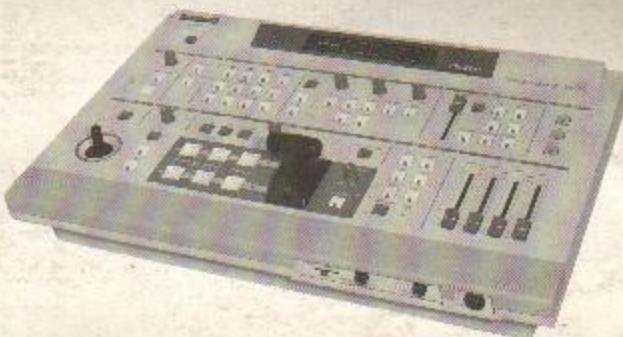


Service Manual

Production Mixer
WJ-MX30



SPECIFICATIONS

Source Input :	×2 [SOURCE 1/2]
Composite Video Input :	1.0 Vp-p/75 ohms, PAL signal, BNC ×2
S-Video Input :	Y signal; 1.0 Vp-p/75 ohms, C signal; 0.3 Vp-p/75 ohms, Mini DIN 4 connector ×2
Audio Input :	SOURCE 1/2; Pin-jack ×2, -6 dBs/20 Kohms (Unbalanced), Left and Right.
Auxiliary Audio Input :	×1 [Aux] -6 dBs/20 Kohms, Pin-jack (Unbalanced), Left and Right
Microphone Input :	-60 dBv/600 ohms, unbalanced, tip-ring-sleeve type phone jack ×1
External Camera Input :	1.0 Vp-p/75 ohms, PAL composite signal, BNC ×1
GPI Input :	Y signal; 1.0 Vp-p/75 ohms, C signal; 0.3 Vp-p/75 ohms, Mini DIN 4 connector ×1
Character (TITLE) Input :	Make-contact, BNC ×1 10-pin connector ×1 for optional Character Generator WJ-KB15, WJ-KB50
Program Output :	×2 [PROGRAM OUT 1/2]
Composite Video Output :	1.0 Vp-p/75 ohms PAL signal, BNC ×2
S-Video Output :	Y signal; 1.0 Vp-p/75 ohms, C signal; 0.3 Vp-p/75 ohms, Mini DIN 4 connector ×2
Audio Output :	PROGRAM OUT 1/2; Pin Jack ×2, -6 dBs/1 Kohms (Unbalanced) Left and Right.
Preview Output :	1.0 Vp-p/75 ohms, PAL composite signal, BNC ×1
Advance Sync Output :	4 Vp-p/75 ohms, BNC ×2
Headphone Output :	-20 dBv, -80 dBv, 5 ohms unbalanced, tip-ring-sleeve type phone jack ×1
Digital Effects :	Nega, Mosaic, Mono, Paint, Still, Strobe, A/V Syncro
Matte Colours :	Colour Bar, White, Yellow, Cyan, Green, Magenta, Red, Blue, Black
Wipe Patterns :	107 Patterns
Joystick Control :	Positioner, Colour Correction
Audio Mixer :	Source 1, Source 2, AUX, Mic

Panasonic

ADJUSTMENT PROCEDURE

1. Test Equipment Required

The following test equipments are required for adjustment.

- Oscilloscope
- Frequency Counter
- Digital Voltmeter
- Vectorscope
- Waveform Monitor
- Underscanned Color Video Monitor
- Y/C Test Signal Generator
- SC-H Vectorscope (Tektronix 1751 or equivalent)
- Audio Signal Generator
- Audio Level Meter

2. Disassembling Procedure for Adjustment

- Referring to the Fig. 2-1, remove eleven screws fixing the Upper Cover.

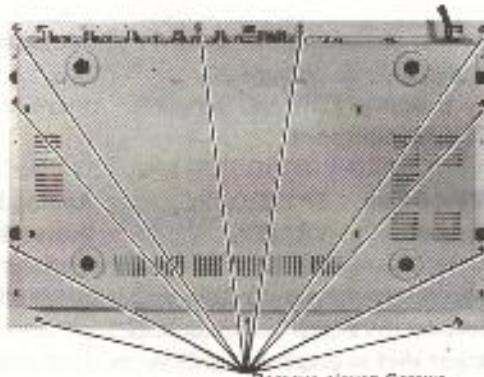


Fig. 2-1

- Referring to the Fig. 2-2, open the Upper Cover and secure it using the Hook L.

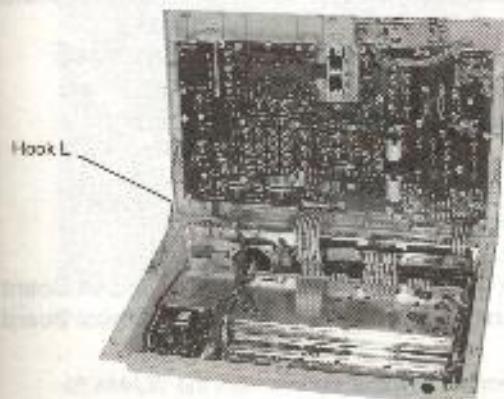


Fig. 2-2

- Referring to the Fig. 2-3, remove four screws fixing the Shield Cover and remove the Shield Cover, and then remove four screws fixing the Analog Board to the Bottom Cover.



Fig. 2-3

- Referring to the Fig. 2-4, stand up the Analog Board and hook both sides of the Analog Board to the Mounting Angles of the Bottom Cover, and then remove the Shield Cover using screwdriver.

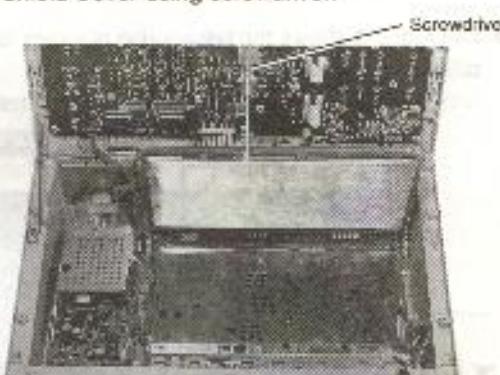


Fig. 2-4

- Referring to the Fig. 2-5, remove eight screws fixing the Shield Cover and remove the Shield Cover, and then remove four screws fixing Digital Board to the Bottom Cover.

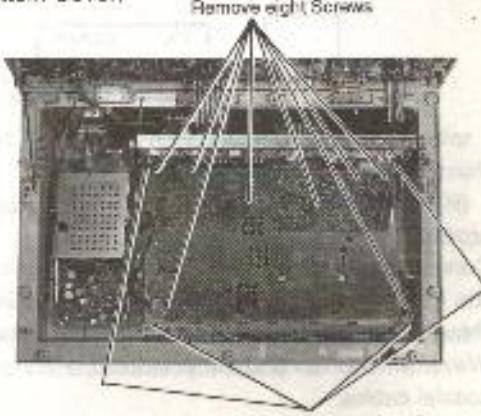


Fig. 2-5

- Referring to the Fig. 2-6, stand up the Digital Board and hook both sides of the Digital Board to the Mounting Angles of the Bottom Cover, and then remove the Shield Cover using screwdriver.

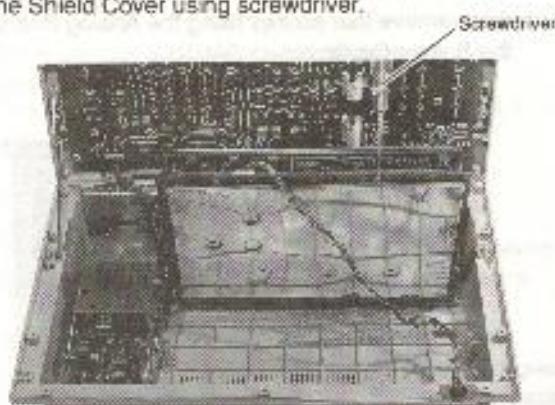


Fig. 2-6

3. Connection and precaution for Adjustment

3.1. Connection

- The Fig. 3-1 shows the connecting diagram for the adjustment procedure.

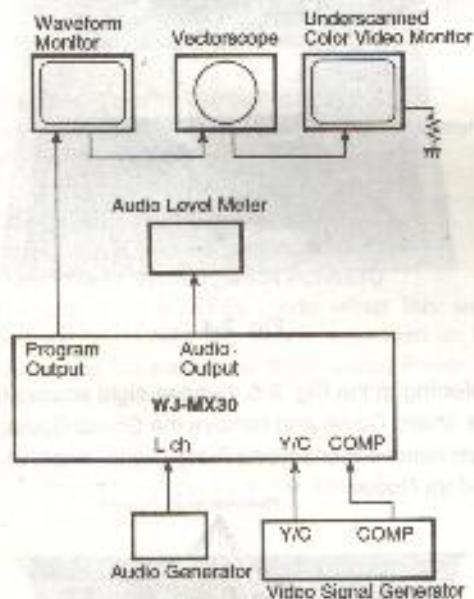


Fig. 3-1

- Connect the Underscanned Color Video Monitor to the Program Out 1 COMP Connector on the Rear Panel of the Production Mixer WJ-MX30 through the Waveform Monitor and the Vectorscope using the coaxial cables.

- Terminate the input terminal of the Underscanned Color Video Monitor with 75 ohms.
- Connect the Audio Signal Generator to the L channel of the Source 1 Audio Input Jack on the Rear Panel using the Pin-plug cable.
- Connect the Y/C Test Signal Generator to the Source 1 Y/C Input Connector and the Source 2 COMP Input Connector on the Rear Panel.
- Connect the AC Millivoltmeter with dB measure to L channel of the Program Out 1 Audio Output Jack on the Rear Panel using the Pin-plug cable.
- Connect the probe of the Digital Voltmeter or Oscilloscope to the desired test point in each adjustment step.

3.2. Precaution

- This adjustment should be made after 10 min. warm up of the WJ-MX30.
- The gate time response of the Frequency Counter will be slow.

4. Adjustment Procedure

- Refer to the Location of the Test Points and the Adjusting Controls on page 20.

(1) 5V Adjustment

Test Point:	TP1 (5V)	Analog Board
Adjust:	VR1 (5V)	Power Board

- Disconnect all input signals from the WJ-MX30.
- Connect the Digital Voltmeter to TP1.
- Adjust VR1 to obtain $5 \pm 0.05V$.

(2) FSC Adjustment

Test Point:	TP7 (FSC)	Digital Board
Adjust:	VR1 (FSC)	Digital Board

- Disconnect all input signals from the WJ-MX30.
- Connect the Frequency Counter to TP7.
- Adjust VR1 to obtain $4.433629MHz \pm 5Hz$.

(3) Read VCO Adjustment

Test Point:	TP8 (READ VCO)	Digital Board
Adjust:	L33 (READ VCO)	Digital Board

- Disconnect all input signals from the WJ-MX30.
- Connect the Digital Voltmeter to TP8.
- Adjust L33 to obtain $2.1 \pm 0.1V$.

(4) Write Ach VCO Adjustment

Test Point: TP1 (WRITE ACH VCO)

Digital Board

Adjust: L32 (WRITE ACH VCO) Digital Board

- Connect the Digital Voltmeter to TP1.
- Supply the Color Bar Signal with Y/C components to the Source 1 Y/C Connector.
- Press the Source 1 Switch of the BUS-A.
- Adjust L32 to obtain $2.1 \pm 0.1V$.

(5) Write Bch VCO Adjustment

Test Point: TP3 (WRITE BCH VCO) Digital Board

Adjust: L31 (WRITE BCH VCO) Digital Board

- Connect the Digital Voltmeter to TP3.
- Supply the Color Bar signal with Y/C components to the Source 2 Y/C Connector.
- Press the Source 2 Switch of the BUS-B.
- Adjust L31 to obtain $2.1 \pm 0.1V$.

(6) Program Out Y Gain Adjustment

Test Point: Program Out Y/C Connector

Rear Panel

Adjust: VR8 (PROGOUT Y-GAIN)
Analog Board

- Terminate between Y terminal and Ground terminal of the Program Out 1 Y/C Connector with 75 ohms.
- Connect the Oscilloscope across the 75 ohms.
- Output the internal Color Bar signal to the Program Out 1 Y/C Connector.
- Adjust VR8 so that the white level becomes $700 \pm 14mV$ as shown in the Fig. 4-1.

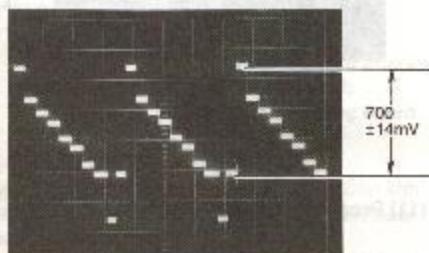


Fig. 4-1

Test Point: Program Out Y/C Connector

Rear Panel

Adjust: VR9 (PROGOUT C-GAIN)

Analog Board

- Terminate between C terminal of the Program Out 1 Y/C Connector with 75 ohms.
- Connect the Oscilloscope across the 75 ohms.
- Output the internal Color Bar signal to the Program Out 1 Y/C Output Connector.
- By observing the Vectorscope, adjust VR9 so that each vector positions in each color area as shown in the Fig. 4-2-1.



Fig. 4-2-1

- Confirm that the burst level becomes $300 \pm 30mV$ as shown in the Fig. 4-2-2.

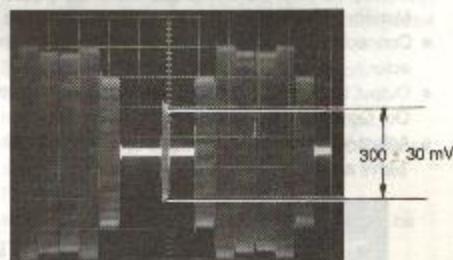


Fig. 4-2-2

(8) Program Out COMP Gain Adjustment

Test Point: Program Out COMP Connector
Rear Panel

Adjust: VR31 (PROGOUT COMP GAIN)
Analog Board

- Connect the Video Monitor to the Program Out COMP Connector, then terminate the input terminal of the Video Monitor with 75 ohms.

- Connect the Oscilloscope to the Program Out COMP Connector.
- Output the internal Color Bar signal to the Program Out 1 COMP Connector.
- Adjust VR31 so that the white level becomes $700 \pm 14mV$ as shown in the Fig. 4-3.

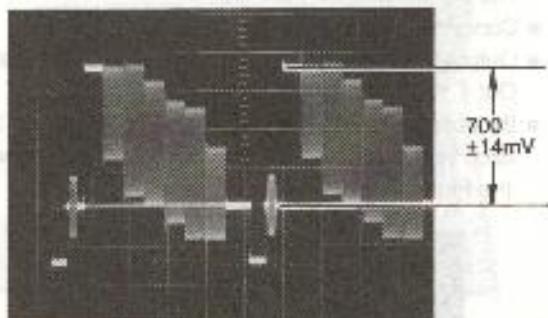


Fig. 4-3

(9) Preview Y Gain Adjustment

Test Point: Preview Out Connector
Rear Panel
Adjust: VR11 (PREV Y-GAIN)
Analog Board

- Connect the Video Monitor to the Preview Out Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Preview Out Connector.
- Output the internal Color Bar signal to the Preview Out Connector.
- Adjust VR11 so that the white level becomes $700 \pm 14mV$ as shown in the Fig. 4-4.

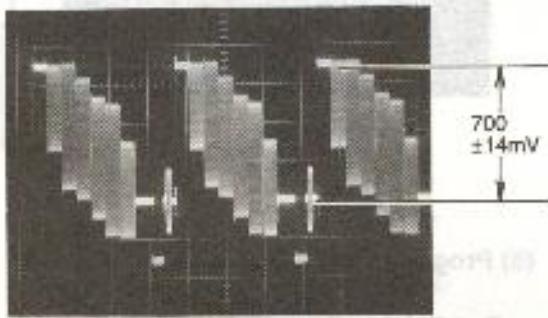


Fig. 4-4

(10) Preview C Gain Adjustment

Test Point: Preview Out Connector
Rear Panel
Adjust: VR13 (PREV C-GAIN)
Analog Board

- Connect the Video Monitor to the Preview Out Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Preview Out Connector.
- Output the internal Color Bar signal to the Preview Out Connector.
- By observing the Vectorscope, adjust VR13 so that each vector positions in each color area as shown in the Fig. 4-5-1.



Fig. 4-5-1

- Confirm that the burst level becomes $300 \pm 30mV$ as shown in the Fig. 4-5-2.

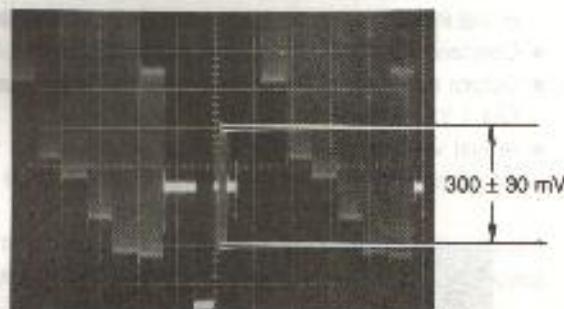


Fig. 4-5-2

(11) Program Out SC-H Adjustment

Test Point: Program Out COMP Connector
Rear Panel
Adjust: VR5 (PROGOUT SC-H)
Analog Board

- Connect the SC-H Vectorscope to the Program Out

- 1 COMP Connector, then terminate the input terminal of the SC-H Vectorscope with 75 ohms.
 - Output the internal Color Bar signal to the Program Out 1 COMP Connector.
 - Adjust VR5 by observing the SC-H Vectorscope to obtain $0 \pm 5^\circ$.
- Note:** The phase difference between in and out of the External Camera signal should be within $\pm 5^\circ$.

(12) Preview Out SC-H Adjustment

Test Point: Preview Output Connector
Rear Panel
Adjust: VR7 (PREV SC-H) Analog Board

- Connect the SC-H Vectorscope to the Preview Out Connector, then terminate the input terminal of the SC-H Vectorscope with 75 ohms.
 - Output the internal Color Bar signal to the Preview Output Connector.
 - Adjust VR7 by observing the SC-H Vectorscope to obtain $0 \pm 5^\circ$.
- Note:** The phase difference between in and out of the External Camera signal should be within $\pm 5^\circ$.

(13) Ach FVCXO Adjustment

Test Point: TP11 (ACH FVCXO) Analog Board
Adjust: CT2 (ACH FVCXO) Analog Board

- Disconnect all input signals from the WJ-MX30.
- Connect the Frequency Counter to TP11.
- Adjust CT2 to obtain $4.433629\text{MHz} \pm 5\text{Hz}$.

(14) Ach Burst-Gate-Pulse Width Adjustment

Test Point: TP10 (ACH BGP WIDTH)
Analog Board
Adjust: VR21 (ACH BGP WIDTH)
Analog Board

- Connect the Oscilloscope to TP10.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 Y/C Connector.
- Select the Source 1 of the BUS-A.
- Adjust VR21 to obtain the pulse width of $7.8 \mu\text{-sec}$. as shown in the Fig. 4-6.

Note: Use TP16 (CSYNCA) on the Analog Board for the trigger for the Oscilloscope.

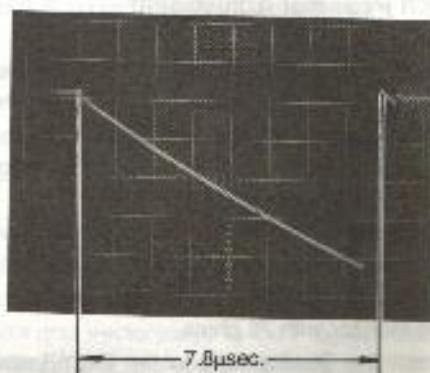


Fig. 4-6

(15) Ach Carrier Balance Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: VR28 (ACH CAR BAL-1)
Analog Board
VR30 (ACH CAR BAL-2)
Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 Y/C Connector on the Rear Panel.
- Select the A of the PROGRAM OUT section.
- Select the Source 1 of the BUS-A.
- Increase the Gain Control of the Vectorscope.
- Adjust VR28 and VR30 so that the vector positions at the center on the Vectorscope as shown in the Fig. 4-7.

Note: Color Correction of the WJ-MX30 should be off.



Fig. 4-7

(16) Ach Pedestal Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: VR29 (ACH PEDESTAL)
Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the the Y terminal of the Program Out 1 Y/C Connector.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 Y/C Connector.
- Select the A of the PROGRAM OUT section.
- Select the Source 1 of the BUS-A.
- Adjust VR29 so that the black level of the RAMP signal becomes $0 \pm 14 \text{ mV}$ as shown in the Fig. 4-8.

Note: The black level of the RAMP signal should not be lower than 0V.

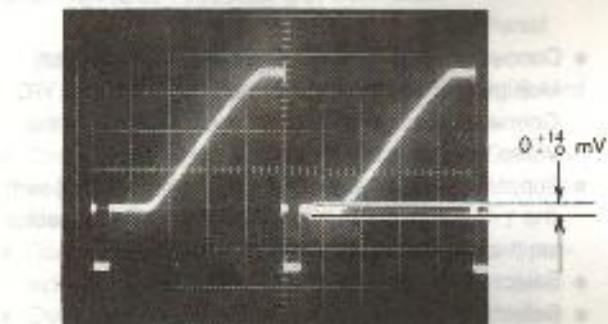


Fig. 4-8

(17) Ach Y Gain Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: VR26 (ACH Y-GAIN)
Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the the Y terminal of the Out 1 Y/C Connector.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 Y/C Connector on the Rear Panel.
- Select the A of the PROGRAM OUT section.
- Select the Source 1 of the BUS-A.

- Adjust VR26 so that the white level of the RAMP signal becomes $700 \pm 14 \text{ mV}$ as shown in the Fig. 4-9.

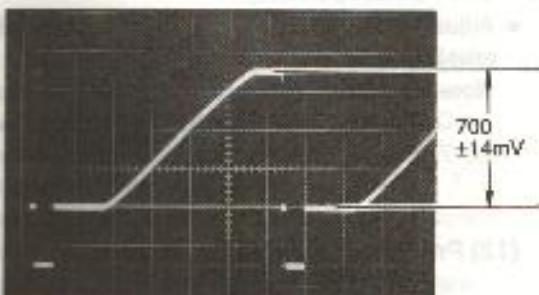


Fig. 4-9

(18) Ach TINT and C Gain Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: TP18 (R-YA) Analog Board
VR22 (ACH C-GAIN) Analog Board
VR25 (ACH TINT) Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to TP18.
- Supply the Color Bar signal to the Source 1 COMP Connector.
- Select the A of the PROGRAM OUT section.
- Select the Source 1 of the BUS-A.
- Adjust VR22 and VR25 by observing the Vectorscope so that each vector positions in each color area as shown in the Fig. 4-10-1.

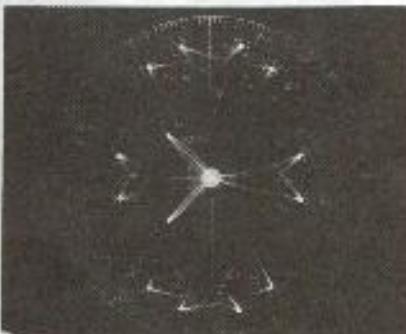


Fig. 4-10-1

- Adjust VR25 so that the waveform coincides as shown in the Fig. 4-10-2.

Note: Supply the Black Burst signal from WJ-MX30

to the Vectorscope for the reference Sync signal.



Fig. 4-10-2

(19) Bch FVCXO Adjustment

Test Point: TP8 (BCH FVCXO) Analog Board
Adjust: CT1 (BCH FVCXO) Analog Board

- Disconnect all input signals from the WJ-MX30.
- Connect the Frequency Counter to TP8.
- Adjust CT1 to obtain 4.433629MHz \pm 5Hz.

(20) Bch Burst-Gate-Pulse Width Adjustment

Test Point: TP7 (BCH BGP WIDTH)
Adjust: VR14 (BCH BGP WIDTH)
 Analog Board

- Connect the Oscilloscope to TP7.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 2 Y/C Connector on the Rear Panel.
- Select the Source 2 of the BUS-B.
- Adjust VR14 to obtain the pulse width of $7.8 \pm 0.1 \mu\text{sec}$. as shown in the Fig. 4-11.

Note: Use TP15 (CSYNCB) on the Analog Board for the trigger for the Oscilloscope.

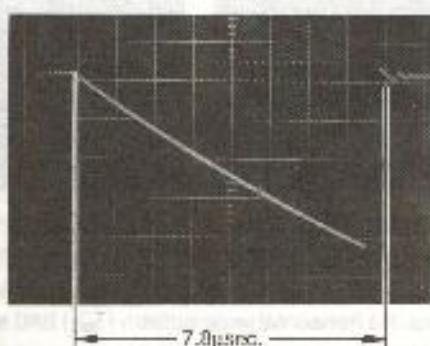


Fig. 4-11

(21) Bch Carrier Balance Adjustment

Test Point: Program Out Y/C Connector
 Rear Panel
Adjust: VR16 (BCH CAR BAL-1)
 Analog Board
 VR18 (BCH CAR BAL-2)
 Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 2 Y/C Connector on the Rear Panel.
- Select the B of the PROGRAM OUT section.
- Select the Source 2 of the BUS-B.
- Increase the Gain Control of the Vectorscope.
- Adjust VR16 and VR18 so that the vector positions at the center on the Vectorscope as shown in the Fig. 4-12.

Note: Color Correction of the WJ-MX30 should be off.



Fig. 4-12

(22) Bch Pedestal Adjustment

Test Point: Program Out Y/C Connector
 Rear Panel
Adjust: VR17 (BCH PEDESTAL)
 Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Y terminal of the Program Out 1 Y/C Connector.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 and 2 Y/C Connectors.

- Select the B of the PROGRAM OUT section.
- Select the horizontal wipe pattern (■) and wipe the signal at the black portion.
- Adjust VR17 so that the black level of the RAMP signal becomes 0 ± 14 mV as shown in the Fig. 4-13.

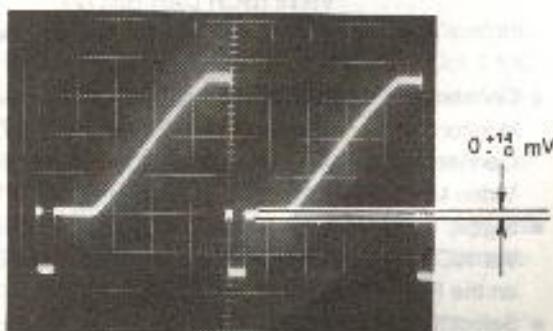


Fig. 4-13

(23) Bch Y Gain Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: VR20 (BCH Y-GAIN)
Analog Board

- Connect the Video Monitor through the Waveform Monitor and Vectorscope to the Program Out 1 Y/C Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Y terminal of the Program Out 1 Y/C Connector.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 2 Y/C Connector on the Rear Panel.
- Select the B of the PROGRAM OUT section.
- Select the Source 2 of the BUS-B.
- Adjust VR20 so that the white level of the RAMP signal becomes 700 ± 14 mV as shown in the Fig. 4-14.

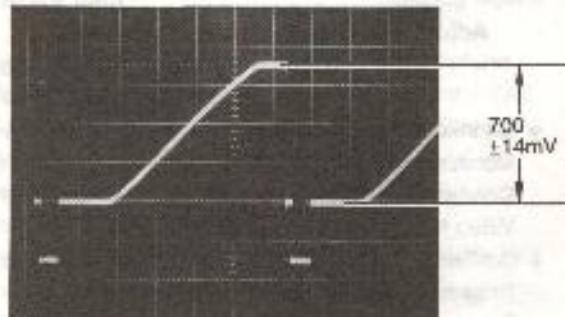


Fig. 4-14

(24) Bch TINT and C Gain Adjustment

Test Point:	Program Out Y/C Connector
Adjust:	TP13 (R-YB)
	Analog Board
VR15 (BCH C-GAIN)	
	Analog Board
VR19 (BCH TINT)	Analog Board
VR22 (ACH C-GAIN)	
	Analog Board
VR25 (ACH TINT)	Analog Board
	Analog Board

- Connect the Oscilloscope to TP13.
- Supply the Color Bar signal with the Y/C components to the Source 1 and 2 Y/C Input Connectors.
- Select the B of the PROGRAM OUT section.
- Adjust VR15 and VR19 by observing the Vectorscope so that each vector positions in each color area as shown in the Fig. 4-15-1.

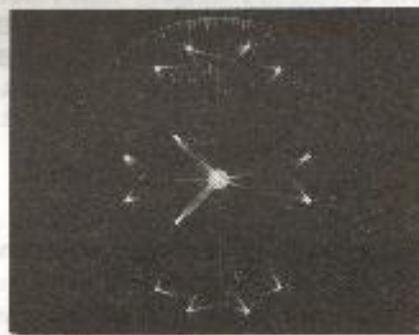


Fig. 4-15-1

- Adjust VR19 so that the waveform coincides as shown in the Fig. 4-15-2.
- Note:** Supply the Black Burst signal from WJ-MX30 to the Vectorscope for the reference Sync signal.

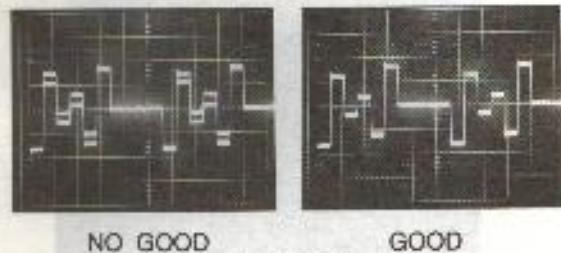


Fig. 4-15-2

- Select the horizontal wipe pattern (■) and wipe the signal at the center of the picture.
- Adjust VR22, VR25, VR15, and VR19 so that each vector positions to the respective color area.

(25) Bch COMP Gain Adjustment

Test Point: Program Out Y/C Connector
Rear Panel
Adjust: VR6 (BCH COMP GAIN)
Analog Board

- Connect the Video Monitor to the Program Out 2 COMP Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Program Out 2 COMP Connector.
- Supply the RAMP signal ($Y = 0.7V$, APL = 50%) with the Y/C components to the Source 1 Y/C Connector and the composite RAMP signal to the Source 2 COMP Connector.
- Select the horizontal wipe pattern (■) and wipe the signal at the black portion.
- Adjust VR6 so that the white level of the RAMP signal becomes $700 \pm 14mV$ as shown in the Fig. 4-16.

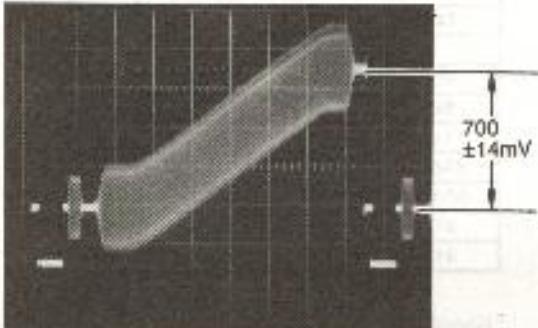


Fig. 4-16

(26) Ach COMP Gain Adjustment

Test Point: Program Out COMP Connector
Rear Panel
Adjust: VR10 (ACH COMP GAIN)
Analog Board

- Connect the Video Monitor to the Program Out 1 COMP Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Program Out 1 COMP Connector.
- Supply the composite RAMP signal ($Y = 0.7V$, APL = 50%) with the Source 1 and 2 COMP Connectors.
- Select the horizontal wipe pattern (■) and wipe the signal at the white portion.
- Adjust VR10 so that the white level of the RAMP signal becomes $700 \pm 14mV$ as shown in the Fig. 4-17.

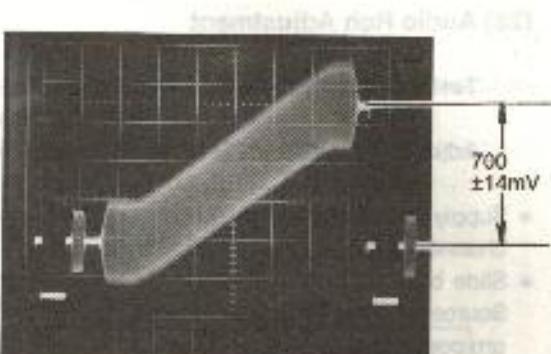


Fig. 4-17

(27) Ach/Bch H-Phase Adjustment

Test Point: Program Out COMP Connector
Rear Panel
Adjust: VR24 (A-B H PHASE)
Analog Board

- Connect the Video Monitor to the Program Out COMP Connector, then terminate the input terminal of the Video Monitor with 75 ohms.
- Connect the Oscilloscope to the Program Out COMP Connector.
- Supply the composite CROSS HATCH signal to the Source 1 and 2 COMP Input Connectors.
- Press the MIX Switch of the MIX EFFECT section and mix both Source 1 and Source 2 signals with 50/50 percent.
- Adjust VR24 so that the signal level becomes maximum as shown in the Fig. 4-18.

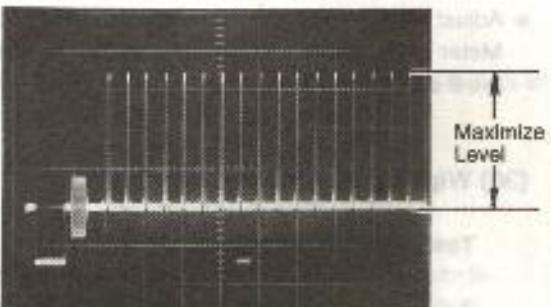


Fig. 4-18

(28) Audio Rch Adjustment

Test Point: RCH Audio Level Meter
Upper Cover
Adjust: VR5 (RCH METER) Audio Board

- Supply the audio signal (1kHz, -18dBs) to the L channel of the Source 1 Audio Pin Jack.
- Slide both of the Volume Controls Source 1 and Source 2 on the AUDIO MIX Section to the maximum position.
- Connect the Audio Level Meter to the L channel of the Program Out 1 Audio Jack.
- Adjust the output level of the Audio Signal Generator to obtain -6dBs on the Audio Level Meter.
- Adjust VR5 so that the R channel of the Audio Level Meter of the WJ-MX30 indicates 0 dB (just light off the 2 dB Indicator).

(29) Audio Lch Adjustment

Test Point: LCH Audio Level Meter
Upper Cover
Adjust: VR6 (LCH METER) Audio Board

- Supply the audio signal (1kHz, -18dBs) to the L channel of the Source 1 Audio Pin Jack.
- Connect the Audio Level Meter to the L channel of the Program Out 1 Audio Jack.
- Slide both of the Volume Controls Source 1 and Source 2 on the AUDIO MIX Section to the maximum position.
- Adjust the output level of the Audio Signal Generator to obtain -6dBs on the Audio Level Meter.
- Adjust VR6 so that the L channel of the Audio Level Meter of the WJ-MX30 indicates 0 dB (just light off the 2 dB Indicator).

(30) Wipe Level Adjustment

Test Point: Pins 1 and 3 of CN23
Switch Board
Adjust: VR12 (H LEVEL) Switch Board
 VR13 (L LEVEL) Switch Board

- Connect the Digital Voltmeter to the pin 1 (+ REF) of CN23.
- Adjust the VR12 to obtain $5.2 \pm 0.05V$.
- Connect the Digital Voltmeter to the pin 3 (- REF) of CN23.
- Adjust the VR13 to obtain $-0.2 \pm 0.02V$.
- Move the Wipe Lever to both BUS-A side and BUS-B side, confirm that there are 10mm clearance in between the Lever and front surface of the Upper

Cover as shown in the Fig. 4-19.

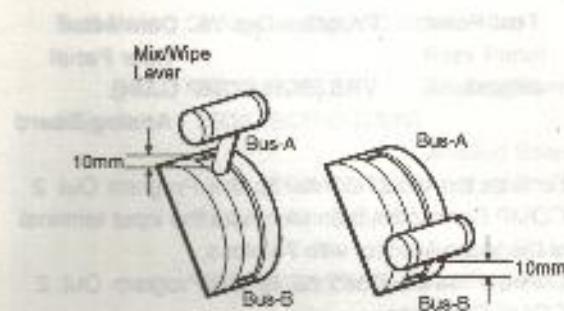
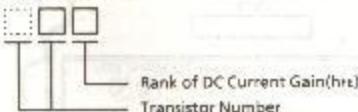


Fig. 4-19

1. Chip Transistor

The transistor number is indicated on the top surface of the chip transistor using two alphabet letters or one numerical and two alphabet letters.



Transistor Number

(Chio Transistor)

Letter	Transistor No.	Letter	Transistor No.
A	2SB709	X	2SD602A
B	2SB709A	Y	2SD601
C	2SB710	Z	2SD601A
D	2SB710A	1A	2SB799
E	2SA1022	1B	2SB814
F	2SA1034	1C	2SB902
H	2SA1035	1F	2SK321
I	2SB792	1K	2SK316
K	2SC2778	1L	2SK247
P	2SD814	1M	2SB84
Q	2SD813	1N	2SK199
R	2SC2480	1O	2SK198
S	2SC2405	1T	2SC3077
T	2SC2406	1X	2SC2845
U	2SC2404	1Z	2SD1030
V	2SC2295	2B	2SK374
W	2SD602	2C	2SK116

(Small Chip Transistor)

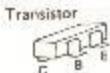
Letter	Transistor No.
A	2SB1218
U	2SC3931
W	2SD1820
Y	2SD1819
E3	2SA1226
OS	2SB1219
UC	2SA1532
YU	2SC3938

(Pair Transistor)

Letter	Transistor No.
5C	XN4601
5N	XN6501
5O	XN6401

Example : WQ → 2SD602 - Q
YQ → 2SD601 - Q
1B5 → 2SB814 - S

Appearance and Symbols



C: Collector
B: Base
E: Emitter

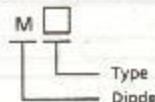


FET
Gate
Drain
Source

	1	2	3
Except 2SK199	Drain	Source	Gate
2SK199	Gate	Drain	Source

2. Chip Diode

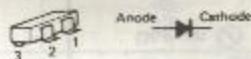
The diode number is indicated on the top surface of the chip diode using two alphabet letters.



Diode Number

Letter	Diode No.	Letter	Diode No.
MA	MA151A	MI	MA152K
M8	MA152A	MK	MA2BW-B
MC	MA153	ML	MA28T-A
MD	MA28-A	MN	MA151WA
ME	MA28-B	MO	MA152WA
MF	MA2BW-A	MT	MA151WK
MH	MA151K	MU	MA152WK

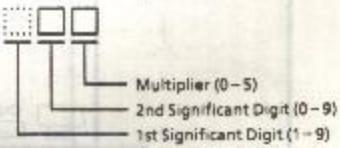
Appearance and Symbols



	1	2	3
MA28/MA2BW/MA2BT	-	Anode	Cathode
MA151K/MA152K	-	Anode	Cathode
MA151A/MA152A	-	Cathode	Anode
MA151WK/MA152WK	Anode	Anode	Cathode
MA151WA/MA152WA	Cathode	Cathode	Anode
MA153	Cathode	Anode	Common

3. Chip Resistor

The resistor value is indicated on the bottom surface of the chip resistor using three digit numbers.

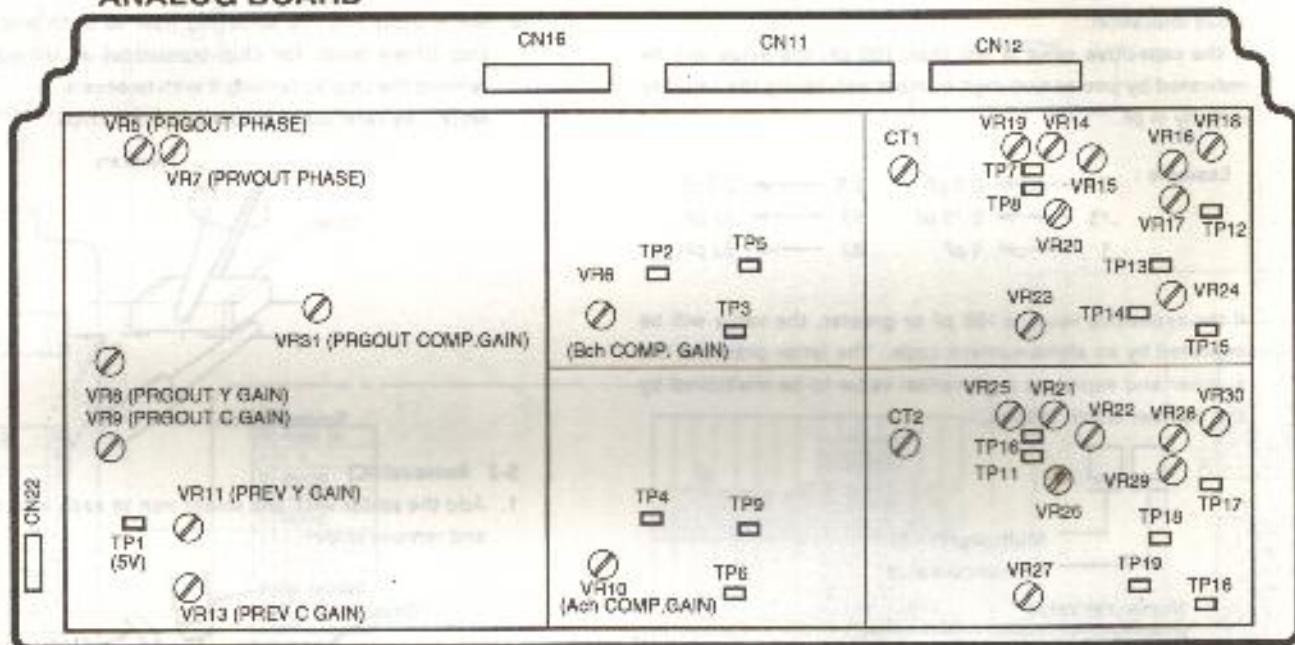


Example : 330 → $33 \times 10^0 = 33$ ohms
561 → $56 \times 10^1 = 560$ ohms
123 → $12 \times 10^3 = 12K$ ohms

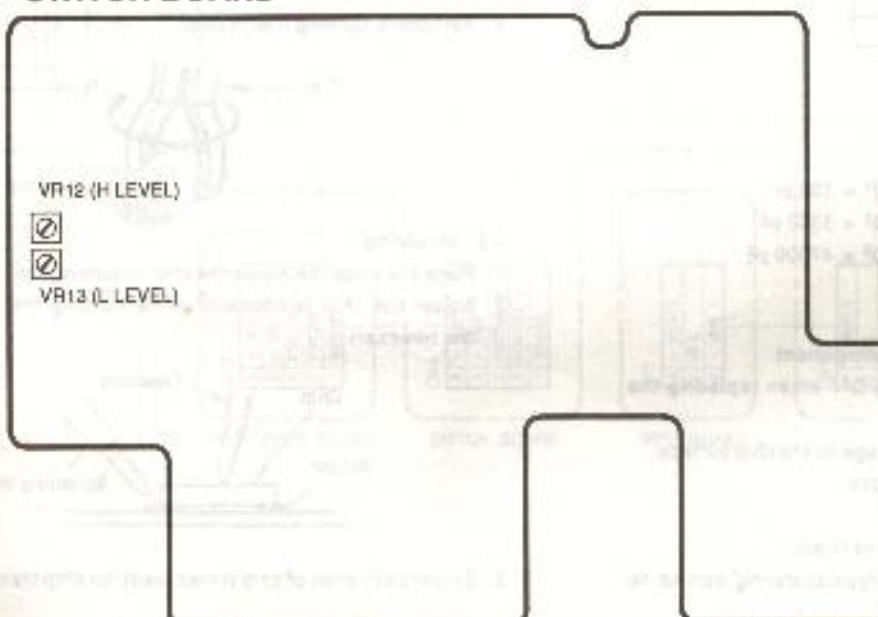
Note : Zero ohm resistor (jumper chip) is colored red or green.

LOCATION OF TEST POINT AND

ANALOG BOARD



SWITCH BOARD

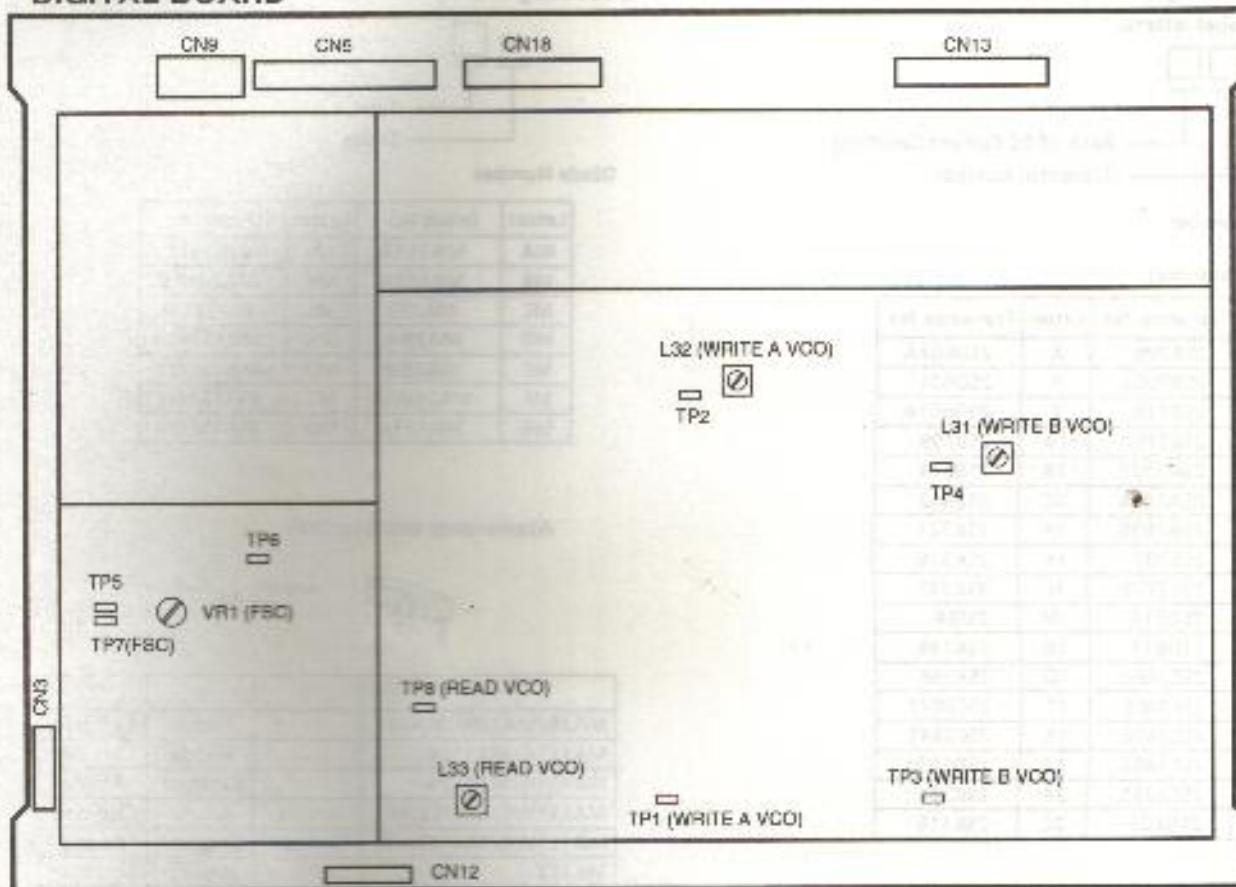


AUDIO

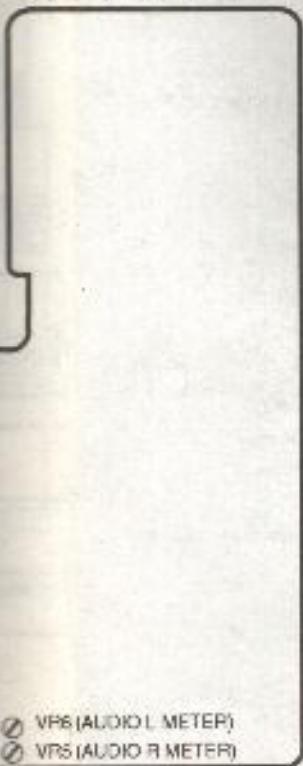
VR6 (AUDIO)
VR5 (AUDIO)

INT AND ADJUSTING CONTROLS

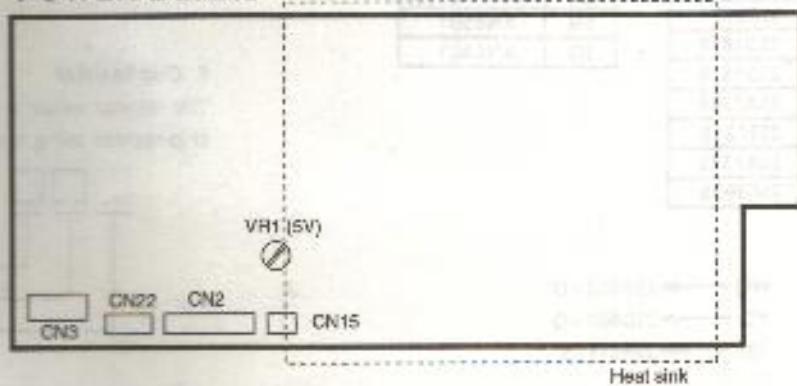
DIGITAL BOARD



AUDIO BOARD



POWER BOARD



VR6 (AUDIO L METER)
VR5 (AUDIO R METER)

COMPONENTS

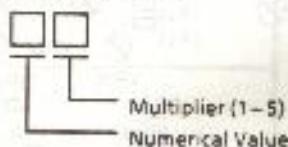
4. Chip Capacitor

The capacitive value of replacement chip capacitors is indicated on the bottom surface. Original parts do not have value indication.

If the capacitive value is less than 100 pF, the value will be indicated by one or two digit number expressing the capacity directly in pF.

Example :	0.5 → 0.5 pF	2.5 → 2.5 pF
	.75 → 0.75 pF	33 → 33 pF
	1 → 1 pF	82 → 82 pF

If the capacitive value is 100 pF or greater, the value will be indicated by an alpha-numeric code. The letter precedes the number and expresses a numerical value to be multiplied by the number which follows.



Numerical Value

Letter	Value	Letter	Value
A	10	N	33
B	11	P	36
C	12	O	39
D	13	R	43
E	15	S	47
F	16	T	51
G	18	U	56
H	20	V	62
J	22	W	68
K	24	X	75
L	27	Y	82
M	30	Z	91

*Letters I and O are not used

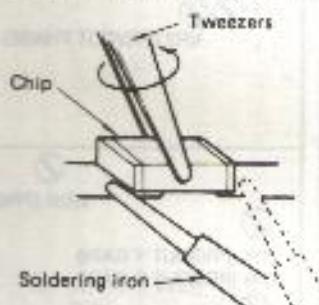
Example :	A1 → 10 × 10 ¹ = 100 pF
	N2 → 33 × 10 ² = 3300 pF
	S3 → 47 × 10 ³ = 47000 pF

5. Precautions in replacing the chip component

1. Make sure that the unit is turned OFF when replacing the chip.
2. Use tweezers to prevent any damage to the chip surface.
3. Do not re-use the chips after removal.
4. Do not rub the electrode of chips.
5. Do not subject the chips to excessive stress.
6. It is recommended that a pencil-type soldering iron to be used.
7. The solder whose diameter is less than 0.5 mm is recommended.
8. Do not heat the chip beyond 3 seconds.
9. Maintain temperature control under 260°C (500°F) when soldering.

5-1 Removal (Transistor, Diode, Resistor and Capacitor)

1. Add the solder to both ends of the chip (three leads for chip transistor).
2. While attaching the soldering iron to both ends of the chip (three leads for chip transistor) as shown below, remove the chip by turning it with tweezers.
Note : Be careful not to damage other chips.

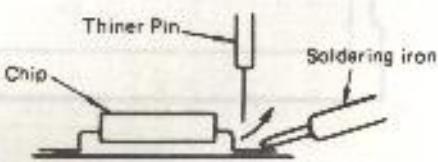


5-2 Removal (IC)

1. Add the solder wick and solder iron to each lead of the IC and remove solder.



2. Add the solder iron to each lead of the IC and lift each lead of the IC using thinner pin.



3. Remove IC turning it with plier.

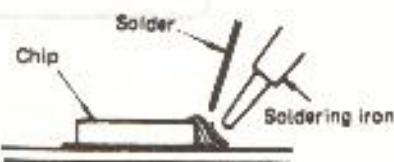


5-3 Mounting

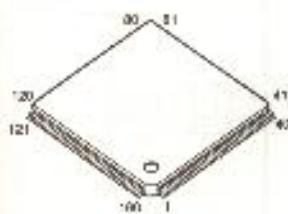
1. Place the solder thinly on the chip mounting foil.
2. Solder the chip temporarily while holding the chip with the tweezers.



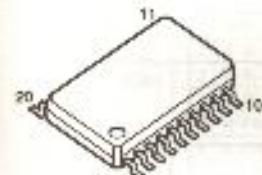
3. Solder both ends of chip (three leads for chip transistor).



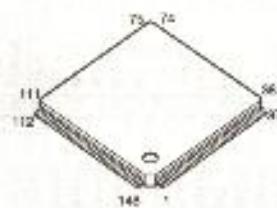
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YWL7A1077



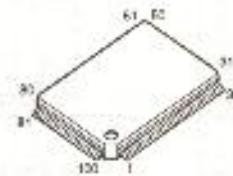
YWMC145407F, MC74HC374AF
YWMC74AC374M



MN5306-LBY



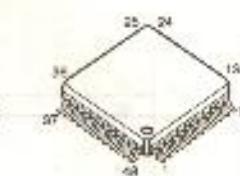
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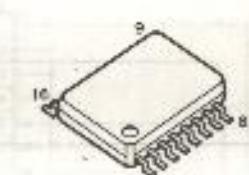
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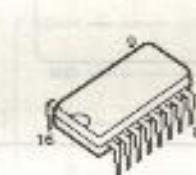
YWMC141625FU



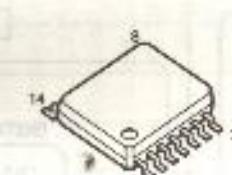
NJU4051BM, NJU4053BM
YWUPD4536BG, MC74HC4053F
MC74HC4051F



YWM5283P



YNJM3409AM, NJM319M
YWUPC4064G2

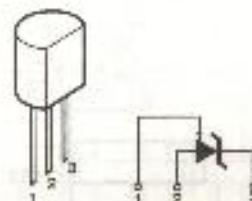


NJM209
YWFAS

YWUPC24M12-HF
YWUPC2412-HF



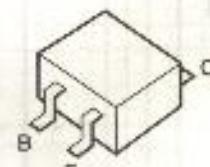
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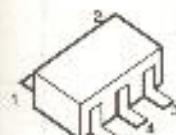
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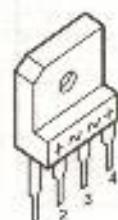
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2SD1386RS, DTB114EK, 2SD1882A
2SA1733K



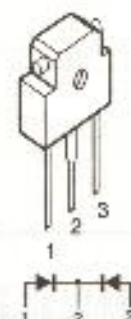
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YWRBV406



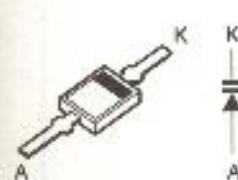
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YWE8AC82M004



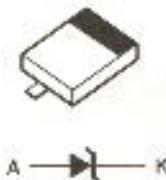
YWPC111LY



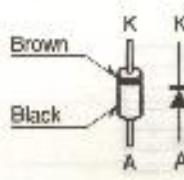
1SV153



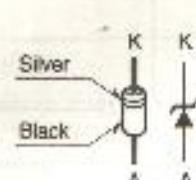
MA8033



RU1P



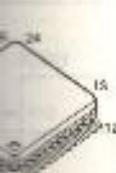
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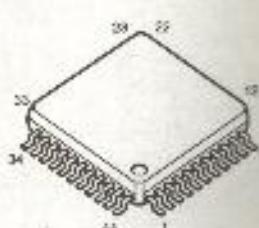
IC & TRANSISTORS

625FU

YWUPD85012Q25



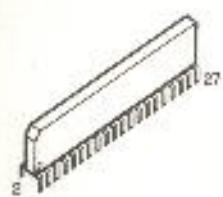
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YWM51271FP



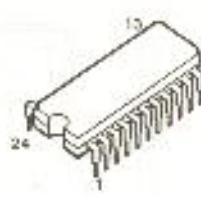
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YWCX01175AM
YWUPD42102G3

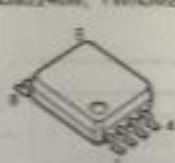


YWM86310P

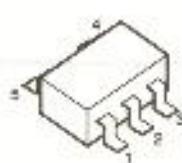


NJM2068MD
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YWM51953AFP, YWM51955AAPP
YWLM1981M, YWM5216FP, NJM2904M
YWTG4W53FL, YWNLM2245M,
YWNLM2248M, YWNLM2233M



YWBC7506F, YWSC7SU04F
YWTG7R32F, YWSC7S32F



NJM78L05A, NJM78L06A
YWNJM78L06A, NJM78L05A



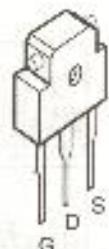
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D1992A

2SA833, 2SC1740
2SC3377

2SK196-PQR

2SK960, 2SK947
2SK857

2SD642QRS

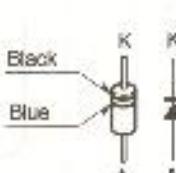
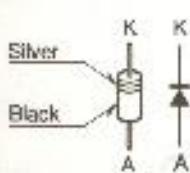
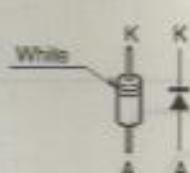
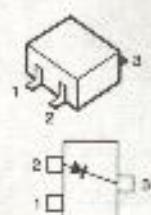


YWDAN212K, MA151K
YWRB421D

MA165

YWERAB9102

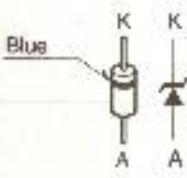
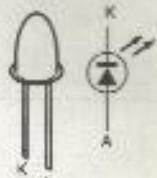
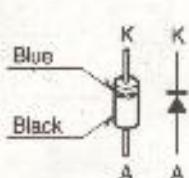
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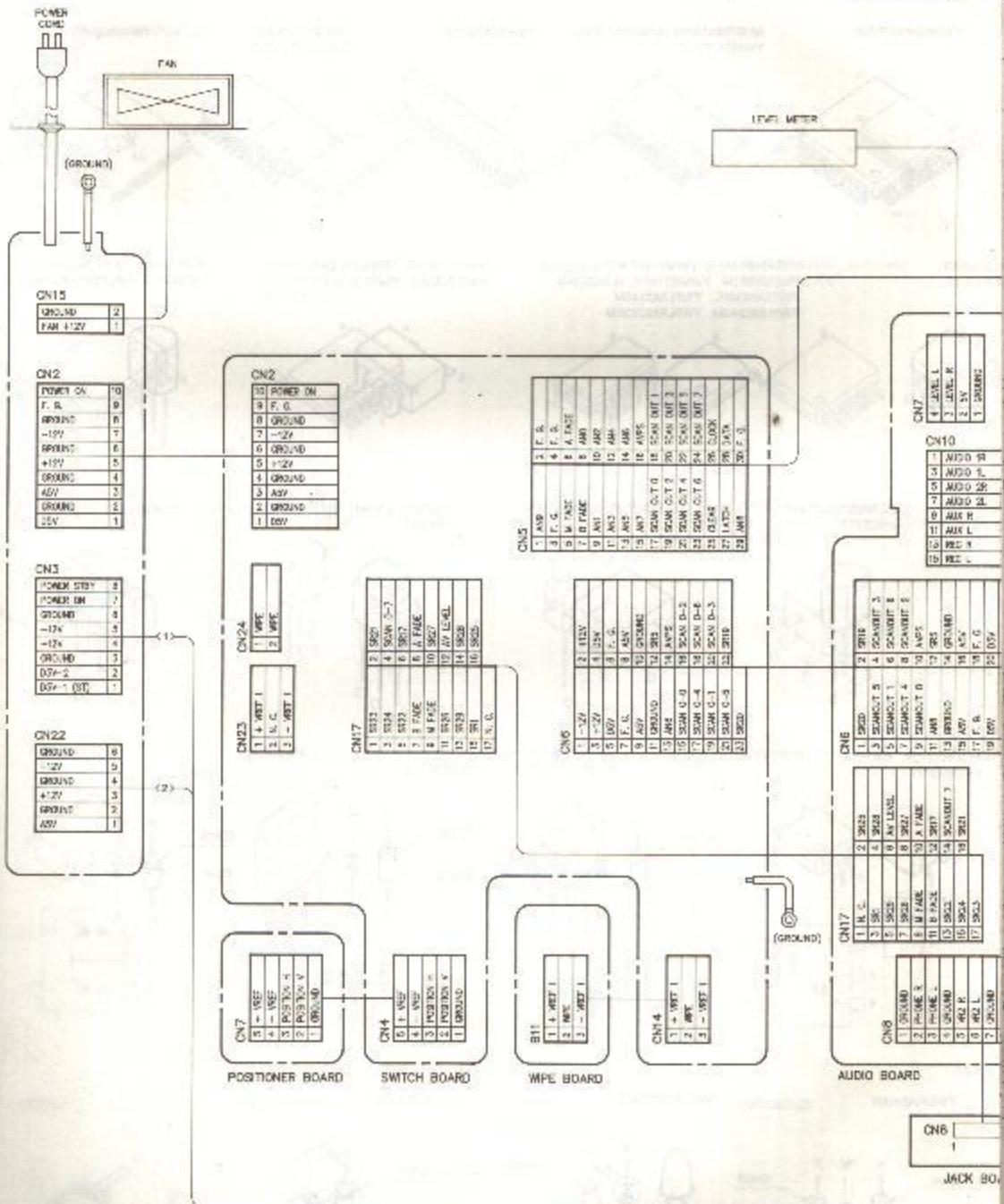


YWERAB4009

YWSLR34VR90T

RD5.1JB2





DIAGRAM

2	8 R/H R
9	9 R/H L
10	10 GND
11	11 MC
12	12 GND
13	13 GND
14	14 GND
15	15 GND

MRD

[2] +2V
[2] -2V

DIGITAL BOARD

8	POWER SW
7	POWER ON
6	GROUND
5	GROUND
4	GROUND
3	GROUND
2	USB-2
1	USB-1 (S1)

24	32
1	23

ANALOG BOARD

8	GROUND
5	-12V
4	GROUND
3	+2V
2	GROUND
1	ASV

21	20
22	19

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	PSEN
6	8 380040
7	REG CS
8	REG YZ
9	REG ZY
10	REG ZY
11	REG ZY
12	REG ZY
13	REG ZY
14	REG ZY
15	REG ZY
16	REG ZY
17	REG ZY
18	REG ZY
19	EXT Y
20	EXT Y
21	EXT X
22	EXT X
23	EXT C
24	EXT C
25	C2
26	C2
27	C2
28	C2
29	C2
30	C2
31	C2
32	C2
33	C2
34	C2
35	C2
36	C2
37	C2
38	C2
39	C2
40	C2
41	C2
42	C2
43	C2
44	C2
45	C2
46	C2
47	C2
48	C2
49	C2
50	C2
51	C2
52	C2
53	C2
54	C2
55	C2
56	C2

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
8	380040
9	3-19
10	380040
11	3-19
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14	380040
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41	3-19
42	380040
43	3-19
44	380040
45	3-19
46	380040
47	3-19
48	380040
49	3-19
50	380040

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
8	380040
9	3-19
10	380040
11	3-19
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42	380040
43	3-19
44	380040
45	3-19
46	380040
47	3-19
48	380040
49	3-19
50	380040

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
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30	380040
31	3-19
32	380040
33	3-19
34	380040
35	3-19
36	380040
37	3-19
38	380040
39	3-19
40	380040
41	3-19
42	380040
43	3-19
44	380040
45	3-19
46	380040
47	3-19
48	380040
49	3-19
50	380040

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
8	380040
9	3-19
10	380040
11	3-19
12	380040
13	3-19
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50	380040

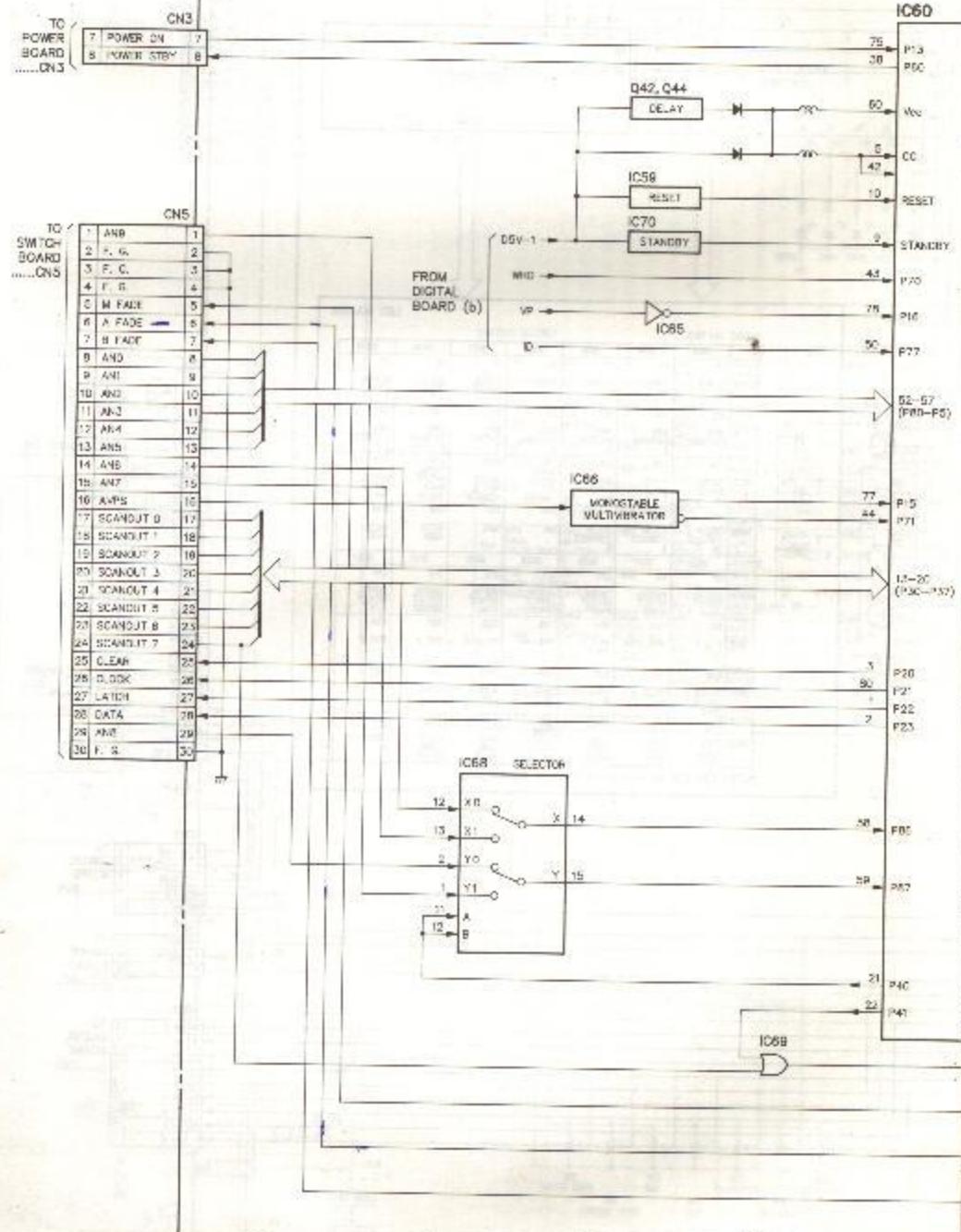
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2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
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11	3-19
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43	3-19
44	380040
45	3-19
46	380040
47	3-19
48	380040
49	3-19
50	380040

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
8	380040
9	3-19
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42	380040
43	3-19
44	380040
45	3-19
46	380040
47	3-19
48	380040
49	3-19
50	380040

1	AD574C 2
2	380040
3	AD574C 1
4	380040
5	3-19
6	380040
7	3-19
8	380040
9	3-19
10	380040
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18	380040
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27	3-19
28	

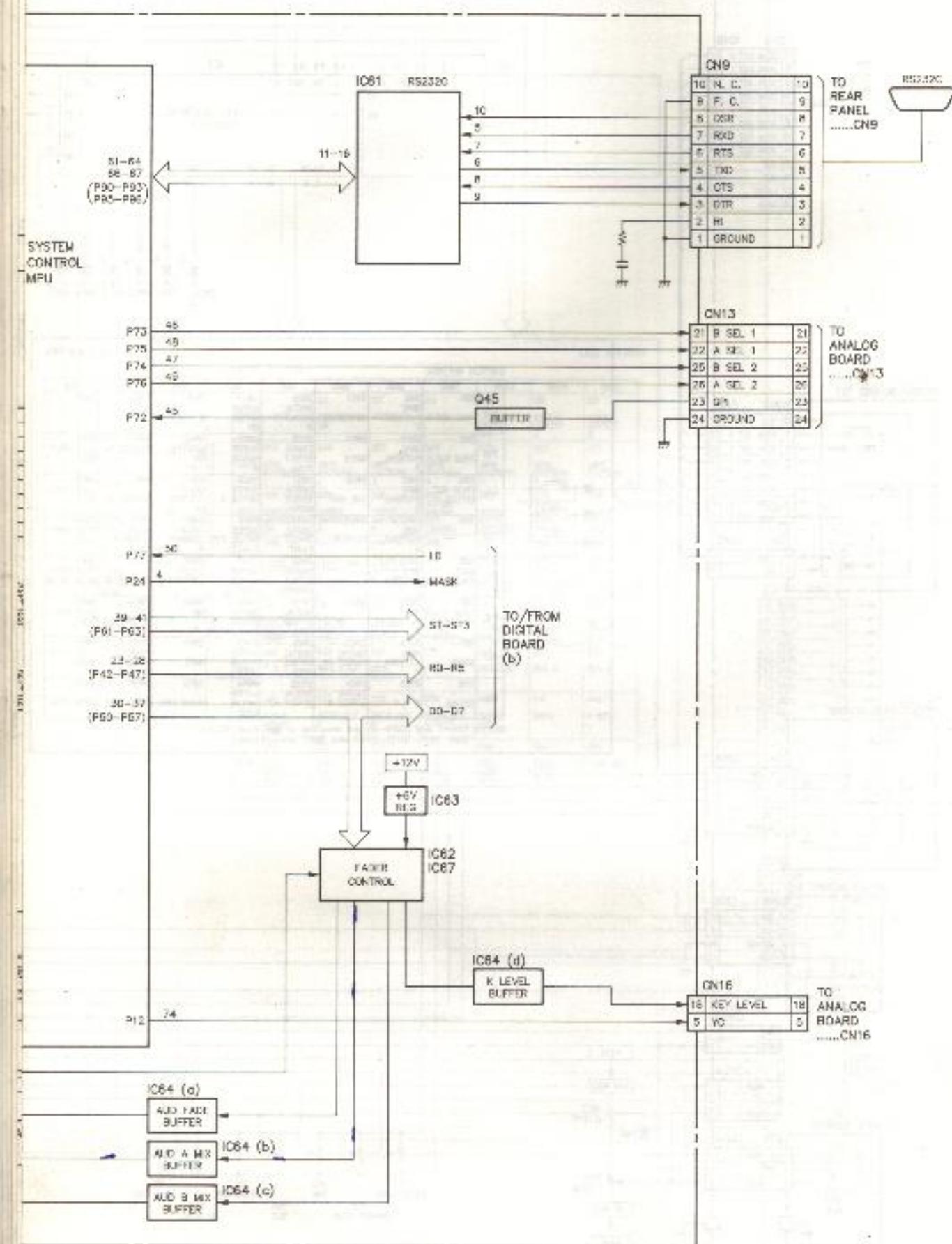
BLOCK DIAGRAM OF DIGITAL

DIGITAL BOARD (a) [MICROPROCESSOR SECTION]



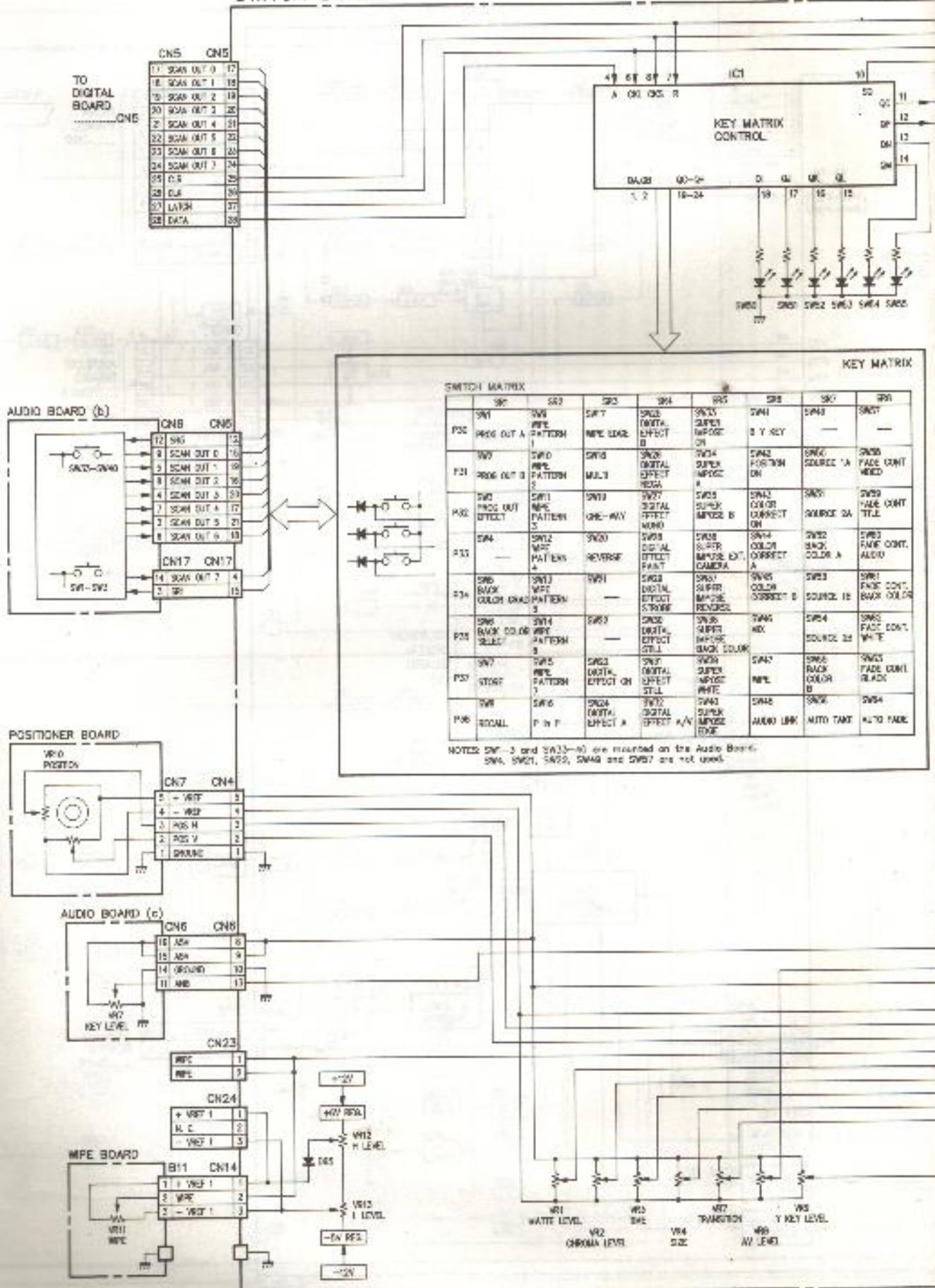
L BORAD (Microprocessor Section)

GRAB HUTW2



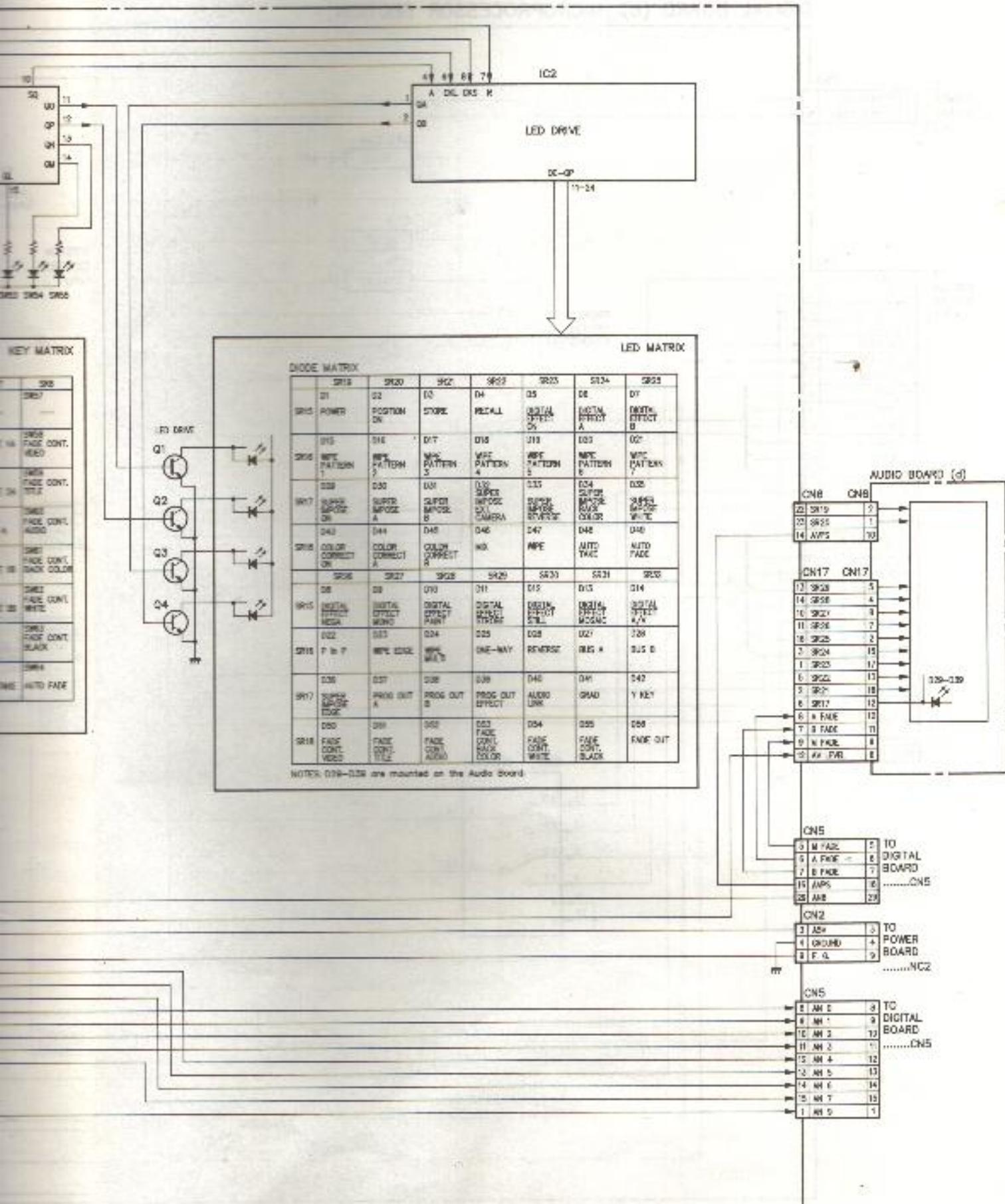
BLOCK DIAGRAM OF

SWITCH BOARD



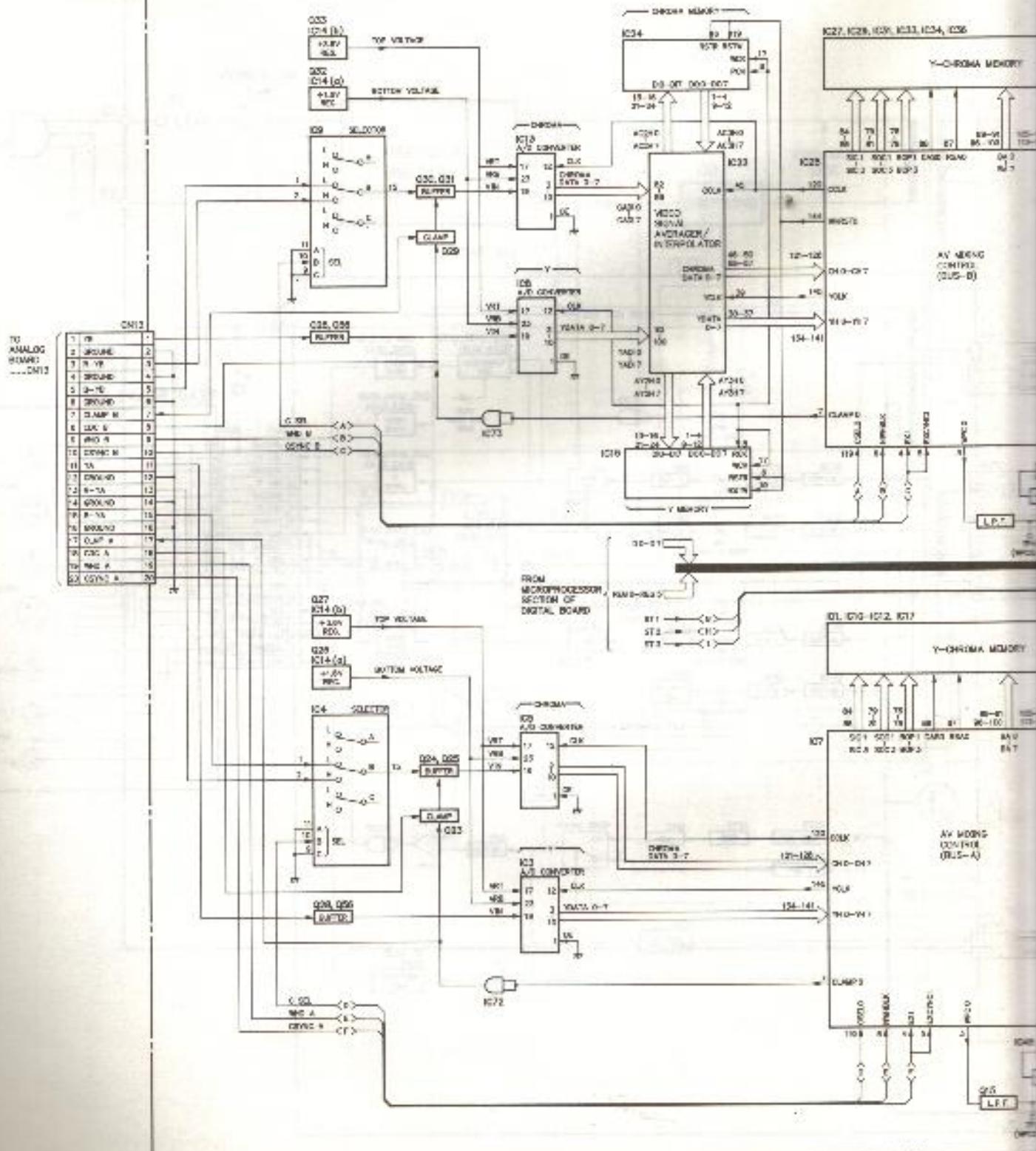
FRONT PANEL

FRONT PANEL

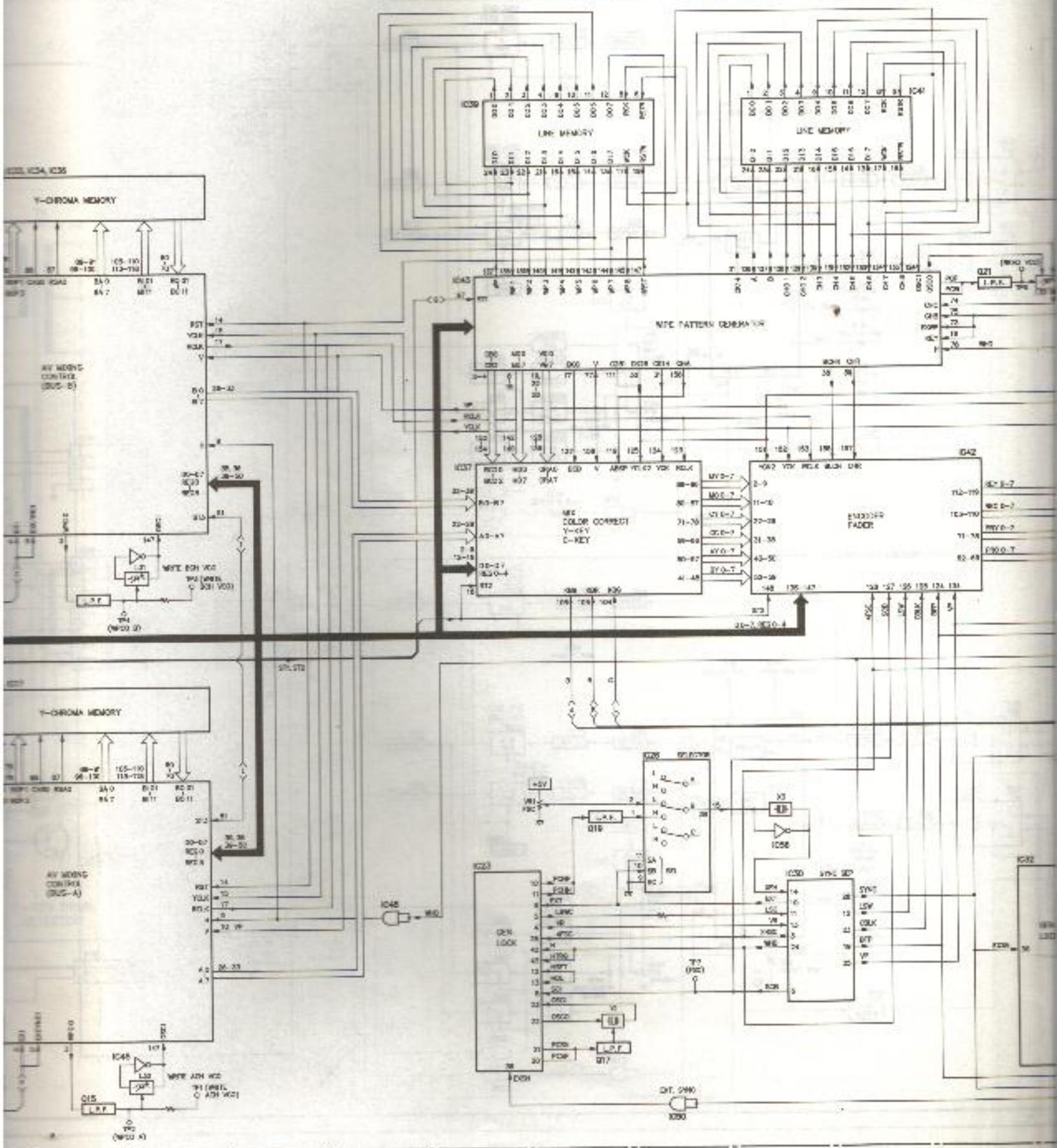


BLOCK DIAG

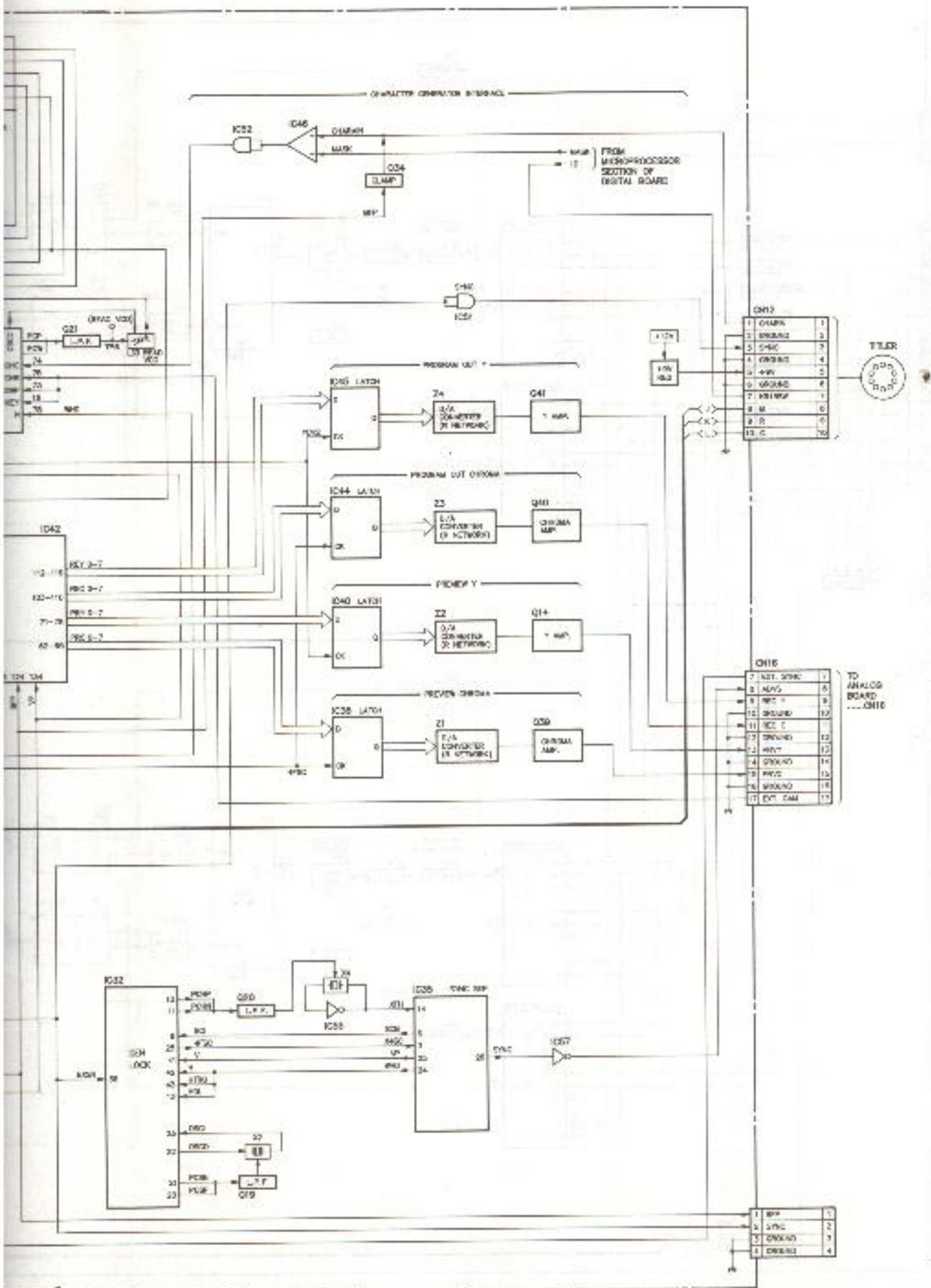
DIGITAL BOARD (b) [DIGITAL SIGNAL PROCESSING SECTION]



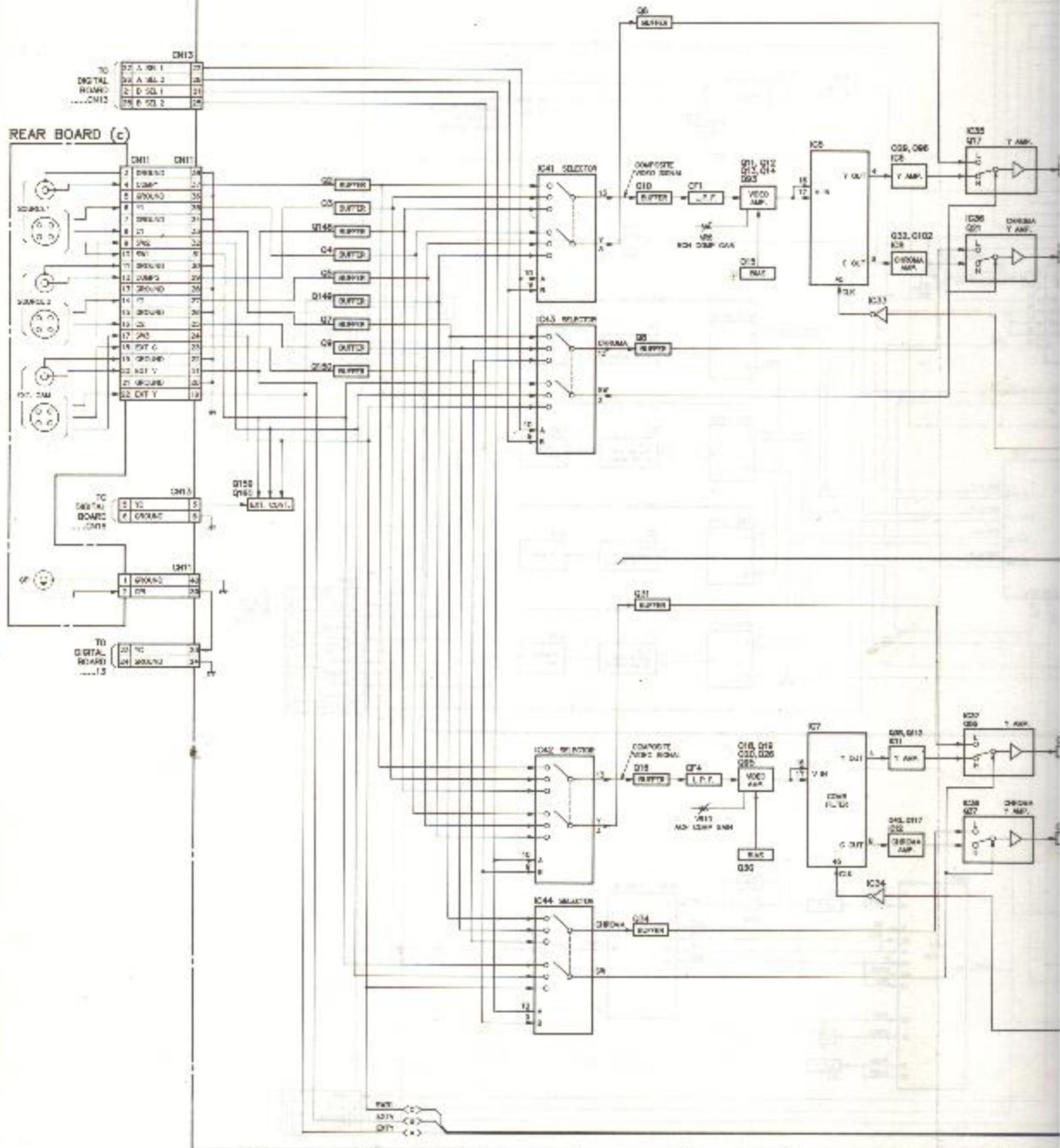
BLOCK DIAGRAM OF DIGITAL BORAD (Digital Signal Processing Section)



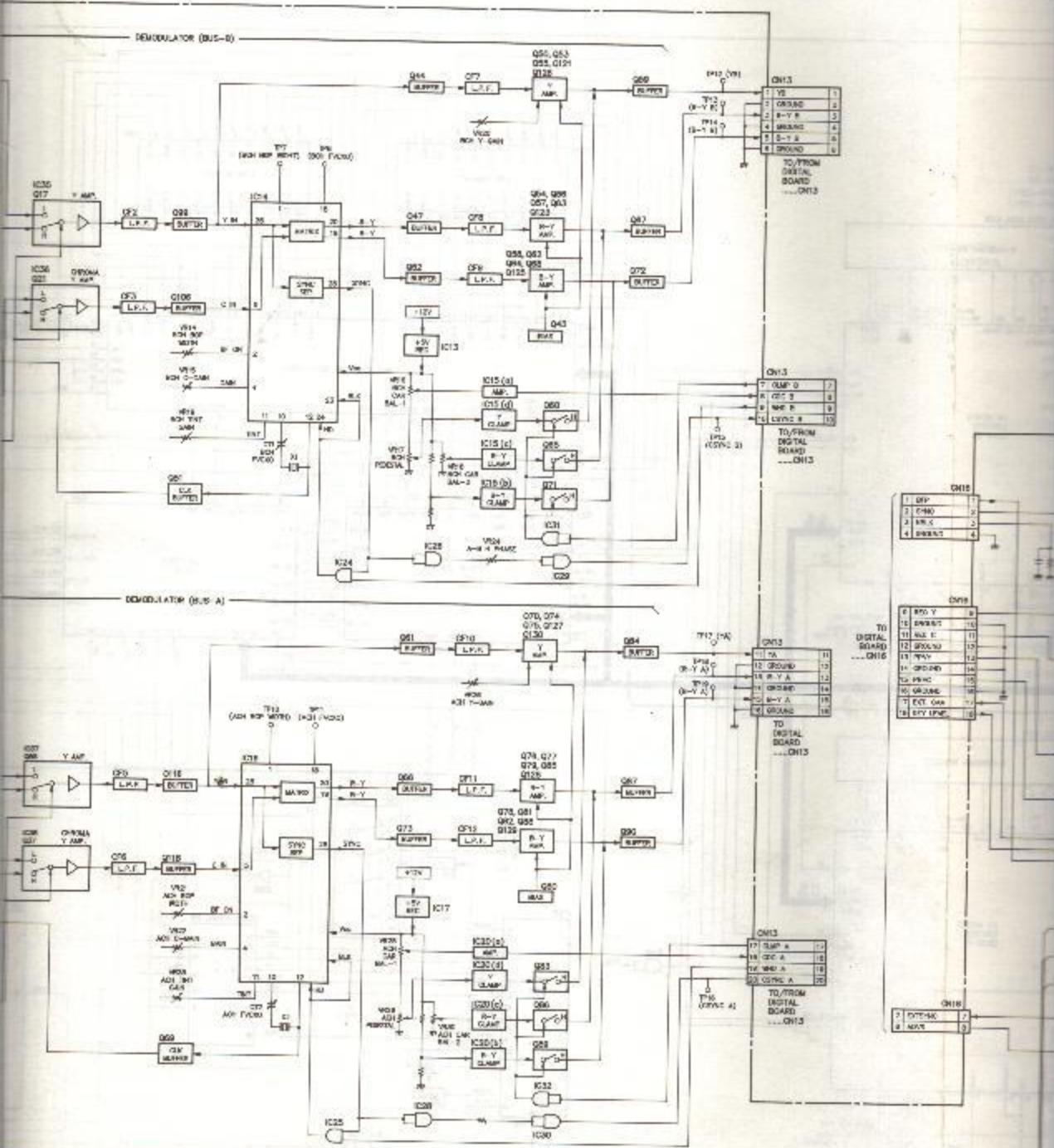
tion)

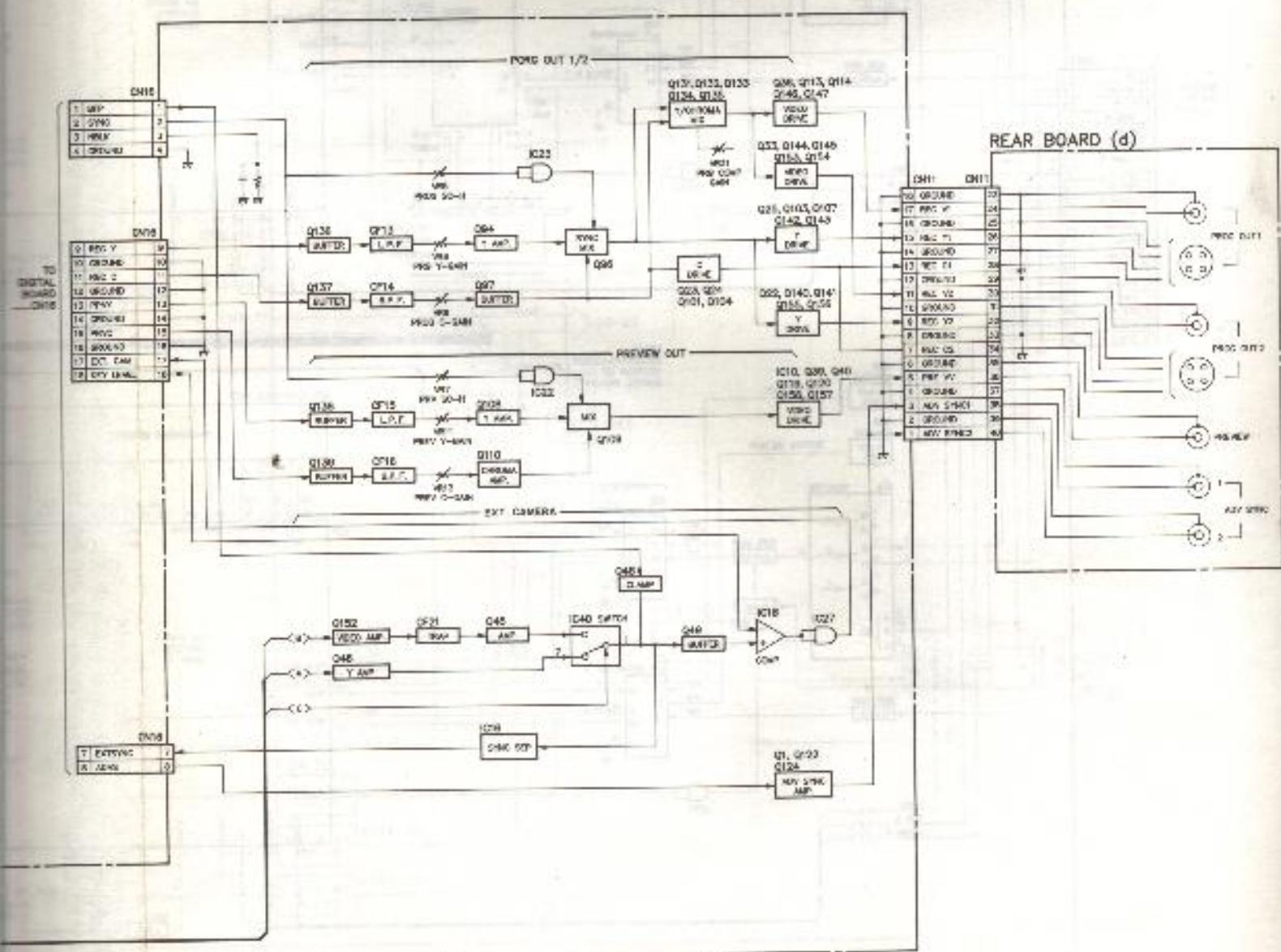


ANALOG BOARD



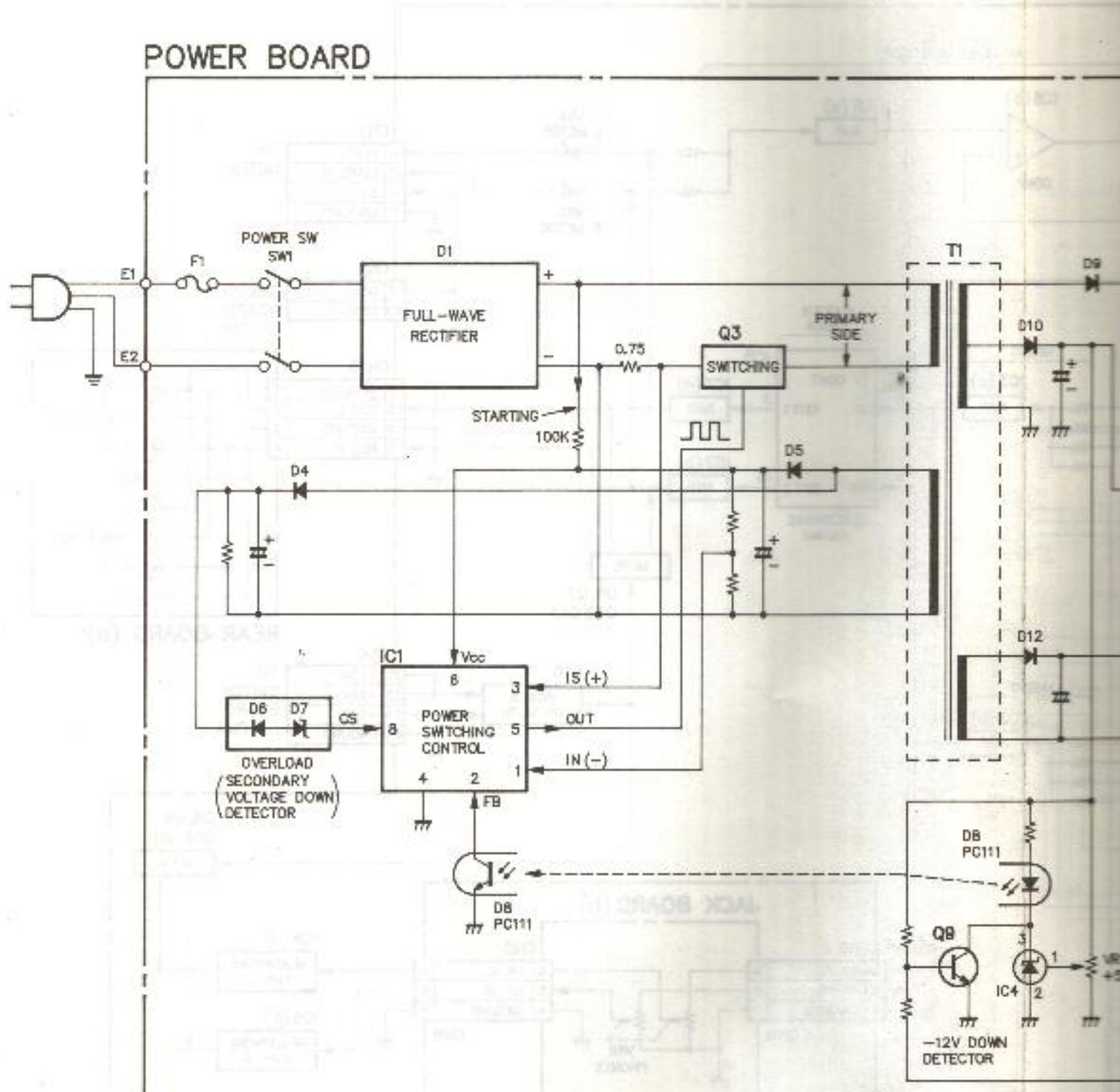
BLOCK DIAGRAM OF ANALOG BOARD



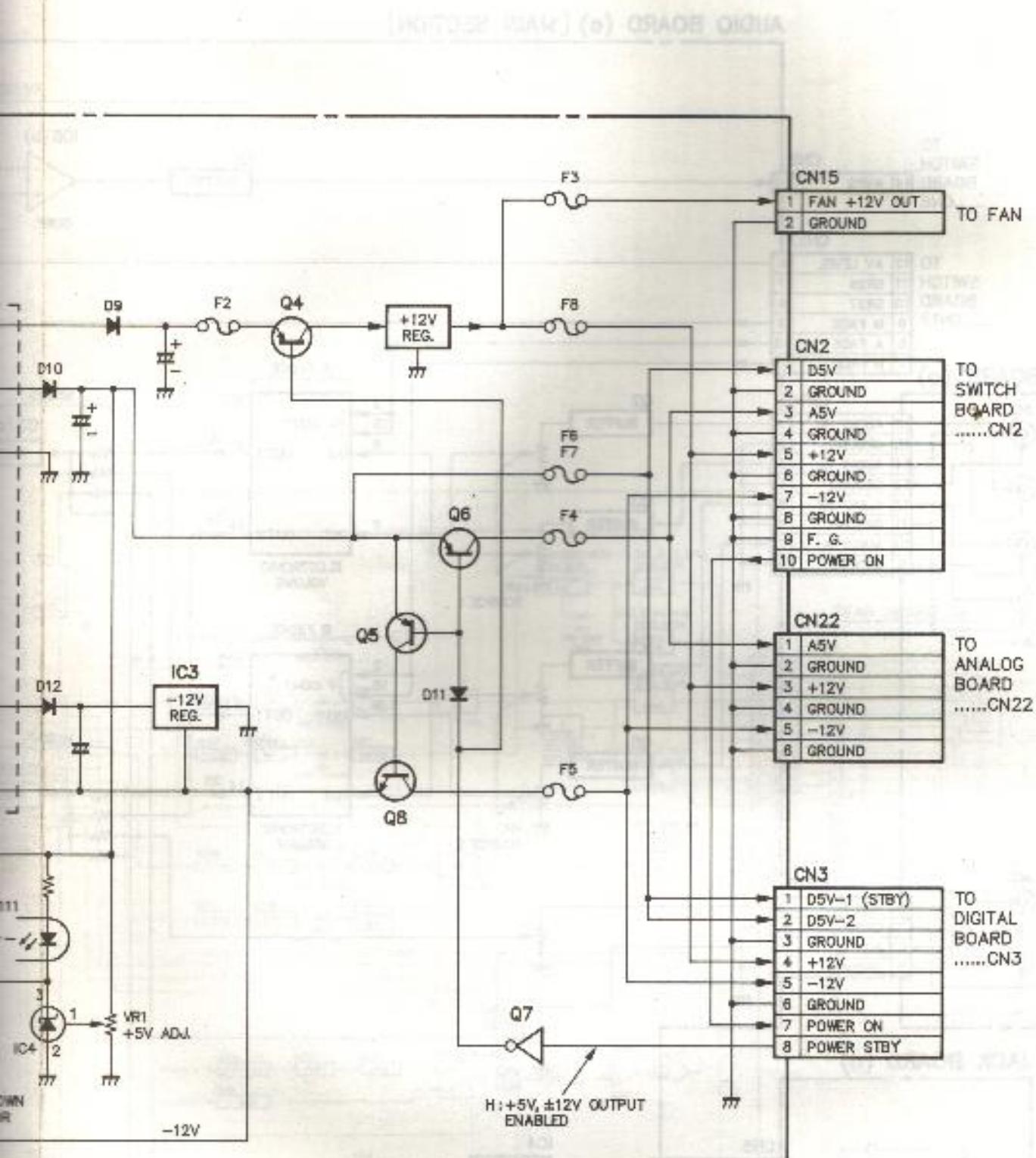


BLOCK DIAGRAM OF POW

POWER BOARD



1 OF POWER BOARD

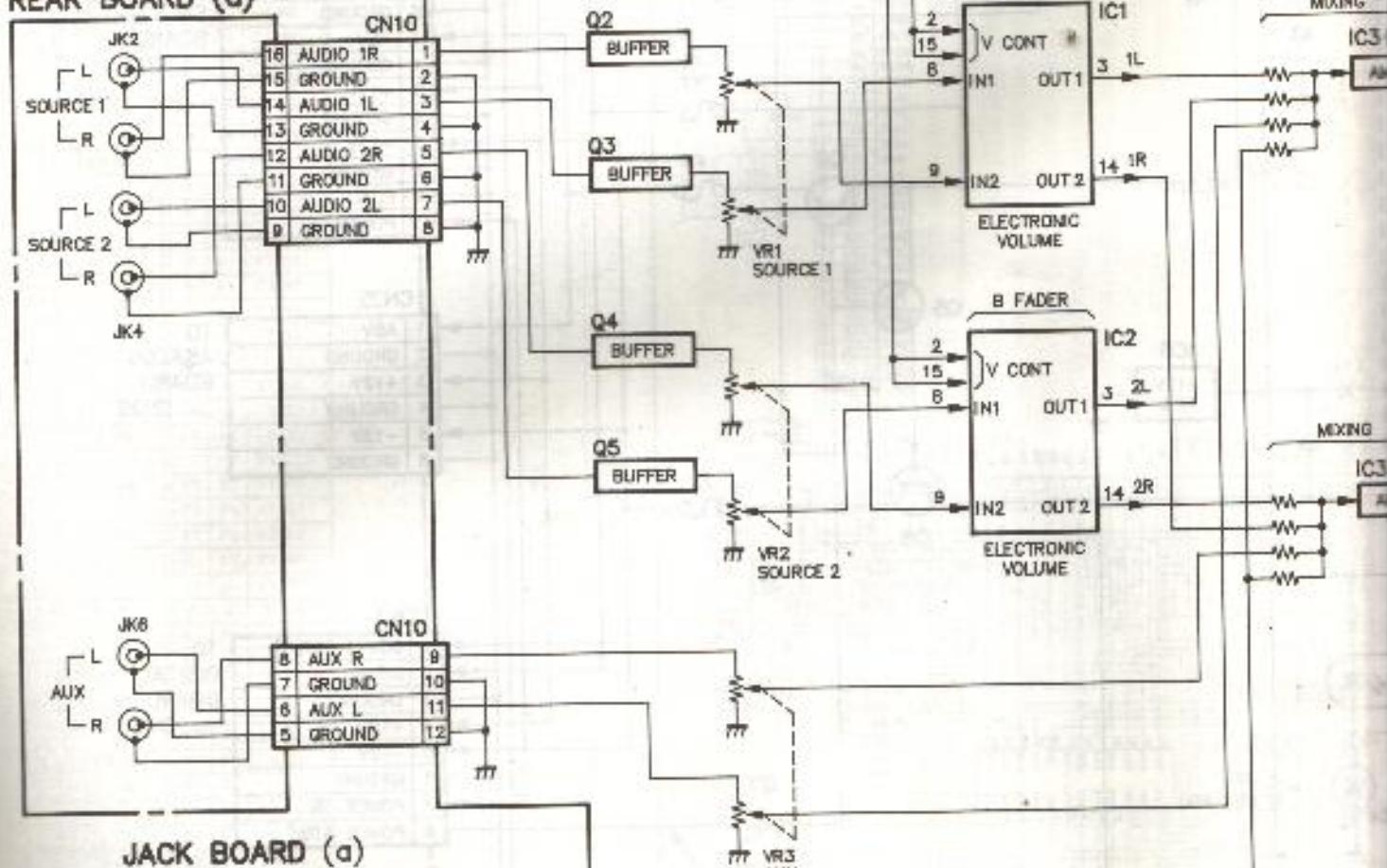


BLOCK DIAGRAM O

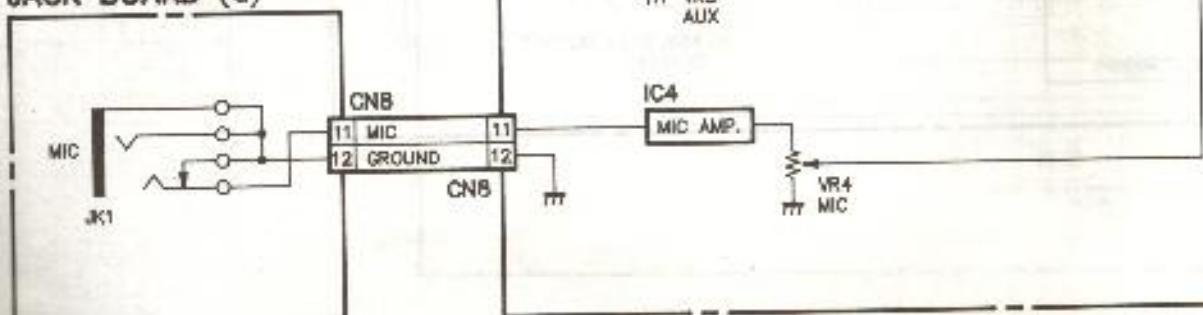
AUDIO BOARD (a) [MAIN SECTION]



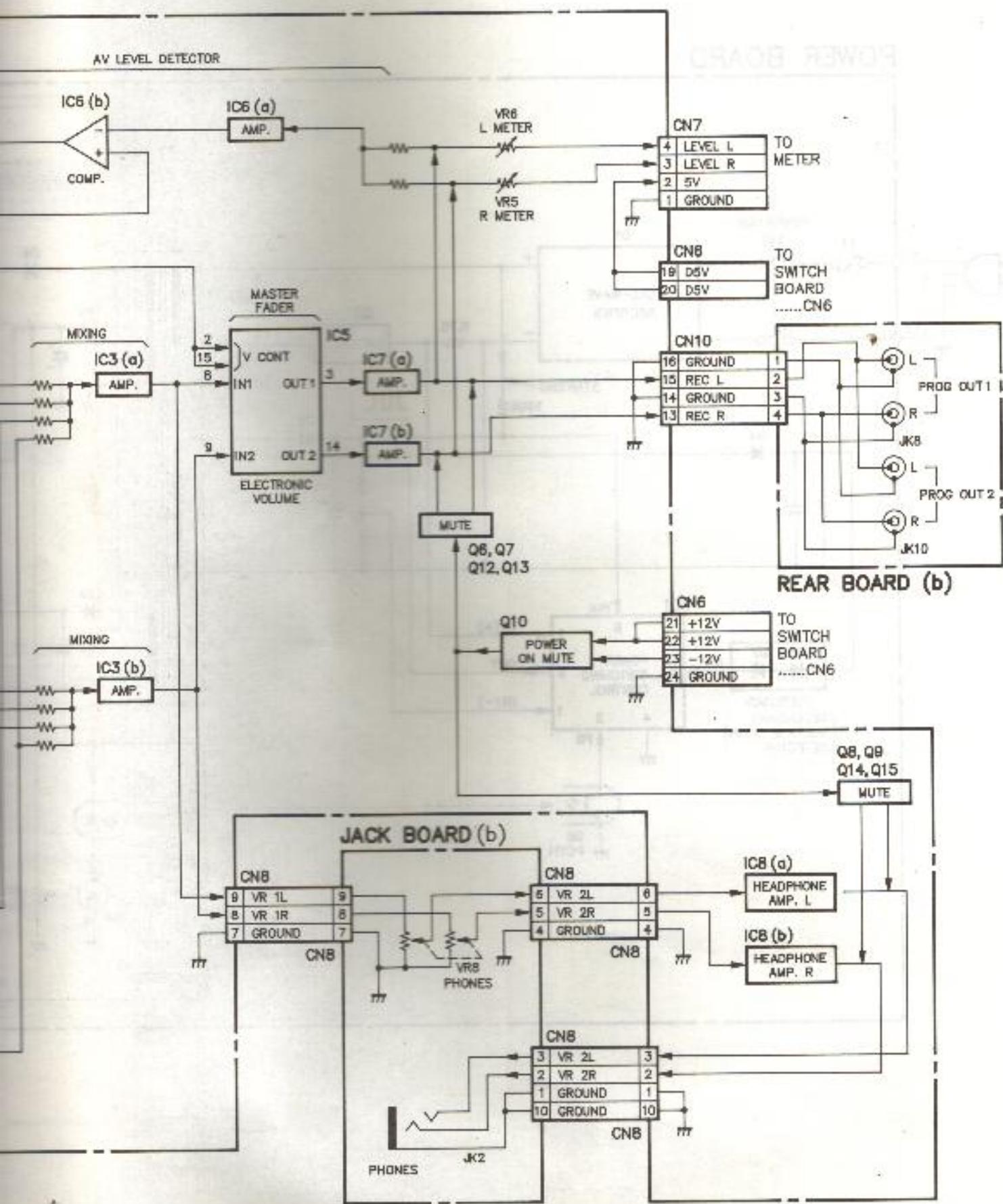
REAR BOARD (a)



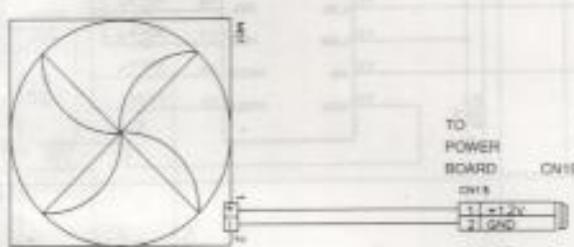
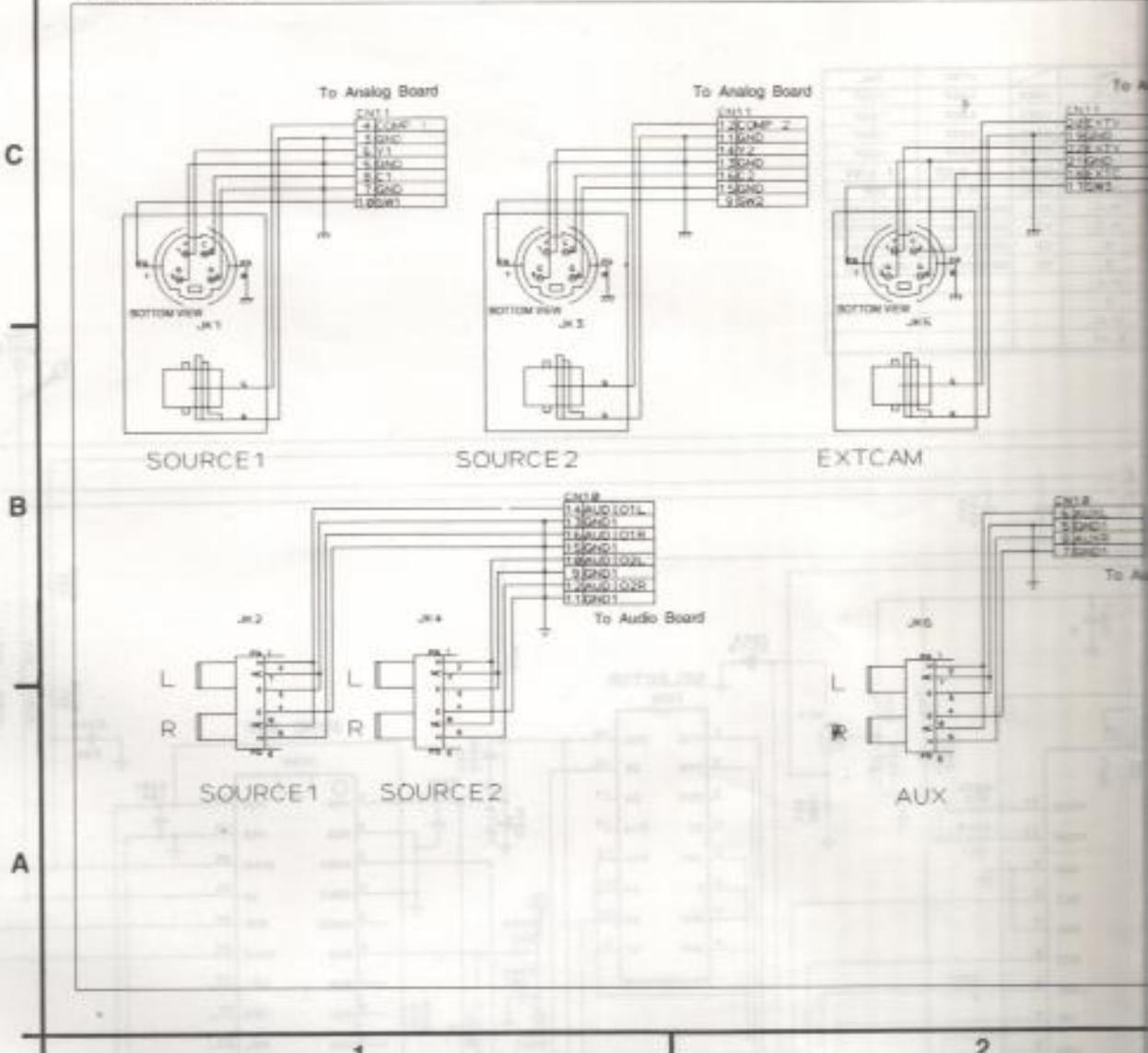
JACK BOARD (a)



GRAM OF AUDIO BOARD

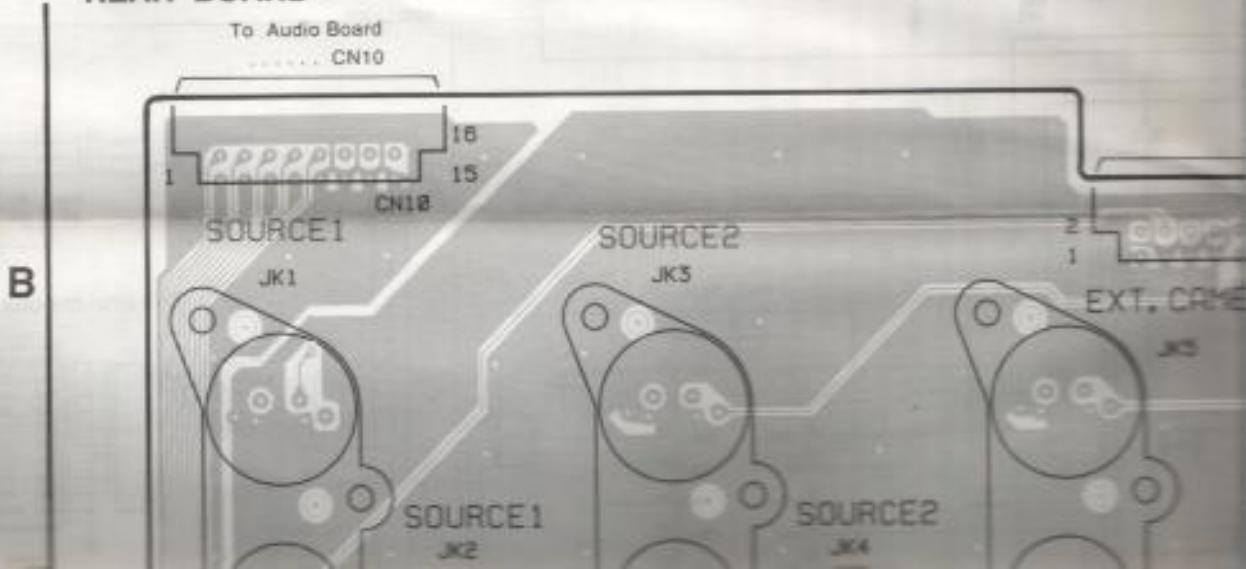


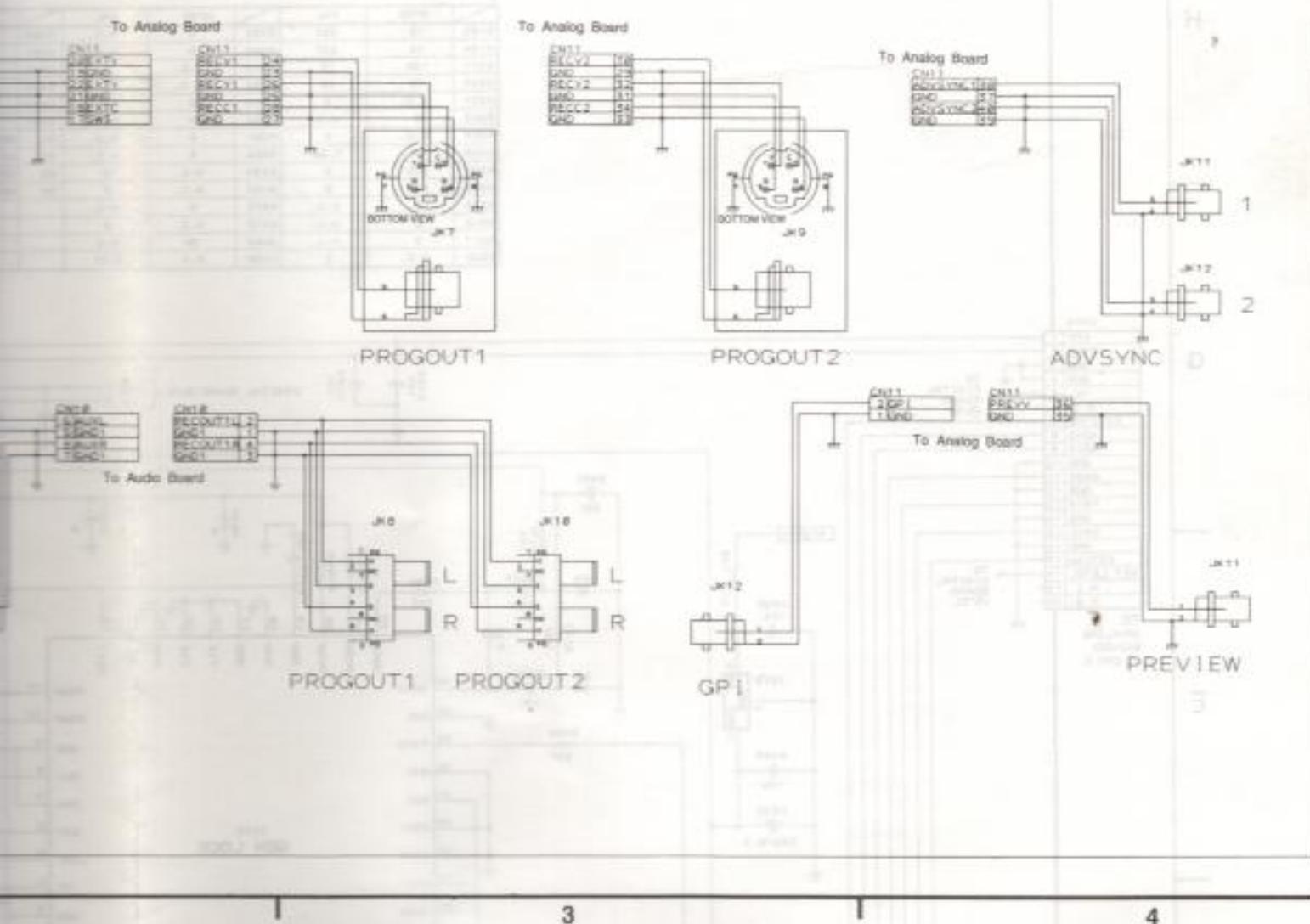
REAR BOARD



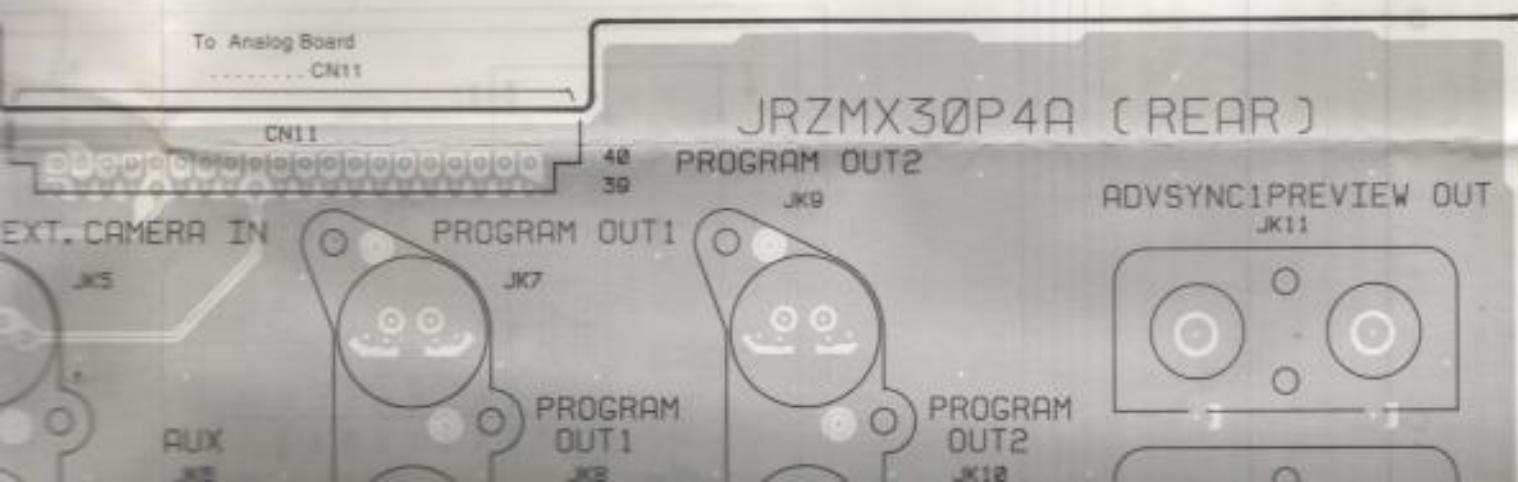
CONDUCTOR VIEW C

REAR BOARD



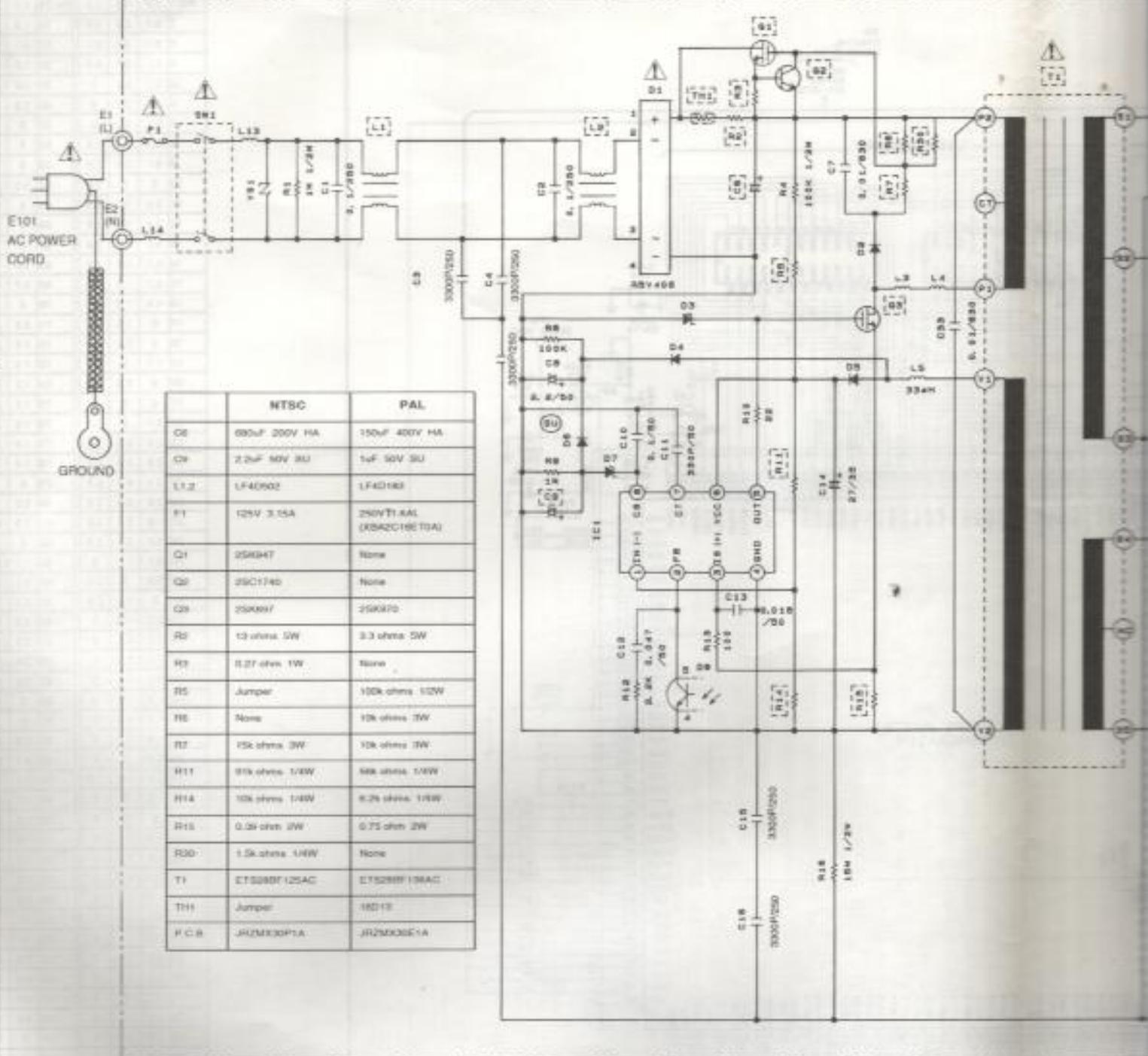


VIEW OF REAR BOARD



POWER BOARD

C



B

A

1

2

PRODUCT SAFETY NOTICE

COMPONENT IDENTIFIED WITH THE "▲" MARK HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY. WHEN SERVICING ANY OF THESE COMPONENTS, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED.

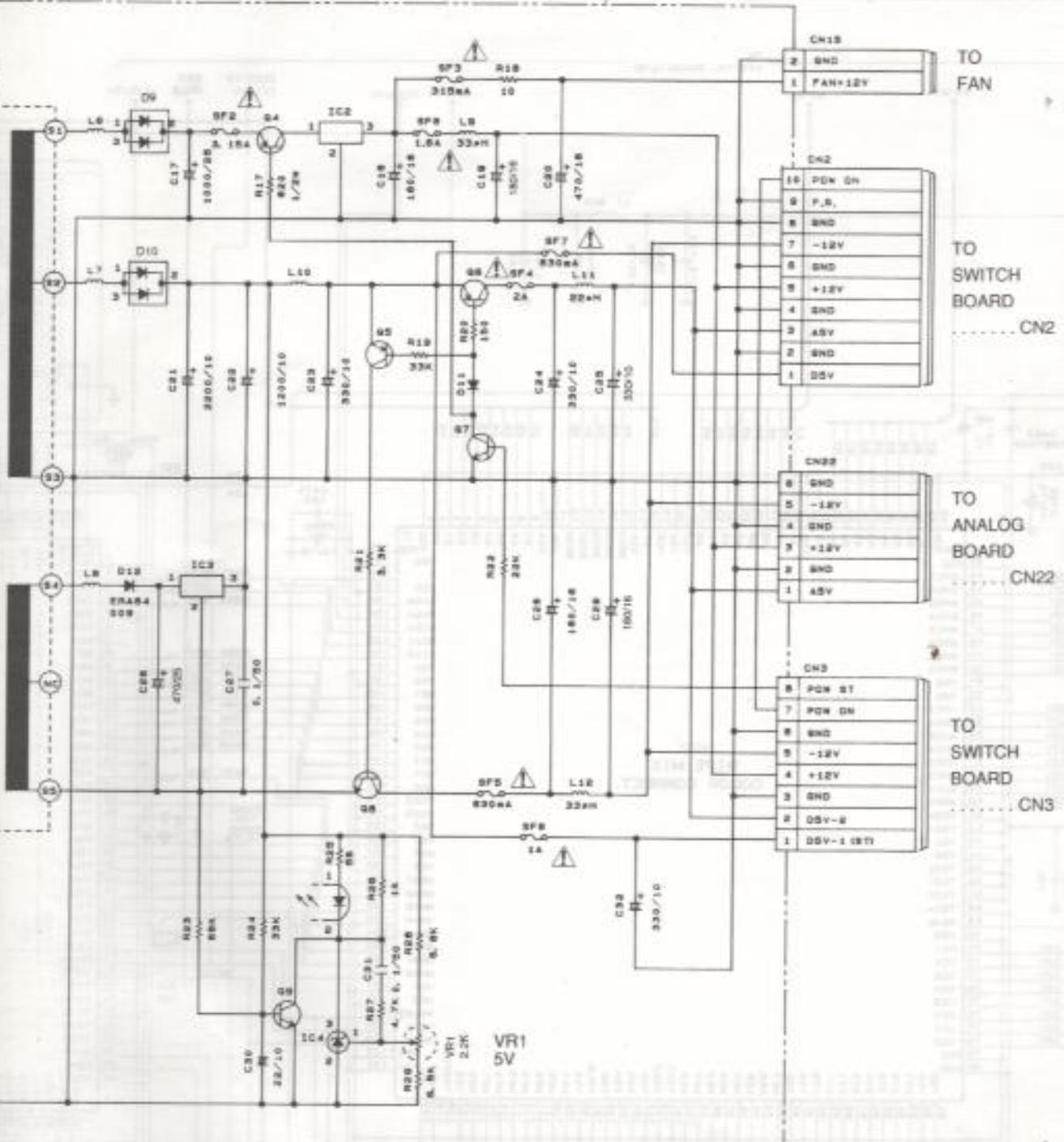
<Index >

Power Board

I1	B2	Q3	C2	Q7	B3	D2	C2	D6	B2	D10	C3
I2	C3	Q4	C3	Q8	A3	D3	C2	D7	B2	D11	C3
I3	B3	Q5	C3	Q9	A3	D4	C2	D8	A3/B2	D12	B3
I4	A3	Q6	C3	D1	C2	D5	B2	D9	C3	SW1	C1

CONDUCTOR VIEW OF PO

POWER BOARD



3

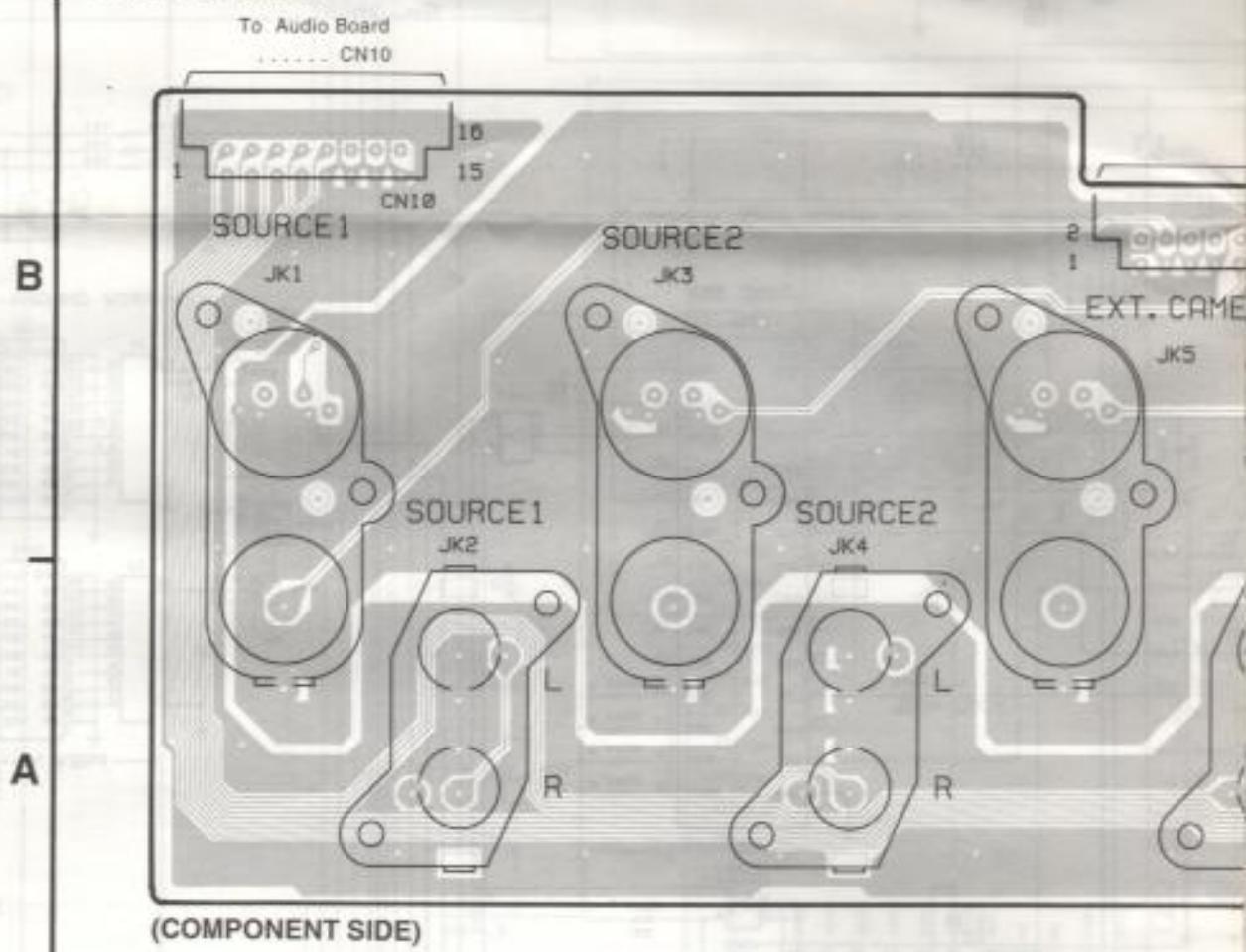
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POWER BOARD

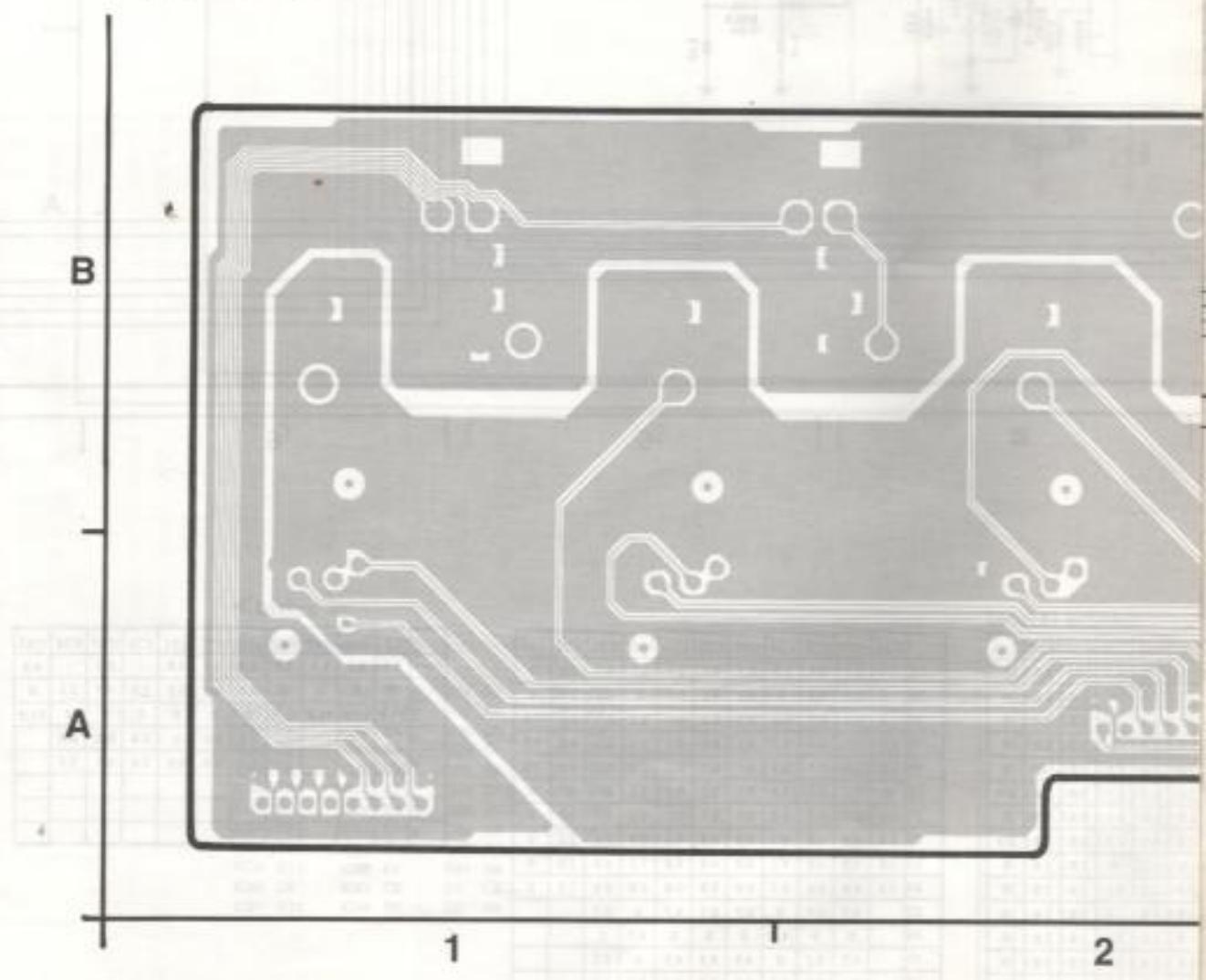
	I _{C1}	I _{C2}	I _{C3}	I _{C4}	B	C	E	
Pin 1	1.4	15.8	3.9	2.4	Q3	(Q)5.0	(D)-13.4	(S)0
2	1.6	0	-12.0	-16.0	4	15.1	15.8	15.8
3	0	12.0	0	4.2	5	4.5	5.1	5.2
4	0				6	4.5	5.1	5.2
5	1.7				7	0.7	0.4	-12.4
6	2.0				8	-11.1	-12.0	-12.0
7	1.4				9	-0.5	4.2	0
8	1.6							

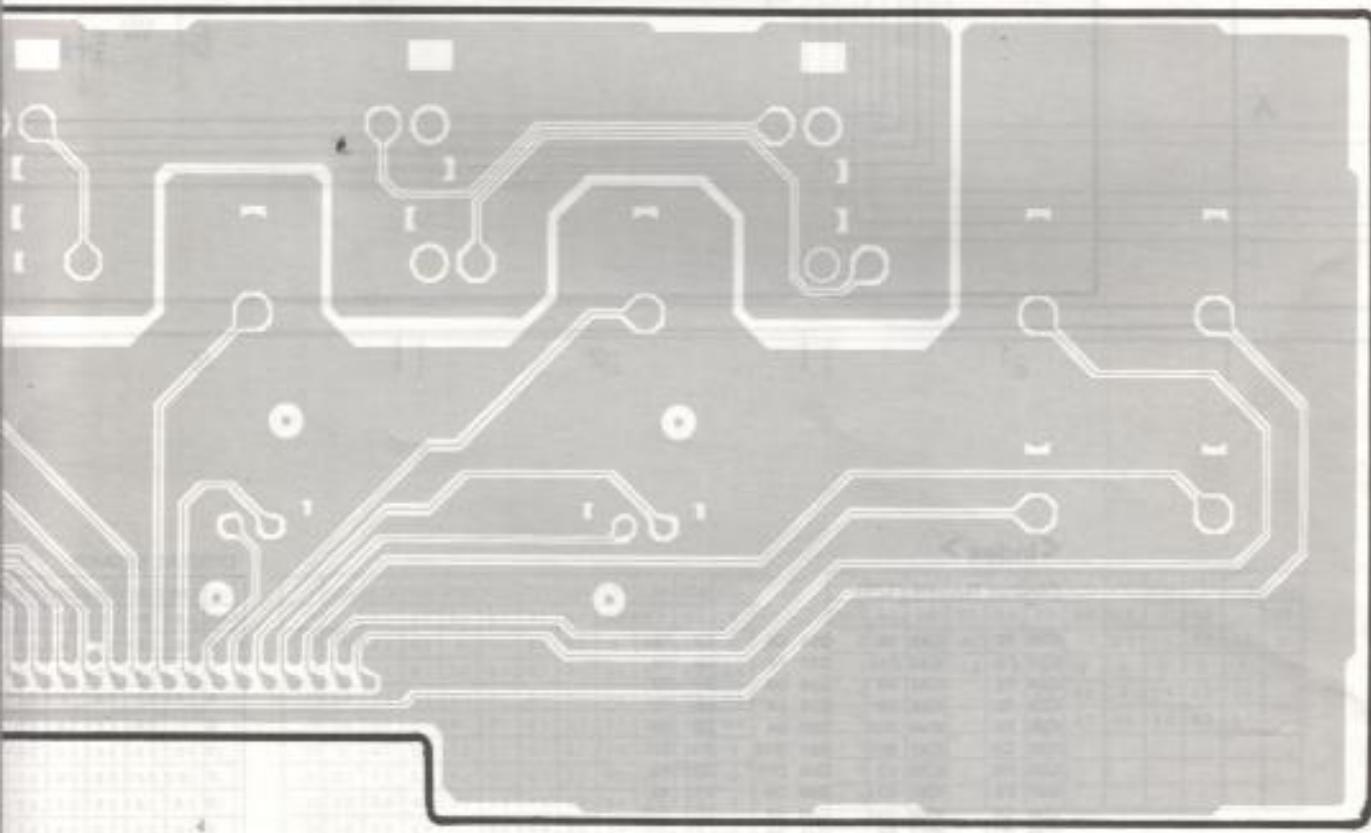
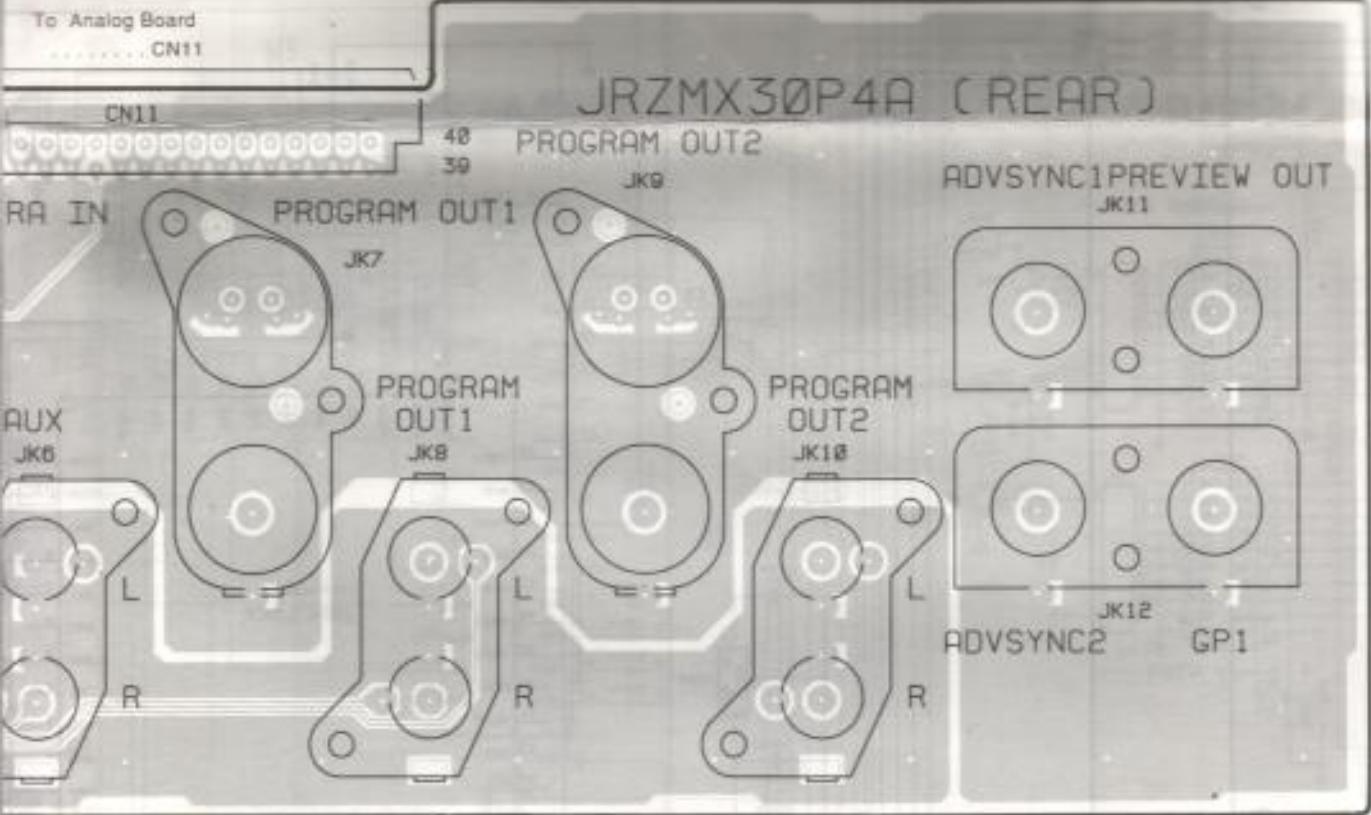
CONDUCTOR VIEW

REAR BOARD



REAR BOARD





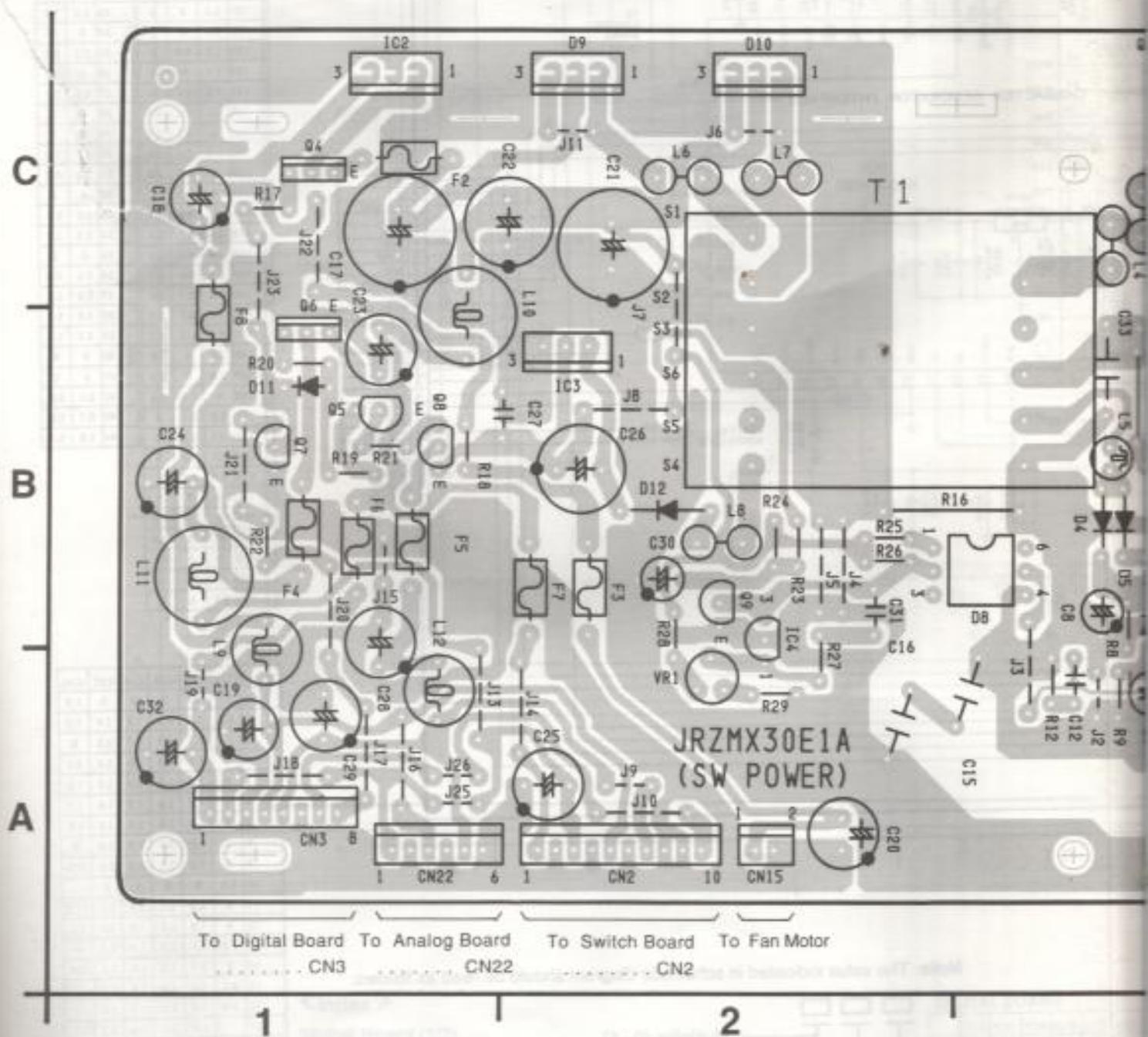
3

4

IC1 A3	Q3 C3	Q8 A3	D3 C2	D7 B2	D11 C3
IC2 C1	Q4 C1	Q9 A3	D4 C2	D8 A3/B2	D12 B3
IC3 B2	Q5 B1	Q9 B2	D5 B3	D9 C3	SW1 C1
IC4 A2	Q6 B1	D1 B4	D6 B2	D9 C2	

CONDUCTOR VIEW OF

POWER BOARD

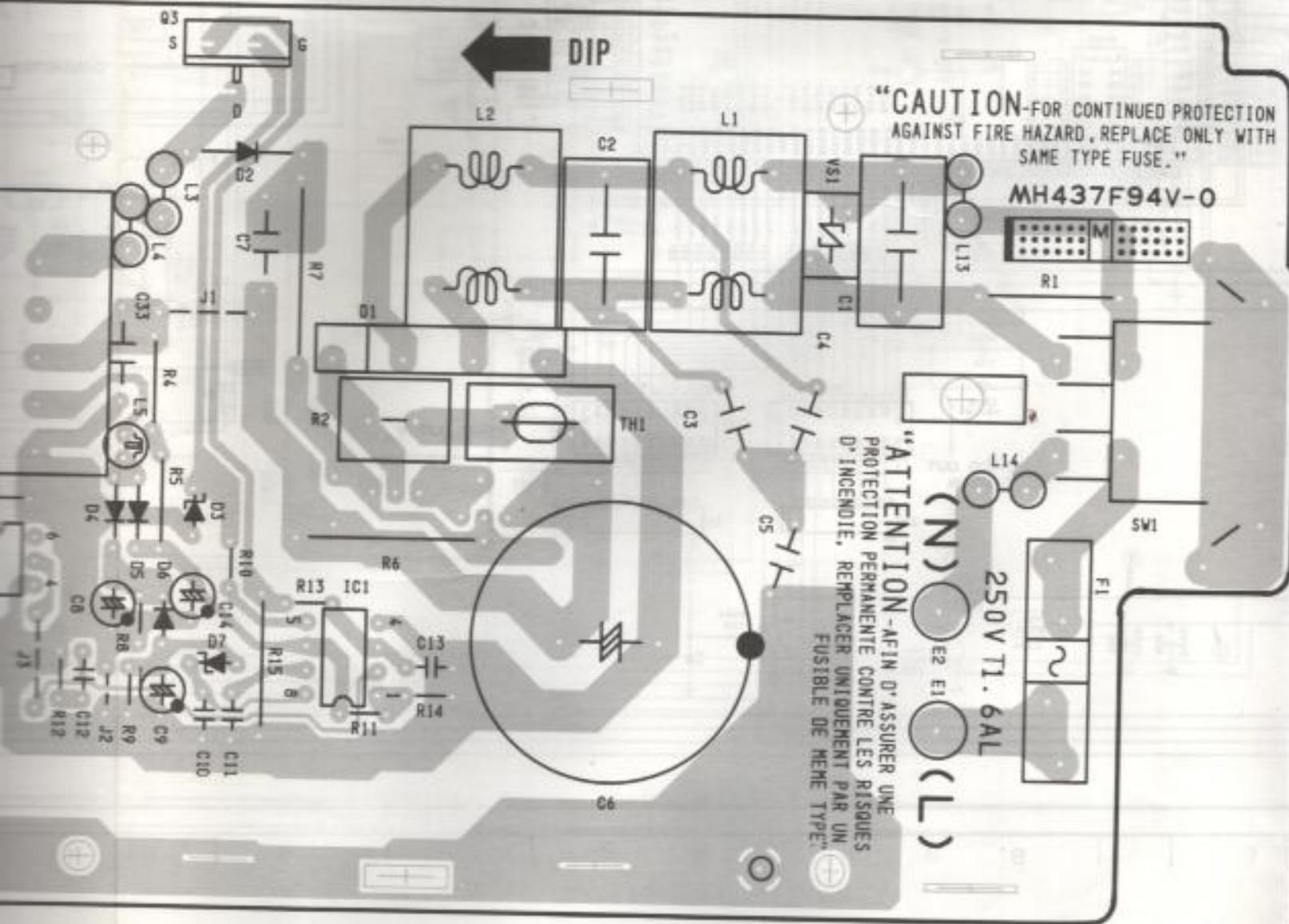


<Index >

Power Board

IC1 A3	Q3 C3	Q7 B1	D2 C3	D6 A6	D10 C2
IC2 C1	Q4 C1	Q8 B1	D3 B3	D7 A3	D11 B1
IC3 B2	Q5 B1	Q9 B2	D4 B3	D8 B3	D12 B2
IC4 A2	Q6 B1	D1 B4	D5 B3	D9 C2	SW1 B5

VIEW OF POWER BOARD



3

4

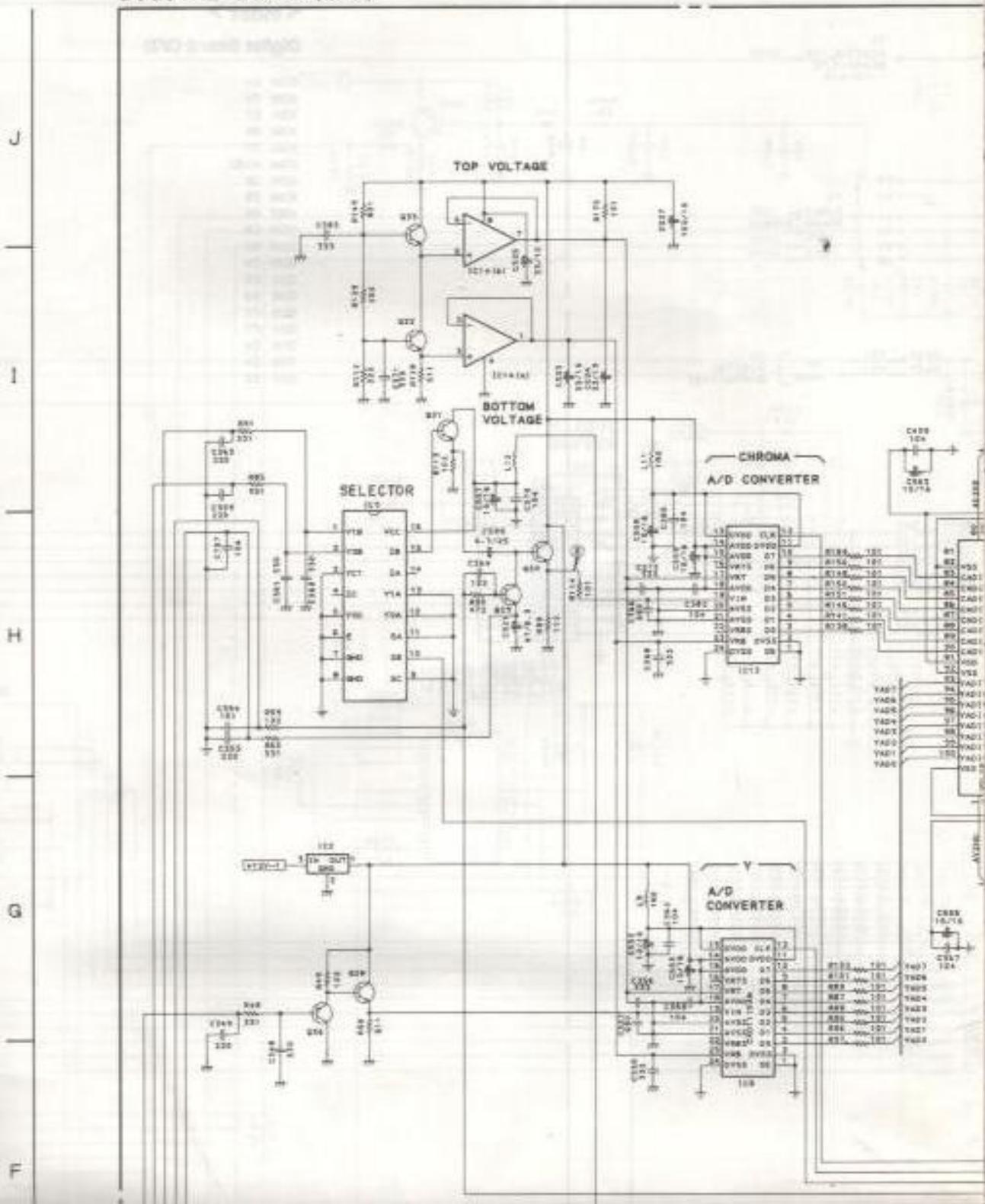
5

Type of capacitor:

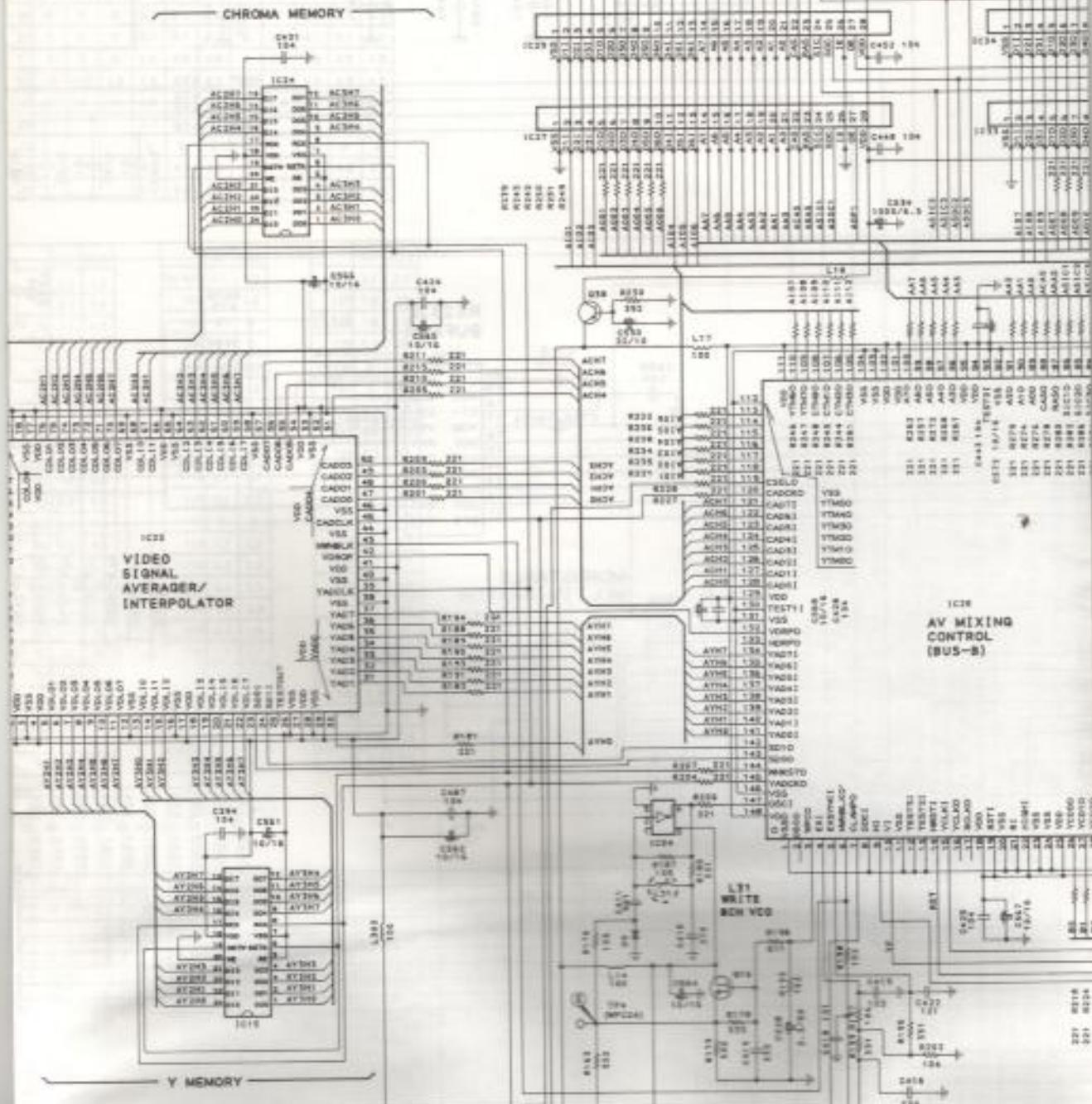
Uuniverse = $0.1\mu F$
Cells a

OF DIGITAL BOARD (3/3)

DIGITAL BOARD (2/3)

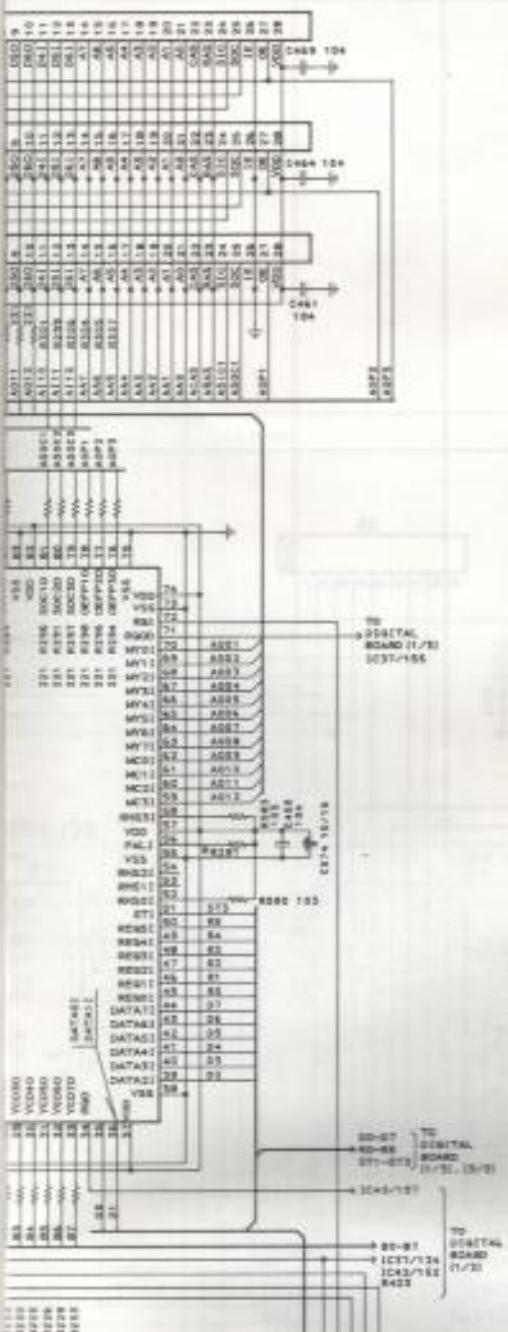


- Y CHROMA MEMORY



DIGITAL BOARD

	IC9	IC5	IC8	IC10	IC11	IC12	IC13	IC15	IC17	IC18	IC21
Row 1	0	0	0	0	0	0	0	2.0	0	0	0
2	0	0	0	2.1	2.1	2.1	0	2.2	2.6	2.6	2.6
3	1.1	2.6	1.9	2.2	2.2	2.2	1.6	2.3	3.0	3.0	3.0
4	1.2	4.5	2.2	2.2	2.2	2.2	1.8	1.8 ^b	2.4	2.4	2.4
5	1.3	1.1	2.4	2.4	2.4	2.3	1.6	0	2.7	2.7	2.7
6	1.4	1.1	1.9	2.5	2.5	2.4	2.8	5.0	3.1	3.1	3.1
7	1.6	0	1.9	2.5	2.5	2.6	1.1	0	2.4	2.6	2.6
8	1.8	0	2.2	2.5	2.5	2.4	0.9	2.4	2.4	2.3	2.3
9	2.3	0	2.5	2.5	2.4	2.3	0.9	1.7	2.1	2.0	2.0
10	2.4	5.0	2.9	2.5	2.5	2.5	3.5	1.8	2.5	2.4	2.5
11	5.0	5.0	5.0	5.0	2.2	2.2	5.0	1.9	2.4	2.8	2.6
12	2.3	2.4	2.4	2.2	2.2	2.3	2.6	2.2	1.7	1.7	1.7
13	5.0	5.0	1.8	2.6	2.6	2.3	5.0	3.8	2.5	2.5	2.5
14	5.0	5.0	5.0	0.1	0.1	0.1	5.0	2.6	0.1	0.1	0.1



	HTAC	FBL
执行数	100000	100000
未完成	000000	000000

	ICF	IC25
Pus 1	0	0
2	2.3	2.2
3	1.5	1.8
4	4.1	4.2
5	4.5	4.5
6	4.3	4.4
7	0.2	0.2
8	0	0
9	0.8	0.8
10	0	0
11	0	0
12	0	0
13	0	0
14	4.3	4.3
15	2.3	2.3
16	2.3	2.4
17	2.3	2.3
18	5.0	5.0
19	5.1	5.0
20	0	0
21	3.1	3
22	5.1	5.0
23	0	0
24	0	0
25	5.1	5.0

	KCF	K25
18	2.0	2.2
17	2.0	2.3
16	2.0	2.3
15	2.0	2.4
14	2.1	2.6
13	1.9	1.8
12	2.2	1.9
11	3.0	3.8
10	5.1	5.0
9	9.1	0.1
8	0.1	0.1
7	5.1	5.0
6	0	0
5	0.1	0.1
4	0.1	0.1
3	0.1	0.1
2	0.1	0.1
1	0.1	0.1
0	0.1	0.1
-1	4.6	4.6
-2	4.6	4.6
-3	0.1	0.1
-4	0.1	0.1
-5	2.5	2.5
-6	3.8	3.8

	HCF	KC15
Pun 51	0	0
52	4.6	4.6
53	0.1	0
54	0.1	0
55	0	0
56	5.1	5.8
57	5.1	5.8
58	4.6	4.9
59	2.2	2.2
60	2.0	1.5
61	2.2	2.2
62	2.3	2.3
63	2.9	3.2
64	2.9	2.9
65	2.4	3.8
66	2.4	2.7
67	2.4	2.6
68	2.6	3.0
69	2.4	2.9
70	2.3	2.3
71	0	0
72	7.1	5.1
73	0	0
74	5.1	6.0
75	3	6

	IC4	IC5
Row 1	1.5	1.5
2	1.5	1.5
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	2.4	2.4
11	0	0
12	0	0
13	0	0
14	0	0
15	1.5	1.5
16	5.0	5.0

	B	C	E
15	G1.5	D1.5	G01.5
16	G1.3	D1.3	G01.3
22	3.0	5.0	2.3
23	0.2	1.2	3.2
24	1.9	5.1	1.8
25	3.2	5.0	2.6
26	2.2	3.6	1.5
27	4.2	5.0	3.6
28	3.1	5.0	2.4
29	0.3	1.2	3.2
30	3.2	5.0	2.8
31	2.2	3.5	1.6
33	4.2	5.0	3.6
35	2.3	5	3.0
36	2.4	5	3.1
37	4.2	5.0	3.1

	IC3	IC5	IC8	IC10	IC11	IC12	IC13	IC15	IC17	IC18	IC21
15	5.0	5.0	5.8	0.1	0.1	0.1	5.0	2.4	0.1	0.1	0.1
16	5.0	5.0	5.0	0.2	0.2	0.2	5.0	2.3	0.2	0.2	0.1
17	3.6	3.6	3.5	0.1	0.1	0.1	3.5	2.4	0.1	0.1	0.1
18	5.0	5.0	3.0	0.1	0.1	0.1	5.0	5.0	0.1	0.1	0.1
19	2.4	2.6	2.7	0.1	0.1	0.1	2.6	5.0	0.1	0.1	0.1
20	0	0	0	0.1	0.1	0.1	0	0	0.1	0.1	0.1
21	0	0	0	0.1	0.1	0.1	0	2.3	0.1	0.1	0.1
22	0	0	0	4.9	4.9	4.9	0	2.3	4.9	4.9	4.9
23	1.6	1.6	1.6	4.9	4.9	4.9	1.6	2.8	4.9	4.9	4.9
24	0	0	0	0.6	0.6	0.6	0	2.6	0.6	0.6	0.6
25				0.7	0.7	0.7			0.7	0.7	0.7
26				0	0	0			0	0	0
27				4.3	4.3	4.3			4.3	4.3	4.3
28				5.0	5.0	5.0			5.0	5.0	5.0

	IC7	IC25
75	4.1	4.3
77	4.3	4.3
78	4.3	4.3
79	0.7	0.8
80	0.7	0.6
81	0.7	0.6
82	5.1	5.0
83	0	0
84	0.6	0.6
85	0.6	0.6
86	0.6	0.6
87	4.9	4.9
88	4.9	4.9
89	0.1	0.1
90	0.1	0.1
91	0.1	0.1
92	0	0
93	0	0
94	5.1	5.0
95	5.1	5.0
96	0.1	0.1
97	0.1	0.1
98	0.2	0.2
99	0.1	0.1
100	0.1	0.1

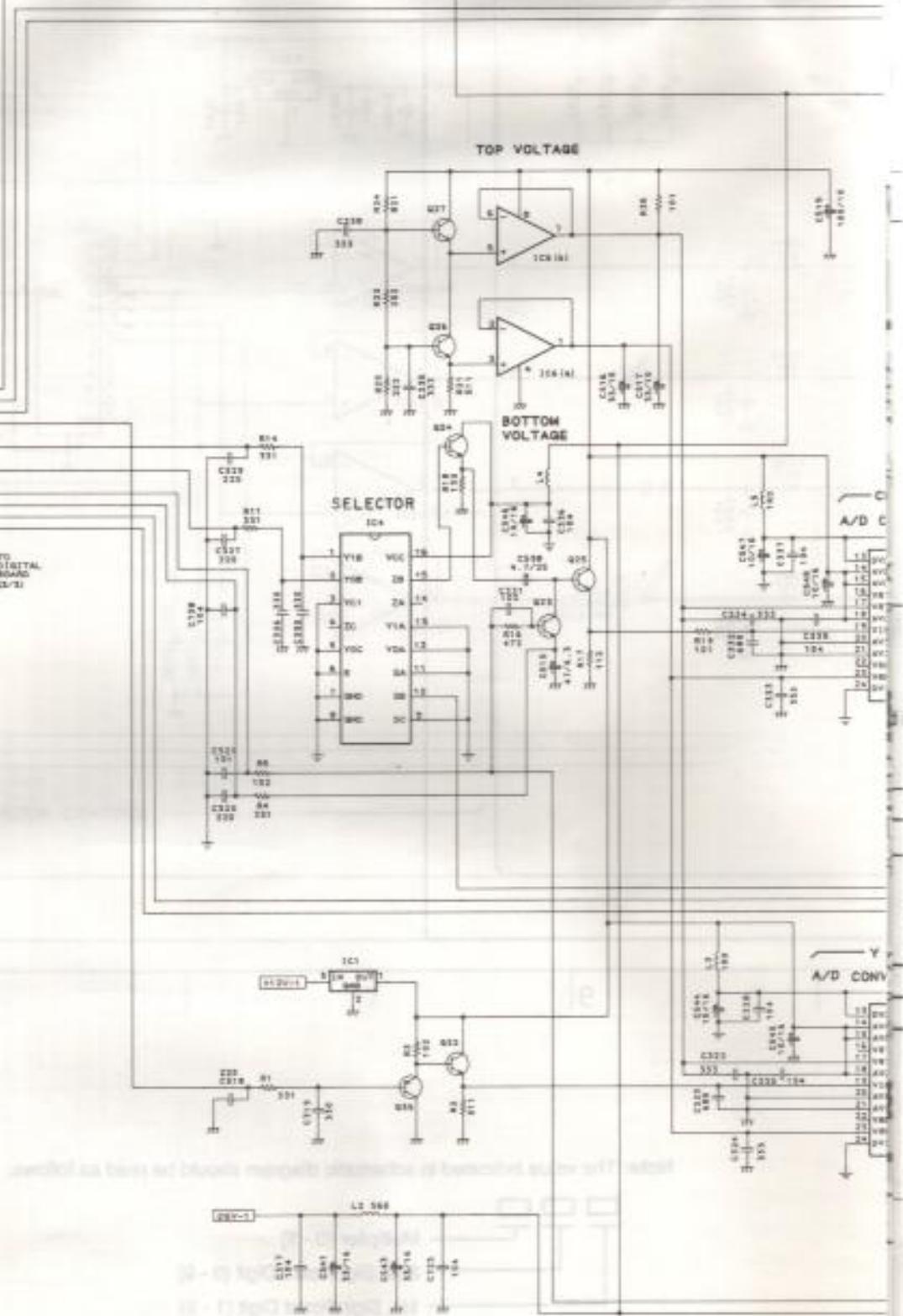
	IC7	IC25
Pin 101	5.1	5.0
102	5.1	5.0
103	0	0
104	0	0
105	2.3	2.3
106	1.7	1.3
107	2.4	2.7
108	2.8	2.8
109	2.8	3.0
110	2.7	2.7
111	5.1	5.0
112	0	0
113	2.3	2.5
114	2.2	2.4
115	2.2	2.5
116	2.2	3.0
117	2.2	2.8
118	2.1	2.7
119	2.5	2.6
120	1.3	2.2
121	2.9	1.9
122	1.3	1.2
123	1.2	1.1
124	1.5	1.5
125	1.6	1.3

	IC7	IC25
126	1.7	2.4
127	1.6	2.5
128	1.9	2.4
129	5.1	5.0
130	0	0
131	0	0
132	5.1	5.0
133	5.0	5.0
134	2.7	3.1
135	2.5	2.7
136	1.9	2.8
137	1.8	2.5
138	1.7	2.5
139	1.7	3.1
140	1.8	2.9
141	1.5	2.7
142	0	0
143	0	0
144	5.1	5.0
145	1.8	2.4
146	0	0
147	1.5	2.6
148	3.1	5.0

	IC22	IC22	IC22	IC22			
1	2.8	Pin 29	1.9	Pin 41	5.0	Pin 61	0.9
2	5.0	22	2.2	42	5.0	62	1.1
3	0	13	0	43	4.3	63	2.4
4	5.0	14	0	44	0	64	1.7
5	2.8	25	1.0	45	2.4	65	0
6	2.9	16	0	46	0	66	2.0
7	2.8	27	1.8	47	2.4	67	1.8
8	2.3	28	0	48	2.5	68	1.7
9	2.4	29	5.0	49	2.4	69	0
10	2.8	30	2.6	50	3.2	70	3.8
11	3.0	31	2.8	51	1.5	71	1.2
12	0	32	2.9	52	5.0	72	1.2
13	1.9	33	2.3	53	0	73	1.9
14	2.8	34	2.3	54	5.0	74	2.2
15	2.1	35	2.4	55	1.2	75	2.4
16	0	36	2.6	56	1.2	76	2.5
17	5.0	37	2.9	57	3.8	77	5.0
18	1.7	38	0	58	0	78	0
19	1.7	39	2.4	59	2.9	79	5.0
20	1.8	40	0	60	0.9	80	2.4

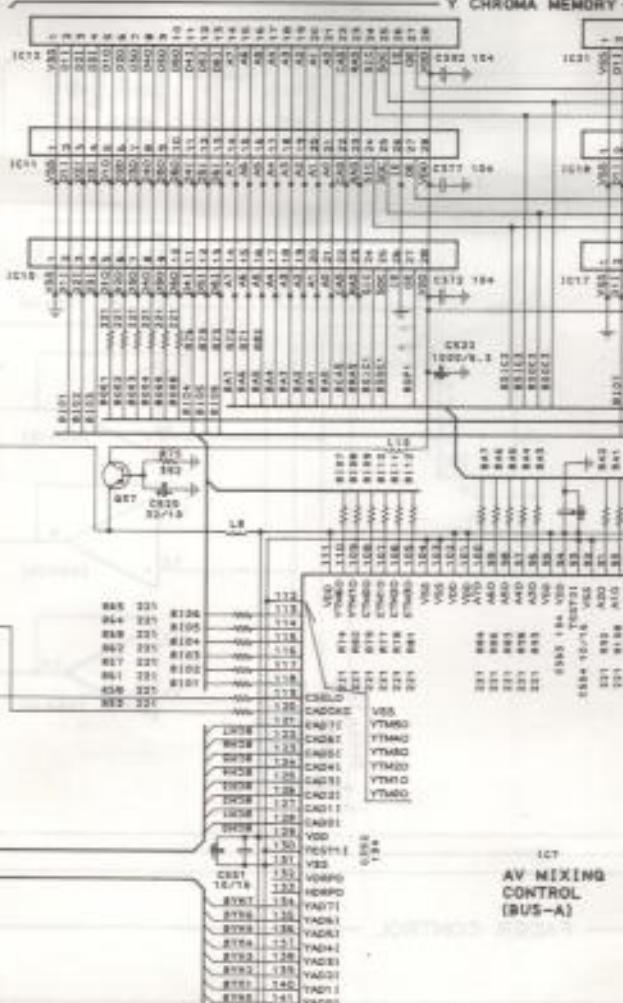
CH12	VBI
R-19	12
R-20	13
R-21	14
R-22	15
R-23	16
R-24	17
R-25	18
CLAMPS	19
CLAMPB	20
REFB	21
REFAC	22
Y1A	23
Y1D	24
Y2A	25
Y2D	26
CLAMPA	27
CLAMPB	28
CYVCA	29
WVB	30
BSBL1	31
AMPL1	32
SP1	33
YHD1	34
BSBL2	35
AMPL2	36
SP2	37
YHD2	38

TO
ANALOG
BOARD
... CH13

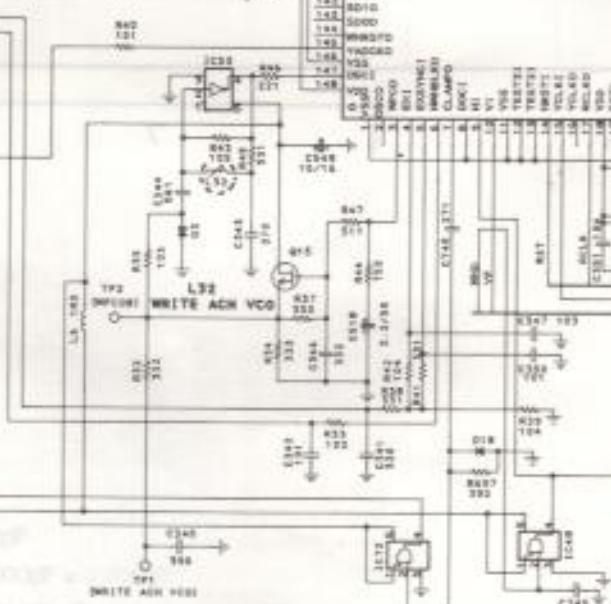


< diagram 3 >

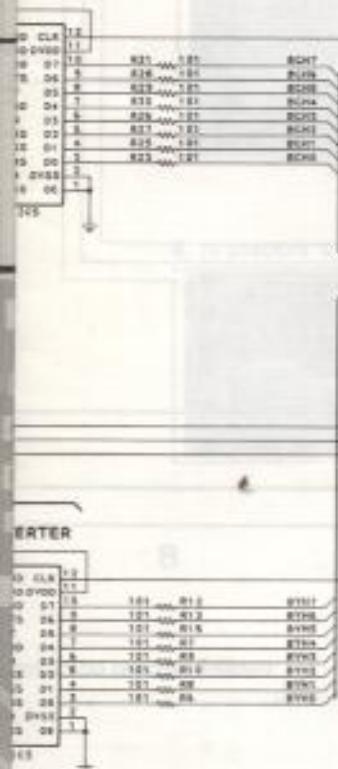
Y CHROMA MEMORY



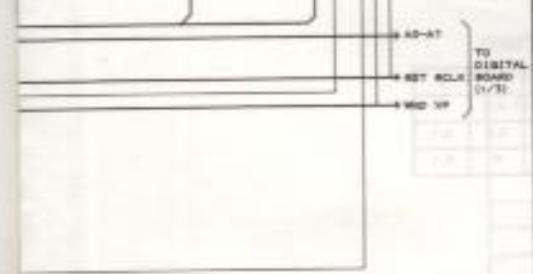
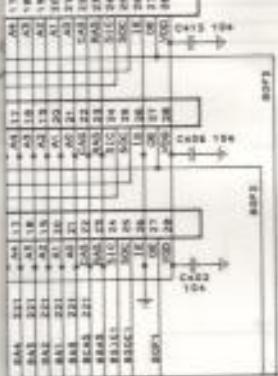
**IC7
AV MIXING
CONTROL
(BUS-A)**



**Y CHROMA
ONVERTER**



	STD	PAL
ACM1	0.000	0.000
ACM2	0.000	0.000



1	0	0	23	0.0	0.2	3.2	3.2
2	0	0	24	1.9	9.7	3.3	
3	0	0	25	3.2	1.0	2.6	
4	0	0	26	2.2	7.6	1.5	
5	0	0	27	4.2	5.0	3.6	
6	0	0	28	3.1	5.0	2.4	
7	0	0	29	0.2	3.2	3.2	
8	0	0	30	3.2	5.0	2.6	
9	0	0	31	2.2	3.5	1.6	
10	2.6	2.4	32	4.2	5.0	3.5	
11	0	0	33	2.3	0	3.0	
12	0	0	34	2.4	0	3.1	
13	0	0	35	4.2	5.0	3.1	
14	0	0	36	1.8	1.8		
15	0	0	37	4.2	5.0	3.1	
16	0	0	38	4.3	5.0	3.1	
17							
18							
19							
20							

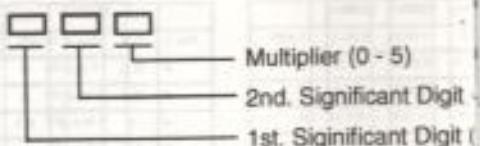
	IC2	IC6	IC14	IC48	IC53	IC54	IC72	IC73
Pin 1	5.0	1.6	1.6	5.1	-	-	5.1	5.1
2	0	1.6	1.6	0.7	2.6	2.6	2.5	0.1
3	11.8	1.6	0.5	0	0	0	0	0
4	0	0	0.8	2.6	2.6	0.1	0.1	
5	3.6	3.5	5.1	5.1	5.1	5.1	5.1	
6	3.6	3.5						
7	3.6	3.5						
8	5.0	5.0						

<Index>

Digital Board (2/3)

IC1	B2	IC25	H7	Q28	G2
IC2	G2	IC27	I6	Q29	H2
IC3	B4	IC29	J6	Q30	H2
IC4	C2	IC31	J6	Q31	I2
IC5	C4	IC33	J8	Q32	I2
IC6	D3/E3	IC34	J8	Q33	J2
IC7	C7	IC36	J8	Q35	B2
IC8	G3	IC48	A7	Q36	G2
IC9	H2	IC53	B6	Q37	D6
IC10	E8	IC54	G6	Q38	I6
IC11	E8	IC72	A7	D3	B6
IC12	E8	IC73	F7	D5	G6
IC13	H3	Q15	B6	D18	A7
IC14	I2/U2	Q16	F7	D19	F7
IC15	G5	Q22	B3		
IC16	E7	Q23	C3		
IC18	E7	Q24	D3		
IC21	E7	Q25	D3		
IC22	H5	Q26	D3		
IC24	I5	Q27	E3		

Note: The value indicated in schematic diagram is



<Example>

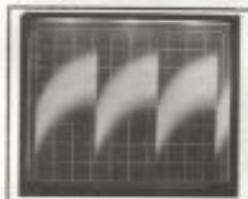
For Resistor: $330 \rightarrow 33 \times 10^0 = 33\Omega$

$561 \rightarrow 56 \times 10^1 = 560\Omega$

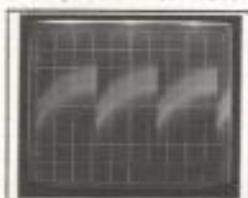
$123 \rightarrow 12 \times 10^3 = 12k\Omega$

14	2.0	24	2.3	56	5.0	74	3.0
15	2.1	25	2.4	57	5.2	75	3.4
16	0	36	2.6	58	1.2	76	1.5
17	5.0	37	2.8	59	1.6	77	5.0
18	1.7	38	0	60	0	78	0
19	1.7	39	2.4	79	2.9	79	1.0
20	1.8	40	0	80	0.9	80	2.4

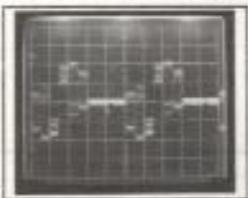
6. 20 μ sec/DIV, 50mV/DIV



7. 20 μ sec/DIV, 0.1V/DIV



8. 10 μ sec/DIV, 0.5V/DIV



should be read as follows:

(0 - 9)
1 - 9)

GRADE MARKS

For Capacitor: $820 \rightarrow 82 \times 10^0 = 82\text{pF}$
 $102 \rightarrow 10 \times 10^2 = 1000\text{pF} = 0.001\mu\text{F}$
 $104 \rightarrow 10 \times 10^4 = 100000\text{pF} = 0.1\mu\text{F}$

The suffix attached to capacitance indicates a type of capacitor.

0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6
1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4

1

= 0.
F = t
icate

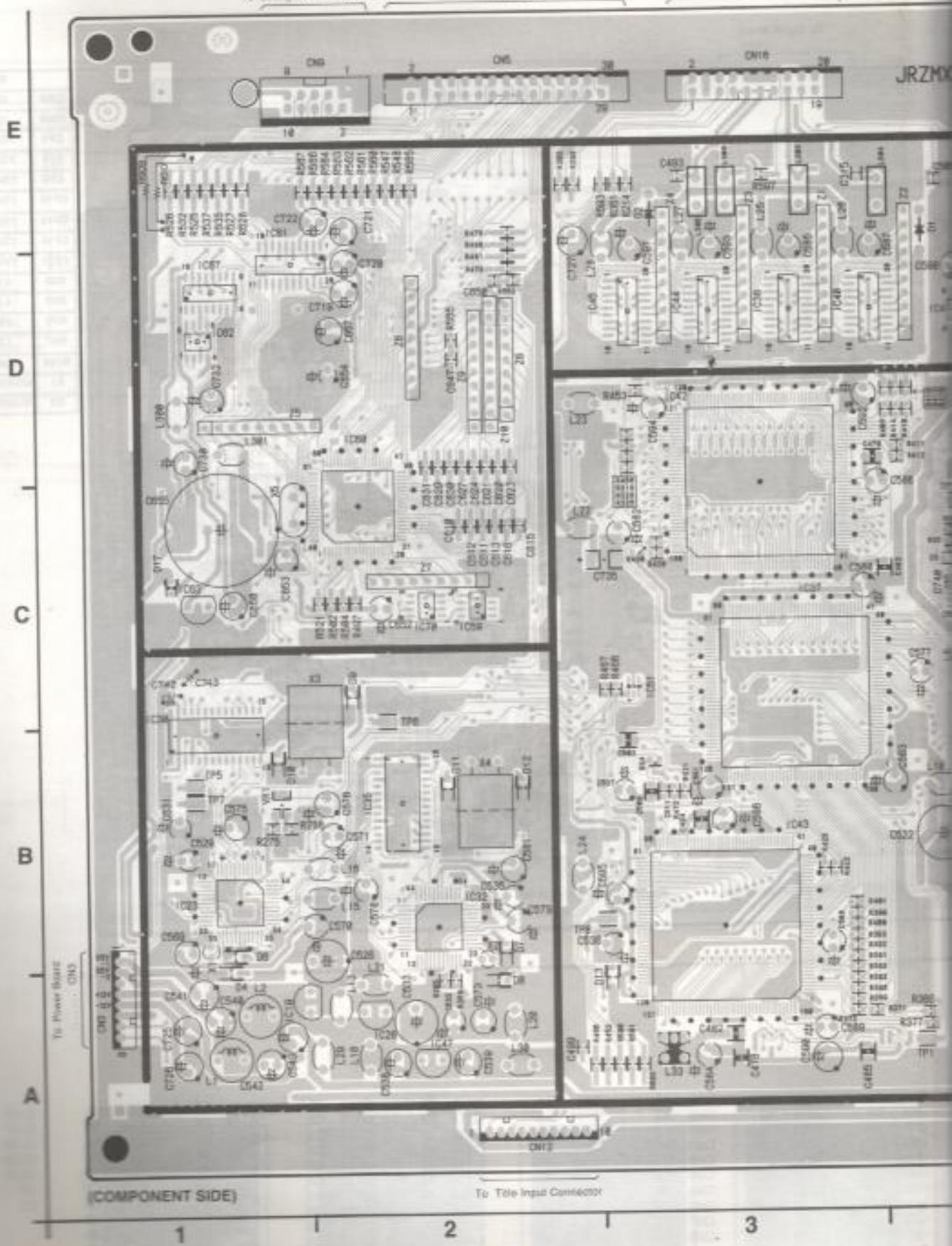
COMPONENT SIDE

<Index>

DIGITAL BOARD

Digital Board
(Component Side)

C1 E5
C2 E6
C3 D4
C4 D4
C5 D4/D5
C6 E5
C7 C4
C8 D5/D6
C9 D5
C10 A4/B4
C11 A4/B4
C12 A4/B4
C13 D6
C14 E6
C15 C5/D5
C16 A4/B4
C17 A4/B4
C18 A1
C19 A5/B5
C20 C5-6/C5-6
C21 B1
C22 C6/D6
C23 B5-6/C5-6
C24 A5/B5
C25 A2
C26 A5/B5

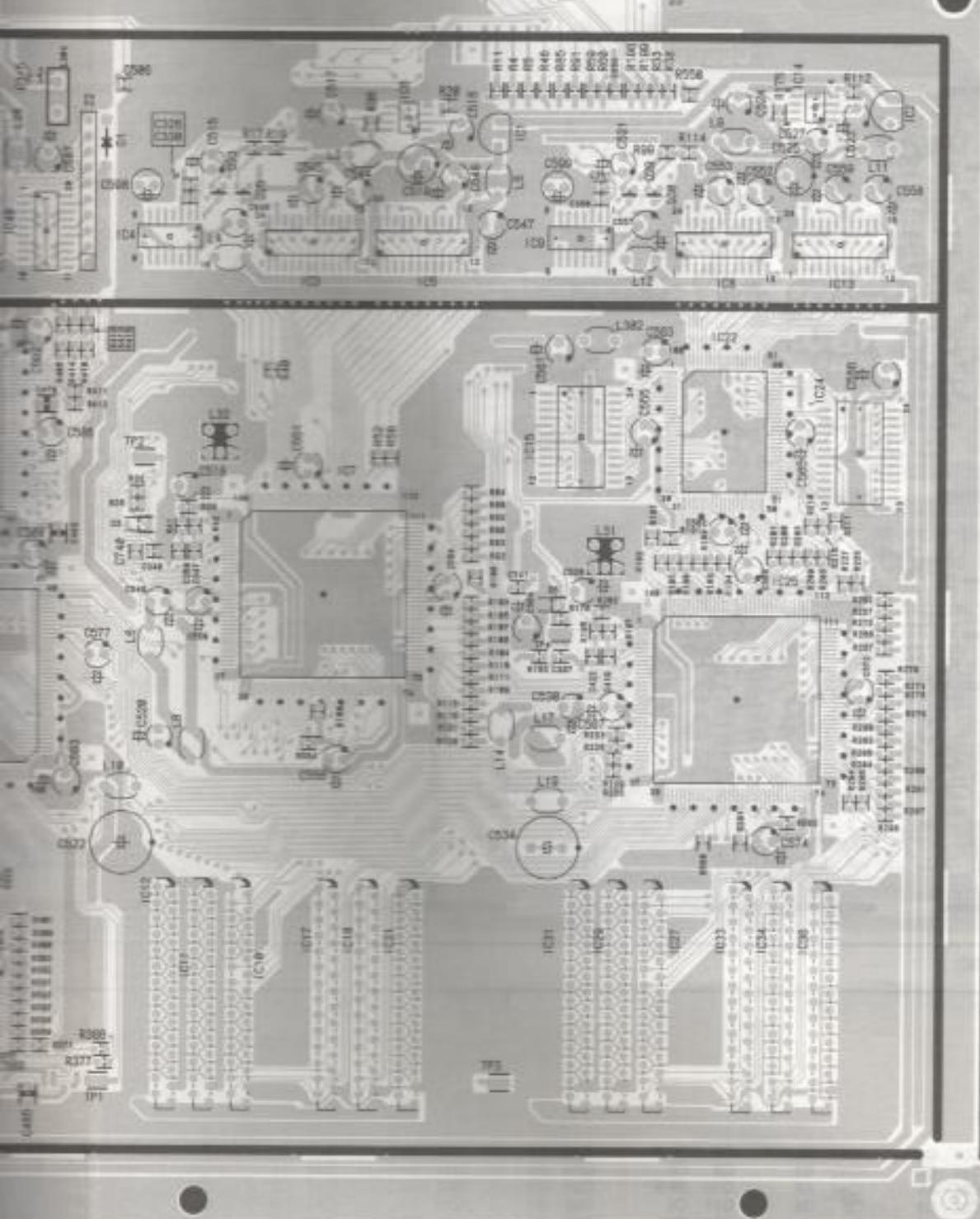


CONDUCTOR VIEW OF

To Analog Board
CN13

ANSWER

JRZMX30P3A (DIGITAL)



	NTSC	PAL
IIC30	MN676011NPS	MN676021PPS
IIC35	MN676011NPS	MN676021PPS
C532	2.2 μ F 50V	3.3 μ F 50V
R100	Open	0 Ω
R265	620 Ω	0 Ω
R266	620 Ω	0 Ω
R281	Open	0 Ω
R453	Open	0 Ω
X1	MS30914M10	MS30917M10
X2	MS30914M10	MS30917M10
X3	MS30914M10	N8R4R40625
X4	MS30914M10	N8R4R40625

VIEW OF DIGITAL BOARD

PATTERN SIDE

<Index>

Digital Board

(Pattern Side)

IC26 D6

IC39 A3-A4

IC41 A4

IC46 B6

IC48 D5

IC50 C5

IC52 B6

IC53 C3

IC54 C2

IC56 C6

IC58 B5

IC64 E6

IC65 C8

IC66 D6

IC68 E5

IC69 C6

IC72 D3

IC73 C2

Q14 E3

Q15 C3

Q16 C2

Q17 B6

Q18 A5

Q19 B6

Q20 B5

Q21 A4

Q22 D3

Q24 D3

Q26 E2

Q27 E2

Q28 D2

Q31 D2

Q32 E1

Q33 E1

Q35 D9

Q36 E2

Q37 B3

Q38 B2

Q39 E4

Q40 E4

Q41 E4

Q42 C6

Q44 C6

Q45 D5

D14 D5

D15 C6

D16 C6

D18 D3

D19 C2

D17 C1

DIGITAL BOARD

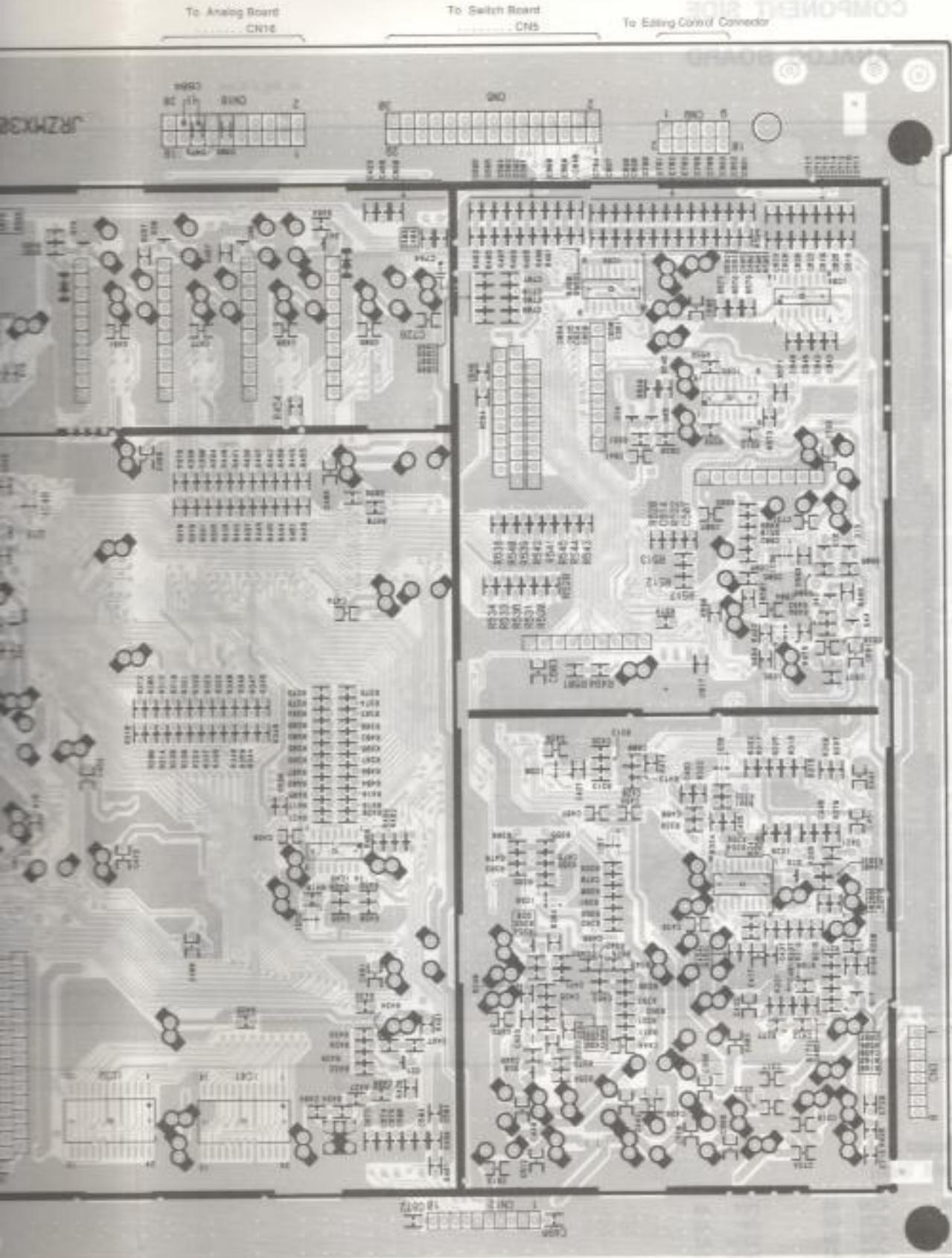
To Analog Board

CN13

JRMZM30P3A (DIGITAL)

E
D
C
B
A

1 2 3



	NTSC	PAL
C430	0.1 μ F	0.01 μ F
C460	680 pF	100 pF
C465	680 pF	100 pF
C475	680 pF	100 pF
C476	680 pF	100 pF
C687	Open	100 pF
R183	10 Ω	330 Ω
R184	10 Ω	330 Ω
R217	10 k Ω	1 k Ω
R220	10 Ω	330 Ω
R237	Open	0 Ω
R253	0 Ω	Open
R254	Open	0 Ω
R258	1 k Ω	7.5 k Ω
R315	0 Ω	Open
R316	0 Ω	Open
R317	0 Ω	Open
R325	Open	0 Ω
R332	0 Ω	Open
R342	0 Ω	Open
R343	Open	0 Ω
R352	Open	0 Ω
R359	0 Ω	Open
R360	0 Ω	Open
R361	0 Ω	Open
R362	0 Ω	Open
R439	Open	0 Ω
R507	Open	0 Ω
R509	10 k Ω	Open
R574	0 Ω	Open
R575	Open	0 Ω
R600	2 M Ω	Open

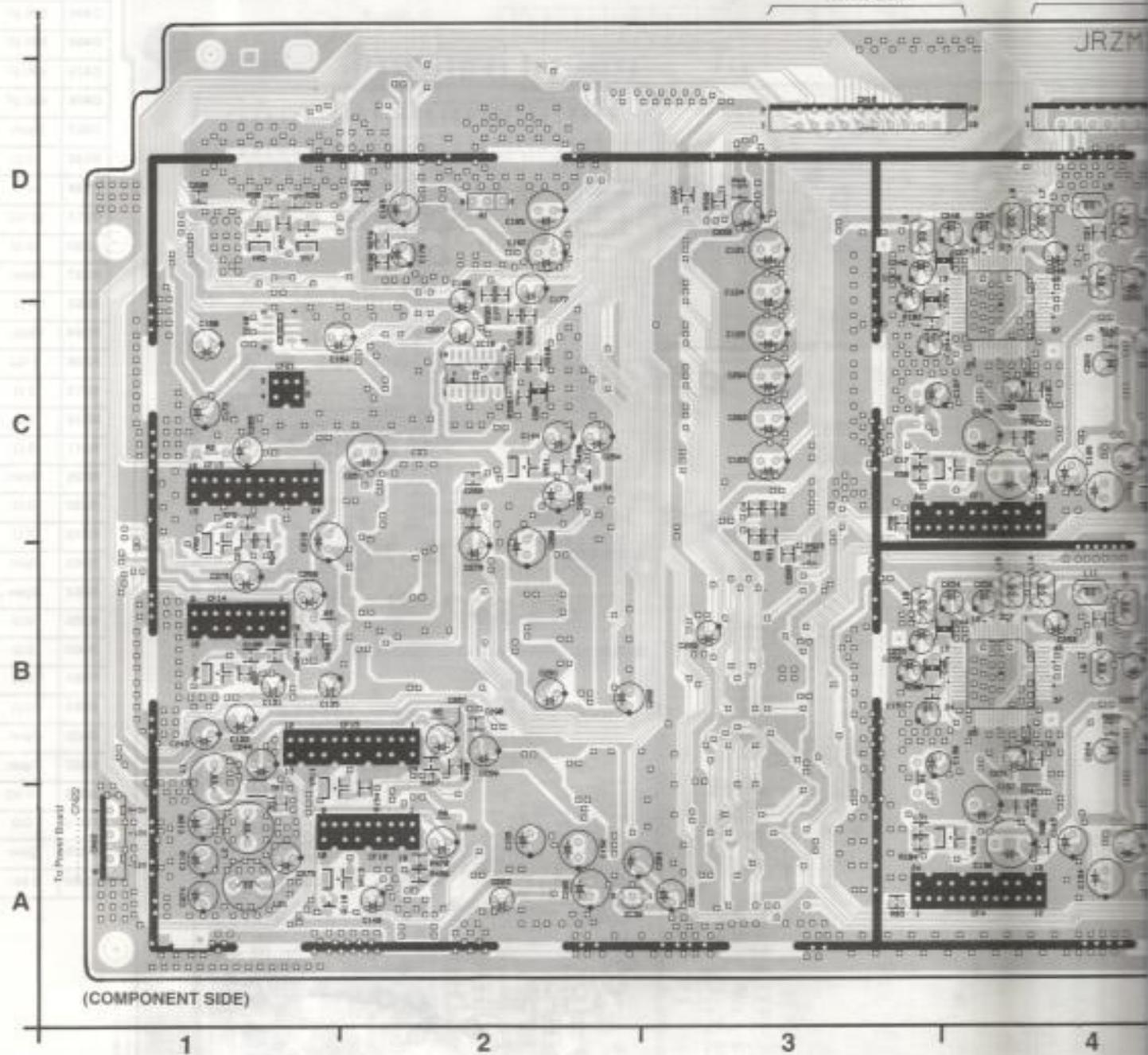
To Power Board
CN3

COMPONENT SIDE

ANALOG BOARD

To Digital Board
CN16

JRZM



<Index>

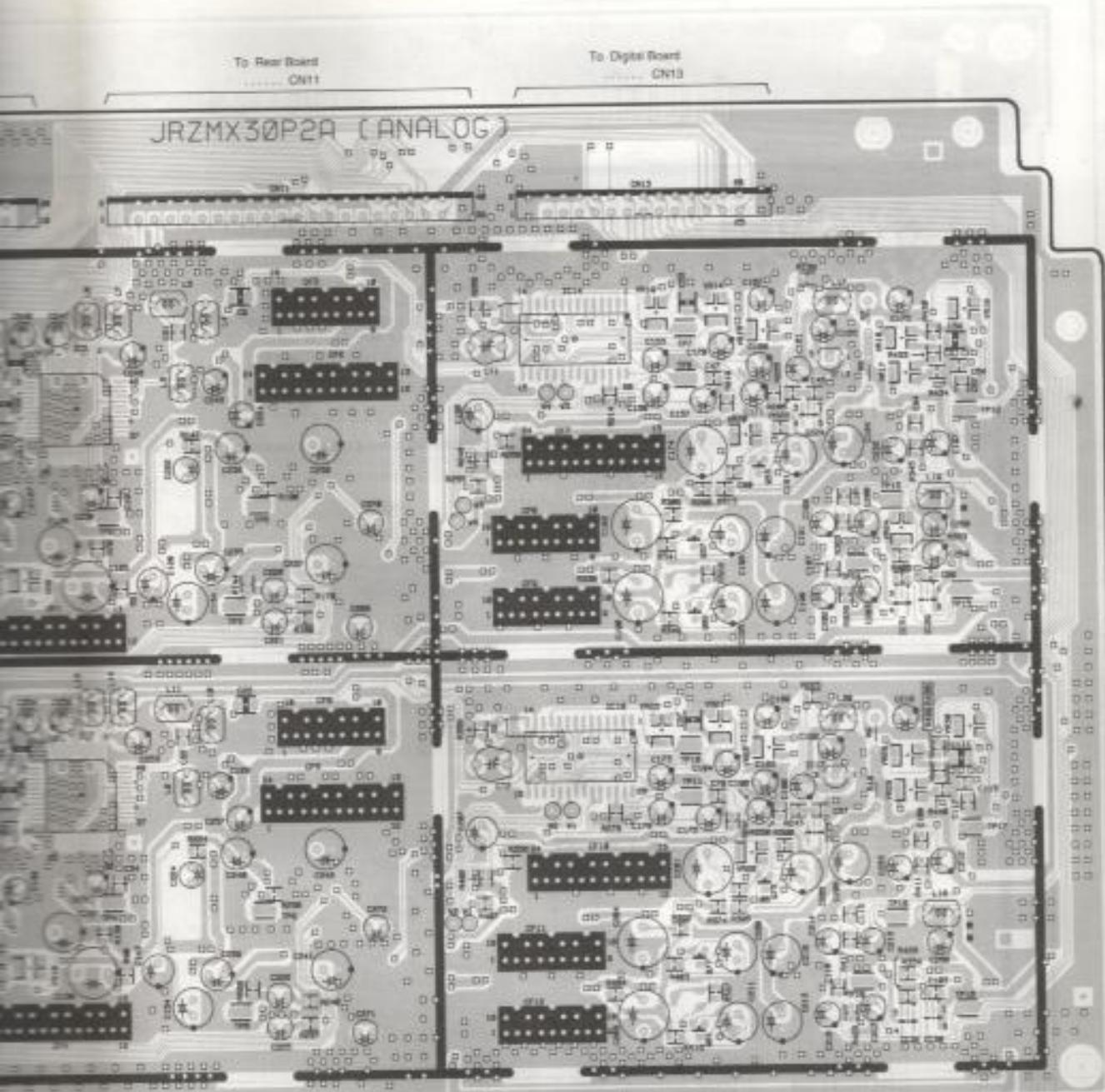
Analog Board

(Component Side)

IC5	C4/D4	IC30	A6	Q77	A6
IC7	B4	IC31	C6	Q81	A6
IC13	D6	IC32	A6	Q110	A1
IC14	D5	IC39	A1	Q134	C2
IC17	B6	IC40	C1		
IC18	C2	Q1	D1		
IC19	B5	Q53	C6		
IC24	D6	Q57	C6		
IC25	B6	Q62	C6		
IC29	C6	Q75	B6		

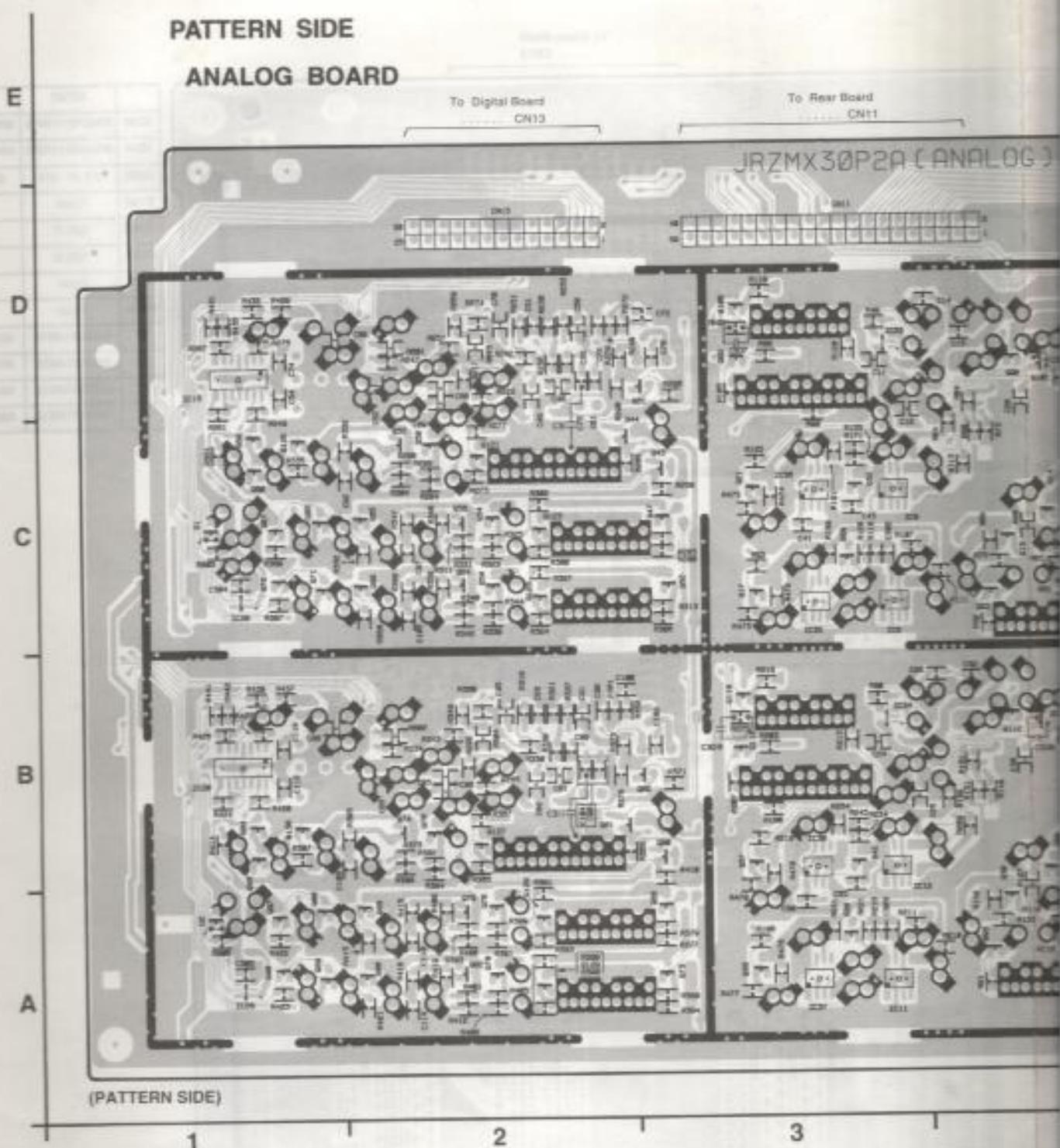
CONDUCTOR VIEW OF

GRAB JATDIO



	NTSC	PAL
R68	0 Ω	Open
R73	Open	0 Ω
R128	1.5 kΩ	1.3 kΩ
R149	Open	0 Ω
R151	0 kΩ	Open
R165	3.3 kΩ	2.7 kΩ
R181	820 Ω	1.2 kΩ
R221	1.5 kΩ	1.3 kΩ
R242	Open	0 Ω
R230	Optm	0 Ω

VIEW OF ANALOG BOARD



<Index>

Analog board

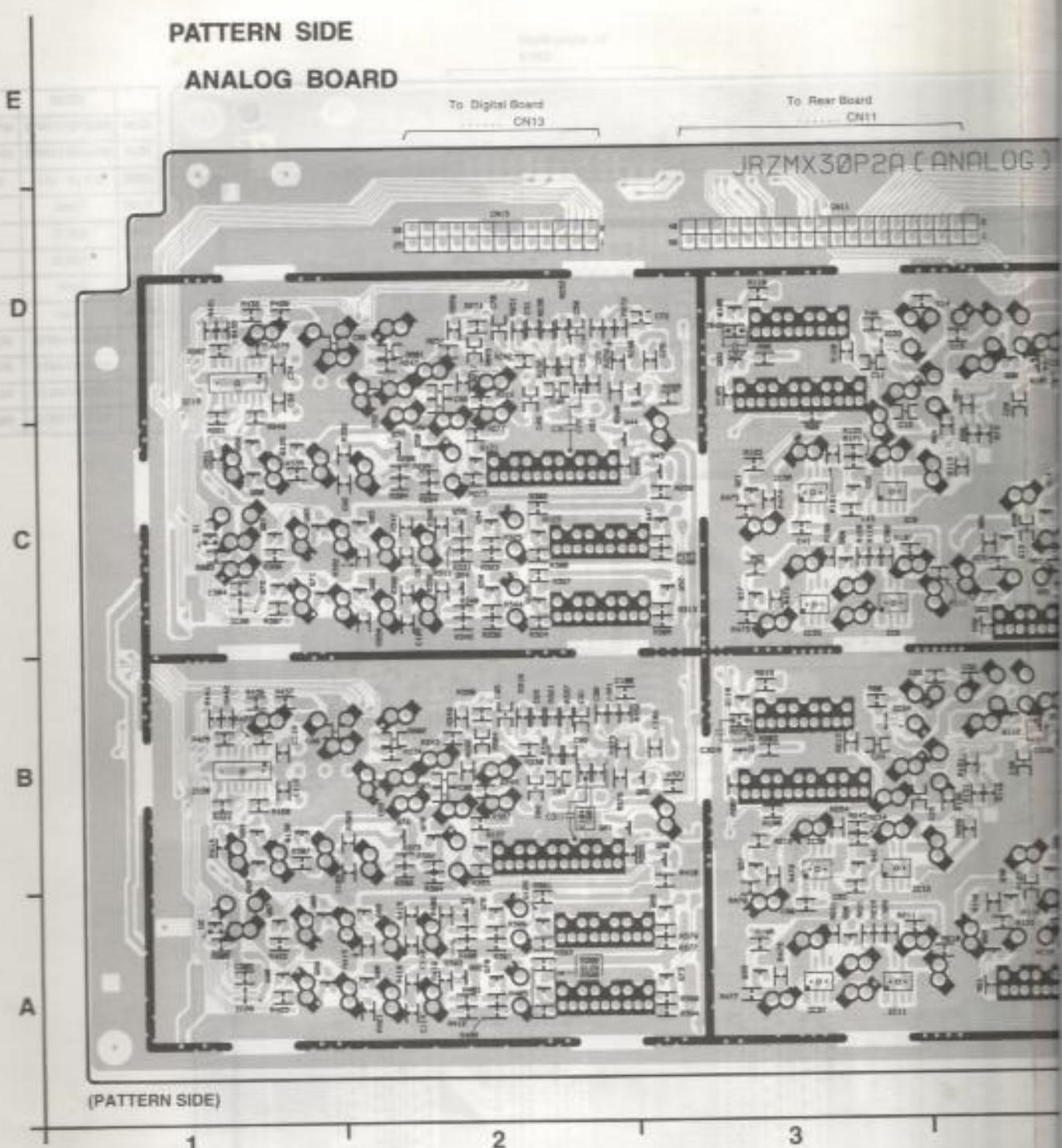
(Pattern Side)

IC8 C3	IC26 C1	IC42 B5	Q8 B4-5	Q18 A4	Q30 A4	Q40 A5	Q51 D3
IC8 C3	IC27 C5	IC43 B5	Q9 C5	Q19 A4	Q31 B4-5	Q42 B3	Q52 C3
IC10 A5	IC28 A1	IC44 A5	Q10 B4-5	Q21 C3	Q32 C3	Q43 C3	Q54 C3
IC11 A3	IC33 D3	Q2 D5	Q11 C4	Q22 B6	Q33 B5	Q44 C3	Q55 C3
IC12 A3	IC34 B3	Q3 C5	Q12 C4	Q23 B6	Q34 B4-5	Q45 C6	Q56 C2
IC15 C1	IC35 C3	Q4 C5	Q13 C4	Q24 B6	Q35 A3	Q46 C6	Q58 C3
IC16 D6	IC36 C3	Q5 D5	Q14 C4	Q25 B6	Q36 B5	Q47 C3	Q59 C1
IC20 B1	IC37 A3	Q6 B4	Q15 C4	Q26 A4	Q37 A3	Q48 C6	Q60 C1
IC22 D8	IC38 A3	Q6 B4	Q16 B4-5	Q28 A4	Q38 A3	Q49 C6	Q61 B2
IC23 D8	IC41 B5	Q7 B5	Q17 C3	Q29 C3	Q39 B5	Q50 C2	Q62 C2

VIEW OF ANALOG BOARD

NTSC	PAL
Q1	Open
Open	0 Ω
1.5kΩ	1.3 kΩ
Open	0 Ω
2kΩ	Open
2.2kΩ	2.7 kΩ
2.2kΩ	1.2 kΩ
1.5kΩ	1.3 kΩ
Open	0 Ω
Open	0 Ω

PATTERN SIDE
ANALOG BOARD

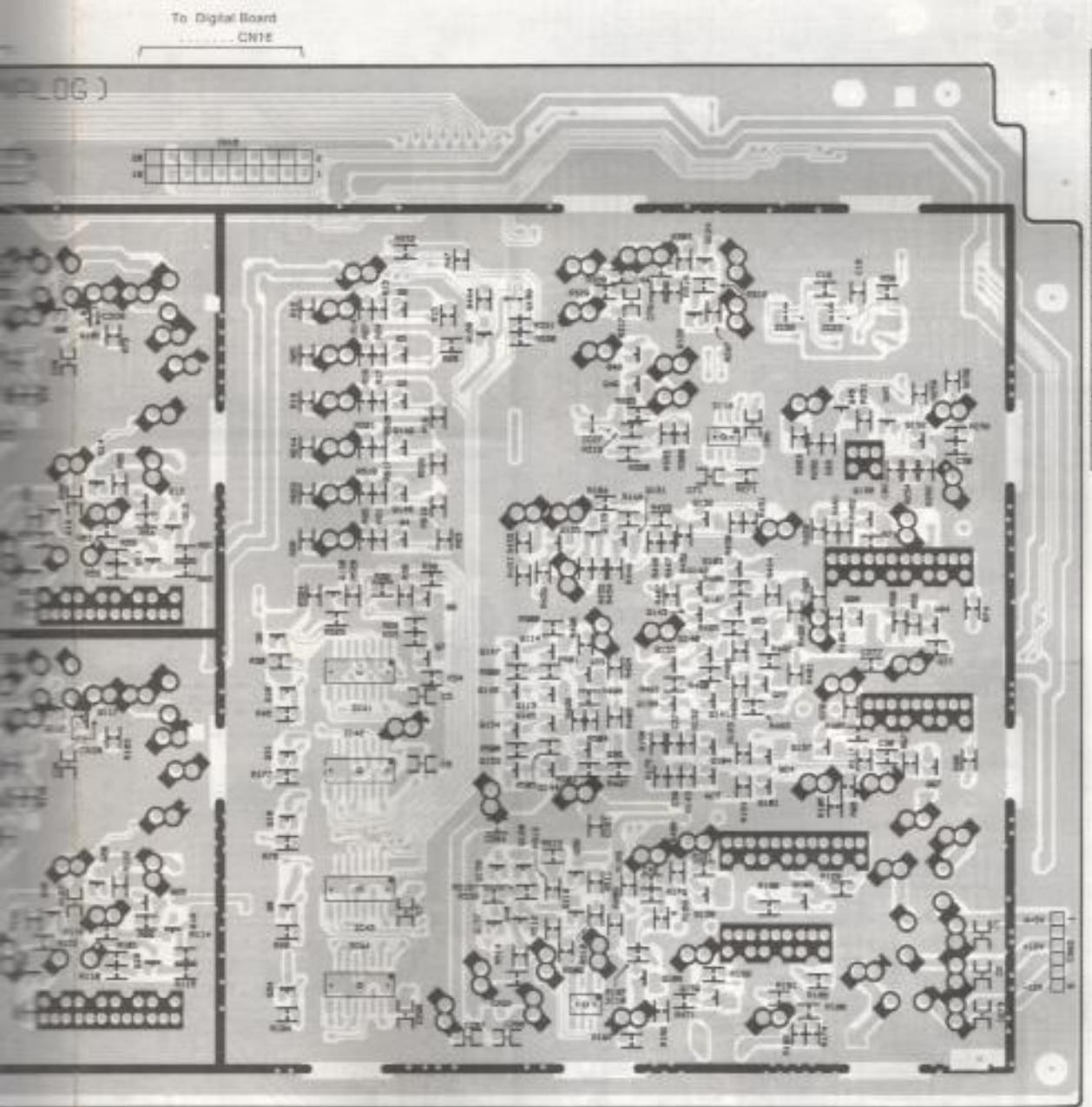


<Index>

Analog board
(Pattern Side)

IC8 C3	IC26 C1	IC42 B5	Q8 B4-5	Q18 A4	Q30 A4	Q40 A5	Q51 D3	Q61
IC8 C3	IC27 C5	IC43 B5	Q9 C5	Q19 A4	Q31 B4-5	Q42 B3	Q52 C3	Q62
IC10 A5	IC28 A1	IC44 A5	Q10 B4-5	Q21 C3	Q32 C3	Q43 C3	Q54 C3	Q64
IC11 A3	IC33 D3	Q2 D5	Q11 C4	Q22 B6	Q33 B5	Q44 C3	Q55 C3	Q65
IC12 A3	IC34 B3	Q3 C5	Q12 C4	Q23 B6	Q34 B4-5	Q45 C6	Q56 C2	Q66
IC15 C1	IC35 C3	Q4 C5	Q13 C4	Q24 B6	Q35 A3	Q46 C6	Q58 C3	Q68
IC16 D8	IC36 C3	Q5 D5	Q14 C4	Q25 B6	Q36 B5	Q47 C3	Q59 C1	Q69
IC20 B1	IC37 A3	Q6 B4	Q15 C4	Q26 A4	Q37 A3	Q48 C6	Q60 C1	Q70
IC22 D6	IC38 A3	Q6 B4	Q16 B4-5	Q28 A4	Q38 A3	Q49 C6	Q61 B2	Q71
IC23 D6	IC41 B5	Q7 B5	Q17 C3	Q29 C3	Q39 B5	Q50 C2	Q62 C2	Q72

COMPONENT SIDE



	NTSC	PAL
C306	180 pF	100 pF
C308	180 pF	100 pF
CF3	YS30500	YS30030
CF5	YS30620	YS30030
CF7	YS40072	YS40030
CF10	YS40071	YS40030
CF14	YS30600	YS30030
CF16	YS30600	YS30030
CF21	YSG0399	YSG0382
R56	4.3 kΩ	5.1 kΩ
R57	4.3 kΩ	5.1 kΩ
R79	750 Ω	680 Ω
R87	1.3 kΩ	1.5 kΩ
R154	880 Ω	750 Ω
X1	MS30914M10	MS30917M10
X2	MS30914M10	MS30917M10

Q54	C2	Q74	B2	Q87	A1	Q99	D3	Q113	B5	Q124	D6	Q135	C5	Q145	B5	Q156	B6
Q65	C1	Q76	A2	Q88	A2	Q101	B5	Q114	B5	Q125	C2	Q136	C6	Q146	B5	Q157	A5
Q66	A3	Q78	A2	Q89	A1	Q102	D4	Q116	B3	Q126	C1	Q137	B6	Q147	B5	Q158	B5
Q67	C1	Q79	A2	Q90	A1	Q103	C6	Q117	B4	Q127	B2	Q138	A6	Q148	C5	Q159	D5
Q68	C2	Q80	B3	Q93	C4	Q104	B6	Q118	B3	Q128	A2	Q139	A6	Q149	C5	Q160	D5
Q69	B3	Q82	A2	Q94	C6	Q106	D3	Q119	A5	Q129	A2	Q140	B6	Q150	C5	D1	C1
Q70	B2	Q83	B1	Q95	A4	Q107	C6	Q120	B5	Q130	B1	Q141	B6	Q152	C6	D2	A1
Q71	C1	Q84	B1	Q96	D4	Q108	A6	Q121	C2	Q131	C6	Q142	C6	Q153	B5		
Q72	C1	Q85	A2	Q97	B6	Q109	A6	Q122	D6	Q132	C6	Q143	C6	Q154	B5		
Q73	A3	Q86	A1	Q98	C6	Q112	B4	Q123	C2	Q133	C5	Q144	B5	Q155	B6		

VITCH BOARD

ANALOG BOARD

	IC6	IC8	IC10	IC11	IC12	IC13	IC15	IC17	IC27	IC23	IC24	IC25	IC26	IC29
Pin 1	4.0	6.3	4.4	4.0	6.2	5.0	4.5	5.1	4.2	4.2	4.2	4.2	5.0	3.5
2	0	0	0	0	0	0	3.1	0	5.0	5.0	0.1	0.1	0.1	5.0
3	0	6.3	4.4	4.1	6.3	8.9	4.5	8.9	0	0	0	0	0	0
4	9.3	9.3	10.3	9.4	9.3	0	0	0	4.6	4.6	0	0	0	3.7
5	4.0	6.3	4.7	4.0	6.2	4.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
6	9.3	9.3	10.3	9.4	9.3	1.3	0	0	0	0	0	0	0	0
7	3.3	4.4	4.8	3.3	4.3	1.4	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	5.0	0	0	0	0	0	0	0

	IC28	IC29	IC30	IC31	IC32	IC33	IC34	IC35	IC36	IC37	IC38	IC39	IC40
Pin 1	5.0	5.0	5.0	4.9	4.9	0.8	1.6	2.1	3.0	2.0	3.0	0	1.8
2	0.1	0	0	0.2	0.2	2.4	2.4	3.7	3.7	3.7	3.7	-11.9	0.6
3	0	0	0	0	0	0	0	2.1	2.9	2.0	2.9	-5.1	0
4	0	0	0	0.2	0.2	2.8	2.8	0	0	0	0	0	0
5	5.0	5.0	5.0	4.9	4.9	5.0	5.0	2.2	1.1	2.3	1.7	0	3.7
6	0	0	0	0	0	0	0	4.8	4.9	4.8	4.9	0	1.8
7	0	0	0	0	0	0	0	1.4	2.2	1.4	2.2	0	1.7
8	0	0	0	0	0	0	0	0	0	0	0	0	5.0

	IC15	IC18	IC20	IC41	IC42	IC43	IC44
Pin 1	3.2	-	3.2	2.5	2.5	3.7	3.7
2	3.2	-	3.2	2.4	2.4	5.0	5.0
3	3.2	0	3.2	2.5	2.5	3.7	3.7
4	3.1	2.1	3.1	0	0	0	0
5	2.5	2.4	2.5	2.4	2.4	5.0	5.0
6	3.5	0	2.5	0	0	0	0
7	2.5	0	2.5	0	0	0	0
8	2.5	0	2.4	0	0	0	0
9	2.5	-	2.4	0	0	0	0
10	2.5	-	2.4	0	0	0	0
11	0	11.8	0	0	0	0	0
12	2.2	3.2	2.1	2.4	2.5	2.5	2.5
13	2.2	1.9	2.1	2.4	2.4	2.5	2.5
14	2.2	-	2.1	2.5	2.5	2.5	2.5
15	0	0	2.5	2.5	2.5	2.5	2.5
16	0	0	5.0	5.0	5.0	5.0	5.0

IC14 IC19

Pin 1 2.8 2.9

2 3.3 3.6

3 2.3 2.4

4 2.4 2.5

5 3.0 3.0

6 3.0 3.0

7 3.9 3.9

8 3.0 3.1

9 2.5 3.0

10 2.8 2.9

11 2.4 2.8

12 3.3 3.4

13 0.5 0.4

14 2.9 3.0

15 5.0 5.1

16 2.9 2.9

17 0 0

18 4.2 4.3

19 2.2 2.2

20 2.1 2.1

21 2.0 2.2

22 2.7 2.8

23 4.3 4.3

24 4.3 4.3

25 2.9 3.0

26 3.1 3.1

27 2.7 2.7

28 4.1 4.2

29 0 0

30 4.9 4.5

31 0 0

32 0 0

33 0 0

34 0 0

35 0 0

36 0 0

37 0 0

38 0 0

39 0 0

40 0 0

41 0 0

42 0 0

43 0 0

44 4.9 4.9

45 2.1 2.1

46 0 0

47 0 0

48 4.9 4.9

49 0.9 0 1.5

50 2.1 5.0 2.9

51 3.6 5.0 2.9

52 2.1 5.0 1.5

53 3.1 6.5 2.5

54 3.0 5.0 2.4

55 6.5 11.4 5.9

56 6.3 11.4 5.7

57 3.0 6.3 2.4

58 3.0 5.0 2.4

59 2.2 4.9 1.6

60 0.1 2.2 2.2

61 0.1 2.2 2.2

62 0.1 2.2 2.2

63 0.1 2.2 2.2

64 0.1 2.2 2.2

65 0.1 2.2 2.2

66 0.1 2.2 2.2

67 0.1 2.2 2.2

68 0.1 2.2 2.2

69 0.1 2.2 2.2

70 0.1 2.2 2.2

71 0.1 2.2 2.2

72 0.1 2.2 2.2

73 0.1 2.2 2.2

74 0.1 2.2 2.2

75 0.1 2.2 2.2

76 0.1 2.2 2.2

77 0.1 2.2 2.2

78 0.1 2.2 2.2

79 0.1 2.2 2.2

80 0.1 2.2 2.2

81 0.1 2.2 2.2

82 0.1 2.2 2.2

83 0.1 2.2 2.2

84 0.1 2.2 2.2

85 0.1 2.2 2.2

86 0.1 2.2 2.2

87 0.1 2.2 2.2

88 0.0 11.4 5.4

89 0.1 2.5 2.5

90 2.5 4.9 1.9

91 0.9 0 1.5

92 1.5 0 2.1

93 0.9 0 1.5

94 0.4 11.1 1.0

95 0.4 11.1 1.0

96 0.4 11.1 1.0

97 2.5 0 3.1

98 2.4 0 3.0

99 0.9 0 1.5

100 2.5 0 3.1

101 0.1 0 1.6

102 0.1 0 1.6

103 2.7 5.0 2.1

104 0.1 0 1.6

105 0.1 0 1.6

106 0.1 0 1.6

107 0 0 1.6

108 0 0 1.6

109 0 0 1.6

110 0 0 1.6

111 0 0 1.6

112 0 0 1.6

113 0 0 1.6

114 0 0 1.6

115 0 0 1.6

116 0 0 1.6

117 0 0 1.6

118 0 0 1.6

119 0 0 1.6

120 0 0 1.6

121 0 0 1.6

122 0 0 1.6

123 0 0 1.6

124 0 0 1.6

125 0 0 1.6

126 0 0 1.6

127 0 0 1.6

128 0 0 1.6

129 0 0 1.6

130 0 0 1.6

131 0 0 1.6

132 0 0 1.6

133 0 0 1.6

134 0 0 1.6

135 0 0 1.6

136 0 0 1.6

137 0 0 1.6

138 0 0 1.6

139 0 0 1.6

140 0 0 1.6

141 0 0 1.6

142 0 0 1.6

143 0 0 1.6

144 0 0 1.6

145 0 0 1.6

146 0 0 1.6

147 0 0 1.6

148 0 0 1.6

149 0 0 1.6

150 0 0 1.6

151 0 0 1.6

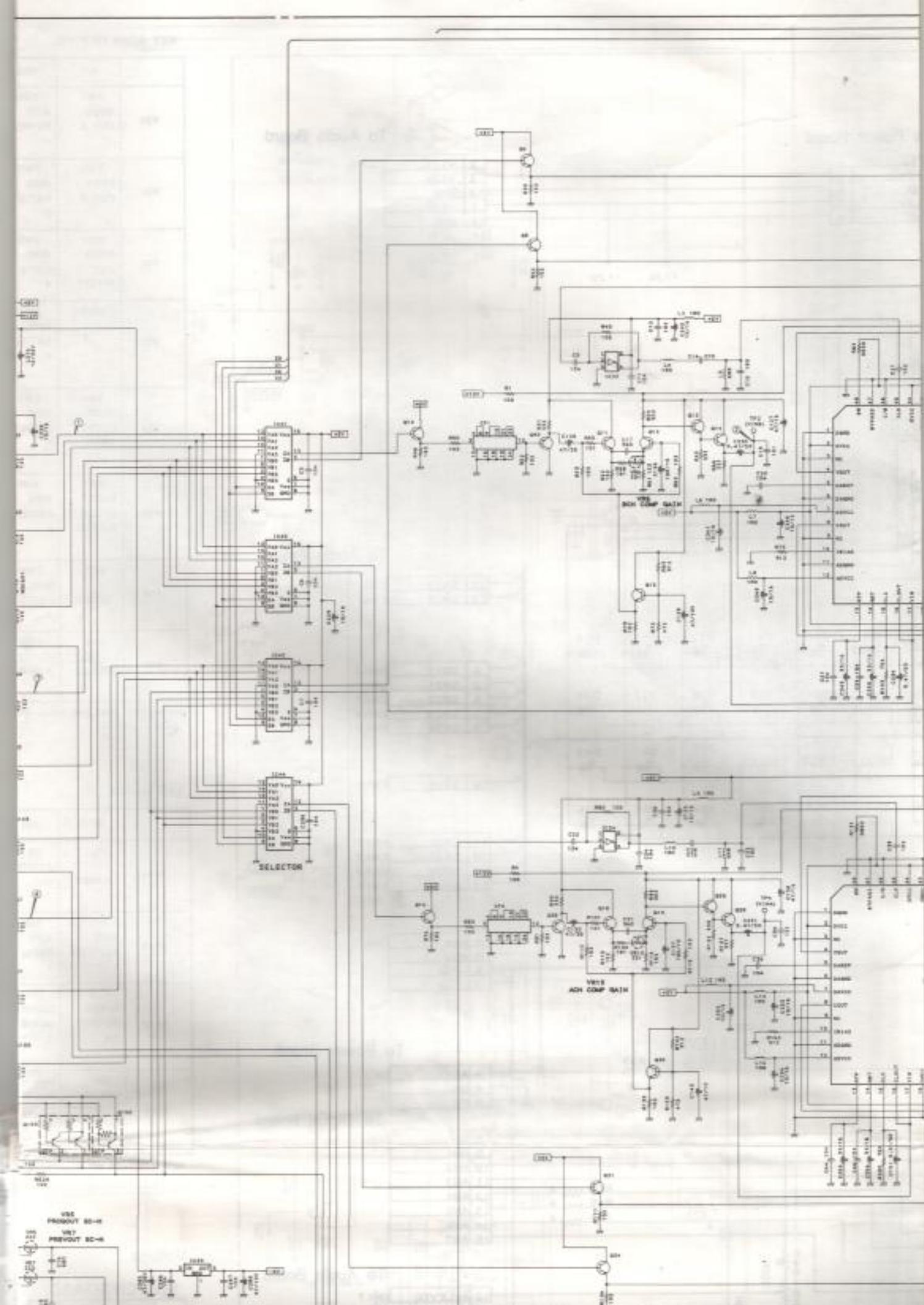
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153 0 0 1.6

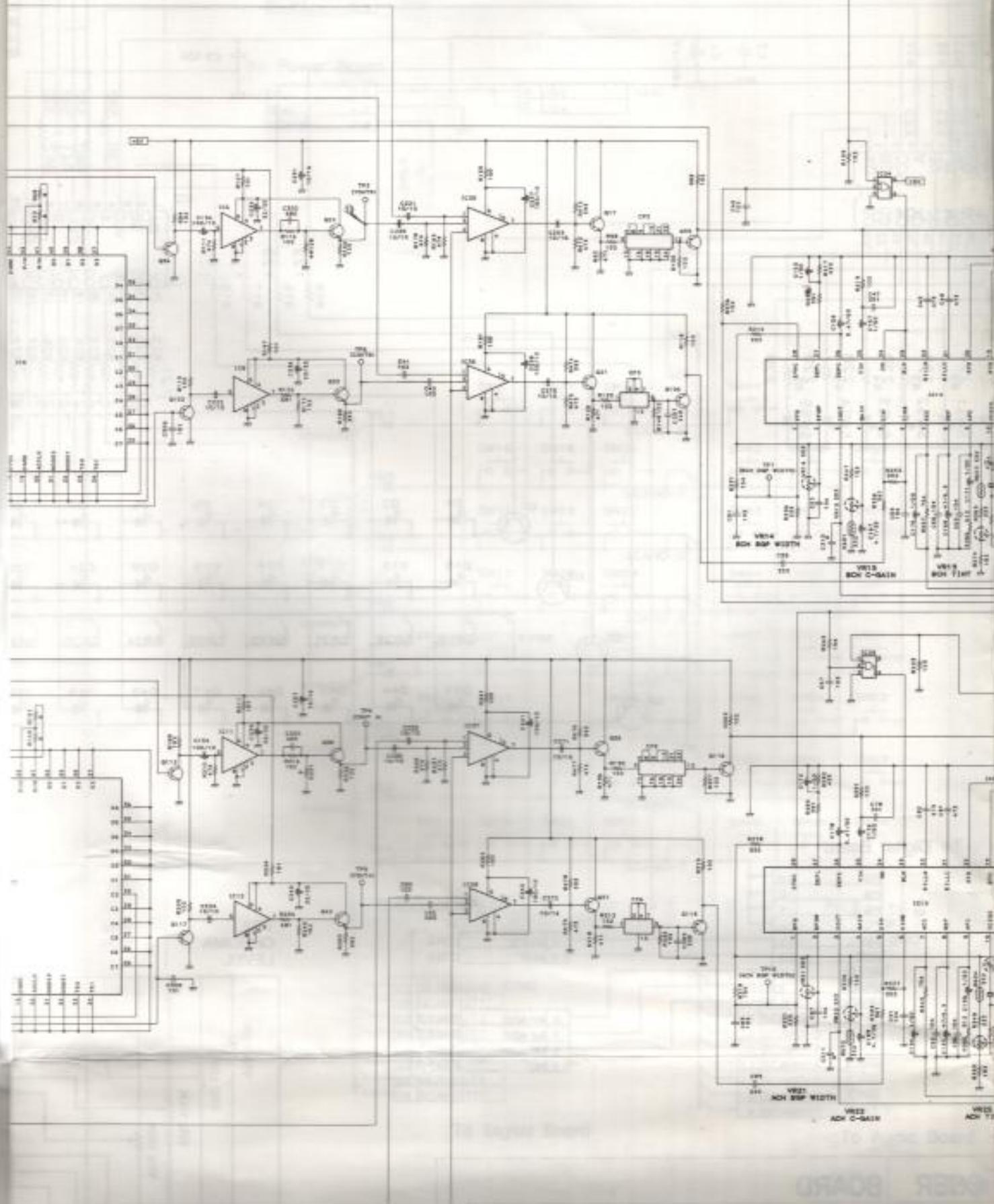
154 0 0 1.6

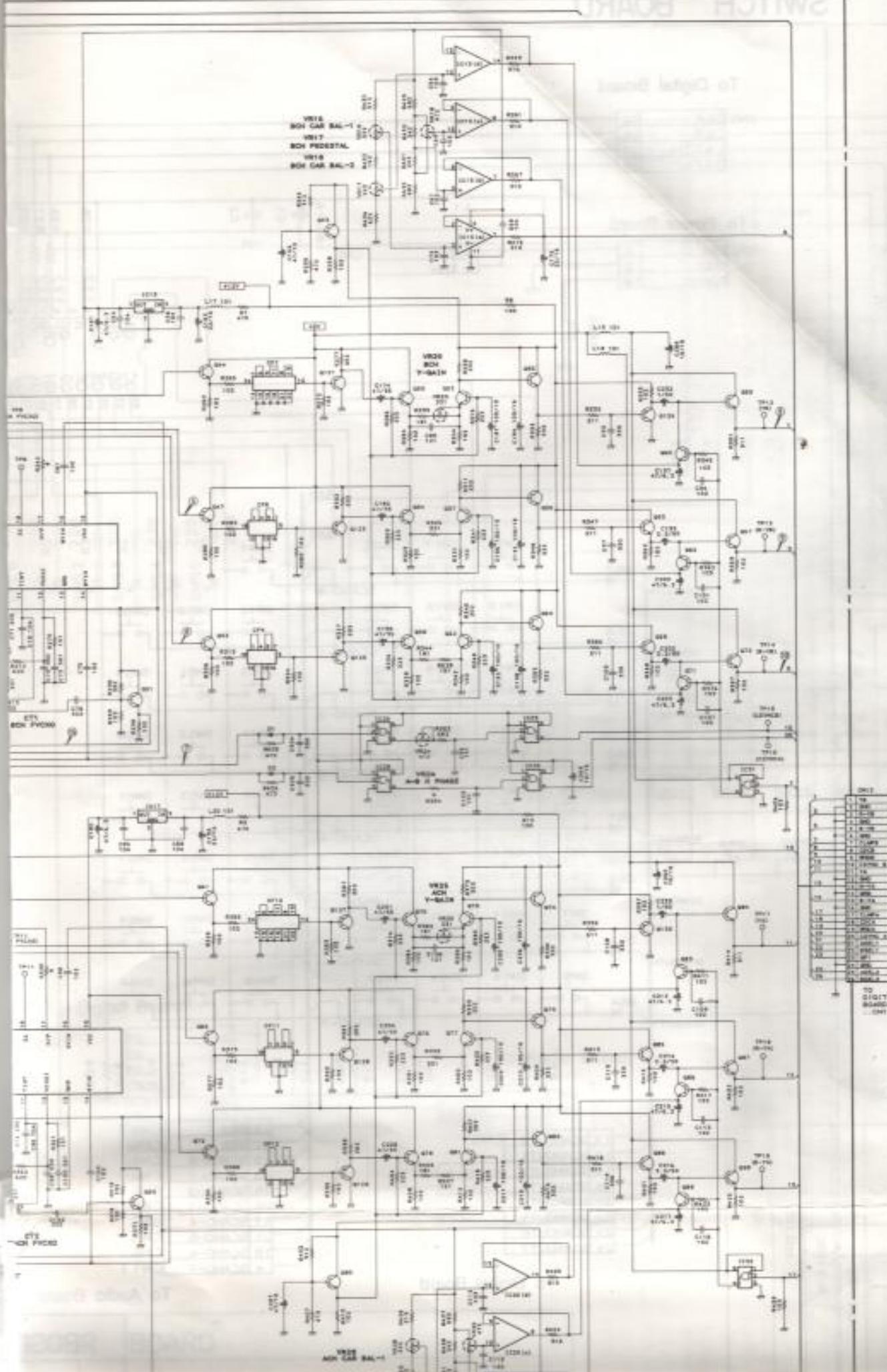
155 0 0 1.6

156 0



To Digital Section

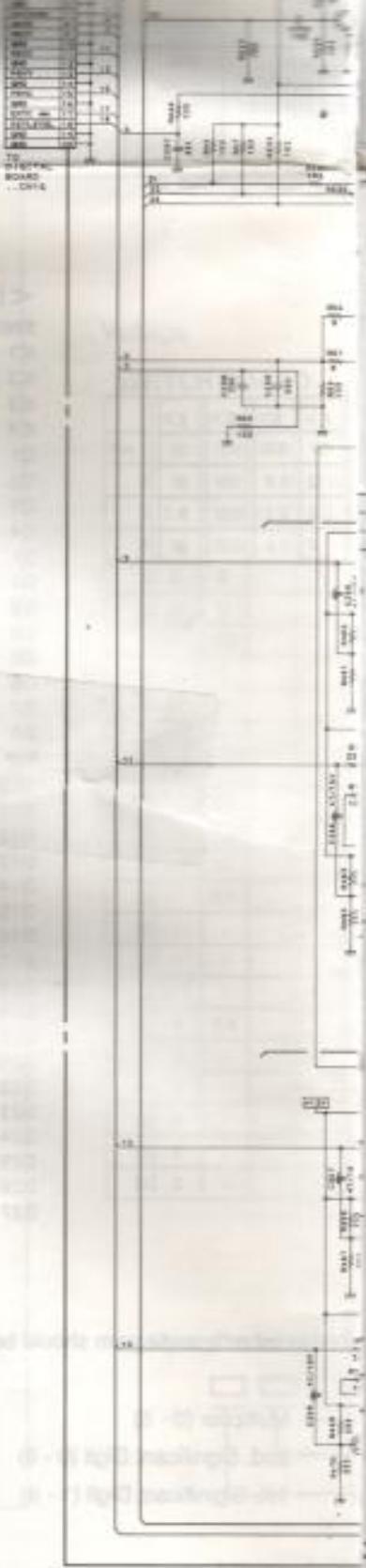




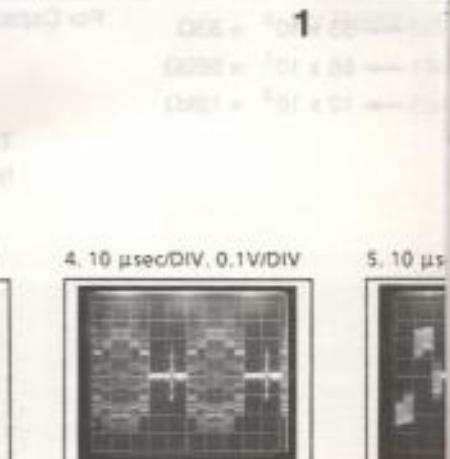
21	0.0	2.4
22	-0.3	5.7
23	0.3	2.4
24	-0.3	5.1
25	0.0	3.1
26	0.0	1.8
27	0.0	1.7
28	0.0	2.4
29	0.0	2.6
30	0.0	1.8
31	0.0	2.5
32	0.0	1.4
33	0.0	2.5
34	0.0	1.9
35	0.0	2.0
36	0.0	1.6
37	0.0	1.8
38	0.0	1.8
39	0.0	1.3
40	0.0	1.3
41	0.0	1.3
42	0.0	1.3
43	0.0	1.2
44	0.0	0.9

55	0.0	11.4	5.9
56	0.0	11.4	5.7
57	0.0	6.9	2.4
58	0.0	5.0	2.4
59	0.2	4.8	1.6
60	0.1	2.2	2.2
61	1.5	5.0	0.8
62	3.0	6.5	2.4
63	3.1	11.4	5.1
64	6.5	11.4	5.7
65	0.1	2.5	2.5
66	2.2	5.0	1.5
67	2.5	4.8	1.8
68	5.5	11.4	5.2
69	3.7	11.4	5.0
70	3.1	5.0	2.3
71	0.1	2.5	2.3
72	2.5	4.8	1.8
73	7.1	5.0	1.5
74	6.7	11.4	6.1
75	3.8	6.7	1.4
76	3.1	5.0	2.3
77	3.1	6.7	2.4
78	3.1	5.0	2.4
79	6.7	11.4	6.1
80	6.9	11.4	3.3
81	3.8	6.6	2.4
82	6.6	11.4	6.0
83	0	2.1	2.1
84	2.1	4.9	1.5
108	0	0	0.7
109	0	0	0.7
110	0	0	0.7
111	0	0	0.7
112	0	0	0.7
113	0	0	0.7
114	0	0	0.7
115	0	0	0.7
116	0	0	0.7
117	0	0	0.7
118	0	0	0.7
119	0	0	0.7
120	0	0	0.7
121	0	0	0.7
122	0	0	0.7
123	0	0	0.7
124	0	0	0.7
125	0	0	0.7
126	0	0	0.7
127	0	0	0.7
128	0	0	0.7
129	0	0	0.7
130	0	0	0.7

C



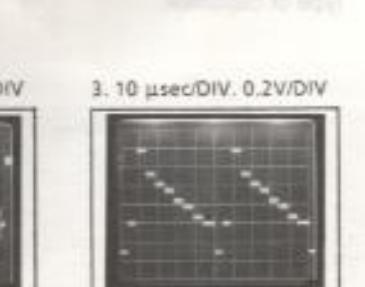
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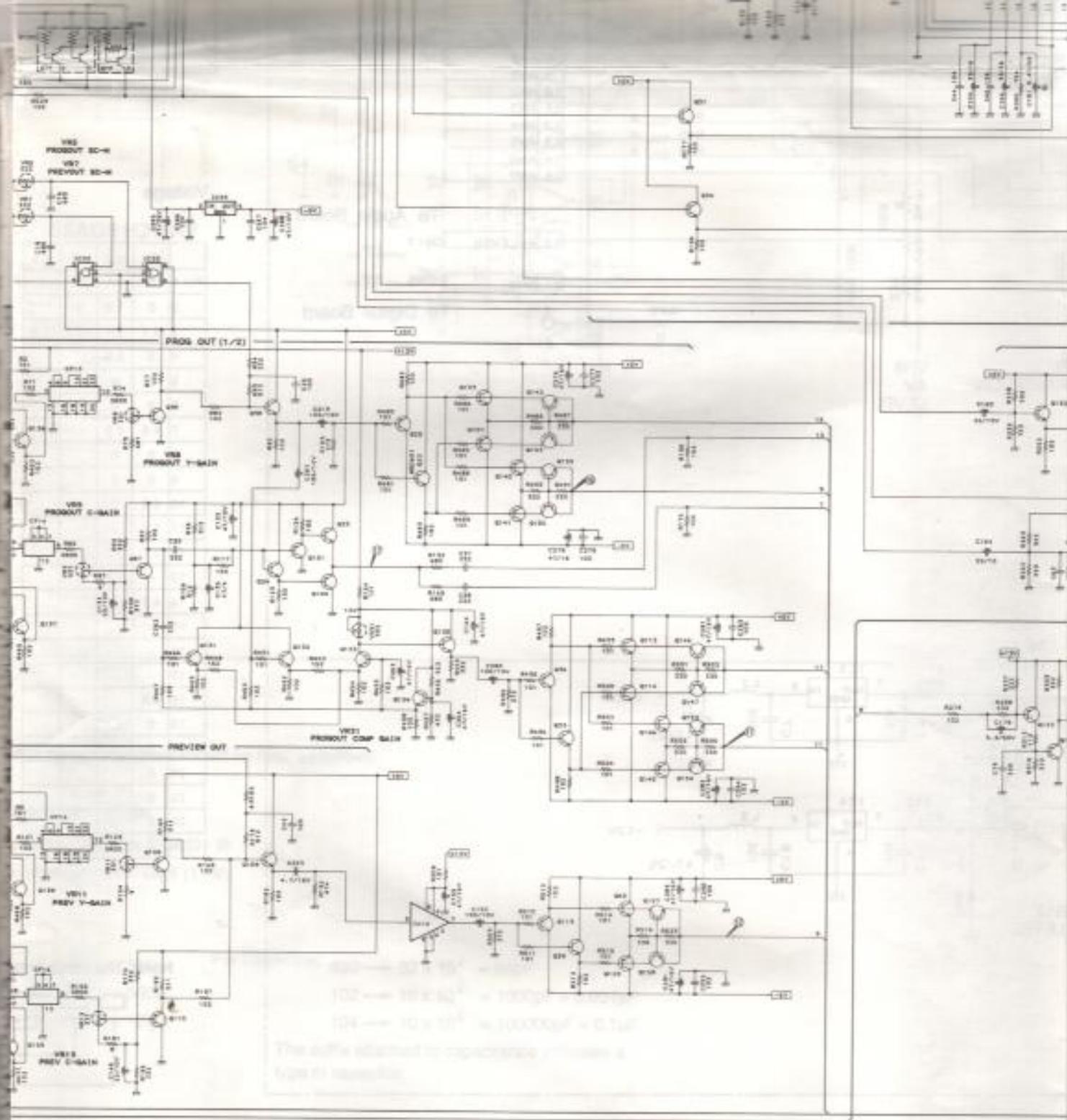


<Index>

Analog Board

IC5	E4	Q4	E1	Q48	B5	Q99	C9	Q136	B1
IC6	F5	Q5	E1	Q49	B5	Q90	C9	Q137	B1
IC7	D4	Q6	F3	Q50	F8	Q93	E3	Q138	A1
IC8	E5	Q7	D1	Q51	E7	Q94	B1	Q139	A1
IC10	A2	Q8	F3	Q52	E7	Q95	D3	Q140	B3
IC11	D5	Q9	D1	Q53	F8	Q96	F4	Q141	B3
IC12	D5	Q10	E2	Q54	E8	Q97	B2	Q142	B3
IC13	F8	Q11	E3	Q55	F8	Q98	B1	Q143	B3
IC14	E7	Q12	E3	Q56	E8	Q99	F8	Q144	B3
IC15	F8/G8	Q13	E3	Q57	E8	Q101	B2	Q145	B3
IC16	B5	Q14	E3	Q58	E8	Q102	E5	Q146	B3
IC17	E7	Q15	E3	Q59	F9	Q103	B2	Q147	B3
IC18	B6	Q16	D2	Q60	E9	Q104	B2	Q148	E1
IC19	D7	Q17	F6	Q61	D7	Q106	E6	Q149	D1
IC20	C8	Q18	D3	Q62	E8	Q107	B2	Q150	D1
IC22	C1	Q19	D3	Q63	E9	Q108	A1	Q152	B4
IC23	C2	Q21	E6	Q64	E8	Q109	A3	Q153	B3
IC24	F7	Q22	B2	Q65	E9	Q110	A2	Q154	B3
IC25	D6	Q23	B2	Q66	D7	Q112	D4	Q155	B3
IC26	E8	Q24	B2	Q67	E9	Q113	B3	Q156	B3
IC27	B6	Q25	B2	Q68	E9	Q114	B3	Q157	A3
IC28	E8	Q26	D3	Q69	C7	Q115	D6	Q158	A3
IC29	E8	Q28	D3	Q70	D8	Q117	D6	Q159	C1
IC30	E8	Q29	F5	Q71	E9	Q118	D6	Q160	C1
IC31	E9	Q30	D3	Q72	E9	Q119	A3	D1	E8
IC32	E9	Q31	C3	Q73	D7	Q120	A3	D2	E8
IC33	F3	Q32	E5	Q74	D8	Q121	F8		
IC34	D3	Q33	B3	Q75	D8	Q122	B4		
IC35	F5	Q34	C3	Q76	D8	Q123	E8		
IC36	E5	Q35	D6	Q77	D8	Q124	B4		
IC37	D5	Q36	B3	Q78	C8	Q125	E8		
IC38	D5	Q37	D6	Q79	D8	Q126	F9		
IC39	C2	Q38	D5	Q80	C8	Q127	D8		
IC40	B4	Q39	A3	Q81	C8	Q128	D8		
IC41	E2	Q40	A3	Q82	D8	Q129	C8		
IC42	E2	Q42	D5	Q83	D9	Q130	D9		
IC43	E3	Q43	F5	Q84	D9	Q131	B2		
IC44	D2	Q44	F7	Q85	D9	Q132	B2		
Q1	B4	Q45	B4	Q86	D9	Q133	B2		
Q2	E1	Q46	B4	Q87	D9	Q134	B2		
Q3	E1	Q47	E7	Q88	C9	Q135	B2		



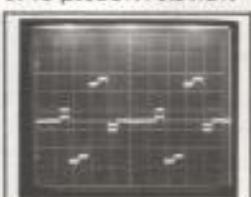
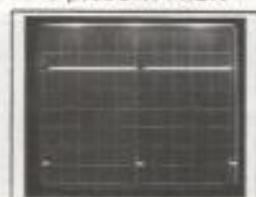
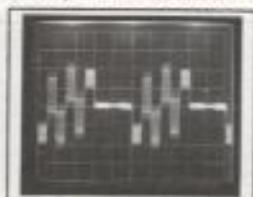
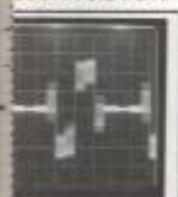


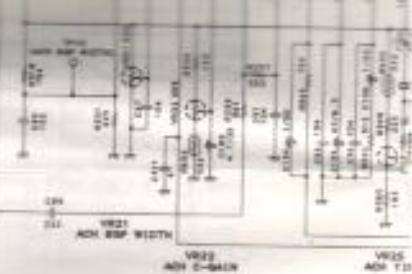
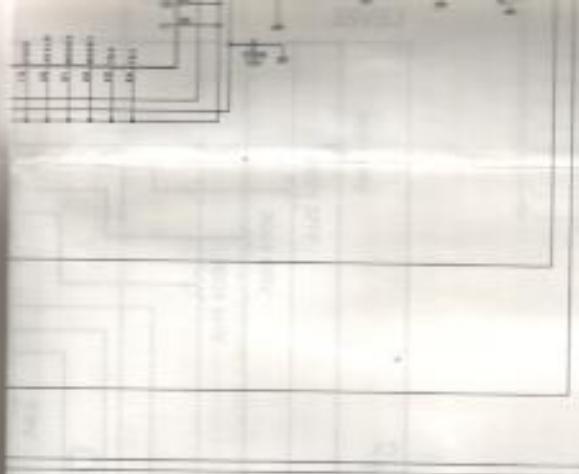
2

3

4

200 mV/DIV, 0.2V/DIV

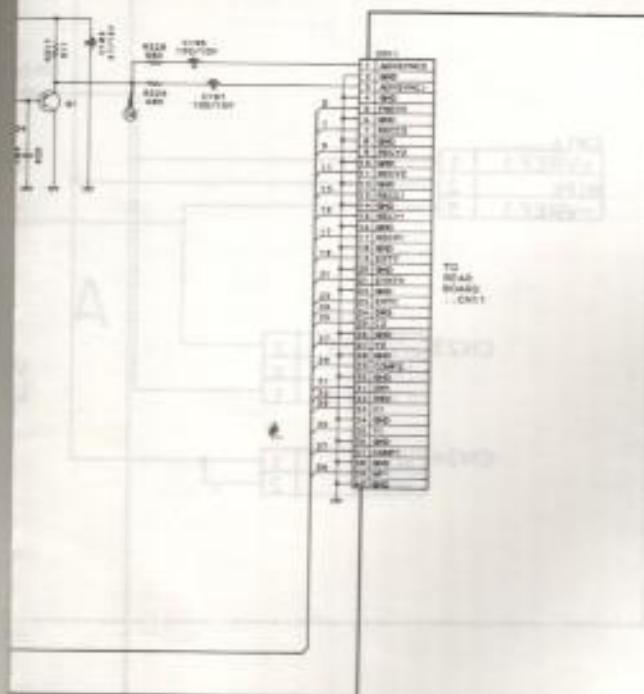
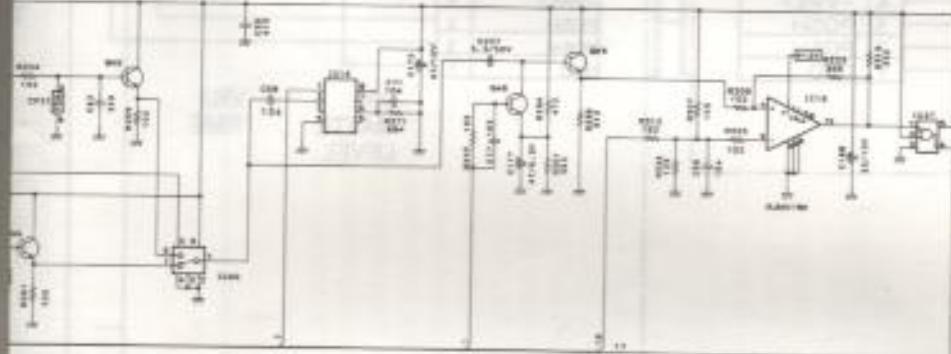
6. 10 μ sec/DIV, 0.2V/DIV7. 10 μ sec/DIV, 1V/DIV8. 10 μ sec/DIV, 0.5V/DIV9. 10 μ sec/DIV, 0.5V/DIV



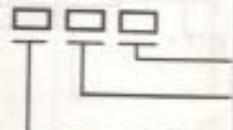
GRADS REPORT

DEMODULATOR (BUS-A)

EXT. CAMERA



Note: The value indicated



<Example>

For Resistor: 330 —

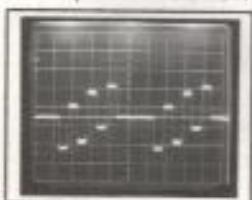
561 —

123 —

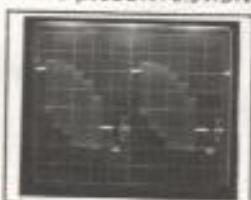
5

6

10. 10 μsec/DIV. 0.5V/DIV



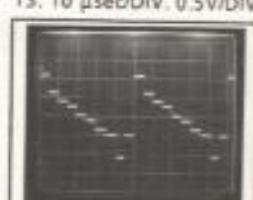
11. 10 μsec/DIV. 0.5V/DIV

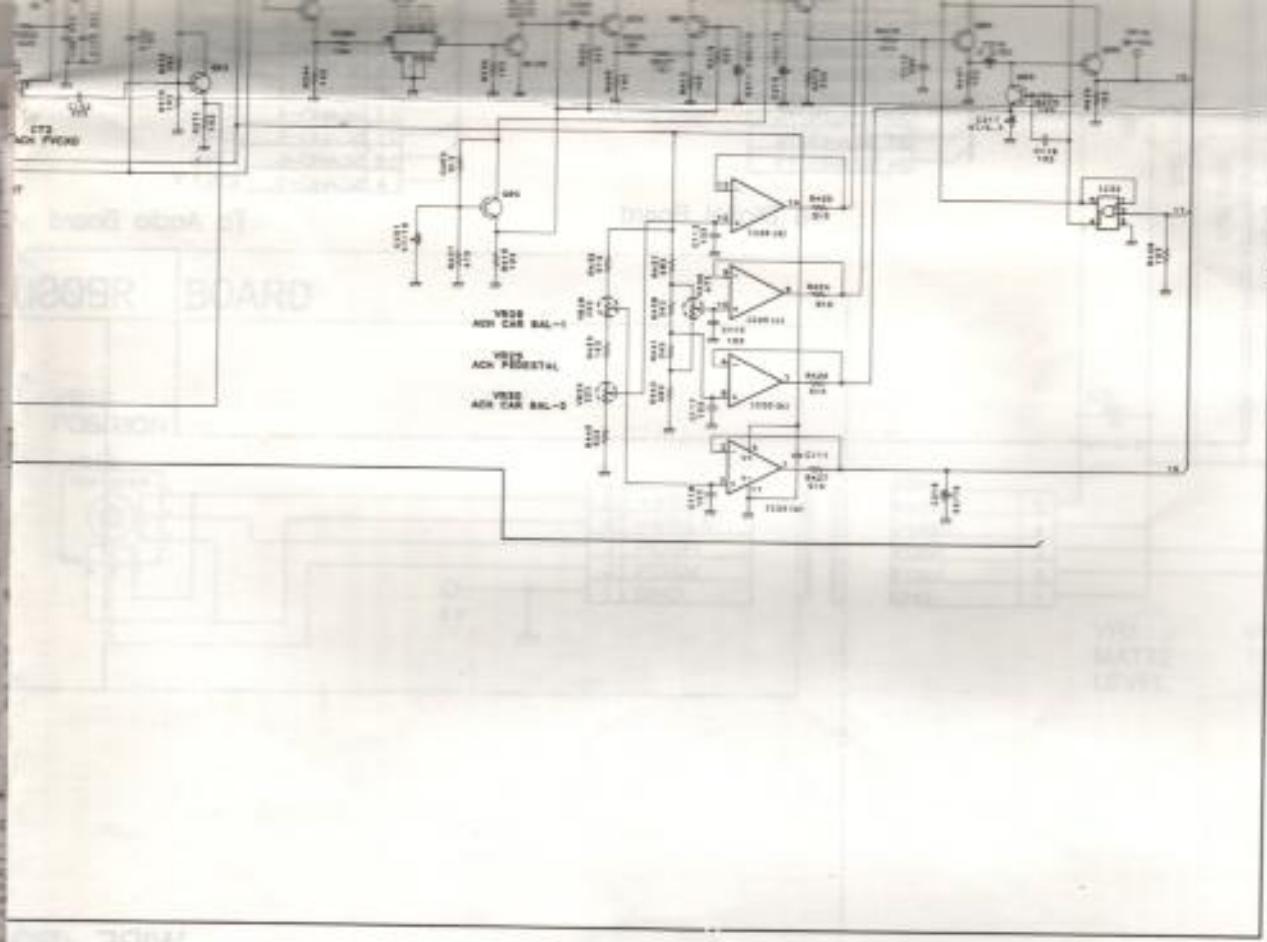


12. 10 μsec/DIV. 0.5V/DIV



13. 10 μsec/DIV. 0.5V/DIV





The schematic diagram should be read as follows:

- Multiplier (0 - 5)
- 2nd. Significant Digit (0 - 9)
- 1st. Significant Digit (1 - 9)

$$\begin{aligned} \rightarrow 33 \times 10^0 &= 33\Omega \\ \rightarrow 56 \times 10^1 &= 560\Omega \\ \rightarrow 12 \times 10^3 &= 12k\Omega \end{aligned}$$

$$\begin{aligned} \text{For Capacitor: } 820 &\rightarrow 82 \times 10^0 = 82\text{pF} \\ 102 &\rightarrow 10 \times 10^2 = 1000\text{pF} = 0.001\mu\text{F} \\ 104 &\rightarrow 10 \times 10^4 = 100000\text{pF} = 0.1\mu\text{F} \end{aligned}$$

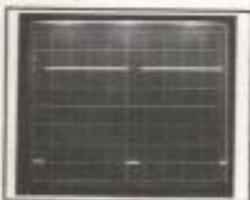
The suffix attached to capacitance indicates a type of capacitor.

7

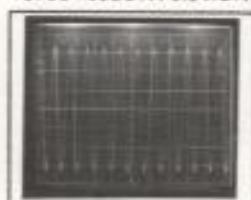
8

9

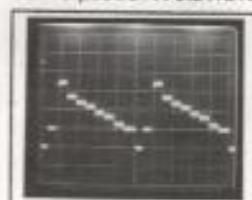
14. 10 μ sec/DIV. 1V/DIV



15. 50 nsec/DIV. 0.5V/DIV



16. 10 μ sec/DIV. 0.2V/DIV



17. 10 μ sec/DIV. 0.1V/DIV



AUDIO BOARD

SWITCH BOARD

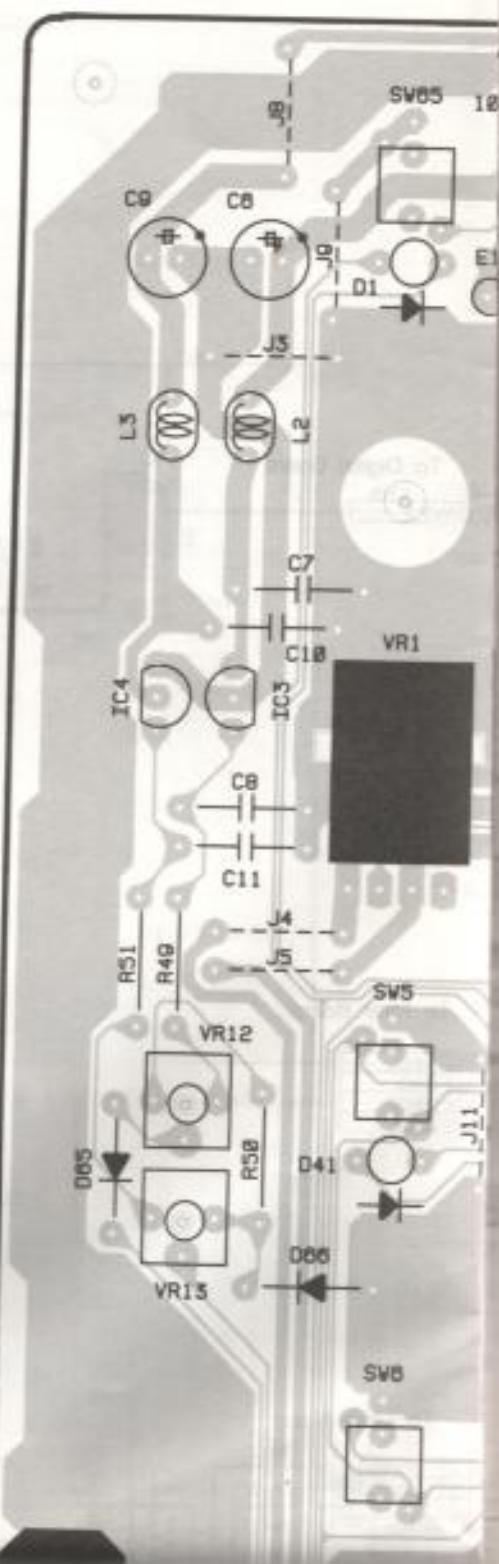
<Index>

Switch Board

IC1	E2	SW5	D1
IC2	E3	SW6	C1
IC3	D1	SW7	D1
IC4	D1	SW8	D1
Q1	D1	SW9	D2
Q2	D1	SW10	D2
Q3	D3	SW11	D2
Q4	D3	SW12	D3
D1	E1	SW13	D2
D2	B1	SW14	D2
D3	D1	SW15	D2
D4	D1	SW16	D3
D5	D3	SW17	C2
D6	D3	SW18	C2
D7	C3	SW19	C2
D8	D4	SW20	C3
D9	C4	SW23	D3
D10	D4	SW24	D3
D11	D4	SW25	C3
D12	C4	SW26	D4
D13	D3	SW27	C4
D14	D4	SW28	D4
D15	D3	SW29	D4
D16	D3	SW30	C4
D17	D3	SW31	D3
D18	D3	SW32	D4
D19	D2	SW41	B3
D20	D2	SW42	B2
D21	D2	SW43	B2
D22	D3	SW44	B2
D23	C2	SW45	A2
D24	C2	SW46	B2
D25	C2	SW47	B2
D26	C3	SW48	B4
D27	B3	SW50	A2
D28	A3	SW51	B3
D40	B4	SW52	B3
D41	D1	SW53	A2
D42	B3	SW54	A3
D43	B2	SW55	A3
D44	A2	SW56	A4
D45	A2	SW58	B5
D46	B2	SW59	B5
D47	B2	SW60	A5
D48	A4	SW61	B5
D49	A5	SW62	B5
D50	B5	SW63	A5
D51	B5	SW64	A5
D52	A5	SW65	E1
D53	B5		
D54	B5		
D55	A5		
D56	A5		
D57	E3		
D58	E4		
D59	E3		
D60	E4		
D61	E3		
D62	E4		
D63	E4		

E

D



CONDUCTOR

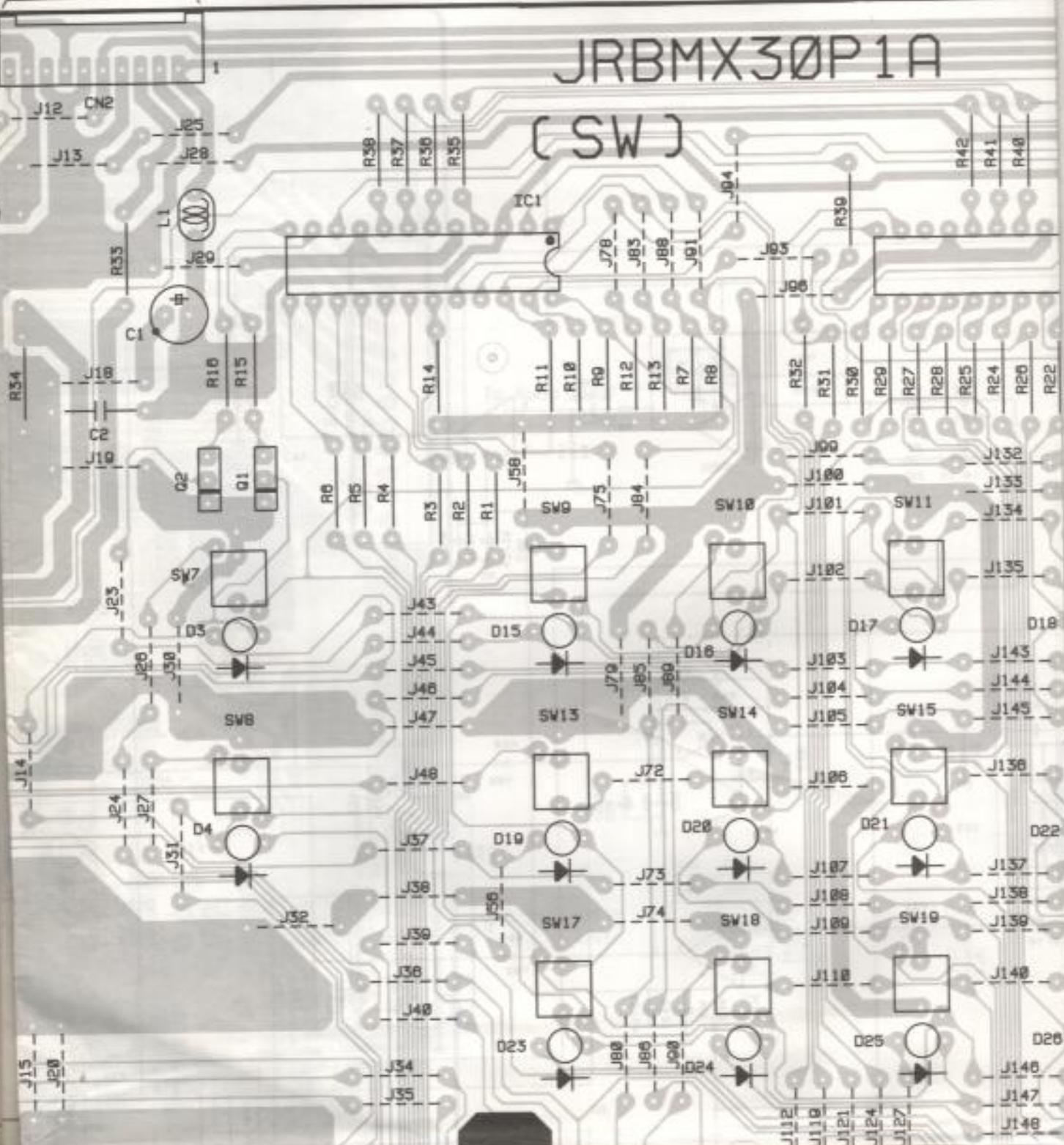
2

To Power Board

CN2

JRBMX30P1A

(SW)



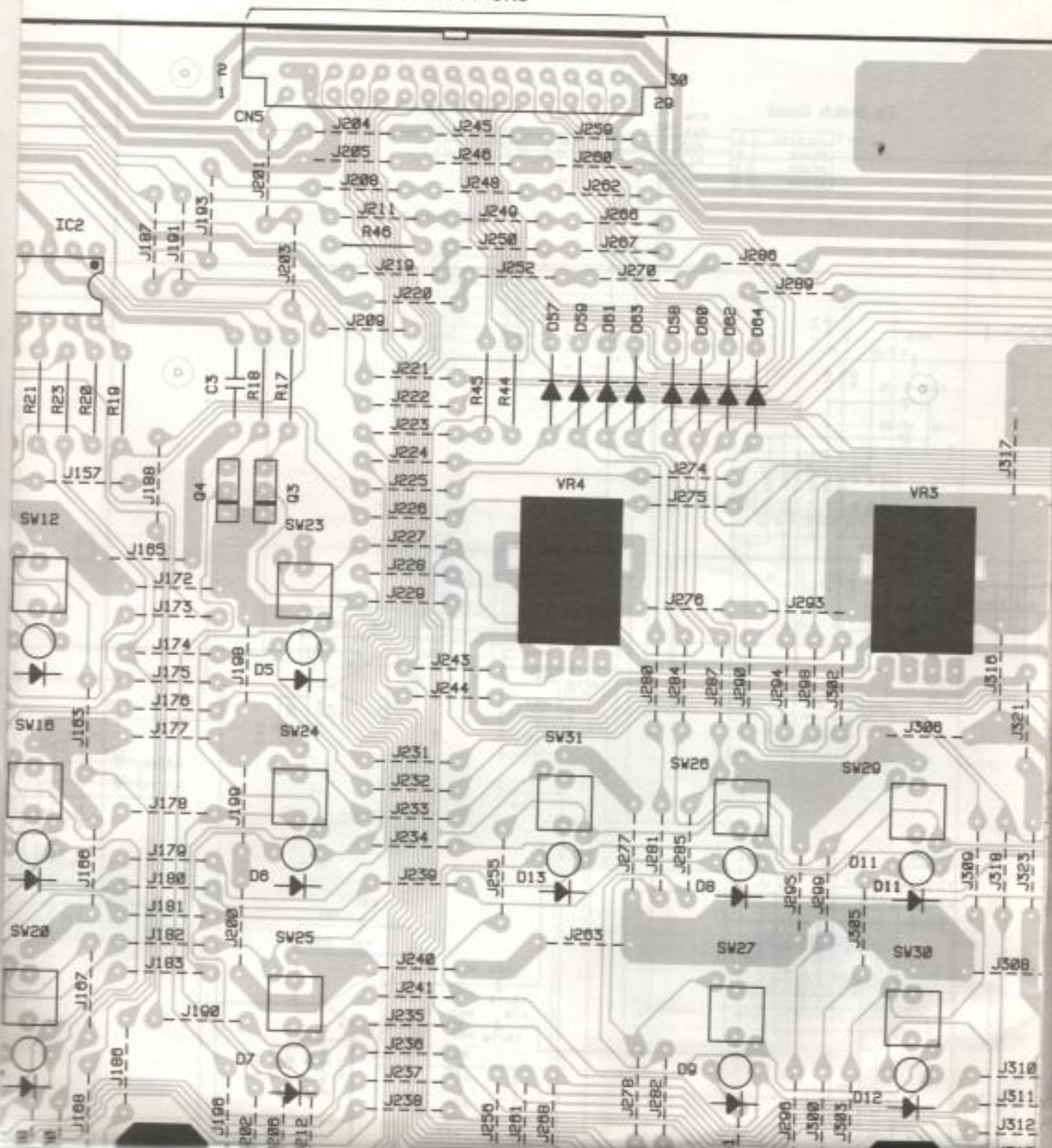
VIEW OF SWITCH BOARD

AUDIO BOARD

3

To Digital Board

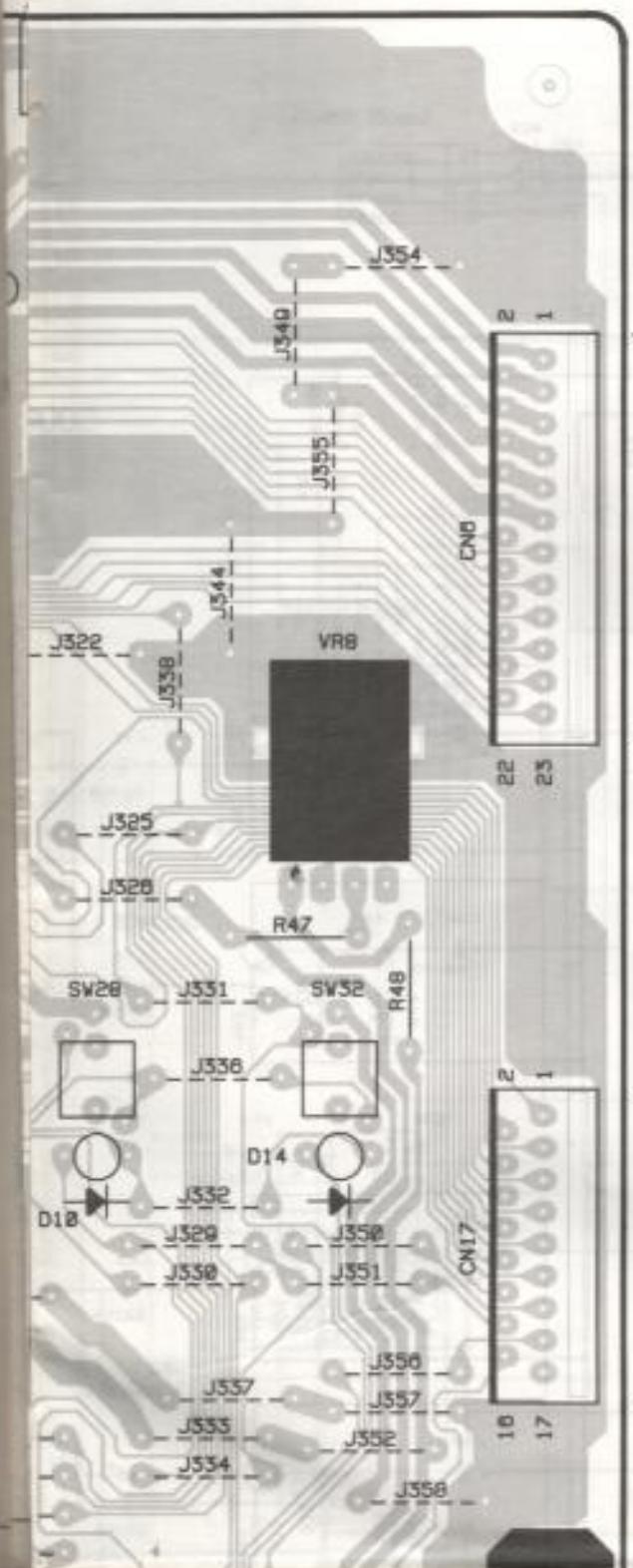
..... CN5



SCHEMATIC DIAGRAM OF

GRADE ONUA

4

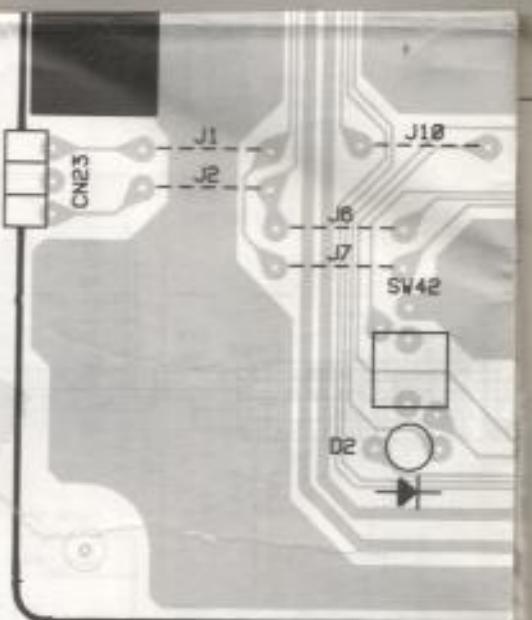


To Audio Board
..... CN6

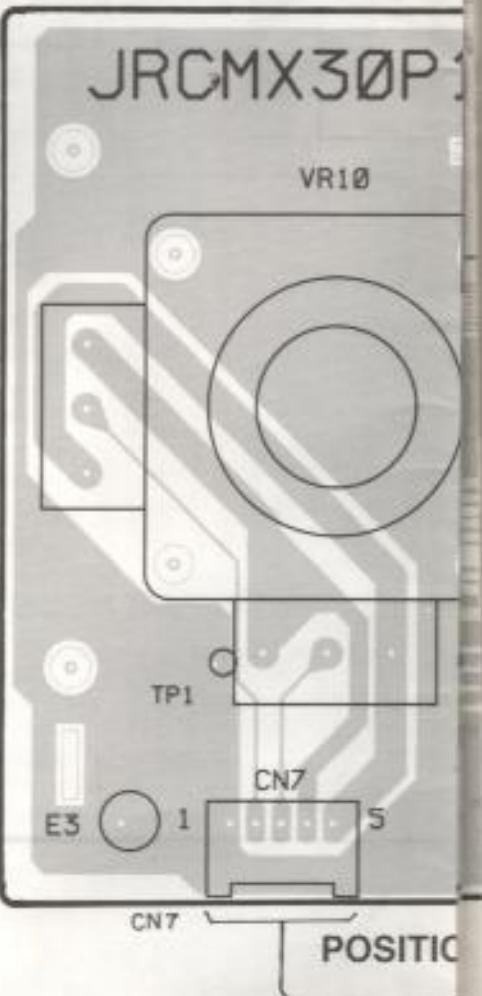
To Audio Board
..... CN17

D64 E4
D65 D1
D66 C1

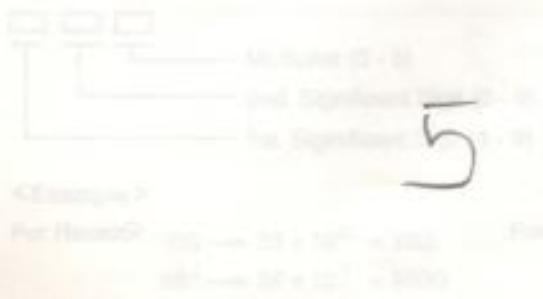
C



B



A

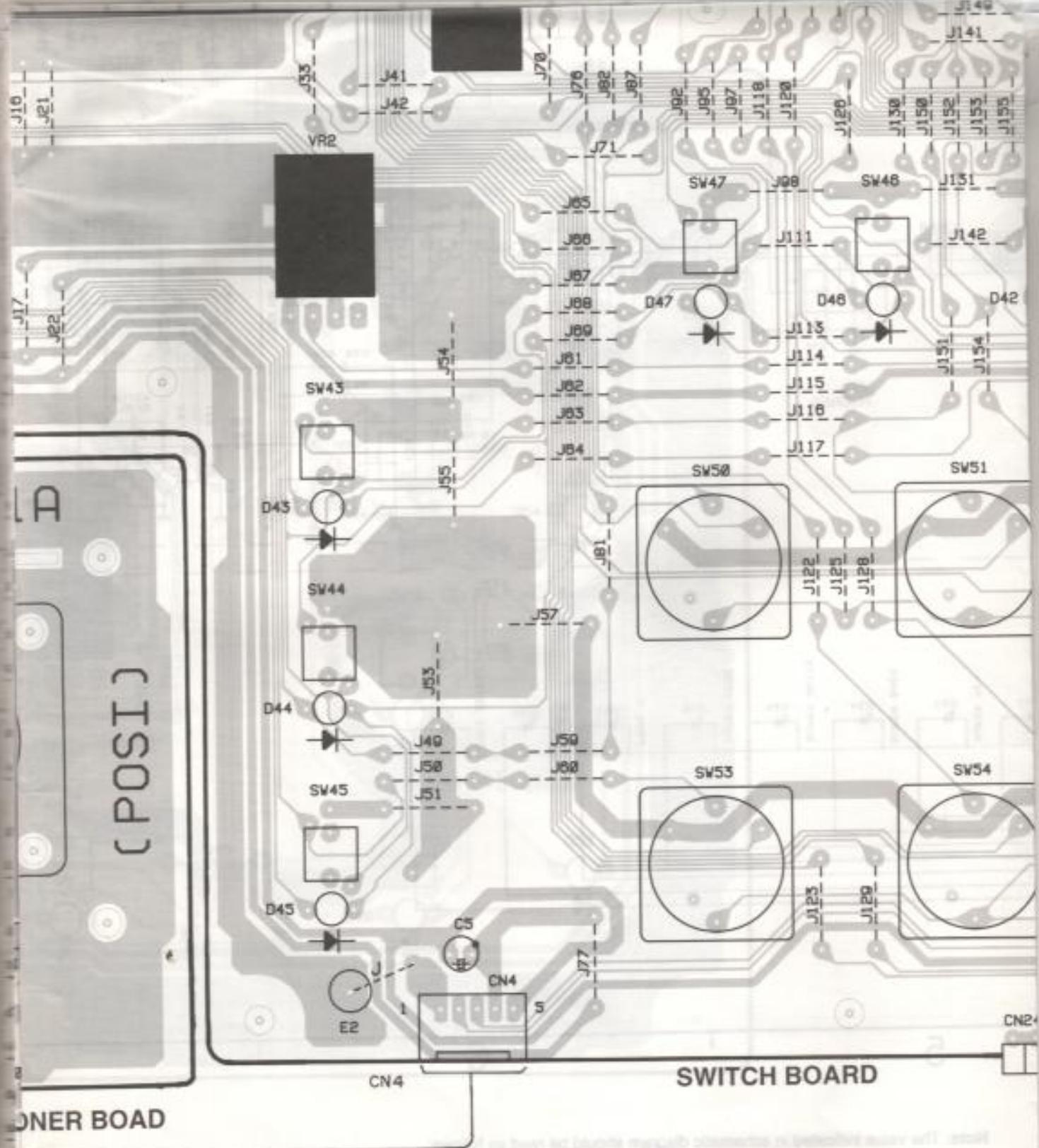


Note: The values indicated in schematic diagrams are not to scale.

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(POST)

ONER BOAD

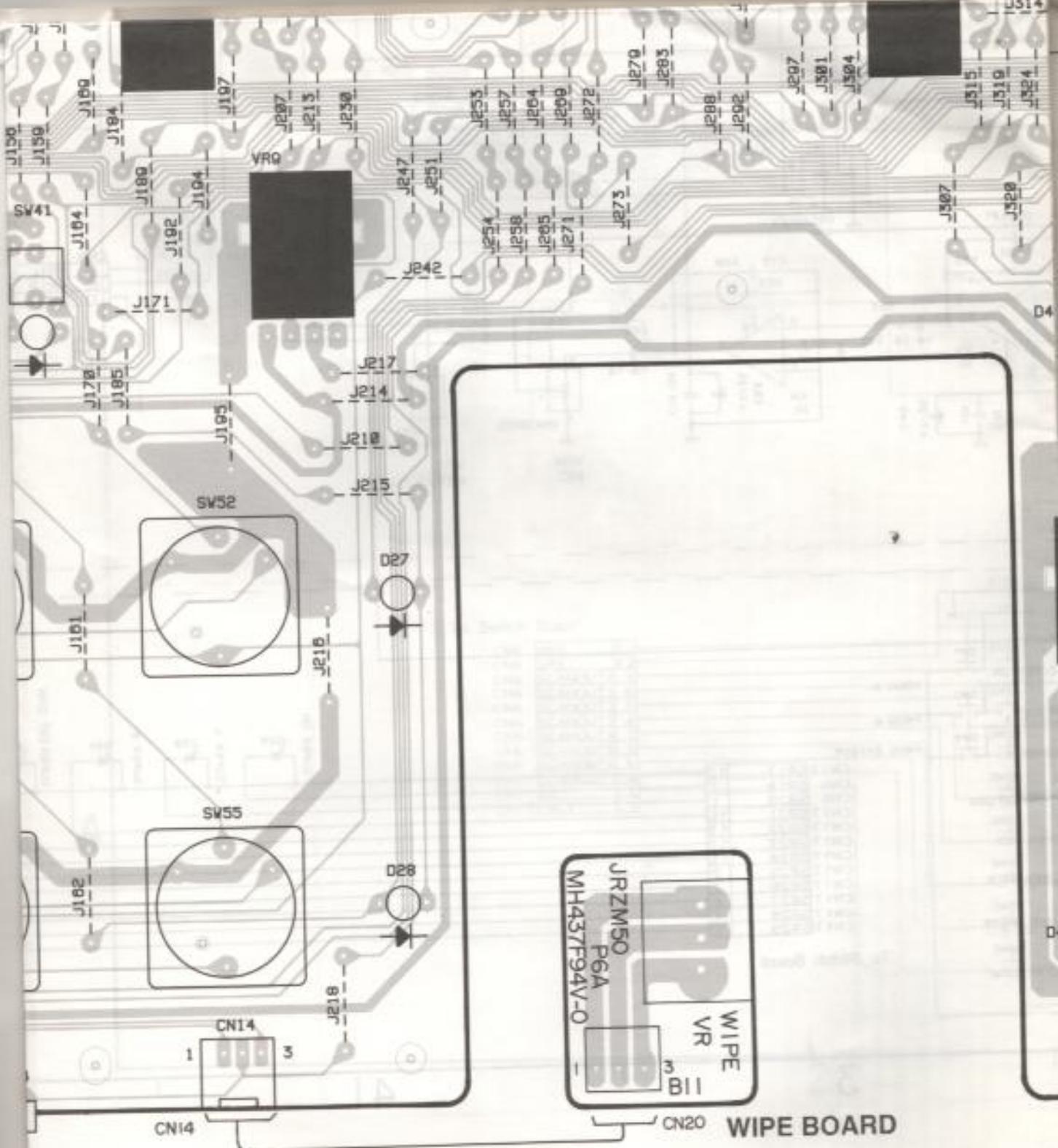


2

6

000 = 00 x 00 --- 000
0000 = 00 x 00 --- 000
00000 = 00 x 00 --- 000
000000 = 00 x 00 --- 000

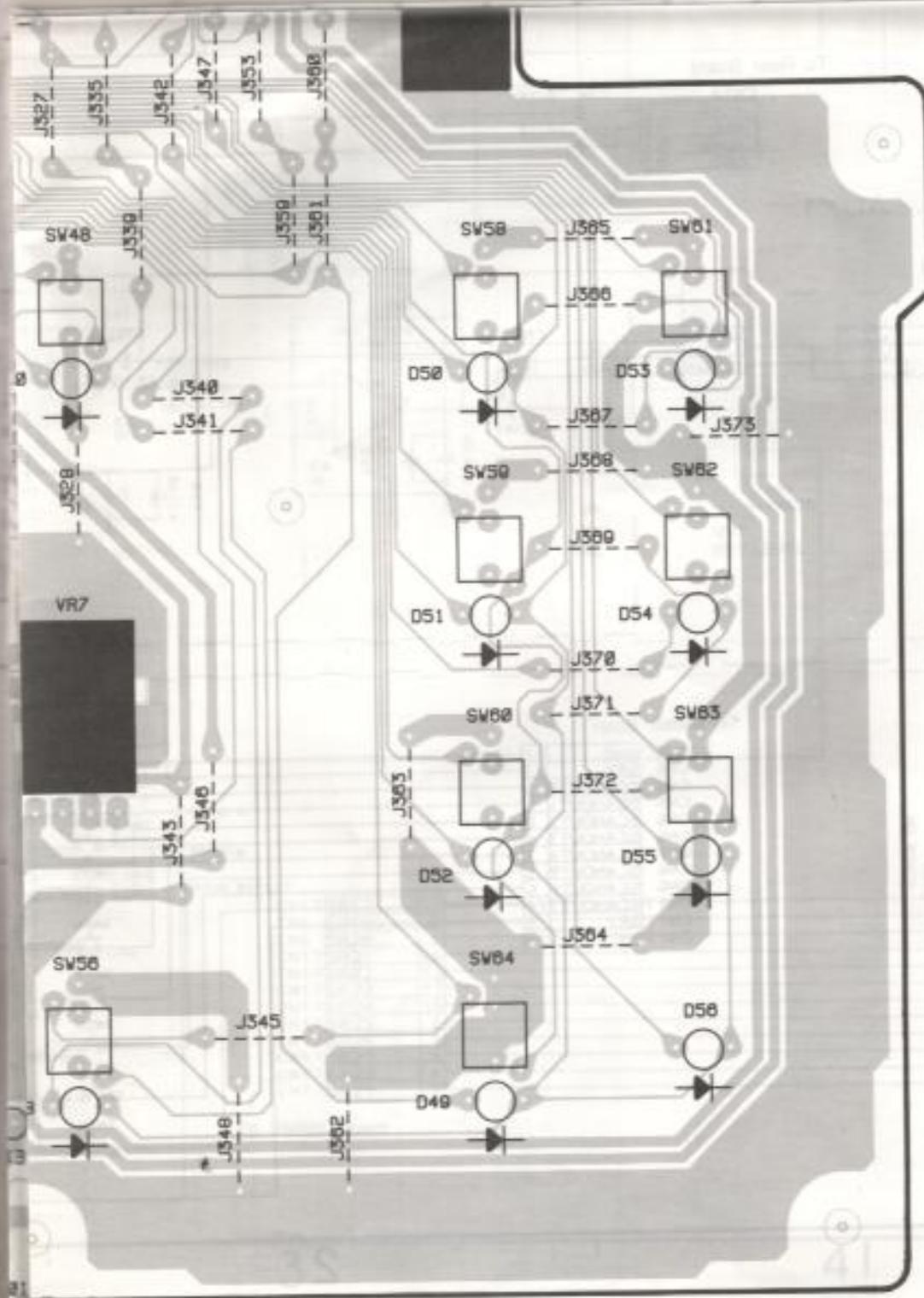
000 = 00 x 00 --- 000
0000 = 00 x 00 --- 000
00000 = 00 x 00 --- 000
000000 = 00 x 00 --- 000



3

4

4



VIEW OF SWITCH BOARD

AUDIO BOARD

To Output Board

CN6

E

To Switch Board

CN6	FG	1.7
	FG	1.0

To Switch Board

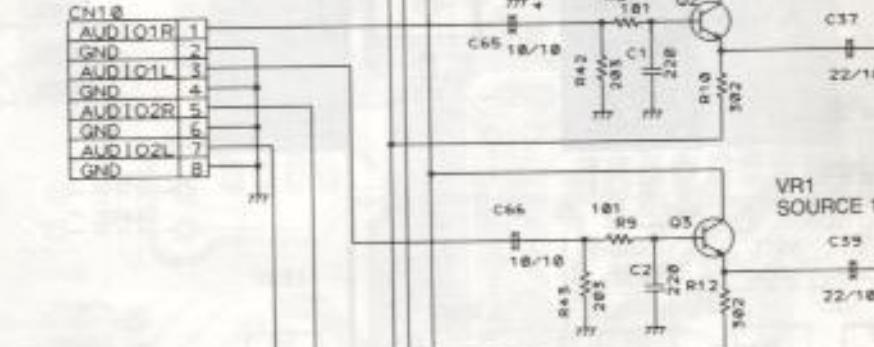
CN6	D5V	1.9
	D5V	2.0
	GND	1.3
	+12V	2.1
	+12V	2.2
	-12V	2.3
	GND	1.4
	A5V	1.5
	A5V	1.6

SOURCE

D

To Rear Board

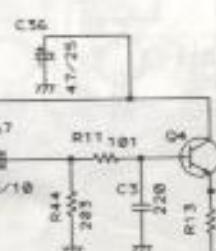
CN18	AUD101R	1
	GND	2
	AUD101L	3
	GND	4
	AUD102R	5
	GND	6
	AUD102L	7
	GND	8



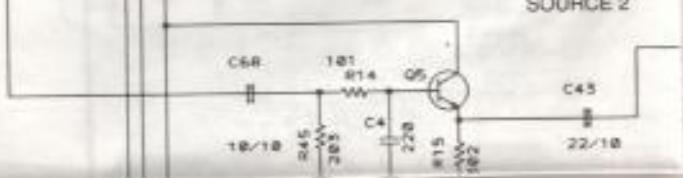
VR1
SOURCE 1

SOURCE

C



VR2
SOURCE 2



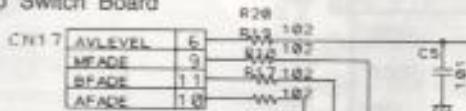
SCHEMATIC DIAGRAM OF

10

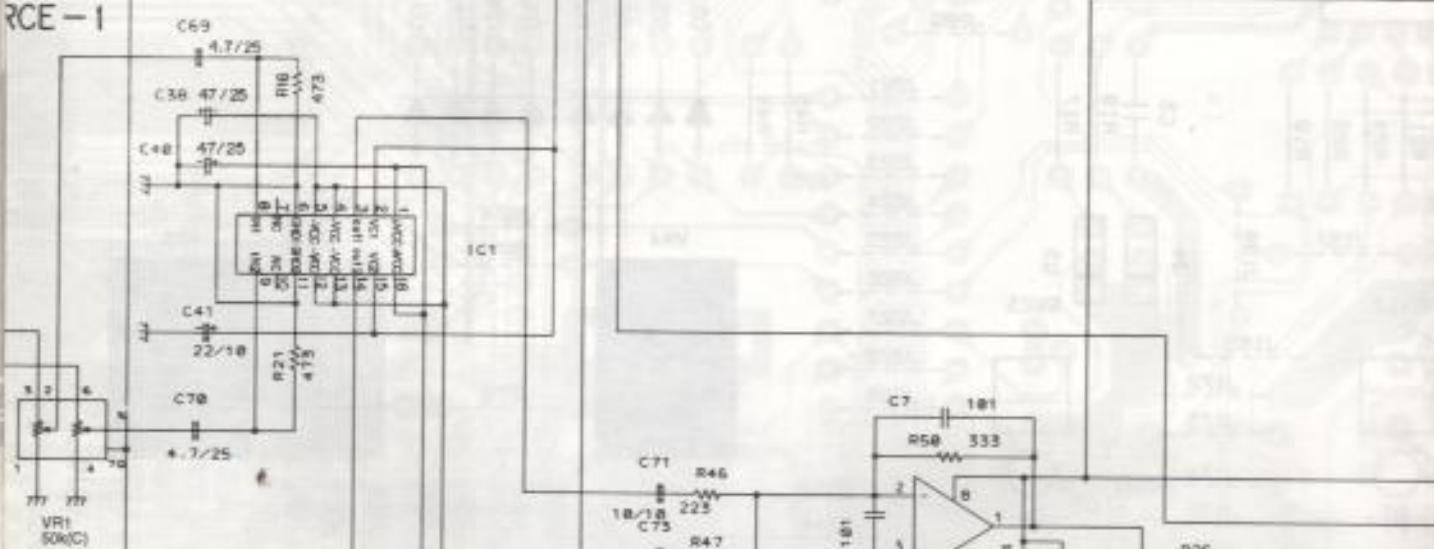
DRAFT NO. 07

DATE 10/10/07

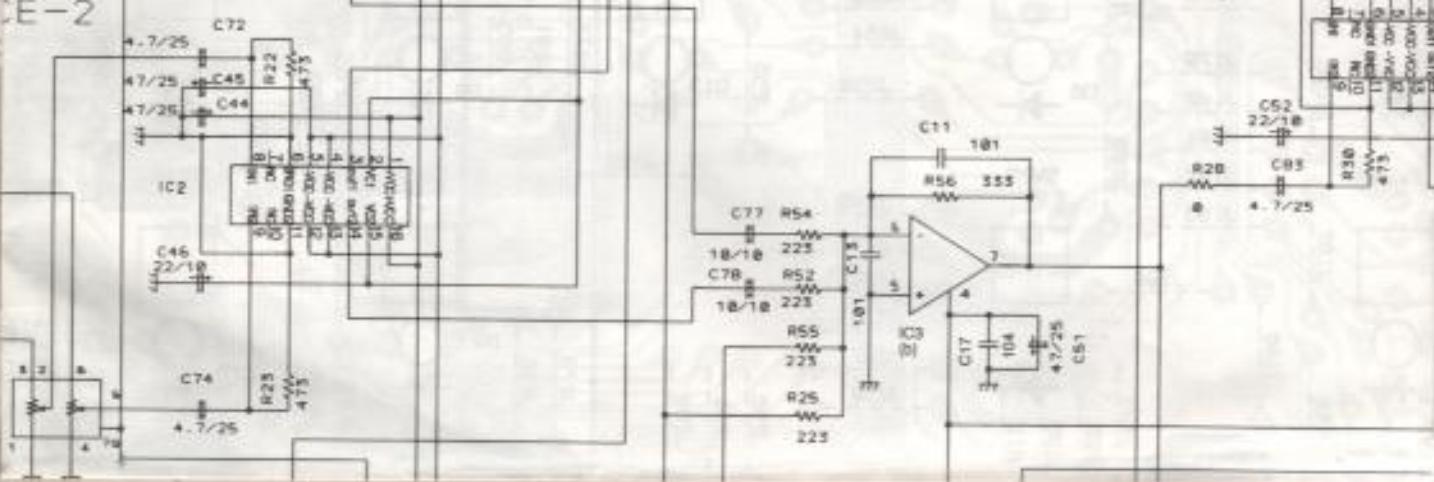
To Switch Board



RCE - 1



CE - 2



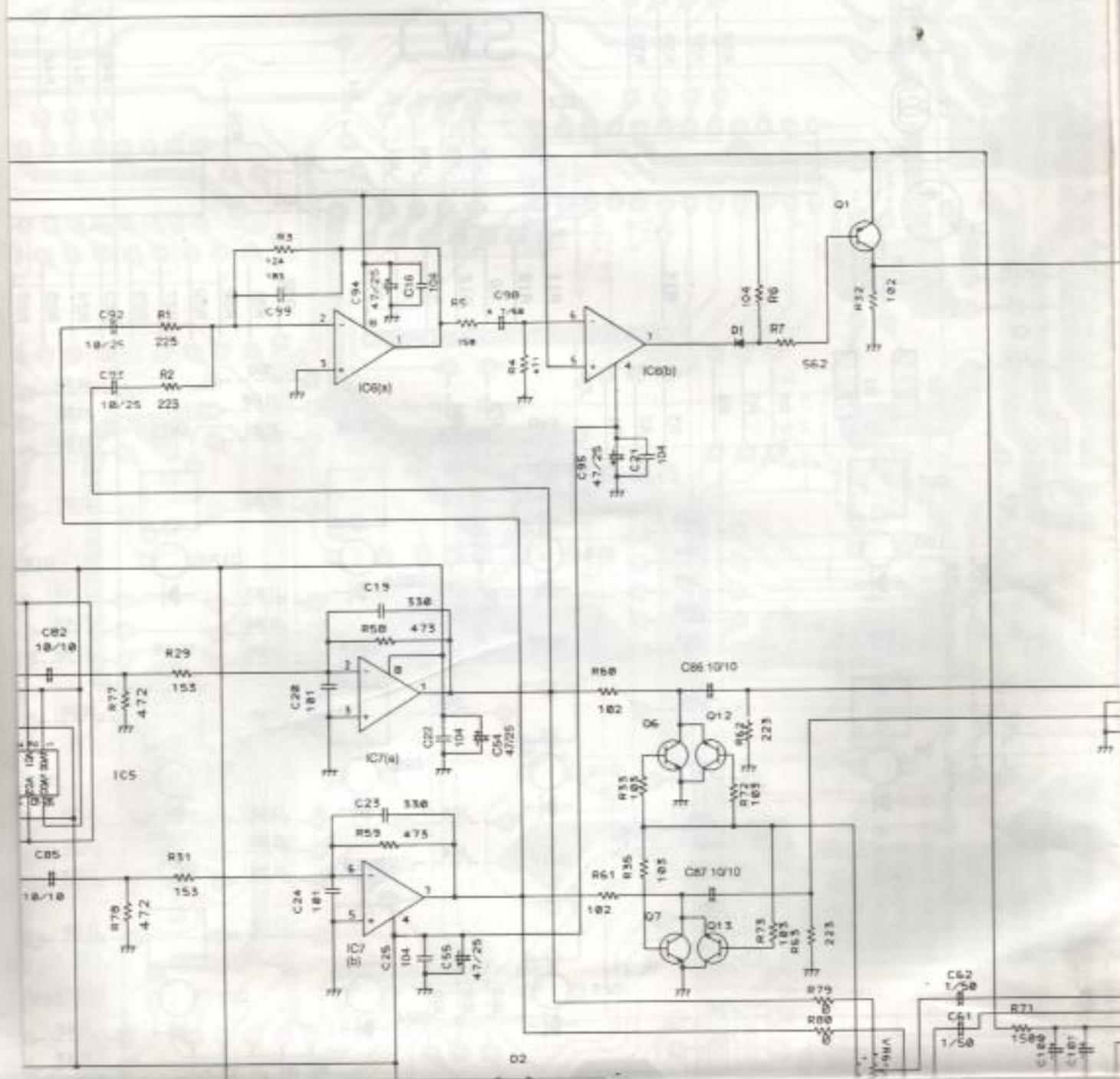
10

DRAFT NO. 07

DATE 10/10/07

AUDIO BOARD

AUDIO BOARD



SWITCH BOARD

<xebl>

trunc. datum

12

AUDIO BOARD

	IC1	IC2	IC3	IC4	IC5	IC6	IC7	IC8
Pin 1	11.5	11.5	0	0	11.5	0	0	0
2	0	0	0	0	3.6	0	0	0
3	0	0	0	0	0	0	0	0
4	-11.7	-11.7	-11.7	-11.7	-11.7	-11.7	-11.7	-11.7
5	-11.7	-11.7	0	0	-11.7	2.4	0	0
6	0	0	0	0	0	0	0	0
7	-	-	0	0	-	11.2	0	0
8	0	0	11.5	11.5	0	11.5	11.5	11.5
9	0	0			0			
10	-	-			-			
11	0	0			0			
12	-11.7	-11.7			-11.7			
13	-11.7	-11.7			-11.7			
14	0	0			0			
15	0	0			3.6			
16	11.5	11.5			11.5			

	B	C	E
Q1	11.4	0	5.2
2	-0.2	11.5	-0.9
3	-0.2	11.5	-0.8
4	-0.2	11.5	-0.8
5	-0.2	11.5	-0.8
6	-	0	0
7	-	0	0
8	-	0	0
9	-	0	0
10	11.4	0.3	11.3
12	-	0	0
13	-	0	0
14	-	0	0
15	-	0	0

To Digital Board

CN6

10AVPS

To Rear Board

CN10

15	RECL
16	GND
13	RECR
14	GND

To Level Meter

CN7

4	LEVELL
3	LEVELR
2	SV
1	GND

To Rear Board

CN1B			
AUXR	9		
GND	1.0	CBS 18/18	
AUXL	11		
GND	1.2		

AUX1

JACK BOARD



C75R49

18/18 552

C15

18

To Switch Board

CN6	ANB	1.1
CN6	SBS	1.2
CN6	SCANOUT0	9
CN6	SCANOUT1	5
CN6	SCANOUT2	8
CN6	SCANOUT3	4
CN6	SCANOUT4	7
CN6	SCANOUT5	3
CN6	SCANOUT6	6
CN17	SCANOUT7	14
CN17	SBI	3
CN17	LNC1	1

A

R78

184

SW35

0 0

SW34

0 0

SW35

0 0

SW36

0 0

SW37

0 0

SW38

0 0

SW39

0 0

SW40

0 0

1

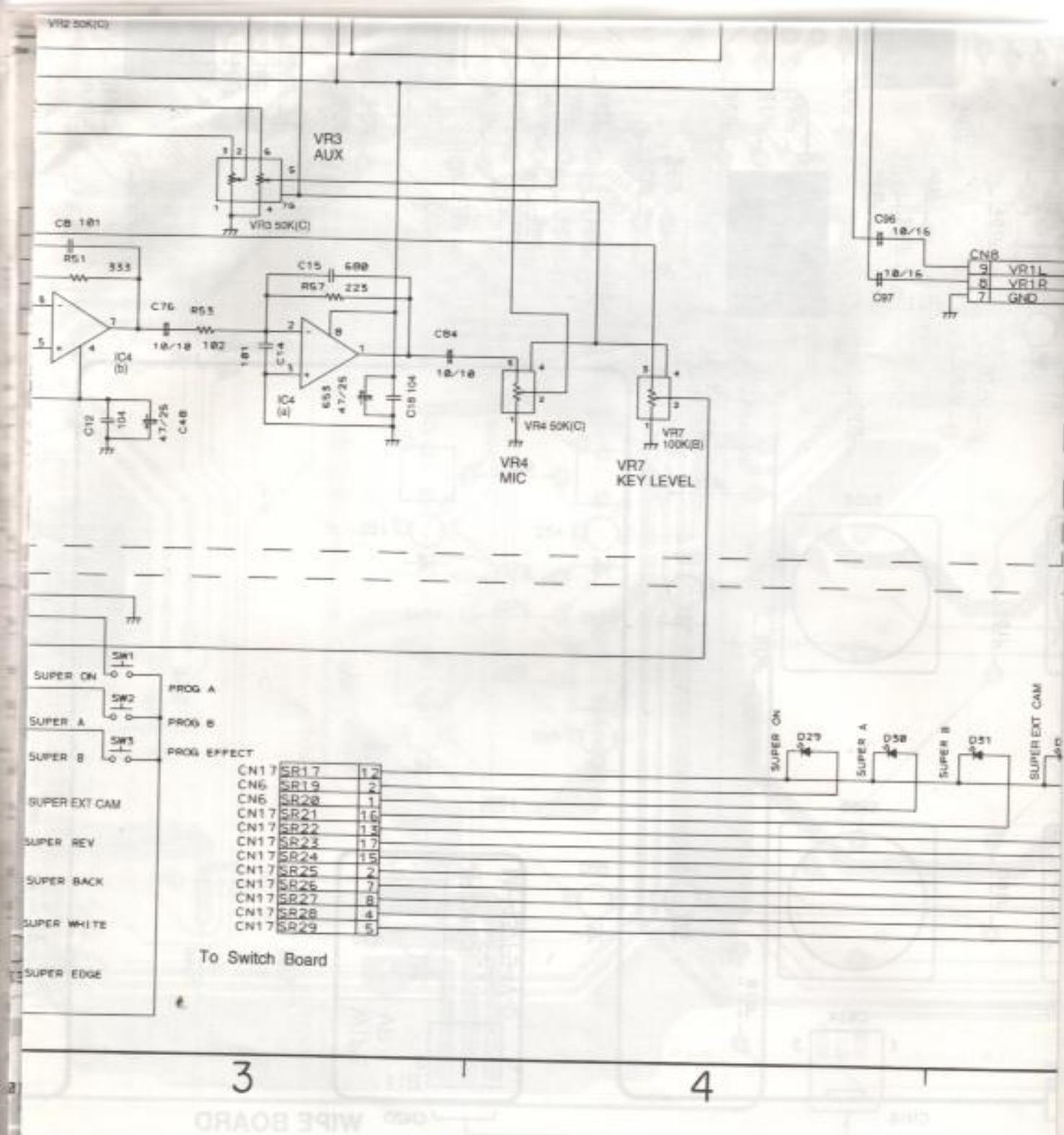
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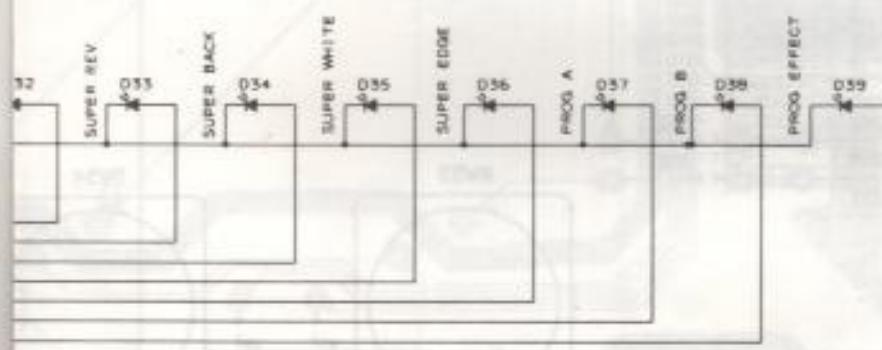
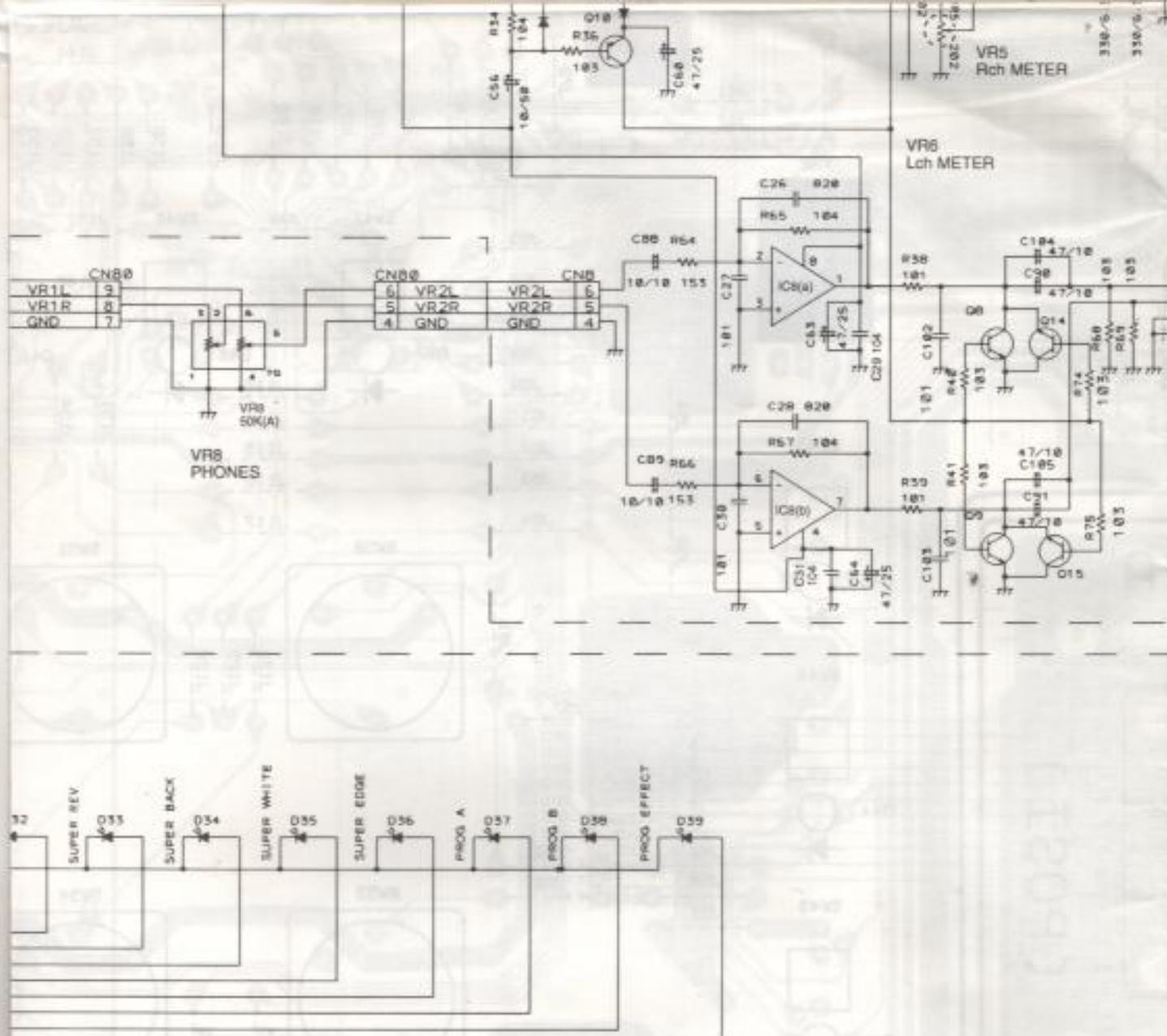
WIPE

3

4

19



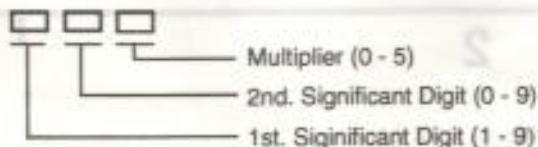


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6

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Note: The value indicated in schematic diagram should be read as follows:



<Example>

For Resistor: $330 \rightarrow 33 \times 10^0 = 33\Omega$

$561 \rightarrow 56 \times 10^1 = 560\Omega$

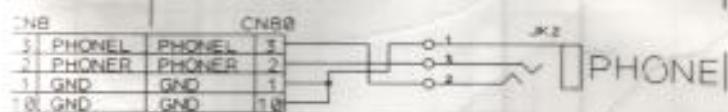
$123 \rightarrow 12 \times 10^3 = 12k\Omega$

For Capacitor: $820 \rightarrow 82 \times 10^0 = 82pF$

$102 \rightarrow 10 \times 10^2 = 1000pF = 0.001\mu F$

$104 \rightarrow 10 \times 10^4 = 100000pF = 0.1\mu F$

The suffix attached to capacitance indicates a type of capacitor.



<Index>

AUDIO BOARD

IC1	D3
IC2	C3
IC3	C4, D4
IC4	B3
IC5	C5
IC6	D5, D6
IC7	C5, D5
IC8	B6
Q1	E7
Q2	D2
Q3	D2
Q4	C2
Q5	C2
Q6	C5
Q7	C6
Q8	B7
Q9	B7
Q10	C6
Q12	C6
Q13	C6
Q14	B7
Q15	B7
D1	D6
D2	C6
D3	C6
D29	A4
D30	A4
D31	A5
D32	A5
D33	A5
D34	A5
D35	A5
D36	A6
D37	A6
D38	A6
D39	A6

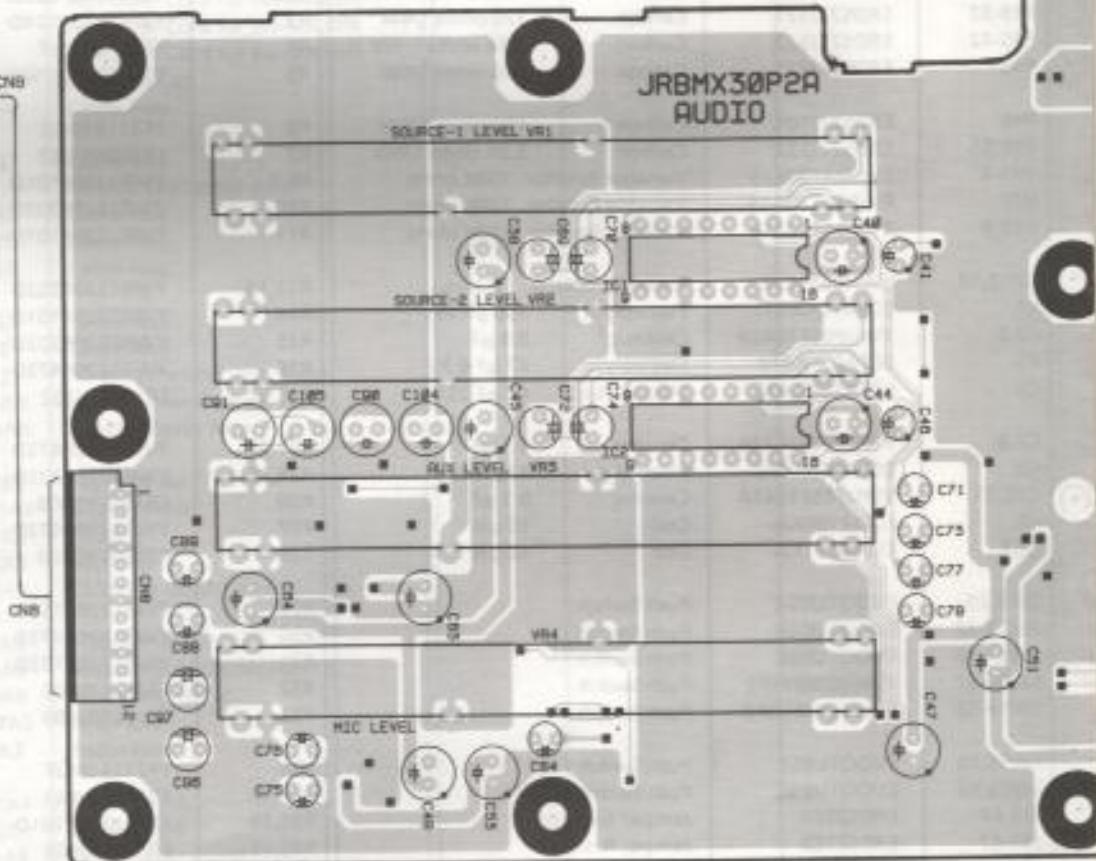
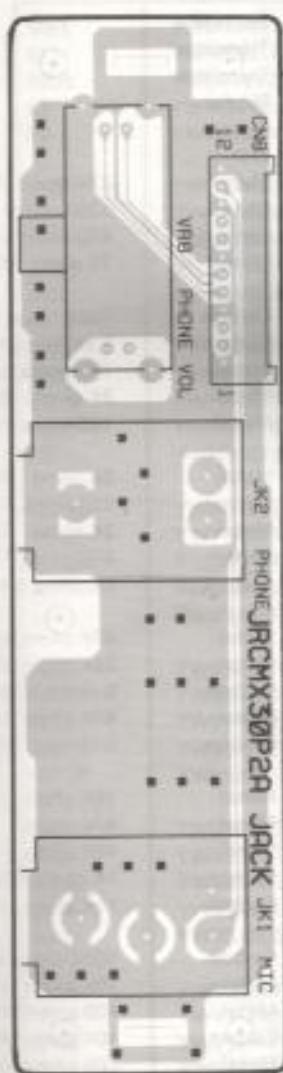
8

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COMPONENT SIDE

AUDIO BOARD

JACK BOARD



1

2

1

<Index>

Audio Board

(Pattern Side)

IC3	A3	Q1	C1	Q5	A1	Q12	A1
IC4	A4	Q2	B1	Q7	B1	Q13	B1
IC6	C1	Q3	B1	Q8	B4	Q14	B4
IC7	A1	Q4	B1	Q9	B4	Q15	B4
IC8	A4	Q5	B1	Q10	A1		

CONDUCTOR VIER

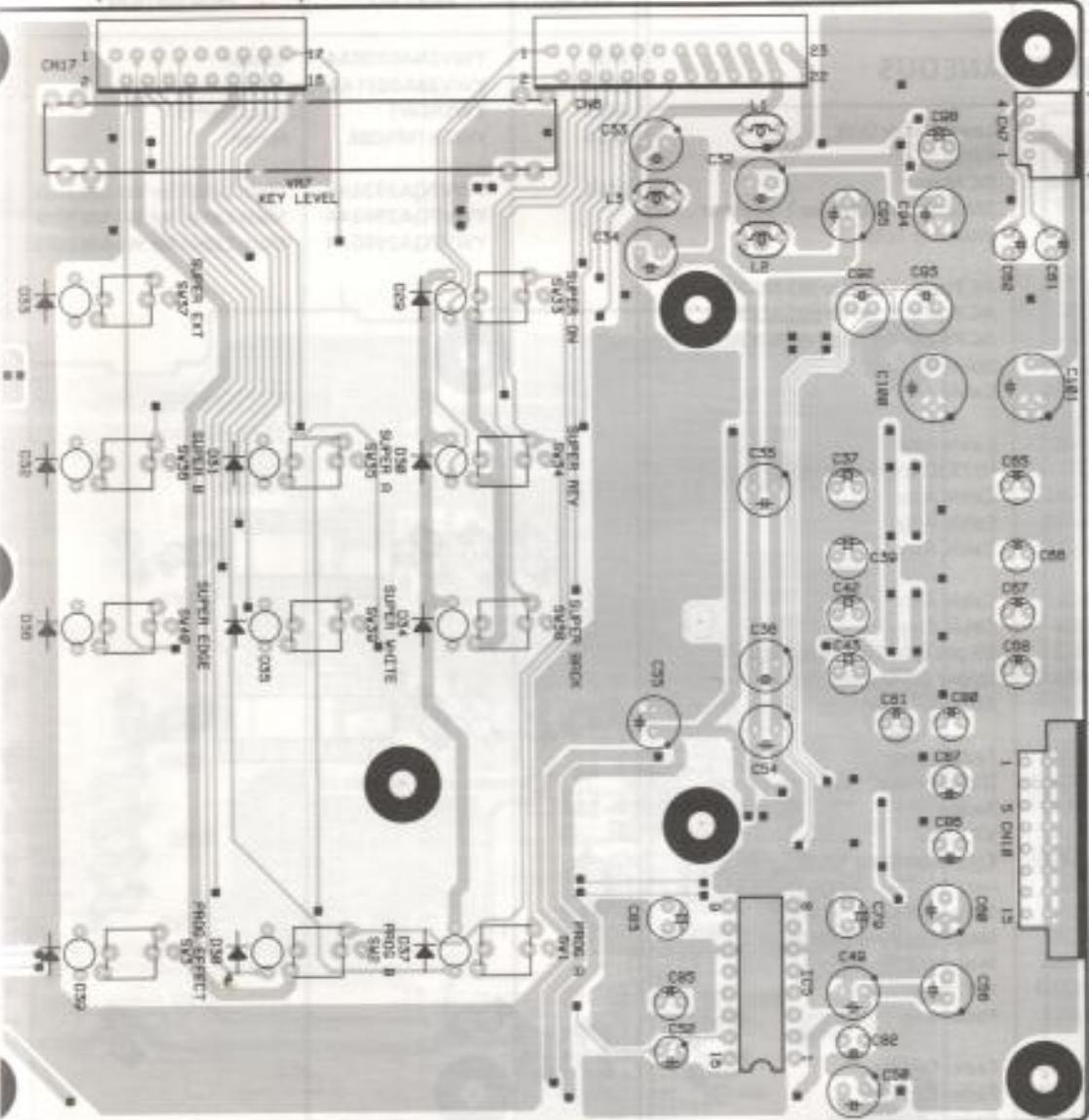
PLACEMENT PARTS LIST

2

To Switch Board
CN17To Switch Board
CN6

TO LEVEL METER

CN10



(COMPONENT SIDE)

3

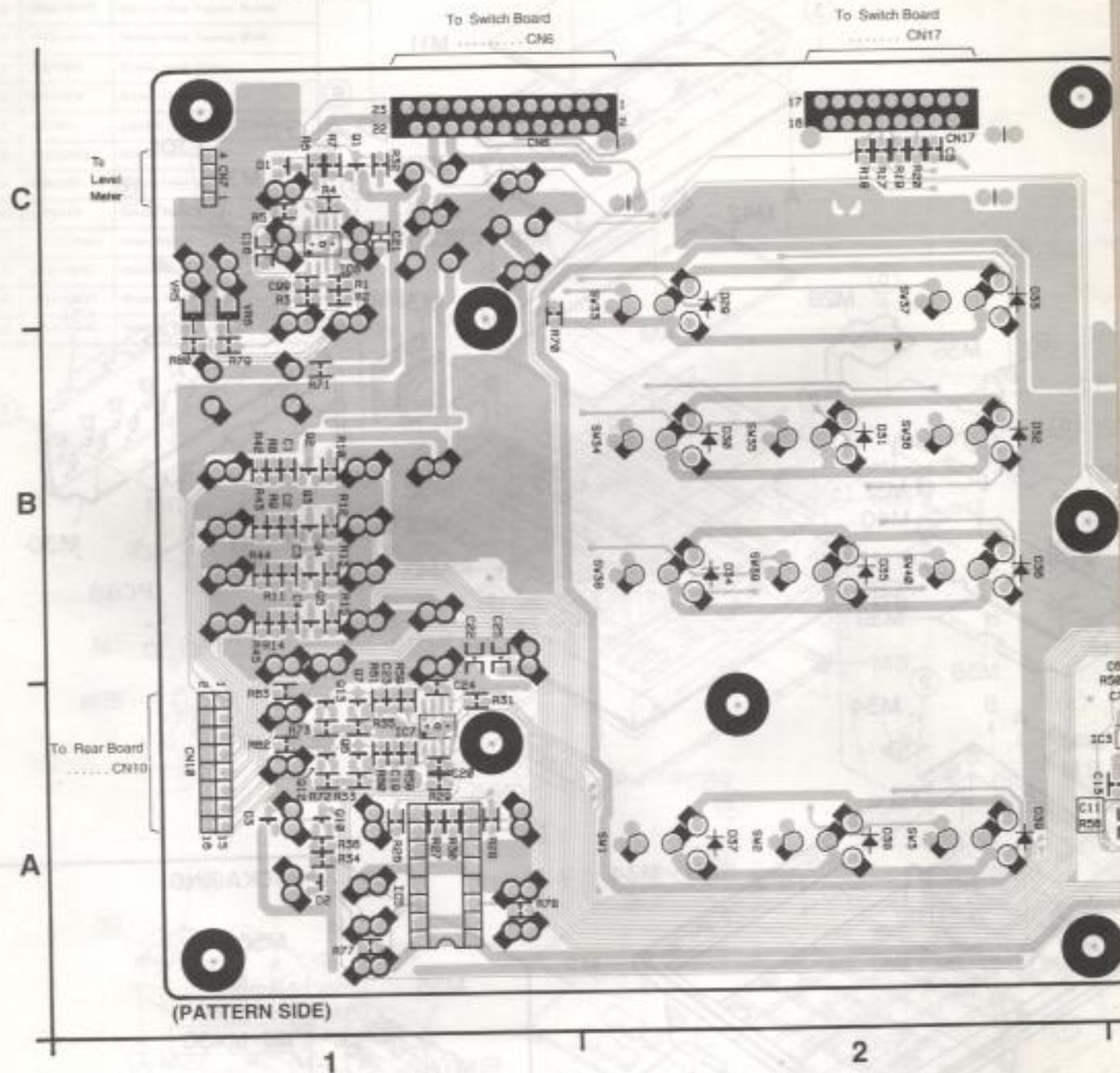
4

3

OF AUDIO BOARD

PATTERN SIDE

AUDIO BOARD



1

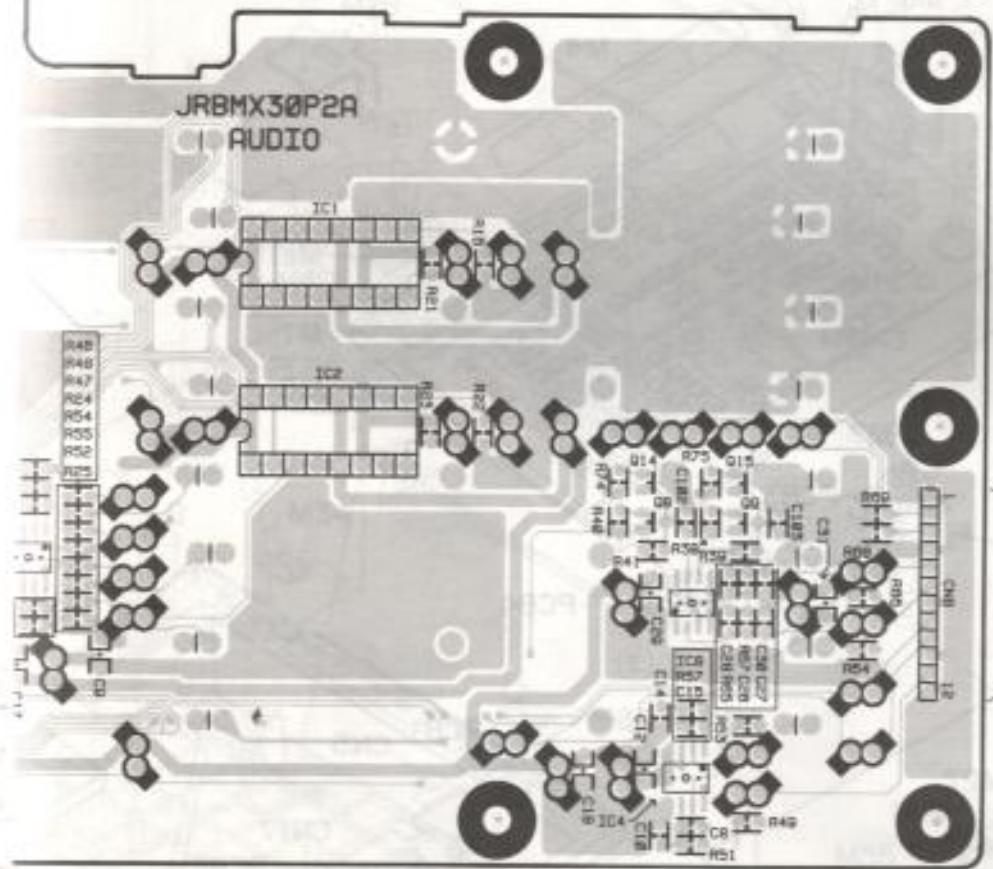
2

<Index>

Audio Board

(Component Side)

IC1	B2	D32	B3	D38	A3	SW34	B4	SW40	B3
IC2	B2	D33	C3	D39	A3	SW35	B3		
IC5	A4	D34	B4	SW1	A4	SW36	B3		
D29	C4	D35	B3	SW2	A3	SW37	C3		
D30	B4	D36	B3	SW3	A3	SW38	B4		
D31	B3	D37	A4	SW33	C4	SW39	B3		



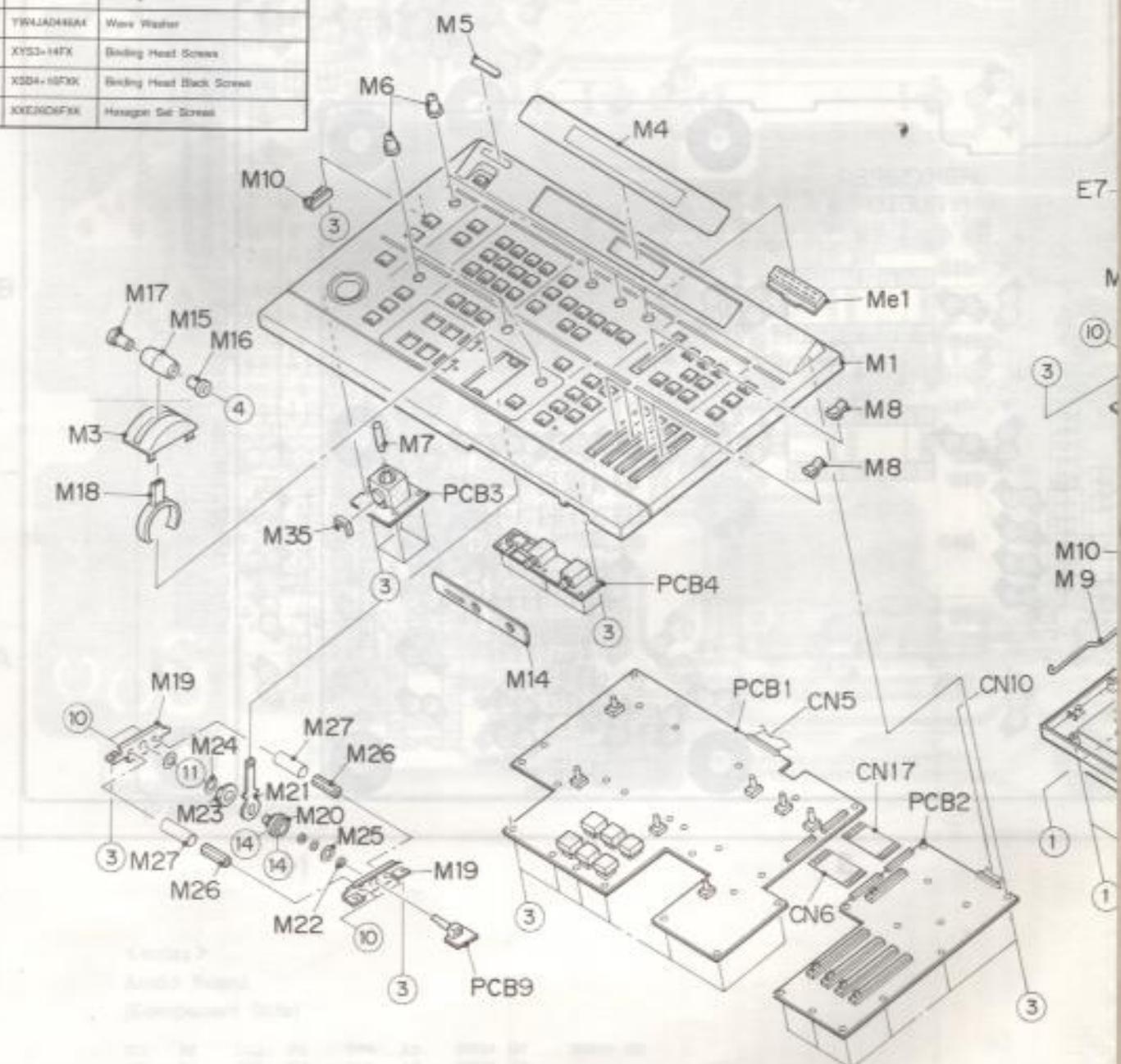
JACK BOARD



EXPLDED

○ Numbers show screws, washers, nuts and etc.

No.	Screws	Description
①	XTB3+10CFXK	Binding Head Tapping Back Screw
②	XTS3+10CFX	Flush Head Screw
③	XTB3+10CFX	Binding Head Tapping Screw
④	XTB3+14CFXK	Binding Head Tapping Back Screw
⑤	XSR3+6FX	Binding Head Screw
⑥	XSR4+6FX	Binding Head Screw
⑦	XWC4BFX	External Threaded Lock Washer
⑧	XSB26+6FX	Binding Head Screw
⑨	XSB3+6FX	Binding Head Screw
⑩	XSD3+6FX	Binding Head Screw
⑪	TW4JAD468AE	Wave Washer
⑫	XY53+14FX	Binding Head Screw
⑬	XSD4+10FXK	Binding Head Back Screw
⑭	XXE36D6FXK	Hexagon Set Screw

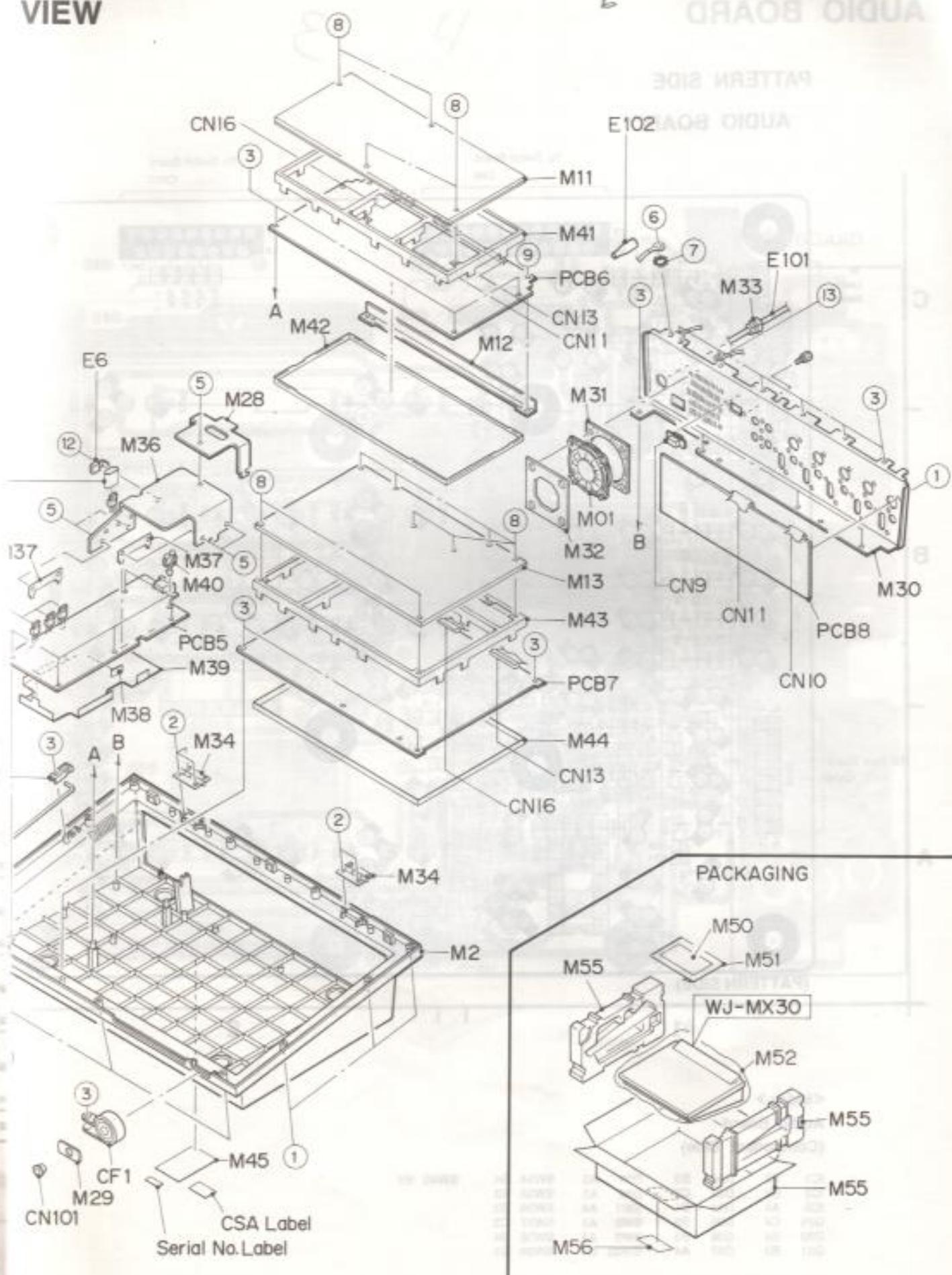


VIEW

AUDIO BOARD

PATTERN SIDE

AUDIO BOARD



REPLACEMENT PARTS LIST

EXPLDED

Important Notice

1. Components identified by "▲" mark have special characteristics important for safety.
When replacing any of these components, use only manufacturer's specified parts.
2. RTL : Retention Time Limited.

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
MISCELLANEOUS					
Me1	YWLI1244	Level Meter Unit	M31	YWV2NA0400A4	Spacer
CF1	YWTRCN16813	Filter	M32	YWV3BA0091A4	Supporting Angle
MO1	YW061012L180	DC Motor	M33	YWSR6W1	Cord Clamp
E6	YWM1748A	Mounting Holder for Transistor	M34	YWTHTMN086	Hinge
E7	YW45T01130L	Insulator Tube	M45	YWV7QA2938A4	Main Label for WJ-MX30/A
E101 ▲	YWACJ450/A YWGTS2R5B YWACJ450/G	AC Power Cord for WJ-MX30/A AC Power Cord for WJ-MX30/B AC Power Cord for WJ-MX30/G		YWV7QA2949A4	Main Label for WJ-MX30/B
E102	YFCD20A/CCAP	Insulator Cap		YWV7QA2950A4	Main Label for WJ-MX30/G
CN5	YWFCHZZ30064	Cable Assy			
CN6	YW23B085DGE	Cable Assy			
CN9	YWMX3007A	RS232C Connector Assy			
CN10	YWFCHZZ16042	Cable Assy			
CN11	YWFCHZZ40125	Cable Assy			
CN13	YWFCHZZ26136	Cable Assy			
CN16	YWFCHZZ20163	Cable Assy			
CN17	YW17B085DGE	Cable Assy			
CN101	YWD0111N622	10-pin Title Connector Assy			
M1	YVV9AB0853AN	Upper Cover Assy			
M2	YVV9AA0DB54AN	Bottom Cover Assy			
M3	YVV5EA1150A3	Fader Cover			
M4	YVV5WA1471A3	Display Panel			
M5	YVV7PA0093A3	Badge			
M6	YVV5RA0372A3	VR Knob			
M7	YVV5RA0334A3	Color Corrector Knob			
MB	YVV5RB0335A3	Slide VR Knob			
M9	YVV2SA2282A4	Mounting Angle for Hook L			
M10	YVV2SA2284A4	Mounting Angle			
M14	YVV5WB1397A3	MIC Panel			
M15	YVV5JA0089A3	Fader Grip			
M16	YVV5GA0141A4	Fader Cap A			
M17	YVV5GA0142A4	Fader Cap B			
M18	YVV5EA1151A3	Fader Lever Cover			
M19	YVV2KA0778A4	Chassis			
M20	YVV4HA0192A3	Fader Shaft			
M21	YVV4RA0103A4	Lever			
M22	YVV2NA0399A4	Spacer			
M23	YVV1FA0074A4	Nut			
M24	YVV1KA0151A4	Washer			
M25	YVV1KA0152A4	Washer			
M26	-MASB320	Spacer			
M27	YVV5GA0130A4	Tube			
M28	YVV2PA0558A3	Insulator			
M29	YVV5WA1398A4	Titler Panel			
M30	YVV5EA1241A1	Rear Cover			

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	
SWITCH BOARD					AUDIO BOARD	
PCB1 (RTL)	YWJKBMX30P1A	Printed Circuit Board Assy	PCB2 (RTL)	YWJKBMX30P2A	Printed Circuit Board Assy	
IC1,2	YWM66310P	IC	IC1,2	YWM5283P	IC	
IC3	NJM78L06A	IC	IC3,4	NJM2068MD	IC	
IC4	NJM79L05A	IC	IC5	YWM5283P	IC	
Q1-4	2SD1992A	Transistor	IC6,7	NJM2068MD	IC	
D1-2B	SLR34VR90KLM	Diode	IC8	YWM5216FP	IC	
D40-56	SLR34VR90KLM	Diode	Q1	MSB709-QRS	Transistor	
D57-64	MA165	Diode	Q2-9	MSD601-QRS	Transistor	
D65	1SS99	Diode	Q10	MSB709-QRS	Transistor	
D66	MA165	Diode	Q12-15	MSD601-QRS	Transistor	
R1-6	ERDS2TJ220	Carbon	D1-3	YWDAN212K	Diode	
R7-14	ERDS2TJ104	Carbon	D29-39	SLR34VR90KLM	LED	
R15-18	ERDS2TJ122	Carbon	R1,2	YWR1220P223D	Metal	
R19-32	ERDS2TJ121	Carbon	R3	YWR1220P124D	Metal	
R35-42	ERDS2TJ332	Carbon	R4	YF2116471JT	Carbon	
R48	ERDS2TJ221	Carbon	R5	YWR1220Q750D	Metal	
R49	ERDS2TJ101	Carbon	R6	YF2116104JT	Carbon	
R50,51	ERDS2TJ332	Carbon	R7	ERJ6GEYJ562	Carbon	
VR1-4	EVJ02AF20B15	Variable Resistor	R8,9	YWR1220P101D	Metal	
VR7	EVJ02AF20A15	Variable Resistor	R10	YWR1220P302D	Metal	
VR8,9	EVJ02AF20B15	Variable Resistor	R11	YWR1220P101D	Metal	
VR12,13	YWHP0683C1K	Variable Resistor	R12,13	YWR1220P302D	Metal	
C1	ECEA1CKA101	Electrolytic	R14	YWR1220P101D	Metal	
C2,3	YWUP05F104ZA	Ceramic	R15	YWR1220P302D	Metal	
CS	ECEA0JKA470	Electrolytic	R16	YWR1220P473D	Metal	
C6	ECEA1EKA470	Electrolytic	R17-20	ERJ6GEYJ102	Carbon	
C7,8	YWUP05F104ZA	Ceramic	R21-23	YWR1220P473D	Metal	
C9	ECEA1EKA470	Electrolytic	R24,25	YWR1220P223D	Metal	
C10,11	YWUP05F104ZA	Ceramic	R26	ERJ6GEY0R00	Carbon	
L1	ELESE100KA	Coil	R27	YWR1220P473D	Metal	
L2,3	ELESE101KA	Coil	R28	ERJ6GEY0R00	Carbon	
SW5-20	EVQQTU05R	Push Switch	R29	YWR1220P153D	Metal	
SW23-32	EVQQTU05R	Push Switch	R30	YWR1220P473D	Metal	
SW41-48	EVQQTU05R	Push Switch	R31	YWR1220P153D	Metal	
SW50-52	YW60W01YP2	Push Switch	R32	ERJ6GEYJ102	Carbon	
SW53-55	YW600W01GP2	Push Switch	R33	ERJ6GEYJ103	Carbon	
SW56,58	EVQQTU05R	Push Switch	R34	YF2116104JT	Carbon	
SW59-65	EVQQTU05R	Push Switch	R35,36	ERJ6GEYJ103	Carbon	
J33,34	ERDS2TC0	Jumper Resistor	R38,39	YWR1220P101D	Metal	
J44-47	ERDS2TC0	Jumper Resistor	R40,41	ERJ6GEYJ103	Carbon	
CN2	YW530151010	10-pin Connector	R42-45	YFR1220P203D	Metal	
CN4	YW530150510	5-pin Connector	R46-48	YWR1220P223D	Metal	
CN5	YWF795P030LA	30-pin Connector	R49	YWR1220P332D	Metal	
CN6	YW524922320	23-pin Connector	R50,51	YWR1220P333D	Metal	
CN14	YW530150310	3-pin Connector	R52	YWR1220P223D	Metal	
CN17	YW524921720	17-pin Connector	R53	YWR1220P102D	Metal	
CN23	JMIBLH03BBT	3-pin Connector	R54,55	YWR1220P223D	Metal	
CN24	JMIBLH02BBT	2-pin Connector	R56	YWR1220P333D	Metal	
			R57	YWR1220P223D	Metal	
			R58,59	YWR1220P473D	Metal	
			R60,61	YWR1220P102D	Metal	

REF.NO.	PART NO.	DESCRIPTION			REF.NO.	PART NO.	DESCRIPTION		
R62,63	YWR1220P152D	Metal	1.5K ohms	1/10W	C73	ECEA1ASN100	Electrolytic	10 μF 10V	
R64	YWR1220P153D	Metal	15K ohms	1/10W	C74	ECEA1EKN4R7	Electrolytic	4.7 μF 25V	
R65	YFR1220P104D	Metal	100K ohms	1/10W	C75-78	ECEA1AKN100	Electrolytic	10 μF 10V	
R66	YWR1220P153D	Metal	15K ohms	1/10W	C79	ECEA1EKN4R7	Electrolytic	4.7 μF 25V	
R67	YFR1220P104D	Metal	100K ohms	1/10W	C80-82	ECEA1AKN100	Electrolytic	10 μF 10V	
R68,69	YWR1220P103D	Metal	10K ohms	1/10W	C83	ECEA1EKN4R7	Electrolytic	4.7 μF 25V	
R70	YF2116104JT	Carbon	100K ohms	1/10W	C84-89	ECEA1AKN100	Electrolytic	10 μF 10V	
R71	Z116150JT	Carbon	15 ohms	1/10W	C90,91	ECEA1AKN470	Electrolytic	47 μF 10V	
R72-75	ERJ6GEYJ103	Carbon	10K ohms	1/10W	C92,93	ECEA1EKN100	Electrolytic	10 μF 10V	
R77,78	YWR1220P472D	Metal	4.7K ohms	1/10W	C94,95	ECEA1EKA470	Electrolytic	47 μF 25V	
R79,80	ERJ6GEY0R00	Carbon	0 ohms	1/10W	C96	ECEA1CKN100	Electrolytic	10 μF 16V	
VR1-3	EWAQA1X05C54	Variable Resistor	50K ohms		C97	ECEA1CSN100	Electrolytic	10 μF 16V	
VR4	EWAQFEX05B15	Variable Resistor	100K ohms		C98	ECEA1HKN4R7	Electrolytic	4.7 μF 50V	
VR5,6	EVM7JGA30B23	Variable Resistor	2K ohms		C99	YF400183XKT	Ceramic	0.018 μF	
VR7	EWApFEX05B15	Variable Resistor	100K ohms		C100,101	ECEA0JK331	Electrolytic	330 μF 6.3V	
C1-4	YF400220CHJT	Ceramic	22 pF		C102,103	YF400101CHJT	Ceramic	100 pF	
C5-8	YF400101CHJT	Ceramic	100 pF		C104,105	ECEA1AKN470	Electrolytic	47 μF 10V	
C9	YWT316B104MT	Ceramic	0.1 μF		L1-3	ELESE101KA	Coil	100 μH	
C10,11	YF400101CHJT	Ceramic	100 pF		SW1-3	EVQQTU05R	Push Switch		
C12	YWT316B104MT	Ceramic	0.1 μF		SW33-40	EVQQTU05R	Push Switch		
C13,14	YF400101CHJT	Ceramic	100 pF		CN6	YWS24922320	23-pin Connector		
C15	YF400680CHJT	Ceramic	68 pF		CN7	YWS30150410	4-pin Connector		
C16-18	YWT316B104MT	Ceramic	0.1 μF		CNB	YWS30151210	12-pin Connector		
C19	YF400330CHJT	Ceramic	33 pF		CN10	YWF795P016LA	16-pin Connector		
C20	YF400101CHJT	Ceramic	100 pF		CN17	YWS24921720	17-pin Connector		
C21,22	YWT316B104MT	Ceramic	0.1 μF						
C23	YF400330CHJT	Ceramic	33 pF						
C24	YF400101CHJT	Ceramic	100 pF						
C25	YWT316B104MT	Ceramic	0.1 μF						
C26	YF400820CHJT	Ceramic	82 pF						
C27	YF400101CHJT	Ceramic	100 pF						
C28	YF400820CHJT	Ceramic	82 pF						
C29	YWT316B104MT	Ceramic	0.1 μF						
C30	YF400101CHJT	Ceramic	100 pF						
C31	YWT316B104MT	Ceramic	0.1 μF						
C32-36	ECEA1EKA470	Electrolytic	47 μF 25V		PCB3 (RTJ)	YWKCMX30P1A	Printed Circuit Board Assy		
C37	ECEA1AKN220	Electrolytic	22 μF 10V		VR10	YWRKJXB100KB	Variable Resistor 100K ohms		
C38	ECEA1EKA470	Electrolytic	47 μF 25V		CN7	YWS30150510	5-pin Connector		
C39	ECEA1AKN220	Electrolytic	22 μF 10V		E1	YW32BM10	Terminal		
C40	ECEA1EKA470	Electrolytic	47 μF 25V		M35	YWV2HA1094A4	Insulator Sheet		
C41	ECEA1AKA220	Electrolytic	22 μF 10V						
C42,43	ECEA1AKN220	Electrolytic	22 μF 10V						
C44,45	ECEA1EKA470	Electrolytic	47 μF 25V						
C46	ECEA1AKA220	Electrolytic	22 μF 10V						
C47-51	ECEA1EKA470	Electrolytic	47 μF 25V						
C52	ECEA1AKA220	Electrolytic	22 μF 10V						
C53-55	ECEA1EKA470	Electrolytic	47 μF 25V						
C56	ECEA1HKA100	Electrolytic	10 μF 50V						
C60	ECEA1EKA470	Electrolytic	47 μF 25V						
C61,62	ECEA1HKN010	Electrolytic	1 μF 50V						
C63,64	ECEA1EKA470	Electrolytic	47 μF 25V						
C65-68	ECEA1AKN100	Electrolytic	10 μF 10V						
C69,70	ECEA1EKN4R7	Electrolytic	4.7 μF 25V						
C71	ECEA1ASN100	Electrolytic	10 μF 10V						
C72	ECEA1EKN4R7	Electrolytic	4.7 μF 25V						

POSITIONER BOARD

PCB3 (RTJ)	YWKCMX30P1A	Printed Circuit Board Assy
VR10	YWRKJXB100KB	Variable Resistor 100K ohms
CN7	YWS30150510	5-pin Connector
E1	YW32BM10	Terminal
M35	YWV2HA1094A4	Insulator Sheet

JACK BOARD

PCB4 (RTJ)	YWKCMX30P2A	Printed Circuit Board Assy
VR8	YWR51SH250KA	Variable Resistor 250K ohms
CN80	YWS30151210	12-pin Connector
JK1	YWLJ23083090	Jack
JK2	YWLJ23083020	Jack

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
POWER BOARD					
PCB5 (RTU)	YWJKZMX30E1A	Printed Circuit Board Assy	C6	EC052GA151DA	Electrolytic 150 μ F 140V
IC1	YWFA5304P	IC	C7	ECQE6103KZ	Plastic 0.01 μ F
IC2	YWUPC2412HF	IC	C8	ECEA1HU2R2	Electrolytic 2.2 μ F 50V
IC3	YWUPC24M12HF	IC	C9	ECEA1HU010	Electrolytic 1 μ F 50V (SU)
IC4	YWTAT76431S	IC	C10	ECQM1H104JZ	Plastic 0.1 μ F 50V
Q3	ZSK960	FET	C11	ECQP1H331JZ	Plastic 330P 50V
Q4	2SA1244Y	Transistor	C12	ECQM1H473JZ	Plastic 0.047 μ F 50V
Q5	2SA933	Transistor	C13	ECQB1H183JZ	Plastic 0.018 μ F 50V
Q6	2SA1244Y	Transistor	C14	ECA1VFQ270	Electrolytic 27 μ F 35V
Q7	2SC1740	Transistor	C15,16	ECKDRS332ME	Ceramic 3300 pF
Q8	2SC3377	Transistor	C17	ECA1EFQ102	Electrolytic 1000 μ F 25V
Q9	2SC1740	Transistor	C18,19	ECA1CFQ181B	Electrolytic 180 μ F 16V
D1	△ YWR8V406	Diode	C20	ECA1CFQ471	Electrolytic 470 μ F 16V
D2	RUIP	Diode	C21	ECA1AFQ222	Electrolytic 2200 μ F 10V
D3	YWEQA0325	Diode	C22	ECA1AFQ122	Electrolytic 1200 μ F 10V
D4,5	YWERA9102	Diode	C23-25	ECA1AFQ331	Electrolytic 330 μ F 10V
D6	MA165	Diode	C26	ECA1EFQ471	Electrolytic 470 μ F 25V
D7	RD5.1JB2	Diode	C27	ECQM1H104JZ	Plastic 0.1 μ F 50V
D8	YWPC111LY	Diode	C28,29	ECA1CFQ181B	Electrolytic 180 μ F 16V
D9	YWE5AB85M009	Diode	C30	ECEA1AN220S	Electrolytic 22 μ F 10V
D10	ESAB82M004	Diode	C31	ECQM1H104JZ	Plastic 0.1 μ F 50V
D11	MA165	Diode	C32	ECA1AFQ331	Electrolytic 330 μ F 10V
D12	YWERA84009	Diode	C33	ECQE6103KZ	Plastic 0.01 μ F
TH1	YW16D13	Thermistor	L1,2	YWL4D183	Coil
V51	ER2C07DK471U	ZNR	L3,4	YFBLO2RN2R62	Coil 2.6 μ H
R1	ERC122GK105	Solid	L5	EL055I330K	Coil 33 μ H
R2	ERF5TK3R3	Wire Wound	L6-8	YFBLO2RN2R62	Coil 2.6 μ H
R4,5	ERD50FJ104	Carbon	L9	YWPC7330K	Coil 33 μ H
R6,7	ERG35J103	Metal	L10,11	YWPC10220K	Coil 22 μ H
R8	ERDS2TJ104	Carbon	L12	YWPC7330K	Coil 33 μ H
R9	ERDS2TJ105	Carbon	L13,14	YFBLO2RN2R62	Coil 2.6 μ H
R10	ERDS2TJ220	Carbon	T1	△ ETS2BBF136AC	Power Transformer
R11	ERDS2TJ563	Carbon	SW1	△ YWSJP4A01BBM	Seesaw Switch
R12	ERDS2TJ222	Carbon	F1	△ XBA2C16ET0A	Current Fuse 1.6A 250V
R13	ERDS2TJ101	Carbon	F2	△ SSFR3.15AF02	Current Fuse 3.15A
R14	ERDS2TJ622	Carbon	F3	△ SSFR315F002	Current Fuse 3.15A
R15	ERX25JR75	Metal	F4	△ YWSSFR2AF002	Current Fuse 2A
R16	ERC122GM156	Solid Resistor	F5	△ SSFR630F002	Current Fuse 6.3A
R17	ERDS1VJB21	Carbon	F6	△ YWSSFR1AF002	Current Fuse 1A
R18	ERDS2TJ100	Carbon	F7	△ SSFR630F002	Current Fuse 6.3A
R19	ERDS2TJ333	Carbon	F8	△ SSFR1.6A002	Current Fuse 1.6A
R20	ERDS2TJ151	Carbon	CN2	△ YWS30141010	10-pin Connector
R21	ERDS2TJ332	Carbon	CN3	△ YWS30140810	8-pin Connector
R22	ERDS2TJ223	Carbon	CN15	△ YWS3014-0210	2-pin Connector
R23	ERDS2TJ683	Carbon	CN22	△ YWS30140610	6-pin Connector
R24	ERDS2TJ333	Carbon	E1,2	△ YWTM02BB	Terminal
R25	ERDS2TJ560	Carbon	E3,4	△ S-N5057	Fuse Holder
R26	ERDS2TJ102	Carbon	E5	△ YWMX5027A	Cable
R27	ERDS2TJ472	Carbon	EB-10	△ YWB51248	Insulator
R28,29	ER052CKF6801	Metal	M36	△ YWV7DA0351A2	Heat Sink
VR1	YFH0621A2R2K	Variable Resistor	M37	△ YWV25A2452A4	Mounting Angle for Heat Sink
C1,2	ECQU2A104MV	Plastic	M38	△ YWV2PA0572A4	Insulator Sheet for Shield Cover
C3-5	ECKDRS332ME	Ceramic	M39	△ YWV2HA1101B3	Shield Cover
			M40	△ YW5076	Cord Clamp

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
ANALOG BOARD					
PCB6 (RTU)	YWJKZMX30E2A	Printed Circuit Board Assy	Q102	MSB709-QRS	Transistor
IC5	YWMC141625FU	IC	Q103	MSD601-QRS	Transistor
IC6	YWNJM2246M	IC	Q104,106	MSB709-QRS	Transistor
IC7	YWMC141625FU	IC	Q107,108	MSB709-QRS	Transistor
IC8	YWNJM2245M	IC	Q109	MSD601-QRS	Transistor
IC10,11	YWNJM2246M	IC	Q110,112	MSB709-QRS	Transistor
IC12	YWNJM2245M	IC	Q113	MSD601-QRS	Transistor
IC13	NJM78L05A	IC	Q114,116	MSB709-QRS	Transistor
IC14	YVMS51271FP	IC	Q117-130	MSB709-QRS	Transistor
IC15	YWNJM3403AM	IC	Q131-140	MSD601-QRS	Transistor
IC16	YWLM1881M	IC	Q141	MSB709-QRS	Transistor
IC17	NJM78L05A	IC	Q142	MSD601-QRS	Transistor
IC18	NJM319M	IC	Q143	MSB709-QRS	Transistor
IC19	YVMS51271FP	IC	Q144	MSD601-QRS	Transistor
IC20	YWNJM3403AM	IC	Q145	MSB709-QRS	Transistor
IC22-32	YWSC7508F	IC	Q146	MSD601-QRS	Transistor
IC33,34	YWSC7504F	IC	Q147	MSB709-QRS	Transistor
IC35	YWNJM2246M	IC	Q148-150	MSD601-QRS	Transistor *
IC36	YWNJM2233BM	IC	Q152,153	MSD601-QRS	Transistor
IC37	YWNJM2246M	IC	Q154	MSB709-QRS	Transistor
IC38	YWNJM2233BM	IC	Q155	MSD601-QRS	Transistor
IC39	NJM79L05A	IC	Q156	MSB709-QRS	Transistor
IC40	YVTC4W53FL	IC	Q157	MSD601-QRS	Transistor
IC41-44	MC74HC4052F	IC	Q158	MSB709-QRS	Transistor
Q1	25B642-QRS	Transistor	Q159	FMA4	Transistor
Q2-19	MSD601-QRS	Transistor	Q160	DTB114EK	Transistor
Q21-24	MSD601-QRS	Transistor	D1,2	MA151K	Diode
Q25	MSB709-QRS	Transistor	R1	ERDS2TJ100	Carbon 10 ohms 1/4W
Q26,28	MSD601-QRS	Transistor	R2	ERDS2TJ751	Carbon 750 ohms 1/4W
Q29-35	MSD601-QRS	Transistor	R3	ERDS2TJ331	Carbon 330 ohms 1/4W
Q36	MSB709-QRS	Transistor	R4	ERDS2TJ100	Carbon 10 ohms 1/4W
Q37-40	MSD601-QRS	Transistor	R5	ERDS2TJ751	Carbon 750 ohms 1/4W
Q42-47	MSD601-QRS	Transistor	R6	ERDS2TJ331	Carbon 330 ohms 1/4W
Q48	2SD1328-RS	Transistor	R7	ERDS2TJ470	Carbon 47 ohms 1/4W
Q49-59	MSD601-QRS	Transistor	R8	ERDS2TJ100	Carbon 10 ohms 1/4W
Q60	2SD1328-RS	Transistor	R9	ERDS2TJ470	Carbon 47 ohms 1/4W
Q61-64	MSD601-QRS	Transistor	R10	ERDS2TJ100	Carbon 10 ohms 1/4W
Q65	2SD1328-RS	Transistor	R11	ERJ6GEYJ103	Carbon 10K ohms 1/10W
Q66-70	MSD601-QRS	Transistor	R12	ERJ6GEYJ750	Carbon 75 ohms 1/10W
Q71	2SD1328-RS	Transistor	R13	ERJ6GEYJ393	Carbon 39K ohms 1/10W
Q72-82	MSD601-QRS	Transistor	R14	YF2116753JT	Carbon 75K ohms 1/10W
Q83	2SD1328-RS	Transistor	R15	YF2116122JT	Carbon 1.2K ohms 1/10W
Q84,85	MSD601-QRS	Transistor	R16	ERJ6GEYJ750	Carbon 75 ohms 1/10W
Q86	2SD1328-RS	Transistor	R17	ERJ6GEYJ393	Carbon 39K ohms 1/10W
Q87,88	MSD601-QRS	Transistor	R18	YF2116753JT	Carbon 75K ohms 1/10W
Q89	2SD1328-RS	Transistor	R19	YF2116122JT	Carbon 1.2K ohms 1/10W
Q90	MSD601-QRS	Transistor	R20	ERJ6GEYJ750	Carbon 75 ohms 1/10W
Q93-97	MSB709-QRS	Transistor	R21	ERJ6GEYJ393	Carbon 39K ohms 1/10W
Q98	MSD601-QRS	Transistor	R22	YF2116753JT	Carbon 75K ohms 1/10W
Q99,101	MSB709-QRS	Transistor	R23	YF2116122JT	Carbon 1.2K ohms 1/10W
			R24	ERJ6GEYJ393	Carbon 39K ohms 1/10W
			R25	ERJ6GEYJ750	Carbon 75 ohms 1/10W
			R26	YF2116122JT	Carbon 1.2K ohms 1/10W
			R27	YF2116753JT	Carbon 75K ohms 1/10W
			R28	ERJ6GEYJ393	Carbon 39K ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R30	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R107	YF2116101JT	Carbon	100 ohms 1/10W
R31,32	ERJ6GEYJ750	Carbon	75 ohms 1/10W	R109	YF2116273GT	Carbon	27K ohms 1/10W
R33	YF2116753JT	Carbon	75K ohms 1/10W	R110	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R34	YF2116122JT	Carbon	1.2K ohms 1/10W	R111	YF2116474JT	Carbon	470K ohms 1/10W
R36	ERJ6GEYJ393	Carbon	39K ohms 1/10W	R113	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R38	YF2116122JT	Carbon	1.2K ohms 1/10W	R114,115	YF2116152JT	Carbon	1.5K ohms 1/10W
R39	YF2116753JT	Carbon	75K ohms 1/10W	R116	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R42,44	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R117	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R46	ERJ6GEYJ182	Carbon	1.8K ohms 1/10W	R118	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R47	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R119	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R49	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R120,121	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R50	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R122	YF2116332JT	Carbon	3.3K ohms 1/10W
R51	YF2116332JT	Carbon	3.3K ohms 1/10W	R123,124	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R52	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R125	YF2116471JT	Carbon	470 ohms 1/10W
R53	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R127	ERJ8GCSG221	Carbon	220 ohms 1/8W
R54	YF2116202JT	Carbon	2K ohms 1/10W	R128	ERJ6GEYJ132	Carbon	1.3K ohms 1/10W
R55	YF2116101JT	Carbon	100 ohms 1/10W	R129,131	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R56,57	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W	R132	YF2116680JT	Carbon	68 ohms 1/10W
R58	YF2116181JT	Carbon	180 ohms 1/10W	R139	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R59,60	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R142	YF2116912GT	Carbon	9.1K ohms 1/10W
R61,62	YF2116152JT	Carbon	1.5K ohms 1/10W	R144	YF2116122JT	Carbon	1.2K ohms 1/10W
R63	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R145	YF2116680JT	Carbon	68 ohms 1/10W
R64	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R147	YF2116101JT	Carbon	100 ohms 1/10W
R65	YF2116332JT	Carbon	3.3K ohms 1/10W	R148	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R66	ERJ8GCSG221	Carbon	220 ohms 1/8W	R149	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R69	YF2116912GT	Carbon	9.1K ohms 1/10W	R150	ERJ6GEYJ100	Carbon	10 ohms 1/10W
R70,71	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R153	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W
R72	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W	R154	YF2116751JT	Carbon	750 ohms 1/10W
R73,74	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R155	YF2116681JT	Carbon	680 ohms 1/10W
R75	YF2116912GT	Carbon	9.1K ohms 1/10W	R156	YF2116104JT	Carbon	100K ohms 1/10W
R76	ERJ6GEYJ182	Carbon	1.8K ohms 1/10W	R158	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R77,78	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R159	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R79	YF2116681JT	Carbon	680 ohms 1/10W	R160	YF2116511JT	Carbon	510 ohms 1/10W
R80	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R163	YF2116912GT	Carbon	9.1K ohms 1/10W
R82	YWR1220P102D	Metal	1K ohms 1/10W	R164	YF2116101JT	Carbon	100 ohms 1/10W
R83,84	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R165	YWR1220P272D	Metal	2.7K ohms 1/10W
R86	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R166	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R87	YF2116152JT	Carbon	1.5K ohms 1/10W	R168	YWR1220P102D	Metal	1K ohms 1/10W
R88	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R169,170	YF2116474JT	Carbon	470K ohms 1/10W
R89	YWR1220P512D	Metal	5.1K ohms 1/10W	R171	YF2116152JT	Carbon	1.5K ohms 1/10W
R90	YF2116332JT	Carbon	3.3K ohms 1/10W	R174	YF2116332JT	Carbon	3.3K ohms 1/10W
R91	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R175	YF2116104JT	Carbon	100K ohms 1/10W
R92	YF2116332JT	Carbon	3.3K ohms 1/10W	R177	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R93	YF2116471JT	Carbon	470 ohms 1/10W	R179	YWR1220P512D	Metal	5.1K ohms 1/10W
R94	YWR1220P222D	Metal	2.2K ohms 1/10W	R180	YF2116392JT	Carbon	3.9K ohms 1/10W
R95	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R181	YF2116122JT	Carbon	1.2K ohms 1/10W
R96	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W	R182	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R97,98	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R185	YF2116511JT	Carbon	510 ohms 1/10W
R99	YF2116202JT	Carbon	2K ohms 1/10W	R186	YF2116332JT	Carbon	3.3K ohms 1/10W
R100	YF2116332JT	Carbon	3.3K ohms 1/10W	R188,190	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R101	YF2116101JT	Carbon	100 ohms 1/10W	R191	ERJ6GEYJ100	Carbon	10 ohms 1/10W
R103	YF2116754JT	Carbon	750K ohms 1/10W	R192	YF2116474JT	Carbon	470K ohms 1/10W
R104	YF2116181JT	Carbon	180 ohms 1/10W	R194	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R105	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R196	YF2116471JT	Carbon	470 ohms 1/10W
R106	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W	R197	ERJ6GEYJ102	Carbon	1K ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R200	YF2116754JT	Carbon	750 ohms 1/10W	R273	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R203	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R274	YF2116183GT	Carbon	18K ohms 1/10W
R206	YF2116104JT	Carbon	100K ohms 1/10W	R275	ERJ6GEYJ510	Carbon	51 ohms 1/10W
R207	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R277	YF2116202JT	Carbon	2K ohms 1/10W
R208	YF2116101JT	Carbon	100 ohms 1/10W	R278	ERJ6GEYJ393	Carbon	39K ohms 1/10W
R209	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R279,280	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R210	YF2116474JT	Carbon	470K ohms 1/10W	R282	YF2116433GT	Carbon	43K ohms 1/10W
R211	YF2116101JT	Carbon	100 ohms 1/10W	R283,284	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R213	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R285	YF2116391JT	Carbon	390 ohms 1/10W
R214	ERJ6GEYJ393	Carbon	39K ohms 1/10W	R286	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R215,216	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R288	YF2116202JT	Carbon	2K ohms 1/10W
R217	YF2116433GT	Carbon	43K ohms 1/10W	R289	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R218	YF2116471JT	Carbon	470 ohms 1/10W	R290	YF2116392JT	Carbon	3.9K ohms 1/10W
R219	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R291	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R221	ERJ6GEYJ132	Carbon	1.3K ohms 1/10W	R293	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R222	YF2116391JT	Carbon	390 ohms 1/10W	R294	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W
R223	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R295	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W
R224	YF2116101JT	Carbon	100 ohms 1/10W	R296	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R225	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R297	YF2116222GT	Carbon	2.2K ohms 1/10W
R226	YF2116122JT	Carbon	1.2K ohms 1/10W	R298	YF2116432JT	Carbon	4.3K ohms 1/10W
R229	ERJ6GEYJ750	Carbon	75 ohms 1/10W	R299	YF2116181JT	Carbon	180 ohms 1/10W
R231	YF2116754JT	Carbon	750K ohms 1/10W	R300	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R234	YF21166681JT	Carbon	680 ohms 1/10W	R301	ERJ6GEYJ562	Carbon	5.6K ohms 1/10W
R236	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R302	YF2116202JT	Carbon	2K ohms 1/10W
R237	YF2116474JT	Carbon	470K ohms 1/10W	R303	YF2116332JT	Carbon	3.3K ohms 1/10W
R238	ERJ6GEYJ393	Carbon	39K ohms 1/10W	R304,306	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R239	YF2116753JT	Carbon	75K ohms 1/10W	R307	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R240	YF2116474JT	Carbon	470K ohms 1/10W	R308	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R241	ERJ6GEYJ100	Carbon	10 ohms 1/10W	R309	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R242	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R310	YF2116153JT	Carbon	15K ohms 1/10W
R243	YF2116104JT	Carbon	100K ohms 1/10W	R311	YWR1220P202D	Metal	2K ohms 1/10W
R244	ERJ6GEYJ750	Carbon	75 ohms 1/10W	R312	YF2116112JT	Carbon	1.1K ohms 1/10W
R245	YF2116152JT	Carbon	1.5K ohms 1/10W	R313	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R246	YF2116912GT	Carbon	9.1K ohms 1/10W	R315	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R247	YF2116153JT	Carbon	15K ohms 1/10W	R316	YF2116222GT	Carbon	2.2K ohms 1/10W
R249	ERJ6GEYJ510	Carbon	51 ohms 1/10W	R317	ERJ8GCSG511	Carbon	510 ohms 1/8W
R250	YF2116392JT	Carbon	3.9K ohms 1/10W	R318	YF2116754JT	Carbon	750K ohms 1/10W
R251,252	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R319	YF2116332JT	Carbon	3.3K ohms 1/10W
R253	YF2116202JT	Carbon	2K ohms 1/10W	R320	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R254	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R321	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R255	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W	R322	YF2116332JT	Carbon	3.3K ohms 1/10W
R256	YF2116561JT	Carbon	560 ohms 1/10W	R323,324	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R257	YF2116754JT	Carbon	750K ohms 1/10W	R325	R1220P331D	Metal	330K ohms 1/10W
R258-260	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R326	YF2116123JT	Carbon	12K ohms 1/10W
R261	ERJ6GEYJ510	Carbon	51 ohms 1/10W	R327	YF2116202JT	Carbon	2K ohms 1/10W
R262,263	ERJ6GEYJ393	Carbon	39K ohms 1/10W	R328,329	YF2116680JT	Carbon	68 ohms 1/10W
R264	ERJ6GEYJ100	Carbon	10 ohms 1/10W	R330	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R265	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R331	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R266	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W	R332	YF2116S11JT	Carbon	510 ohms 1/10W
R267	ERJ6GEYJ510	Carbon	51 ohms 1/10W	R333	YW2116305JT	Carbon	3M ohms 1/10W
R268	YF2116331JT	Carbon	330 ohms 1/10W	R334	YF2116153JT	Carbon	15K ohms 1/10W
R269	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R335	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R270	YF2116151JT	Carbon	150 ohms 1/10W	R336	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R271	ERJ6GEYJ684	Carbon	680K ohms 1/10W	R337	YF2116202JT	Carbon	2K ohms 1/10W
R272	YW2116620JT	Carbon	62 ohms 1/10W	R338	ERJ6GEYJ102	Carbon	1K ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R339	YF2116561JT	Carbon	560 ohms 1/10W	R409	YF2116332JT	Carbon	3.3K ohms 1/10W
R340	YWR1220P202D	Metal	2K ohms 1/10W	R410	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R341	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R411	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R342	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R412	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R343	YF2116754JT	Carbon	750K ohms 1/10W	R413,414	YF2116511JT	Carbon	510 ohms 1/10W
R344	YWR1220P181D	Metal	180 ohms 1/10W	R415	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R345	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R416	ERJ6GEYJ223	Carbon	22K ohms 1/10W
R346	YF2116332JT	Carbon	3.3K ohms 1/10W	R417	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R347	YF2116511JT	Carbon	510 ohms 1/10W	R418	YF2116511JT	Carbon	510 ohms 1/10W
R348,349	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R419	YF2116332JT	Carbon	3.3K ohms 1/10W
R350	ERJ6GEYJ512	Carbon	5.1K ohms 1/10W	R420	ERJ6GEYJ510	Carbon	51 ohms 1/10W
R351	YF2116511JT	Carbon	510 ohms 1/10W	R421,422	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R352	YWR1220P682D	Carbon	62 ohms 1/10W	R423	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R353	YWR1220P682D	Metal	6.8K ohms 1/10W	R424	ERJ6GEYJ510	Carbon	51 ohms 1/10W
R354	ERJ6GEYJ562	Carbon	5.6K ohms 1/10W	R425	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R355,356	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R426,427	ERJ6GEYJ510	Carbon	51 ohms 1/10W
R358	YF2116331JT	Carbon	330 ohms 1/10W	R428	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R359	YF2116332JT	Carbon	3.3K ohms 1/10W	R429	YWR1220P682D	Metal	6.8K ohms 1/10W
R360	YF2116183GT	Carbon	18K ohms 1/10W	R430	YWR1220P512D	Metal	5.1K ohms 1/10W
R361	YF2116151JT	Carbon	150 ohms 1/10W	R431,432	YWR1220P242D	Metal	2.4K ohms 1/10W
R362	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R433	YWR1220P162D	Metal	1.6K ohms 1/10W
R363	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R434	YWR1220P622D	Metal	6.2K ohms 1/10W
R365	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R435	YWR1220P682D	Metal	6.8K ohms 1/10W
R366	YF2116511JT	Carbon	510 ohms 1/10W	R436	YWR1220P512D	Metal	5.1K ohms 1/10W
R367	YF2116202JT	Carbon	2K ohms 1/10W	R437	YWR1220P682D	Metal	6.8K ohms 1/10W
R368,369	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R438	YWR1220P242D	Metal	2.4K ohms 1/10W
R371	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R439	YWR1220P162D	Metal	1.6K ohms 1/10W
R373	YF2116202JT	Carbon	2K ohms 1/10W	R440	YWR1220P622D	Metal	6.2K ohms 1/10W
R374	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R441	YWR1220P242D	Metal	2.4K ohms 1/10W
R375,376	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R442	YWR1220P682D	Metal	6.8K ohms 1/10W
R377	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R444	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R378	YF2116392JT	Carbon	3.9K ohms 1/10W	R446	YF2116101JT	Carbon	100 ohms 1/10W
R379	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R447	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R381	YF2116202JT	Carbon	2K ohms 1/10W	R448	YWR1220P152D	Metal	1.5K ohms 1/10W
R382	YF2116181JT	Carbon	180 ohms 1/10W	R449	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R383,384	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R450	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R385	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R451	YF2116101JT	Carbon	100 ohms 1/10W
R386,388	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R452	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R390	YF2116332JT	Carbon	3.3K ohms 1/10W	R453	YWR1220P152D	Metal	1.5K ohms 1/10W
R391	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R454	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R392	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R455	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R393	YWR1220P202D	Metal	2K ohms 1/10W	R456	ERJ6GEYJ562	Carbon	5.6K ohms 1/10W
R394	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R457	YF2116432JT	Carbon	4.3K ohms 1/10W
R395	YF2116511JT	Carbon	510 ohms 1/10W	R458	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R396,397	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R459	YF2116332JT	Carbon	3.3K ohms 1/10W
R398	YF2116202JT	Carbon	2K ohms 1/10W	R460,461	YF2116333GT	Carbon	33K ohms 1/10W
R399	R1220P331D	Metal	330K ohms 1/10W	R462	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R400	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R463,464	YF2116333GT	Carbon	33K ohms 1/10W
R401	YWR1220P202D	Metal	2K ohms 1/10W	R465	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R402	YF2116912GT	Carbon	9.1K ohms 1/10W	R466,467	YF2116333GT	Carbon	33K ohms 1/10W
R403,404	ERJ6GEYJ223	Carbon	22K ohms 1/10W	R468	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R405	YWR1220P181D	Metal	180 ohms 1/10W	R469,470	YF2116333GT	Carbon	33K ohms 1/10W
R406	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R471	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R407	ERJ6GEYJ472	Carbon	4.7K ohms 1/10W	R472	ERJ6GEYJ393	Carbon	39K ohms 1/10W
R408	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R473	YF2116473GT	Carbon	47K ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R474	ERJ6GEYJ393	Carbon	39K ohms 1/10W	VR25	EVM1DSW30B24	Variable Resistor	20K ohms
R475	YF2116473GT	Carbon	47K ohms 1/10W	VR26	EVM1DSW30BY2	Variable Resistor	330 ohms
R476	ERJ6GEYJ393	Carbon	39K ohms 1/10W	VR28,29	EVM1DSW30BE3	Variable Resistor	2.2K ohms
R477	YF2116473GT	Carbon	47K ohms 1/10W	VR30	EVM1DSW30BQ3	Variable Resistor	4.7K ohms
R478	ERJ6GEYJ393	Carbon	39K ohms 1/10W	VR31	EVM1DSW30B33	Variable Resistor	3K ohms
R479	YF2116473GT	Carbon	47K ohms 1/10W	C1,2	YWT316B104MT	Ceramic	0.1 μF
R480,481	YF2116101JT	Carbon	100 ohms 1/10W	C3,4	YF400103XKT	Ceramic	0.01 μF
R482,483	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C5-7	YWT316B104MT	Ceramic	0.1 μF
R484,485	YF2116101JT	Carbon	100 ohms 1/10W	C9,11	YWT316B104MT	Ceramic	0.1 μF
R486	YF2116330JT	Carbon	33 ohms 1/10W	C12	YWT316B104MT	Ceramic	0.1 μF
R487	YF2116330JT	Carbon	33 ohms 1/10W	C14	YF400070CHDT	Ceramic	7pF
R488,489	YF2116101JT	Carbon	100 ohms 1/10W	C15	YF400180CHJT	Ceramic	18 pF
R490,491	YF2116330JT	Carbon	33 ohms 1/10W	C16	YF400680CHJT	Ceramic	68 pF
R494	YF2116273GT	Carbon	27K ohms 1/10W	C17	YF400560CHJT	Ceramic	56 pF
R495,496	YF2116101JT	Carbon	100 ohms 1/10W	C18	YF400680CHJT	Ceramic	68 pF
R497	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C19	YF400151CHJT	Ceramic	150 pF
R498	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C20	YWT316B104MT	Ceramic	0.1 μF
R499,500	YF2116101JT	Carbon	100 ohms 1/10W	C21	YF400102XKT	Ceramic	1000 pF
R501,502	YF2116330JT	Carbon	33 ohms 1/10W	C22,24	YWT316B104MT	Ceramic	0.1 μF
R503,504	YF2116101JT	Carbon	100 ohms 1/10W	C25	YF400100CHJT	Ceramic	10 pF
R505,506	YF2116330JT	Carbon	33 ohms 1/10W	C26,27	YWT316B104MT	Ceramic	0.1 μF
R509	YF2116273GT	Carbon	27K ohms 1/10W	C28	YF400070CHDT	Ceramic	7pF
R510,511	YF2116101JT	Carbon	100 ohms 1/10W	C29	YWT316B104MT	Ceramic	0.1 μF
R512,513	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C30	YF400222XKT	Ceramic	2200 pF
R514,515	YF2116101JT	Carbon	100 ohms 1/10W	C31	YF400560CHJT	Ceramic	56 pF
R516	YF2116330JT	Carbon	33 ohms 1/10W	C32	YF400180CHJT	Ceramic	18 pF
R517	ERJ6GEYJ393	Carbon	39K ohms 1/10W	C34	YF400151CHJT	Ceramic	150 pF
R518	YF2116753JT	Carbon	75K ohms 1/10W	C35	YF400102XKT	Ceramic	1000 pF
R519	YF2116122JT	Carbon	1.2K ohms 1/10W	C36	YWT316B104MT	Ceramic	0.1 μF
R520	ERJ6GEYJ393	Carbon	39K ohms 1/10W	C37,38	YF400222XKT	Ceramic	2200 pF
R521	YF2116753JT	Carbon	75K ohms 1/10W	C41	YF400103XKT	Ceramic	0.01 μF
R522	YF2116122JT	Carbon	1.2K ohms 1/10W	C42	YF400100CHJT	Ceramic	10 pF
R523	ERJ6GEYJ750	Carbon	75 ohms 1/10W	C43	YF400103XKT	Ceramic	0.01 μF
R524	ERJ6GEYJ393	Carbon	39K ohms 1/10W	C44	YWT316B104MT	Ceramic	0.1 μF
R525	YF2116753JT	Carbon	75K ohms 1/10W	C45	YF400103XKT	Ceramic	0.01 μF
R526	YF2116122JT	Carbon	1.2K ohms 1/10W	C46	YWT316B104MT	Ceramic	0.1 μF
R527,528	R1220P151D	Metal	150 ohms 1/10W	C47	YF400201CHJT	Ceramic	200 pF
R529-532	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C48-50	YWT316B473MT	Ceramic	0.047 μF
R533	YF2116330JT	Carbon	33 ohms 1/10W	C51	YF400102XKT	Ceramic	1000 pF
R601-604	L3111103J32	Thermistor	3.3K ohms	C52,53	YWT316B104MT	Ceramic	0.1 μF
R605,606	YF2116473GT	Carbon	47K ohms 1/10W	C54	YF400103XKT	Ceramic	0.01 μF
VR5	EVM1DSW30BE3	Variable Resistor	2.2K ohms	C55	YF400222XKT	Ceramic	2200 pF
VR6	EVM1DSW30BY2	Variable Resistor	330 ohms	C56	YWT316B104MT	Ceramic	0.1 μF
VR7	EVM1DSW30BE3	Variable Resistor	2.2K ohms	C57	YF400103XKT	Ceramic	0.01 μF
VR8-11	EVM1DSW30BY2	Variable Resistor	330 ohms	C58,59	YWT316B104MT	Ceramic	0.1 μF
VR13	EVM1DSW30BY2	Variable Resistor	330 ohms	C60	YF400103XKT	Ceramic	0.01 μF
VR14	EVM1DSW30B54	Variable Resistor	50K ohms	C61	YF400102XKT	Ceramic	1000 pF
VR15	EVM1DSW30B24	Variable Resistor	20K ohms	C62,63	YF400220CHJT	Ceramic	22 pF
VR16,17	EVM1DSW30BE3	Variable Resistor	2.2K ohms	C64,65	YF400103XKT	Ceramic	0.01 μF
VR18	EVM1DSW30BQ3	Variable Resistor	4.7K ohms	C66	YWT316B104MT	Ceramic	0.1 μF
VR19	EVM1DSW30B24	Variable Resistor	20K ohms	C67	YF400103XKT	Ceramic	0.01 μF
VR20	EVM1DSW30BY2	Variable Resistor	330 ohms	C68-71	YWT316B104MT	Ceramic	0.1 μF
VR21	EVM1DSW30B54	Variable Resistor	50K ohms	C72	YF400561CHJT	Ceramic	560 pF
VR22	EVM1DSW30B24	Variable Resistor	20K ohms	C73	YF400050CHDT	Ceramic	5 pF
VR24	EVM1DSW30BQ3	Variable Resistor	4.7K ohms	C74	YF400103XKT	Ceramic	0.01 μF

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
C75	YF400102XKT	Ceramic	1000 pF	C148	ECEA1AKA220	Electrolytic	22 µF 10V
C76	YF400222XKT	Ceramic	2200 pF	C151	ECEA1HKAR47	Electrolytic	0.47 µF 50V
C77	YF400103XKT	Ceramic	0.01 µF	C152	ECEA1AKA101	Electrolytic	100 µF 10V
C78	YF400201CHJT	Ceramic	200 pF	C153	ECEA1HKA010	Electrolytic	1 µF 50V
C79	YF400330CHJT	Ceramic	33 pF	C154	ECEA1AKA101	Electrolytic	100 µF 10V
C80	YF400121CHJT	Ceramic	120 pF	C155	ECEA1CKA470	Electrolytic	47 µF 16V
C81,82	YWT316B473MT	Ceramic	0.047 µF	C157	ECEA1HKA010	Electrolytic	1 µF 50V
C83	YF400102XKT	Ceramic	1000 pF	C158	ECEA1HKAR47	Electrolytic	0.47 µF 50V
C84	YF400820CHJT	Ceramic	82 pF	C160	ECEA1AKA220	Electrolytic	22 µF 10V
C85-88	YWT316B104MT	Ceramic	0.1 µF	C161	ECEA0JKA470	Electrolytic	47 µF 6.3V
C89	YF400222XKT	Ceramic	2200 pF	C164	ECEA1AKA220	Electrolytic	22 µF 10V
C90	YF400102XKT	Ceramic	1000 pF	C165	ECEA1CKA220	Electrolytic	22 µF 16V
C91	YWT316B104MT	Ceramic	0.1 µF	C166	ECEA1AKA470	Electrolytic	47 µF 10V
C92	YF400330CHJT	Ceramic	33 pF	C167	ECEA1EKA4R7	Electrolytic	0.47 µF 25V
C93	YWT316B104MT	Ceramic	0.1 µF	C168	ECEA0JKA470	Electrolytic	47 µF 6.3V
C94	YF400102XKT	Ceramic	1000 pF	C170,171	ECEA1HKA010	Electrolytic	1 µF 50V
C95,96	YWT316B104MT	Ceramic	0.1 µF	C172	ECEA1AKA470	Electrolytic	47 µF 10V
C97	YF400330CHJT	Ceramic	33 pF	C173	ECEA1HKA010	Electrolytic	1 µF 50V
C98	YF400050CHDT	Ceramic	5 pF	C174	ECEA1VKS470	Electrolytic	47 µF 35V
C99	YF400101CHJT	Ceramic	100 pF	C175	ECEA1CKA220	Electrolytic	22 µF 16V
C100	YF400561CHJT	Ceramic	560 pF	C176	ECEA1HKA010	Electrolytic	1 µF 50V
C101	YF400102XKT	Ceramic	1000 pF	C177	ECEA0JKA470	Electrolytic	47 µF 6.3V
C102	YF400222XKT	Ceramic	2200 pF	C178	ECEA1HKAR47	Electrolytic	0.47 µF 50V
C103	YF400101CHJT	Ceramic	100 pF	C179	ECEA1THK\$3R3	Electrolytic	3.3 µF 50V
C104	YF400102XKT	Ceramic	1000 pF	C180	ECEA0JKA470	Electrolytic	47 µF 6.3V
C105	YF400330CHJT	Ceramic	33 pF	C181	ECEA1AKA101	Electrolytic	100 µF 10V
C106	YF400121CHJT	Ceramic	120 pF	C182	ECEA1VKS470	Electrolytic	47 µF 35V
C107	YF400102XKT	Ceramic	1000 pF	C183	ECEA1CKA470	Electrolytic	47 µF 16V
C108	YF400330CHJT	Ceramic	33 pF	C184	ECEA1AKA101	Electrolytic	100 µF 16V
C109	YF400102XKT	Ceramic	1000 pF	C185-187	ECEA1AKA101	Electrolytic	100 µF 10V
C110	YF400330CHJT	Ceramic	33 pF	C188	ECEA1AKA220	Electrolytic	22 µF 10V
C111	YWT316B104MT	Ceramic	0.1 µF	C189	ECEA1EKA4R7	Electrolytic	4.7 µF 25V
C112	YF400103XKT	Ceramic	0.01 µF	C190	ECEA1VKS470	Electrolytic	47 µF 35V
C113	YF400102XKT	Ceramic	1000 pF	C191	ECEA1CKA101	Electrolytic	100 µF 16V
C114	YF400330CHJT	Ceramic	33 pF	C192	ECEA1CKA220	Electrolytic	22 µF 16V
C115	YF400103XKT	Ceramic	0.01 µF	C193	ECEA0JKA470	Electrolytic	47 µF 6.3V
C116	YF400102XKT	Ceramic	1000 pF	C194	ECEA1HKA010	Electrolytic	1 µF 50V
C117,118	*YF400103XKT	Ceramic	0.01 µF	C195	ECEA1AKA101	Electrolytic	100 µF 10V
C119	ECEA1CKA470	Electrolytic	47 µF 16V	C196	ECEA1HKA010	Electrolytic	1 µF 50V
C120	ECEA1AKA470	Electrolytic	47 µF 10V	C197	ECEA0JKA470	Electrolytic	47 µF 6.3V
C121-124	ECEA1AKA101	Electrolytic	100 µF 10V	C198	ECEA1CKA101	Electrolytic	100 µF 16V
C125	ECEA1VKS470	Electrolytic	47 µF 35V	C199	ECEA1HKA2R2	Electrolytic	2.2 µF 50V
C126	ECEA1AKA101	Electrolytic	100 µF 10V	C200	ECEA0JKA470	Electrolytic	47 µF 6.3V
C127	ECEA1CKA470	Electrolytic	47 µF 16V	C201	ECEA1VKS470	Electrolytic	47 µF 35V
C128	ECEA1AKA470	Electrolytic	47 µF 10V	C202	ECEA1HKA2R2	Electrolytic	2.2 µF 50V
C129	EC5F1CE106	Tantalum	10 µF 16V	C203	ECEA0JKA470	Electrolytic	47 µF 6.3V
C130	ECEA1VKS470	Electrolytic	47 µF 35V	C204	ECEA1VKS470	Electrolytic	47 µF 35V
C131	ECEA1AKA220	Electrolytic	22 µF 10V	C205	ECEA1AKA101	Electrolytic	100 µF 10V
C133	ECEA1AKA470	Electrolytic	47 µF 10V	C206	ECEA1CKA101	Electrolytic	100 µF 16V
C134	ECEA1AKA101	Electrolytic	100 µF 10V	C207	ECEA1AKA470	Electrolytic	47 µF 10V
C135	ECEA0GKA470	Electrolytic	47 µF 4V				
C137	ECEA1AKA101	Electrolytic	100 µF 10V				
C138	ECEA1CKA470	Electrolytic	47 µF 16V				
C143	ECEA1AKA470	Electrolytic	47 µF 10V				
C144	ECEA1CKA470	Electrolytic	47 µF 16V				

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
C208	ECEA1VK5470	Electrolytic	47 µF 35V	C297	YF400331CHJT	Ceramic	330 pF
C209	ECEA1AKA101	Electrolytic	100 µF 10V	C298,299	YF400330CHJT	Ceramic	33 pF
C210	ECEA1CKA101	Electrolytic	100 µF 16V	C302,303	YF4006B0CHJT	Ceramic	68 pF
C211	ECEA1AKA101	Electrolytic	100 µF 10V	C304,305	YF400300CHJT	Ceramic	30 pF
C212	ECEA0JKA470	Electrolytic	47 µF 6.3V	C306	ECCF1H101JC	Ceramic	100 pF 50V
C213	ECEA1CKA101	Electrolytic	100 µF 16V	C307	ECCF1H220JC	Ceramic	22 pF 50V
C214	ECEA1HKA2R2	Electrolytic	2.2 µF 50V	C308	ECCF1H101JC	Ceramic	100 pF 50V
C215	ECEA0JKA470	Electrolytic	47 µF 6.3V	C309	ECCF1H220JC	Ceramic	22 pF 50V
C216	ECEA1HKA2R2	Electrolytic	2.2 µF 50V	C310,311	ECCF1H101JC	Ceramic	100 pF 50V
C217	ECEA0JKA470	Electrolytic	47 µF 6.3V	CT1,2	YFTZ03R200FR	Trimmer Capacitor	20 pF
C218	ECEA1CKA220	Electrolytic	22 µF 16V	L1,2	ELC08D082	Coil	56 µH
C219	ECEA1AKA101	Electrolytic	100 µF 10V	L3	ELESE1R0KA	Coil	1 µH
C220-222	ECEA1AKN100	Electrolytic	10 µF 10V	L4	ELESE1B0KA	Coil	18 µH
C223	ECEA1CKN4R7	Electrolytic	4.7 µF 16V	L5	ELESE6R8KA	Coil	6.8 µH
C224-226	ECEA1AKN100	Electrolytic	10 µF 10V	L6-9	ELESE1R0KA	Coil	1 µH
C227	ECEA1HKS3R3	Electrolytic	3.3 µF 50V	L10	ELESE1B0KA	Coil	18 µH
C228,229	ECSF1CE106	Tantalum	10 µF 16V	L11	ELESE6R8KA	Coil	6.8 µH
C230,231	ECSF1HE474	Tantalum	0.47 µF 50V	L13,14	ELESE1R0KA	Coil	1 µH
C232,233	ECSF1HE105	Tantalum	1 µF 50V	L16	ELESE1R0KA	Coil	1 µH
C234	ECEA1HKAR47	Electrolytic	4.7 µF 50V	L17-20	ELESE101KA	Coil	100 µH
C235,236	ECSF1EE226	Tantalum	22 µF 25V	L21	ELC08D082	Coil	56 µH
C237,238	ECEA1AKA101	Electrolytic	100 µF 10V	X1,2	YFMS30917M10	Crystal Oscillator	
C239,240	ECSF1EE226	Tantalum	22 µF 25V	CF1,2	YWYS40075	Filter	
C241,242	ECEA1AKA101	Electrolytic	10 µF 10V	CF3	YWYS30030	Filter	
C243	ECSF1CE106	Tantalum	10 µF 16V	CF4,5	YWYS40075	Filter	
C244	ECSF1EE106	Tantalum	10 µF 25V	CF6	YWYS30030	Filter	
C245-248	ECSF1CE106	Tantalum	10 µF 16V	CF7	YWYS40030	Filter	
C249,250	ECSF1CE336	Tantalum	33 µF 16V	CF8,9	YWYS30031	Filter	
C251-254	ECSF1CE106	Tantalum	10 µF 16V	CF10	YWYS40030	Filter	
C255,256	ECSF1CE336	Tantalum	33 µF 16V	CF11,12	YWYS30031	Filter	
C257-260	ECSF1CE106	Tantalum	10 µF 16V	CF13	YWYS40075	Filter	
C261	ECEA1AKA101	Electrolytic	100 µF 10V	CF14	YWYS30030	Filter	
C262	YF400222XKT	Ceramic	2200 pF	CF15	YWYS40075	Filter	
C263-268	ECEA1CKA470	Electrolytic	47 µF 16V	CF16	YWYS30030	Filter	
C269-272	ECEA1CKN100	Electrolytic	10 µF 16V	CF21	YWYS5G0382	Filter	
C273	YWT316B104MT	Ceramic	0.1 µF	CN11	YWF794P040LA	40-pin Connector	
C274	ECEA1CKA470	Electrolytic	47 µF 16V	CN13	YWF794P026LA	26-pin Connector	
C275	ECSF1EE106	Tantalum	10 µF 25V	CN16	YWF794P020LA	20-pin Connector	
C276	ECEA1CKA470	Electrolytic	47 µF 16V	CN22	YW530140610	6-pin Connector	
C277	YF400103XKT	Ceramic	0.01 µF	TP1-19	YWRCS3216TPV	Test Point	
C278	ECEA1CKA470	Electrolytic	47 µF 16V	M11	YWV2HA1100A1	Shield Cover	
C279	YF400103XKT	Ceramic	0.01 µF	M12	YWV2SA2451A3	Mounting Angle	
C280	ECEA1AKA101	Electrolytic	100 µF 10V	M41	YWV2HA1098A1	Shield Parts	
C281,282	ECEA1CKA470	Electrolytic	47 µF 16V	M42	YWV2HA1099A2	Bottom Shield Case	
C283,284	YF400103XKT	Ceramic	0.01 µF				
C285	ECEA1EKA470	Electrolytic	47 µF 25V				
C286,287	YWT316B104MT	Ceramic	0.1 µF				
C288	ECEA1AKA470	Electrolytic	47 µF 10V				
C289	ECEA1CKA470	Electrolytic	47 µF 16V				
C290	YF400103XKT	Ceramic	0.01 µF				
C291	ECEA1CKA470	Electrolytic	47 µF 16V				
C292	YF400103XKT	Ceramic	0.01 µF				
C293,294	ECEA1AKA101	Electrolytic	100 µF 10V				
C295	YF400103XKT	Ceramic	0.01 µF				
C296	YWT316B104MT	Ceramic	0.1 µF				

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
DIGITAL BOARD					
PCB7 (M1)	YWJKZMX30E3A	Printed Circuit Board Assy	IC64	YWUPC4064G2	IC
IC1,2	NJM78L05A	IC	IC65	YW5C75U04F	IC
IC3	YWCXD1175AM	IC	IC66	YWUPD4538BG	IC
IC4	MC74HC4053F	IC	IC67	NJU4051BM	IC
IC5	YWCXD1175AM	IC	IC68	NJU4053BM	IC
IC6	NJM2904M	IC	IC69	YW5C7532FER	IC
IC7	MN53060LBY2	IC	IC70	YWM51955AFT1	IC
IC8	YWCXD1175AM	IC	IC72,73	YW5C750BF	IC
IC9	MC74HC4053F	IC	Q14	2SA1733	Transistor
IC10-12	YWM5M4C500AL	IC	Q15-21	2SK198-Q	FET
IC13	YWCXD1175AM	IC	Q22	MSD601-QRS	Transistor
IC14	NJM2904M	IC	Q23	2SD1328-RS	Transistor
IC15	YWUPD42102G3	IC	Q24-28	MSD601-QRS	Transistor
IC17,18	YWM5M4C500AL	IC	Q29	2SD1328-RS	Transistor
IC19	NJM78L05A	IC	Q30-34	MSD601-QRS	Transistor
IC21	YWM5M4C500AL	IC	Q35-40	MS8709-QRS	Transistor
IC22	YWL7A0946	LSI	Q41	2SA1733	Transistor
IC23	YWPD65012C25	IC	Q42	MSD601-QRS	Transistor
IC24	YWUPD42102G3	IC	Q44	2SB710-QRS	Transistor
IC25	MN53060LBY2	IC	Q45	MS8709-QRS	Transistor
IC26	MC74HC4053F	IC	D1,2	1SS99	Diode
IC27	YWM5M4C500AL	IC	D3-13	1SV153	Diode
IC28	NJM78L05A	IC	D14	YWDAN212K	Diode
IC29	YWM5M4C500AL	IC	D15,16	YWRB421D	Diode
IC30	MN676021PPS	IC	D17	MA8033	Diode
IC31	YWM5M4C500AL	IC	D18,19	MA151K	Diode
IC32	YWPD65012C25	IC	R1	YF2116331JT	Carbon
IC33,34	YWM5M4C500AL	IC	R2	YF2116511JT	Carbon
IC35	MN676021PPS	IC	R3	ERJ6GEYJ102	Carbon
IC36	YWM5M4C500AL	IC	R4	YF2116331JT	Carbon
IC37	YWL7A1077	LSI	R5	ERJ6GEYJ102	Carbon
IC38	MC74HC374AF	IC	R6-10	YF2116101JT	Carbon
IC39	YWUPD42102G3	IC	R11	YF2116331JT	Carbon
IC40	YWM74AC374M	IC	R12,13	YF2116101JT	Carbon
IC41	YWUPD42102G3	IC	R14	YF2116331JT	Carbon
IC42	YWPD65082067	IC	R15	YF2116101JT	Carbon
IC43	YWUPD91361	IC	R16	ERJ6GEYJ472	Carbon
IC44	MC74HC374AF	IC	R17	YF2116112JT	Carbon
IC45	YWM74AC374M	IC	R18	ERJ6GEYJ102	Carbon
IC46	NJM319M	IC	R19	YF2116101JT	Carbon
IC47	YWNJM7BL09A	IC	R20	YF2116222GT	Carbon
IC48,50	YW5C750BF	IC	R21	YF2116511JT	Carbon
IC51,52	YW5C750BF	IC	R22	YF2116202JT	Carbon
IC53,54	YW5C75U04F	IC	R23	YF2116101JT	Carbon
IC56-58	YW5C75U04F	IC	R24	YF2116821GT	Carbon
IC59	YWM51953AFT	IC	R25-31	YF2116101JT	Carbon
IC60	YWH7532F0MX1	IC	R32	YF2116332JT	Carbon
IC61	YWM74AC374M	IC	R33	ERJ6GEYJ102	Carbon
IC62	NJM2904M	IC	R34	YF2116332JT	Carbon
IC63	NJM78L06A	IC	R35	ERJ6GEYJ103	Carbon
			R36	YF2116101JT	Carbon
			R37	YF2116333GT	Carbon
			R38	YF2116331JT	Carbon
			R39	YF2116104JT	Carbon
			R40	YF2116101JT	Carbon

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R41	YF2116331JT	Carbon	330 ohms 1/10W	R192	YF2116752JT	Carbon	7.5K ohms 1/10W
R42	YF2116104JT	Carbon	100K ohms 1/10W	R193,194	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R43	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R195	YF2116331JT	Carbon	330 ohms 1/10W
R44	YF2116752JT	Carbon	7.5K ohms 1/10W	R196	YF2116511JT	Carbon	510 ohms 1/10W
R45	YF2116331JT	Carbon	330 ohms 1/10W	R197	YF2116104JT	Carbon	100K ohms 1/10W
R46	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R198	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R47	YF2116511JT	Carbon	510 ohms 1/10W	R199	YF2116331JT	Carbon	330 ohms 1/10W
R48	YF2116331JT	Carbon	330 ohms 1/10W	R200,201	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R49	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R202	YF2116104JT	Carbon	100K ohms 1/10W
R50	YF2116511JT	Carbon	510 ohms 1/10W	R203-206	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R51-S8	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R207	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R59	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R209-210	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R60	YF2116331JT	Carbon	330 ohms 1/10W	R211	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R61-74	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R212	YF2116104JT	Carbon	100K ohms 1/10W
R75	YF2116392JT	Carbon	3.9K ohms 1/10W	R213	YF2116511JT	Carbon	510 ohms 1/10W
R76-84	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R214	YF2116331JT	Carbon	330 ohms 1/10W
R85	YF2116331JT	Carbon	330 ohms 1/10W	R215	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R86	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R216	YF2116511JT	Carbon	510 ohms 1/10W
R87-89	YF2116101JT	Carbon	100 ohms 1/10W	R217	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R90	ERJ6GEYJ472	Carbon	4.7K ohms 1/10W	R218	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R91	YF2116331JT	Carbon	330 ohms 1/10W	R219	YF2116511JT	Carbon	510 ohms 1/10W
R92,93	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R220	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R95-97	YF2116101JT	Carbon	100 ohms 1/10W	R221-229	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R98	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R230	YF2116392JT	Carbon	3.9K ohms 1/10W
R99	YF211612JT	Carbon	1.1K ohms 1/10W	R231	YF2116332JT	Carbon	3.3K ohms 1/10W
R100	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R232-236	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R101,102	YF2116101JT	Carbon	100 ohms 1/10W	R237	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R103-111	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R238,239	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R112	YF2116222GT	Carbon	2.2K ohms 1/10W	R240	YF2116104JT	Carbon	100K ohms 1/10W
R113	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R241	YF2116101JT	Carbon	100 ohms 1/10W
R114	YF2116101JT	Carbon	100 ohms 1/10W	R242-251	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R115,116	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R252	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R118	YF2116511JT	Carbon	510 ohms 1/10W	R254	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R120,121	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R255	YF2116104JT	Carbon	100K ohms 1/10W
R124-127	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R256	YF211683GT	Carbon	18K ohms 1/10W
R129	YF2116202JT	Carbon	2K ohms 1/10W	R257	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R131,135	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R258	YF2116752JT	Carbon	7.5K ohms 1/10W
R138,141	YF2116101JT	Carbon	100 ohms 1/10W	R260	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R146,148	YF2116101JT	Carbon	100 ohms 1/10W	R261,262	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R149	YF2116821GT	Carbon	820 ohms 1/10W	R263	YF2116752JT	Carbon	7.5K ohms 1/10W
R150,151	YF2116101JT	Carbon	100 ohms 1/10W	R264	YF2116101JT	Carbon	100 ohms 1/10W
R156,159	YF2116101JT	Carbon	100 ohms 1/10W	R265,266	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R163	YF2116332JT	Carbon	3.3K ohms 1/10W	R267-269	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R171	YF2116104JT	Carbon	100K ohms 1/10W	R270	YF2116332JT	Carbon	3.3K ohms 1/10W
R175	YF2116101JT	Carbon	100 ohms 1/10W	R272	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R176	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R273	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R177	YF2116104JT	Carbon	100K ohms 1/10W	R274	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R178	YF2116333GT	Carbon	33K ohms 1/10W	R275	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R179	YF2116332JT	Carbon	3.3K ohms 1/10W	R276	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R180	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R277	YF2116332JT	Carbon	3.3K ohms 1/10W
R181,182	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R278-280	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R183-185	YF2116331JT	Carbon	330 ohms 1/10W	R281	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R186	YF2116561JT	Carbon	560 ohms 1/10W	R282	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R187	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R283	YF2116332JT	Carbon	3.3K ohms 1/10W
R188-191	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R284	ERJ6GEYJ221	Carbon	220 ohms 1/10W

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R285	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R436-438	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R286	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R439	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R287	YF2116511JT	Carbon	510 ohms 1/10W	R440-451	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R288	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R452	YF2116511JT	Carbon	510 ohms 1/10W
R289	YF2116511JT	Carbon	510 ohms 1/10W	R453	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R290,291	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R454	YF2116101JT	Carbon	100 ohms 1/10W
R292,293	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R455,456	ERJ6GEYJ221	Carbon	220 ohms 1/10W
R294,295	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R457	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R297-299	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R458	YF2116511JT	Carbon	510 ohms 1/10W
R301,304	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R459	YF2116153JT	Carbon	15K ohms 1/10W
R305-310	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R460	YF2116203JT	Carbon	20K ohms 1/10W
R311	YF2116511JT	Carbon	510 ohms 1/10W	R461	YF2116511JT	Carbon	510 ohms 1/10W
R312-314	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R462	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R318	YF2116511JT	Carbon	510 ohms 1/10W	R463,464	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R319,320	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R465	YF2116511JT	Carbon	510 ohms 1/10W
R321	YF2116511JT	Carbon	510 ohms 1/10W	R466	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R322	YF2116104JT	Carbon	100K ohms 1/10W	R467	YF2116511JT	Carbon	510 ohms 1/10W
R323,324	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R468	YF2116222GT	Carbon	2.2K ohms 1/10W
R325	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R469	YF2116362GT	Carbon	3.6K ohms 1/10W
R326-331	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R470	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R333	YF2116331JT	Carbon	330 ohms 1/10W	R471	YF2116222GT	Carbon	2.2K ohms 1/10W
R334	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R472	YF2116331JT	Carbon	330 ohms 1/10W
R335,336	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R473	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R337	YF2116203JT	Carbon	20K ohms 1/10W	R474	YF2116331JT	Carbon	330 ohms 1/10W
R338	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R475	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R339	YF2116101JT	Carbon	100 ohms 1/10W	R478-482	YF2116331JT	Carbon	330 ohms 1/10W
R340	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R483	YF2116471JT	Carbon	470 ohms 1/10W
R341	YF2116104JT	Carbon	100K ohms 1/10W	R484	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R343	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R485	YF2116331JT	Carbon	330 ohms 1/10W
R344-350	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R486	YF2116471JT	Carbon	470 ohms 1/10W
R351	YF2116331JT	Carbon	330 ohms 1/10W	R487,488	YF2116331JT	Carbon	330 ohms 1/10W
R352	ERJ6GEY0R00	Carbon	0 ohms 1/10W	R489	YF2116222GT	Carbon	2.2K ohms 1/10W
R353,354	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R490-493	YF2116331JT	Carbon	330 ohms 1/10W
R355	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R494	ERJ6GEYJ472	Carbon	4.7K ohms 1/10W
R356	YF2116104JT	Carbon	100K ohms 1/10W	R495	YF2116331JT	Carbon	330 ohms 1/10W
R357	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R496	ERJ6GEYJ102	Carbon	1K ohms 1/10W
R358	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R497,499	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R363	YF2116104JT	Carbon	100K ohms 1/10W	R500,501	ERJ6GEYJ472	Carbon	4.7K ohms 1/10W
R364	YF2116332JT	Carbon	3.3K ohms 1/10W	R502	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R365	YF2116331JT	Carbon	330 ohms 1/10W	R503	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R366	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R504	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R367,368	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R507	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R369-422	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R510	YF2116101JT	Carbon	100 ohms 1/10W
R423	YF2116101JT	Carbon	100 ohms 1/10W	R512,513	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R424	ERJ6GEYJ105	Carbon	1M ohms 1/10W	R514	ERJ6GEY0R00	Carbon	0 ohms 1/10W
R425,426	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R515,517	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R427	ERJ6GEYJ102	Carbon	1K ohms 1/10W	R520	ERJ6GEYJ103	Carbon	10K ohms 1/10W
R428	ERJ6GEYJ103	Carbon	10K ohms 1/10W	R521	YF2116222GT	Carbon	2.2K ohms 1/10W
R429	YF2116511JT	Carbon	510 ohms 1/10W	R522,525	YF2116331JT	Carbon	330 ohms 1/10W
R430	ERJ6GEYJ221	Carbon	220 ohms 1/10W	R526-545	YF2116331JT	Carbon	330 ohms 1/10W
R431	YF2116332JT	Carbon	3.3K ohms 1/10W				
R432	YF2116331JT	Carbon	330 ohms 1/10W				
R433	YF2116752JT	Carbon	7.5K ohms 1/10W				
R434	YF2116333GT	Carbon	33K ohms 1/10W				
R435	YF2116331JT	Carbon	330 ohms 1/10W				

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
R546	YF2116101JT	Carbon	100 ohms 1/10W	C344	YF400561CHJT	Ceramic	560 pF
R547,548	ERJ6GEYJ103	Carbon	10K ohms 1/10W	C345	YF400330CHJT	Ceramic	33 pF
R549	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W	C346	YF400332XKT	Ceramic	3300 pF
R550	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C347	YF400103XKT	Ceramic	0.01 F
R551	ERJ6GEYJ103	Carbon	10K ohms 1/10W	C348	YF400330CHJT	Ceramic	33 pF
R552-555	YF2116331JT	Carbon	330 ohms 1/10W	C349	YF400220CHJT	Ceramic	22 pF
R558	YFR1220P104D	Metal	100K ohms 1/10W	C350	YF400101CHJT	Ceramic	100 pF
R559-567	ERJ6GEYJ103	Carbon	10K ohms 1/10W	C351,352	YWT316B104MT	Ceramic	0.1 μF
R569	ERJ6GEY0R00	Carbon	0 ohms 1/10W	C353	YF400220CHJT	Ceramic	22 pF
R570	ERJ6GEYJ1B2	Carbon	1.8K ohms 1/10W	C354	YF400101CHJT	Ceramic	100 pF
R571	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C355,356	YF400333XKT	Ceramic	0.033 μF
R573	YF2116101JT	Carbon	100 ohms 1/10W	C357	YF400680CHJT	Ceramic	68 pF
R575	ERJ6GEY0R00	Carbon	0 ohms 1/10W	C358	YWT316B104MT	Ceramic	0.1 μF
R576	YF2116331JT	Carbon	330 ohms 1/10W	C359	YF400220CHJT	Ceramic	22 pF
R577-579	YF2116473GT	Carbon	47K ohms 1/10W	C360,361	YF400330CHJT	Ceramic	33 pF
R580,583	ERJ6GEYJ103	Carbon	10K ohms 1/10W	C362	YWT316B104MT	Ceramic	0.1 μF
RSB4,587	ERJ6GEYJ103	Carbon	10K ohms 1/10W	C363	YF400220CHJT	Ceramic	22 pF
R588,589	ERJ6GEYJ472	Carbon	4.7K ohms 1/16W	C364	YF400102XKT	Ceramic	1000 pF
R590-592	ERJ6GEYJ102	Carbon	1K ohms 1/10W	C365	YWT316B104MT	Ceramic	0.1 μF
R593	YF2116511JT	Carbon	510 ohms 1/10W	C366	YF400680CHJT	Ceramic	68 pF
R594-597	YF2116331JT	Carbon	330 ohms 1/10W	C367	YWT316B104MT	Ceramic	0.1 μF
R601	YF2116222GT	Carbon	2.2K ohms 1/10W	C368	YF400333XKT	Ceramic	0.033 μF
R603	ERJ6GEY0R00	Carbon	0 ohms 1/10W	C369	YWT316B104MT	Ceramic	0.1 μF
R605,606	ERJ6GEY0R00	Carbon	0 ohms 1/10W	C371	YF400333XKT	Ceramic	0.033 μF
R607,608	YF2116392JT	Carbon	3.9K ohms 1/10W	C372	YWT316B104MT	Ceramic	0.1 μF
R609,610	ERDS2FJ331	Carbon	330 ohms 1/4W	C373	YF400333XKT	Ceramic	0.033 μF
VR1	EVM1DSW30B14	Variable Resistor	10K ohms	C377,379	YWT316B104MT	Ceramic	0.1 μF
Z1-4	YWRKRM10L102F	Block Resistor		C382	YWT316B104MT	Ceramic	0.1 μF
Z5-9	EXBF9E103J	Block Resistor		C383	YF400333XKT	Ceramic	0.033 μF
Z10	YWRKRM10L503F	Block Resistor		C385,392	YWT316B104MT	Ceramic	0.1 μF
C315	YF400330CHJT	Ceramic	33 pF	C394	YWT316B104MT	Ceramic	0.1 μF
C316,317	YWT316B104MT	Ceramic	0.1 μF	C397	YF400390CHJT	Ceramic	39 pF
C318	YF400220CHJT	Ceramic	22 pF	C398	YWT316B104MT	Ceramic	0.1 μF
C319	YF400330CHJT	Ceramic	33 pF	C401	YF400201CHJT	Ceramic	200 pF
C320	YF400220CHJT	Ceramic	22 pF	C402,403	YWT316B104MT	Ceramic	0.1 μF
C321	YF400101CHJT	Ceramic	100 pF	C404,405	YF400101CHJT	Ceramic	100 pF
C322	YF400333XKT	Ceramic	0.033 μF	C406,407	YWT316B104MT	Ceramic	0.1 μF
C323	YF400680CHJT	Ceramic	68 pF	C408	YF400101CHJT	Ceramic	100 pF
C324	YF400333XKT	Ceramic	0.033 μF	C409	YWT316B104MT	Ceramic	0.1 μF
C325	YWT316B104MT	Ceramic	0.1 μF	C410	YF400270CHJT	Ceramic	27 pF
C326	YF400330CHJT	Ceramic	33 pF	C411	YF400561CHJT	Ceramic	560 pF
C327	YF400220CHJT	Ceramic	22 pF	C412	YF400101CHJT	Ceramic	100 pF
C328	YWT316B104MT	Ceramic	0.1 μF	C413	YF400332XKT	Ceramic	3300 pF
C329	YF400220CHJT	Ceramic	22 pF	C415	YWT316B104MT	Ceramic	0.1 μF
C330	YF400330CHJT	Ceramic	33 pF	C416	YF400330CHJT	Ceramic	33 pF
C331	YF400102XKT	Ceramic	1000 pF	C417	YWT316B104MT	Ceramic	0.1 μF
C332	YF400680CHJT	Ceramic	68 pF	C418	YF400101CHJT	Ceramic	100 pF
C333-335	YF400333XKT	Ceramic	0.033 μF	C419	YF400103XKT	Ceramic	0.01 μF
C336,337	YWT316B104MT	Ceramic	0.1 μF	C420,421	YF400330CHJT	Ceramic	33 pF
C338	YF400333XKT	Ceramic	0.033 μF	C422	YF400121CHJT	Ceramic	120 pF
C339	YWT316B104MT	Ceramic	0.1 μF	C423	YF400330CHJT	Ceramic	33 pF
C340	YF400390CHJT	Ceramic	39 pF	C424,425	YWT316B104MT	Ceramic	0.1 μF
C341	YF400330CHJT	Ceramic	33 pF	C426,427	YF400330CHJT	Ceramic	33 pF
C342	YF400101CHJT	Ceramic	100 pF	C428,429	YWT316B104MT	Ceramic	0.1 μF
C343	YF400270CHJT	Ceramic	27 pF	C430	YF400103XKT	Ceramic	0.01 μF

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
C431,432	YWT316B104MT	Ceramic	0.1 μ F	C527	ECEA1AKA101	Electrolytic	100 μ F 10V
C433	YF400101CHJT	Ceramic	100 pF	C528	ECEA1HKA2R2	Electrolytic	2.2 μ F 50V
C434	YF400390CHJT	Ceramic	39 pF	C529	ECEA1CKA100	Electrolytic	10 μ F 16V
C435	YF400201CHJT	Ceramic	200 pF	C530	ECEA1AKA220	Electrolytic	22 μ F 10V
C436,437	YF400101CHJT	Ceramic	100 pF	C531	ECEA1HKA2R2	Electrolytic	2.2 μ F 50V
C438,439	YWT316B104MT	Ceramic	0.1 μ F	C532	ECEA1HKS3R3	Electrolytic	3.3 μ F 50V
C440	YF400103XKT	Ceramic	0.01 μ F	C533	ECEA0JKA331	Electrolytic	330 μ F 6.3V
C441-444	YWT316B104MT	Ceramic	0.1 μ F	C534	ECEA0JU102	Electrolytic	1000 μ F 6.3V
C445	YF400390CHJT	Ceramic	39 pF	C535,536	ECEA1HKA2R2	Electrolytic	2.2 μ F 50V
C446	YF400103XKT	Ceramic	0.01 μ F	C537	ECEA0JKA470	Electrolytic	47 μ F 6.3V
C448-454	YWT316B104MT	Ceramic	0.1 μ F	C538,539	ECEA1CKA470	Electrolytic	47 μ F 16V
C455,457	YF400390CHJT	Ceramic	39 pF	C540-543	ECSF1CE336	Tantalum	33 μ F 16V
C458,459	YWT316B104MT	Ceramic	0.1 μ F	C544-559	ECSF1CE106	Tantalum	10 μ F 16V
C460	YF400101CHJT	Ceramic	100 pF	C561-568	ECSF1CE106	Tantalum	10 μ F 16V
C461	YWT316B104MT	Ceramic	0.1 μ F	C569	ECSF1CE226	Tantalum	22 μ F 16V
C462	YF400201CHJT	Ceramic	200 pF	C570-572	ECSF1CE106	Tantalum	10 μ F 16V
C463	YF400101CHJT	Ceramic	100 pF	C573	ECSF1CE226	Tantalum	22 μ F 16V
C464	YWT316B104MT	Ceramic	0.1 μ F	C574	ECSF1CE106	Tantalum	10 μ F 16V
C465,466	YF400101CHJT	Ceramic	100 pF	C575,576	ECSF1CE226	Tantalum	22 μ F 16V
C467-469	YWT316B104MT	Ceramic	0.1 μ F	C577-580	ECSF1CE106	Tantalum	10 μ F 16V
C470	YF400330CHJT	Ceramic	33 pF	C581	ECSF1CE226	Tantalum	22 μ F 16V
C471	YF400103XKT	Ceramic	0.01 μ F	C582-589	ECSF1CE106	Tantalum	10 μ F 16V
C472	YF400820CHJT	Ceramic	82 pF	C590	ECSF1CE336	Tantalum	33 μ F 16V
C473,474	YWT316B104MT	Ceramic	0.1 μ F	C591-597	ECSF1CE106	Tantalum	10 μ F 16V
C475,476	YF400101CHJT	Ceramic	100 pF	C598,599	ECEA1EKN4R7	Electrolytic	4.7 μ F 25V
C477-483	YWT316B104MT	Ceramic	0.1 μ F	C600	YF400101CHJT	Ceramic	100 pF
C484	YF400270CHJT	Ceramic	27 pF	C601	YWT316B104MT	Ceramic	0.1 μ F
C485	YWT316B104MT	Ceramic	0.1 μ F	C602	YF400101CHJT	Ceramic	100 pF
C486	YF400561CHJT	Ceramic	560 pF	C603	YWT316B224MT	Ceramic	0.22 μ F
C487	YF400332XKT	Ceramic	3300 pF	C604	YWT316B104MT	Ceramic	0.1 μ F
C488-491	YWT316B104MT	Ceramic	0.1 μ F	C605,606	YF400330CHDT	Ceramic	3 pF
C492	YF400820CHJT	Ceramic	82 pF	C607,608	YWT316B104MT	Ceramic	0.1 μ F
C493	YF400330CHJT	Ceramic	33 pF	C610-616	YF400101CHJT	Ceramic	100 pF
C494	YWT316B104MT	Ceramic	0.1 μ F	C617	YF400330CHJT	Ceramic	33 pF
C495,496	YF400330CHJT	Ceramic	33 pF	C618,619	YF400471CHJT	Ceramic	470 pF
C498	YF400330CHJT	Ceramic	33 pF	C620,621	YF400101CHJT	Ceramic	100 pF
C499	YF400390CHJT	Ceramic	39 pF	C622	YF400471CHJT	Ceramic	470 pF
C500,501	YF400330CHJT	Ceramic	33 pF	C623,624	YF400101CHJT	Ceramic	100 pF
C503	YWT316B104MT	Ceramic	0.1 μ F	C625,626	YF400471CHJT	Ceramic	470 pF
C504	YF400330CHJT	Ceramic	33 pF	C627	YF400101CHJT	Ceramic	100 pF
C505	YWT316B104MT	Ceramic	0.1 μ F	C628	YF400471CHJT	Ceramic	470 pF
C506	YF400221CHJT	Ceramic	220 pF	C629-631	YF400101CHJT	Ceramic	100 pF
C507	YF400101CHJT	Ceramic	100 pF	C633	YF400471CHJT	Ceramic	470 pF
C508-510	YWT316B104MT	Ceramic	0.1 μ F	C634,635	YF400104FZT	Ceramic	0.1 μ F
C511	YF400101CHJT	Ceramic	100 pF	C637,638	YWT316B104MT	Ceramic	0.1 μ F
C512,513	YWT316B104MT	Ceramic	0.1 μ F	C639	YF400101CHJT	Ceramic	100 pF
C515	ECEA0JKA470	Electrolytic	47 μ F 6.3V	C640,641	YWT316B104MT	Ceramic	0.1 μ F
C516,517	ECEA1AKS330	Electrolytic	33 μ F 10V (KA)	C642,643	YF400103XKT	Ceramic	0.01 μ F
C518	ECEA1HKA2R2	Electrolytic	2.2 μ F 50V	C645,646	YF400103XKT	Ceramic	0.01 μ F
C519	ECEA1AKA101	Electrolytic	100 μ F 10V	C647-650	YF400101CHJT	Ceramic	100 pF
C520	ECEA1AKA220	Electrolytic	22 μ F 10V	C652,653	ECSF1CE106	Tantalum	10 μ F 16V
C521	ECEA0JKA470	Electrolytic	47 μ F 6.3V	C654	ECSF1CE105	Tantalum	1 μ F 16V
C522	ECEA0JU102	Electrolytic	000 μ F 6.3V	C655	EECF5R5U105	Electrolytic	1 μ F 16V
C523-525	ECEA1AKS330	Electrolytic	33 μ F 10V (KA)	C657	ECEA1CKA330	Electrolytic	33 μ F 16V
C526	ECEA0JKA331	Electrolytic	330 μ F 6.3V	C658	ECEA1CKA470	Electrolytic	47 μ F 16V

REF.NO.	PART NO.	DESCRIPTION		REF.NO.	PART NO.	DESCRIPTION	
C659,660	YF400104FZT	Ceramic	0.1 μ F	CN3	YW530140810	8-pin Connector	
C661-663	YF400224FZT	Ceramic	0.22 μ F	CN5	YWF794P030LA	30-pin Connector	
C664,665	YF400104FZT	Ceramic	0.1 μ F	CN9	YW6091027	10-pin Connector	
C666	YF400101CHJT	Ceramic	100 pF	CN13	YWF794P026LA	26-pin Connector	
C667	YF400390CHJT	Ceramic	39 pF	CN16	YWF794P020LA	20-pin Connector	
C669	YF400104FZT	Ceramic	0.1 μ F	CN12	YW530141010	10-pin Connector	
C672-675	YF400330CHJT	Ceramic	33 pF	TP1-8	YWRCS3216TPV	Test Point	
C676-679	YF400101CHJT	Ceramic	100 pF	M13	YWV2HA1097A2	Upper Shield Cover	
C680-683	YF400331CHJT	Ceramic	330 pF	M43	YWV2HA1095A1	Shield Case	
C684	ECKF1H331KB	Ceramic	330 pF 50V	M44	YWV2HA1096A2	Bottom Shield Cover	
C685-696	YF400221CHJT	Ceramic	220 pF				
C697-700	YF400104FZT	Ceramic	0.1 μ F				
C701-703	YF400224FZT	Ceramic	0.22 μ F				
C704-706	YF400104FZT	Ceramic	0.1 μ F				
C707-710	YF400221CHJT	Ceramic	220 pF				
C711-717	YF400471CHJT	Ceramic	470 pF	PCB8 (RTL)	YWJKZMX30P4A	Printed Circuit Board Assy	
C718	YF400101CHJT	Ceramic	100 pF	CN10	YWF795P016LA	16-pin Connector	
C719-722	ECEA1CKA100	Electrolytic	10 μ F 16V	CN11	YWF795P040LA	40-pin Connector	
C723,724	YWT316B104MT	Ceramic	0.1 μ F	JK1	YW80096	Jack	*
C725,726	ECSF1EE106	Tantalum	10 μ F 25V	JK2	YWT6575AAABA	Jack	
C727	ECSF1CE336	Tantalum	33 μ F 16V	JK3	YW80096	Jack	
C728	YWT316B104MT	Ceramic	0.1 μ F	JK4	YWT6575AAABA	Jack	
C729	YF400104FZT	Ceramic	0.1 μ F	JK5	YW80096	Jack	
C730	ECSF1CE106	Tantalum	10 μ F 16V	JK6	YWT6575AAABA	Jack	
C731	YWT316B104MT	Ceramic	0.1 μ F	JK7	YW80096	Jack	
C732	ECSF1CE106	Tantalum	10 μ F 16V	JK8	YWT6575AAABA	Jack	
C733,734	YWT316B104MT	Ceramic	0.1 μ F	JK9	YW80096	Jack	
C735	ECST1CC106	Tantalum	10 μ F 16V	JK10	YWT6575AAABA	Jack	
C737,738	YWT316B104MT	Ceramic	0.1 μ F	JK11,12	YWP2200B	Jack	
C740,741	YF400271CHJT	Ceramic	270 pF				
C742,743	ECCF1H330JC	Ceramic	33 pF 50V				
L1,2	ELC08D082	Coil					
L3-6	ELESE1ROKA	Coil	1 μ H				
L8	ELESE100KA	Coil	10 μ H				
L9	ELESE1ROKA	Coil	1 μ H				
L10	ELESE100KA	Coil	10 μ H				
L11,12	ELESE1ROKA	Coil	1 μ H				
L13	ELESE100KA	Coil	10 μ H				
L14-16	ELESE1ROKA	Coil	1 μ H				
L17-19	ELESE100KA	Coil	10 μ H				
I20,21	ELESE1ROKA	Coil	1 μ H				
L22-24	ELESE100KA	Coil	10 μ H				
L25-28	ELESE220KA	Coil	22 μ H				
L29,30	ELESE1ROKA	Coil	1 μ H				
L31-33	YWS5LE0554	Coil					
L300-302	ELESE100KA	Coil	10 μ H	M50	YWVBQA2935AN	Operating Instructions	
L303-306	YFB02RN2R62	Coil	2.6 μ H	M51	XZB26X40C05	Polyethylene Bag	
X1,2	YFMS30917M10	Crystal Oscillator		M52	XZB55X71C1	Polyethylene Bag	
X3,4	YWNBR4R40625	Crystal Oscillator		M55	YWV9CA1942AN	Packaging Assy	
X5	YWC5A1966MXT	Crystal Oscillator		M56	YWV8FA0200A4	Packaging Label for WJ-MX30/B	
REAR BOARD							
WIPE BOARD							
ACCESSORY PARTS/PACKAGING PARTS							