DENON

Hi-Fi AV Surround Receiver

SERVICE MANUAL

MODEL AVR-3000/3000G

AV SURROUND RECEIVER

(Photo: AVR-3000)

CONTENTS

NIPPON COLUMBIA CO., LTD.

DISASSEMBLY

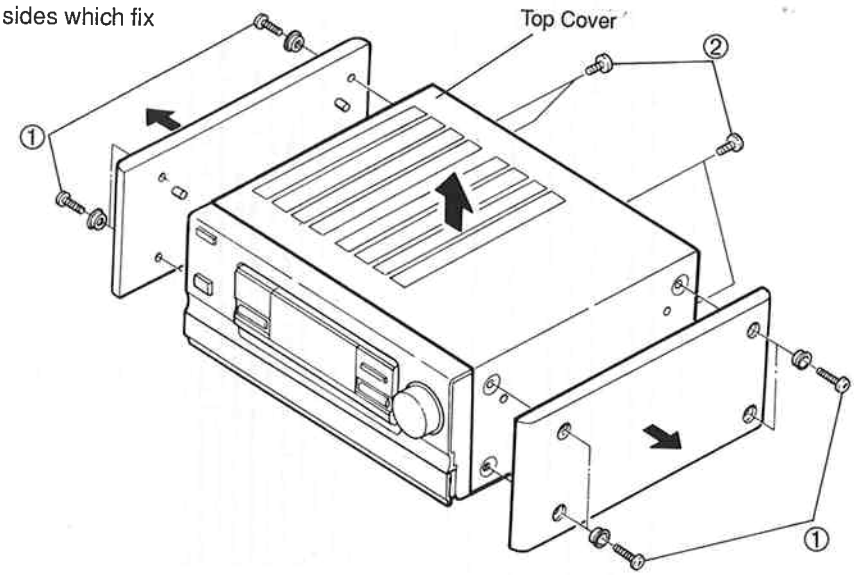
(To reassemble reverse disassembly)

1. Side plates (AVR-3000 only)

Remove 4 scerws ① each on left and right sides which fix the both sides.

2. Top Cover

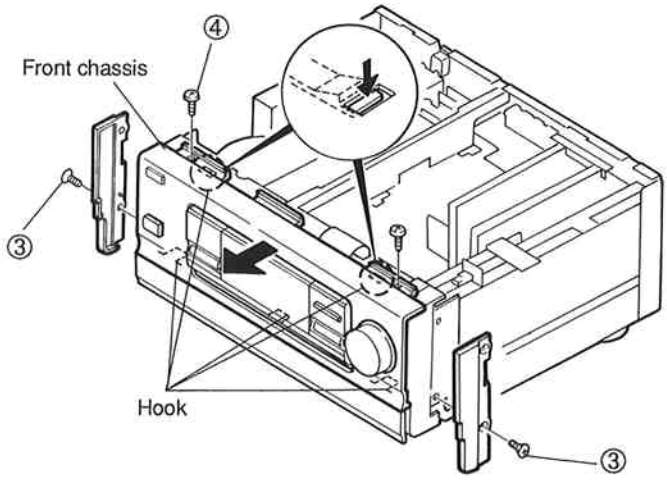
Remove 4 rear screws ② .



3. Front Alminium Panel

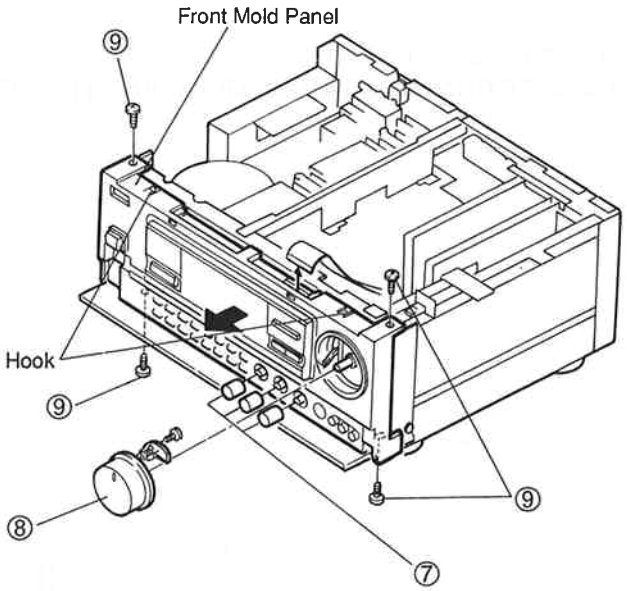
(1) Remove each on left and right screw ③ and detach Side Plate.

(2) Remove 2 upper screws ④, unfasten upper hooks at two places, and detach Panel from upper portion in arrow direction.



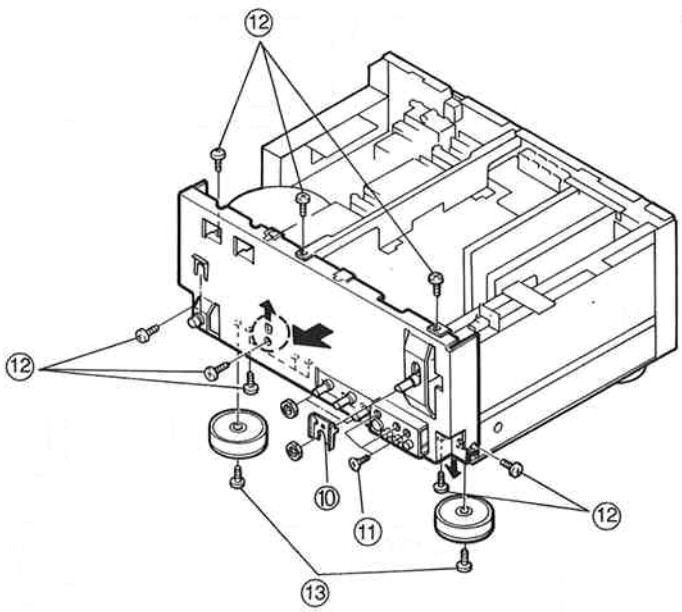
4. Front Mold Panel

(1) Remove connector of wire, for LED of Motor VR ⑧, and pull out Master VR Knob ⑧ and 3 round Knob ⑦.
(2) Remove all connector of wire, connected to FLD P.C.B..
(3) Remove fixing screws ⑨, fixing from upper and lower positions. (Totally 4 screws).



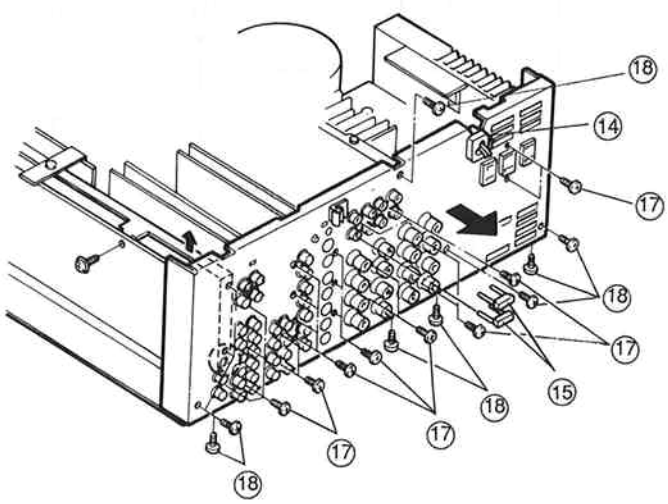
5. Front Chassis

(1) Remove Master VR and 3 VR nuts of one set, and then remove bracket ⑩.
(2) Remove 3 fixing screws of V-AUX P.C.B. ⑪.
(3) Remove snap plate for fixing headphone jack and fixing screws for fixing wire ⑫.
(4) Remove 2 screws ⑬ for attaching FOOT.
(5) Remove screws for attaching chassis ⑫.
(Upper 2, front 2, and lower 4 screws).



6. Rear Panel

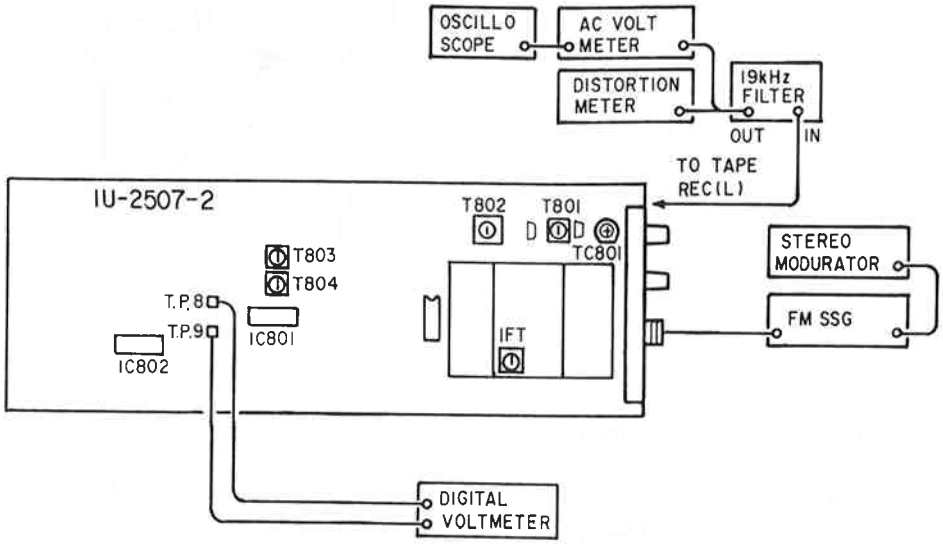
(1) Remove short circuit pin ⑮, and remove cord bush ⑭.
(2) Remove 21 terminal connecting screws ⑰.
(3) Remove panel fixing screws (lower 4, front 6 screws ⑱).



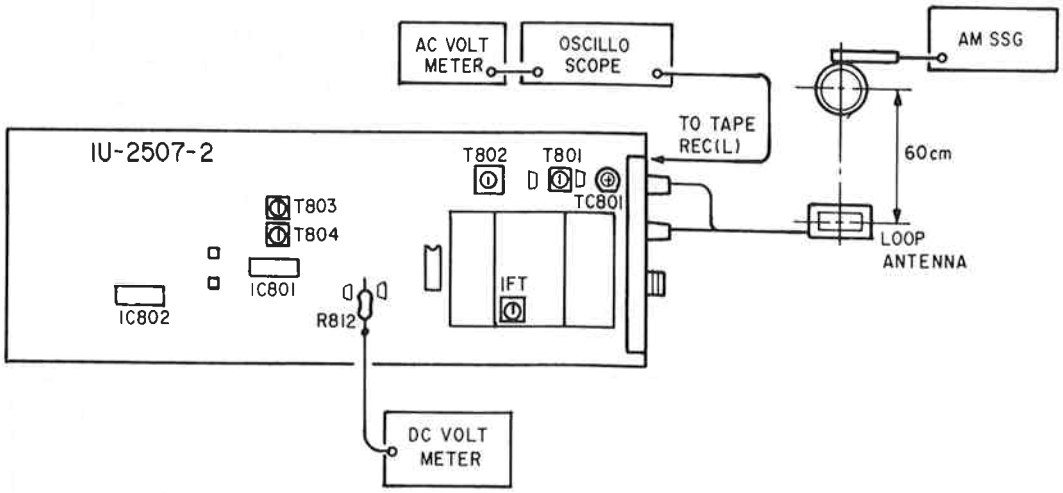
ADJUSTMENT

● TUNER SECTION
CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

● FM



● AM



FM/MPX ALIGNMENT

Step	Alignment Item	Tuning Frequency Setting	Input					Output		Adjust		Remarks
			Type	Frequency	Input Level	Modulation	Coupling	Type	Connect to	Points	Adjust to	
1	Tuning Center	98 MHz	FM SSG Mono	98 MHz	60 dBμ	None	Antenna Terminal	Digital Voltmeter	T.P.8, 9	T3	±50 mV	Function: FM Mode: Auto
2	Distortion (Mono)	98MHz	FM SSG Mono	98 MHz	60 dBμ	1 kHz 100%	Antenna Terminal	Distortion Meter	TAPE REC (L) −1	T4	Minimum Distortion	Function: FM Mode: Auto
3	Distortion (Stereo)	98 MHz	FM SSG Stereo (L)	98 MHz	60 dBμ	1 kHz Main: 90% Pilot: 10%	Antenna Terminal	Distortion Meter	TAPE REC (L) −1	IFT on Front End	Minimum Distortion	Function: FM Mode: Auto
4	Noise Center & Distortion	Repeat 1, 2 and 3 to obtain minimum distortion and same time indicating ±50 mV on Digital Voltmeter.										

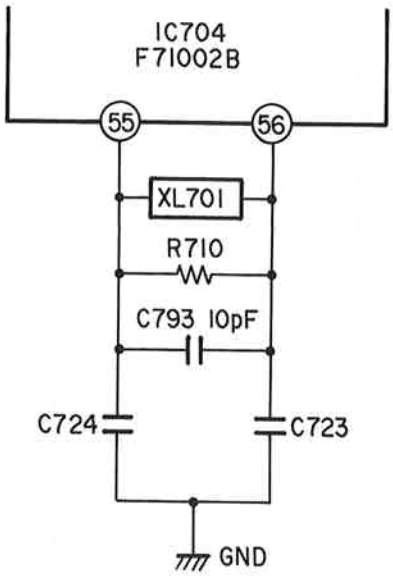
AM ALIGNMENT

Step	Alignmet Item	Tuning Frequency Setting	Input					Output		Adjust		Remarks
			Type	Frequency	Input Level	Modulation	Coupling	Type	Connect to	Points	Adjust to	
1	Receving Band Alignment	520 KHz	AM SSG	520 KHz	Input Level is not over to work A.G.C.	400 Hz 30%	Loop Antenna	Electric DC Voltmeter	TP1 GND	T2	1.0 V ±100 mV	Function : AM
2	Tracking Alignment	600 KHz	AM SSG	600 KHz	Input Level is not over to work A.G.C.	400 Hz 30%	Loop Antenna	Audio V.M.	TAPE REC (L) −1	T1	Maximum Output	Function: AM
		1400 KHz	AM SSG	1400 KHz	Input Level is not over to work A.G.C.	400 Hz 30%	Loop Antenna	Audio V.M.	TAPE REC (L) −1	TC1	Maximum Output	Function: AM
3	Repeat 600 kHz and 1400 kHz to obtain maximum reading on Voltmeter.											

Note : Under reception of FM Broadcast using this unit at TUNER position, in case of receiving stations with specially low signal level, difficulty of reception may occur due to arisen beet hindrance by high frequency components from seldomly oscillating DSP.
In case such matter happens, please exercise the following countermeasure to change frequency which arises the beet hindrance.

● Countermeasure

1U-2436-1 UNIT
Delete C793 10pF parallelly connected with DSP clock oscillating quartz oscillator XL701 or change it down to around level of 3 ~ 8pF.



(C793 is connected on pattern side of P.W.B.)

● Initialiging (memory clearing) Method

To clear memory contents of microcomputer and restore to the initial state, take the following steps:

1. Press power switch, turn off power of the unit, and set to standby mode.
2. Pull out power cord from wall outlet temporarily.
3. Insert power cord into outlet while simultaneously pressing three keys of CD DIRECT, AUDIO, and VIDEO.
4. Press power switch to confirm that memory contents are cleared.

By completion of the above, the initial state is restored. In case the memory can not be cleared due to some reasons, repeat steps 1 through 3.

● AUDIO SECTION

Idling Current (1U-2433B-1)

Required measurement equipment: DC Voltmeter

Arrangement

(1) Avoid direct blow from an air conditioner or an electric fan, and adjust the unit at normal room temperature 15˚C ~ 30˚C. (59˚F ~ 86˚F).

(2) Presetting

- POWER (Power source switch) → OFF
- MODE (Mode buttton) → BY PASS
- FUNCTION (Function button) → CD
- VOLUME (Volume control) → 0: fully counterclockwise (↺ min.)
- CENTER VOLUME (Center volume control) → –12dB
- BASS, TREBLE (Tone control) → 0: (Controls to center)
- SPEAKERS (Speaker terminal) → No load (Do not connect speaker, dummy resistor, etc.)

(3) Prepare an oscillator with 10mVrms output, 1kHz sine wave and connect it to CD input terminal on rear panel.

Adjustment

(1) Remove top cover and set VR251, VR301, VR302, and VR253, VR503, VR504 of 1U-2433B-1 (Main Unit) at counterclockwise fully.

(2) Connect DC Voltmeter to test points (Lch T.P.1, Rch T.P.2, CENTER ch T.P.3).

(3) Connect power cord to AC Line, and turn power switch "ON".

(4) Allow 15 minutes, and turn VR301, VR302 and VR251 clockwise (↻) and adjust the TEST POINTS voltage to 1.5 mV ± 1.0 mV DC.

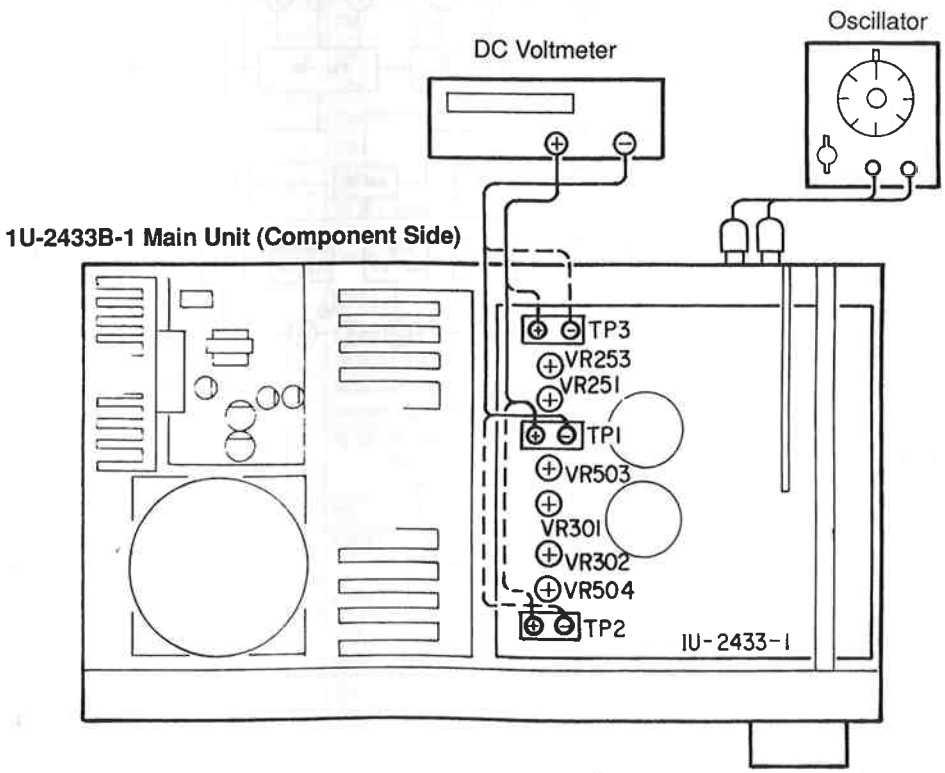
(5) After 2 minutes from preset, turn VR301, VR302, and VR251 to set the voltage to 3 mV ± 1.0mV DC.

Idling Adjustment in operation of OPTICAL CLASS A.

(6) Allow 10 minutes, and turn VOLUME (Main Volume knob) to MAX (↻ maximum) and turn VR503, VR504 and VR253 clockwise within 15 minutes, and adjust the TEST point voltage to 15 mV ± 5mV DC.

(7) Allow 1 minutes, and adjust the VR503, VR504 and VR253 so that the meter reads 20 mV ± 10 mV DC.

(8) Allow 5 minutes further, and confirm that the TEST POINT Voltage is 20 mV ± 10 mV DC.



SEMICONDUCTORS

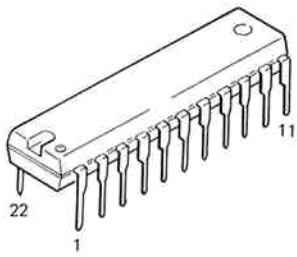
IC's

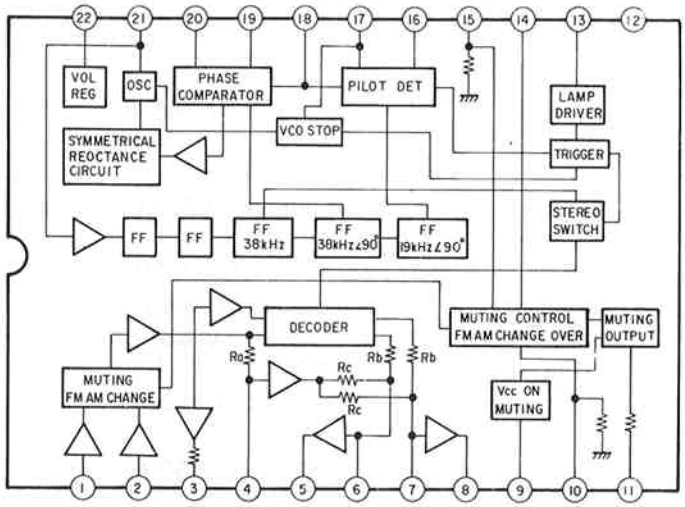
Note)

Indications before IC numbers denote P.W.B. Name.

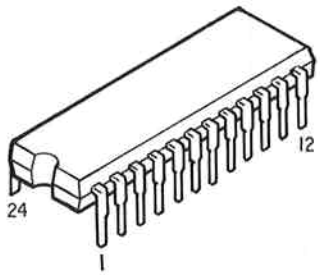
MA : Main Amp P.W.B. Unit
RI : Rear Input P.W.B. Unit
VV : VFD, Video P.W.B. Unit
SU : Surround P.W.B. Unit
TU : Tuner P.W.B. Unit

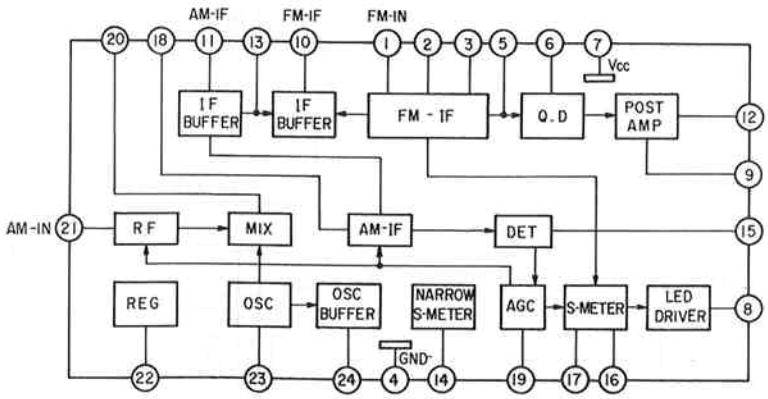
LA3401
(TU: IC002)





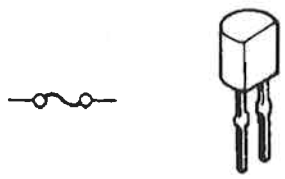
LA1266
(TU: IC001)



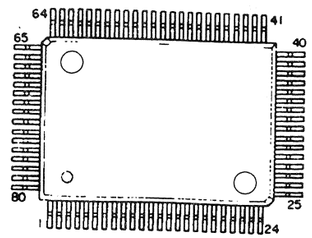


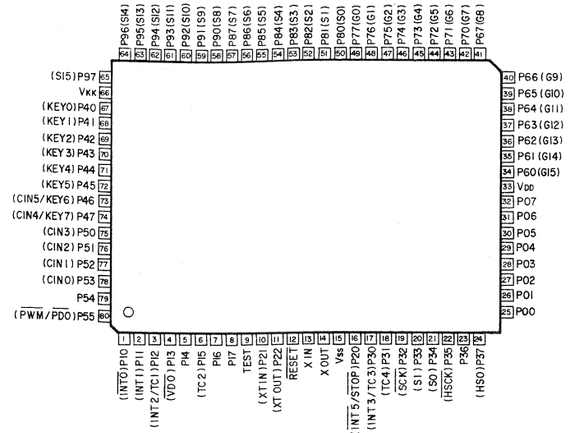
• IC PROTECTORS

ICP-N15 (RI: IC509~511)(TU: IC004)
ICP-N20 (RI: IC507, 508)



TMP87CM70AF
(VV:IC801)





TMP87CM70AF Terminal Function

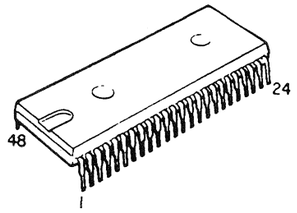
Terminal Voltage							
Power OFF (V)	Power ON (V)	Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
5.3	5.2	1	P10(INT0)	I	L*	—	Power breakdown; Break down detect input (*L at Breakdown)
0.0	0.6	2	P11(INT1)	I	H*	—	PROTECTION: PROTECTION INPUT (*H at detect mode)
0.0	5.0	3	P12(INT2/TC1)	O	L*	L	Not used
0.0	0.0	4	P13(DV0)	I	—	—	MODE Shift 1 (Shift of Previous AVC/AVR MODE)
0.0	0.0	5	P14	O	H	L	DM1
0.0	0.0	6	P15(TC2)	O	H	L	DM2 Dolby-Prologic Control
0.0	0.0	7	P16	O	H	L	DM3 (SSK2125)
0.0	0.0	8	P17	O	H	L	DM4
0.0	0.0	9	TEST	I	–	—	Connect to GND
0.0	0.0	10	P21(XTIN)	O	H	L	CM1 Dolby-Prologic Control
0.0	0.0	11	P22(XTOUT)	O	H	L	CM2 (SSK2125)
5.0	4.9	12	RESET	I	L	—	RESET: Microcomputer reset Input
2.3	2.0	13	XIN	I	–	—	Oscillator connection (8MHz)
2.4	2.0	14	XOUT	I	–	—	
0.0	0.0	15	Vss	PW	–	—	0V (GND)
0.0	0.0	16	P20 (INT5/STOP)	I	—	—	MODE Shift 2 (Shift of Previous OEM MODE)
5.2	5.1	17	P30 (INT3/TC3)	I	L	—	REMOTE: REMOTE Control reception signal input
0.0	5.1	18	P31(TC4)	O	L*	L	FL CS FL Driver Control (MSC2128) (*L at data transfer mode)
0.0	0.0	19	P32(SCK)	O	H	L	CK FL, Control
0.0	5.2	20	P33(SI)	O	L*	L	RESET (MSC7128) (*L at reset)
0.0	0.0	21	P34(SO)	O	H	L	DATA: FL, Control
0.0	5.1	22	P35(HSCK)	O	H	L	BCK
0.0	0.0	23	P36	O	H	L	WCK DSP Control (YSS-215)
0.0	5.1	24	P37(HSO)	O	H	L	CD

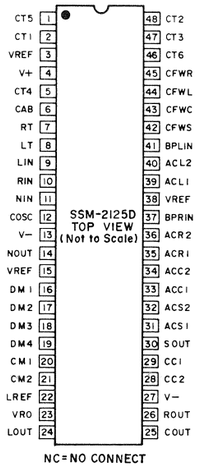
Terminal Voltage							
Power OFF (V)	Power ON (V)	Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
0.0	0.0	25	P00	O	H	L	CK
0.0	0.0	26	P01	O	H*	L	CE Audio I/O, Surround (*H at inhibit Mode)
0.0	0.0	27	P02	O	H	L	DATA (LC7821,7822)
0.0	0.0	28	P03	O	H	L	CK
0.0	5.0	29	P04	O	H	L	DATA Volume control (TC9176P)
0.0	0.0	30	P05	O	H	L	ST1 ➡REAR CH
0.0	0.0	31	P06	O	H	L	ST2 ➡CENTER CH
0.0	0.0	32	P07	O	H	L	INPUT ADJ ➡INPUT LEVEL ADJ
5.2	5.0	33	VDD	PW	–	—	+5V
0.3	–15.0	34	P60(G15)	O	H	L	VOL.UP Motor drive control
0.4	–15.0	35	P61(G14)	O	H	L	VOL.DOWN (BA6109)
4.9	5.0	36	P62(G13)	O	H*	H	LED MOTOR VOLUME LED (*H at lit time)
0.4	–15.0	37	P63(G12)	O	H	L	AVSE AVSE Control
0.4	5.0	38	P64(G11)	O	L	H	CINEMA; CINEMA Equalizer control
0.4	–15.0	39	P65(G10)	O	L*	L	Not used
0.4	–15.0	40	P66(G9)	O	H*	L	DIRECT MODE ON/OFF (*H at DIRECT mode)
0.4	–15.0	41	P67(G8)	O	L	H	L + R
0.4	4.9	42	P70(G7)	O	L	H	PRO LOGIC CENTER SIGNAL SWITCH
0.4	4.8	43	P71(G6)	O	L	H	Not used
0.4	4.8	44	P72(G5)	O	H	L	SP-A
0.4	–15.0	45	P73(G4)	O	H	L	SP-B Speaker relay control
0.4	–15.0	46	P74(G3)	O	H	L	SP-REAR
0.4	–15.0	47	P75(G2)	O	H	L	SP-CENTER
0.4	4.7	48	P76(G1)	O	H	L	H/P, PRE MUTE Premute control

Terminal Voltage							
Power OFF (V)	Power ON (V)	Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
0.4	5.0	49	P77(G0)	O	L*	L	AMP MUTE (*L at MUTE mode)
0.3	4.8	50	P80(S0)	O	H	L	POWER Power relay control
0.4	4.8	51	P81(S1)	O	H	L	Not used
0.3	–6.6	52	P82(S2)	O	H	L	KS1
0.3	–6.6	53	P83(S3)	O	H	L	KS2
0.3	–6.6	54	P84(S4)	O	H	L	KS3 Key Scan Strobe
0.3	–6.6	55	P85(S5)	O	H	L	KS4
0.3	–6.6	56	P86(S6)	O	H	L	KS5
0.3	–6.6	57	P87(S7)	O	H	L	KS6
0.3	–7.0	58	P90(S8)	I	H	—	KA1
0.3	–7.0	59	P91(S9)	I	H	—	KA2 Key Scan Receive
0.3	–7.0	60	P92(S10)	I	H	—	KA3
0.3	–7.0	61	P93(S11)	I	H	—	KA4
0.3	–7.0	62	P94(S12)	I	H	—	KA5 Key Scan Receive
0.3	–7.0	63	P95(S13)	I	H	—	KA6
0.4	4.9	64	P96(S14)	O	L*	L	VCR-1 REC INH. (*H at Inhibit mode)
0.4	4.9	65	P97(S15)	O	L*	L	VCR-2 REC INH. (*H at Inhibit mode)

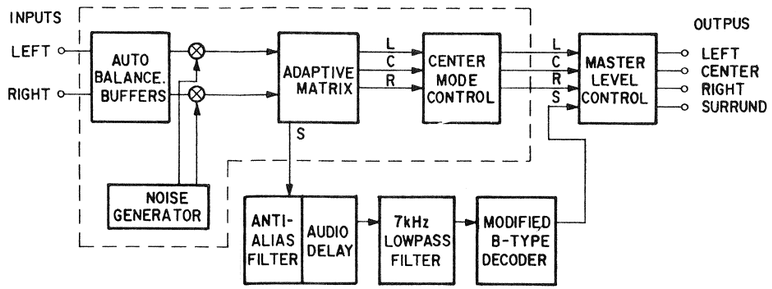
Terminal Voltage							
Power OFF (V)	Power ON (V)	Pin	Terminal Name	I/O	Logic	Initial Setting	Usage
0.4	–15.0	66	VKK	PW	—	—	VKK
0.5	0.0	67	P40(KEY0)	O	H	L	A
0.0	0.0	68	P41(KEY1)	O	H	L	B VIDEO INPUT CONTROL
0.0	0.0	69	P42(KEY2)	O	H	L	C (HD14051BP)
0.0	0.0	70	P43(KEY3)	O	H	L	A
0.0	0.0	71	P44(KEY4)	O	H	L	B VIDEO REC OUT CONTROL
0.0	0.0	72	P45(KEY5)	O	H	L	C (HD14051BP)
0.0	0.0	73	P46(CIN5/KEY6)	O	H	L	CK
0.0	0.0	74	P47(CIN4/KEY7)	O	H	L	ST TUNER PLL Control (LM7001)
0.0	0.0	75	P50(CIN3)	O	H	L	DATA
0.2	6.0	76	P51(CIN2)	I	L*	—	TUNED signal input (* L at reception)
2.8	5.32	77	P52(CIN1)	I	L*	—	STEREO signal input (* L at STEREO reception)
0.0	4.8	78	P53(CIN0)	O	L*	L	ST/MONO TUNER STEREO/MONO Switching (*L at STEREO reception) "L" during auto tuning "H" during manual tuning
0.0	0.3	79	P54	O	H*	L	TUNER MUTE (*H at MUTE mode)
0.2	0.5	80	P55(PWM/PD0)	I	H*	L	Not used

SSM-2125D (SU: IC601)

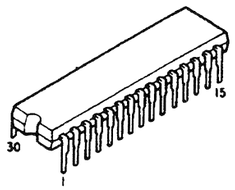




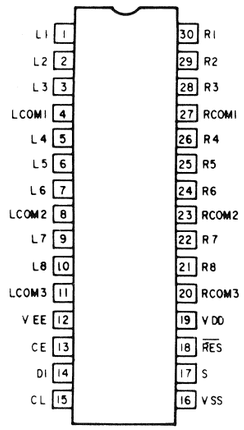
SSM-2125D



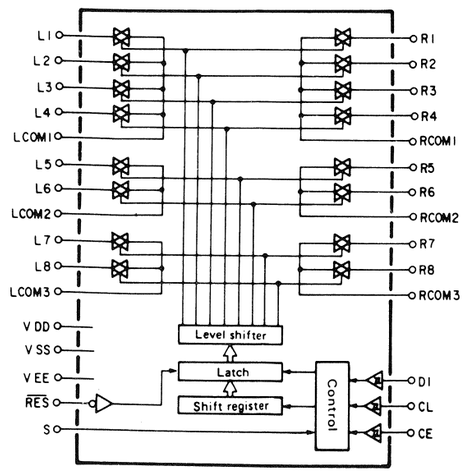
LC7821 (RI: IC153, 155)
LC7822 (RI: IC154)(SU: IC605)



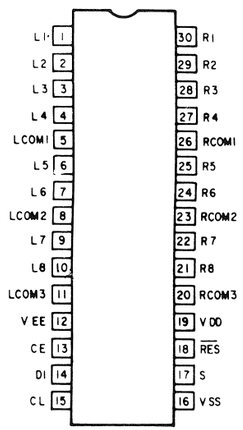
LC7821



LC7821



LC7822



LC7822

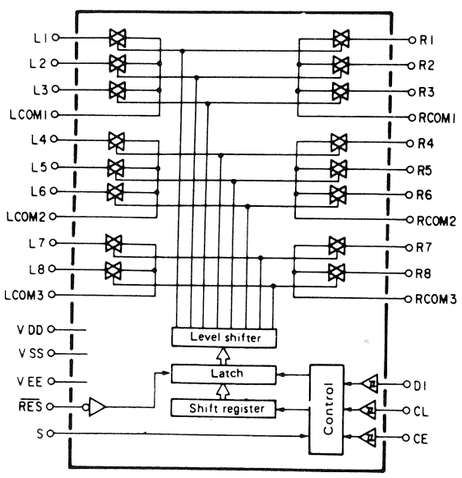
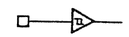
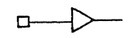
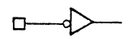
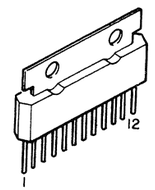


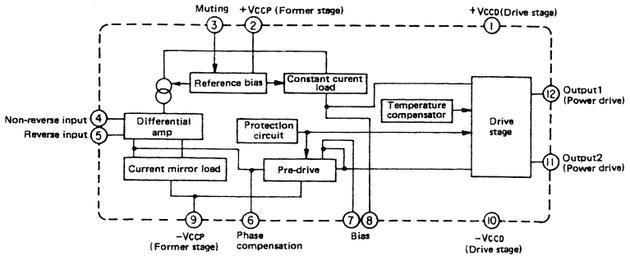
Table of LC7821, LC7822 Terminal Function

Name of Terminal	I/O	Equivalent Internal Circuit	Function of Terminal
V_{DD}, V_{SS}, V_{EE}			Power terminal.
L1 ~ L8, R1 ~ R8 LCOM1 ~ LCOM4, BCOM1 ~ BCOM4		Refer to block diagram	In/Out terminal of analog switch.
CL, DI, CE	I		Serial data input terminal (Schmidt buffer). CL = Clock input terminal. DI = Data input terminal. CE = Chip enable terminal.
S	I		Selection terminal for using of two. Address will be shifted as per below table when switching S terminal to L or H.
$\overline{RES}$	I		Reset terminal. Condition of analog switch is not fixed at the time of turning on the power. When shift this termnal to L, all analog switches become OFF.

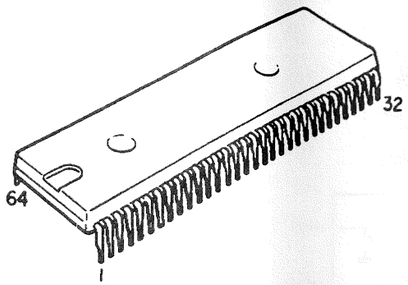
Name of Item	S Terminal	Address			
		A0	A1	A2	A3
LC7821	L	0	1	0	1
	H	1	1	0	1
LC7822	L	0	0	1	1
	H	1	0	1	1

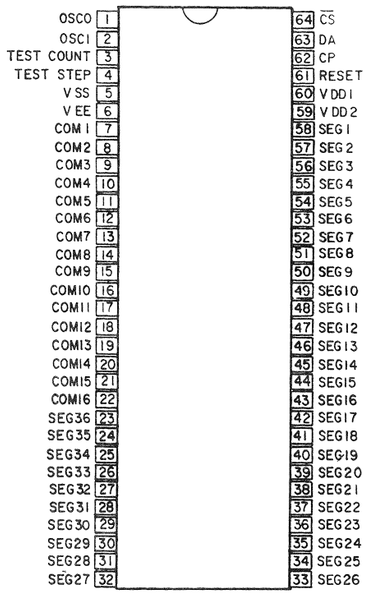
μPC1225H (RI: IC401, 402)





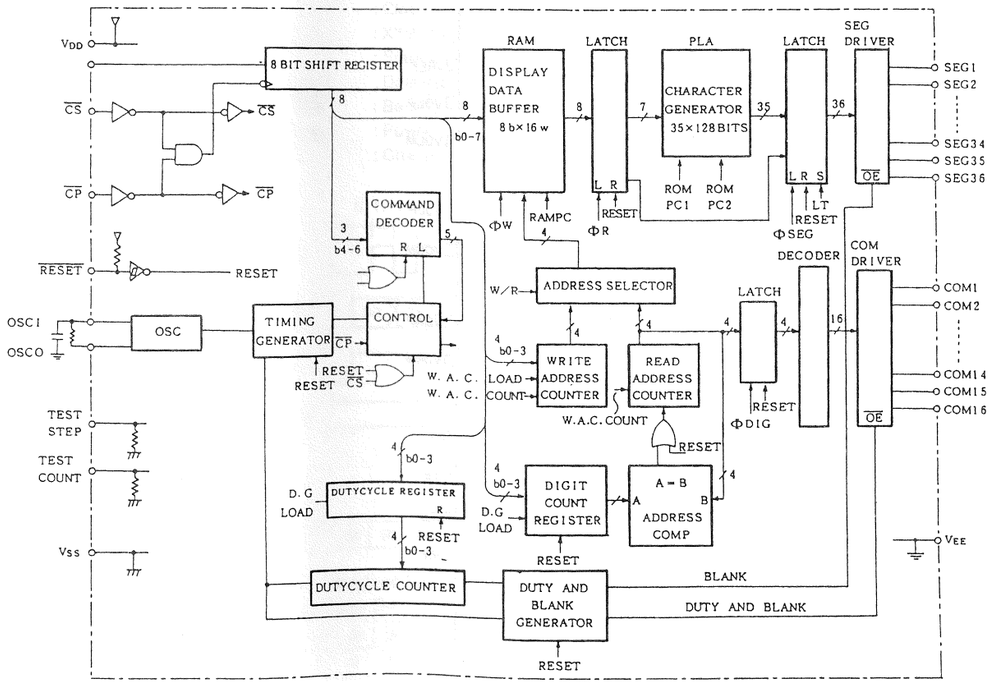
MSC7128-03SS (VV:IC802)

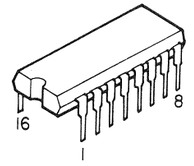


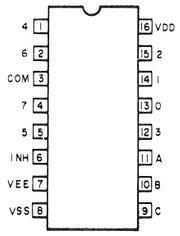


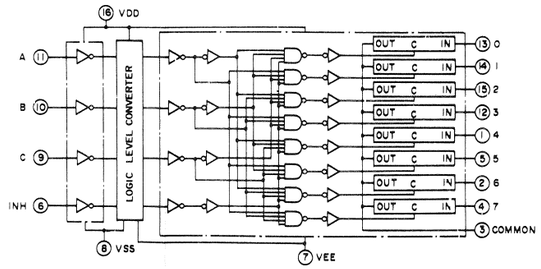
MSC7128-03SS Terminal Function

Terminal Name	Terminal No.	I/O	Connection to:	Function
$V_{DD}1$	60		Power Supply	$V_{DD}1$ — V_{SS} Internal logic power supply. $V_{DD}2$ — V_{EE} Fluorescent display tube drive circuit power supply.
$V_{DD}2$	59			
V_{SS}	5			
V_{EE}	6			
DA	63	I	Microcomputer	Serial data input. Input from (Positive logic) LBS.
$\overline{CP}$	62	I	Microcomputer	Shift clock input. Data shift at rise time of CP.
$\overline{CS}$	64	I	Microcomputer	Chip select input. Serial transfer of data is prohibited when set to "Hi".
OSCI	2	I		External terminal of CR for CR oscillation. fosc 250 KHz at C= 100 PF, R= 47 KΩ
OSCO	1	O		
$\overline{RESET}$	61	I		Reset input (Built-in Pull-up resistor). Internal logic is reset when "LOW" is set, and output of SEG1 ~ 36, COM1 ~ 16 all become "LOW".
COM1 ~ COM16	7 ~ 22	O	Fluorescent display tube grid	Drive output of fluorescent display tube grid. Able to connect directly to fluorescent display tube, and no Pull-down resistor is needed. $I_{OH>}$ –30 mA
SEG1 ~ SEG35	58 ~ 24	O	Fluorescent display tube anode	Drive output of anode for fluorescent display tube 5×7 dot. Able to connect directly to fluorescent display tube and no Pull-down resistor is needed. $I_{OH>}$ –2 mA.
SEG36	23	O	Fluorescent display tube anode	Drive output of anode for fluorescent display tube cathode. Able to connect display to fluorescent display tube and no Pull-down resistor is needed. $I_{OH>}$ –10 mA
TEST STEP	4	I		Test mode setting input (Normally opened).
TEST COUNT	3	I		Test clock input (Normally opened).

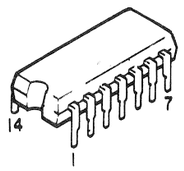


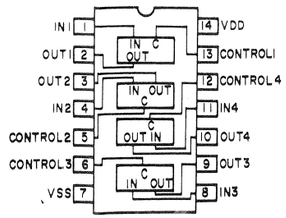






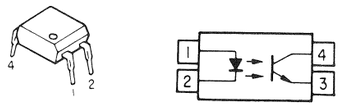
HD14066BP (VV: IC003, 103)





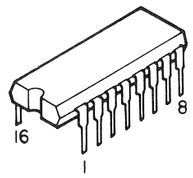
TC4051BP (VV: IC001, 002, 101, 102, 104, 105)

TLP521-1(BL) (MA: IC453-455)
INFRARED LED + PHOTO TRANSISTOR

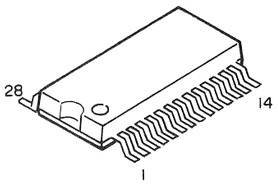


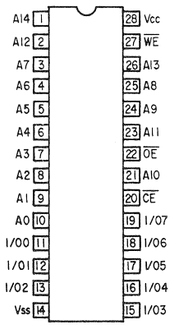
1. Anode
2. Cathode
3. Emitter
4. Collector

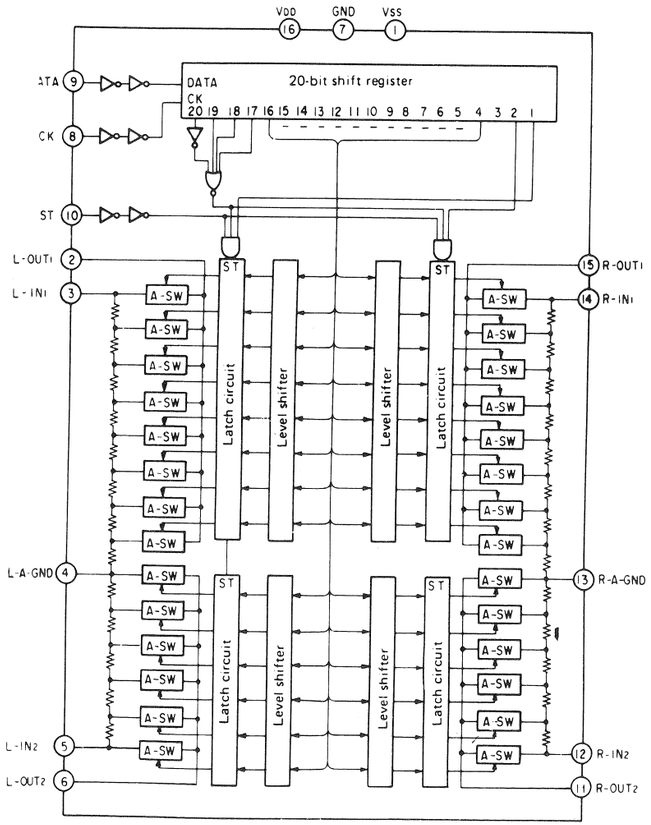
TC9176P (SU: IC707, 708)



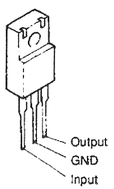
HM65256BLFP-10
(SU: IC705)



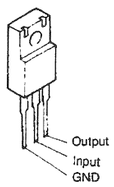




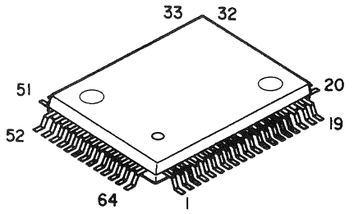
NJM7805FA(S) (SU: IC715)
NJM7806FA(S) (MA: IC503, 505)
NJM7815FA(S) (MA: IC501)
NJM7812FA(S) (TU: IC005)

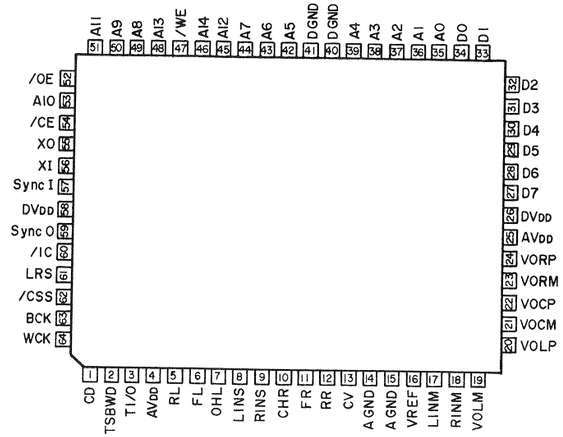


NJM7906FA (MA: IC504)
NJM7915FA (MA: IC502)

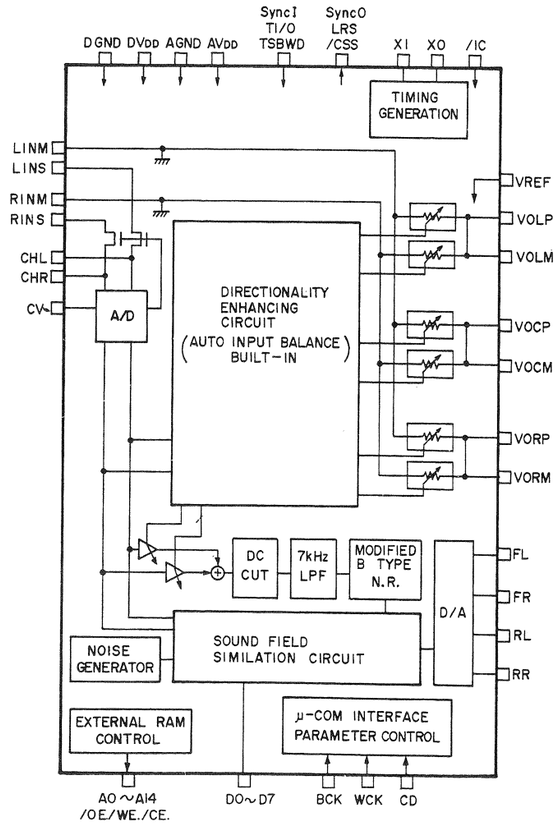


F71002B
(SU: IC704)

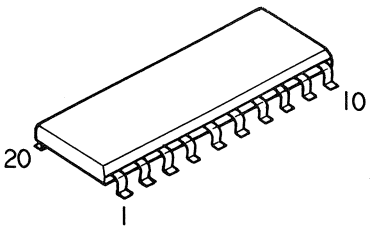


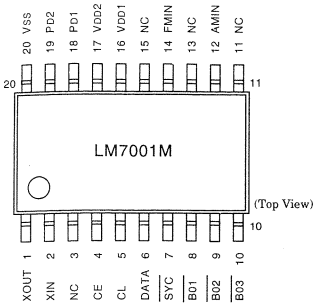


BLOCK DIAGRAM

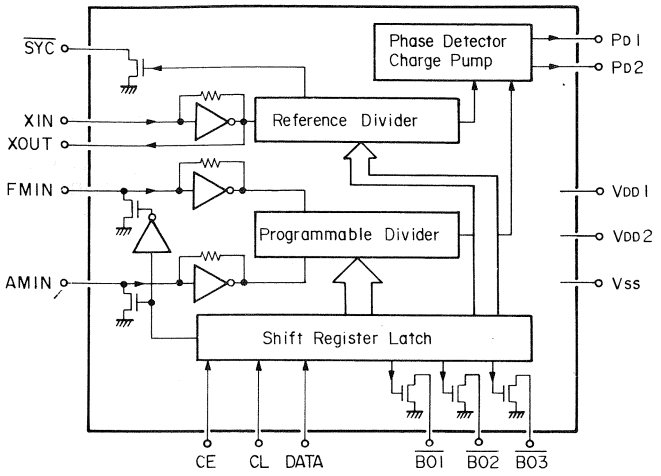


LM7001M
(TU: IC003)





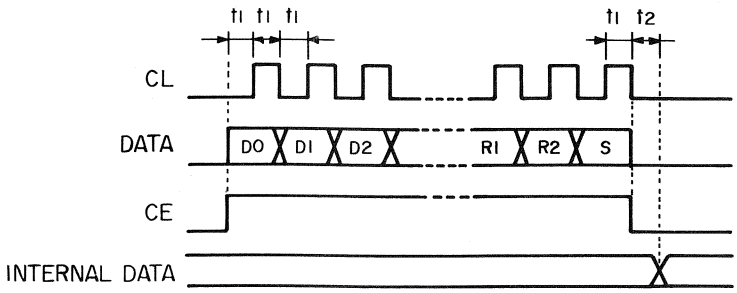
* (NC) pin : Use at opened.



Terminal Description

$\overline{SYC}$	: Clock for controller (400 kHz)
XIN, XOUT	: X'tal OSC (7.2MHz)
FMIN, AMIN	: Station oscillation signal input.
CE, CL, DATA	: Data input.
$\overline{BO1}$, $\overline{BO2}$, $\overline{BO3}$	: Band data output. $\overline{BO1}$ is feasible for time base output (8Hz).
$V_{DD}1$, $V_{DD}2$, V_{SS}	: Power supply. ($V_{DD}2$ is for back-up)
P_D1, P_D2	: Charge pump output.

Data input



t1 > 1.5 us (X'tal at 7.2MHz)
t2 < 1.5 us

← Input from D0.

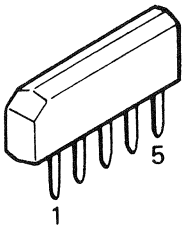
D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	T0	T1	B0	B1	B2	TB	R0	R1	R2	S

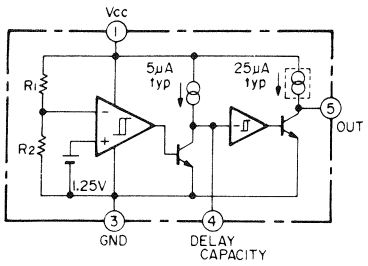
(1) D0 (LSB)~D13 (MSB) :Frequency dividend data
For FMIN, use D0~D13; for AMIN, use D4~D13.

D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	
1	0	1	0	0	0	0	0	0	1	0	1	1	1	→ FMIN Frequency dividend number = 14853
LSB													MSB	
×	×	×	×	0	0	0	0	0	1	0	1	1	1	→ AMIN Frequency dividend number = 928
				LSB									MSB	

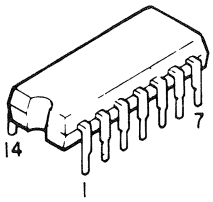
(2) T0, T1 : For test of LSI(0,0)

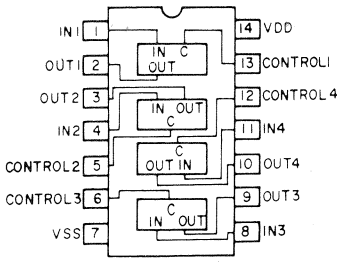
M51953B (VV: IC803)



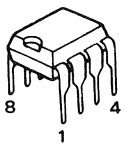


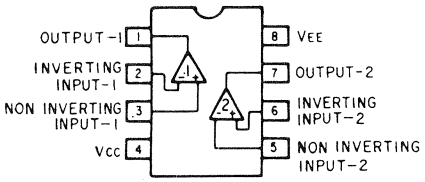
LC4996 (SU: IC604)



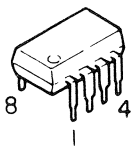


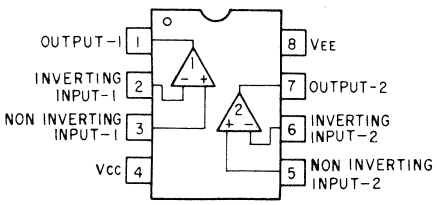
M5128AP
(MA: IC351)
(SU: IC452, 602, 606, 607, 609, 611, 703, 706, 709~712, 716)
(RI: IC051, 152)



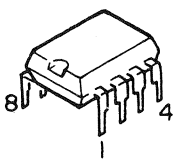


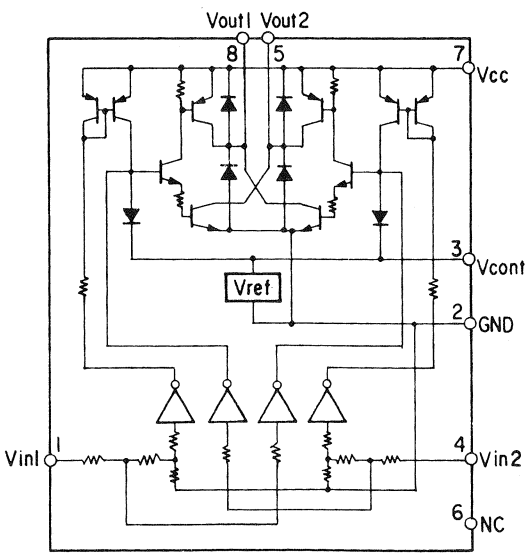
RC4556D/NJM4556D (MA: IC231)
RC4558D-D/NJM4558D-D (RI: IC151)
RC2082D/NJM2082D (SU: IC451, 608, 610)
RC2068DDC/NJM2068DDC (SU: IC713)





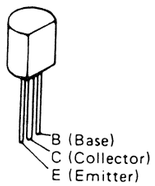
BA1639 (SU: IC714)



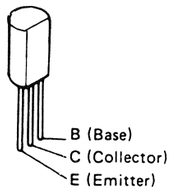


● TRANSISTORS

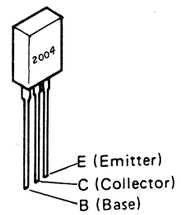
2SA970 (BL)
2SA988 (E/F)
2SC1015 (GR/Y)
2SC1815 (Y),(BL)
2SC1841 (E/F)
2SC2878 (A/B)



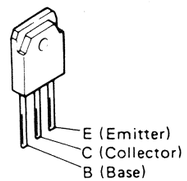
2SB647A (C)
2SD667A (C)



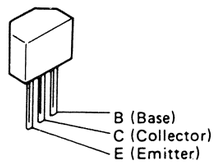
2SB1328 (P)
2SD2004 (P)



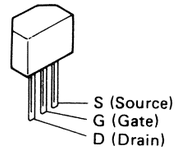
2SA1490 (O/P/Y) (Z)
2SC3854 (O/P/Y) (Z)



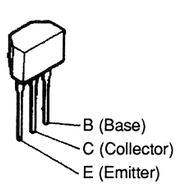
2SA1048 (GR),(Y/GR)
2SC2458 (BL)



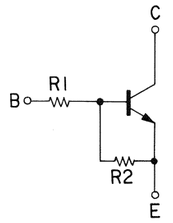
2SK184 (GR)/(BL)



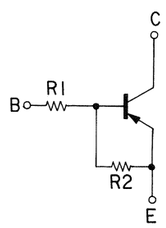
RN1202
RN1204
RN2201
RN2204



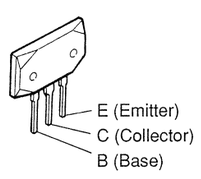
RN1202
RN1204



RN2201
RN2204



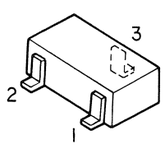
2SA1493(O)/(Y)
2SA3857(O)/(Y)



	R1	R2
RN1202	10 kohm	10 kohm
RN1204	47 kohm	47 kohm

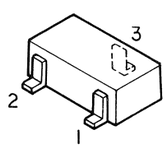
	R1	R2
RN2201	4.7 kohm	4.7 kohm
RN2204	47 kohm	47 kohm

2SK209 (Y/GR)



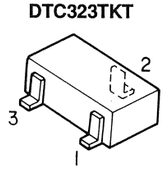
1: Drain
2: Source
3: Gate

2SC2712 (Y/GR)



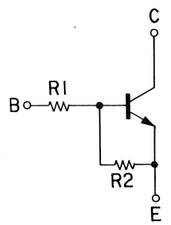
1: Emitter
2: Base
3: Collector

RN2402
DTC144EKT
DTC323TKT

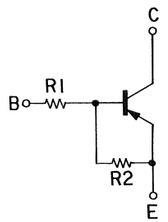


1: GND/Emitter
2: Out/Collector
3: In/Base

DTC144EKT
DTC323TKT



RN2402

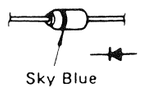


	R1	R2
DTC144EK	10 kohm	10 kohm
DTC323TK	2.2 kohm	—

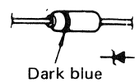
R1	R2
kohm	kohm

● DIODES (included LED)

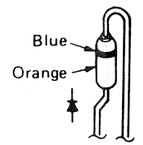
1SS270A
1S2076A



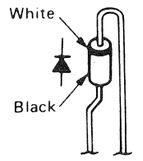
HZS4B-1
HZS6B-1
HZS7C-1
HZS7B-1
HZS9A-1
HZS20-1
HZS20-1



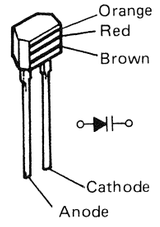
1SR35-200A



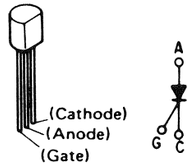
DSM1D2 (Type 3)



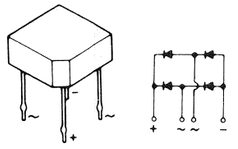
SVC321SPA-D-2



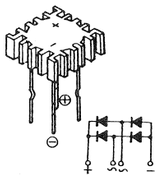
SFOR1A42 (Thyrister)



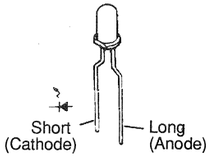
S4VB20F



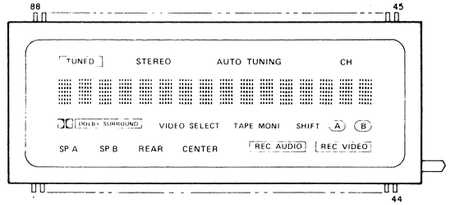
D5FB20 (4001)

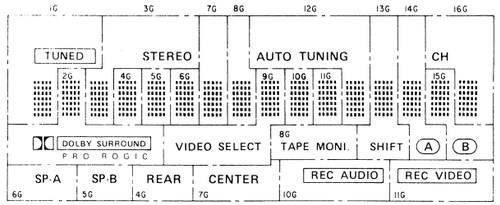


SEL1210R (Red)



● FL DISPLAY (Part No.: 3934111004)





(UPPER) TERMINAL CONNECTION

TERMINAL No.	88	87	86	85	84	83	82	81	80	79	78	77				
ELECTRODE	F1	F1	NP	NP	NP	NP	NP	NP	P (11)	P (21)	P (31)	P (41)				
TERMINAL No.	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57
ELECTRODE	P (51)	P (12)	P (22)	P (32)	P (42)	P (52)	P (13)	P (23)	P (33)	NP	NP	NP	P (55)	P (45)	P (35)	P (25)	P (15)	P (54)	P (44)	P (34)
TERMINAL No.									56	55	54	53	52	51	50	49	48	47	46	45
ELECTRODE									P (24)	P (14)	P (53)	P (43)	NP	NP	NP	NP	NP	NP	F2	F2

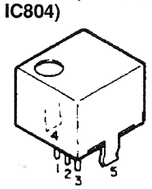
(LOWER)

TERMINAL No.									33	34	35	36	37	38	39	40	41	42	43	44
ELECTRODE									P (27)	P (37)	P (47)	P (57)	NP	NP	NP	NP	NP	NP	F2	F2
TERMINAL No.	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
ELECTRODE	3G	7G	8G	12G	13G	14G	15G	16G	11G	10G	2G	9G	NP	P (X)	P (16)	P (26)	P (36)	P (46)	P (56)	P (17)
TERMINAL No.	1	2	3	4	5	6	7	8	9	10	11	12								
ELECTRODE	F1	F1	NP	NP	NP	NP	NP	NP	6G	5G	4G	1G								

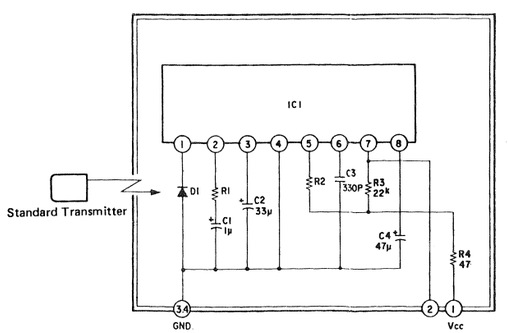
Notes: F: Filament NP: No-Pin
G: Grid
P: Anode

● OTHERS

SBX1610-52 (Remote Control Receiver)
(VV: IC804)



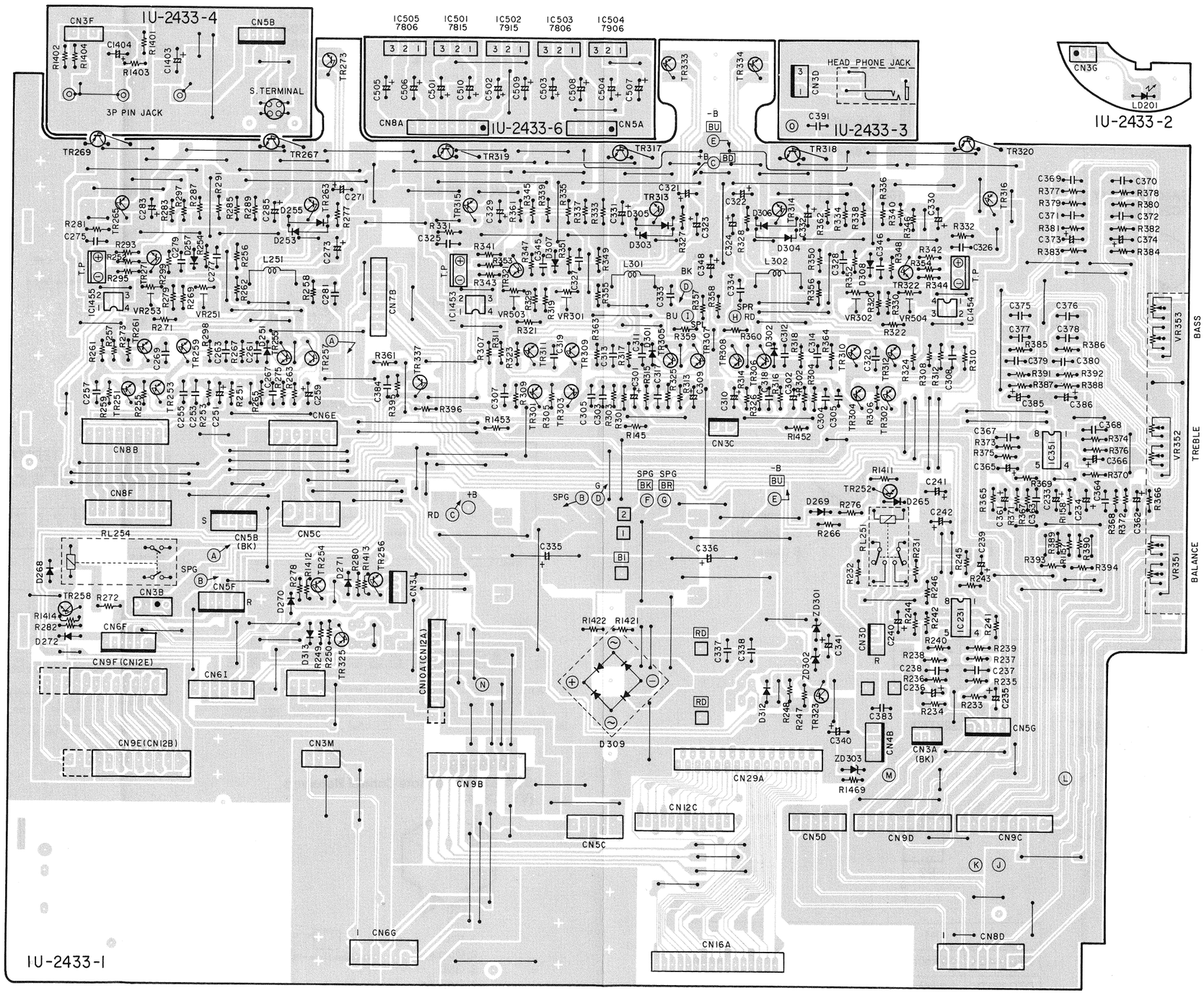
1. Vcc
2. Output
3. GND
4. Case fin
5. Case fin



IC1	: CX20106A chip
D1	: Pin photodiode chip
C1, C2, C4	: Alumininum electrolytic capacitor
C3	: SL characteristic ± 5%
R1	: Gain control resistor
R2	: fo control resistor (using ± 1%)
R (Other than above items)	: ± 5%

PRINTED WIRING BOARD (Pattern side)

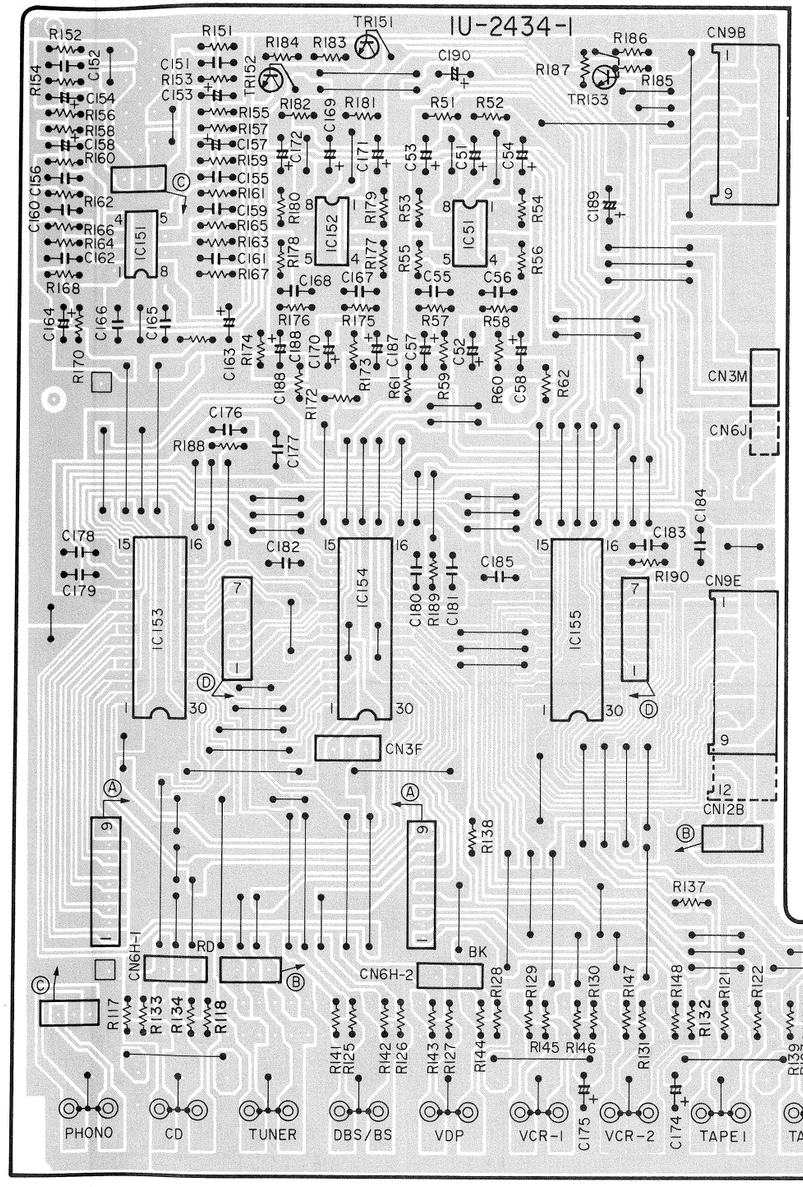
1U-2433B MAIN AMP. UNIT ASS'Y



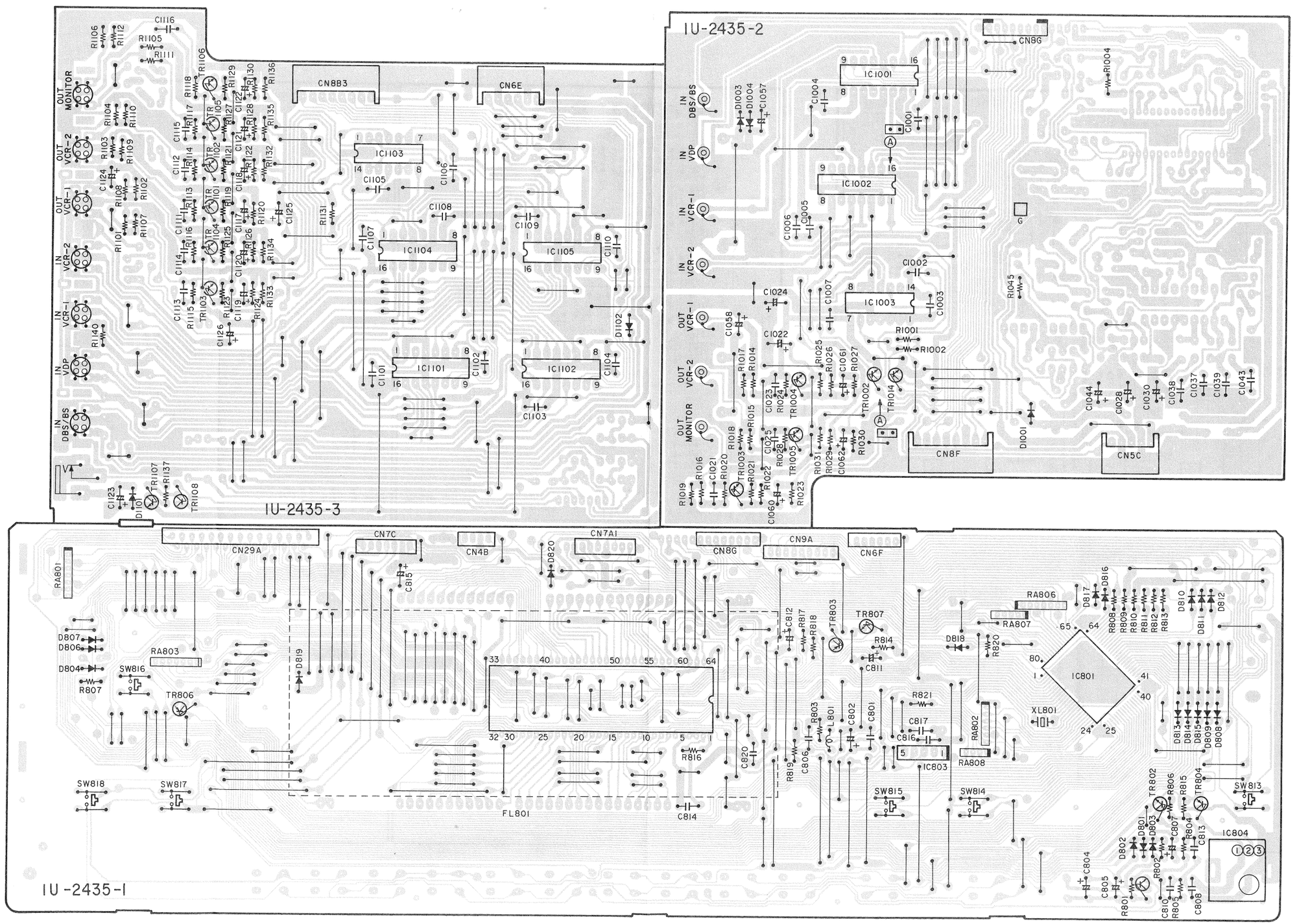
1 2 3 4 5 6 7 8

A B C D E

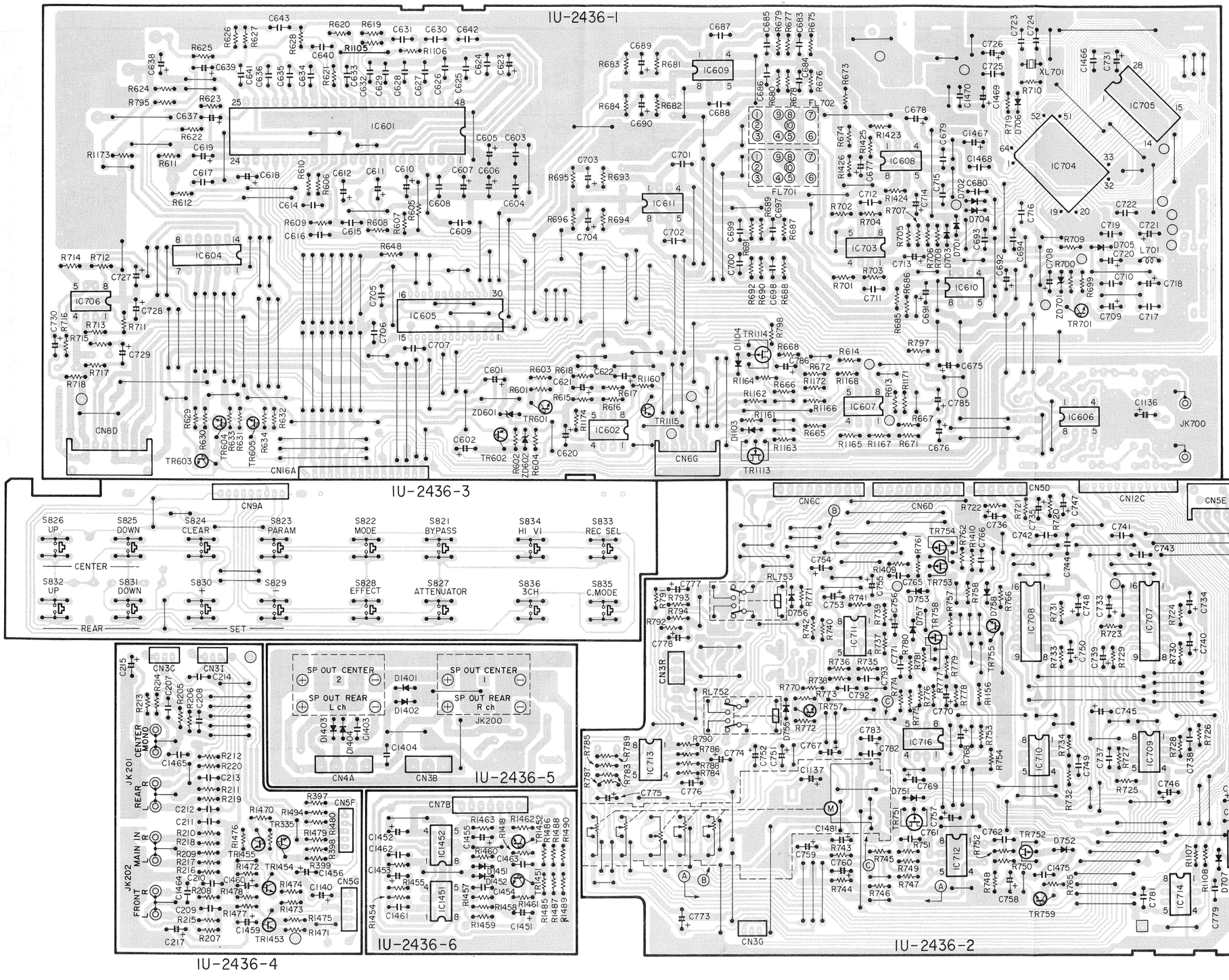
1U-2434B REAR INPUT UNIT ASS'Y



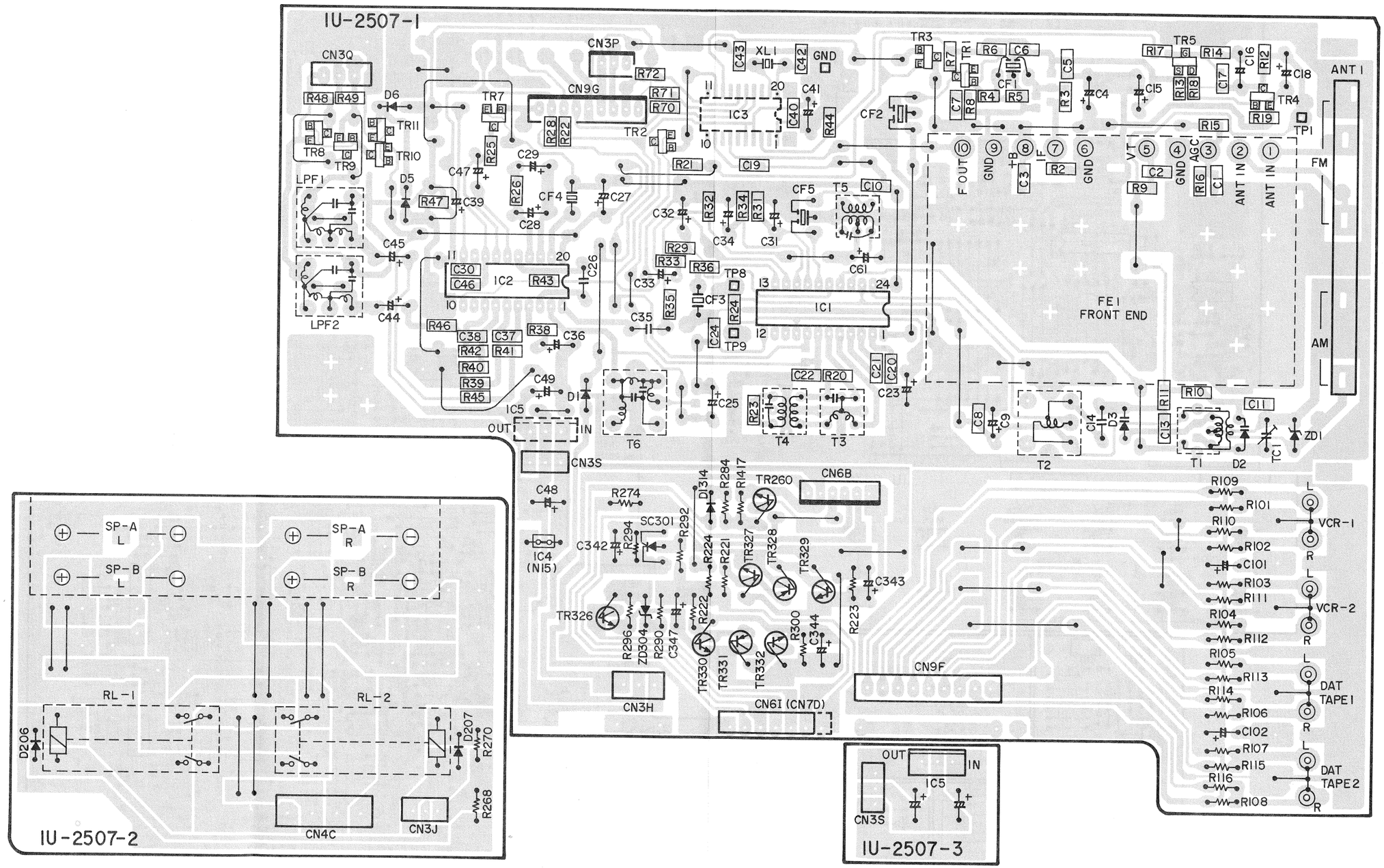
1U-2435B VED, VIDEO UNIT ASS'Y



1U-2436B SURROUND UNIT ASS'Y



1U-2507 TUNER UNIT ASS'Y



NOTE FOR PARTS LIST

- Part indicated with the mark " ◉ " are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "l" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W.Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol ⚠ ▒▒ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

● Resistors

Ex.: RN (Type) 14K (Shape and performance) 2E (Power) 182 (Resistance) G (Allowable error) FR (Others)

RD : Carbon	2B : 1/8W	F : ±1%	P : Pulse-resistant type
RC : Composition	2E : 1/4W	G : ±2%	NL : Low noise type
RS : Metallic oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type
RW : Winding	3A : 1W	K : ±10%	FR : Fuse-resistor
RN : Metal film	3D : 2W	M : ±20%	F : Lead wire forming
RK : Metal mixture	3F : 3W		
	3H : 5W		

* **Resistance**

1 8 2 ⇒ 1800 ohm = 1.8 kohm
- 2: 2-digit effective number.
- 8: Indicates number of zeros after effective number.

• Units: ohm

1 R 2 ⇒ 1.2 ohm
- 2: 1-digit effective number.
- R: 2-digit effective number, decimal point indicated by R.

• Units: ohm

* **Capacity (electrolyte only)**

2 2 2 ⇒ 2200μF
- 2: 2-digit effective number.
- 2: Indicates number of zeros after effective number.

• Units: μF.

2 R 2 ⇒ 2.2μF
- 2: 1-digit effective number.
- R: 2-digit effective number, decimal point indicated by R.

• Units: μF.

● Capacitors

Ex.: CE (Type) 04W (Shape and performance) 1H (Dielectric strength) 2R2 (Capasity) M (Allowable error) BP (Others)

CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	HS : High stability type
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type
CS : Tantalm electrolitic	1C : 16V	J : ±5%	HR : Ripple-resistant type
CQ : Film	1E : 25V	K : ±10%	DL : For charge and discharge
CK : Ceramic	1V : 35V	M : ±20%	HF : For assuring high frequency
CC : Ceramic	1H : 50V	Z : +80% −20%	U : UL part
CP : Oil	2A : 100V	P : +100% −0%	C : CSA part
CM : Mica	2B : 125V	C : ±0.25pF	W : UL-CSA type
CF : Metallized	2C : 160V	D : ±0.5pF	F : Lead wire forming
CH : Metallized	2D : 200V	= : Others	
	2E : 250V		
	2H : 500V		
	2J : 630V		

* **Capacity (except electrolyte)**

2 2 2 ⇒ 2200μμF = 0.0022μF
- 2: 2-digit effective number.
- 2 (More than 2): Indicates number of zeros after effective number.

• Units: μF.

2 2 1 ⇒ 220PF
- 2: 2-digit effective number.
- 1 (0 or 1): Indicates number of zeros after effective number.

• Units: PF.

• When the dielectric strength is indicated in AC, "AC" is included after the dieelectric strength value.

PARTS LIST OF P.W. BOARD
1U-2433B MAIN AMP UNIT

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC231	263 0767 009	IC RC4556D(RAY)	
IC351	273 0711 000	IC M5218AP	
IC453~455	262 0874 009	IC TLP521-1(BL)	
IC501	263 0812 006	IC NJM7815FA(S)	Regulator +15V
IC502	263 0561 001	IC NJM7915FA	Regulator –15V
IC503	263 0793 002	IC NJM7806FA(S)	Regulator +6V
IC504	263 0683 002	IC NJM7906FA	Regulator –6V
IC505	263 0793 002	IC NJM7806FA(S)	Regulator +6V
TR251	271 0094 919	Transistor 2SA970(BL)	
TR252	273 0317 906	Transistor 2SC2458(BL)	
TR253	271 0094 919	Transistor 2SA970(BL)	
TR254	273 0317 906	Transistor 2SC2458(BL)	
TR255	273 0235 923	Transistor 2SC1841(E/F)	
TR256	273 0317 906	Transistor 2SC2458(BL)	
TR257	271 0131 908	Transistor 2SA988(F)	
TR258	273 0317 906	Transistor 2SC2458(BL)	
TR259	273 0235 923	Transistor 2SC1841(E/F)	
TR261	273 0235 923	Transistor 2SC1841(E/F)	
TR263	274 0151 000	Transistor 2SD2004(P)	
TR265	272 0107 906	Transistor 2SB1328(P)	
TR271	273 0235 923	Transistor 2SC1841(E/F)	
TR273	273 0198 905	Transistor 2SC1815(Y)	
TR301~304	271 0094 919	Transistor 2SA970(BL)	
TR305,306	273 0235 923	Transistor 2SC1841(E/F)	
TR307,308	271 0131 908	Transistor 2SA988(F)	
TR309~312	273 0235 923	Transistor 2SC1841(E/F)	
TR313,314	274 0151 000	Transistor 2SD2004(P)	
TR315,316	272 0107 906	Transistor 2SB1328(P)	
TR321,322	273 0235 923	Transistor 2SC1841(E/F)	
TR323	272 0053 908	Transistor 2SB647A(C)	
TR325	271 0102 937	Transistor 2SA1015(GR/Y)	
TR333,334	273 0198 905	Transistor 2SC1815(Y)	
TR337	271 0131 908	Transistor 2SA988(F)	
D251	276 0432 903	Diode 1SS270A	
D253	276 0049 914	Diode 1S2076A	
D255	276 0049 914	Diode 1S2076A	
D257	276 0432 903	Diode 1SS270A	
D265	276 0432 903	Diode 1SS270A	
D268~272	276 0432 903	Diode 1SS270A	
D301,302	276 0432 903	Diode 1SS270A	
D303~306	276 0049 914	Diode 1S2076A	
D307,308	276 0432 903	Diode 1SS270A	
⚠ D309	276 0356 005	Diode D5FB20(4001)	Bridge
D312	276 0548 910	Diode DSM1D2 (Type 3)	
D313	276 0432 903	Diode 1SS270A	
ZD301,302	276 0479 908	Zener Diode HZS20-1	20V
ZD303	276 0467 907	Zener Diode HZS9A-1	9V
LD201	393 9434 906	LED SEL1210S	Red
RESISTORS GROUP			
(Not included Carbon Film ±5%, 1/4W Type. Refer to the Schematic Diagram for those Parts.)			
⚠ R243,244	244 2051 961	Metal Oxide 100ohm, 1W (N.B)	RS14B3A101JNBS(S)
⚠ R247	241 2376 964	Carbon Film 47ohm, 1/4W (N.B)	RD14B2E470JNBS
⚠ R256	244 2051 987	Metal Oxide 4.7ohm, 1W (N.B)	RS14B3A4R7JNBS(S)
⚠ R257	241 2380 963	Carbon Film 2.2Kohm, 1/4W (N.B)	RD14B2E222JNBS

Ref. No.	Part No.	Part Name	Remarks
⚠ R258	244 2043 937	Metal Oxide 10ohm, 1W (N.B)	RS14B3A100JNBS(S)
⚠ R261	241 2380 963	Carbon Film 2.2Kohm, 1/4W (N.B)	RD14B2E222JNBS
⚠ R266	241 2380 950	Carbon Film 2Kohm, 1/4W (N.B)	RD14B2E202JNBS
⚠ R267	241 2377 976	Carbon Film 130ohm, 1/4W (N.B)	RD14B2E131JNBS
⚠ R272	244 2052 973	Metal Oxide 560ohm, 1W (N.B)	RS14B3A561JNBS(S)
⚠ R273	241 2315 967	Fusible 68ohm, 1/4W	RD14B2E680GFRS
⚠ R283	241 2378 920	Carbon Film 220ohm, 1/4W (N.B)	RD14B2E221JNBS
⚠ R285	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R287	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R289	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R291	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R297	241 2380 950	Carbon Film 2Kohm, 1/4W (N.B)	RD14B2E202JNBS
⚠ R298	241 2377 976	Carbon Film 130ohm, 1/4W (N.B)	RD14B2E131JNBS
⚠ R299	241 2380 950	Carbon Film 2Kohm, 1/4W (N.B)	RD14B2E202JNBS
⚠ R307,308	241 2380 963	Carbon Film 2.2Kohm, 1/4W (N.B)	RD14B2E222JNBS
⚠ R311,312	241 2380 963	Carbon Film 2.2Kohm, 1/4W (N.B)	RD14B2E222JNBS
⚠ 317,318	241 2377 976	Carbon Film 130ohm, 1/4W (N.B)	RD14B2E131JNBS
⚠ R323,324	241 2315 967	Fusible 68ohm, 1/4W	RD14B2E680GFRS
⚠ R333~340	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R345~348	241 2380 950	Carbon Film 2Kohm, 1/4W (N.B)	RD14B2E202JNBS
⚠ R349,350	244 2051 987	Metal Oxide 4.7ohm, 1W (N.B)	RS14B3A4R7JNBS(S)
⚠ R357,358	244 2043 937	Metal Oxide 10ohm, 1/4W (N.B)	RS14B3A100JNBS(S)
⚠ R361,362	241 2378 920	Carbon Film 220ohm, 1/4W (N.B)	RD14B2E221JNBS
⚠ R363,364	241 2377 976	Carbon Film 130ohm, 1/4W (N.B)	RD14B2E131JNBS
VR251	211 6044 048	Semi Fixed Resistor 5Kohm	V06PB502
VR253	211 6044 019	Semi Fixed Resistor 47Kohm	V06PB473
VR301,302	211 6044 048	Semi Fixed Resistor 5Kohm	V06PB502
VR351	211 0760 005	Variable Resistor	V1603V25F---K
VR503,504	211 6064 019	Semi Fixed Resistor 47Kohm	V06PB473
CAPACITORS GROUP			
C233,234	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C235,236	254 4254 909	Electrolytic 10μF16V	CE04W1C100M
C237,238	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C239,240	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C241,242	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C251	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C253	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C255	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C257	255 1264 908	Plastic Film 0.001μF/50V	CQ93M1H102J(B)
C259	254 4256 949	Electrolytic 100μF/25V	CE04W1E101M
C261	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C263	255 1264 940	Plastic Film 0.0022μF/50V	CQ93M1H222J(B)
C267	253 4536 909	Ceramic 10pF/50V	CC45SL1H100D
C269	253 4482 901	Ceramic 33pF/500V	CC45SL2H330J
C271	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C273	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C275	253 1128 909	Ceramic 220pF/500V	CK45B2H221K
C277	256 1034 979	Metalized 0.1μF/50V	CF93A1H104J
C279	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C281	255 1265 978	Plastic Film 0.022μF/50V	CQ93M1H223J(B)
C283	254 4262 917	Electrolytic 10μF/63V	CE04W1J100M
C285	254 4262 917	Electrolytic 10μF/63V	CE04W1J100M

Ref. No.	Part No.	Part Name	Remarks
C301,302	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C303,304	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C305,306	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C307,308	255 1264 966	Plastic Film 0.0033μF/50V	CQ93M1H332J(B)
C309,310	254 4256 949	Electrolytic 100μF/25V	CE04W1E101M
C311,312	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C313,314	255 1264 940	Plastic Film 0.0022μF/50V	CQ93M1H222J(B)
C317,318	253 4536 909	Ceramic 10pF/50V	CC45SL1H100D
C319,320	253 4470 900	Ceramic 10pF/500V	CC45SL2H100D
C321,322	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C323,324	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C325,326	253 1124 903	Ceramic 100pF/500V	CK45B2H101K
C327,328	256 1034 979	Metalized 0.1μF/50V	CF93A1H104J
C329~332	254 4262 917	Electrolytic 10μF/63V	CE04W1J100M
C333,334	255 1265 978	Plastic Film 0.022μF/50V	CQ93M1H223J(B)
C335,336	254 6170 007	Electrolytic 15000μF/63V	CE04W1J153M(DL)
C337,338	253 1151 905	Ceramic 4700pF/500V	CK45E2H472P
C340,341	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C345,346	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C348	254 4263 945	Electrolytic 1μF/100V	CE04W2A010M
C349	256 1042 000	Metalized 0.1μF/250V	CF93A2E104K
C361,362	254 4254 925	Electrolytic 33μF/16V	CE04W1C330M
C363,364	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C365,366	254 4258 905	Electrolytic 4.7μF/35V	CE04W1V4R7M
C367,368	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C369,370	255 1264 908	Plastic Film 0.001μF/50V	CQ93M1H102J(B)
C371,372	256 1034 995	Metalized 0.15μF/50V	CF93A1H154J
C373,374	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C375,376	255 1264 937	Plastic Film 0.0018μF/50V	CQ93M1H182J(B)
C377,378	255 1265 949	Plastic Film 0.012μF/50V	CQ93M1H123J(B)
C379,380	256 1034 953	Metalized 0.068μF/50V	CF93A1H683J
C383	256 1034 979	Metalized 0.1μF/50V	CF93A1H104J
C384	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C385,386	254 4260 935	Electrolytic 0.47μF/50V	CE04W1HR47M
C391	253 9031 920	BC Ceamic 0.1μF/25V	CK45=1E104K
C403,404	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C501,502	254 4256 936	Electrolytic 47μF/25V	CE04W1E470M
C503~510	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M

OTHER GROUP				Q'ty
	—	(P.W. Board)		(1)
L251	235 0068 004	Inductor 1mH		1
L301,302	235 0068 004	Inductor 1mH		2
RL251	214 0127 003	Relay (RY-12W)		1
RL254	214 9003 005	Relay	CENTER	1
	204 8341 004	Head Phone Jack		1
	204 8342 003	3P Pin Jack (C-GND)	(Gold Flash)	1
	205 0605 000	S-Terminal	(Gold Flash)	1
	205 0190 036	3P NH Connector Base	TP	3
CN3F	205 0233 032	3P EH Connector Base		1
CN3A,C, D,D,J	205 0343 032	3P Connector Base (KR-PH)		5
CN4B	205 0343 045	4P Connector Base (KR-PH)		
CN5B,B,E,G	205 0343 058	5P Conn. Base (KR-PH)		4
CN6F	205 0343 061	6P Conn. Base (KR-PH)		1
CN12A	205 0375 026	12P Conn. Base (KR-PH)		1
CN6J	205 0666 036	3P Conn. Base (9130)		1
CN5D	205 0666 052	5P Conn. Base (9130)		1
CN6I	205 0666 065	6P Conn. Base (9130)		1
CN7B	205 0666 078	7P Conn. Base (9130)		1
CN3H	205 0696 035	JL Connector (BT-E)		1
CN5C,E	205 0696 051	JL Connector (BT-E)		2
CN6E,G	205 0696 064	JL Connector (BT-E)		2

Ref. No.	Part No.	Part Name	Remarks	Q'ty
CN8B,D,F	205 0696 080	JL Connector (BT-E)		3
CN9B,12B, 12E	205 0696 093	JL Connector (BT-E)		3
CN3B	205 0185 025	2P Wire Holder		1
CN9C,D	205 0666-094	9P Connector Base (9130)		2
CN12C	205 0535 028	12P Connector Base (9130)		1
CN16A	205 0772 001	16P Connector Base (9110B)		1
CN29A	205 0736 034	29P FFC Connector (9603)		1
CN3B	203 4868 009	3P VH Conn. Cord		1
CN3G	203 4869 008	3P PH-SAN Conn. Cord		1
CN5A	203 8346 006	5P EH-SCN Conn. Cord		1
CN8A	204 2451 026	8P EH-SCN Conn. Cord		1
	203 4876 004	3C SIN Cord Ass'y		1
A-A	203 0525 029	1P SIN Cord Ass'y		1
B-B	203 0525 032	1P SIN Cord Ass'y		1
	203 0524 004	1P SIN Cord Ass'y		2
CN4C	203 6391 008	4P VH Conn. Cord		1
	203 0426 005	1P Conn. Cord Ass'y		1
	205 0452 004	Style Pin		1

1U-2434B REAR, INPUT UNIT

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC051	263 0711 000	IC M5218AP	
IC151	263 0774 005	IC RC4558D-D (RAY)	
IC152	263 0711 000	IC M5218AP	
IC153	262 1227 008	IC LC7821	
IC154	262 1228 007	IC LC7822	
IC155	262 1227 008	IC LC7821	
IC401,402	263 0206 007	IC μPC1225H	
IC507,508	268 0074 904	IC ICP-N20	IC Protector
IC509~511	268 0073 905	IC ICP-N15	IC Protector
TR151,152	273 0253 918	Transistor 2SC2878 (A/B)	
TR153	273 0317 906	Transistor 2SC2458 (BL)	
TR401,402	271 0102 937	Transistor 2SA1015 (GR/Y)	
TR403,404	273 0198 918	Transistor 2SC1815 (BL)	
TR409,410	273 0235 923	Transistor 2SC1841 (E/F)	
TR411	271 0191 906	Transistor 2SA1048 (GR)	
TR501,502	273 0317 906	Transistor 2SC2458 (BL)	
D401~403	276 0432 903	Diode 1SS270A	
⚠ D404	276 0338 007	Diode S4VB20F	Bridge
D501~508	276 0548 910	Diode DSM1D2 (Type 3)	
D509	276 0432 903	Diode 1SS270A	
D510~515	276 0553 905	Diode 1SR35-200A	
D517	276 0049 011	Diode 1S2076A	
ZD501	276 0456 905	Zener Diode HZS4B-1	4V
RESISTORS GROUP			
(Not included Carbon Film ±5%, 1/4W Type. Refer to the Schematic Diagram for those Parts.)			
⚠ R411,412	241 2379 903	Carbon Film 470ohm, 1/4W (N.B)	RD14B2E471JNBS
⚠ R417~424	244 2055 912	Metal Oxide 0.47ohm, 1W (N.B)	RS14B3AR47JNBS(S)
⚠ R425,426	241 2380 950	Carbon Film 2Kohm, 1/4W (N.B)	RD14B2E202JNBS
⚠ R427,428	241 2380 921	Carbon Film 1.5Kohm, 1/4W (N.B)	RD14B2E152JNBS
⚠ R429,430	244 2050 904	Metal Oxide 22ohm, 1W (N.B)	RS14B3A220JNBS(S)
⚠ R437,438	244 2043 937	Metal Oxide 10ohm, 1W (N.B)	RS14B3A100JNBS(S)
⚠ R501,502	244 2043 982	Metal Oxide 0.22ohm, 1W (N.B)	RS14B3AR22JNBS(S)
⚠ R503,504	241 2387 908	Carbon Film 1ohm, 1/4W (N.B)	RD14B2E010JNBS
⚠ R512	241 2375 978	Carbon Film 20ohm, 1/4W (N.B)	RD14B2E200JNBS
⚠ R516	241 2387 940	Carbon Film 4.7ohm, 1/4W (N.B)	RD14B2E4R7JNBS
⚠ R517	242 0073 000	Carbon Composition 2.2Mohm, 1/2W	RC05GF2H225K
CAPACITORS GROUP			
C051,052	254 4260 948	Electroytic 1μF/50V	CE04W1H010M
C053,054	254 4254 909	Electroytic 10μF/16V	CE04W1C100M
C055,056	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C057,058	254 4260 951	Electroytic 2.2μ/50V	CE04W1H2R2M
C151,152	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C153,154	254 4254 909	Electroytic 10μF/16V	CE04W1C100M
C155,156	253 1179 987	Ceramic 470pF/50V	CK45B1H471K
C157,158	254 4250 932	Electroytic 220μF/6.3V	CE04W0J221M
C159,160	255 4199 999	Plastic Film 0.024μF/50V (MRZ)	CQ92M1H243J
C161,162	255 1265 907	Plastic Film 0.0068μF/50V	CQ93M1H682J(B)

Ref. No.	Part No.	Part Name	Remarks
C163,164	254 4260 951	Electroytic 2.2μF/50V	CE04W1H2R2M
C165,166	253 1181 917	Ceramic 0.022μF/50V	CK45F1H223Z
C167,168	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C169,170	254 4260 948	Electroytic 1μF/50V	CE04W1H010M
C171,172	254 4254 938	Electroytic 47μF/16V	CE04W1C470M
C173~175	254 4260 948	Electroytic 1μF/50V	CE04W1H010M
C176,177	253 1181 917	Ceramic 0.022μF/50V	CK45F1H223Z
C178	253 1116 908	Ceramic 2200pF/50V	CK45B1H222K
C179~185	253 1181 917	Ceramic 0.022μF/50V	CK45F1H223Z
C187,188	254 4260 951	Electroytic 2.2μF/50V	CE04W1H2R2M
C189,190	254 4254 938	Electroytic 47μF/16V	CE04W1C470M
C401,402	254 4260 948	Electroytic 1μF/50V	CE04W1H010M
C403,404	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C405,406	254 4256 952	Electroytic 220μF/25V	CE04W1E221M
C407,408	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C413,414	254 4261 921	Electroytic 100μF/50V	CE04W1H101M
C415,416	253 1179 929	Ceramic 150pF/50V	CK45B1H151K
C417,418	253 4537 966	Ceramic 47pF/50V	CC45SL1H470J
C419,420	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C421,422	255 1265 994	Plastic Film 0.033μF/50V	CQ93M1H333J(B)
C423,424	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C425,426	256 1034 979	Metalized 0.1μF/50V	CF93A1H104J
C427,428	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C429,430	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C431,432	255 1265 978	Plastic Film 0.022μF/50V	CQ93M1H223J(B)
C433,434	254 4355 002	Electrolytic 6800μF/50V	CE04W1H682MDL
C435,436	253 1151 905	Ceramic 4700pF/500V	CK45BE2H472P
C439	255 1265 936	Plastic Film 0.01μF/50V	CQ93M1H103J(B)
C511,512	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C515,516	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C517,518	254 4259 014	Electrolytic 3300μF/35V	CE04W1V332MC
C519,520	253 1151 905	Ceramic 4700pF/500V	CK45E2H472P
C521,522	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C525,526	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C527,528	254 4256 790	Electrolytic 2200μF/25V	CE04W1E222MC
⚠ C529	253 8014 702	Ceramic 0.01μF/400V(AC)	CK45F2GAC103MC
C530	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C532	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C533	254 4256 790	Electrolytic 2200μF/25V	CE04W1E222MC
C534	254 4260 935	Electrolytic 0.47μF/50V	CE04W1HR47M
C535	259 0007 702	Back Up Cap 8200μF/5.5V	SB CAP==822=C
C551,552	253 1052 004	Ceramic 4700pF/500V	CK45E2H472P

OTHER GROUP				Q'ty
	—	(P.W.Board)		(1)
L401,402	235 0068 004	Inducto 1mH		2
RL401	214 9003 005	Relay		1
⚠ RL501	214 0120 000	Relay (TV-8)		1
	204 8313 003	4P Pin Jack (S-GND)		1
	204 8346 009	6P Pin Jack (S-GND)		2
*⚠ F001	206 1046 014	Fuse 8A		1
*⚠ F003,004	206 1046 001	Fuse 6.3A (UL)	20mm	2
*	202 0022 008	Fuse Holder		6
⚠	203 3946 003	AC Outlet (Polarized)		1
*⚠	233 5818 004	Power Trans (Mini)		1
CN3R	205 0277 030	3P EH Conn. Base (RD)		1
CN3Q	205 0276 031	3P EH Conn. Base (BU)		1
CN3F	205 0233 032	3P EH Conn. Base (BK)		1
CN5A	205 0233 058	5P EH Conn. Base (BK)		1
CN8A	205 0233 087	8P EH Conn. Base (BK)		1
CN3A,I	205 0343 032	3P EH Conn. Base (KR-PH)		2
CN6B	205 0343 061	6P EH Conn. Base (KR-PH)		1
CN6A	205 0343 074	7P EH Conn. Base (KR-PH)		1
CN12A	205 0375 026	12P EH Conn. Base (KR-PH)		1

1U-2435B VFD VIDEO UNIT

Ref. No.	Part No.	Part Name	Remarks	Q'ty
CN12B	205 0697 092	JL Connector (F-E)	9P	1
CN6J	205 0731 039	3P Connector Base-L (9131)		1
CN9B	205 0748 093	9P JL Connecor (R)		1
CN4A	203 6384 002	4P VH-SDN Conn. Cord		1
D-D	204 2540 005	7P SAN-SAN Conn. Cod		1
A-A	204 2542 003	9P SAN-SAN Conn. Cord		1
C-C	203 4870 000	3P SCN-SCN Conn. Cord		1
A-A	203 0525 003	1P SIN Cord Ass'y		1
B-B	203 0525 016	1P SIN Cord Ass'y		1
	203 2318 001	2P SAN-SAN Cord	L=180	1
	513 1674 009	Fuse Label	for F001	1
	513 2011 072	Fuse Label	for F002	1
	513 1715 007	Fuse Label	for F003	1

1U-2434C VFD VIDEO UNIT (Same as 1U-2434B for U.S.A. model expect the following)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER GROUP				
⚠ F001	206 1061 073	Fuse 10A (250V)	F001 Change	1
⚠ F002	206 1061 044	Fuse 5A (250V)	F002 Change	1
	513 1451 044	Fuse Label	5A/250V Add	1
	202 0022 008	Fuse Holder	Change	4
	415 0299 000	Condenser Cover	Add	1
⚠	233 5793 006	Power Trans (Mini)	Change	1
	513 1674 009	Fuse Label	Delete	(1)
	513 1715 007	Fuse Label	Delete	(1)
	513 2011 072	Fuse Label	Delete	(1)

Ref. No.	Part No.	Part Name	Remarks
SEMICNDUCTORS GROUP			
IC001,002	262 1108 004	IC TC4051BP	
IC003	262 0276 005	IC D14066BP	
IC101,102	262 1108 004	IC TC4051BP	
IC103	262 0276 005	IC HD14066BP	
IC104,105	262 1108 004	IC TC4051BP	
IC801	262 1722 008	IC TMP87CM70AF-XXXX	μ-Com
IC802	262 1418 105	IC MSC7128-03SS-D	μ-Com
IC803	263 0423 000	IC M51953B	
IC804	499 0150 008	IC SBX1610-52	Remocon Receiver
TR002	269 0029 907	Transistor RN1204 (47K-47K)	Built in Resistor
TR003~005	273 0198 918	Transistor 2SC1815 (BL)	
TR014	269 0029 907	Transistor RN1204 (47K-47K)	Built in Resistor
TR101~106	273 0198 918	Transistor 2SC1815 (BL)	
TR107	269 0029 907	Transistor RN1204 (47K-47K)	Built in Resistor
TR108	269 0030 909	Transistor RN2204 (47K-47K)	Built in Resistor
TR801,802	273 0317 906	Transistor 2SC2458 (BL)	
TR803	269 0024 902	Transistor RN2201 (4.7K-4.7K)	Built in Resistor
TR804	269 0030 909	Transistor RN2204 (47K-47K)	Built in Resistor
TR806	269 0030 909	Transistor RN2204 (47K-47K)	Built in Resistor
TR807	269 0029 907	Transistor RN1204 (47K-47K)	Built in Resistor
D001	276 0432 903	Diode 1SS270A	
D003,004	276 0432 903	Diode 1SS270A	
D101,102	276 0432 903	Diode 1SS270A	
D801~804	276 0432 903	Diode 1SS270A	
D806~820	276 0432 903	Diode 1SS270A	
RESISTORS GROUP			
(Not included Carbon Film ±5%, 1/4W Type. Refer to the Schematic Diagram for those Parts.)			
RA801	246 2044 013	Resistor Array 47Kohm×6	RK99==473JP6
RA802	246 2053 033	Resistor Array 4.7Kohm×5	RK99==472JP5
RA803	246 2044 039	Resistor Array 10Kohm×6	RK99==103JP6
RA806	246 2044 013	Resistor Array 47Kohm×6	RK99==473JP6
RA807	246 2052 005	Resistor Array 10Kohm×4	RK99==103JP4
RA808	246 2076 023	Resistor Array 1.5Kohm×3	RK99==152JP3
CAPACITORS GROUP			
C001~007	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C021	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C022	254 4252 930	Electoytic 100μF/10V	CE04W1A101M
C023	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C024	254 4252 930	Electoytic 100μF/10V	CE04W1A101M
C025	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C057,058	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C060~062	254 4252 930	Electrolytic 100μF/10V	CE04W1A101M
C101~110	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C111~116	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C117~122	254 4252 930	Electrolytic 100μF/10V	CE04W1A101M
C123	254 3053 907	Electrolytic 10μF/16V (Bipole)	CE04D1C100MBP
C124	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C125,126	254 4252 930	Electrolytic 100μF/10V	CE04W1A101M
C801	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C802	254 4250 945	Electrolytic 330μF/6.3V	CE04W0J331M
C804	254 4196 944	Electrolytic 1μF/50V	CE04W1H010M(SRA)
C805	254 4196 928	Electrolytic 0.33μF/50V	CE04W1HR33M(SRA)
C806	256 1034 982	Metalized 0.12μF/50V	CF93A1H124J
C807	254 4250 932	Electrolytic 220μF/6.3V	CE04W0J221M
C808	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z
C810	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z

1U-2436B SURROUND UNIT

Ref. No.	Part No.	Part Name	Remarks	Q'ty
C811	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M	
C812	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M	
C813	253 1181 904	Ceramic 0.01μF/50V	CK45F1H103Z	
C814	253 1179 903	Ceramic 100pF/50V	CK45B1H101K	
C815	254 4261 028	Electrolytic 100μF/50V	CE04W1H101M	
C816	253 9030 905	BC Ceramic 1000pF/25V	CK45=1E102K	
C817	253 9030 921	BC Ceramic 2200pF/25V	CK45=1E222K	
C820	253 1148 905	Ceramic 0.022μF/50V	CK45F1H223Z	
C821	253 1027 000	Ceramic 0.1μF/50V	CK45F1H104Z	
OTHER GROUP				
	—	(P.W. Board)		(1)
L801	235 0060 989	Inductor 120μH		1
L803	235 0060 989	Inductor 120μH		1
S801~818	212 4388 907	Tact Switch		18
XL801	399 0160 002	Ceramic Vibrator	CST8.00MTW	1
FL801	393 4111 004	FLD (FIP16XM1HA)		1
	204 8308 005	3P Pin Jack (C-GND)		1
	204 8309 004	4P Pin Jack (C-GND)		1
	204 8414 012	2P S-Terminal		2
	204 8415 011	3P S-Terminal		1
	204 8260 004	Mini Jack	Remote	1
CN4B	205 0355 046	4P KR Conn. Base (L)		1
CN6F	205 0355 062	6P KR Conn. Base (L)		1
CN3P	205 0343 032	3P Conn. Base (KR-PH)		1
CN6A,7A	205 0355 075	7P KR Conn. Base (L)		2
CN9A	205 0355 091	9P KR Conn. Base (L)		1
CN8G	205 0343 087	8P Conn. Base (KR-PH)		1
CN8G	205 0755 088	8P KR Conn. Base (L)		1
CN8B 8F	205 0679 089	JL Connector (F-E)		2
CN5C	205 0748 051	5P JL Connector (R)		1
CN6E	205 0748 064	JL Connector	6P	1
CN29A	205 0702 042	29P FFC Conn. Base (L)		1
A-A	203 2331 004	2P SAN-SAN Conn. Cord	2P Shield	1
	125 9002 049	UL Tube (L=25)		2

Ref No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC451	263 0771 008	IC RC2082D (RAY)	
IC452	263 0711 000	IC M5218AP	
IC601	263 0756 104	IC SM2125D	
IC602	263 0711 000	IC M5218AP	
IC604	263 0359 006	IC LC4966	
IC605	262 1228 007	IC LC7822	
IC607	263 0711 000	IC M15218AP	
IC608	263 0771 008	IC RC2082D (RAY)	
IC609	263 0711 000	IC M5218AP	
IC610	263 0771 008	IC RC2082D (RAY)	
IC611	263 0711 000	IC M5218AP	
IC703	263 0711 000	IC M5218AP	
IC704	262 1609 105	IC F71002B	
IC705	262 1610 000	IC HM65256BLFP-10T	μ-Com
IC706	263 0711 000	IC M5218AP	
IC707,708	262 0625 009	IC TC9176P	
IC709~712	263 0711 000	IC M5218AP	
IC713	263 0775 004	IC RC2068DDC (RAY)	For CD Direct
IC714	263 0476 002	IC LB1639	
IC715	263 0809 006	IC NJM7805FA(S)	Regulator + 5V
IC716	263 0711 000	IC M5218AP	
TR113,114	275 0061 902	FET 2SK184(GR)/(BL)	FET
TR115	269 0025 901	Transistor RN1202(10K-10K)	Buit in Resistor
TR335	273 0317 906	Transistor 2SC2458(BL)	
TR451,452	273 0317 906	Transistor 2SC2458(BL)	
TR453~455	273 0253 918	Transistor 2SC2878 (A/B)	
TR601	274 0060 900	Transistor 2SD667A(C)	
TR602	272 0053 908	Transistor 2SB647A(C)	
TR603~605	269 0025 901	Transistor RN1202 (10K-10K)	Buit in Resistor
TR701	274 0060 900	Transistor 2SD667A(C)	
TR751~754	275 0061 902	FET 2SK184(GR)/(BL)	FET
TR755	269 0025 901	Transistor RN1202 (10K-10K)	Buit in Resistor
TR757	273 0317 906	Transistor 2SC2458(BL)	
TR758	275 0061 902	FET 2SK184 (GR)/(BL)	FET
TR759	269 0025 901	Transistor RN1202 (10K-10K)	Buit in Resistor
D103,104	276 0432 903	Diode 1SS270A	
D401~404	276 0049 011	Diode 1S2076A	
D451,452	276 0432 903	Diode 1SS270A	
D701~707	276 0432 903	Diode 1SS270A	
D751~753	276 0432 903	Diode 1SS270A	
D755~758	276 0432 903	Diode 1SS270A	
ZD601,602	276 0466 908	Zener Diode HZS7C-1	7V
ZD701	276 0462 902	Zener diode HZS6B-1	6V
RESISTORS GROOUP			
(Not included Carbon Film ±5% 1/4W Type. Refer to the Schematic Diagram for thosse Parts.)			
⚠ R603,604	241 2387 940	Carbon Film 4.7ohm 1/4W (N.B.)	RD14B2E4R7JNBS
⚠ R605	242 0203 003	Carbon Composition 10Mohm, 1/4W	RC05GF2E106K
⚠ R699	241 2387 940	Carbon Film 4.7ohm,1/4W (N.B.)	RD14B2E4R7JNBS
⚠ R770,771	241 2379 974	Carbon Film 910ohm, 1/4W (N.B.)	RD14B2E911JNBS
VR701	211 0759 003	Variable Resistor 100Kohm	Main

1U-2507 TUNER UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C137	254 4260 045	Electrolytic 1µF/50V	CE04W1H010M
C140	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C207~214	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C215	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C217	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C403,404	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C451,452	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C453	254 4260 980	Electrolytic 10µF/50V	CE04W1H100M
C454	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C455	254 4260 993	Electrolytic 22µF/50V	CE04W1H220M
C456	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C459,460	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C461,462	253 4536 909	Ceramic 10pF/50V	CC45SL1H100D
C463	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C464,465	253 1146 907	Ceramic 0.01µF/50V	CK45F1H103Z
C466	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C467	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C468	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C469	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C470	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C475	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C481	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C601,602	254 4261 918	Electrolytic 47µF/50V	CE04W1H470M
C603,604	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C605,606	254 4254 941	Electrolytic 100µF/16V	CE04W1C101M
C607	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C608,609	256 1035 910	Metalized 0.22µF/50V	CF93A1H224J
C610	254 4258 918	Electrolytic 10µF/35V	CE04W1V100M
C611,612	254 4260 980	Electrolytic 10µF/50V	CE04W1H100M
C614	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C615~617	255 1265 936	Plastic Film 0.01µF/50V	CQ93M1H103J(B)
C618	254 4256 949	Electrolytic 100µF/25V	CE04W1E101M
C619	254 4258 905	Electrolytic 47µF/35V	CE04W1V4R7M
C620	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C621	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C622	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C623	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C624,625	256 1035 910	Metalized 0.22µF/50V	CF93A1H224J
C626~629	256 1035 936	Metalized 0.33µF/50V	CF93A1H334J
C630,631	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C632	253 1180 905	Ceramic 680pF/50V	CK45B1H681K
C633~635	255 1265 978	Plastic Film 0.022µF/50V	CQ93M1H223J(B)
C636	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C637~639	254 4258 905	Electrolytic 4.7µF/35V	CE04W1V4R7M
C640	255 1265 978	Plastic Film 0.022µF/50V	CQ93M1H223J(B)
C641	253 1180 905	Ceramic 680pF/50V	CK45B1H681K
C642,643	256 1034 979	Metalized 0.1µF/50V	CF93A1H104J
C675~678	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C679,680	255 6177 919	Plastic Film 56pF/50V (SMT)	CQ09S1H560J
C683,684	253 9030 918	BC Ceramic 1500pF/25V	CK45=1E152K
C685,686	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C687,688	253 9031 975	BC Ceramic 3900pF/25V	CK45=1E392K
C689,690	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C691,692	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C693,694	255 6177 919	Plastic Film 56pF/50V (SMT)	CQ09S1H560J
C697,698	253 9030 918	BC Ceramic 1500pF/25V	CK45=1E152K
C699,700	253 1179 945	Ceramic 220pF/50V	CK45B1H221K
C701,702	253 9031 975	BC Ceramic 3900pF/25V	CK45=1E392K
C703,704	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C705~707	253 1181 917	Ceramic 0.022µF/50V	CK45F1H223Z
C708	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C709	254 4254 941	Electrolytic 100µF/16V	CE04W1C101M
C710	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C711,712	253 1179 916	Ceramic 120pF/50V	CK45B1H121K
C713,714	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C715,716	255 1264 966	Plastic Film 0.0033µF/50V (SBT)	CQ93M1H332J(B)
C717	253 9031 920	BC Ceramic 0.1µF/25V	CK45=1E104K
C718	254 4254 938	Electrolytic 47µF/16V	CE04W1C470M
C719	253 9031 920	BC Ceramic 0.1µF/25V	CK45=1E104K
C720	254 4254 938	Electrolytic 47µF/16V	CE04W1C470M
C721	254 4254 941	Electrolytic 100µF/16V	CE04W1C101M
C722	253 9031 920	BC Ceramic 0.1µF/25V	CK45=1E104K
C723,724	253 4536 970	Ceramic 20pF/50V	CC45SL1H200J
C725	253 9031 920	BC Ceramic 0.1µF/25V	CK45=1E104K
C726	254 4260 977	Electrolytic 4.7µF/50V	CE04W1H4R7M
C727,728	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C729,730	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C731	254 4254 954	Electrolytic 220µF/16V	CE04W1C221M
C732	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C733~736	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C737,738	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C739,740	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C741~744	253 1181 917	Ceramic 0.022µF/50V	CK45F1H223Z
C745,746	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C747,748	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C749	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C750~754	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C755~758	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C759,760	254 4254 925	Electrolytic 33µF/16V	CE04W1C330M
C761,762	256 1034 982	Metalized 0.12µF/50V	CF93A1H124J
C765,766	255 1265 965	Plastic Film 0.018µF/50V	CQ93M1H183J(B)
C767	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C768,769	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C770	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C771	255 1265 965	Plastic Film 0.018µF/50V	CQ93M1H183J(B)
C772	254 4258 950	Electrolytic 100µF/35V	CE04W1V101M
C773,774	254 4260 948	Electrolytic 1µF/50V	CE04W1H010M
C775,776	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C777,778	254 4261 921	Electrolytic 100µF/50V	CE04W1H101M
C779	254 4252 927	Electrolytic 47µF/10V	CE04W1A470M
C780~782	253 1181 904	Ceramic 0.01µF/50V	CK45F1H103Z
C783	254 3056 917	Electrolytic 1µF/50V (Bi Pole)	CE04D1H010MBP
C785,786	254 4254 909	Electrolytic 10µF/16V	CE04W1C100M
C791,792	253 1024 003	Ceramic 0.01µF/50V	CK45F1H103Z
C792,793	253 1179 903	Ceramic 100pF/50V	CK45B1H101K
C793	253 3603 008	Ceramic 10pF/50V	CC45SL1H100D

OTHER GROUP				Q'ty
	—	(PW Board)		(1)
L701	235 0060 989	Inductor 120mH		1
S821~836	212 4388 907	Tact Switch		16
XL701	399 0162 000	Crystal Vibrator (11.2896MHz)		1
RL752,753	214 0127 000	Relay (RY-12W)		2
	204 8410 003	2P Pin Jack (C-GND)		1
	204 8266 008	4P Pin Jack (S-GND)		2
F701,702	232 0168 002	LC Filter		2
	205 0472 039	8P SP Terminal		
CN3G,I	205 0343 032	3P Conn. Base (KR-PH)		2
CN3C	205 0323 036	3P Conn. Base (BLK)		1
CN5G	205 0343 058	5P Conn. Base (KR-PH)		1
CN5F	205 0323 052	5P Conn. Base (BLK)		1
CN3R	205 0277 030	3P EH Connector Base (RD)		1
CN5E	205 0697 050	JL Connector (F-E)	5P	1
CN6G	205 0697 063	JL Connector (F-E)	6P	1
CN8D	205 0697 089	JL Connector (F-E)	8P	1
CN3B	205 0653 036	3P VH Conn. Base		1
CN4A	205 0653 049	4P VH Conn. Base		1
CN5D	205 0731 055	5P Conn. Base-L (9131)		1
CN7B	205 0667 077	7P Conn. Base-L (9130)		1
CN9C,D	205 0731 097	9P Conn. Base-L (9131)		2
CN12C	205 0536 027	12P Conn. Socket		1
CN16A	205 0773 000	16P Conn. Base-L (9110)		1
CN9A	204 2541 004	9P KR-DS Conn. Cord		1
	203 0525 003	1P SIN Cord Ass'y	Black l=100	1
	203 0525 032	1P SSIN Cord Ass'y	Brown l=100	1
	205 0452 004	Style Pin	For Preout	2
	461 0415 007	Rubber Sheet		2

Ref No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC001	263 0438 008	IC LA1266	
IC002	263 0439 007	IC LA3401	
IC003	263 0791 907	IC LM7001M	
IC004	268 0073 905	IC ICP-N15	IC Protector
IC005	263 0801 004	IC NJM7812FA(S)	Regulator +12V
TR001	273 0411 909	Transistor 2SC2966-Y	
TR002	269 0114 906	Transistor RN2402	Built IN Resistor
TR003	269 0114 906	Transistor RN2402	Built IN Resistor
TR004	273 0403 904	Transistor 2SC2712-Y/GR	
TR005	275 0075 901	FET 2SK209-Y/GR	
TR006	269 0114 906	Transistor RN2402	Built IN Resistor
TR007	269 0054 901	Transistor DTC144EK	Built IN Resistor
TR008	269 0066 902	Transistor DTC323TK	Built IN Resistor
TR009	269 0066 902	Transistor DTC323TK	Built IN Resistor
TR010	269 0114 906	Transistor RN2402	Built IN Resistor
TR011	269 0054 901	Transistor DTC144EK	Built IN Resistor
TR260	273 0317 906	Transistor 2SC2458 (BL)	
TR326	273 0317 906	Transistor 2SC2458 (BL)	
TR327	273 0317 906	Transistor 2SC2458 (BL)	
TR328	271 0191 906	Transistor 2SA1048 (GR)	
TR329	273 0317 906	Transistor 2SC2458 (BL)	
TR330	273 0317 906	Transistor 2SC2458 (BL)	
TR331	271 0191 906	Transistor 2SA1048 (GR)	
TR332	273 0317 906	Transistor 2SC2458 (BL)	
TR336	273 0198 918	Transistor 2SC1815 (BL)	
D001	276 0432 903	Diode 1SS270A	
D002	276 0302 004	Varactor SVC321SPA-D-2	
D003	276 0302 004	Varactor SVC321SPA-D-2	
D005	276 0432 903	Diode 1SS270A	
D006	276 0432 903	Diode 1SS270A	
D206	276 0432 903	Diode 1SS270A	
D207	276 0432 903	Diode 1SS270A	
D314	276 0432 903	Diode 1SS270A	
ZD001	276 0467 907	Zener Diode HZS9A-1	9V
ZD304	276 0465 909	Zener Diode HZS7B-1	7V
P301	279 0034 067	Resistor PTH9M04BB222TS2F333	
SC304	279 0016 904	Thyristor SF0R1A42	

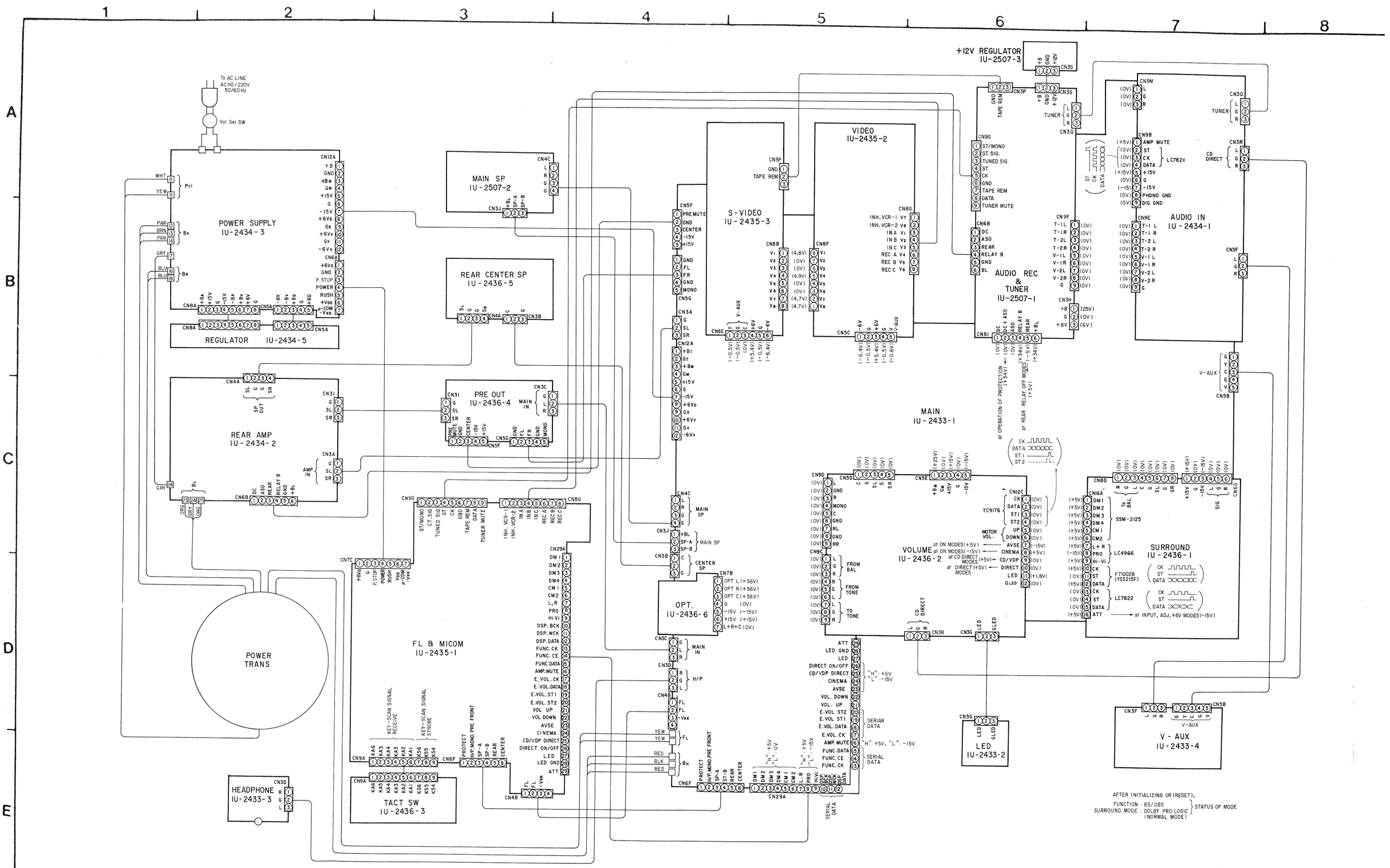
RESISTORS GROUP			
R002	247 0007 945	Chip Carbon 1kohm, 1/10W	RM73B--102J
R003	247 0005 905	Chip Carbon 100ohm, 1/10W	RM73B--101J
R004	247 0005 989	Chip Carbon 220ohm, 1/10W	RM73B--221J
R005	247 0006 920	Chip Carbon 330ohm, 1/10W	RM73B--331J
R006	247 0009 901	Chip Carbon 4.7kohm, 1/10W	RM73B--472J
R007	247 0006 920	Chip Carbon 330ohm, 1/10W	RM73B--331J
R008	247 0007 945	Chip Carbon 1kohm, 1/10W	RM73B--102J
R009	247 0007 945	Chip Carbon 1kohm, 1/10W	RM73B--102J
R010	247 0012 927	Chip Carbon 100kohm, 1/10W	RM73B--104J
R011	247 0012 927	Chip Carbon 100kohm, 1/10W	RM73B--104J
R012	247 0005 905	Chip Carbon 100ohm, 1/10W	RM73B--101J
R013	247 0010 961	Chip Carbon 22kohm, 1/10W	RM73B--223J
R014	247 0007 945	Chip Carbon 1kohm, 1/10W	RM73B--102J
R015	247 0010 961	Chip Carbon 22kohm, 1/10W	RM73B--223J
R016	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R017	247 0009 927	Chip Carbon 5.6kohm, 1/10W	RM73B--562J
R018	247 0005 989	Chip Carbon 220ohm, 1/10W	RM73B--221J
R019	247 0005 947	Chip Carbon 150ohm, 1/10W	RM73B--151J
R020	247 0010 929	Chip Carbon 15kohm, 1/10W	RM73B--153J
R021	247 0004 906	Chip Carbon 39ohm, 1/10W	RM73B--390J

Ref. No.	Part No.	Part Name	Remarks
R022	247 0009 927	Chip Carbon 5.6kohm, 1/10W	RM73B--562J
R023	247 0008 960	Chip Carbon 3.3kohm, 1/10W	RM73B--332J
R024	247 0010 945	Chip Carbon 18kohm, 1/10W	RM73B--183J
R025	247 0012 927	Chip Carbon 100kohm, 1/10W	RM73B--104J
R026	247 0008 960	Chip Carbon 3.3kohm, 1/10W	RM73B--332J
R028	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R029	247 0009 914	Chip Carbon 5.1kohm, 1/10W	RM73B--512J
R031	247 0010 916	Chip Carbon 13kohm, 1/10W	RM73B--133J
R032	247 0011 986	Chip Carbon 68kohm, 1/10W	RM73B--683J
R033	247 0010 958	Chip Carbon 20kohm, 1/10W	RM73B--203J
R034	247 0010 945	Chip Carbon 18kohm, 1/10W	RM73B--183J
R035	247 0007 945	Chip Carbon 1kohm, 1/10W	RM73B--102J
R036	247 0004 980	Chip Carbon 82ohm, 1/10W	RM73B--820J
R038	247 0011 973	Chip Carbon 62kohm, 1/10W	RM73B--623J
R039	247 0012 943	Chip Carbon 120kohm, 1/10W	RM73B--124J
R040	247 0012 943	Chip Carbon 120kohm, 1/10W	RM73B--124J
R041	247 0012 927	Chip Carbon 100kohm, 1/10W	RM73B--104J
R042	247 0012 927	Chip Carbon 100kohm, 1/10W	RM73B--104J
R043	247 0011 915	Chip Carbon 36kohm, 1/10W	RM73B--363J
R044	247 0015 940	Chip Carbon 2.2Mohm, 1/10W	RM73B--225J
R045	247 0008 960	Chip Carbon 3.3kohm, 1/10W	RM73B--332J
R046	247 0008 960	Chip Carbon 3.3kohm, 1/10W	RM73B--332J
R047	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R048	247 0009 943	Chip Carbon 6.8kohm, 1/10W	RM73B--682J
R049	247 0009 943	Chip Carbon 6.8kohm, 1/10W	RM73B--682J
R070	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R071	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R072	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R075	247 0009 985	Chip Carbon 10kohm, 1/10W	RM73B--103J
R076	247 0004 906	Chip Carbon 39ohm, 1/10W	RM73B--390J
R097	241 2400 995	Carbon Film 10kohm, 1/4W	RD14B2E103J(5)
R099	241 2400 995	Carbon Film 10kohm, 1/4W	RD14B2E103J(5)
R101	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R102	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R103	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R104	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R105	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R106	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R107	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R108	241 2405 987	Carbon Film 2.7Mohm, 1/4W	RD14B2E275J(5)
R109	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R110	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R111	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R112	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R113	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R114	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R115	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R116	241 2397 972	Carbon Film 470ohm, 1/4W	RD14B2E471J(5)
R194	241 2402 951	Carbon Film 47kohm, 1/4W	RD14B2E473J(5)
R221	241 2393 905	Carbon Film 4.7ohm, 1/4W	RD14B2E4R7J(5)
R222	241 2393 905	Carbon Film 4.7ohm, 1/4W	RD14B2E4R7J(5)
R223	241 2400 995	Carbon Film 10kohm, 1/4W	RD14B2E103J(5)
R224	244 2052 902	Metal Oxide 2.7kohm, 1W	RS14B3A272JNBS(S)
R268	244 2052 973	Metal Oxide 560ohm, 1W	RS14B3A561JNBS(S)
R270	244 2052 973	Metal Oxide 560ohm, 1W	RS14B3A561JNBS(S)
R274	244 2052 973	Metal Oxide 560ohm, 1W	RS14B3A561JNBS(S)
R284	241 2398 955	Carbon Film 1kohm, 1/4W	RD14B2E102J(5)
R290	241 2396 928	Carbon Film 100ohm, 1/4W	RD14B2E100J(5)
R292	241 2393 905	Carbon Film 4.7ohm, 1/4W	RD14B2E4R7J(5)
R294	241 2398 955	Carbon Film 1kohm, 1/4W	RD14B2E102J(5)
R296	241 2400 995	Carbon Film 10kohm, 1/4W	RD14B2E103J(5)
R300	241 2403 934	Carbon Film 100kohm, 1/4W	RD14B2E104J(5)
R417	241 2402 951	Carbon Film 47kohm, 1/4W	RD14B2E473J(5)

Ref. No.	Part No.	Part Name	Remarks
CAPACITORS GROUP			
C002	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C003	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C004	254 4254 938	Electrolytic 47μF/16V	CE04W1C470M
C005	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C006	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C007	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C008	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C009	254 4254 938	Electrolytic 47μF/16V	CE04W1C470M
C010	257 0004 961	Chip Ceramic 100pF/50V	CC73SL1H101J
C011	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C012	257 0001 980	Chip Ceramic 6pF/50V	CC73SL1H6R0D
C013	257 0002 963	Chip Ceramic 15pF/50V	CC73SL1H150J
C014	255 4201 942	Plastic Film 391pF/50V	CQ93P1H391J
C015	254 4254 938	Electrolytic 47μF/16V	CE04W1C470M
C016	254 3056 917	Electrolytic 1μF/50V (Bipole)	CE04W1H010MBP
C017	257 0012 982	Chip Ceramic 0.022μF/50V	CK73F1H223Z
C018	254 4260 906	Electrolytic 0.1μF/50V	CE04W1H0R1M
C019	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C020	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C021	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C022	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C023	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C024	257 0004 987	Chip Ceramic 120pF/50V	CC73SL1H121J
C025	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C026	256 1034 937	Metalized O.O47μ/50V	CF93A1H473J
C027	254 4254 938	Electrolytic 47μF/16V	CE04W1C470M
C028	254 4260 919	Electrolytic 0.22μF/50V	CE04W1HR22M
C029	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C030	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C031	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C032	254 4260 977	Electrolytic 4.7μF/50V	CE04W1H4R7M
C033	254 4260 964	Electrolytic 3.3μF/50V	CE04W1H3R3M
C034	254 4260 906	Electrolytic 0.1μF/50V	CE04W1H0R1M
C035	256 1034 940	Metalized 0.056μF/50V	CF93A1H563J
C036	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C037	257 0006 972	Chip Ceramic 750pF/50V	CC73SL1H751J
C038	257 0006 972	Chip Ceramic 750pF/50V	CC73SL1H751J
C039	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C040	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C041	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C042	257 0002 976	Chip Ceramic 16pF/50V	CC73SL1H160J
C043	257 0002 976	Chip Ceramic 16pF/50V	CC73SL1H160J
C044,045	254 4260 951	Electrolytic 2.2μF/50V	CE04W1H2R2M
C046	253 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C047	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C048	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C049	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C051,052	257 0012 966	Chip Ceramic 0.01μF/50V	CK73F1H103Z
C061~063	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C101	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C102	254 4260 948	Electrolytic 1μF/50V	CE04W1H010M
C342	254 4260 993	Electrolytic 22μF/50V	CE04W1H220M
C343	254 4250 945	Electrolytic 330μF/6.3V	CE04W0J331M
C344	254 4250 945	Electrolytic 330μF/6.3V	CE04W0J331M
C347	254 4261 905	Electrolytic 33μF/50V	CE04W1H330M
C388	254 4254 938	Electrolytic 47μF/16V	CE04W1H470M
TC001	213 0041 034	Trimmer Condencer	

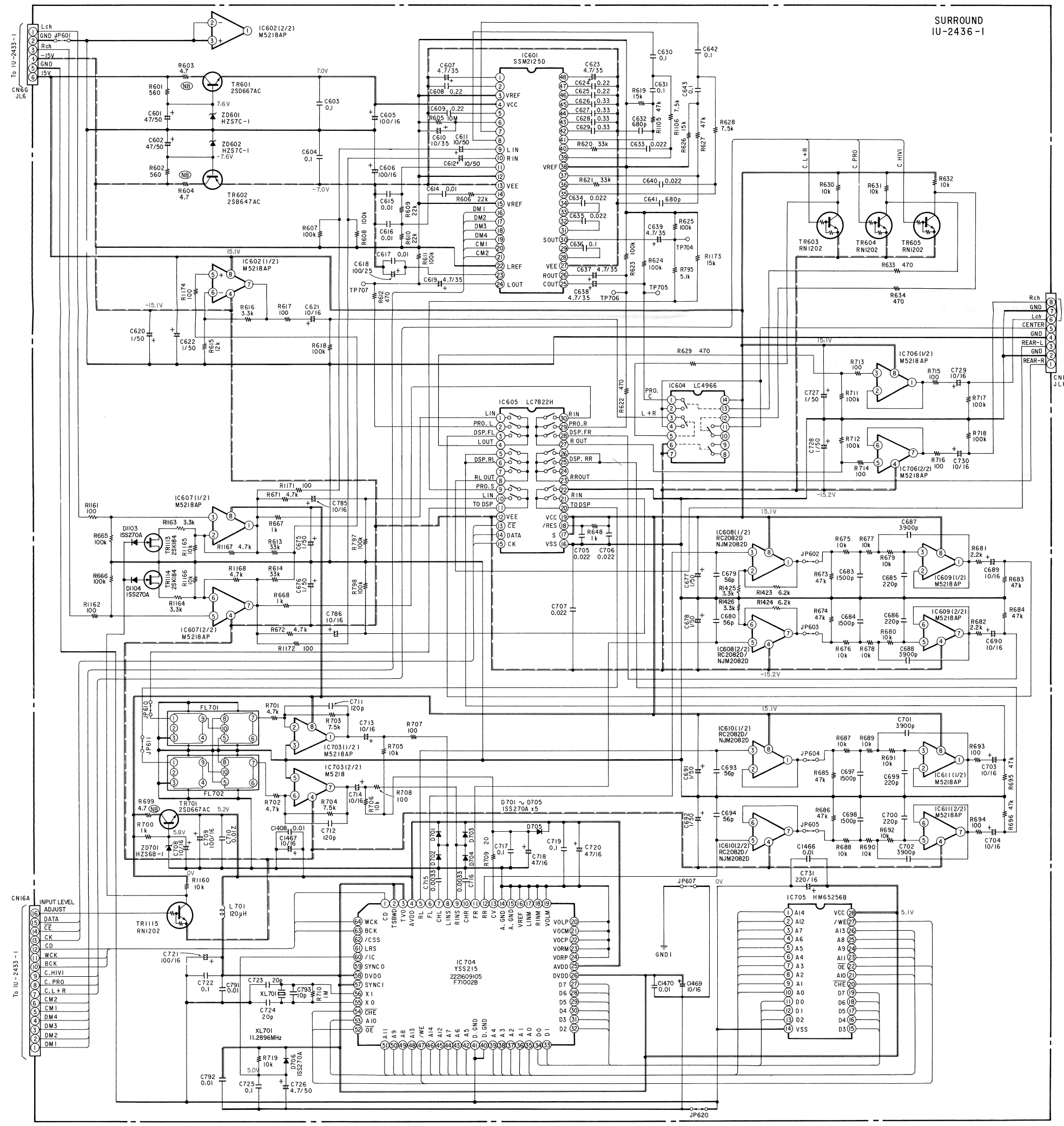
Ref. No.	Part No.	Part Name	Remarks	Q'ty
OTHER GROUP				
	—	(P.W.Board)		(1)
CF001	261 0025 004	Ceramic Filter		1
CF002	261 0025 004	Ceramic Filter		1
CF003	261 0031 001	Ceramic Filter	BFU450C4	1
CF004	261 0079 005	Ceramic Filter	CSB456F11	1
CF005	261 0116 007	Ceramic Filter	SFU450B3	1
XL001	399 0075 003	Crystal Vibrator	7.2MHz	1
T001	231 1127 007	MW Ant. Trans		1
T002	231 4901 000	MW Osc. Coil		1
T003	231 2076 005	IF Trans (P)		1
T004	231 2077 004	IF Trans (S)		1
T005	231 1133 009	AM IFT		1
	205 0432 008	4P Ant. Terminal		1
	216 0064 007	Front End		1
RL001	214 9003 005	Relay		1
RL002	214 9003 005	Relay		1
	204 8266 008	4P Pin Jack (S-GND)		2
	205 0472 039	8P Speaker Terminal		1
CN3J	205 0343 032	3P Conn. Base (KR-PH)		1
CN3P	205 0343 032	3P Conn. Base (KR-PH)		1
CN6B	205 0343 061	6P Conn. Base (KR-PH)		1
CN4C	205 0653 049	4P VH Conn. Base		1
CN3J	205 0748 035	JL Conn. (R)-3P		1
CN6I	205 0731 068	6P Conn. Base-L (9131)		1
CN9F	205 0697 092	JL Conn. (F-E)		1
CN3Q	205 0276 031	3P EH Conn. Base (BU)		1
CN9G	205 0343 090	9P Conn. Base (KR-PH)		1
CN3S	203 4721 023	3P SCN-SCN Conn. Cord	L=270	1
	GEN2322	3T Lug Sub Ass'y		1[S]
	253 1024 003	Ceramic Cap. 0.01μF/50V	CK45F1H103Z	(1)
	125 9002 007	UL TUBE	L=10	(1)
	205 0003 107	3T Lug		(1)

WIRING DIAGRAM



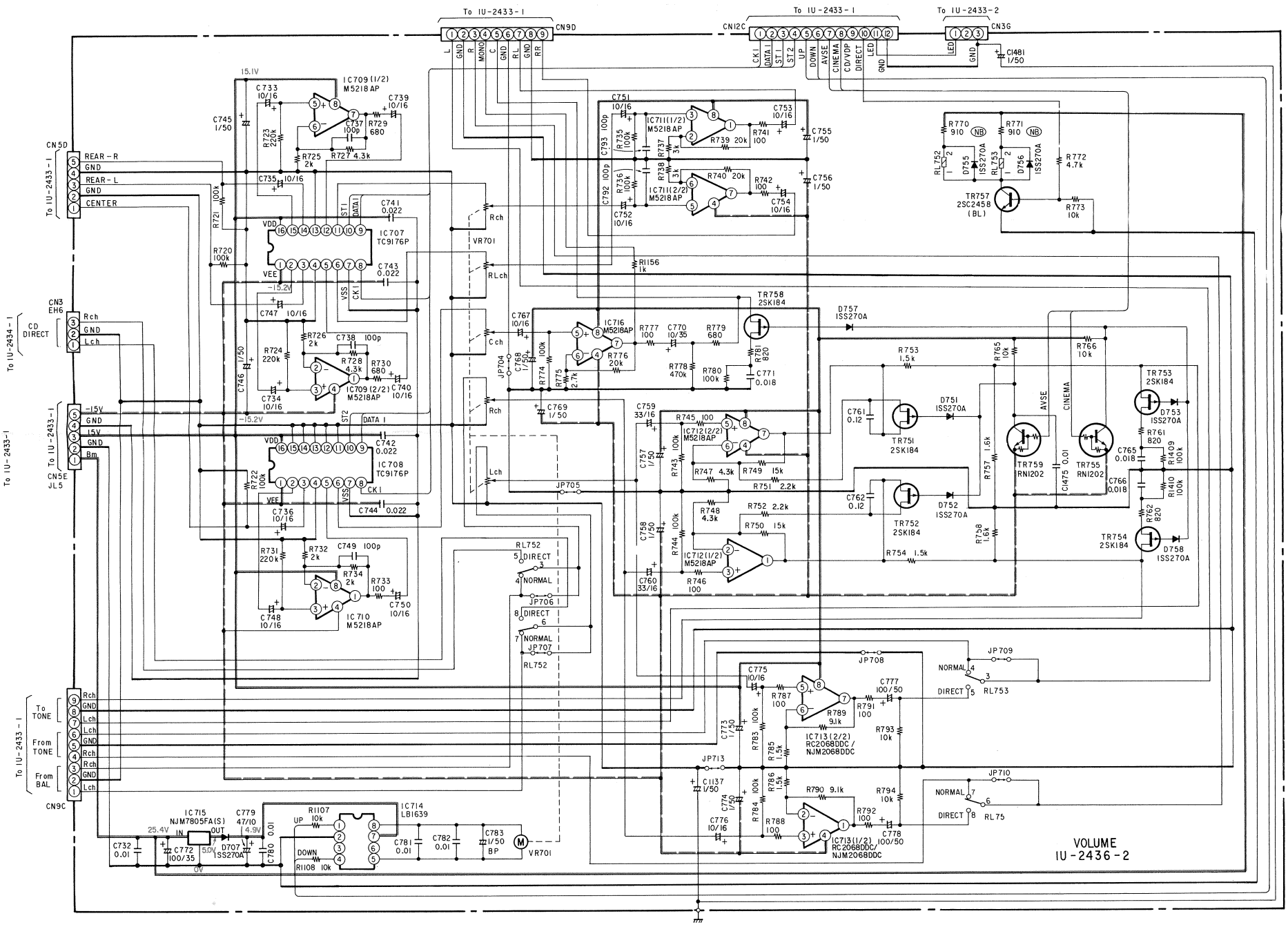
SCHEMATIC DIAGRAM -1/4

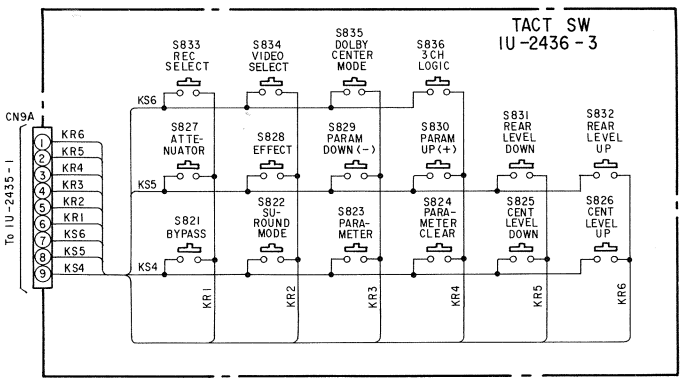
1 2 3 4 5 6

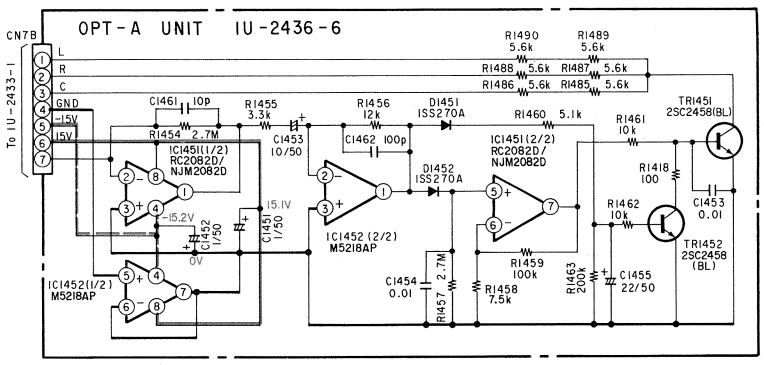


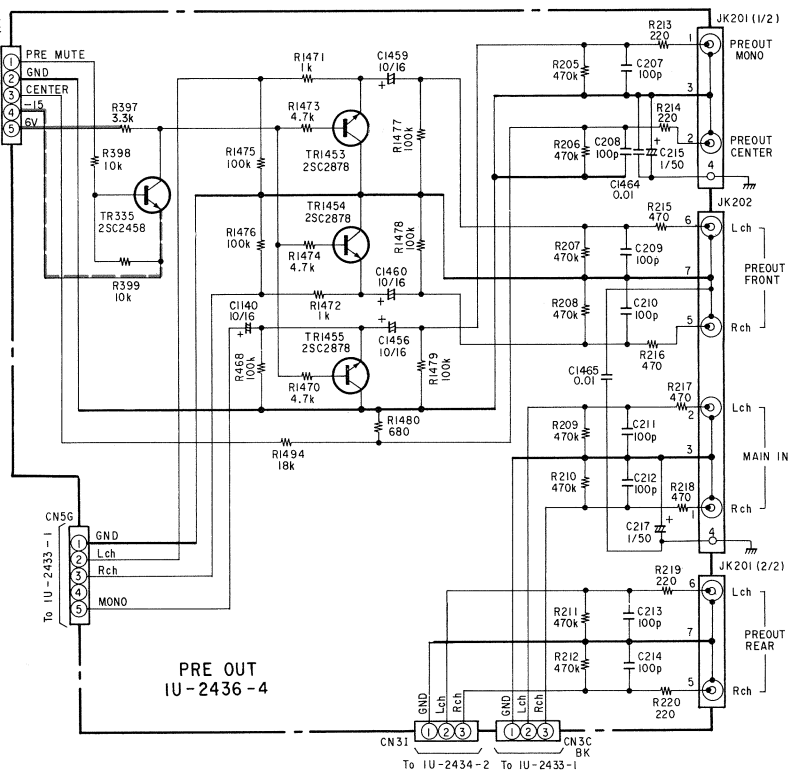
6 7 8 9 10 11

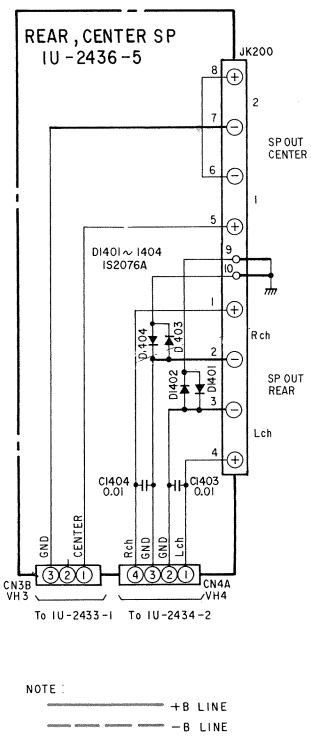
A B C D E F G H







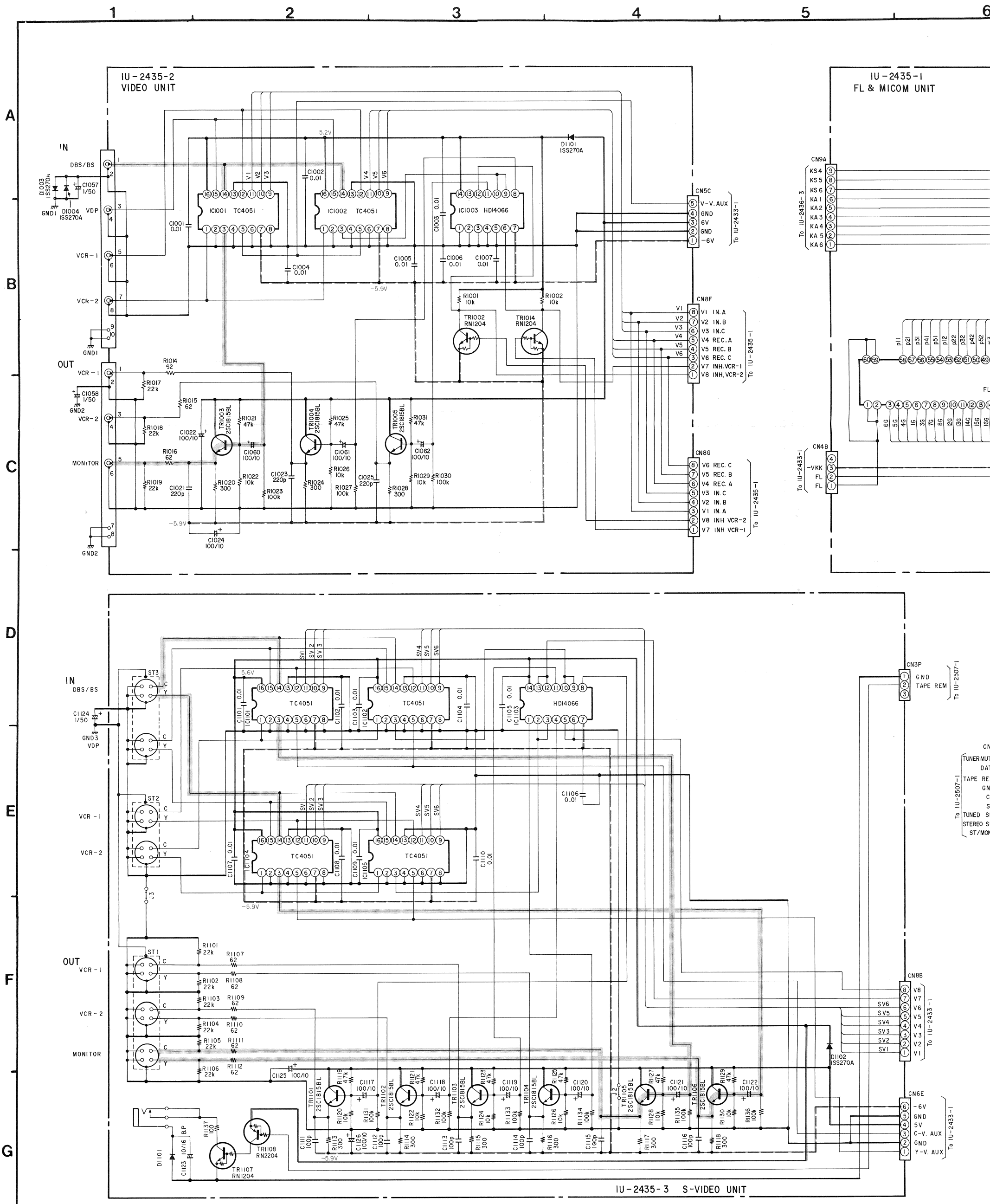




NOTES

ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SCHEMATIC DIAGRAM -2/4



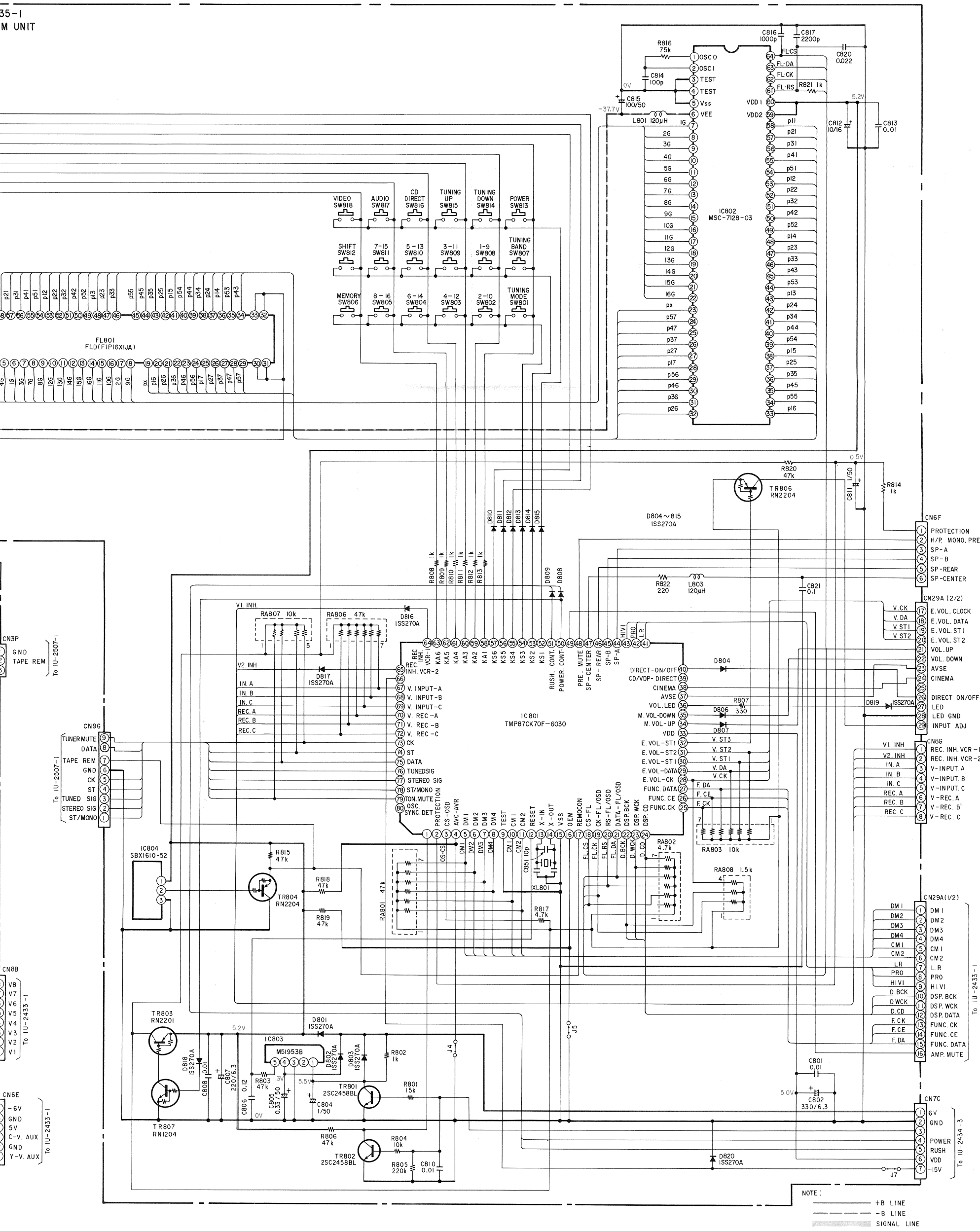
WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.

NOTES
ALL RESISTANCE VALUES IN OHM. k=1,000
ALL CAPACITANCE VALUES IN MICRO FARA
EACH VOLTAGE AND CURRENT ARE MEAS
CIRCUIT AND PARTS ARE SUBJECT TO CH

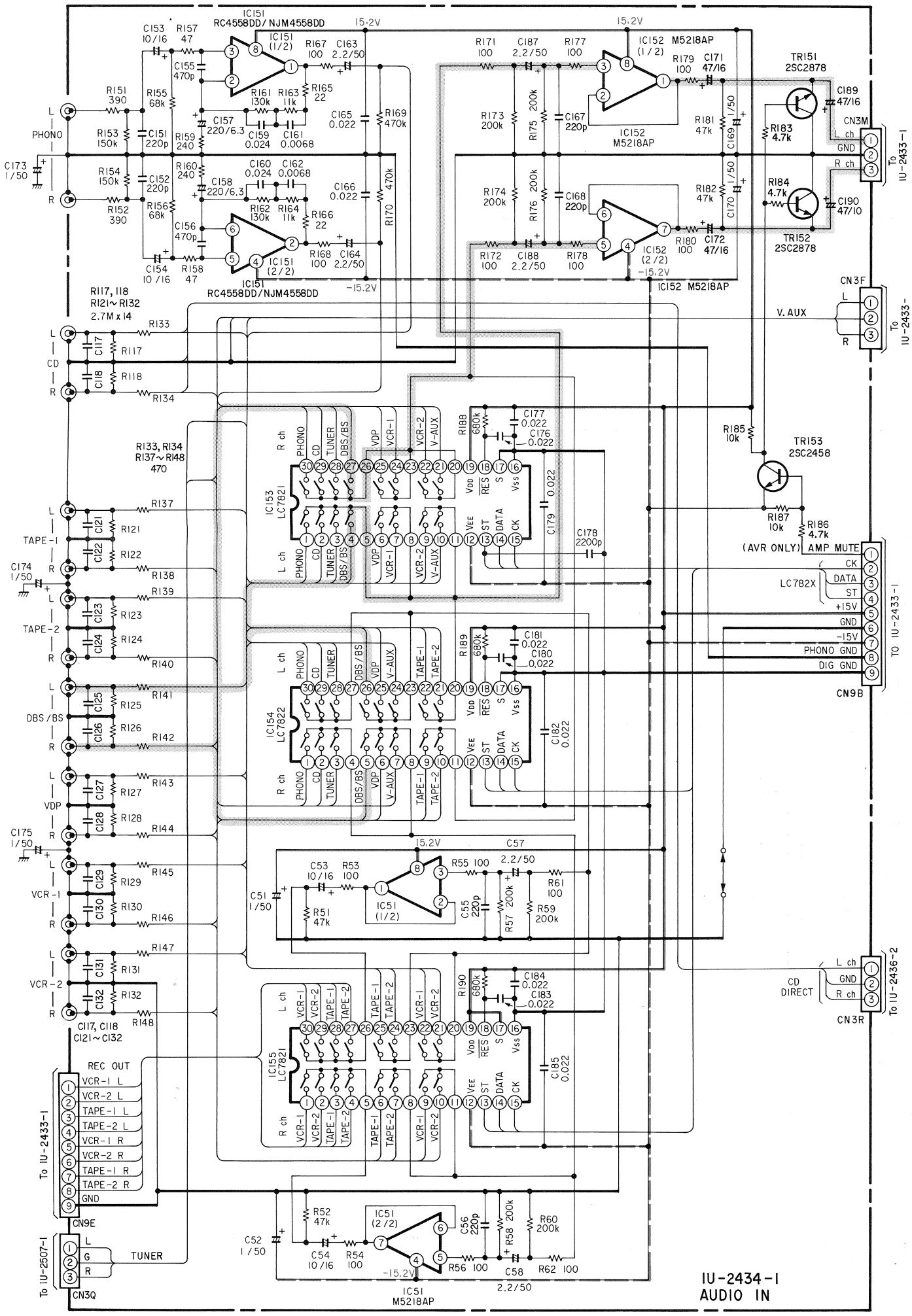
35-1
M UNIT

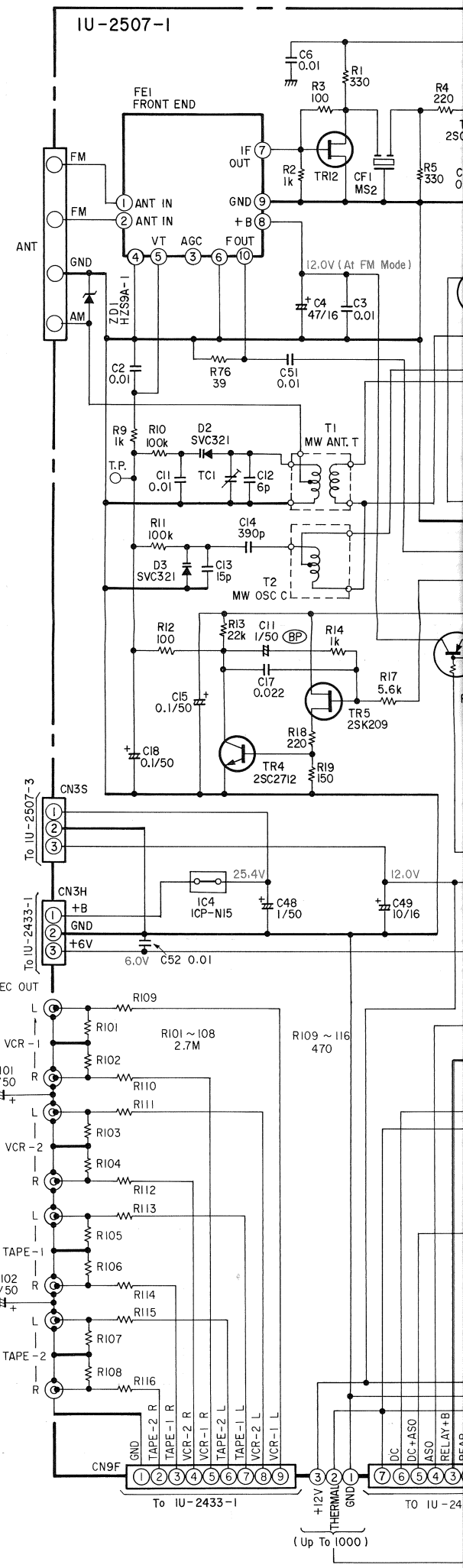


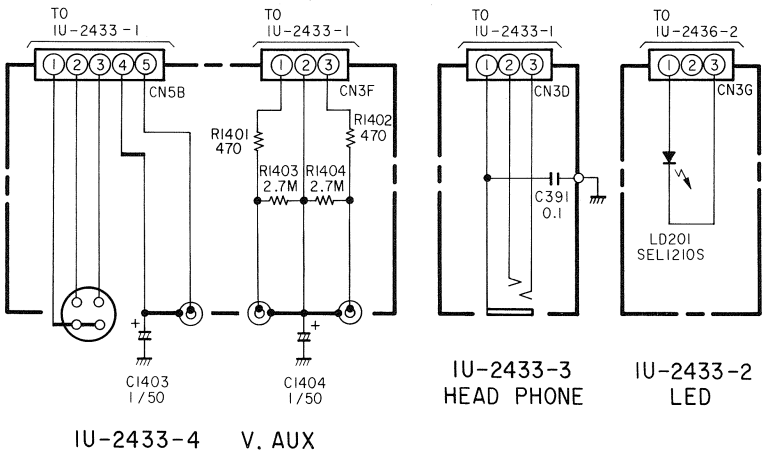
ES IN OHM. k=1,000 OHM, M=1,000,000 OHM
UES IN MICRO FARAD. P=MICRO-MICRO FARAD
RRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
E SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SCHEMATIC DIAGRAM -3/4

1 2 3 4 5 6



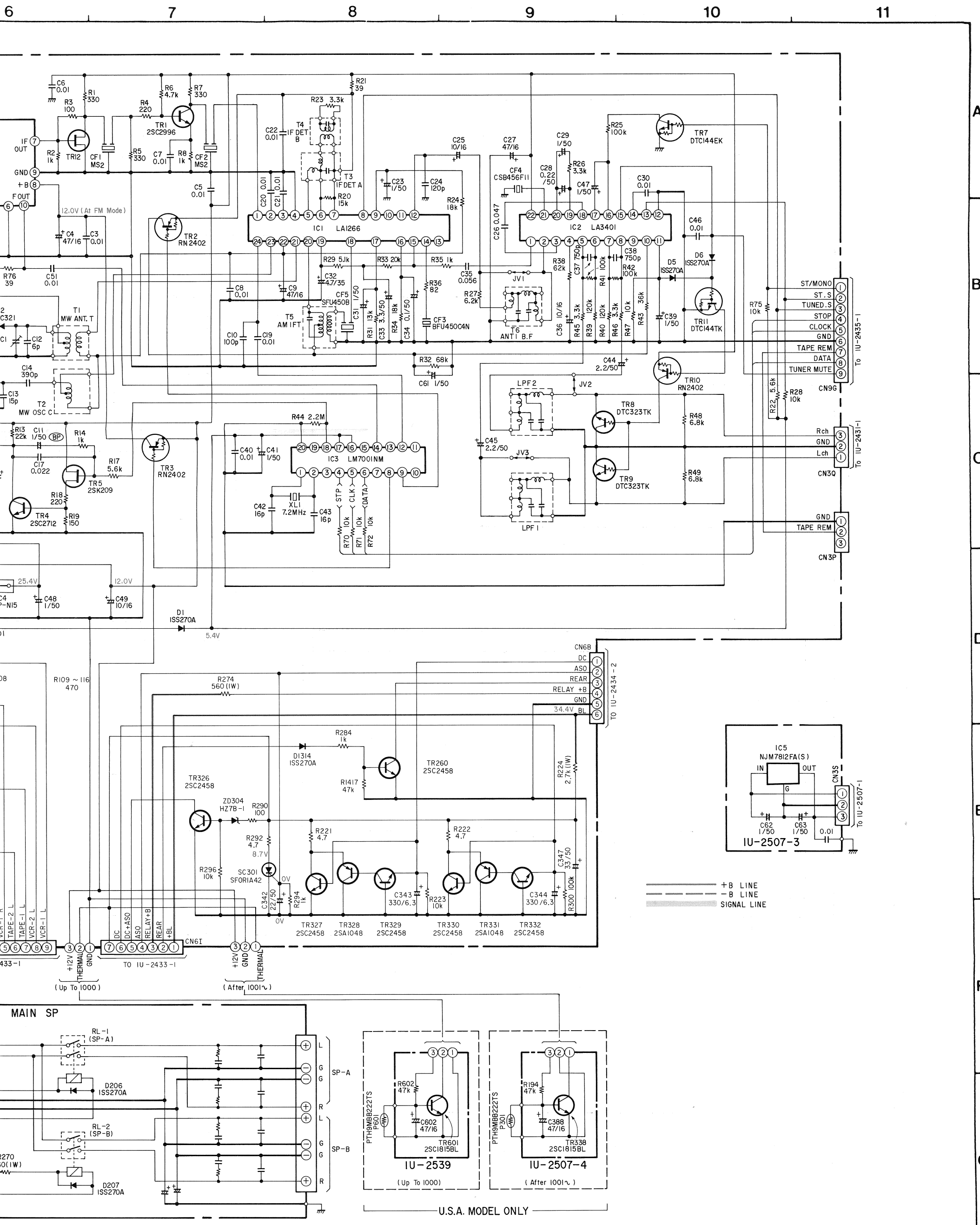




WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage cur
the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either si
defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.



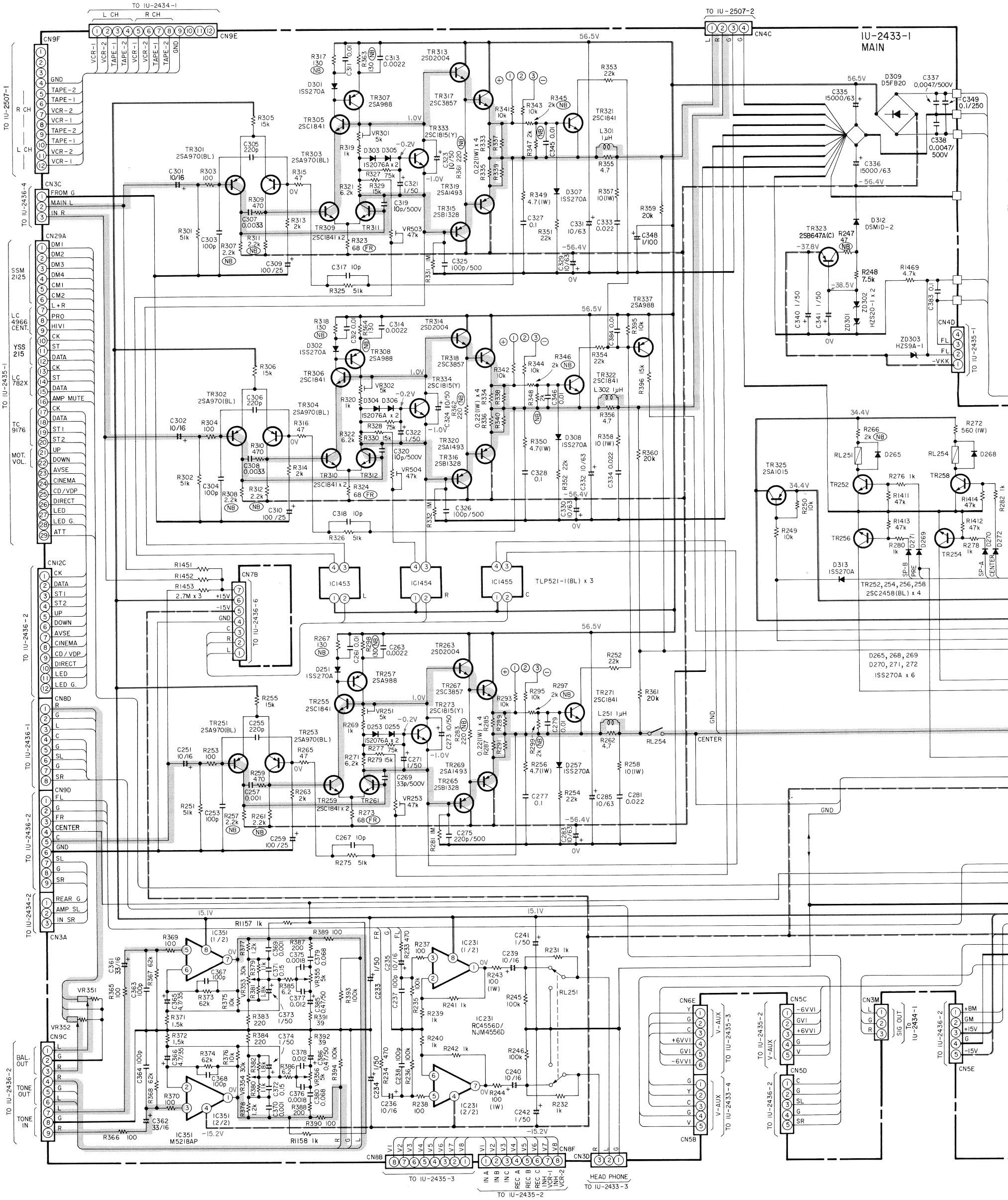
itical characteristics.
y the manufacturer.

e sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If
f the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is

e problem is located and corrected.

NOTES
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

SCHEMATIC DIAGRAM -4/4

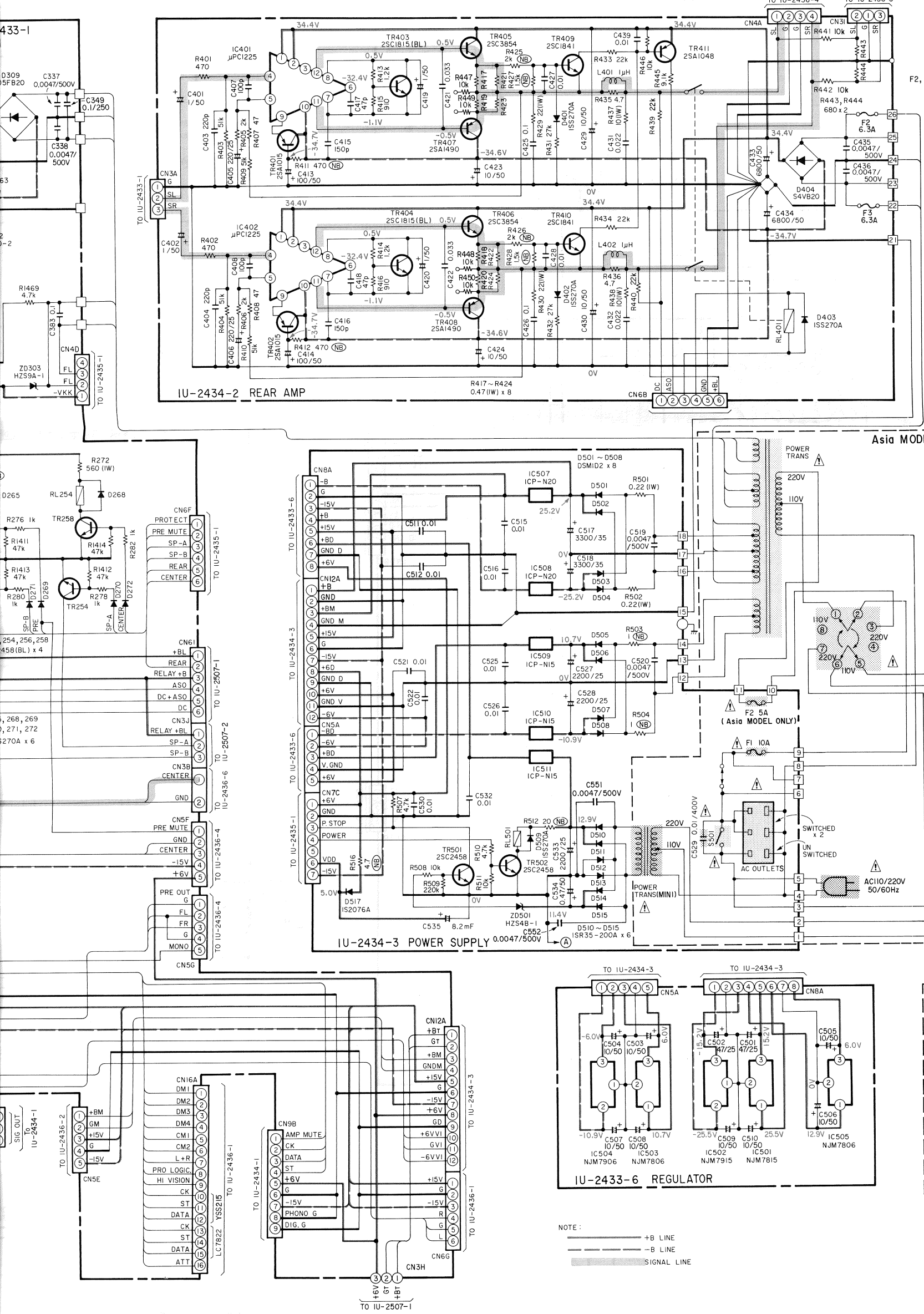


NOTES
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

WARNING:
Parts marked with this symbol ⚠ ▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

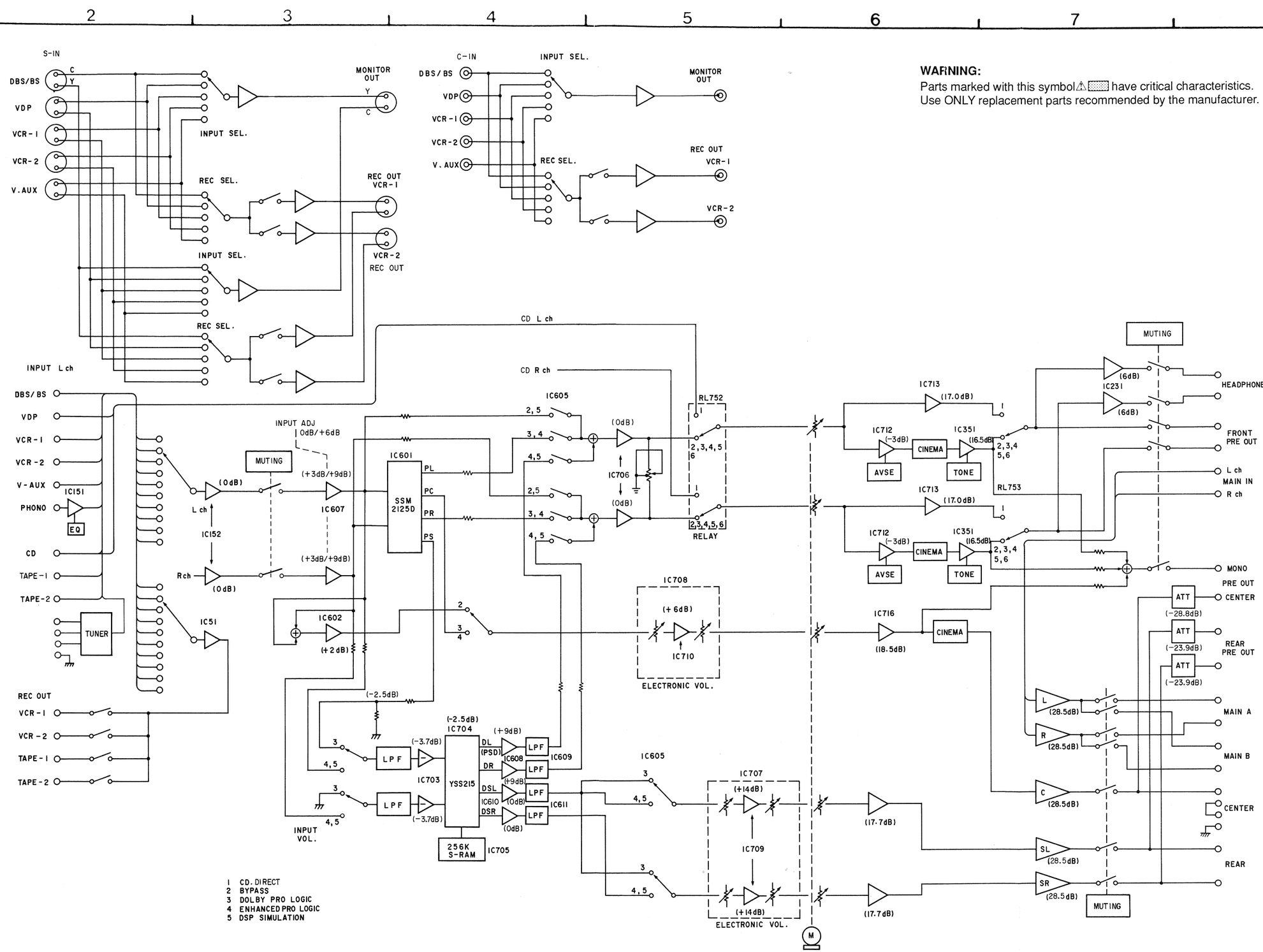
CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis r
the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 2
defective.

WARNING:
DO NOT return the unit to the customer until the problem is located and corrected.



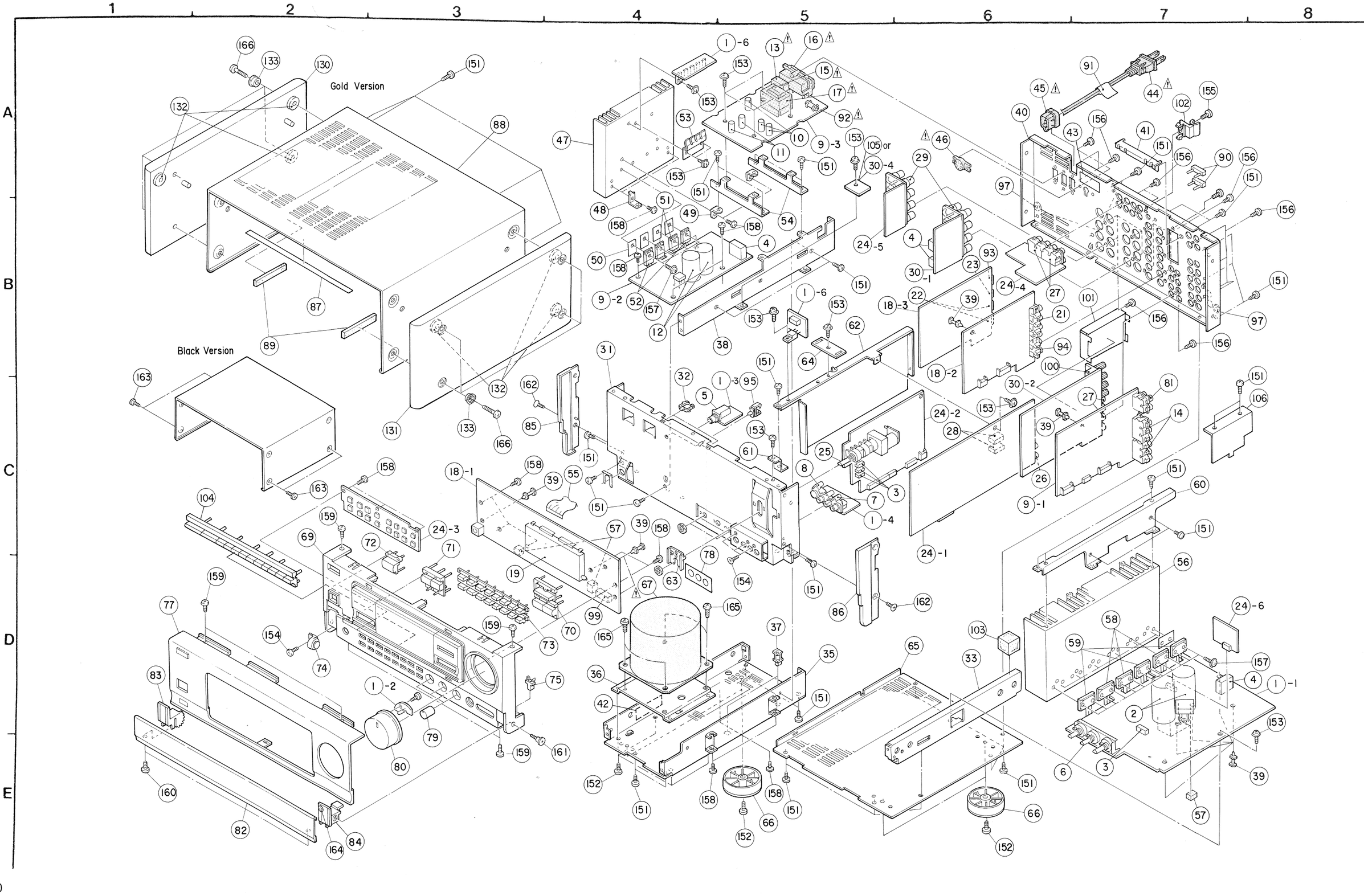
check or (2) a line to chassis resistance check. If
the power cord is less than 240 kohms, the unit is

BLOCK DIAGRAM



WARNING:
Parts marked with this symbol⚠▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

EXPLODED VIEW OF CHASSIS AND CABINET



PARTS LIST OF EXPLODED VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 1	1U-2433B	Main Amp Unit Ass'y		1[S]
1-1	—	Main Amp Unit		(1)
1-2	—	LED Unit		(1)
1-3	—	Head Phone Unit		(1)
1-4	—	Video Aux. Unit		(1)
1-5	—	—		
1-6	—	Regulator Unit		(1)
2	254 6170 007	Chemicon 15000μF/63V	C335,336	2
3	214 0127 003	Relay (RY-12W)		3
4	214 9003 005	Relay		4
5	Note	Headphone Jack		1
6	211 0760 005	Variable Resistor	VR351,356	1
7	204 8342 003	3P Pin Jack (C-GND)		1
8	205 0605 000	S-Terminal		1
◉ 9	Note	Rear Input Unit Ass'y		1[S]
9-1	—	Audio Input Unit		(1)
9-2	—	Rear Amp Unit		(1)
9-3	—	Power Supply Unit		(1)
10	254 4256 790	Chemicon 2200μF/25V	C527,528,333	3
11	254 4259 014	Chemicon 3300μF/35V	C517,518	2
12	254 4355 002	Chemicon 6800μF/50V	C433,434	2
⚠ 13	214 0120 000	Relay (TV-8)		1
14	204 8346 009	6P Pin Jack (S-GND)		2
⚠ 15	Note	Fuse nA	F001	1
⚠ 16	203 3946 003	AC Outlet (Polarized)		1
⚠ 17	Note	Power Trans (Mini)		1
◉ 18	Note	VFD. VIDEO Unit Ass'y		1[S]
18-1	1U-2435B	VFD, μ-Comm. Unit		(1)
18-2	—	Video Unit		(1)
18-3	—	S-Video Unit		(1)
19	393 4111 004	FLD (FIP16XM1HA)		1
20	204 8313 003	4P Pin Jack (S-GND)		1
21	204 8309 004	4P Pin Jack (C-GND)		1
22	204 8414 012	2P S-Terminal		2
23	204 8415 011	3P S-Terminal		1
◉ 24	1U-2436B	Surround Unit Ass'y		1[S]
24-1	—	Surround Unit		(1)
24-2	—	Volume Unit		(1)
24-3	—	Tact Switch Unit		(1)
24-4	—	Pre Out Unit		(1)
24-5	—	Center, Rear SP Unit		(1)
24-6	—	OPT-A Unit		(1)
25	211 0759 003	Variable Resistor 100 Kohm	Main VR	1
26	—	—		
27	204 8266 008	4P Pin Jack (S-GND)		4
28	232 0168 002	LC Filter		2
29	205 0472 039	8P SP Terminal		2
◉ 30	1U-2507	Tuner Unit Ass'y		1[S]
30-1	—	Tuner Unit		(1)
30-2	—	SP Terminal Unit		(1)
30-3	—	—		
30-4	—	Protector Unit	S/N with ××××××××1001 and after	(1)
◉ 31	411 1175 309	Front Chassis Ass'y		1
32	445 0073 007	Wire Clip		2
◉ 33	411 9057 610	Side Chassis		1
34	—	—		
◉ 35	411 1021 314	Trans Chassis		1
◉ 36	412 9160 209	Trans Bracket		1
37	415 9032 006	P.C.B Holder (T)		2

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 38	411 0928 104	Center Chassis		1
◉ 39	412 2814 028	Card Spacer (L=10)		9
◉ 40	Note	Rear Panel		1
◉ 41	412 3519 005	P.W.B Support (A)		1
★ 42	Note	Fuse Caution Label	for F002, 003	1
★ 43	Note	Fuse Caution Label	for F001	1
⚠ 44	Note	AC Cord		1
⚠ 45	Note	Cord Bush		1
⚠ 46	Note	Voltage Sel Switch		1
47	417 0459 215	Power Radiator (B)		1
◉ 48	412 3225 108	P.W.B Bracket (A)		2
◉ 49	412 3427 003	L Bracket		2
50	415 0234 007	Insulating Sheet		4
51	273 0386 005	Transistor 2SC3854 (O/P/Y) (Z)	TR	2
52	271 0237 006	Transistor 2SA1490 (O/P/Y) (Z)	TR	2
◉ 53	412 3314 103	Spring Plate (A)		1
◉ 54	412 3521 006	P.W.B Bracket		2
55	002 0045 003	29C FF Cable		1
56	417 0458 119	Power Radiator (A)		1
57	461 0539 048	Rubber Sheet	15×10×T10	7
58	273 0354 008	Transistor 2SC3857 (O)/(Y)	TR	3
59	271 0220 000	Transistor 2SA1493 (O)/(Y)	TR	3
◉ 60	412 2939 204	Radiator Bracket		1
◉ 61	412 3529 008	Support Bracket		1
◉ 62	411 1177 103	Shield Chassis		1
◉ 63	412 2897 100	VR Bracket		1
◉ 64	412 3520 007	P.W.B Support (B)		1
65	105 1051 007	Bottom Cover		1
66	104 0194 108	Foot Ass'y		4
⚠ 67	Note	Power Trans		1
68	—	—		
69	Note	Inner Panel Ass'y		1
70	Note	Function Knob (A)		1
71	Note	Function Knob (B)		1
72	Note	Push Knob (P)		1
73	Note	Push Knob		2
74	421 9007 007	Mini Damper		1
75	435 0113 009	Latch (Y3Y18)		1
★ 76	445 8004 007	Wire Clamper		10
◉ 77	Note	Front Panel Ass'y		1
78	Note	Blind Sheet		1
79	Note	Vol. Knob (B)		3
80	Note	VR Knob Ass'y		1
81	204 8313 003	4P Pin Jack (S-GND)		1
82	Note	Trap Door		1
83	Note	Hinge (L)		1
84	Note	Hinge (R)		1
85	Note	Side Plate (L)		1
86	Note	Side Plate (R)		1
87	122 0183 049	Spacer	t=1	1
◉ 88	Note	Top Cover		1
89	461 9001 043	Rubber Sheet	T5×10×70	2
90	205 0752 005	Short Pin		2
91	Note			1
⚠ 92	Note	Fuse nA	F003,004	2
93	204 8260 004	Mini Jack	Remote	1
94	204 8308 005	3P Pin Jack (C-GND)		1
95	449 0068 014	Wire Saddle		1
96	—	—		
97	477 0224 031	SP Washer		2

Ref. No.	Part No.	Part Name	Remarks	Q'ty
★ 98	Note	UL Label		1
99	461 0334 052	Rubber Sheet	30×10×T10	1
100	205 0432 008	4P Ant. Terminal		1
101	216 0064 007	Front End		1
102	146 0925 009	Ant. Holder		1
103	461 0386 055	Rubber Sheet	20×10×T18	1
104	Note	Pre-Set Knob		1
◉ 105	1U-2539	Protector Unit Ass'y	S/N with ××××××××1000 and before	1[S]
106	414 0677 108	Shield Cover		1
SCREWS				
151	Note	Tapping Screw (S) 3×8	Black	
152	473 7007 000	Tapping Screw (S) 4×8	Black	12
153	473 8007 025	Cup Screw 3×8		11
154	473 7511 004	F.H. Tapping Screw (P) 3×10		4
155	473 7006 027	Tapping Screw (P) 3×10	Black	1
156	477 0064 107	Fixing Screw		8
157	473 8007 009	Cup Screw 3×12		16
158	473 7501 001	Tapping Screw (P) 3×10		18
159	473 7002 021	Tapping Screw (S) 3×8	Black	6
160	473 7500 044	Tapping Screw (P) 3×8	Black	2
161	473 7514 001	Special Screw		1
162	473 7009 011	F.H. Tapping Screw (S) 3×10		2
163	Note	3P Swelling Screw	Black Version Only	8
164	477 0231 024	3P Washer φ4 (S)		1

PACKING & ACCESSORIES (Not included EXPLODED VIEW)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
◉ 201	504 0092 060	Styrene Paper	for AC Cord	1
◉ 202	504 9102 029	Styrene Paper	for Set	1
◉ 203	505 9102 019	Poly Cover		1
◉ 204	503 1017 203	Cushion		2
◉ 205	511 2403 008	Inst. Manual		1
◉ 206	499 0251 004	Remocon Receiver (RC-159)	Incl. R6P Batteries (2)	1
◉ 207	499 0253 002	Remocon Receiver(RC-160)	Incl. R6P Batteries (2)	1
◉ 208	Note	Carton Case		1
209	505 8006 019	Envelope		1
◉ 210	502 0741 069	Pad	170×110×45	1
◉ 211	502 0741 043	Pad	185×45×45	1
◉ 212	231 1129 005	Loop Antenna		1
◉ 213	395 0019 009	FM Ant. Ass'y		1
214	Note	DAI Warranty Home(5)		1
215	Note	Color Label		2

NOTE FOR PARTS LIST

- Part indicated with the mark " ◉ " are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "I" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "★" is not illustrated in the exploded view.

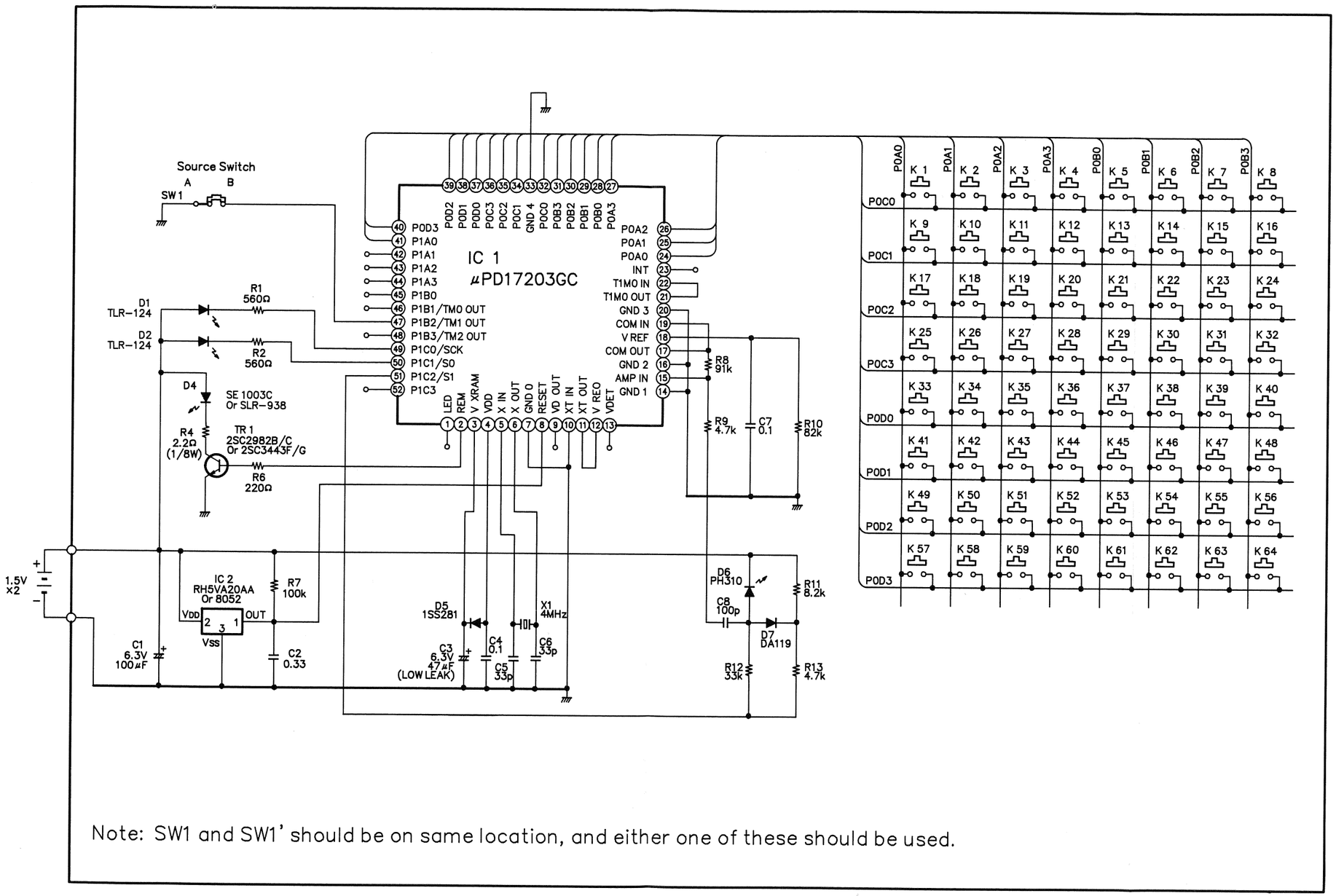
WARNING:

Parts marked with this symbol ⚠▨ have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

ADDENDUM LIST

Ref. No.	Parts Name & Descriptions		Parts No. U.S.A. BLACK		Multi-Voltage Model BLACK	Multi-Voltage Model GOLD	
5	Headphone Jack	(1)	204 8341 004		204 8341 004	204 8341 004	
◉ 9	Rear Input Unit Ass'y	(1[S])	1U-2434B		1U-2434C	1U-2434C	
⚠ 15	Fuse nA (F001)	(1)	206 1046 014 (8A)		206 1061 073 10A (250V)	206 1061 073 10A (250V)	
⚠ 17	Power Trans (Mini)	(1)	233 5818 004		233 5793 006	233 5793 006	
◉ 40	Rear Panel	(1)	105 1037 364		105 1037 380	105 1037 380	
★ 42	Fuse Caution Label (for F002, 003)	(1)	513 1796 097		—	—	
★ 43	Fuse Caution Label (for F001)	(1)	513 1673 000		—	—	
⚠ 44	AC Cord	(1)	206 2060 002		206 2083 005	206 2083 005	
⚠ 45	Cord Bush	(1)	445 0056 008		445 0071 009	445 0071 009	
⚠ 46	Voltage Sel. Switch	(1)	—		212 0338 003	212 0338 003	
⚠ 67	Power Trans	(1)	233 5994 009		233 5983 007	233 5983 007	
69	Inner Panel Ass'y	(1)	146 1375 221		146 1375 221	146 1375 234	
70	Function Knob (A)	(1)	113 1534 017		113 1534 017	113 1534 004	
71	Function Knob (B)	(1)	113 1535 016		113 1535 016	113 1535 003	
72	Push Knob (P)	(1)	113 1292 236		113 1292 236	113 1292 249	
73	Push Knob	(2)	113 1464 019		113 1464 019	113 1464 006	
77	Front Panel Ass'y	(1)	144 2201 343		144 2201 343	144 2201 369	
78	Bind Sheet	(1)	146 9045 100		146 9045 100	146 1117 007	
79	Vol. Knob	(3)	112 0555 007		112 0555 007	112 0555 023	
80	VR Knob Ass'y	(1)	112 0712 015		112 0712 015	112 0712 002	
82	Trap Door	(1)	144 1941 109		144 1941 109	144 1941 154	
83	Hinge (L)	(1)	401 0165 203		401 0165 203	401 0165 216	
84	Hinge (R)	(1)	401 0166 309		401 0166 309	401 0166 312	
85	Side Panel (L)	(1)	146 1377 119		146 1377 119	146 1377 106	
86	Side Panel (R)	(1)	146 1378 118		146 1378 118	146 1378 105	
◉ 88	Top Cover	(1)	102 0515 118		102 0515 118	102 0515 105	
91	Dangerous Mark	(1)	513 8266 009		—	—	
	Preset Label (for AC Cord)	(1)	—		515 8030 008	—	
⚠ 92	Fuse nA (F003,004)	(2)	206 1046 001 6.3A (UL)		—	—	
★ 98	UL Label	(1)	513 1711 001		—	—	
104	Pre-set Knob	(1)	113 1566 001		113 1566 001	113 1566 014	
⚠ 105	Fuse nA	(1)	—		206 1061 044 5A (250V)	206 1061 044 5A (250V)	
106	Fuse Label (5A/250V)	(1)	—		513 1451 044	513 1451 044	
107	Condenser Cover	(1)	—		415 0299 000	415 0299 000	
130	Wood Board (L)	(1)	—		—	101 2449 055	
131	Wood Board (R)	(1)	—		—	101 2143 051	
132	Felt Sheet	(6)	—		—	101 9086 004	
133	Screw Cup	(8)	—		—	146 9086 004	
SCREWS							
151	Tapping Screw (S) 3 × 8		473 7015 018 (36)		473 7015 018 (38)	473 7015 018 (38)	
163	3P Swelling Screw	(8)	477 0263 005		473 0263 005	—	
166	Tapping Screw (S) 4 × 25	(8)	—		—	473 7007 042	
167	Washer ϕ 5 (Black)	(8)	—		—	475 1006 016	
PACKING & ACCESSORIES (Not included EXPLODED VIEW)							
208	Carton Case	(1)	501 1610 141		501 1610 141	501 1610 154	
214	DAI Warranty Home (5)	(1)	515 0623 002		—	—	
215	Color Label (Gold)	(2)	—		—	513 9111 001	

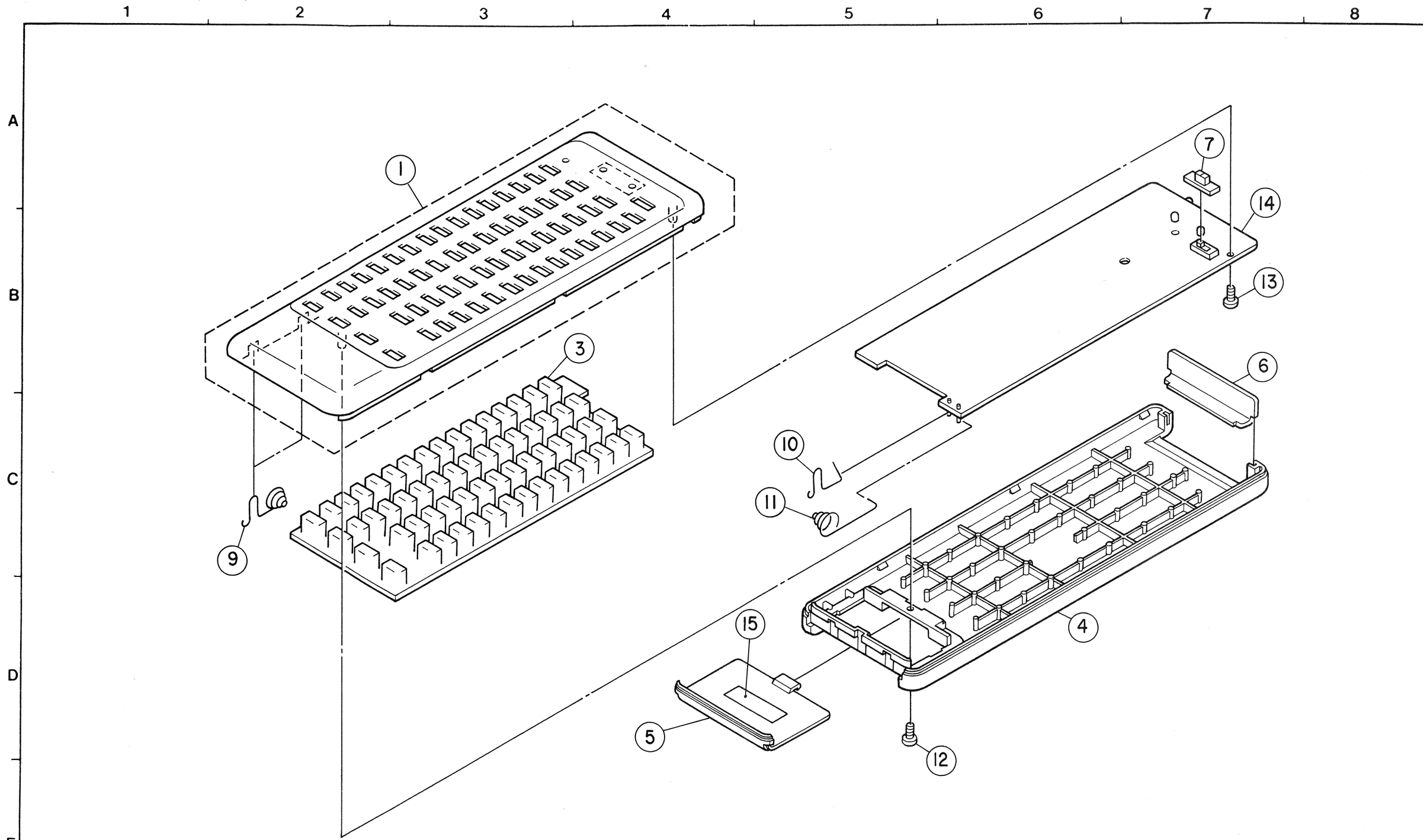
REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM (RC-159)



Note: SW1 and SW1' should be on same location, and either one of these should be used.

NOTES
ALL RESISTANCE VALUES IN OHM. k=1,000 OHM, M=1,000,000 OHM
ALL CAPACITANCE VALUES IN MICRO FARAD. P=MICRO-MICRO FARAD
EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT CONDITION.
CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

REMOTE CONTROL UNIT
EXPLODED VIEW (RC-159)



REMOTE CONTROL UNIT ASS'Y (RC-159)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC1	9H3 1000 157	IC μPD17203AGC-701	μ-Com
IC2	9H3 1000 158	IC RH5VA20AA	VOL. Detector
TR1	9H3 1000 070	Transistor 2SC3443BF/BG	Chip
or	9H3 1000 070	Transistor 2SC2982B/C	Chip
D1,2	9H3 1000 028	LED TLR124	Visible-Red
D3	9H3 1000 131	LED SE1003-C	Inflared
D5	9H3 1000 087	Diode 1SS281 (1)	
D6	9H3 1000 029	Diode PH310	Photo-PIN
D7	9H3 1000 071	Diode DA119/DA118	Chip
or		Diode 1SS196	
RESISTORS GROUP			
R1,2	247 0006 988	Chip Resistor 560ohm, 1/10W	RM73B--561J
R4	247 0001 909	Chip Resistor 2.2ohm, 1/10W	RM73B--2R2J
R6	247 0005 989	Chip Resistor 220ohm, 1/10W	RM73B--221J
R7	247 0012 927	Chip Resistor 100kohm, 1/10W	RM73B--104J
R8	247 0012 914	Chip Resistor 91kohm, 1/10W	RM73B--913J
R9	247 0009 901	Chip Resistor 4.7kohm, 1/10W	RM73B--472J
R10	247 0012 901	Chip Resistor 82kohm, 1/10W	RM73B--823J
R11	247 0009 969	Chip Resistor 8.2kohm, 1/10W	RM73B--822J
R12	247 0011 902	Chip Resistor 33kohm, 1/10W	RM73B--333J
R13	247 0009 901	Chip Resistor 4.7kohm, 1/10W	RM73B--472J
J7,8	247 0018 905	Chip Resistor 0ohm, 1/10W	RM73B--0R0K
CAPACITORS GROUP			
C1	254 4213 034	Electrolytic 100μF/6.3V	CE04W0J101M
C2	—	Chip Ceramic 0.33μF/25V	CK73F1E334Z
C3	254 4213 021	Electrolytic 47μF/6.3V	CE04W0J470M
C4	257 0014 935	Chip Ceramic 0.1μF/25V	CK73F1E104Z
C5,6	257 0003 946	Chip Ceramic 33PF/50V	CK73SL1H330J
C7	257 0014 935	Chip Ceramic 0.1μF/25V	CK73F1E104Z
C8	257 0004 961	Chip Ceramic 100PF/50V	CC73SL1H101J

OTHER GROUP				Q'ty
	—	(P.W. Board)		(1)
X1	9H3 1000 088	Ceramic Resonator	KBR4.0M503	1
SW1	9H3 1000 089	Slide Switch		1
	—	Port Wrapping		2

PARTS LIST OF EXPLODED VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	9H3 1000 145	Case Top Ass'y		1
2	9H3 1000 148	IR Filter		1
3	9H3 1000 149	Switch Rubber		1
4	9H3 1000 150	Switch Button		1
5	9H3 1000 146	Case Bottom Ass'y		1
6	—	Tapping Screw 2×6		1
7	—	Tapping Screw 2×5		1
8	—	—		
8	9H3 1000 151	Spring Coil		1
9	9H3 1000 152	Spring Coil		1
10	9H3 1000 153	Spring Coil		1
11	9H3 1000 147	Cover Battery		1
13	9H3 1000 125	Poly Cover	100×300	1
14	9H3 1000 156	P.W.Unit Ass'y		1[S]
15	—	Label		1
16	—	Sheet		1

KEY LAYOUT (RC-159)

↑ Transmitting direction (upper side)

K65	K6	K7	K8
K2	K1	K4	K3
K9	K12	K11	K10
K17	K18	K19	K20
K25	K26	K27	K28
K33	K34	K35	K36
K41	K42	K43	K44
K49	K50	K51	K52
K57	K58	K59	K60
K61	K62	K63	K64
K53	K54	K55	K56
K45	K46	K47	K48
K37	K38	K39	K40
K29	K30	K31	K32
K21	K22	K23	K24
K13	K14	K15	K16
K5	K6	K7	K8

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REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM (RC-160)