



CD Micro Hi-Fi

Service Manual

MODEL: MC-2180

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ALIGNMENT PROCEDURE

TUNER PART

Instruments and tools

1. MW /FM if sweep generator
2. MW /FM standard signal generator (with FM stereo) and antenna loop
3. AC milli voltmeter (VTVM)
4. Oscilloscope
5. Frequency counter
6. Non-metallic alignment tools

Important

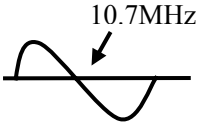
Control setting

1. Check the power source voltage
2. The input signal should be kept as low as possible to avoid AGC and AFC action.

FM Section

Control setting

1. Band selector at FM position.
2. Deviation of FM standard generator is 22.5KHz, Modulating frequency 1KHz.

TYPE	INSTRUMENTS CONNECTION	STEP	FREQUENCY	DIAL SETTING	ADJUSTMENT
IF	FM IF sweep generator output through a 20PF CAP. Connects to IC U6 PIN4 and input connects to IC U8 PIN 19 DET out.	1	10.7MHz	Preset 1 At 87.5MHz	Adjust T3 for Max. curve and T11 for centre of 10.7MHz repeat adjust T3 and T11 to get best curve. 
LOCAL OSC	FM standard gen. Connects to TP5, VTVM connects to TP7 and GND, DC volt meter connects to CN21	2	108.0MHz	Preset 5 At 108.0MHz	Adjust C116. For $\pm 0.2V$ 8V1 $\pm 0.2V$
		3	87.5MHz	Preset 1 At 87.5MHz	Check the DC volt meter at 2.3V adjust L3 For $2.3V \pm 0.1V$
RF Tracking	Same as above	4	87.9MHz	Preset 2 At 90.1MHz	Adjust L5 for maximum output
		5	105.9MHz	Preset 4 At 106.1MHz	Adjust C109 for maximum output
		6	Repeat step 4 and 5		

FM MPX section

Control setting

1. Band selector set to FM-Stereo position

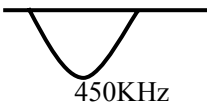
TYPE	INSTRUMENTS CONNECTION	STEP	FREQUENCY	DIAL SETTING	ADJUSTMENT
	NO need to adjust				

MW Section

Control setting

1. Band selector is set to MW position.
2. Modulation is 30% at 400Hz for all frequencies.

MW Alignment

TYPE	INSTRUMENTS CONNECTION	STEP	FREQUENCY	DIAL SETTING	ADJUSTMENT
IF	MW IF sweep GEN. Output connect to the loop antenna. Input connects to IC U8 PIN 19	1	450KHz	Preset at 1620KHz	Adjust T10 and for 450KHz maximum output 
LOCAL OSC	MW standard GEN connect to loop antenna. DC volt meter connects to TP3	2	1620KHz	Preset 10 At 1620KHz	Check the DC VOLT 7.0V +0.2 – 0.1
		3	522KHz	Preset 6 At 522KHz	Adjust T4 for meter at 1.4V – 1.5V
RF tracking		4	612KHz	Preset 7 At 612KHz	Adj MW coil on ferrite bar for MAX output
		5	1404KHz	Preset 9 AT 1404KHz	Adjust C135 for maximum output
		6	Repeat step 4 and 5		

LW Section

TYPE	INSTRUMENTS CONNECTION	STEP	FREQUENCY	DIAL SETTING	ADJUSTMENT
LOCAL OSC	MW standard GEN. Connects to loop antenna. DC volt meter connects to TP3	1	281KHz	Preset 15 At 281KHz	Adjust C99, for 7.0V ±0.2V
		2	146KHz	Preset 11 At 146KHz	Check the DC volt meter at 0.9V ±0.1
RF Tracking	Same as above	3	164KHz	Preset 12 At 164KHz	ADJ LW coil on ferrite bar for max output
		4	272KHz	Preset 14 At 272KHz	Adjust C99 for maximum output
		5	Repeat step 3 and 4		

CASSETTE PART

Instrument and tools

1. AC milli voltmeter (VTVM)
2. Oscilloscope
3. Frequency counter
4. Non-metallic alignment tools
5. Teac test tape: MTT-111N Flutter & MTT-113CN AZIMUTH

Control setting

1. Function selector set at tape position.

Tape speed

1. Play back the standard testing tape MTT-111N on deck.
2. Connect a frequency counter across the output of the speaker.
3. Adjust the variable motor VR to 3KHz +3 -2%.

Head azimuth

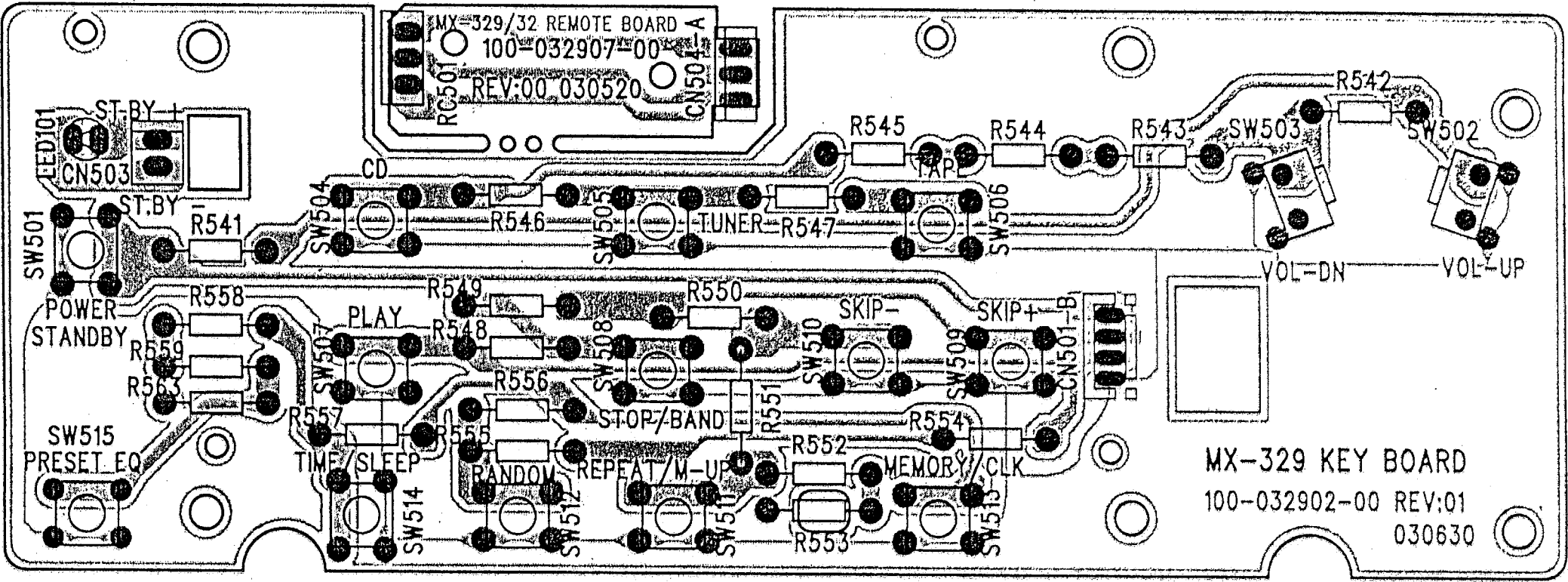
1. Playback the standard testing tape MTT-113CN on deck.
2. Connect an oscilloscope /VTVM across the output of the speaker.
3. Adjust the screw at the playback head for maximum output and obtain a balance both channels.

AC Recording frequency

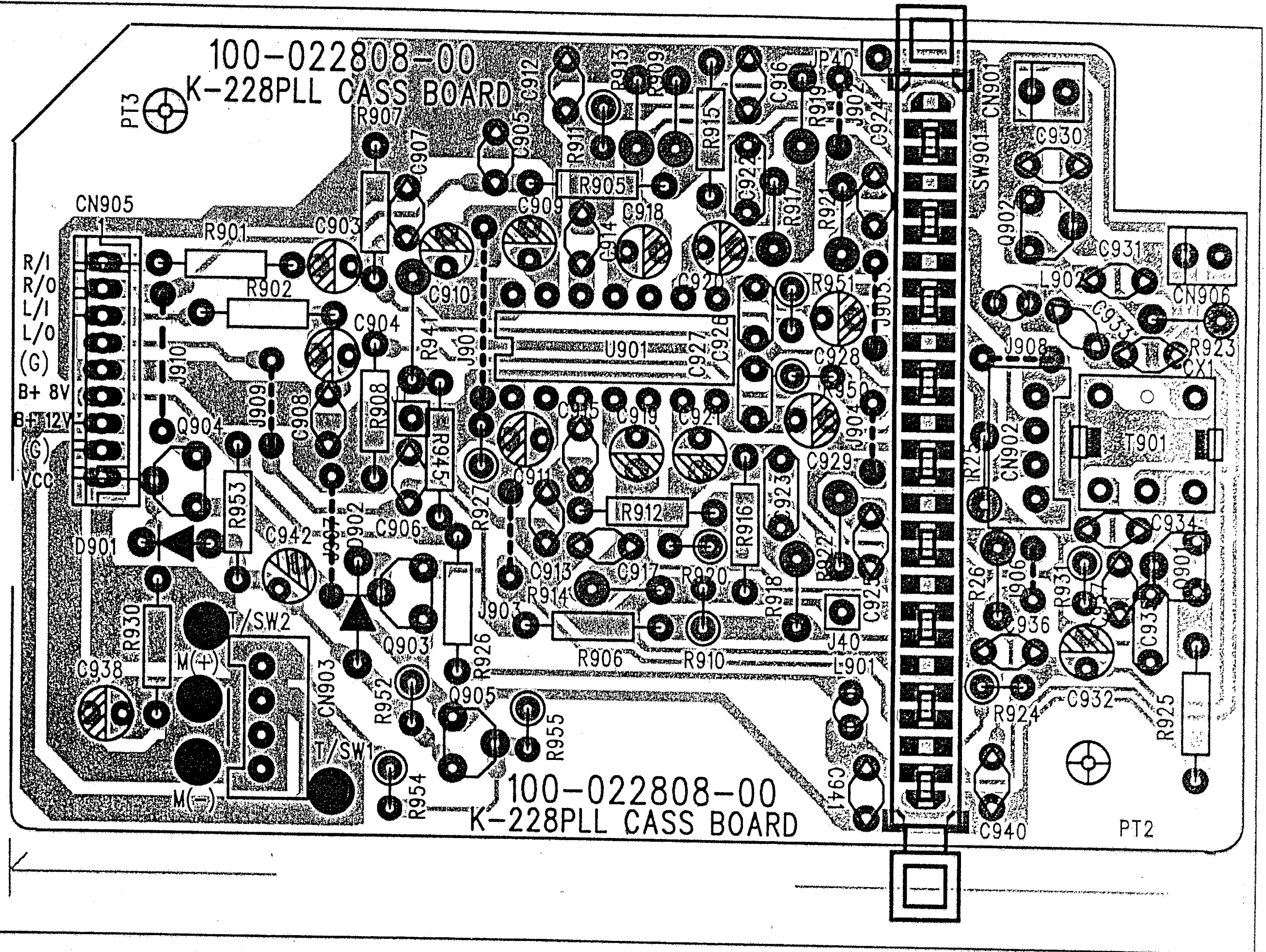
1. Connect a frequency counter through a 100K OHM resistor to R173.
2. Adjust T1 to 63KHz beat cut 1 position.

PCB BOARD

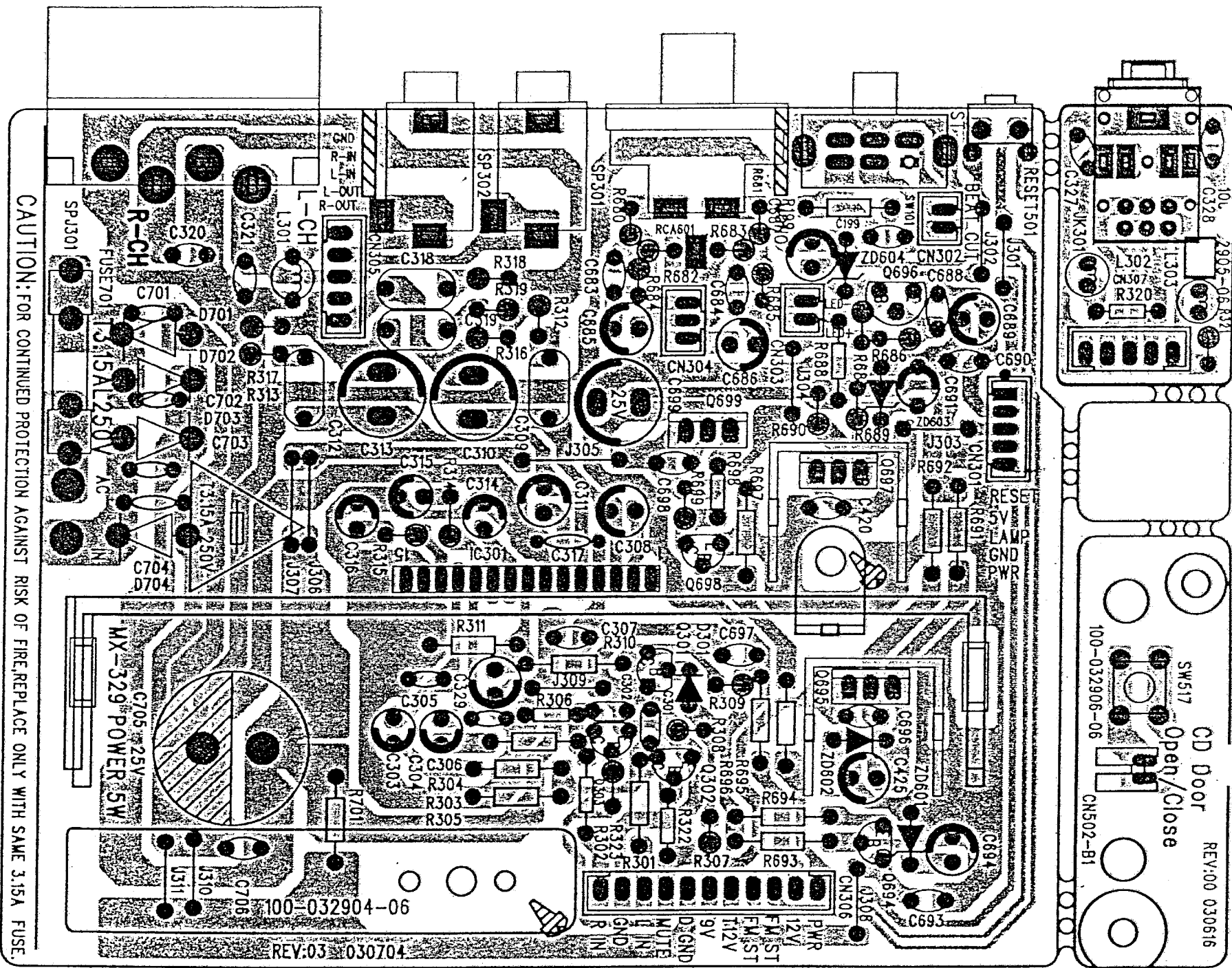
Key board

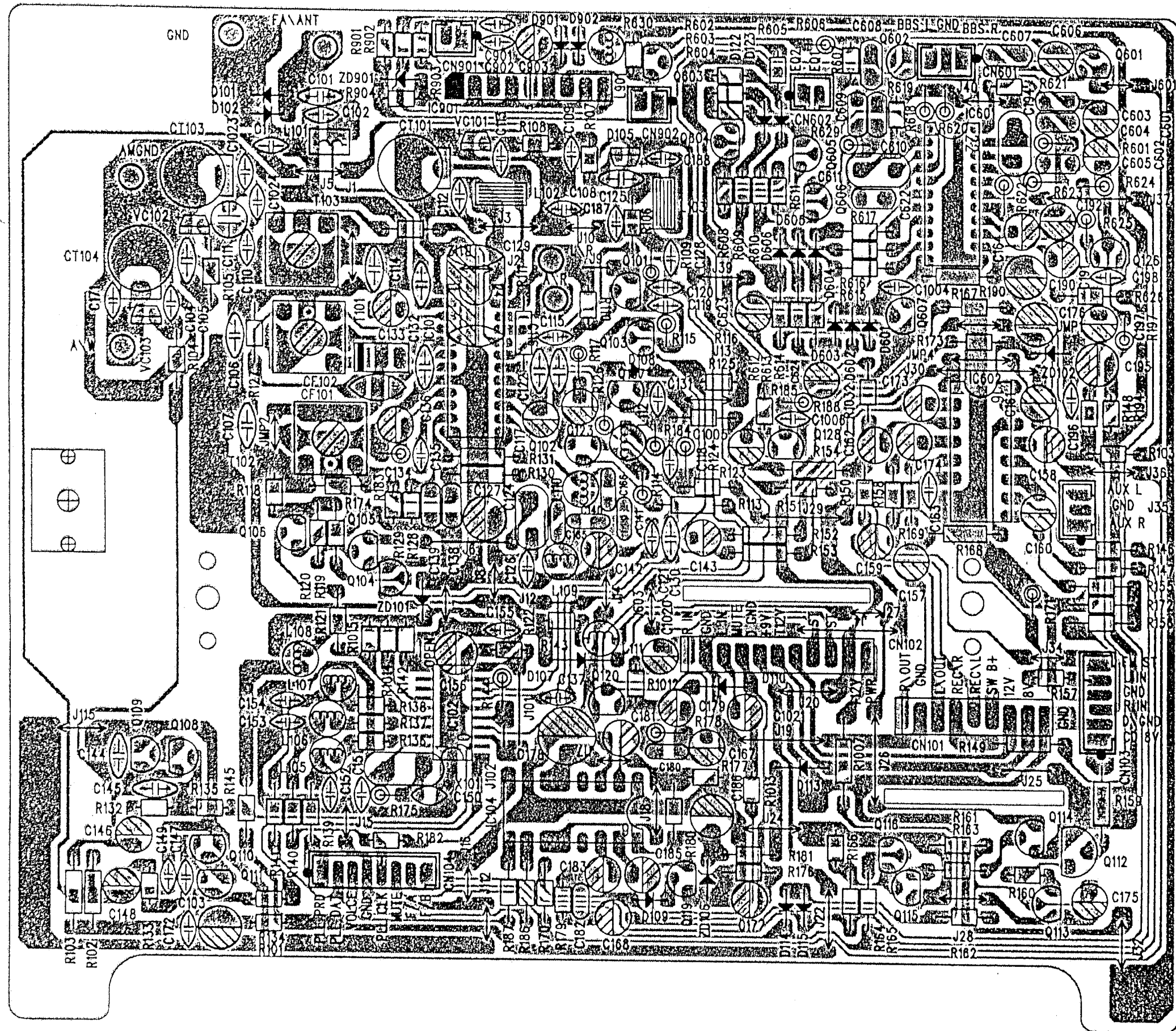


Cass board

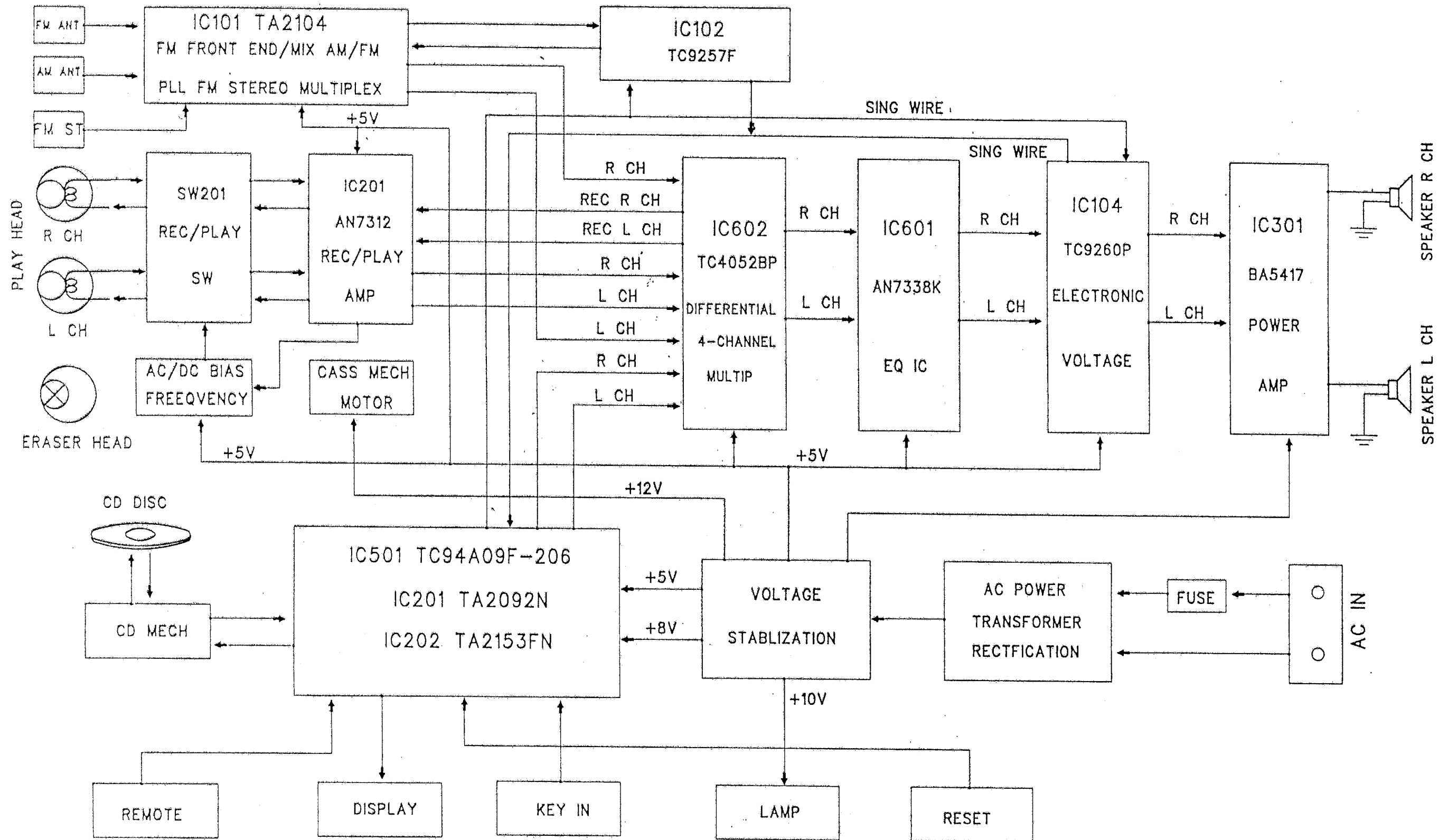


Power board

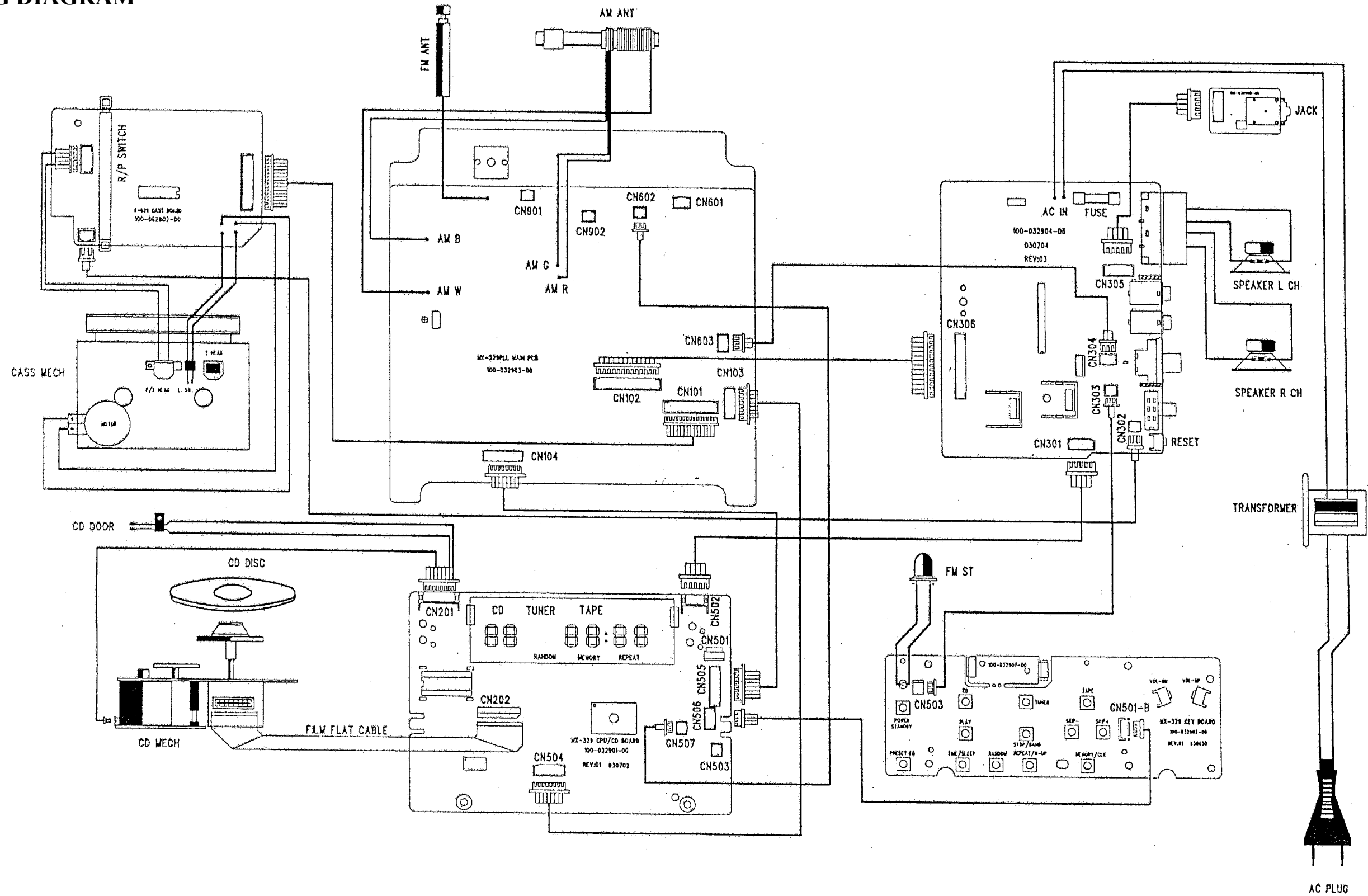




BLOCK DIAGRAM

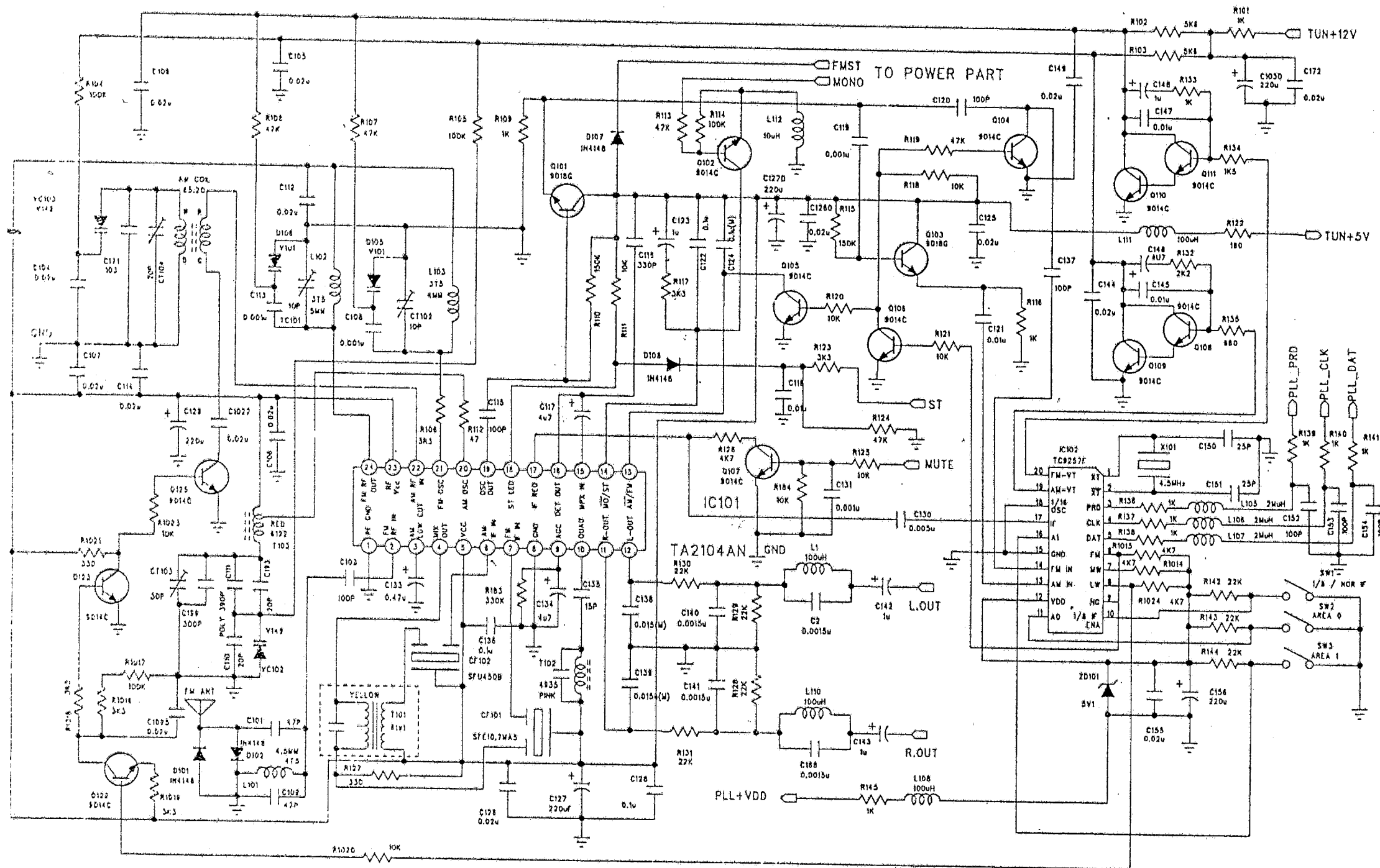


WIRING DIAGRAM

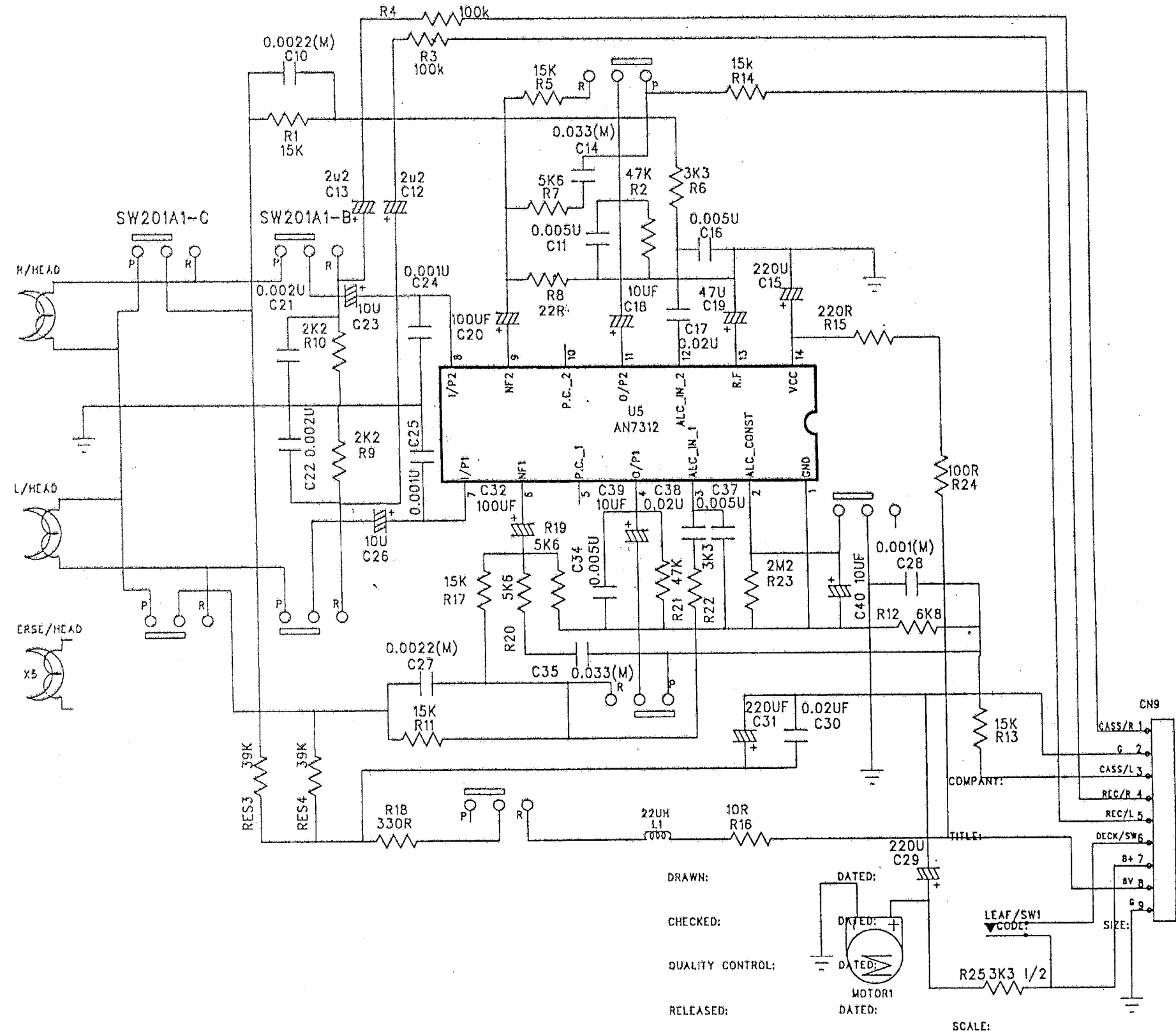


CIRCUIT DIAGRAM

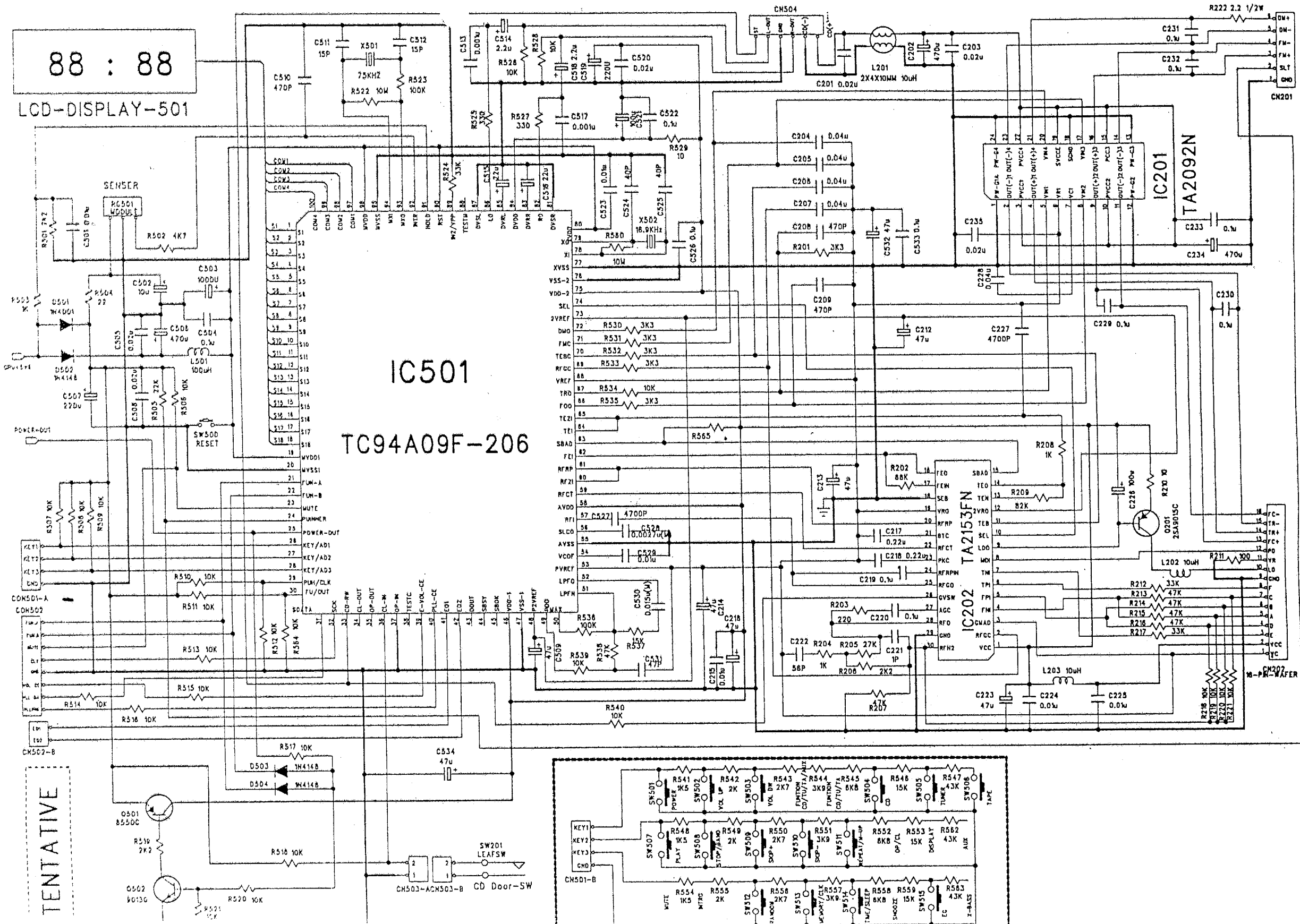
Tuner board



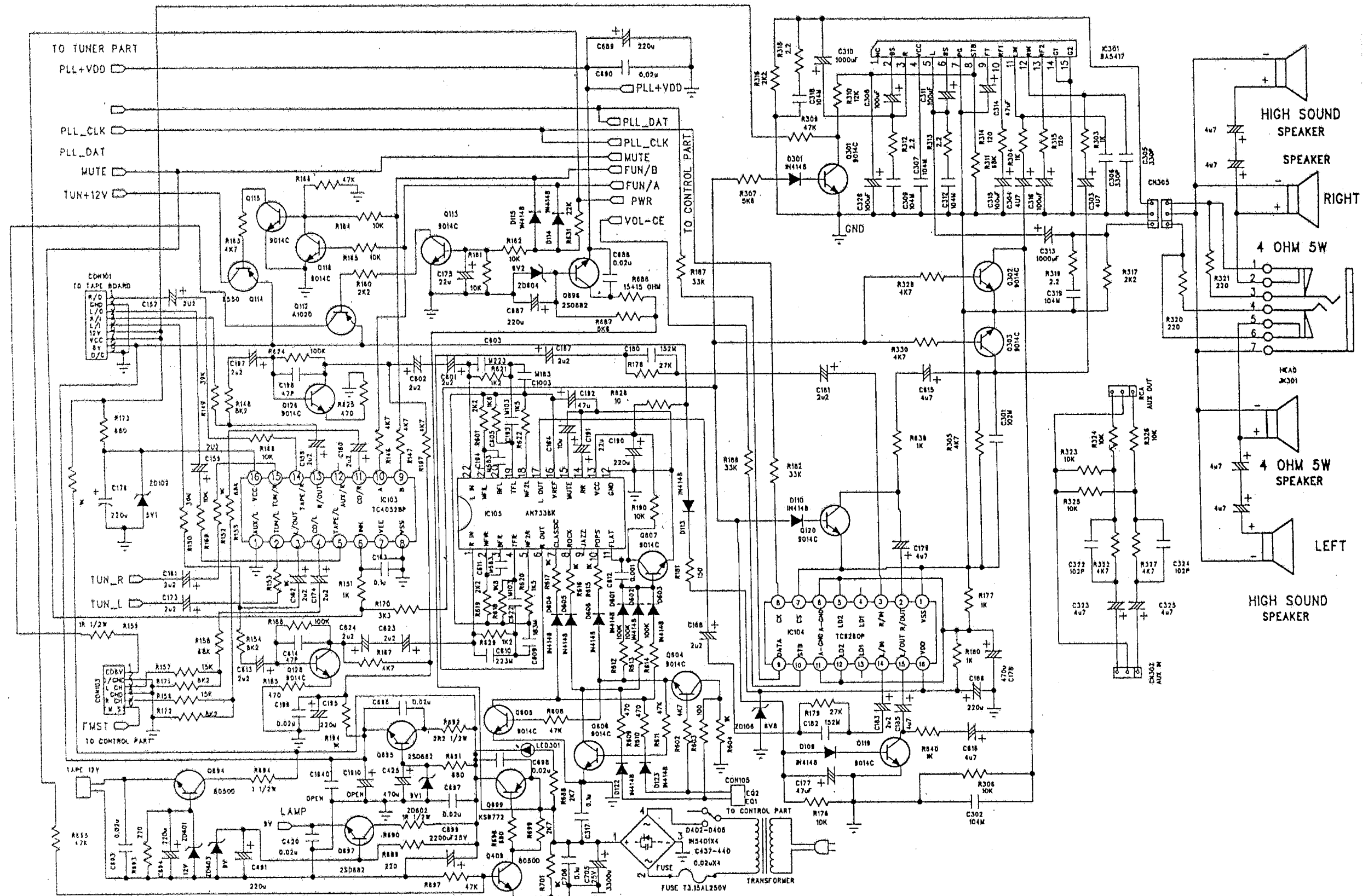
TENTATIVE



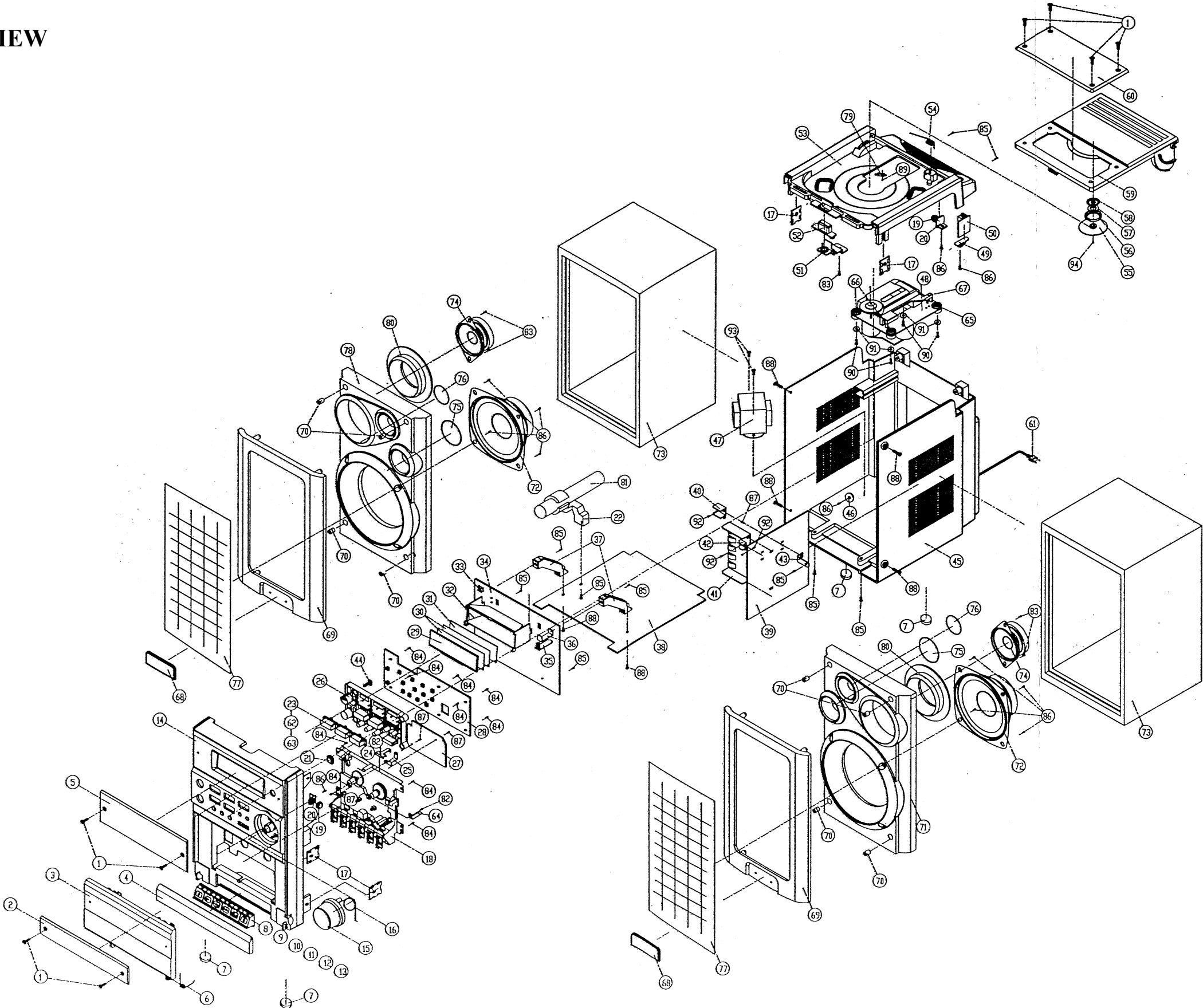
CD CPU



Power board



EXPLODED VIEW



PART LIST

No	Part name	Qty
1	Screw (Hexagon socket)	8
2	Cass door lens	1
3	Cass door cover	1
4	Cass knob door	1
5	Display lens	1
6	Cass door spring	1
7	Rubber foot	4
8	Cass knob “recorder”	1
9	Cass knob “Play”	1
10	Cass knob “REV”	1
11	Cass knob “F.F”	1
12	Cass knob “STOP /Eject”	1
13	Cass knob “PAUSE”	1
14	Front cab.	1
15	Volume knob	1
16	Volume knob spring	1
17	Fixing plate	4
18	Cass deck	1
19	Gear	2
20	Gear holder	2
21	Sensor lens	1
22	Bar holder	1
23	Function knob “CD”	1
24	Cass P.C.B. MTG BKT “D”	1
25	Cass P.C.B. MTG BKT “I”	1
26	Power knob	1
27	Cassette PCB assy	1
28	Key PCB assy	1
29	LCD display	1
30	Backlight film	2
31	Backlight plate	1
32	Display BKT	1
33	Heat Sink	1
34	Display PCB assy	1
35	P.C.B. remote assy	1
36	PCB BKT	1
37	PCB MTG BKT	2
38	Main PCB assy	1
39	Power PCB assy	1
40	Heat sink	1
41	Heat sink	1
42	Heat sink	1

No	Part name	Qty
43	MKG. BKT	1
44	Power lens	1
45	Back CAB	1
46	Fiber washer	1
47	Transformer	1
48	CD Mechanism	1
49	Headphone jack MTG BKT	1
50	Headphone PCB assy	1
51	CD door open knob BKT	1
52	CD door open knob	1
53	CD base	1
54	CD door spring	1
55	Chucking plate	1
56	Chucking plate holder	1
57	Magnet ring	1
58	Magnet ring holder	1
59	CD door	1
60	CD door lens	1
61	Power cord	1
62	Function knob “tuner”	1
63	Function knob “tape”	1
64	Recording plate	1
65	CD rubber cushion	2
66	CD rubber cushion	2
67	CD lends cover	1
68	Badge	1x2
69	Speaker frame	1x2
70	Speaker screw	4x2
71	Speaker front cab “R”	1
72	Speaker 4”	1x2
73	Speaker wooden box	1x2
74	Speaker 2”	1x2
75	Speaker BKT CD	1x2
76	Speaker BKT CD	1x2
77	Speaker frame cloth	1x2
78	Speaker front cab “L”	1
79	Leaf switch	1
80	Speaker BKT (A) 2”	1x2
81	AM Bar	1
82	Screw 2x4T/T	2
83	Screw 3x8W/T	5
84	Screw 3x10P/T	13

No	Part name	Qty
85	Screw 30x10B/T	10
86	Screw 3x10W/T	12
87	Screw 3x6B/M	4
88	Screw 3x8PW/M	4
89	Screw 2s10P/T	1
90	Screw 26x8B/T	4
91	Metal washer	4
92	Screw 3x8B/A	3
93	Screw 4x8B/T	2
94	Screw 2x4P/M	1

