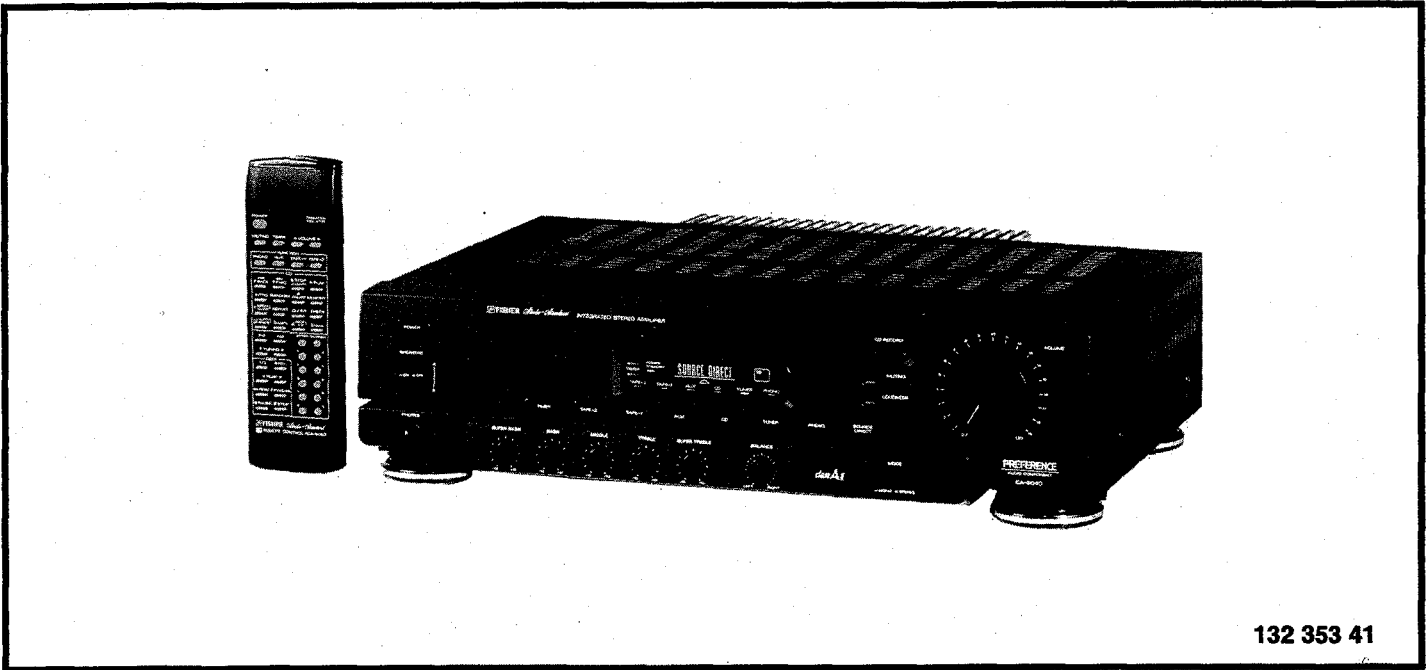


SERVICE MANUAL



INTEGRATED STEREO
AMPLIFIER WITH RCA-9040
WIRELESS REMOTE CONTROL

CA-9040
(EUROPE)



SPECIFICATIONS

RCA-9040
Wireless Remote Control 49 Functions

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel
within the stated bandwidth at no more than the stated
distortion and with an 8-ohm load DIN 80 Watts
Power Bandwidth 40 Hz - 12.5 kHz
Total Harmonic Distortion 0.05 %
I.M. Distortion 0.05 %
Speaker Damping > 30

PREAMPLIFIER SECTION

Frequency Response
Phono (RIAA) ±1 dB
AUX (20 Hz - 20 kHz) ±1 dB
Input Sensitivity and Impedance
Phono 2.5 mV/50 kΩ
Tape Monitor 1,2 150 mV/50 kΩ
Tuner/AUX/CD 150 mV/50 kΩ

Phono Maximum Input Capability 160 mV
Tone Control
Super Bass ±10 dB
Bass ±10 dB
Middle ±10 dB
Treble ±10 dB
Super Treble ±10 dB
Loudness Contour (100 Hz/10 kHz) +8 dB/+4 dB
Hum and Noise (IHF Short Circuit, A Network)
Phono 70 dB
Tape Monitor 1,2 90 dB
Tuner/AUX/CD 90 dB
Source Direct (AUX) 95 dB

GENERAL

Power Requirements AC 220 V
(50 Hz) 400 W
AC Outlets (Switched) 2
Dimensions (WxHxD) 440" x 112" x 335"
Weight (Approximate) 7.8 kg

— Specifications and design are subject to change without notice. —

POWER AMPLIFIER ADJUSTMENT

BEFORE ADJUSTMENT

Unplug the AC power cord and set the front panel controls as follows:

- Power switch to OFF position.
- Set the SPEAKERS switch to the OFF position.
- Turn the MASTER VOLUME Control to minimum.
- IDLING CURRENT ADJUSTMENT VR401/VR402 (on the Main P.C.Board) setting to mechanical center position.
- Connect the AC power cord and Power switch to the ON position.

IDLING CURRENT ADJUSTMENT

This adjustment is very sensitive to changes in ambient temperature. Allow set to operate for 2 minutes before attempting this alignment.

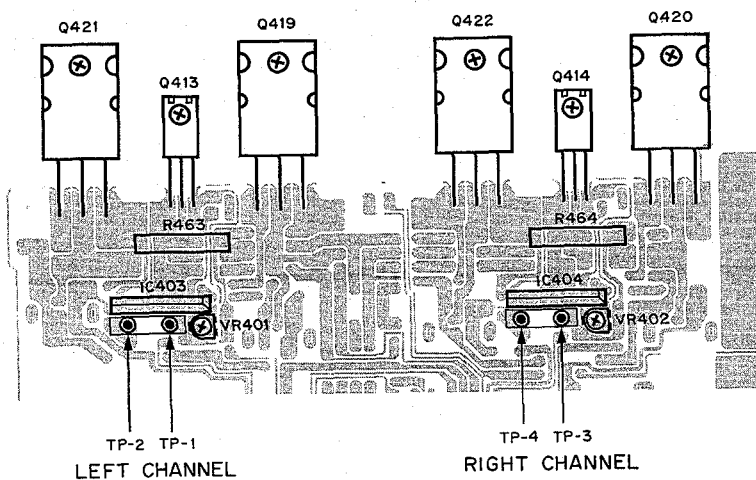
LEFT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test Pins TP-2 and TP-1 on the Main P.C.Board.
2. Adjust the VR401 for an indication of $5\text{mV} \pm 0.5\text{mV}$ on the DC Voltmeter.

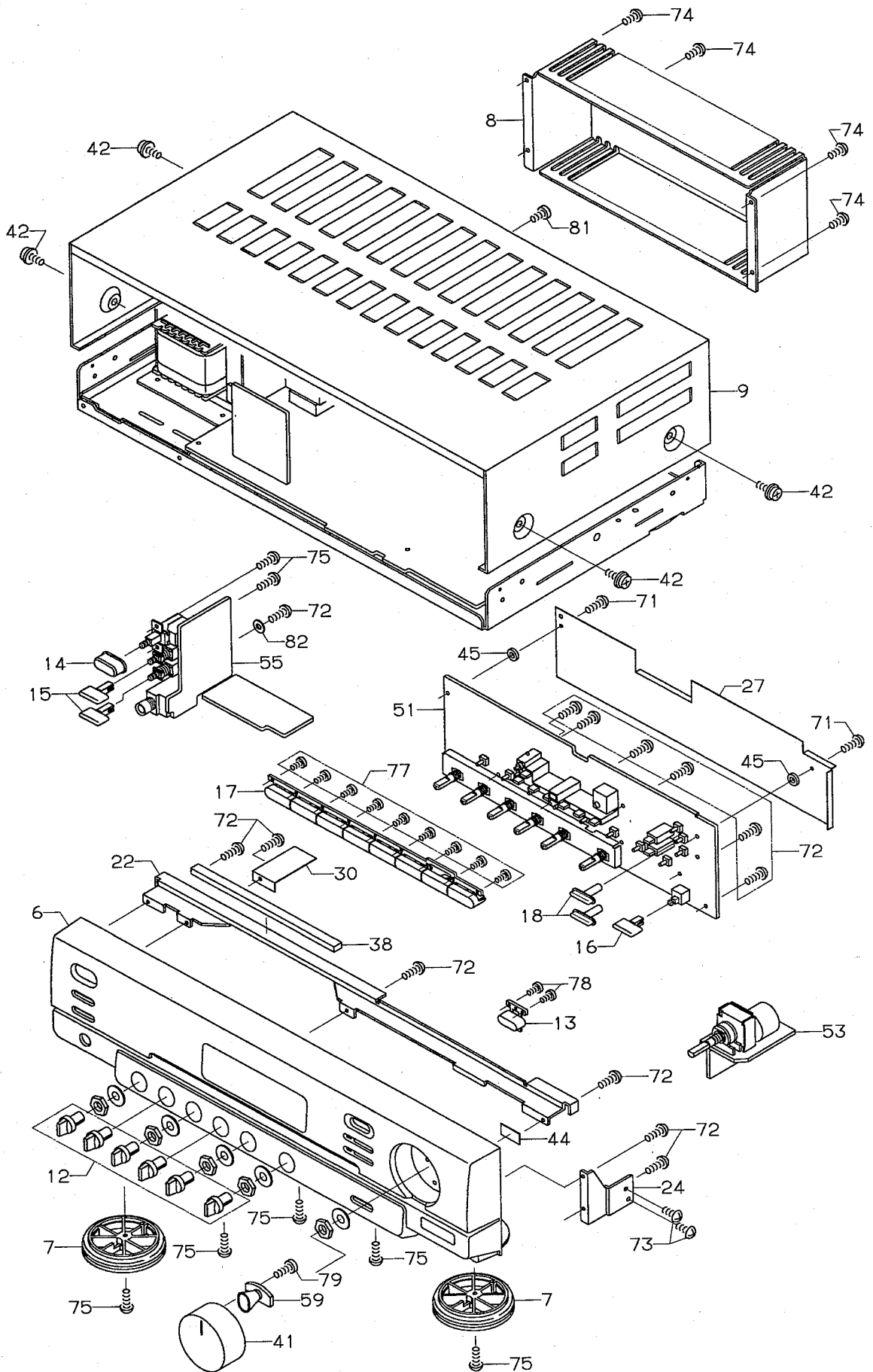
RIGHT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test Pins TP-4 and TP-3 on the Main P.C.Board.
2. Adjust the VR402 for an indication of $5\text{mV} \pm 0.5\text{mV}$ on the DC Voltmeter.

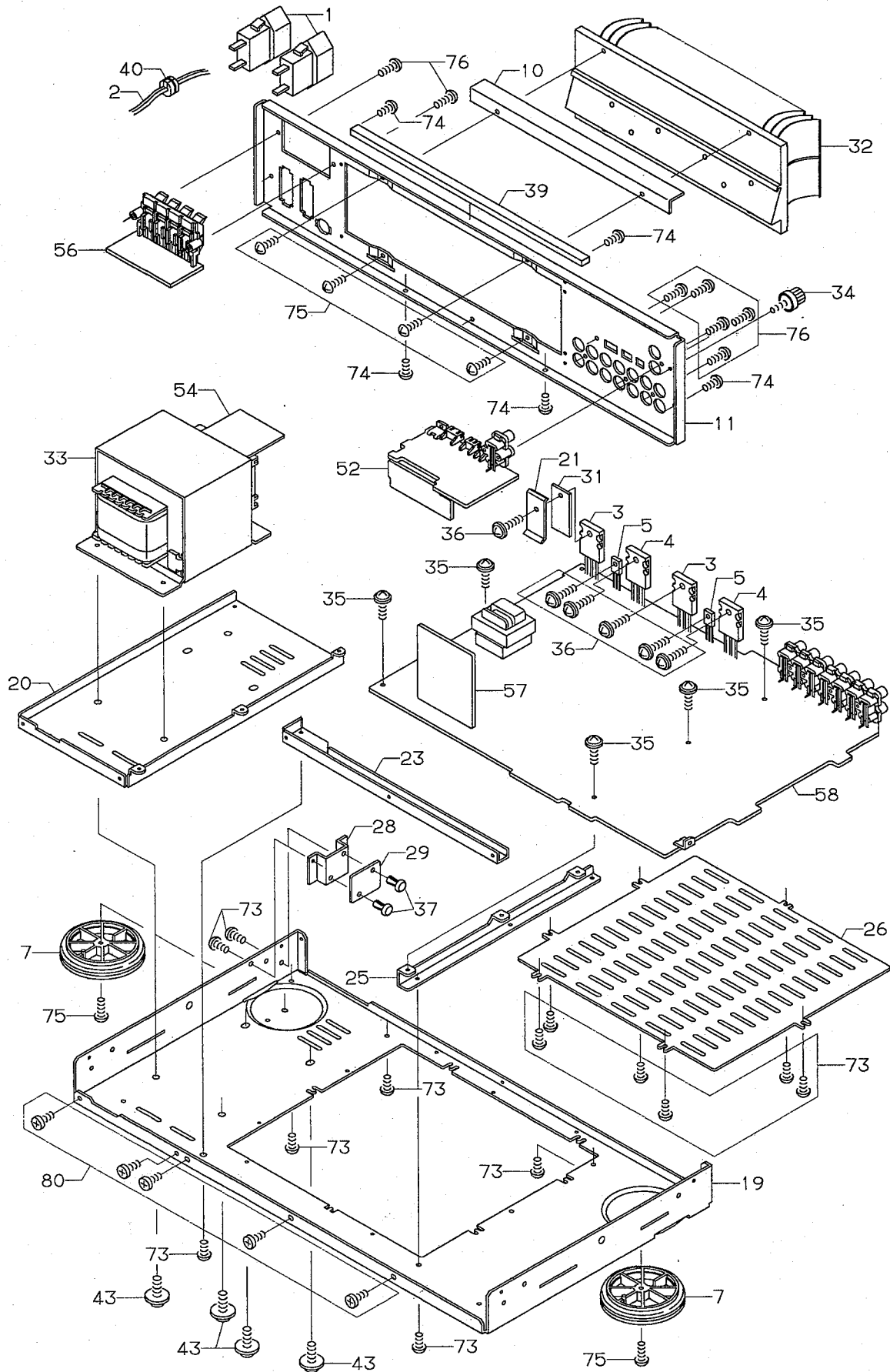
ADJUSTMENT POINTS



CABINET & CHASSIS EXPLODED VIEW (1)

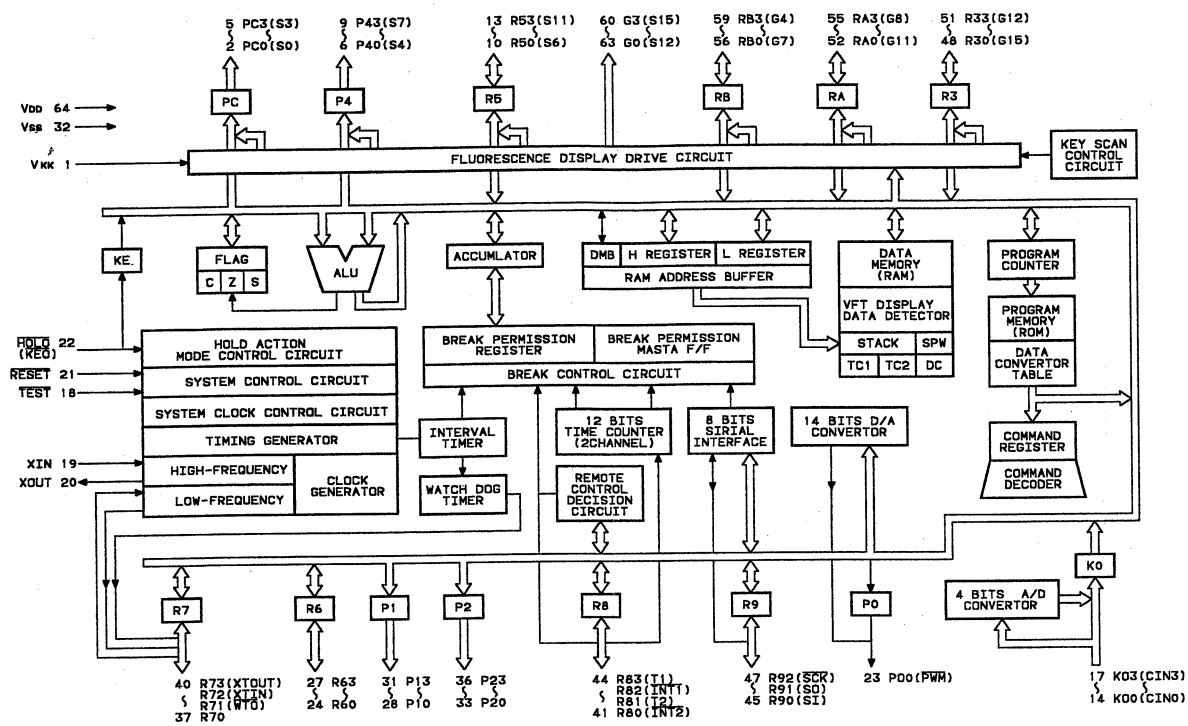


CABINET & CHASSIS EXPLODED VIEW (2)

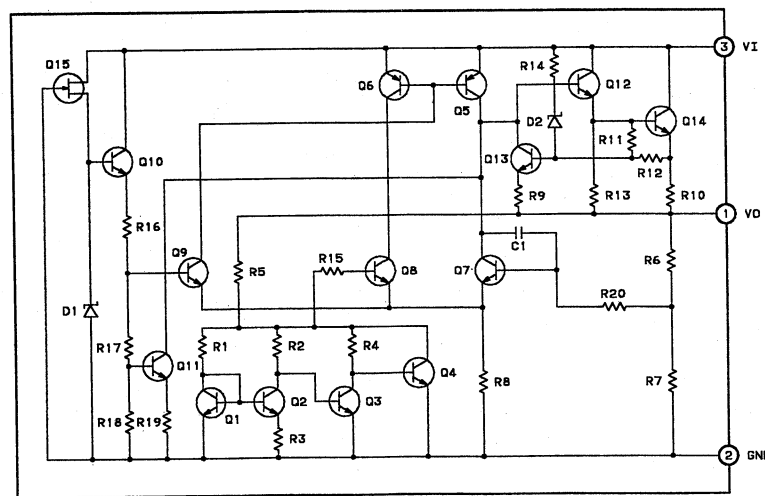


IC BLOCK DIAGRAM

IC701 TMP47C670N-1214 BLOCK DIAGRAM
(System Control Micon)

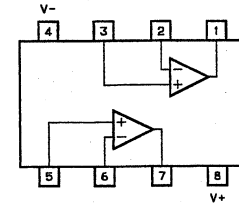


IC501 NJM78M18FA BLOCK DIAGRAM
(Constant Voltage Regulated Power Supply)

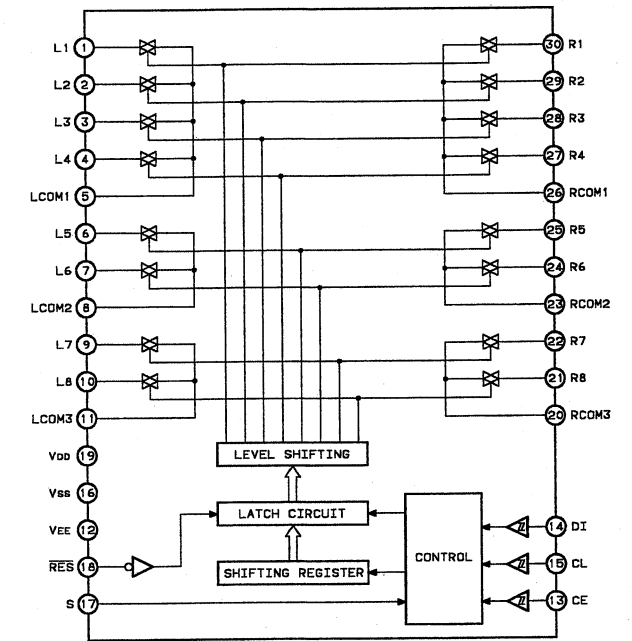


IC BLOCK DIAGRAM (Continued)

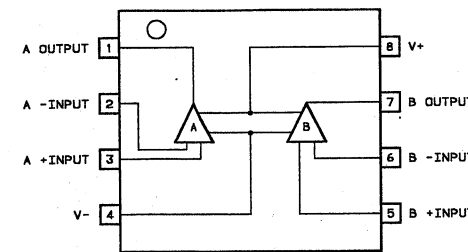
IC401 LA6462D BLOCK DIAGRAM
(Dual Operational Amp.)



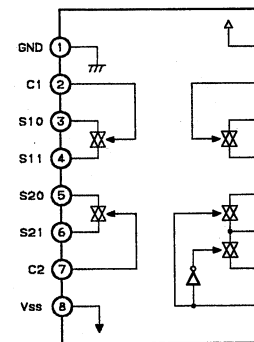
IC201 LC7821 BLOCK DIAGRAM
(Function Selector)



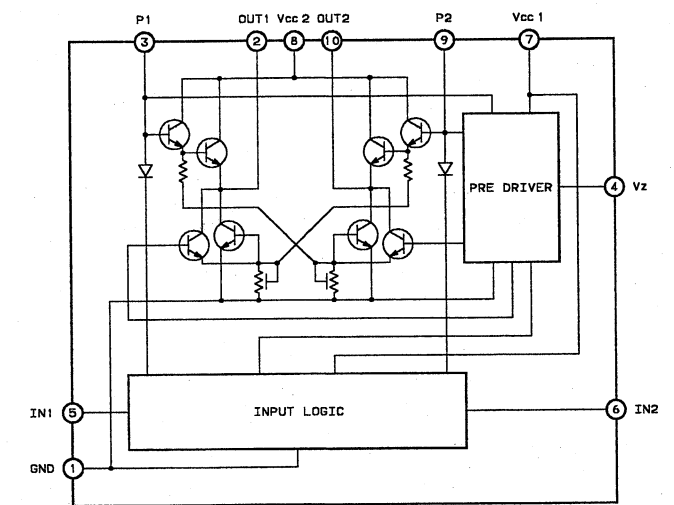
IC202/301 RC4558 BLOCK DIAGRAM
(Dual Operational Amp.)



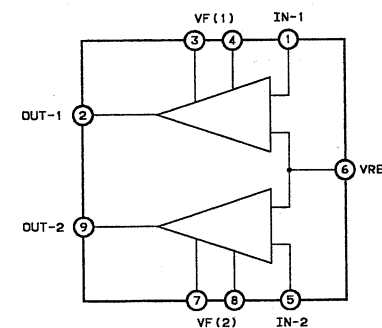
IC203/204 TC9214P BLOCK DIAGRAM
(Loudness/Source Direct Selector)



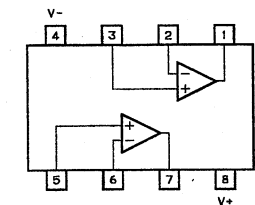
IC205 LB1641 BLOCK DIAGRAM
(Motor Driver)



IC403/404 LA2500 BLOCK DIAGRAM
(Class A Bias)



IC101 UPC4570C BLOCK DIAGRAM
(Dual Operational Amp.)

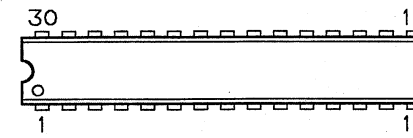


IC & TRANSISTOR LEAD IDENTIFICATION

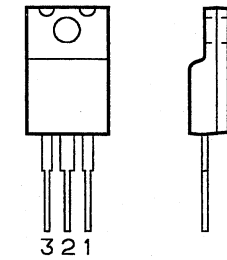
TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SC1570 2SC3331 2SC3792 2SC536			2SB560 2SD438		
2SA1209 2SC2911			2SA1249 2SC3117		
2SA1301 2SC3280			2SA1345 2SA1348 2SA1503 2SC3399 2SC3400 2SC536		
2SC3066			2SD1682		
TERMINAL NAME					
B → BASE C → COLLECTOR E → EMITTER					

IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

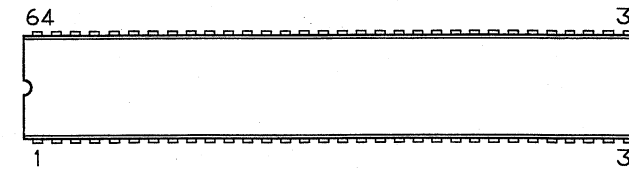
LC7821 TOP VIEW



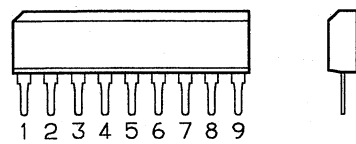
NJM78M18FA TOP/SIDE VIEWS



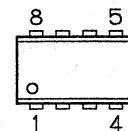
TMP47C670N-1214 TOP VIEW



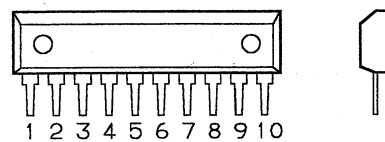
LA2500 FRONT/SIDE VIEWS



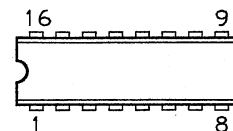
LA6462D TOP VIEW
RC4558 TOP VIEW



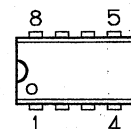
LB1641 FRONT/SIDE VIEWS



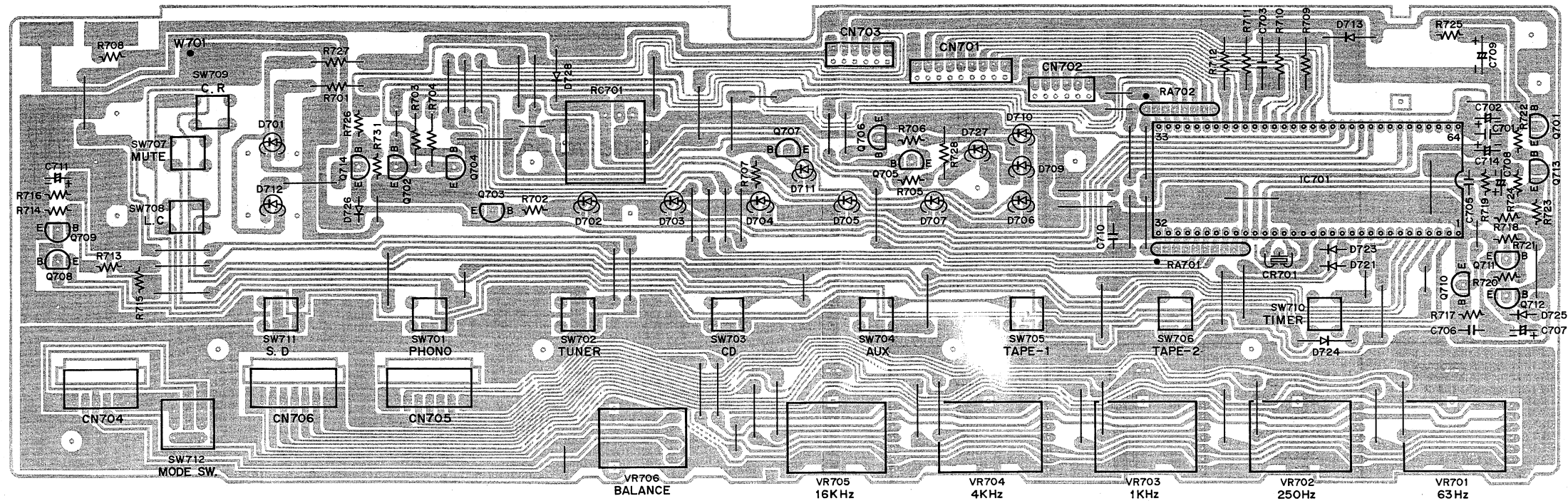
TC9214P TOP VIEW



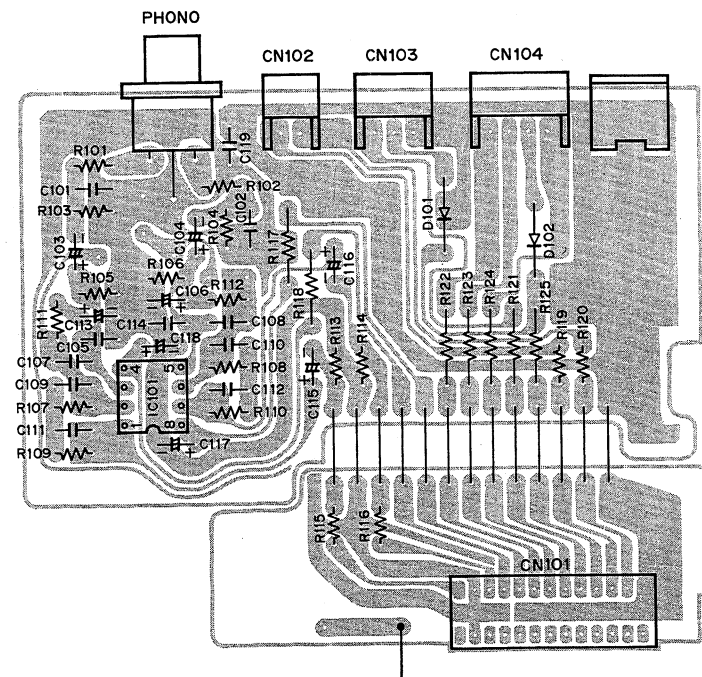
UPC4570C TOP VIEW



U-COM PRINTED CIRCUIT BOARD (BOTTOM VIEW)



INPUT PRINTED CIRCUIT BOARD (BOTTOM VIEW)



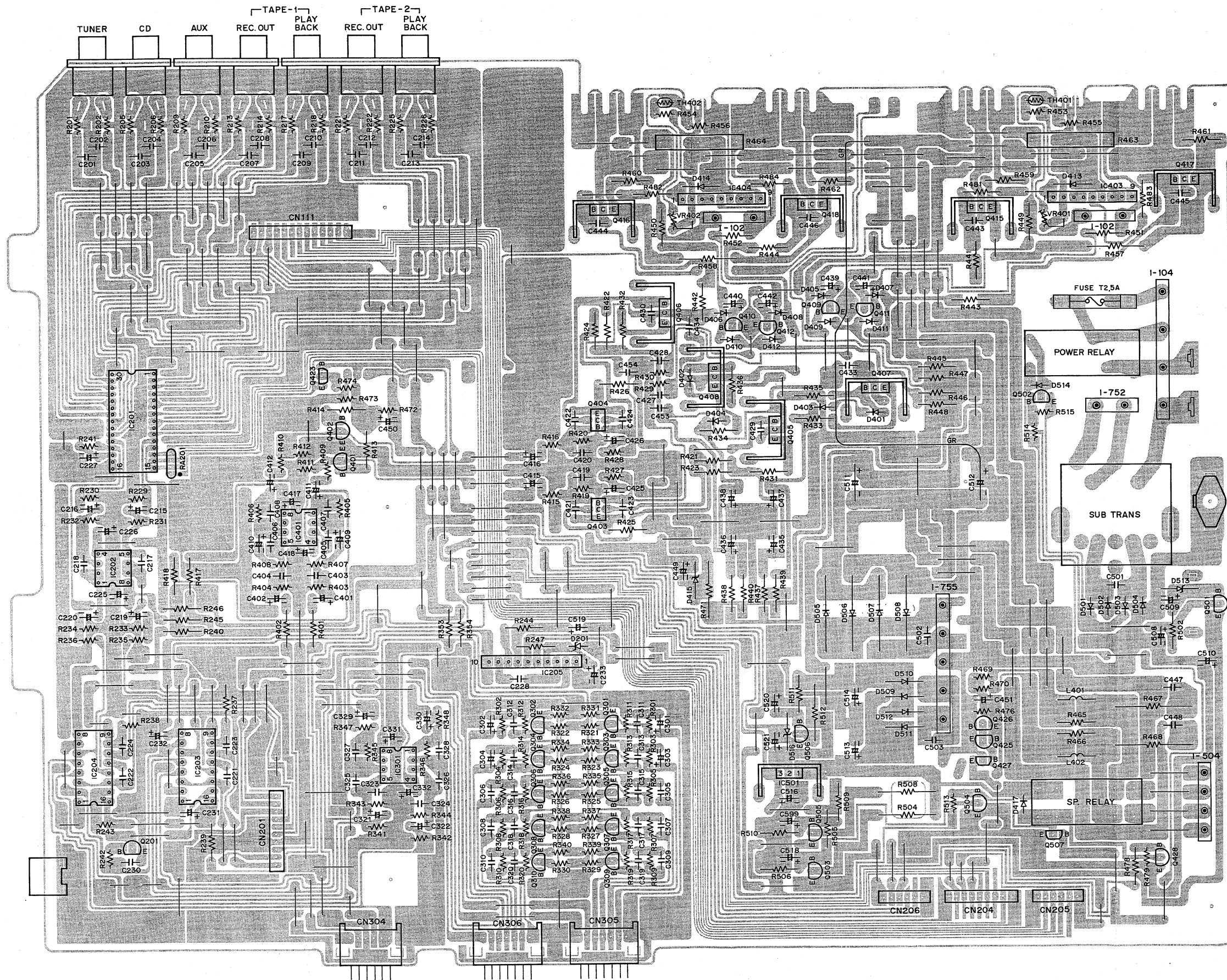
IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
IC101	UPC4570C	0V	0V	0V	-16.9V	0V	0V	0V	16.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	17.1V	17.2V	0V
IC201	LC7821	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V
IC202	RC4558	0V	0V	0V	-17.2V	0V	0V	0V	17.2V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC203,204	TC9214P	0V	4.6V	0V	0V	0V	0V	4.6V	-14.0V	0V	0V	0V	0V	0V	0V	0V	10.6V	0V	0V	0V	0V	
IC205	LB1641	0V	0.5V	0.7V	4.6V	0V	0V	12.9V	12.9V	0.7V	0.5V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC301	RC4558	0V	0V	0V	-13.7V	0V	0V	0V	13.8V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC401	LA6462D	0V	0V	0V	-15.9V	0V	0V	0V	15.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC403,404	LA2500	1.1V	0.4V	1.0V	1.0V	-1.0V	0V	-0.5V	-0.5V	-0.3V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	
IC501	NJM78M18FA	18.0V	0V	24.8V	0V	0V	0V	0V	0V	0V	1.2V	1.2V	1.2V	1.2V	0.1V	2.2V	0V	0V	0V	0V	2.3V	2.3V
IC701	TMP47C670N	0V	0V	0V	0V	0V	0V	0.2V	0V	0V	1.2V	1.2V	1.2V	1.2V	0.1V	2.2V	0V	0V	0V	0V	2.3V	2.3V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
		4.8V	4.6V	0V	0V	0V	0V	0V	5.0V	5.0V	0V	0V	0V	0V	4.6V	5.0V	0V	0V	5.0V	0V	5.0V	0V
		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
		4.9V	0V	5.0V	0V	0V	0V	5.0V	4.8V	4.8V	0V	0V	0V	0V	3.8V	0V	0V	0V	0V	0V	0V	0V
		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	
0V	0V	0V	4.9V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	

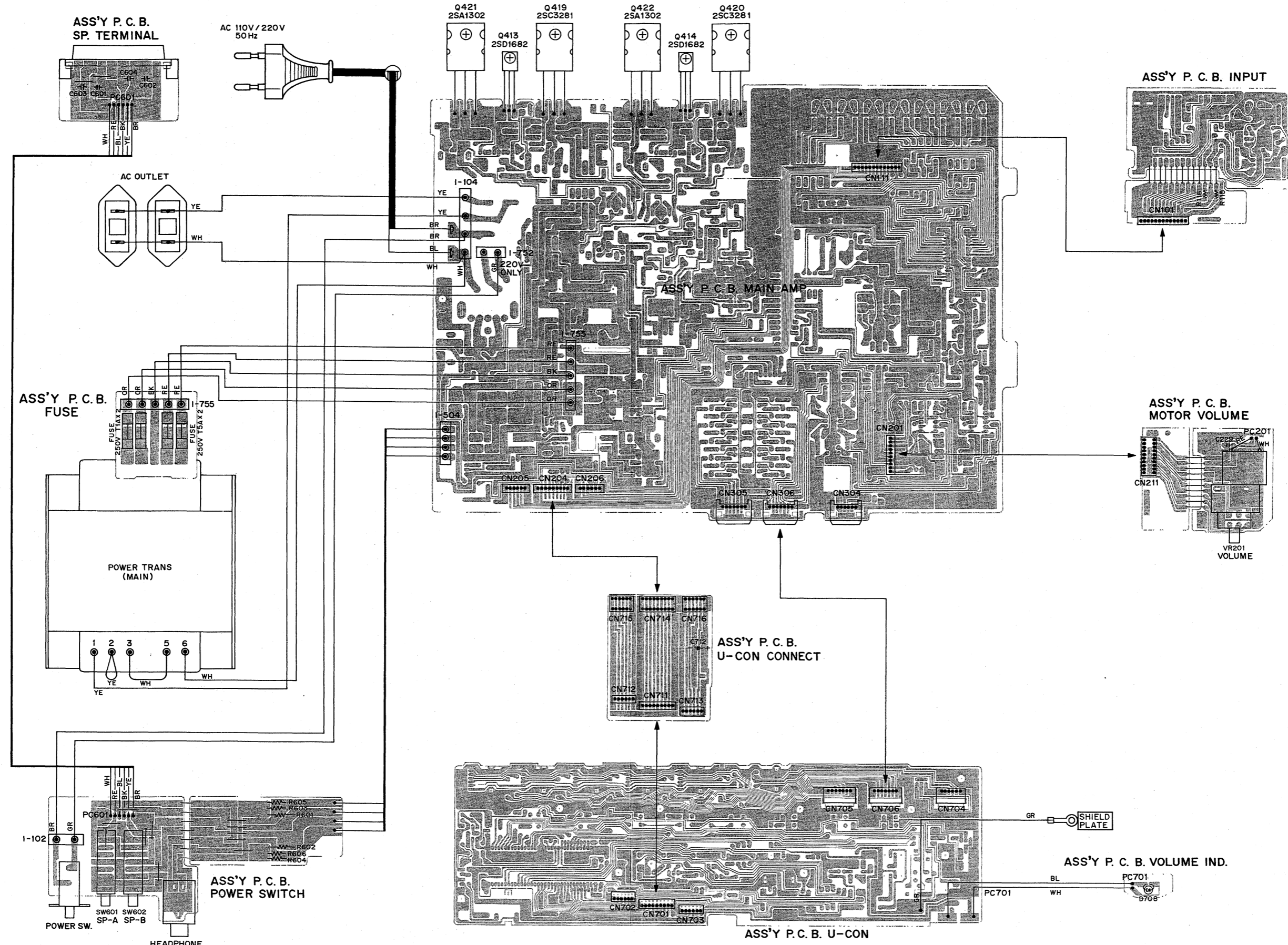
TRANSISTOR DC VOLTAGES

Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q201	2SC3399	2.6V	0V	0V	Q419,420	2SC3280	0.5V	51.6V	0V	Q702	2SC3399	4.9V	0.1V	0V
Q301,302	2SC1570	-0.9V	13.2V	-1.6V	Q421,422	2SA1301	-0.4V	-51.7V	0V	Q703	2SC536	0.7V	0V	0V
Q303,304	2SC1570	-0.6V	13.2V	-1.2V	Q423	2SA1348	5.0V	-4.2V	5.0V	Q704	2SC3399	0V	3.5V	0V
Q305,306	2SC3331	-0.1V	13.2V	-0.7V	Q425	2SC536	0V	5.0V	0V	Q705	2SC3400	0V	3.6V	0V
Q307,308	2SC3331	-0.1V	13.2V	-0.7V	Q426	2SC536	0V	5.0V	0V	Q706	2SC3400	0V	3.6V	0V
Q309,310	2SC3331	-0.1V	13.2V	-0.7V	Q427	2SA1503	5.0V	0V	5.0V	Q707	2SA1345	4.6V	-0.2V	0V
Q401,402	2SC3792	-4.2V	0V	0V	Q428	2SC536	0.7V	0V	0V	Q708	2SA1345	0V	0.1V	0V
Q403,404	2SC3066	0V	49.6V	-0.6V	Q501	2SC536	6.3V	10.6V	5.7V	Q709	2SC536	0V	0V	0V
Q405,406	2SA1209	49.3V	1.4V	51.2V	Q502	2SC536	0.7V	0V	0V	Q710	2SC536	0.1V	0.9V	0V
Q407,408	2SC2911	-50.6V	-1.3V	-51.4V	Q503	2SC536	5.6V	24.5V	5.0V	Q711	2SC536	0V	4.6V	0V
Q409,410	2SC536	0V	1.3V	0V	Q504	2SC536	0V	5.6V	0V	Q712	2SA608	5.7V	0V	5.4V
Q411,412	2SA608	0V	-1.3V	0V	Q505	2SD438	13.5V	23.7V	12.9V	Q713	2SA608	4.9V	0V	2.1V
Q413,414	2SD1682	0.2V	0.3V	-0.3V	Q506	2SB560	-18.7V	-23.3V	-18.0V	Q714	2SC536	0V	3.5V	0V
Q415,416	2SC3117	1.1V	52.5V	0.5V	Q507	2SC3399	4.8V	0V	0V					
Q417,418	2SA1249	-1.0V	-52.3V	-0.4V	Q701	2SC536	5.7V	4.9V	5.7V					

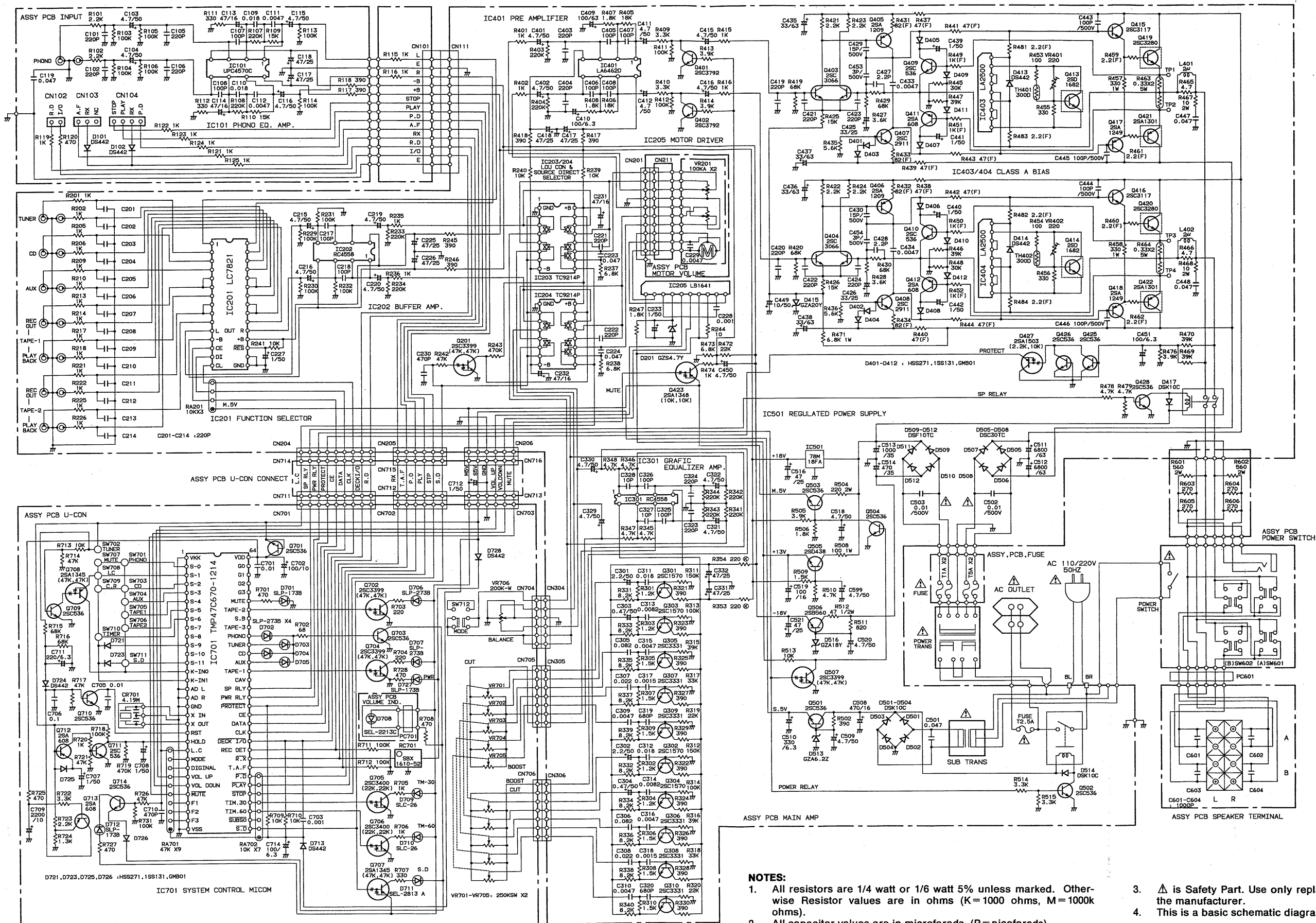
MAIN PRINTED CIRCUIT BOARD (BOTTOM VIEW)



POINT TO POINT WIRING DIAGRAM



SCHEMATIC DIAGRAM



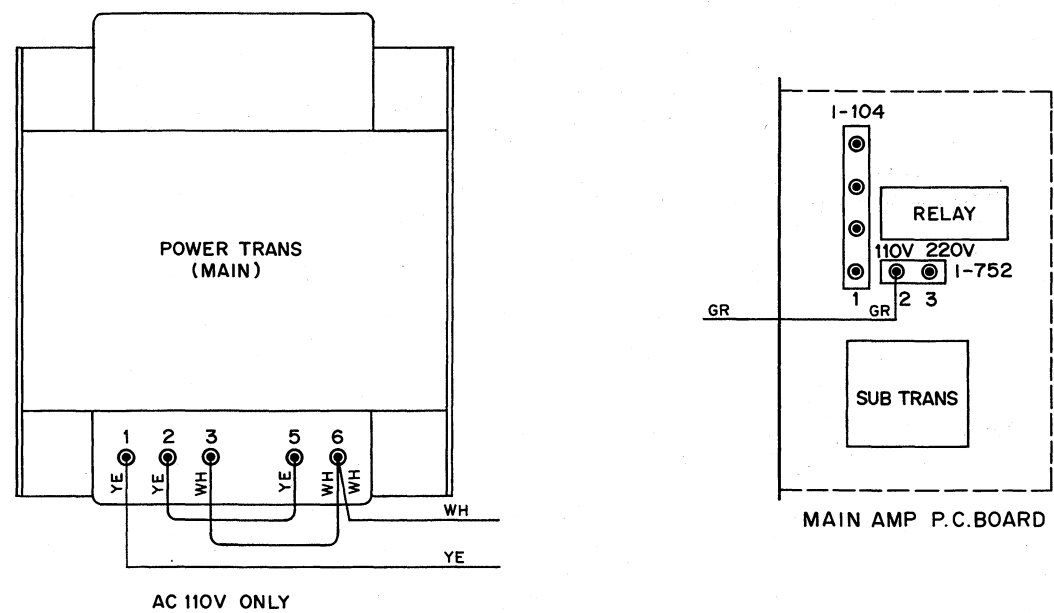
- NOTES:**
1. All resistors are 1/4 watt or 1/6 watt 5% unless marked. Otherwise Resistor values are in ohms (K=1000 ohms, M=1000k ohms).
 2. All capacitor values are in microfarads. (P=picofarads).
 3. Δ is Safety Part. Use only replacement parts recommended by the manufacturer.
 4. This is a basic schematic diagram.

IMPORTANT NOTE

The Amplifier has been Factory-adjusted for operation on 220 V AC. The voltage can be changed for operation on 110 V AC by making the following changes on the Amplifier inside.

1. Remove the AC plug from the wall outlet.
2. Remove the screws securing the cover.
3. Disconnect White lead from Power Trans (Main) Terminal No. 5, and then connect it to Power Trans (Main) Terminal No 6.
4. Disconnect one of the Yellow leads from the Power Trans (Main) Terminal No. 2, and connect its lead to the Power Trans (Main) Terminal No. 5.
5. Disconnect Green lead from Power Trans (Sub) Terminal No. 3, and then connect it to Power Trans (Sub) Terminal No. 2.

The Amplifier is now ready 110 V operation. DO NOT attempt to operate the Amplifier on 220 V. Damage will result !



SERVICE MANUAL



FISHER

INTEGRATED STEREO AMPLIFIER WITH RCA-9040 WIRELESS REMOTE CONTROL

CA-9040

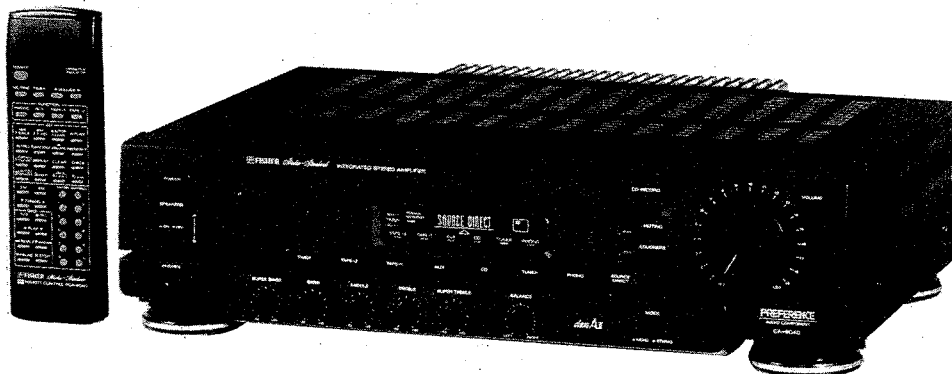
(EUROPE)

132 353 45

The original service manual of model CA-9040 reflects the Black version only. This supplement is intended to add the Titan Gray version to the original service manual of WM-570559.

Ref.No.	CA-9040 (Black)	CA-9040 (Titan Gray)	Description	Q'ty
	PACKAGE 620 210 1293	620 212 5121	Inner Carton	1
	ACCESSORIES 620 209 1594	620 212 5190	Label,Barcode	1
	CABINET			
6	620 209 0009	620 212 4933	Assy,Cabinet,Front	1
7	620 198 6969	620 212 3943	Assy,Foot	4
9	620 207 6614	620 212 4995	Cover,Top	1
12	620 204 7270	620 212 5022	Knob,Rotary	6
13	620 204 7317	620 212 5053	Knob,Touch	1
14	620 198 0622	620 212 4162	Button,Power	1
15	620 198 0752	620 212 4919	Button,Push	2
16	620 204 7294	620 212 5077	Button,Push	1
17	620 209 0412	620 212 5084	Button,Function	1
18	620 199 4025	620 212 5091	Button	2
41	620 186 6711	— — — —	Knob Volume Assy	1
	— — — —	620 212 5510	Assy,Knob,Rotary	1
55	620 208 9362	620 210 2443	Assy,PCB,Power Switch	1
58	620 208 9393	620 210 2412	Assy,PCB,Main Amplifier	1

Add this sheet Model CA-9040 Service Manual (WM-570559).



FISHER Hi-Fi Europa Vertriebs GmbH
Stahlgruberring 4 Tel: 089/420 45-0
8000 München 82 Tlx: 524033
March/'91/1,500/H

REFERENCE No. WM-570681

