50V
C801	1-123-356-00	ELECT	10MF	20%	50V
C802	1-161-330-00	CERAMIC	0.01MF	30%	25V
C803	1-161-330-00	CERAMIC	0.01MF	30%	25V
C804	1-136-156-00	FILM	0.018MF	5%	50V
C805	1-123-382-00	ELECT	3.3MF	20%	50V
C806	1-162-108-00	CERAMIC	680PF	10%	50V
C807	1-162-108-00	CERAMIC	680PF	10%	50V
C901	1-123-338-00	ELECT	2200MF	20%	25V
C902	1-123-338-00	ELECT	2200MF	20%	25V
C903	1-123-327-00	ELECT	4700MF	20%	16V
C904	1-123-327-00	ELECT	4700MF	20%	16V
C905	1-123-325-00	ELECT	2200MF	20%	16V
C906	1-123-332-00	ELECT	47MF	20%	16V
C907	1-123-337-00	ELECT	1000MF	20%	25V
C908	1-136-165-00	FILM	0.1MF	5%	50V
C909	1-123-361-00	ELECT	220MF	20%	50V
C910	1-123-356-00	ELECT	10MF	20%	50V
C911	1-123-332-00	ELECT	47MF	20%	25V
C912	1-123-333-00	ELECT	100MF	20%	25V
C913	1-123-311-00	ELECT	1000MF	20%	10V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C914	1-123-311-00	ELECT	1000MF	20%	10V
C916	1-123-380-00	ELECT	1MF	20%	50V
C917	1-123-356-00	ELECT	10MF	20%	25V
C918	1-123-306-00	ELECT	47MF	20%	10V
C919	1-123-321-00	ELECT	220MF	20%	16V
C920	1-123-380-00	ELECT	1MF	20%	50V
C921	1-123-380-00	ELECT	1MF	20%	50V
C922	1-123-356-00	ELECT	10MF	20%	25V
C923	1-123-356-00	ELECT	10MF	20%	25V
CNJ101	1-507-898-11	JACK, PIN 2P (LINE IN)			
CNJ102	1-507-898-11	JACK, PIN 2P (LINE OUT)			
CNJ201	1-507-898-11	JACK, PIN 2P (LINE IN)			
CNJ202	1-507-898-11	JACK, PIN 2P (LINE OUT)			
CNJ301	1-507-898-21	JACK, PIN 2P (VIDEO IN)			
CNJ302	1-507-898-21	JACK, PIN 2P (VIDEO IN)			
CNJ303	1-507-898-21	JACK, PIN 2P (VIDEO OUT)			
CNJ304	1-507-898-21	JACK, PIN 2P (VIDEO OUT)			
CNJ401	*1-563-079-11	JACK, PIN 1P			
CNJ501	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP1	*1-560-066-00	(POWER BOARD).....PIN, CONNECTOR 10P			
CNP1	*1-564-506-11	(DIGITAL I/O BOARD)..PLUG, CONNECTOR 3P			
CNP2	*1-560-338-00	(POWER BOARD).....PIN, CONNECTOR 7P			
CNP2	*1-564-506-11	(DIGITAL I/O BOARD)..PLUG, CONNECTOR 3P			
CNP3	*1-560-064-00	(POWER BOARD).....PIN, CONNECTOR 6P			
CNP3	*1-564-505-11	(DIGITAL I/O BOARD)..PLUG, CONNECTOR 2P			
CNP4	*1-560-062-00	(POWER BOARD).....PIN, CONNECTOR 4P			
CNP4	*1-564-507-11	(DIGITAL I/O BOARD)..PLUG, CONNECTOR 4P			
CNP5	*1-560-060-00	(POWER BOARD).....PIN, CONNECTOR 2P			
CNP5	*1-564-506-11	(DIGITAL I/O BOARD)..PLUG, CONNECTOR 3P			
CNP6	*1-564-507-21	PLUG, CONNECTOR 4P			
CNP7	*1-564-509-11	PLUG, CONNECTOR 6P			
CNP8	*1-564-505-21	PLUG, CONNECTOR 2P			
CNP9	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP10	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP11	*1-564-505-31	PLUG, CONNECTOR 2P			
CNP12	*1-564-505-41	PLUG, CONNECTOR 2P			
CNP13	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP14	*1-564-505-11	PLUG, CONNECTOR 2P			
CNP15	*1-564-506-11	PLUG, CONNECTOR 3P			
CNP16	*1-564-505-31	PLUG, CONNECTOR 2P			
CNP17	1-564-517-11	PLUG, CONNECTOR 2P			
CNP23	*1-564-505-41	PLUG, CONNECTOR 2P			
CNP51	*1-560-060-00	PIN, CONNECTOR 2P			
CNP52	*1-560-060-00	PIN, CONNECTOR 2P			
CNP53	*1-560-060-00	PIN, CONNECTOR 2P			
CNP54	*1-560-061-00	PIN, CONNECTOR 3P			
CNP55	*1-560-062-00	PIN, CONNECTOR 4P			
CNP56	*1-560-060-00	PIN, CONNECTOR 2P			
CNP57	1-564-517-11	PLUG, CONNECTOR 2P			
CNP501	*1-560-060-00	PIN, CONNECTOR 2P			
CNP502	*1-560-062-00	PIN, CONNECTOR 4P			
CNP503	*1-560-061-00	PIN, CONNECTOR 3P			
CNP504	*1-560-062-00	PIN, CONNECTOR 4P			
CNP505	*1-560-061-00	PIN, CONNECTOR 3P			
CNP506	*1-560-063-00	PIN, CONNECTOR 5P			
CNP507	*1-560-061-00	PIN, CONNECTOR 3P			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D101	8-719-910-65	DIODE HZ6B2L
D102	8-719-107-94	DIODE 1SS202-1
D103	8-719-910-65	DIODE HZ6B2L
D201	8-719-910-65	DIODE HZ6B2L
D202	8-719-107-94	DIODE 1SS202-1
D203	8-719-910-65	DIODE HZ6B2L
D301	8-719-107-94	DIODE 1SS202-1
D302	8-719-107-94	DIODE 1SS202-1
D303	8-719-107-94	DIODE 1SS202-1
D304	8-719-910-65	DIODE HZ6B2L
D305	8-719-910-65	DIODE HZ6B2L
D306	8-719-910-65	DIODE HZ6B2L
D307	8-719-910-65	DIODE HZ6B2L
D401	8-719-101-97	DIODE 1SS97-1
D402	8-719-912-27	DIODE KV1226-0
D403	8-719-107-94	DIODE 1SS202-1
D404	8-719-107-94	DIODE 1SS202-1
D405	8-719-912-27	DIODE KV1226-0
D406	8-719-918-96	DIODE AA3422S
D407	8-719-107-94	DIODE 1SS202-1
D501	8-719-107-94	DIODE 1SS202-1
D502	8-719-107-94	DIODE 1SS202-1
D503	8-719-107-94	DIODE 1SS202-1
D504	8-719-107-94	DIODE 1SS202-1
D505	8-719-107-94	DIODE 1SS202-1
D506	8-719-992-61	DIODE HZ6A1
D507	8-719-915-43	DIODE FC54M
D510	8-719-107-94	DIODE 1SS202-1
D511	8-719-107-94	DIODE 1SS202-1
D512	8-719-107-94	DIODE 1SS202-1
D513	8-719-107-94	DIODE 1SS202-1
D514	8-719-107-94	DIODE 1SS202-1
D801	8-719-107-94	DIODE 1SS202-1
D802	8-719-107-94	DIODE 1SS202-1
D803	8-719-107-94	DIODE 1SS202-1
D901	8-719-230-02	DIODE 30DF2
D902	8-719-230-02	DIODE 30DF2
D903	8-719-230-02	DIODE 30DF2
D904	8-719-230-02	DIODE 30DF2
D905	8-719-210-12	DIODE 10DF2
D906	8-719-210-12	DIODE 10DF2
D907	8-719-210-12	DIODE 10DF2
D908	8-719-210-12	DIODE 10DF2
D909	8-719-210-12	DIODE 10DF2
D910	8-719-210-12	DIODE 10DF2
D911	8-719-200-02	DIODE 10E-2
D912	8-719-200-02	DIODE 10E-2
D913	8-719-200-02	DIODE 10E-2
D914	8-719-200-02	DIODE 10E-2
D915	8-719-910-75	DIODE HZ7B2L
D916	8-719-910-42	DIODE HZ24-2L
D917	8-719-107-94	DIODE 1SS202-1
D918	8-719-107-94	DIODE 1SS202-1
D919	8-719-107-94	DIODE 1SS202-1
D920	8-719-311-12	DIODE SEL1112R
D921	8-719-313-12	DIODE SEL1312G
D922	8-719-313-12	DIODE SEL1312G

ELECTRICAL PARTS

Ref.No.	Part No.	Description
F1	△1-532-279-11	(AEP)...FUSE, TIME-LAG T 0.5A
F1	△1-532-737-11	(US)...FUSE, GLASS TUBE 0.5A 125V
F2	△1-532-078-11	(AEP)...FUSE, TIME-LAG T 1A
F2	△1-532-740-11	(US)...FUSE, GLASS TUBE 1A 125V
FL801	1-519-320-11	INDICATOR TUBE, FLUORESCENT
IC101	8-759-602-33	IC CX20197
IC102	8-759-910-75	IC LF353DP
IC103	8-759-900-72	IC NE5532P
IC104	8-759-910-75	IC LF353DP
IC201	8-759-602-33	IC CX20197
IC202	8-759-910-75	IC LF353DP
IC203	8-759-900-72	IC NE5532P
IC204	8-759-910-75	IC LF353DP
IC301	8-759-910-75	IC LF353DP
IC302	8-752-001-80	IC CX20018
IC303	8-752-001-70	IC CX20017
IC304	8-759-140-53	IC UPD4053BC
IC305	8-759-600-02	IC M5218L
IC306	8-759-700-11	IC NJM78M05A
IC307	8-759-700-20	IC NJM79M05A
IC308	8-759-600-02	IC M5218L
IC309	8-759-900-02	IC SN74LS02N
IC310	8-759-045-84	IC MC1458BCP
IC401	8-759-900-86	IC SN74LS86N
IC402	8-759-902-74	IC SN74LS423N
IC403	8-759-040-44	IC MC4044P
IC404	8-759-906-24	IC SN74LS624N
IC405	8-759-903-93	IC SN74LS393N
IC406	8-759-900-74	IC SN74LS74AN
IC407	8-759-918-71	IC CX23065
IC408	8-759-915-26	IC CX23053
IC409	8-759-900-04	IC SN74LS04N
IC410	8-759-618-41	IC M51841P
IC411	8-759-900-74	IC SN74LS74AN
IC412	8-759-202-17	IC TC74HC14P
IC413	8-759-202-27	IC TC74HC157P
IC414	8-759-900-00	IC SN74LS00N
IC415	8-759-202-24	IC TC74HC86P
IC416	8-759-918-71	IC CX23065
IC417	8-759-915-25	IC CX23033
IC418	8-759-001-05	IC MC74HCU04N
IC419	8-759-900-00	IC SN74LS00N
IC420	8-759-001-05	IC MC74HCU04N
IC421	8-759-900-00	IC SN74LS00N
IC422	8-759-202-24	IC TC74HC86P
IC423	8-759-202-27	IC TC74HC157P
IC424	8-759-001-05	IC MC74HCU04N
IC501	8-759-103-57	IC CX23017A
IC502	8-759-178-50	IC UPD785C
IC503	8-759-302-66	IC HM6116ASP-12
IC504	8-759-974-06	IC SN7406N
IC505	8-759-103-19	IC UPC319C
IC506	8-759-979-14	IC CX-7914
IC507	8-759-102-73	IC CX-7975
IC508	8-759-245-05	IC TM4505P
IC509	8-759-302-66	IC HM6116ASP-12

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC510	8-759-990-82	IC TL082CP
IC511	8-759-915-41	IC 74F02PC
IC512	8-759-900-74	IC SN74LS74AN
IC701	8-759-906-24	IC SN74LS624N
IC801	8-759-904-72	IC MSL9359RS
IC802	8-759-812-90	IC LBL290
IC803	8-759-240-69	IC TC4069UBP
IC901	8-759-700-47	IC CX10035
IC902	8-759-961-38	IC BA6138
IC903	8-759-240-66	IC TC4066BP
IC904	8-759-700-65	IC NJM79L05A
J301	1-507-659-00	JACK
L301	1-408-902-21	MICRO INDUCTOR 0.47UH
L302	1-408-551-00	MICRO INDUCTOR 1UH
L401	1-408-559-00	MICRO INDUCTOR 4.7UH
L402	1-408-559-00	MICRO INDUCTOR 4.7UH
L403	1-408-559-00	MICRO INDUCTOR 4.7UH
L404	1-408-559-00	MICRO INDUCTOR 4.7UH
L405	1-408-559-00	MICRO INDUCTOR 4.7UH
L406	1-408-559-00	MICRO INDUCTOR 4.7UH
L407	1-408-559-00	MICRO INDUCTOR 4.7UH
L408	1-408-559-00	MICRO INDUCTOR 4.7UH
L409	1-408-559-00	MICRO INDUCTOR 4.7UH
L410	1-408-559-00	MICRO INDUCTOR 4.7UH
L411	1-408-559-00	MICRO INDUCTOR 4.7UH
L412	1-408-559-00	MICRO INDUCTOR 4.7UH
L413	1-408-559-00	MICRO INDUCTOR 4.7UH
L414	1-408-559-00	MICRO INDUCTOR 4.7UH
L415	1-408-559-00	MICRO INDUCTOR 4.7UH
L416	1-408-552-00	MICRO INDUCTOR 1.2UH
L417	1-408-556-00	MICRO INDUCTOR 2.7UH
L501	1-459-379-00	COIL (WITH CORE)
L502	1-410-015-11	MICRO INDUCTOR 3.3UH
L503	1-407-163-XX	MICRO INDUCTOR 33UH
L504	1-410-033-11	MICRO INDUCTOR 100UH
L505	1-410-033-11	MICRO INDUCTOR 100UH
L506	1-410-033-11	MICRO INDUCTOR 100UH
LDF101	1-464-343-11	FILTER UNIT, LOW PASS
LDF102	1-464-299-00	FILTER UNIT, LOW PASS
LDF201	1-464-343-11	FILTER UNIT, LOW PASS
LDF202	1-464-299-00	FILTER UNIT, LOW PASS
LF1	1-421-580-00	(US)...TRANSFORMER, LINE FILTER (LFT)
LF1	1-421-878-11	(AEP)...FILTER, LINE
PS1	1-532-605-00	LINK, IC
Q101	8-729-800-43	TRANSISTOR 2SK152-3
Q102	8-729-800-43	TRANSISTOR 2SK152-3
Q201	8-729-800-43	TRANSISTOR 2SK152-3
Q202	8-729-800-43	TRANSISTOR 2SK152-3
Q301	8-729-141-43	TRANSISTOR 2SD414
Q302	8-729-167-62	TRANSISTOR 2SC2676
Q303	8-729-167-62	TRANSISTOR 2SC2676
Q304	8-769-111-00	TRANSISTOR 2SK120
Q305	8-729-180-92	TRANSISTOR 2SD809-K
Q306	8-729-154-83	TRANSISTOR 2SB548
Q307	8-729-113-82	TRANSISTOR 2SA1138
Q308	8-729-113-82	TRANSISTOR 2SA1138

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q309	8-769-111-00	TRANSISTOR 2SK120
Q310	8-729-173-37	TRANSISTOR 2SA733-P
Q311	8-729-606-33	TRANSISTOR 2SC2603-F
Q401	8-729-178-54	TRANSISTOR 2SC2785
Q402	8-729-200-56	TRANSISTOR 2SK241-GR
Q403	8-729-201-93	TRANSISTOR 2SC2995-0
Q404	8-729-200-56	TRANSISTOR 2SK241-GR
Q405	8-729-201-93	TRANSISTOR 2SC2995-0
Q406	8-729-178-54	TRANSISTOR 2SC2785
Q407	8-729-178-54	TRANSISTOR 2SC2785
Q408	8-729-117-54	TRANSISTOR 2SA1175
Q409	8-729-178-54	TRANSISTOR 2SC2785
Q410	8-729-900-80	TRANSISTOR DTC144ES
Q411	8-729-900-74	TRANSISTOR DTC143TS
Q501	8-729-672-43	TRANSISTOR 2SC2724-D
Q502	8-729-672-43	TRANSISTOR 2SC2724-D
Q503	8-729-901-52	TRANSISTOR 2SA933S-R
Q504	8-729-178-54	TRANSISTOR 2SC2785
Q505	8-729-901-52	TRANSISTOR 2SA933S-R
Q506	8-729-178-54	TRANSISTOR 2SC2785
Q507	8-729-178-54	TRANSISTOR 2SC2785
Q508	8-729-178-54	TRANSISTOR 2SC2785
Q509	8-729-178-54	TRANSISTOR 2SC2785
Q510	8-729-178-54	TRANSISTOR 2SC2785
Q511	8-729-901-52	TRANSISTOR 2SA933S-R
Q512	8-729-178-54	TRANSISTOR 2SC2785
Q513	8-729-901-52	TRANSISTOR 2SA933S-R
Q514	8-729-901-52	TRANSISTOR 2SA933S-R
Q515	8-729-901-52	TRANSISTOR 2SA933S-R
Q516	8-729-178-54	TRANSISTOR 2SC2785
Q517	8-729-178-54	TRANSISTOR 2SC2785
Q518	8-729-132-00	TRANSISTOR 2SK121-2
Q519	8-729-178-54	TRANSISTOR 2SC2785
Q520	8-729-178-54	TRANSISTOR 2SC2785
Q521	8-729-178-54	TRANSISTOR 2SC2785
Q522	8-729-178-54	TRANSISTOR 2SC2785
Q523	8-729-178-54	TRANSISTOR 2SC2785
Q524	8-729-901-52	TRANSISTOR 2SA933S-R
Q525	8-729-178-54	TRANSISTOR 2SC2785
Q526	8-729-132-00	TRANSISTOR 2SK121-2
Q527	8-729-178-54	TRANSISTOR 2SC2785
Q528	8-729-178-54	TRANSISTOR 2SC2785
Q529	8-729-672-43	TRANSISTOR 2SC2724-D
Q530	8-729-900-89	TRANSISTOR DTC144ES
Q531	8-729-900-89	TRANSISTOR DTC144ES
Q532	8-729-900-89	TRANSISTOR DTC144ES
Q533	8-729-178-54	TRANSISTOR 2SC2785
Q534	8-729-178-54	TRANSISTOR 2SC2785
Q535	8-729-178-54	TRANSISTOR 2SC2785
Q536	8-729-178-54	TRANSISTOR 2SC2785
Q537	8-729-178-54	TRANSISTOR 2SC2785
Q538	8-729-901-52	TRANSISTOR 2SA933S-R
Q539	8-729-901-52	TRANSISTOR 2SA933S-R
Q540	8-729-178-54	TRANSISTOR 2SC2785
Q650	8-729-178-54	TRANSISTOR 2SC2785
Q651	8-729-178-54	TRANSISTOR 2SC2785
Q701	8-729-612-77	TRANSISTOR 2SA1027R

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
Q801	8-729-612-77	TRANSISTOR 2SA1027R			
Q802	8-729-612-77	TRANSISTOR 2SA1027R			
Q803	8-729-900-61	TRANSISTOR DTA114ES			
Q804	8-729-900-89	TRANSISTOR DTC144ES			
Q805	8-729-900-89	TRANSISTOR DTC144ES			
Q806	8-729-900-61	TRANSISTOR DTA114ES			
Q807	8-729-900-61	TRANSISTOR DTA114ES			
Q808	8-729-900-61	TRANSISTOR DTA114ES			
Q809	8-729-900-61	TRANSISTOR DTA114ES			
Q810	8-729-900-89	TRANSISTOR DTC144ES			
Q811	8-729-900-89	TRANSISTOR DTC144ES			
Q902	8-729-288-03	TRANSISTOR 2SD880			
Q903	8-729-173-13	TRANSISTOR 2SB731			
Q904	8-729-180-92	TRANSISTOR 2SB809K			
Q905	8-729-606-33	TRANSISTOR 2SC2603-F			
Q906	8-729-606-33	TRANSISTOR 2SC2603-F			
Q907	8-729-606-33	TRANSISTOR 2SC2603-F			
Q908	8-729-606-33	TRANSISTOR 2SC2603-F			
Q909	8-729-900-89	TRANSISTOR DTC144ES			
Q910	8-729-606-33	TRANSISTOR 2SC2603-F			
R101	1-214-897-00	METAL	22K	1%	1/2W
R102	1-214-880-00	METAL	4.7K	1%	1/2W
R103	1-214-964-00	METAL	1M	1%	1/4W
R104	1-214-832-00	METAL	47	1%	1/2W
R105	1-214-860-00	METAL	680	1%	1/2W
R106	1-214-851-00	METAL	300	1%	1/2W
R107	1-214-884-00	METAL	6.8K	1%	1/2W
R108	1-214-777-00	METAL	100K	1%	1/4W
R109	1-214-888-00	METAL	10K	1%	1/2W
R110	1-214-888-00	METAL	10K	1%	1/2W
R111	1-214-761-00	METAL	22K	1%	1/4W
R112	1-214-753-00	METAL	10K	1%	1/4W
R113	1-214-888-00	METAL	10K	1%	1/2W
R114	1-214-860-00	METAL	680	1%	1/2W
R115	1-214-868-00	METAL	1.5K	1%	1/2W
R116	1-214-897-00	METAL	22K	1%	1/2W
R117	1-214-856-00	METAL	470	1%	1/2W
R118	1-214-864-00	METAL	1K	1%	1/2W
R119	1-214-761-00	METAL	22K	1%	1/4W
R120	1-214-741-00	METAL	3.3K	1%	1/4W
R121	1-214-751-00	METAL	8.2K	1%	1/4W
R122	1-214-911-00	METAL	82K	1%	1/2W
R131	1-249-425-11	CARBON	4.7K	5%	1/6W
R132	1-247-839-00	CARBON	2.2K	5%	1/6W
R133	1-214-892-00	METAL	15K	1%	1/2W
R134	1-214-761-00	METAL	22K	1%	1/4W
R135	1-214-753-00	METAL	10K	1%	1/4W
R136	1-214-888-00	METAL	10K	1%	1/2W
R138	1-249-441-11	CARBON	100K	5%	1/6W
R140	1-214-879-00	METAL	4.3K	1%	1/2W
R141	1-214-861-00	METAL	750	1%	1/2W
R142	1-214-888-00	METAL	10K	1%	1/2W
R143	1-214-890-00	METAL	12K	1%	1/2W
R144	1-214-902-00	METAL	36K	1%	1/2W
R145	1-214-878-00	METAL	3.9K	1%	1/2W
R146	1-214-964-00	METAL	1M	1%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R583	1-249-429-11	CARBON	10K	5%	1/6W
R584	1-249-429-11	CARBON	10K	5%	1/6W
R585	1-249-429-11	CARBON	10K	5%	1/6W
R586	1-249-429-11	CARBON	10K	5%	1/6W
R587	1-249-429-11	CARBON	10K	5%	1/6W
R588	1-249-429-11	CARBON	10K	5%	1/6W
R589	1-249-429-11	CARBON	10K	5%	1/6W
R590	1-247-813-00	CARBON	180	5%	1/6W
R591	1-247-819-00	CARBON	330	5%	1/6W
R592	1-247-821-00	CARBON	390	5%	1/6W
R593	1-249-415-11	CARBON	680	5%	1/6W
R594	1-247-833-00	CARBON	1.2K	5%	1/6W
R595	1-247-824-00	CARBON	510	5%	1/6W
R596	1-249-417-11	CARBON	1K	5%	1/6W
R597	1-249-405-11	CARBON	100	5%	1/6W
R598	1-247-804-00	CARBON	75	5%	1/6W
R599	1-249-441-11	CARBON	100K	5%	1/6W
R600	1-249-405-11	CARBON	100	5%	1/6W
R601	1-247-804-00	CARBON	75	5%	1/6W
R602	1-249-433-11	CARBON	22K	5%	1/6W
R603	1-249-433-11	CARBON	22K	5%	1/6W
R604	1-249-433-11	CARBON	22K	5%	1/6W
R605	1-249-433-11	CARBON	22K	5%	1/6W
R606	1-249-425-11	CARBON	4.7K	5%	1/6W
R607	1-249-425-11	CARBON	4.7K	5%	1/6W
R608	1-249-425-11	CARBON	4.7K	5%	1/6W
R609	1-249-422-11	CARBON	2.7K	5%	1/6W
R610	1-249-429-11	CARBON	10K	5%	1/6W
R611	1-247-823-00	CARBON	470	5%	1/6W
R612	1-249-425-11	CARBON	4.7K	5%	1/6W
R613	1-249-425-11	CARBON	4.7K	5%	1/6W
R614	1-249-441-11	CARBON	100K	5%	1/6W
R615	1-249-423-11	CARBON	3.3K	5%	1/6W
R616	1-247-815-00	CARBON	220	5%	1/6W
R617	1-247-815-00	CARBON	220	5%	1/6W
R618	1-249-417-11	CARBON	1K	5%	1/6W
R619	1-247-887-00	CARBON	220K	5%	1/6W
R621	1-249-425-11	CARBON	4.7K	5%	1/6W
R622	1-249-441-11	CARBON	100K	5%	1/6W
R623	1-247-851-00	CARBON	6.8K	5%	1/6W
R625	1-249-417-11	CARBON	1K	5%	1/6W
R801	1-249-417-11	CARBON	1K	5%	1/6W
R802	1-249-433-11	CARBON	22K	5%	1/6W
R803	1-249-433-11	CARBON	22K	5%	1/6W
R804	1-249-433-11	CARBON	22K	5%	1/6W
R805	1-249-417-11	CARBON	1K	5%	1/6W
R806	1-249-429-11	CARBON	10K	5%	1/6W
R807	1-249-429-11	CARBON	10K	5%	1/6W
R808	1-249-433-11	CARBON	22K	5%	1/6W
R809	1-247-891-00	CARBON	330K	5%	1/6W
R810	1-247-875-00	CARBON	68K	5%	1/6W
R811	1-247-875-00	CARBON	68K	5%	1/6W
R812	1-247-875-00	CARBON	68K	5%	1/6W
R813	1-247-875-00	CARBON	68K	5%	1/6W
R814	1-249-429-11	CARBON	10K	5%	1/6W
R815	1-247-875-00	CARBON	68K	5%	1/6W
R816	1-247-875-00	CARBON	68K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R817	1-247-875-00	CARBON	68K	5%	1/6W
R818	1-247-875-00	CARBON	68K	5%	1/6W
R901	1-217-387-00	FUSIBLE	10	5%	1/4W F
R902	1-247-839-00	CARBON	2.2K	5%	1/6W
R903	1-249-425-11	CARBON	4.7K	5%	1/6W
R904	1-214-767-00	METAL	39K	1%	1/4W
R905	1-214-737-00	METAL	2.2K	1%	1/4W
R906	1-214-127-00	METAL	620	1%	1/4W
R907	1-214-737-00	METAL	2.2K	1%	1/4W
R908	1-214-755-00	METAL	12K	1%	1/4W
R909	1-247-897-00	CARBON	560K	5%	1/6W
R910	1-247-873-00	CARBON	56K	5%	1/6W
R911	1-247-873-00	CARBON	56K	5%	1/6W
R912	1-247-804-00	CARBON	75	5%	1/6W
R913	1-247-220-00	CARBON	150	5%	1/2W
R914	1-247-881-00	CARBON	120K	5%	1/6W
R915	1-249-433-11	CARBON	22K	5%	1/6W
R916	1-249-425-11	CARBON	4.7K	5%	1/6W
R917	1-249-425-11	CARBON	4.7K	5%	1/6W
R918	1-249-433-11	CARBON	22K	5%	1/6W
R919	1-249-423-11	CARBON	3.3K	5%	1/6W
R920	1-249-425-11	CARBON	4.7K	5%	1/6W
R921	1-247-791-00	CARBON	22	5%	1/6W
R922	1-247-791-00	CARBON	22	5%	1/6W
R923	1-247-891-00	CARBON	330K	5%	1/6W
R924	1-247-891-00	CARBON	330K	5%	1/6W
R925	1-249-425-11	CARBON	4.7K	5%	1/6W
R926	1-249-425-11	CARBON	4.7K	5%	1/6W
R927	1-249-433-11	CARBON	22K	5%	1/6W
R928	1-249-437-11	CARBON	47K	5%	1/6W
R929	1-249-437-11	CARBON	47K	5%	1/6W
RV101	1-228-809-00	RES, VAR, CARBON	50K/50K		
RV102	1-224-253-XX	RES, ADJ, METAL GLAZE	22K		
RV103	1-224-250-XX	RES, ADJ, METAL GLAZE	2.2K		
RV105	1-226-980-00	RES, VAR, CARBON	20K/20K		
RV201	1-228-809-00	RES, VAR, CARBON	50K/50K		
RV202	1-224-253-XX	RES, ADJ, METAL GLAZE	22K		
RV203	1-224-250-XX	RES, ADJ, METAL GLAZE	2.2K		
RV205	1-226-980-00	RES, VAR, CARBON	20K/20K		
RV501	1-228-723-00	RES, ADJ, CARBON	5K		
RV502	1-228-142-00	RES, VAR, CARBON	20K		
RV503	1-228-992-11	RES, ADJ, METAL GLAZE	3.3K		
RV901	1-228-723-00	RES, ADJ, CARBON	5K		
RV902	1-228-723-00	RES, ADJ, CARBON	5K		
RV903	1-224-254-XX	RES, ADJ, METAL GLAZE	47K		
RY301	1-515-547-11	RELAY			
RY302	1-515-547-11	RELAY			
RY303	1-515-547-11	RELAY			
RY401	1-515-547-11	RELAY			
S1	1-553-318-00	SWITCH, PUSH (AC POWER)	(1 KEY)		
S2	1-554-862-11	SWITCH, PUSH (2 KEY)	(REC RESOLUTION)		
S3	1-553-739-21	SWITCH, KEY BOARD	(REC MUTE)		
S4	1-554-863-11	SWITCH, PUSH (3 KEY)	(TRACKING)		
S5	1-554-863-11	SWITCH, PUSH (3 KEY)	(AUTO PB MUTE)		
S6	1-554-863-11	SWITCH, PUSH (3 KEY)	(COPY)		

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R147	1-214-777-00	METAL	100K	1%	1/4W
R148	1-214-844-00	METAL	150	1%	1/2W
R149	1-214-765-00	METAL	33K	1%	1/4W
R150	1-247-712-11	CARBON	820	5%	1/4W
R151	1-214-749-00	METAL	6.8K	1%	1/4W
R152	1-214-777-00	METAL	100K	1%	1/4W
R153	1-214-713-00	METAL	220	1%	1/4W
R154	1-214-848-00	METAL	220	1%	1/2W
R155	1-247-839-00	CARBON	2.2K	5%	1/6W
R201	1-214-897-00	METAL	22K	1%	1/2W
R202	1-214-880-00	METAL	4.7K	1%	1/2W
R203	1-214-964-00	METAL	1M	1%	1/4W
R204	1-214-832-00	METAL	47	1%	1/2W
R205	1-214-860-00	METAL	680	1%	1/2W
R206	1-214-851-00	METAL	300	1%	1/2W
R207	1-214-884-00	METAL	6.8K	1%	1/2W
R208	1-214-777-00	METAL	100K	1%	1/4W
R209	1-214-888-00	METAL	10K	1%	1/2W
R210	1-214-888-00	METAL	10K	1%	1/2W
R211	1-214-761-00	METAL	22K	1%	1/4W
R212	1-214-753-00	METAL	10K	1%	1/4W
R213	1-214-888-00	METAL	10K	1%	1/2W
R214	1-214-860-00	METAL	680	1%	1/2W
R215	1-214-868-00	METAL	1.5K	1%	1/2W
R216	1-214-897-00	METAL	22K	1%	1/2W
R217	1-214-856-00	METAL	470	1%	1/2W
R218	1-214-864-00	METAL	1K	1%	1/2W
R219	1-214-761-00	METAL	22K	1%	1/4W
R220	1-214-741-00	METAL	3.3K	1%	1/4W
R221	1-214-751-00	METAL	8.2K	1%	1/4W
R222	1-214-911-00	METAL	82K	1%	1/2W
R231	1-249-425-11	CARBON	4.7K	5%	1/6W
R232	1-247-839-00	CARBON	2.2K	5%	1/6W
R233	1-214-892-00	METAL	15K	1%	1/2W
R234	1-214-761-00	METAL	22K	1%	1/4W
R235	1-214-753-00	METAL	10K	1%	1/4W
R236	1-214-888-00	METAL	10K	1%	1/2W
R238	1-249-441-11	CARBON	100K	5%	1/6W
R240	1-214-879-00	METAL	4.3K	1%	1/2W
R241	1-214-861-00	METAL	750	1%	1/2W
R242	1-214-888-00	METAL	10K	1%	1/2W
R243	1-214-890-00	METAL	12K	1%	1/2W
R244	1-214-902-00	METAL	36K	1%	1/2W
R245	1-214-878-00	METAL	3.9K	1%	1/2W
R246	1-214-964-00	METAL	1M	1%	1/4W
R247	1-214-777-00	METAL	100K	1%	1/4W
R248	1-214-844-00	METAL	150	1%	1/2W
R249	1-214-765-00	METAL	33K	1%	1/4W
R250	1-247-712-11	CARBON	820	5%	1/4W
R251	1-214-749-00	METAL	6.8K	1%	1/4W
R252	1-214-777-00	METAL	100K	1%	1/4W
R253	1-214-713-00	METAL	220	1%	1/4W
R254	1-214-848-00	METAL	220	1%	1/2W
R255	1-247-839-00	CARBON	2.2K	5%	1/6W
R300	1-249-425-11	CARBON	4.7K	5%	1/6W
R301	1-214-864-00	METAL	1K	1%	1/2W
R302	1-214-866-00	METAL	1.2K	1%	1/2W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R303	1-214-866-00	METAL	1.2K	1%	1/2W
R304	1-214-864-00	METAL	1K	1%	1/2W
R305	1-214-753-00	METAL	10K	1%	1/4W
R306	1-214-753-00	METAL	10K	1%	1/4W
R309	1-214-903-00	METAL	39K	1%	1/2W
R310	1-214-749-00	METAL	6.8K	1%	1/4W
R311	1-249-425-11	CARBON	4.7K	5%	1/6W
R312	1-249-417-11	CARBON	1K	5%	1/6W
R313	1-249-422-11	CARBON	2.7K	5%	1/6W
R316	1-247-220-00	CARBON	150	5%	1/2W
R318	1-249-441-11	CARBON	100K	5%	1/6W
R319	1-247-849-00	CARBON	5.6K	5%	1/6W
R321	1-249-429-11	CARBON	10K	5%	1/6W
R322	1-249-429-11	CARBON	10K	5%	1/6W
R323	1-249-429-11	CARBON	10K	5%	1/6W
R324	1-249-429-11	CARBON	10K	5%	1/6W
R325	1-249-405-11	CARBON	100	5%	1/6W
R326	1-249-419-11	CARBON	1.5K	5%	1/6W
R327	1-214-902-00	METAL	36K	1%	1/2W
R328	1-214-749-00	METAL	6.8K	1%	1/4W
R329	1-217-387-00	FUSIBLE	10	5%	1/4W F
R330	1-217-387-00	FUSIBLE	10	5%	1/4W F
R341	1-247-804-00	CARBON	75	5%	1/6W
R342	1-247-819-00	CARBON	330	5%	1/6W
R343	1-247-818-00	CARBON	300	5%	1/6W
R344	1-247-811-00	CARBON	150	5%	1/6W
R345	1-249-405-11	CARBON	100	5%	1/6W
R346	1-247-821-00	CARBON	390	5%	1/6W
R347	1-247-783-00	CARBON	10	5%	1/6W
R348	1-249-429-11	CARBON	10K	5%	1/6W
R349	1-247-803-00	CARBON	68	5%	1/6W
R401	1-249-429-11	CARBON	10K	5%	1/6W
R402	1-249-429-11	CARBON	10K	5%	1/6W
R403	1-249-425-11	CARBON	4.7K	5%	1/6W
R404	1-249-425-11	CARBON	4.7K	5%	1/6W
R405	1-249-417-11	CARBON	1K	5%	1/6W
R406	1-249-425-11	CARBON	4.7K	5%	1/6W
R407	1-249-425-11	CARBON	4.7K	5%	1/6W
R408	1-249-429-11	CARBON	10K	5%	1/6W
R409	1-247-903-00	CARBON	1M	5%	1/6W
R410	1-247-896-00	CARBON	510K	5%	1/6W
R411	1-247-797-00	CARBON	39	5%	1/6W
R412	1-247-815-00	CARBON	220	5%	1/6W
R413	1-247-872-00	CARBON	51K	5%	1/6W
R414	1-249-429-11	CARBON	10K	5%	1/6W
R415	1-247-791-00	CARBON	22	5%	1/6W
R416	1-247-857-00	CARBON	12K	5%	1/6W
R417	1-247-857-00	CARBON	12K	5%	1/6W
R418	1-249-417-11	CARBON	1K	5%	1/6W
R419	1-249-405-11	CARBON	100	5%	1/6W
R420	1-249-417-11	CARBON	1K	5%	1/6W
R421	1-249-432-11	CARBON	18K	5%	1/6W
R422	1-247-868-00	CARBON	36K	5%	1/6W
R423	1-247-839-00	CARBON	2.2K	5%	1/6W
R424	1-249-429-11	CARBON	10K	5%	1/6W
R425	1-249-429-11	CARBON	10K	5%	1/6W
R426	1-249-429-11	CARBON	10K	5%	1/6W

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified



ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R427	1-247-839-00	CARBON	2.2K	5%	1/6W
R428	1-249-425-11	CARBON	4.7K	5%	1/6W
R429	1-249-441-11	CARBON	100K	5%	1/6W
R430	1-249-429-11	CARBON	10K	5%	1/6W
R431	1-249-405-11	CARBON	100	5%	1/6W
R432	1-249-429-11	CARBON	10K	5%	1/6W
R433	1-249-425-11	CARBON	4.7K	5%	1/6W
R434	1-249-429-11	CARBON	10K	5%	1/6W
R435	1-249-435-11	CARBON	33K	5%	1/6W
R436	1-249-435-11	CARBON	33K	5%	1/6W
R437	1-249-433-11	CARBON	22K	5%	1/6W
R438	1-247-839-00	CARBON	2.2K	5%	1/6W
R439	1-249-425-11	CARBON	4.7K	5%	1/6W
R440	1-249-429-11	CARBON	10K	5%	1/6W
R441	1-249-441-11	CARBON	100K	5%	1/6W
R442	1-247-903-00	CARBON	1M	5%	1/6W
R443	1-247-903-00	CARBON	1M	5%	1/6W
R444	1-247-797-00	CARBON	39	5%	1/6W
R445	1-247-815-00	CARBON	220	5%	1/6W
R446	1-249-441-11	CARBON	100K	5%	1/6W
R447	1-249-429-11	CARBON	10K	5%	1/6W
R448	1-247-791-00	CARBON	22	5%	1/6W
R449	1-247-857-00	CARBON	12K	5%	1/6W
R450	1-247-857-00	CARBON	12K	5%	1/6W
R451	1-249-417-11	CARBON	1K	5%	1/6W
R452	1-249-405-11	CARBON	100	5%	1/6W
R453	1-249-417-11	CARBON	1K	5%	1/6W
R454	1-247-864-00	CARBON	24K	5%	1/6W
R455	1-247-817-00	CARBON	270	5%	1/6W
R456	1-247-804-00	CARBON	75	5%	1/6W
R457	1-247-804-00	CARBON	75	5%	1/6W
R458	1-249-437-11	CARBON	47K	5%	1/6W
R459	1-247-839-00	CARBON	2.2K	5%	1/6W
R460	1-247-804-00	CARBON	75	5%	1/6W
R461	1-247-815-00	CARBON	220	5%	1/6W
R462	1-247-823-00	CARBON	470	5%	1/6W
R501	1-247-721-11	CARBON	4.7K	5%	1/4W
R502	1-249-441-11	CARBON	100K	5%	1/6W
R503	1-249-434-11	CARBON	27K	5%	1/6W
R504	1-247-845-00	CARBON	3.9K	5%	1/6W
R505	1-247-859-00	CARBON	15K	5%	1/6W
R506	1-249-425-11	CARBON	4.7K	5%	1/6W
R507	1-249-414-11	CARBON	560	5%	1/6W
R508	1-249-420-11	CARBON	1.8K	5%	1/6W
R509	1-249-417-11	CARBON	1K	5%	1/6W
R510	1-247-839-00	CARBON	2.2K	5%	1/6W
R511	1-249-417-11	CARBON	1K	5%	1/6W
R512	1-247-893-00	CARBON	390K	5%	1/6W
R513	1-249-425-11	CARBON	4.7K	5%	1/6W
R514	1-249-425-11	CARBON	4.7K	5%	1/6W
R515	1-249-433-11	CARBON	22K	5%	1/6W
R516	1-249-423-11	CARBON	3.3K	5%	1/6W
R517	1-249-425-11	CARBON	4.7K	5%	1/6W
R518	1-247-883-00	CARBON	150K	5%	1/6W
R519	1-249-437-11	CARBON	47K	5%	1/6W
R520	1-247-851-00	CARBON	6.8K	5%	1/6W
R521	1-249-425-11	CARBON	4.7K	5%	1/6W

ELECTRICAL PARTS


Ref.No.	Part No.	Description			
R522	1-247-823-00	CARBON	470	5%	1/6W
R523	1-247-833-00	CARBON	1.2K	5%	1/6W
R524	1-247-855-00	CARBON	2.2K	5%	1/6W
R525	1-249-429-11	CARBON	10K	5%	1/6W
R526	1-247-883-00	CARBON	150K	5%	1/6W
R527	1-249-437-11	CARBON	47K	5%	1/6W
R528	1-249-429-11	CARBON	10K	5%	1/6W
R529	1-249-417-11	CARBON	1K	5%	1/6W
R530	1-247-823-00	CARBON	470	5%	1/6W
R531	1-249-425-11	CARBON	4.7K	5%	1/6W
R532	1-249-425-11	CARBON	4.7K	5%	1/6W
R533	1-249-433-11	CARBON	22K	5%	1/6W
R534	1-247-839-00	CARBON	2.2K	5%	1/6W
R535	1-247-873-00	CARBON	56K	5%	1/6W
R536	1-247-823-00	CARBON	470	5%	1/6W
R537	1-249-429-11	CARBON	10K	5%	1/6W
R538	1-249-435-11	CARBON	33K	5%	1/6W
R539	1-247-887-00	CARBON	220K	5%	1/6W
R540	1-249-437-11	CARBON	47K	5%	1/6W
R541	1-247-875-00	CARBON	68K	5%	1/6W
R542	1-247-851-00	CARBON	6.8K	5%	1/6W
R543	1-249-422-11	CARBON	2.7K	5%	1/6W
R544	1-247-850-00	CARBON	6.2K	5%	1/6W
R545	1-249-425-11	CARBON	4.7K	5%	1/6W
R546	1-249-415-11	CARBON	680	5%	1/6W
R547	1-249-415-11	CARBON	680	5%	1/6W
R548	1-249-425-11	CARBON	4.7K	5%	1/6W
R549	1-249-425-11	CARBON	4.7K	5%	1/6W
R550	1-249-441-11	CARBON	100K	5%	1/6W
R552	1-249-433-11	CARBON	22K	5%	1/6W
R553	1-247-823-00	CARBON	470	5%	1/6W
R554	1-249-425-11	CARBON	4.7K	5%	1/6W
R555	1-249-435-11	CARBON	33K	5%	1/6W
R556	1-247-791-00	CARBON	22	5%	1/6W
R557	1-249-437-11	CARBON	47K	5%	1/6W
R558	1-249-429-11	CARBON	10K	5%	1/6W
R559	1-249-437-11	CARBON	47K	5%	1/6W
R560	1-247-852-00	CARBON	7.5K	5%	1/6W
R561	1-247-852-00	CARBON	7.5K	5%	1/6W
R562	1-247-839-00	CARBON	2.2K	5%	1/6W
R563	1-247-873-00	CARBON	56K	5%	1/6W
R564	1-249-434-11	CARBON	27K	5%	1/6W
R566	1-249-437-11	CARBON	47K	5%	1/6W
R567	1-249-433-11	CARBON	22K	5%	1/6W
R568	1-247-839-00	CARBON	2.2K	5%	1/6W
R569	1-247-823-00	CARBON	470	5%	1/6W
R571	1-247-823-00	CARBON	470	5%	1/6W
R572	1-249-425-11	CARBON	4.7K	5%	1/6W
R573	1-249-425-11	CARBON	4.7K	5%	1/6W
R574	1-249-425-11	CARBON	4.7K	5%	1/6W
R576	1-249-433-11	CARBON	22K	5%	1/6W
R577	1-249-433-11	CARBON	22K	5%	1/6W
R578	1-249-433-11	CARBON	22K	5%	1/6W
R579	1-249-433-11	CARBON	22K	5%	1/6W
R580	1-249-417-11	CARBON	1K	5%	1/6W
R581	1-249-433-11	CARBON	22K	5%	1/6W
R582	1-249-429-11	CARBON	10K	5%	1/6W

ELECTRICAL PARTS

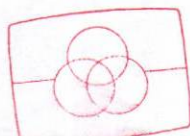
<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>
S401	1-554-862-11	SWITCH, PUSH (2 KEY)
S402	1-554-862-11	SWITCH, PUSH (2 KEY)
S403	1-516-785-XX	SWITCH, SLIDE (DIGITAL OUT)
S501	1-800-202-XX	THERMISTOR S-10K
T1	 1-448-589-11	(US)...TRANSFORMER, POWER
T1	 1-448-590-11	(AEP)...TRANSFORMER, POWER
X301	1-567-280-11	VIBRATOR, CRYSTAL
X302	1-527-948-00	VIBRATOR, CRYSTAL
X501	1-527-949-00	VIBRATOR, CRYSTAL
X502	1-527-871-00	OSCILLATOR, LITHIUM TANTALATE

ACCESSORY & PACKING MATERIAL

<u>Part No.</u>	<u>Description</u>
1-551-315-00	CORD, CONNECTION
1-557-817-11	CORD, CONNECTION
3-701-630-00	BAG, POLYETHYLENE
3-703-450-01	INSTRUCTION
3-760-866-11	MANUAL, INSTRUCTION
3-760-866-11	MANUAL, INSTRUCTION
4-886-573-00	CUSHION (LEFT)
4-886-574-00	CUSHION (RIGHT)
4-906-064-01	(AEP)...INDIVIDUAL CARTON
4-906-064-11	(US).....INDIVIDUAL CARTON

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Part No.	Description	Part No.	Description
1-211-101-01	SCREW (PHILIP)	1-211-101-01	SCREW (PHILIP)
1-211-101-02	SCREW (PHILIP)	1-211-101-02	SCREW (PHILIP)
1-211-101-03	SCREW (PHILIP)	1-211-101-03	SCREW (PHILIP)
1-211-101-04	SCREW (PHILIP)	1-211-101-04	SCREW (PHILIP)
1-211-101-05	SCREW (PHILIP)	1-211-101-05	SCREW (PHILIP)
1-211-101-06	SCREW (PHILIP)	1-211-101-06	SCREW (PHILIP)
1-211-101-07	SCREW (PHILIP)	1-211-101-07	SCREW (PHILIP)
1-211-101-08	SCREW (PHILIP)	1-211-101-08	SCREW (PHILIP)
1-211-101-09	SCREW (PHILIP)	1-211-101-09	SCREW (PHILIP)
1-211-101-10	SCREW (PHILIP)	1-211-101-10	SCREW (PHILIP)
1-211-101-11	SCREW (PHILIP)	1-211-101-11	SCREW (PHILIP)
1-211-101-12	SCREW (PHILIP)	1-211-101-12	SCREW (PHILIP)
1-211-101-13	SCREW (PHILIP)	1-211-101-13	SCREW (PHILIP)
1-211-101-14	SCREW (PHILIP)	1-211-101-14	SCREW (PHILIP)
1-211-101-15	SCREW (PHILIP)	1-211-101-15	SCREW (PHILIP)
1-211-101-16	SCREW (PHILIP)	1-211-101-16	SCREW (PHILIP)
1-211-101-17	SCREW (PHILIP)	1-211-101-17	SCREW (PHILIP)
1-211-101-18	SCREW (PHILIP)	1-211-101-18	SCREW (PHILIP)
1-211-101-19	SCREW (PHILIP)	1-211-101-19	SCREW (PHILIP)
1-211-101-20	SCREW (PHILIP)	1-211-101-20	SCREW (PHILIP)



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