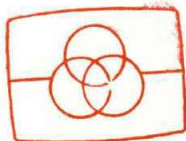


Car Stereo Amplifier 22DAP225/00

Service
Service
Service



Free service manuals
Gratis schema's

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Service Manual

12 V

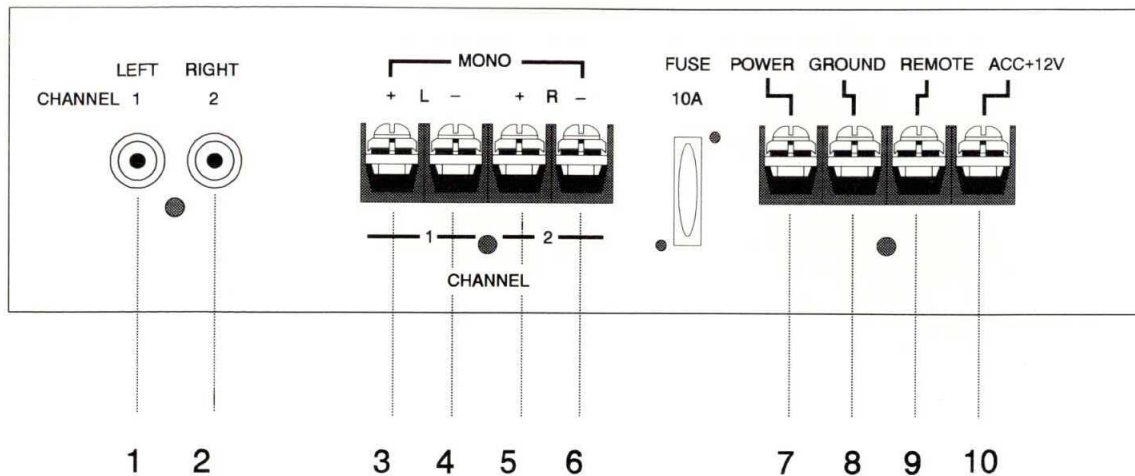


Technical Specifications

Power output	2 x 25 Watt (THD=0.08%) (in bridge mode 1 x 50 W)	Channel separation	80 dB
Maximum power	2 x 50 Watt (in bridge mode 1 x 100 W)	Signal-to-noise ratio	105 db (A-weighted)
Input sensitivity	0.1 - 2.0 V	Residual noise	0.6 mV (input shorted)
Input impedance	10 kΩ	Stand-by current	1 mA max.
Frequency response	5 Hz - 100 kHz (-3 dB)	Fuse size	10 A
CMR	40 dB	Weight	1.6 kg
		Size LxWxH	152.2 x 250 x 53 (mm) 59.9 x 98.5 x 20.9 (inches)



PHILIPS



Connections DAP225

- 1 - 2: Input RCA connectors (White=Left, Red=Right)
- 3 - 6: Speaker terminals
- 7 - 10: Power terminals

1-channel system connection:

(one 'bridged' channel)

- Line output (e.g. from radio set) 1 Left channel (white plug) to RCA connector 1
- Line output 1 Right channel (red plug) to RCA connector 2
- Line 2 outputs not connected
- Speaker channel 1-2 Left+Right: '+' to terminal 3; '-' to terminal 6

2-channel system connection:

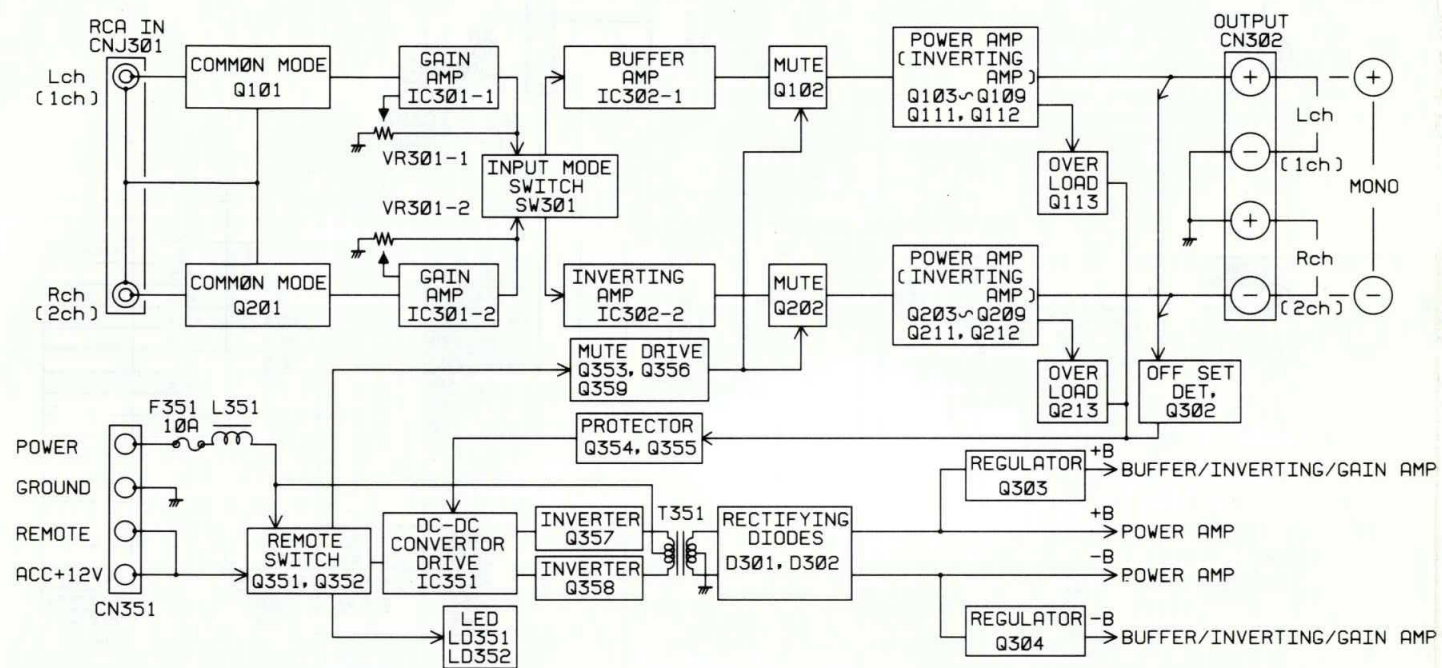
(two 'single' channels)

- Line 1 output (e.g. from radio set) Left channel (white plug) to RCA connector 1
- Line 1 output Right channel (red plug) to RCA connector 2
- Line 2 outputs not connected
- Speaker channel 1-2 Left: '+' to terminal 3; '-' to terminal 4
- Speaker channel 1-2 Right: '+' to terminal 5; '-' to terminal 6

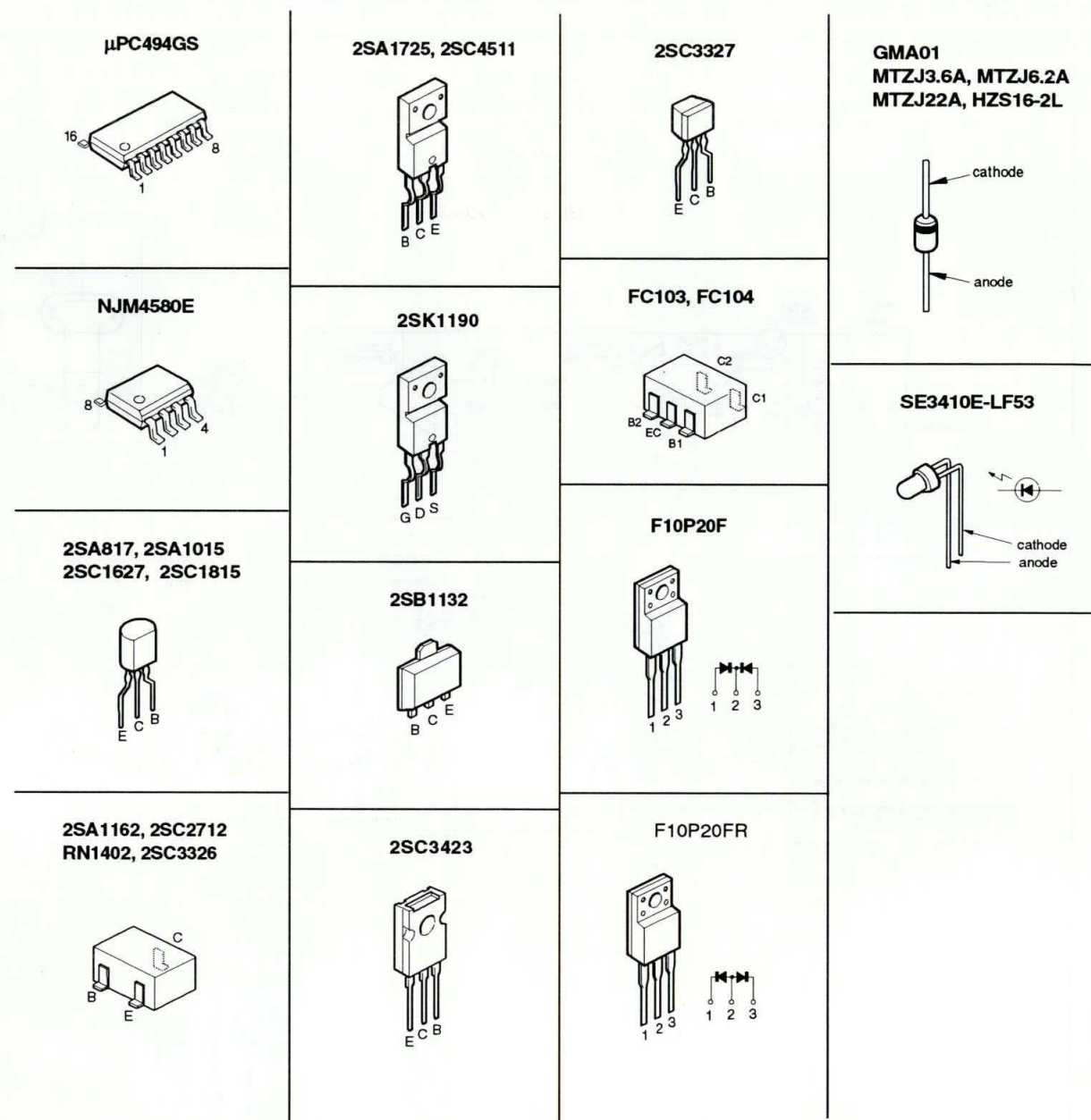
Power connections:

- +12V (permanent) to terminal 7
- Car ground to terminal 8
- 'Automatic aerial' or 'remote' output (e.g. from radio set) to terminal 9
- Terminal 10 (ACC+12V) is only used to control switch on/off other equipment (e.g. other amplifiers and/or equalizer)

Block diagram



Semiconductors lead lay-out

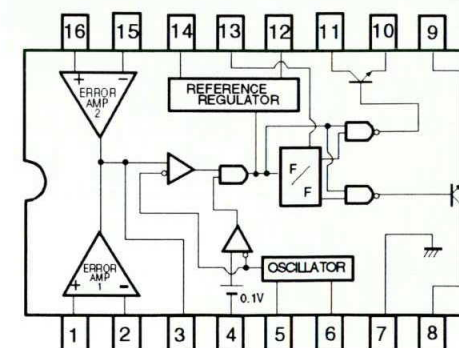


Accessories

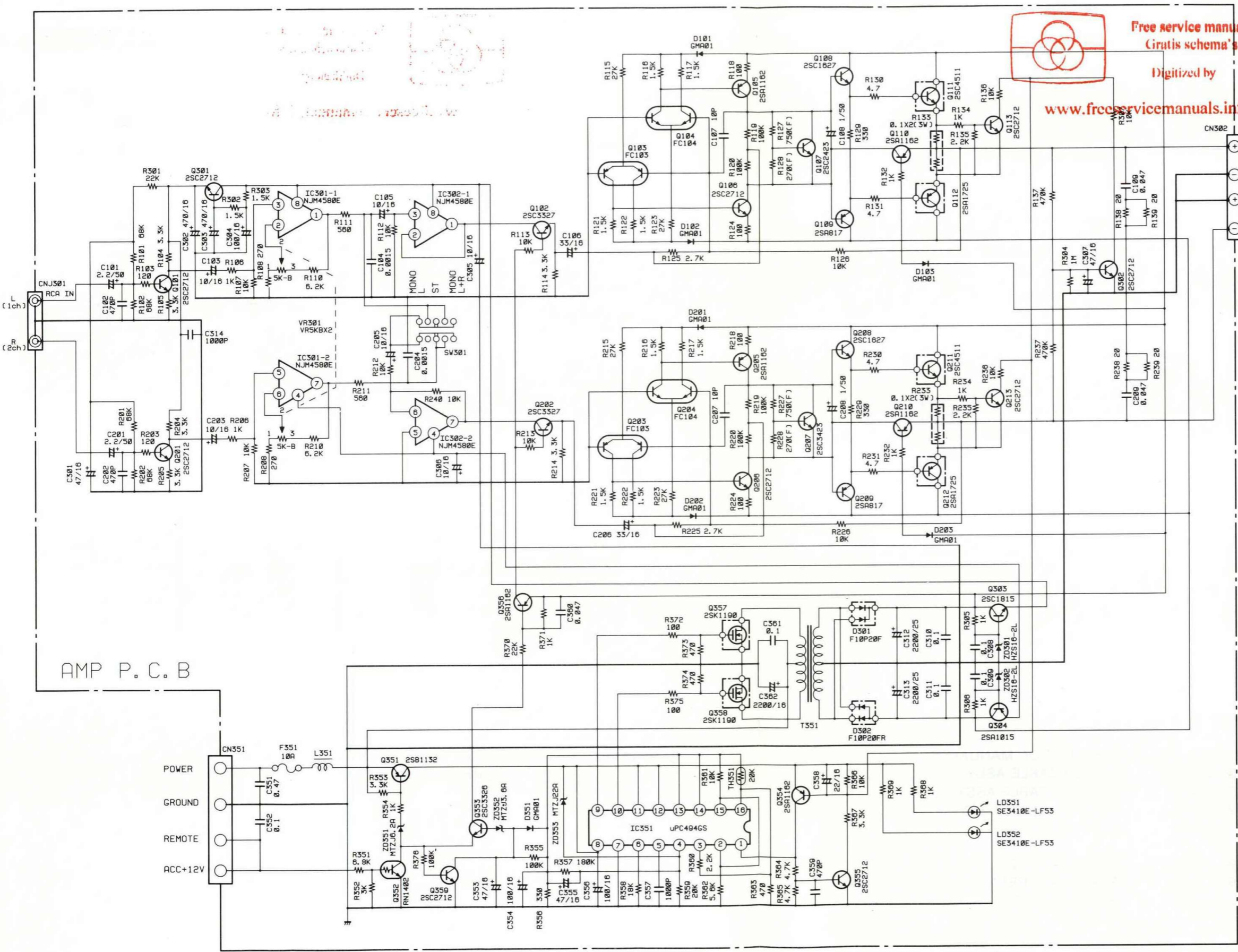
- | | |
|----------------|--------------------|
| 4822 736 22043 | INSTRUCTION MANUAL |
| 4822 321 62457 | POWER CABLE ASSY |
| 4822 321 62458 | GROUND CABLE ASSY |
| 4822 321 62464 | REMOTE CABLE ASSY |
| 4822 071 21003 | FUSE 10A |
| 4822 290 81655 | TERMINAL RED |
| 4822 290 81655 | TERMINAL GREEN |
| 4822 321 62456 | RCA ADAPTOR 4-POLE |

IC Block diagram

IC351 μPC494GS



Circuit diagram



Free service manuals
Circuit's schema's
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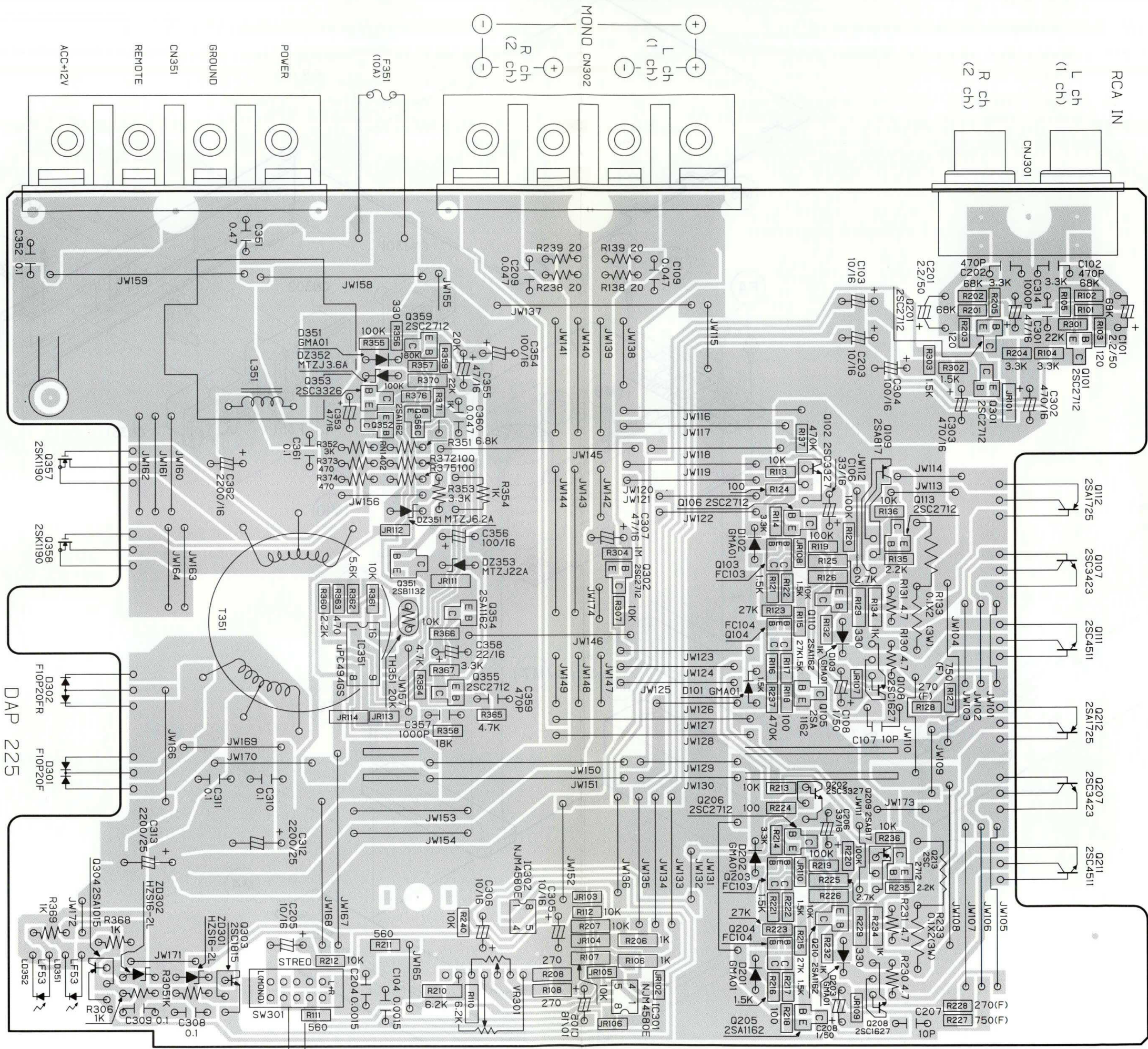
NO SIGNAL
TERMINAL VOLTAGE +B=14.4V

Ref. NO	Collector	Base	Emitter	
Q101, 201	10.4	5.3	4.7	
Q301	16.1	15.7	15.1	
Q102, 202	0	0.0(0)	0	(MUTE)
Q103, 203	-20.8	0	0.6	
Q104, 204	20.8	0	-0.6	
Q105, 205	1.1	20.8	21.4	
Q106, 206	-1.1	-20.8	-21.4	
Q107, 207	1.1	0.6	-1.1	
Q108, 208	21.9	1.1	0.6	
Q109, 209	-21.9	-1.1	-0.6	
Q110, 210	-1.1	0	0	
Q111, 211	21.9	0.6	4mV	
Q112, 212	-21.9	-0.6	4mV	
Q113, 213	14.4	0	0	
Q302	14.4	4mV	4mV	
Q303	21.9	16.8	16.1	
Q304	-21.9	-16.8	-16.1	
Q351	14.4(0)	13.7(14.4)	14.4	(REM OFF)
Q352	0(0.5)	3.0(0)	0	(REM OFF)
Q353	0	0.7(0)	0(0.5)	(REM OFF)
Q354	0(14.4)	14.4(13.0)	14.4	(PROTECT)
Q355	14.4(0)	0(0.7)	0	(PROTECT)
Q356	21.9(0)	21.3(0)	21.9(0)	(MUTE)
Q359	2.5(0)	0(0.6)	0	(REM OFF)

Ref. NO	Source	Drain	Gate	
Q357, 358	0	14.1	4.1(0)	(PROTECT)

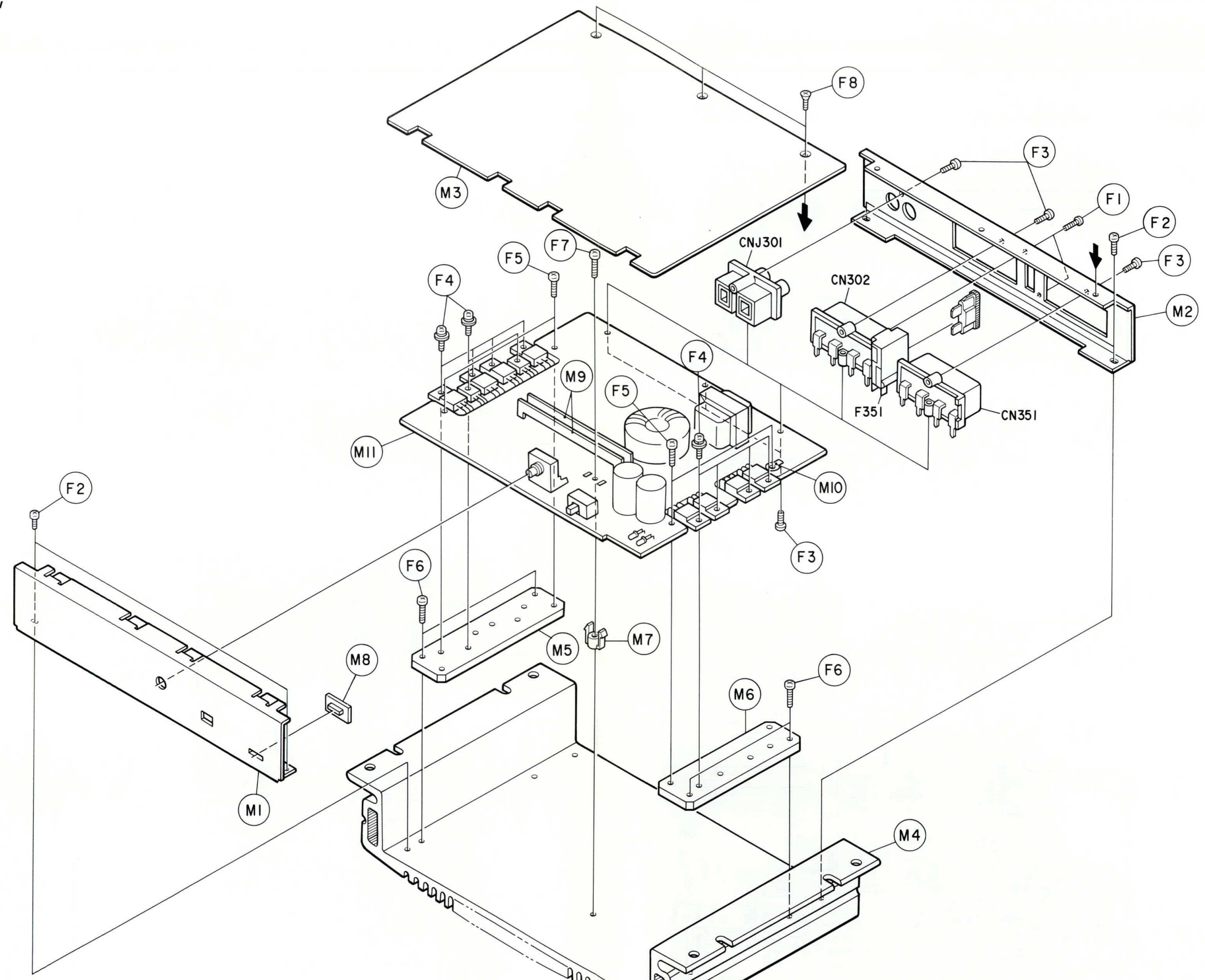
Ref. NO	IC351	IC301	IC302
1	0(14.4)	0	0
2	2.5	0	0
3	0.1(5)	0	0
4	0.5	-16.1	-16.1
5	1.8	0	0
6	4	0	0
7	0	0	0
8	14.4	16.1	16.1
9	5.4	—	—
10	5.4	—	—
11	14.4	—	—
12	14.4	—	—
13	5	—	—
14	5	—	—
15	2.5	—	—
16	0.25	—	—

(PROTECT)



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Exploded view







Mechanical parts list

M1	4822 459 50857
M2	4822 423 41259
M4	4822 511 61025
M7	4822 462 72032
M8	4822 381 11522
M9	4822 466 83115
M10	4822 466 83118

(See for CN302, CN351, CNJ301 and F351
the electrical partslist)

Electrical parts list

For resistors/capacitors/coils not mentioned here, refer to: Standard Component Catalogue
4822 736 53404.

					
D101	4822 130 33993	GMA01	Q203	4822 130 63581	FC103
D102	4822 130 33993	GMA01	Q204	4822 130 63582	FC104
D103	4822 130 33993	GMA01	Q205	4822 130 61311	2SA1162Y
D201	4822 130 33993	GMA01	Q206	4822 130 61355	2SC2712Y
D202	4822 130 33993	GMA01	Q207	4822 130 62711	2SC3423Y
D203	4822 130 33993	GMA01	Q208	4822 130 41507	2SC1627Y
D301	4822 130 80678	F10P20F	Q209	4822 130 60693	2SA817
D302	4822 130 80679	F10P20FR	Q210	4822 130 61311	2SA1162Y
D351	4822 130 33993	GMA01	Q211	4822 130 63589	2SC4511Y
LD351	4822 130 83691	LED 3410E	Q212	4822 130 63588	2SA1725Y
LD352	4822 130 83691	LED 3410E	Q213	4822 130 61355	2SC2712Y
ZD301	4822 130 83686	HZS16-2L	Q301	4822 130 61355	2SC2712Y
ZD302	4822 130 83686	HZS16-2L	Q302	4822 130 61355	2SC2712Y
ZD351	4822 130 83251	MTZJ6.2A	Q303	4822 130 41947	2SC1815Y
ZD352	4822 130 80316	MTZJ3.6A	Q304	4822 130 42959	2SA1015Y
ZD353	4822 130 83685	MTZJ22A	Q351	4822 130 63579	2SB1132R
			Q352	4822 130 63578	RN1402
			Q353	5322 130 63229	2SC3326A
			Q354	4822 130 61311	2SA1162Y
			Q355	4822 130 61355	2SC2712Y
			Q356	4822 130 61311	2SA1162Y
Q101	4822 130 61355	2SC2712Y	Q357	4822 130 62976	2SK1190
Q102	4822 130 63284	2SC3327A	Q358	4822 130 62976	2SK1190
Q103	4822 130 63581	FC103	Q359	4822 130 61355	2SC2712Y
Q104	4822 130 63582	FC104			
Q105	4822 130 61311	2SA1162Y			
Q106	4822 130 61355	2SC2712Y	IC301	4822 209 33467	NJM4580E
Q107	4822 130 62711	2SC3423Y	IC302	4822 209 33467	NJM4580E
Q108	4822 130 41507	2SC1627Y	IC351	4822 209 33466	UPC494GS
Q109	4822 130 60693	2SA817			
Q110	4822 130 61311	2SA1162Y			
Q111	4822 130 63589	2SC4511Y			
Q112	4822 130 63588	2SA1725Y			
Q113	4822 130 61355	2SC2712Y			
Q201	4822 130 61355	2SC2712Y			
Q202	4822 130 63284	2SC3327A			
			Miscellaneous		
			CN302	4822 290 81657	TERM.4-P
			CN351	4822 290 81657	TERM.4-P

Miscellaneous

CNJ301	4822 290 81656	JACK,2-P
F351	4822 256 30515	FUSE HOLD.
	4822 071 21003	FUSE 10A
R133	4822 117 11191	0.1E*2 3W
R233	4822 117 11191	0.1E*2 3W
SW301	4822 277 21738	SLIDE SW.
T351	4822 146 21782	TRANSF.
TH351	4822 111 92181	THERM. 20K
VR301	4822 100 30192	5K*2 LOG