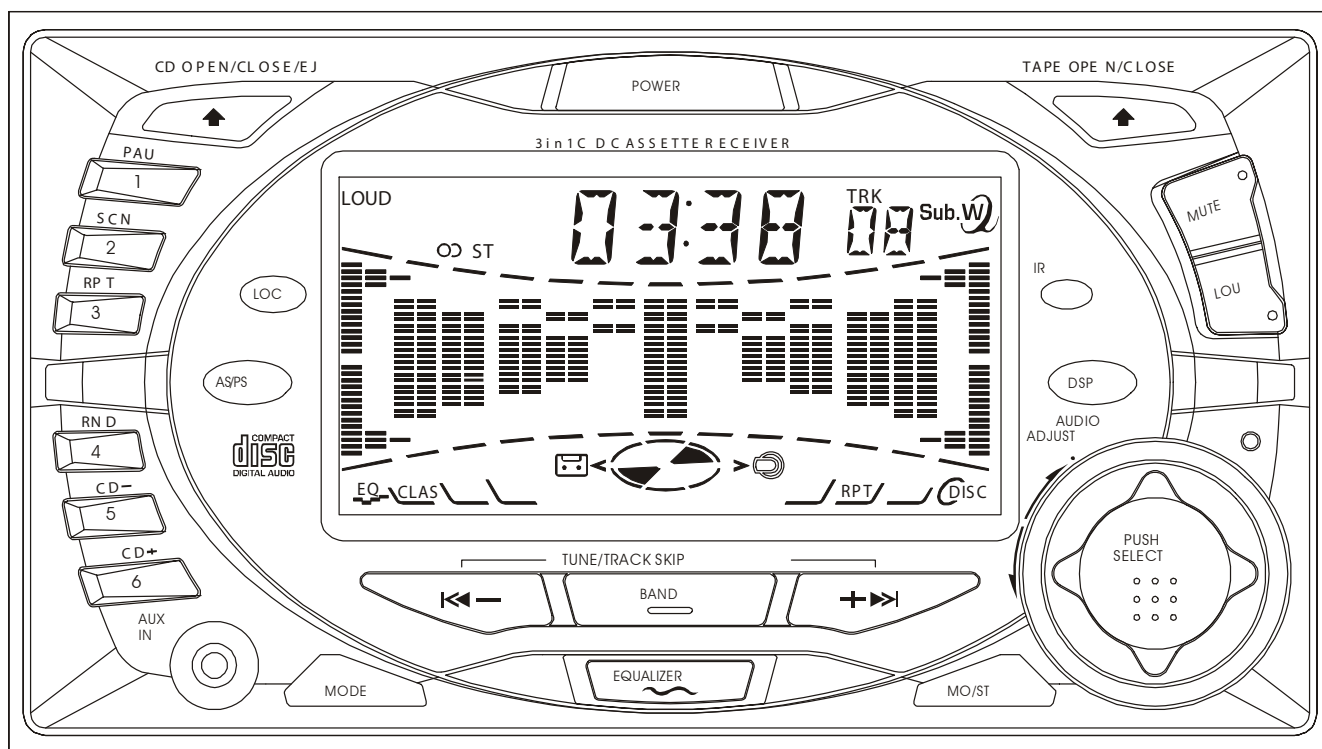


# AKAI

# Service Manual

## MOBILE AUDIO SYSTEM



**MODEL: AKAI ACR-17W**

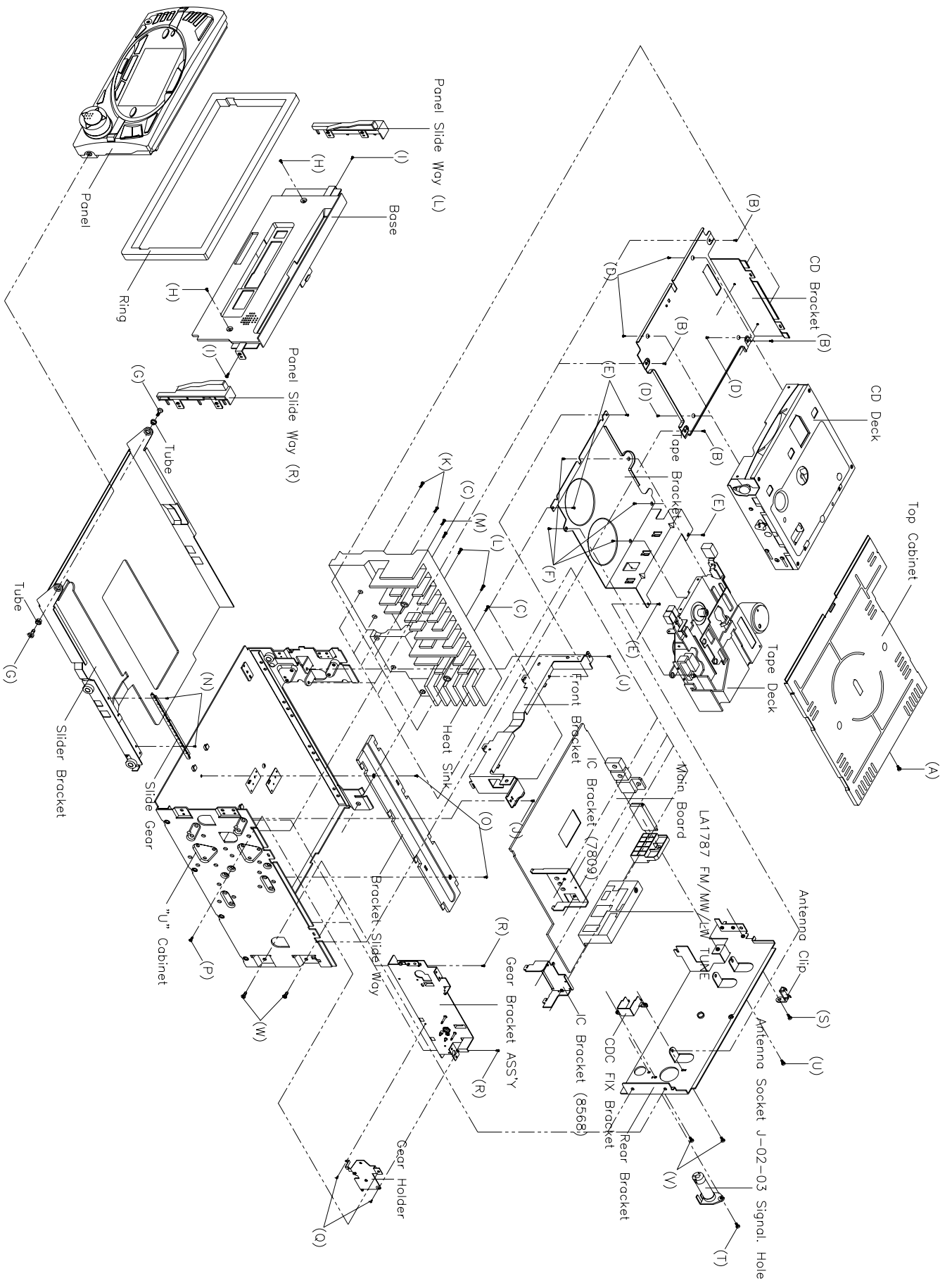
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## DISASSEMBLY INSTRUCTIONS

1. Remove the screw (A) located on the rear of the top cabinet then remove the Top Cabinet.
2. Remove four screws (B) located on the CD bracket and remove two screws (C) from the Heat Sink of the left side.  
Remove four screws (D) from under the CD bracket then remove the CD Deck and the CD Bracket.
3. Remove four screws (E) located on the tape bracket and remove four screws (F) from under the tape bracket then remove the Tape Bracket.
4. Remove two screws (G) from each side of the panel then remove two the Tube.
5. Take out the Panel Slide Way (L/R), The Ring and the Panel.  
Remove two screws (H) from the Base of the front and remove two screws (I) from each side of the Base then remove the Base.
6. Remove two screws (J) from on the front bracket then remove the Front Bracket.
7. Remove two screws (K) and two screws (L) from the Heat Sink of the left side then remove the IC Bracket (7809) and the IC Bracket 8568.
8. Remove the screw (M) from the heat sink then remove the Heat Sink.
9. Remove two screws (N) from the Slide Bracket then remove the Slide Gear and the Slider Bracket.  
Remove two screws (O) from the "U" Cabinet then remove the Bracket Slide Way.
10. Remove the screw (P) from the "U" cabinet of the left side and remove two screws (Q) then remove the Gear Holder.
11. Remove two screws (R) from the "U" Cabinet then remove the Gear Bracket ASS'Y.
12. Remove the screw (S) and the screw (T) from the Rear Bracket then remove the Antenna Clip and the Antenna Socket J-02-03 Signal. Hole.
13. Remove the screw (U) and two screws (V) from the Rear Bracket then remove the CDC FIX Bracket.
14. Remove two screws (W) from the "U" Bracket of the left side then remove the Rear Bracket and the "U" Cabinet.

# DISASSEMBLY DIAGRAM



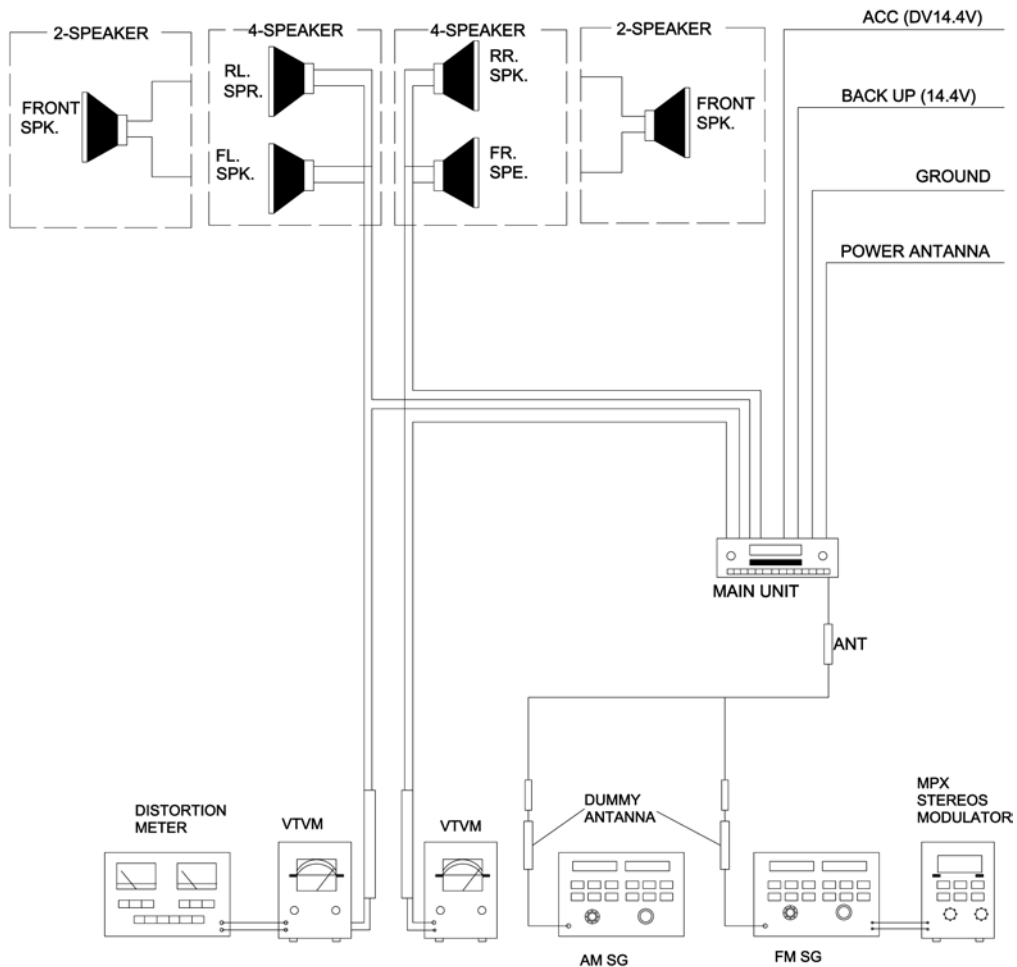
# OPERATION CHECK

## GENERAL SPECIFICATIONS OF SIGNAL

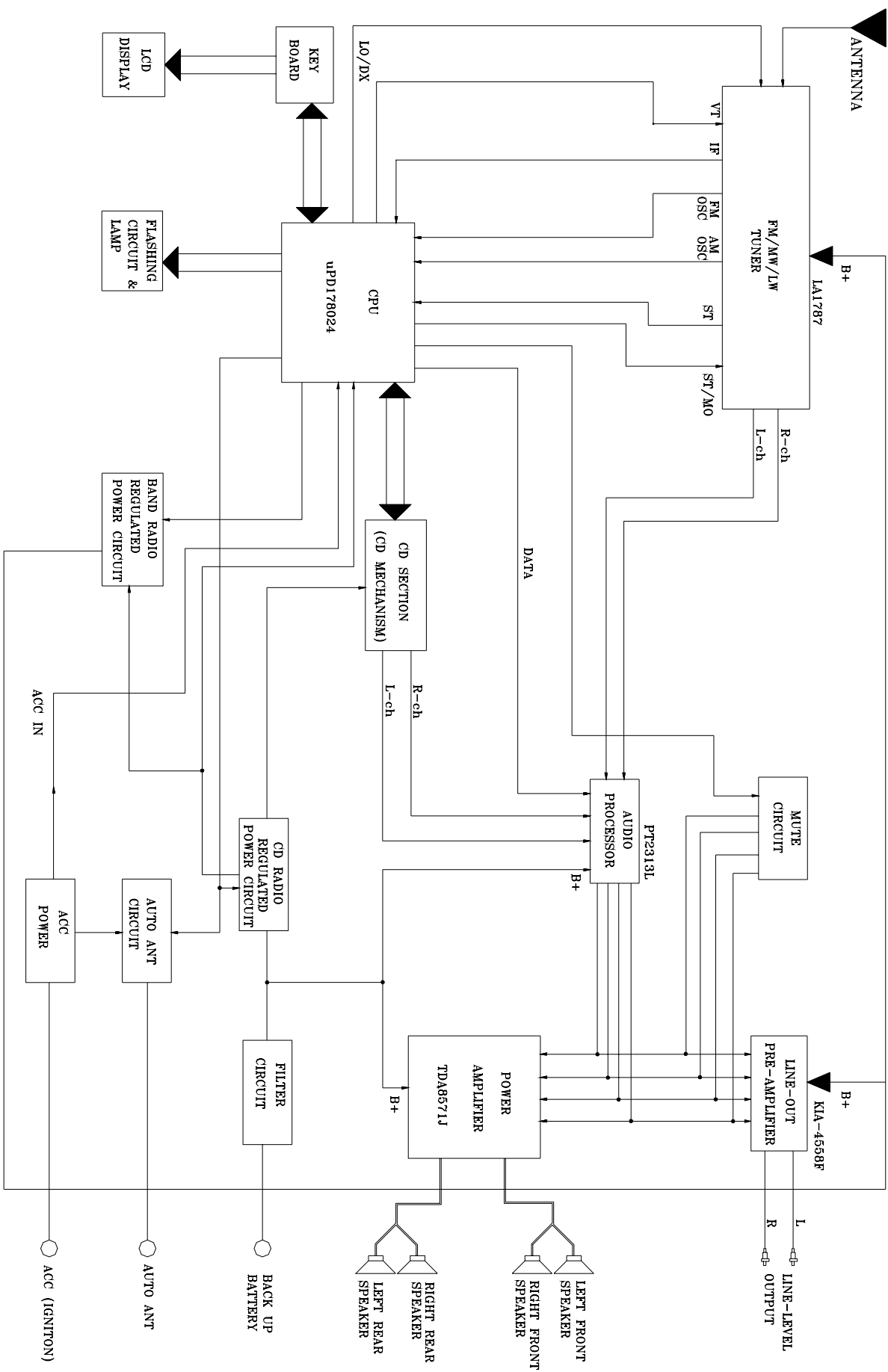
Standard frequency	FM	98.1 MHz	(87.5, 108 MHz)
	MW	1000 kHz	(522, 1620 kHz)
	LW	200 kHz	(144, 288 kHz)
Signal output	FM	1mV	
	MW	5mV	
	LW	5mV	
Modulation	MW	400 Hz	30% MOD.
	FM Stereo	1 kHz	75 kHz DEV. 90% for L only or R only pilot level 10%
AF output level	FM/MW/LW		
Power source voltage	DC 14.0V (Backup voltage is the same as this)		
AF load impedance	4 ohm pure resistance		
Balance	Center position of level		
Tone	Center position		

**The signal strength read in this section is voltage on the antenna.**

**Test Diagram**

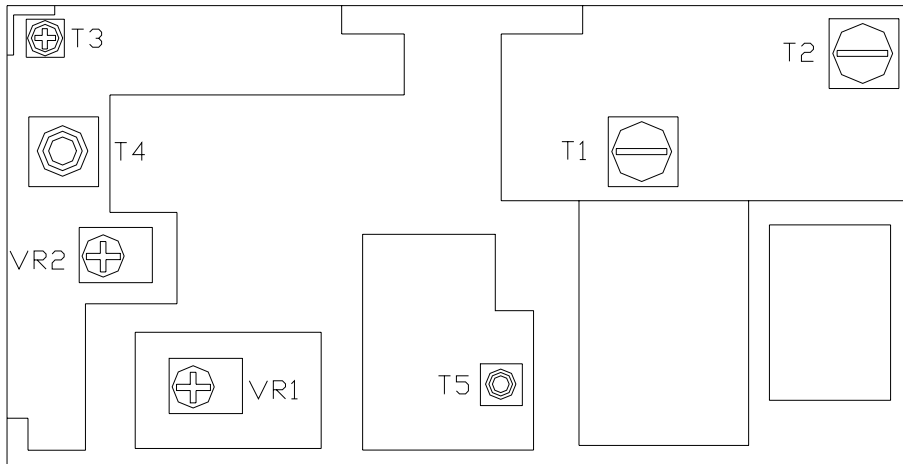


# BLOCK DIAGRAM



# ALIGNMENT LOCATIONS

## FM/MW/LW TUNER



# ALIGNMENT PROCEDURES

## FM ADJUSTMENT

### Equipment Required

- AM IF/RF signal generator
- Solid-state voltmeter (SSVM)
- Regulated DC power supply
- 2-CH voltmeter
- Distortion meter

### FM Alignment Using FM Signal Generator

**Note:** Press the radio power switch to on the radio. Signal generator output must be kept as low as possible to avoid overload and clipping.

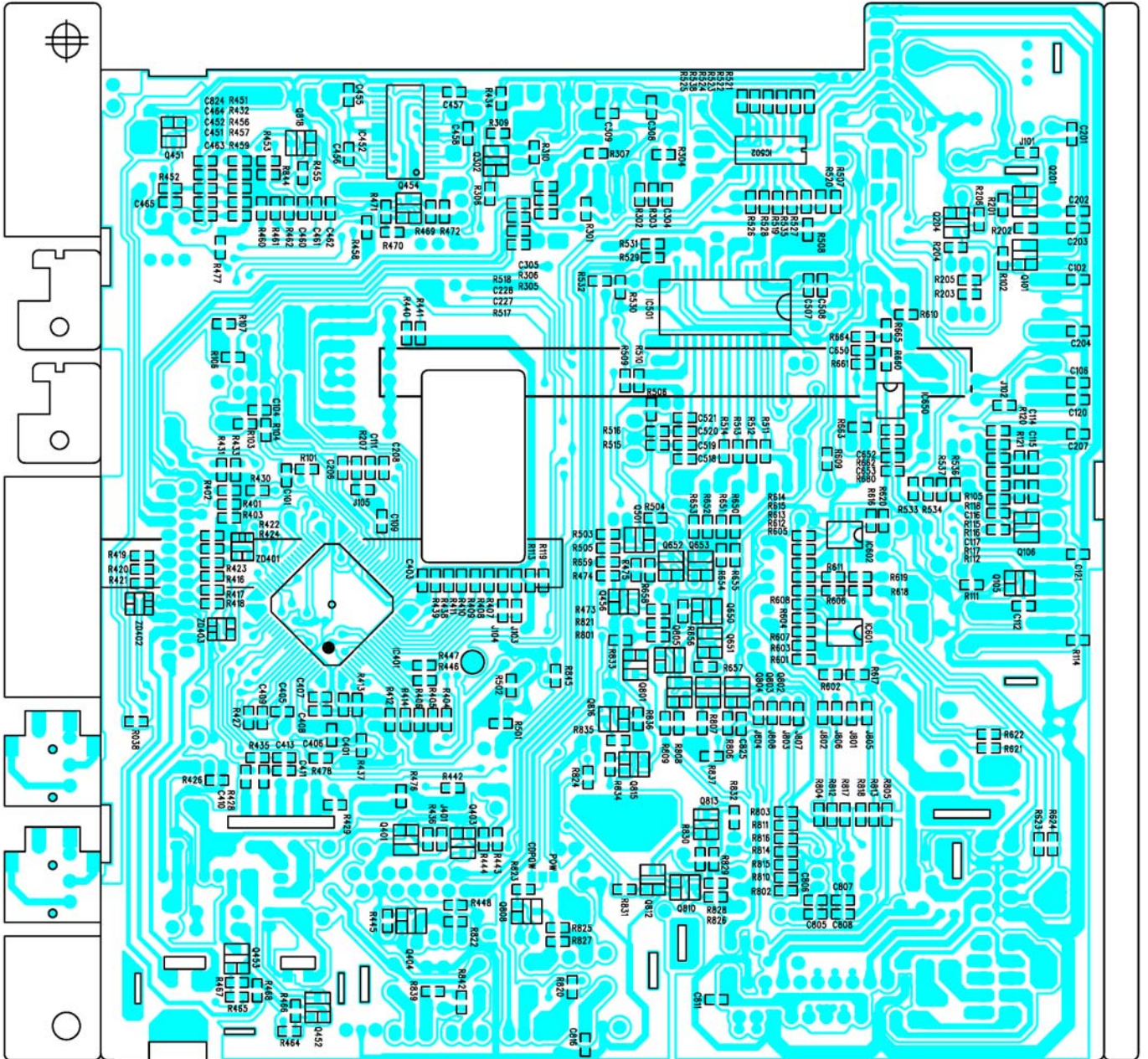
Step	Generator Coupling	Generator	Display Setting	Adjustment	Remarks
<b>Stereo Separation</b>	Signal Generator to antenna receptacle	98.1 MHz Int. 1 kHz Dev. 75 kHz L+R = 90 % pilot = 10 %	98.1 MHz	VR1	Adjust AF output power at maximum separating more than 30 dB
<b>FM SNC Adjustment</b>	98.1 MHz Dev. 75 kHz L+R=90 % Int. 1 kHz 60dB $\mu$ V output	98.1 MHz @ 40 dB $\mu$	98.1 MHz	VR2	Stereo Separation 25 dB ( $\pm$ 5 dB)
<b>STOP SENS.</b>	Signal Generator To antenna receptacle	98.1 MHz Mod. 1kHz Dev 75kHz	98.1 MHz	VR3	Adjust AF to stop station.

**Note:** The tuner module is well-adjust and adjustment is not recommended.



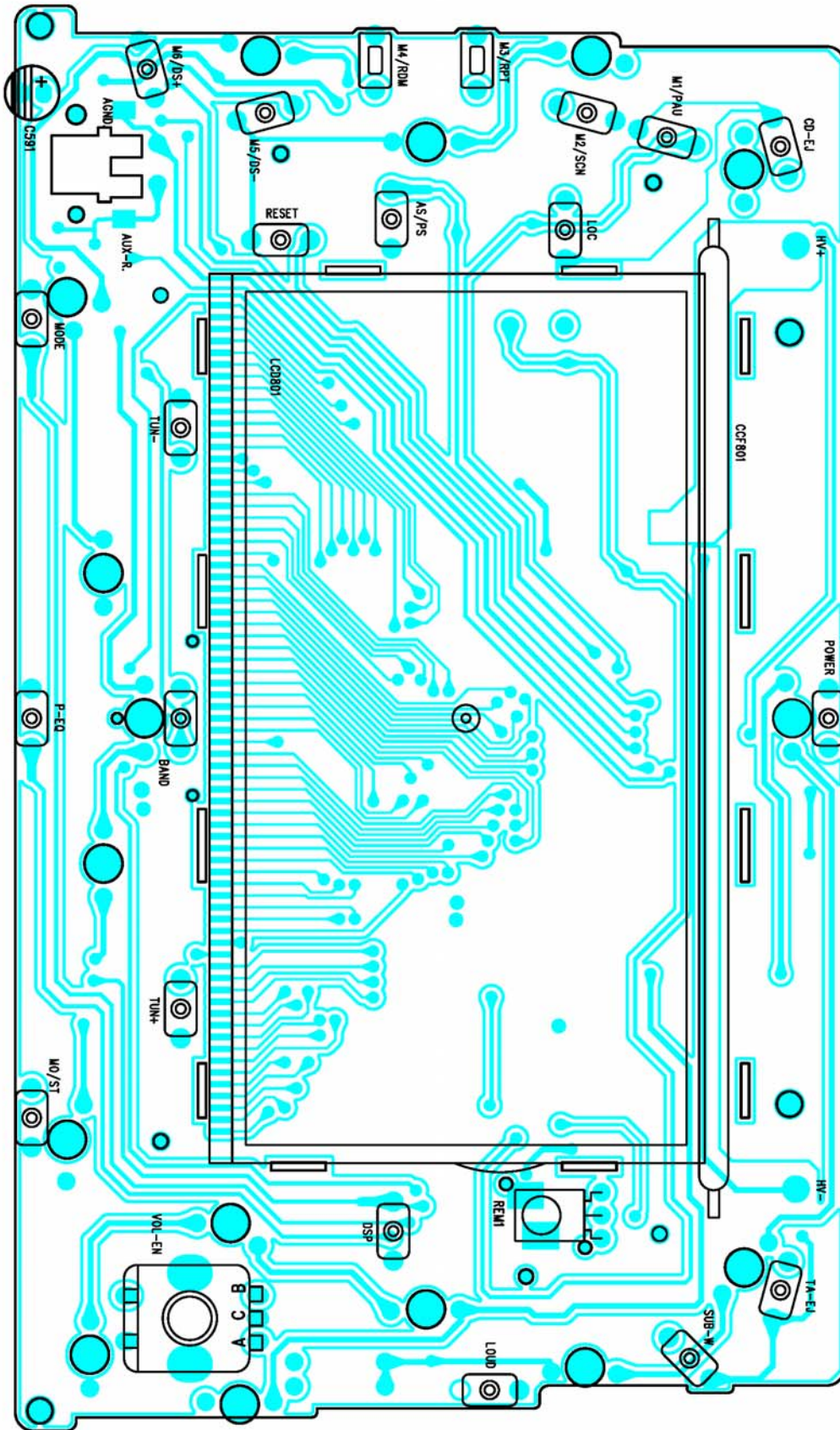


# MAIN BOARD



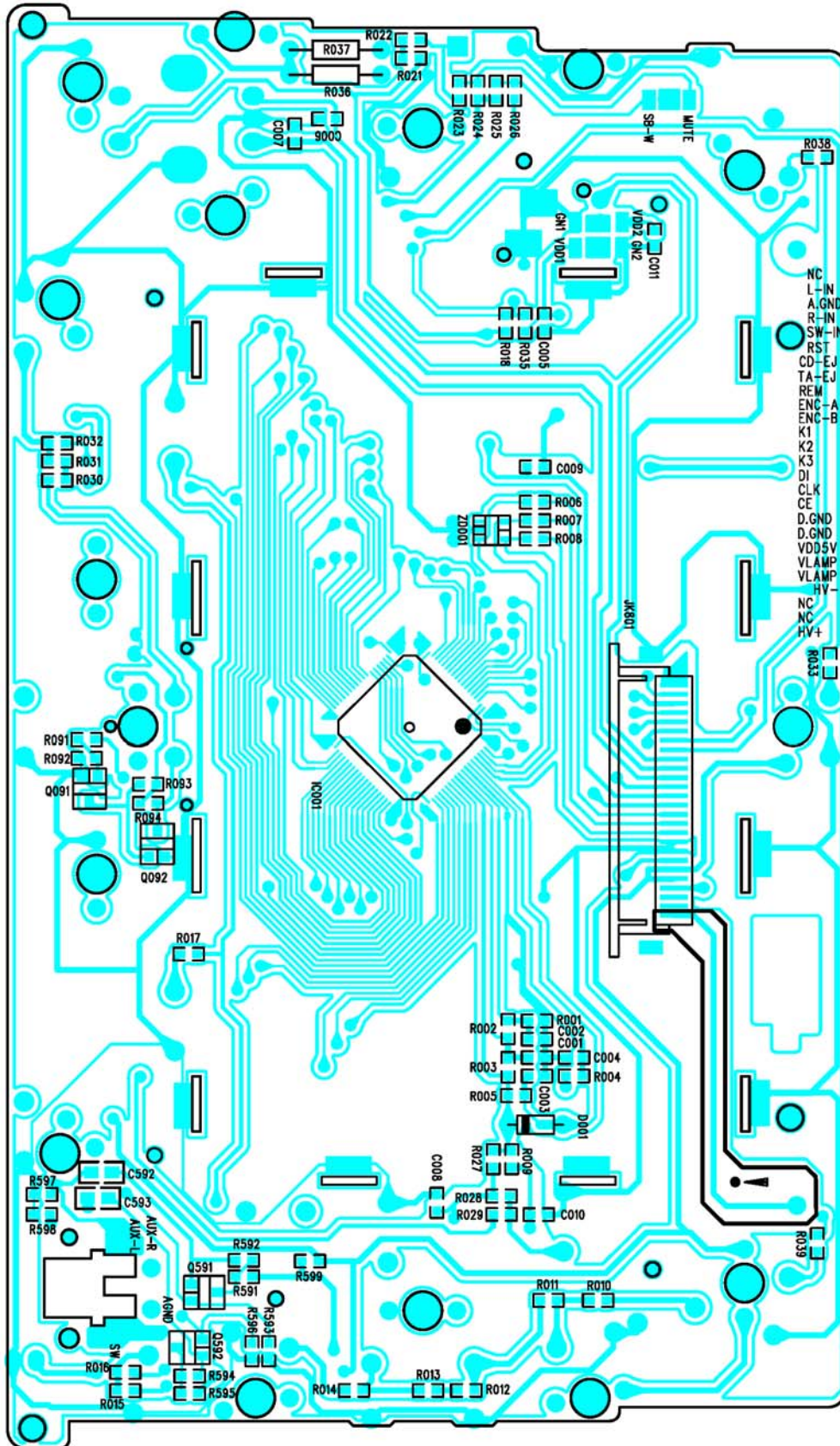
BOTTOM VIEW

# KEY BOARD



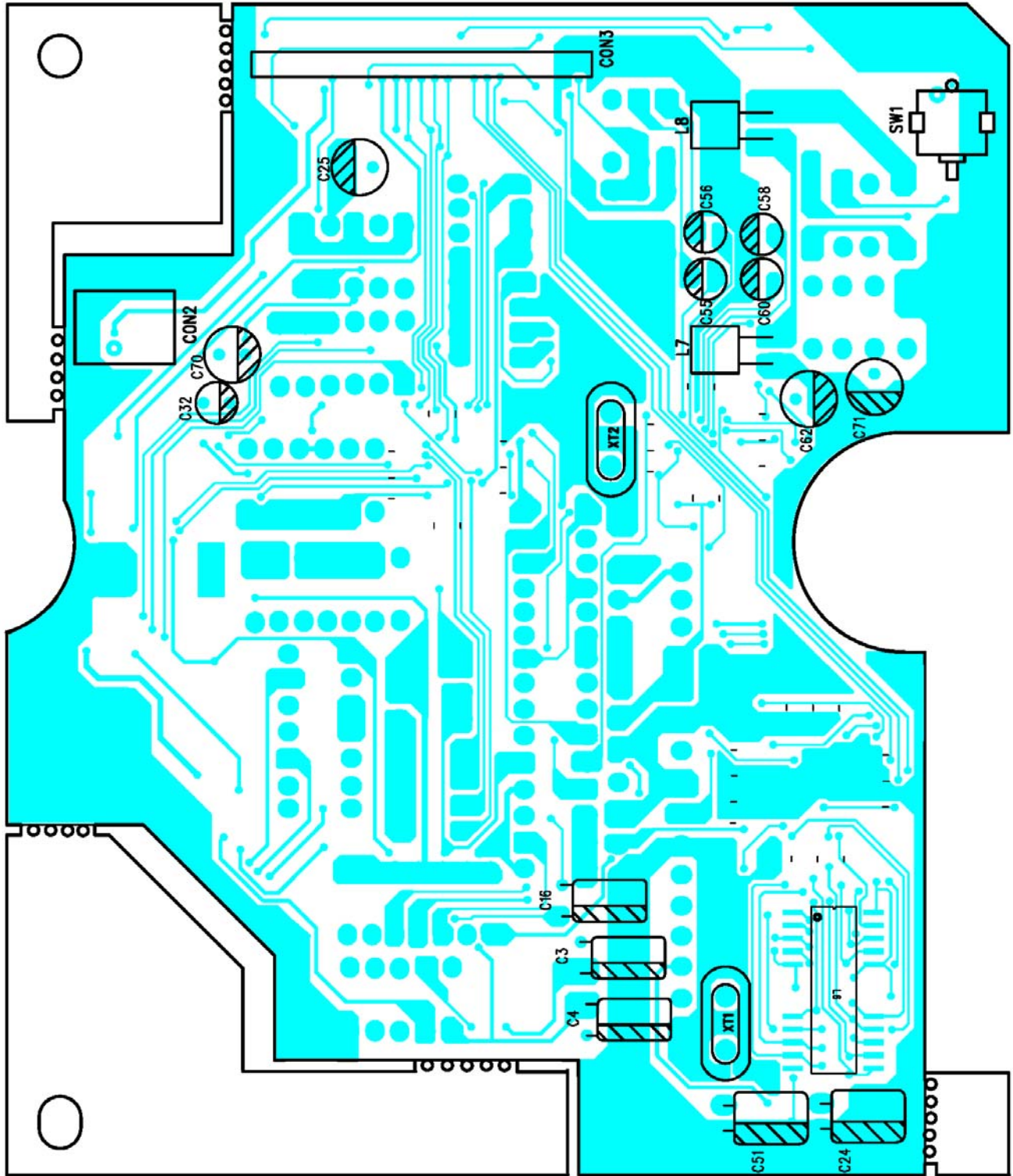
TOP VIEW

# KEY BOARD



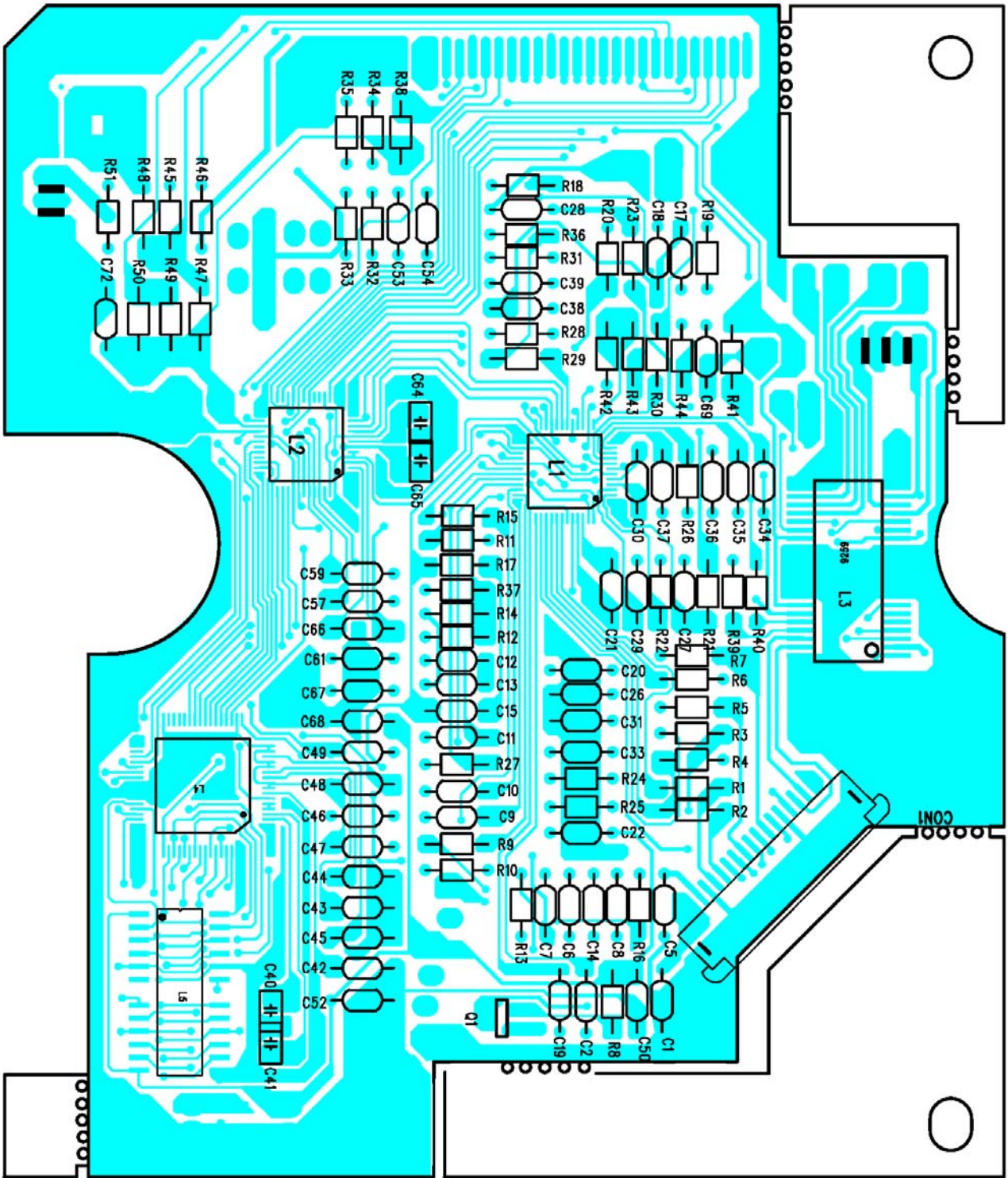
BOTTOM VIEW

# CD SERVO BOARD



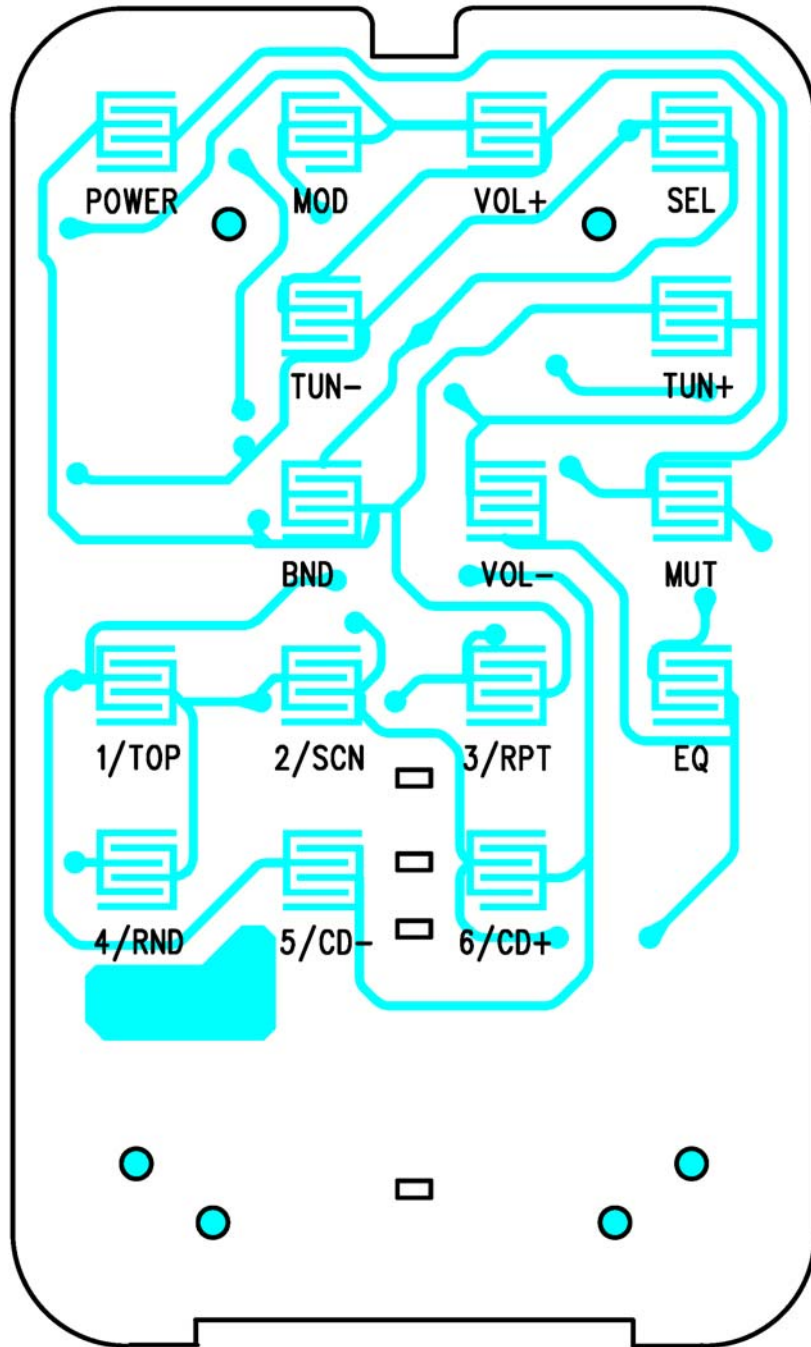
TOP VIEW

# CD SERVO BOARD



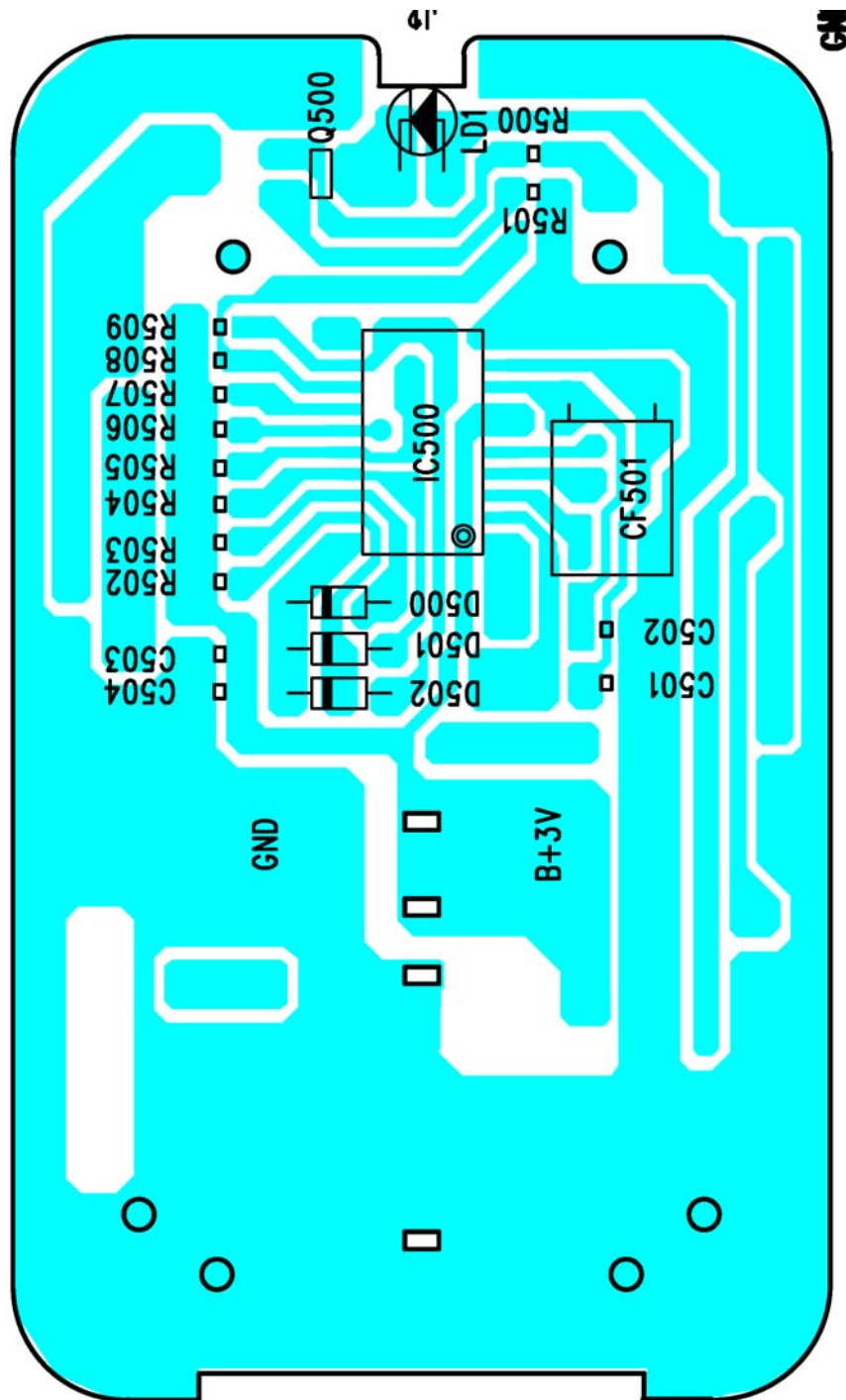
BOTTOM VIEW

# REMOTE BOARD



TOP VIEW

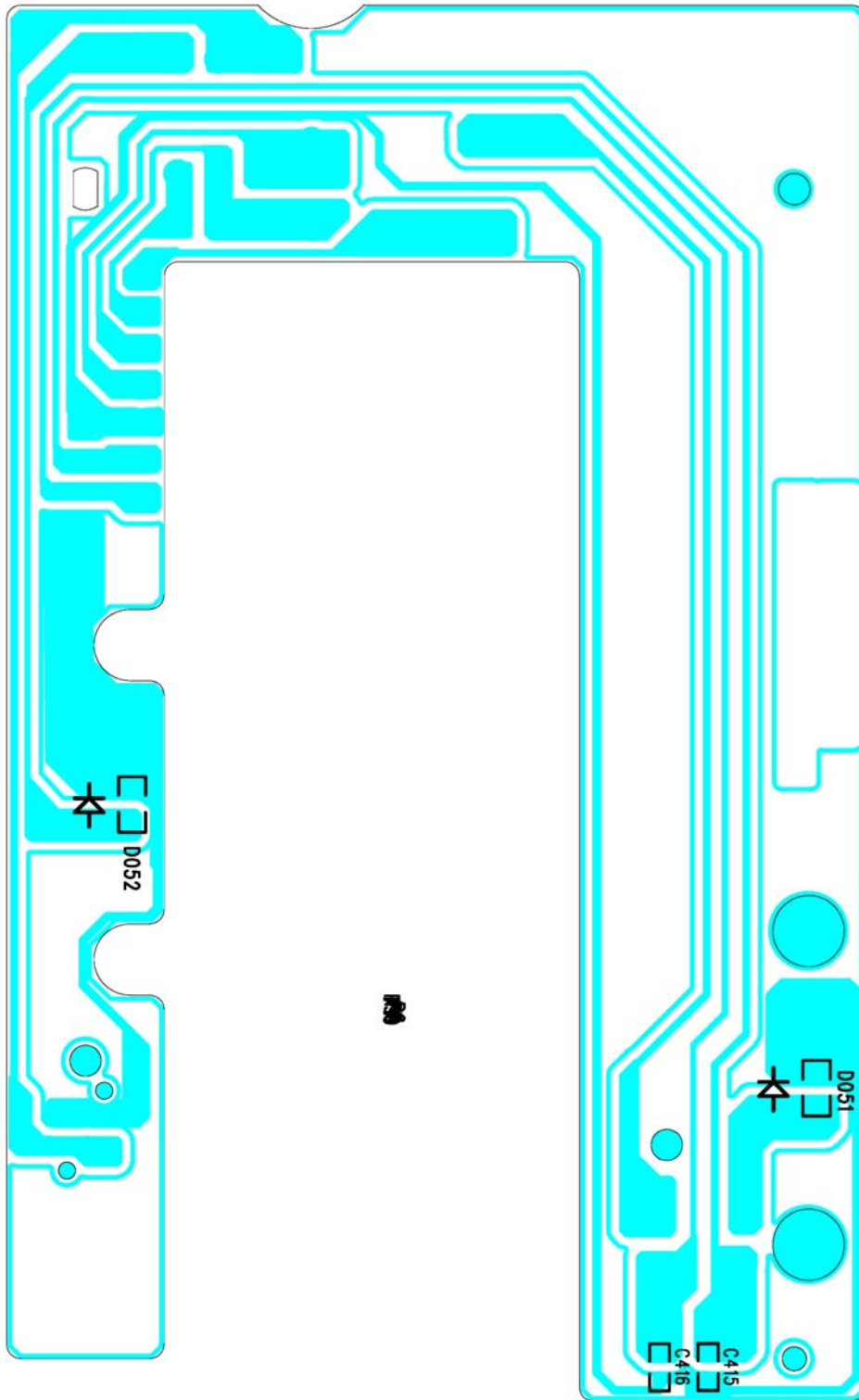
# REMOTE BOARD



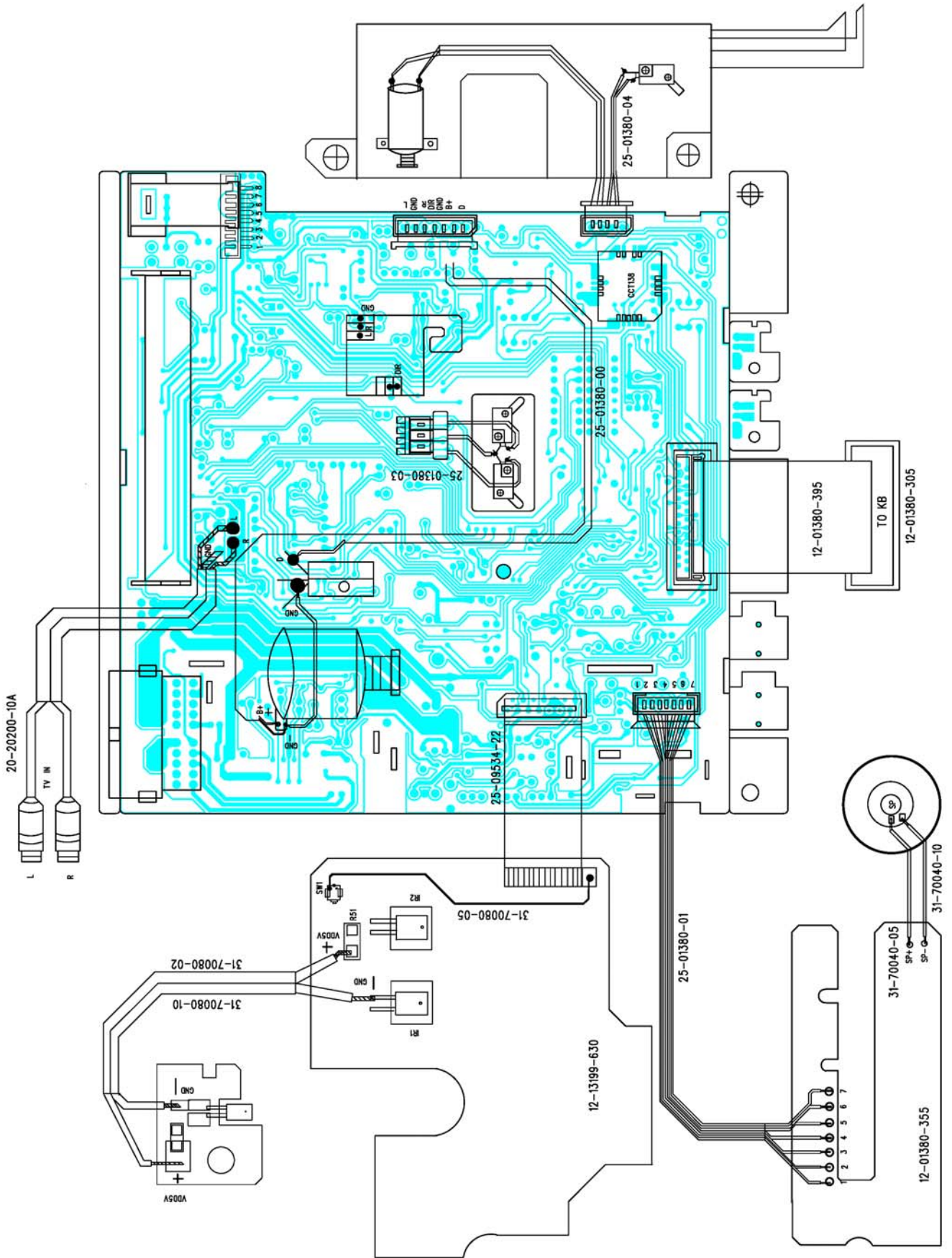
BOTTOM VIEW



# FRONT BOARD

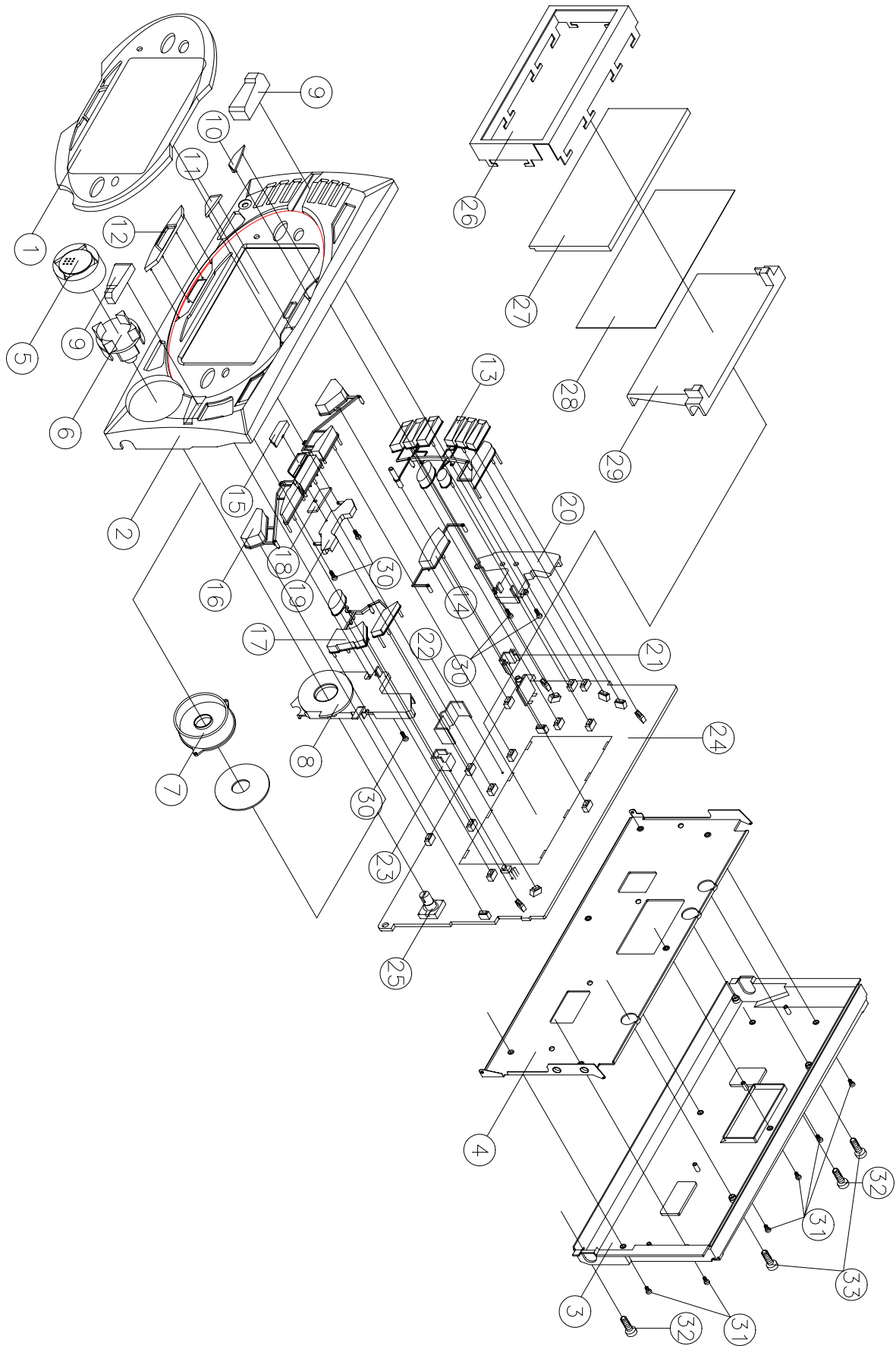


# WIRING DIAGRAM



# EXPLODED VIEW

## PANEL



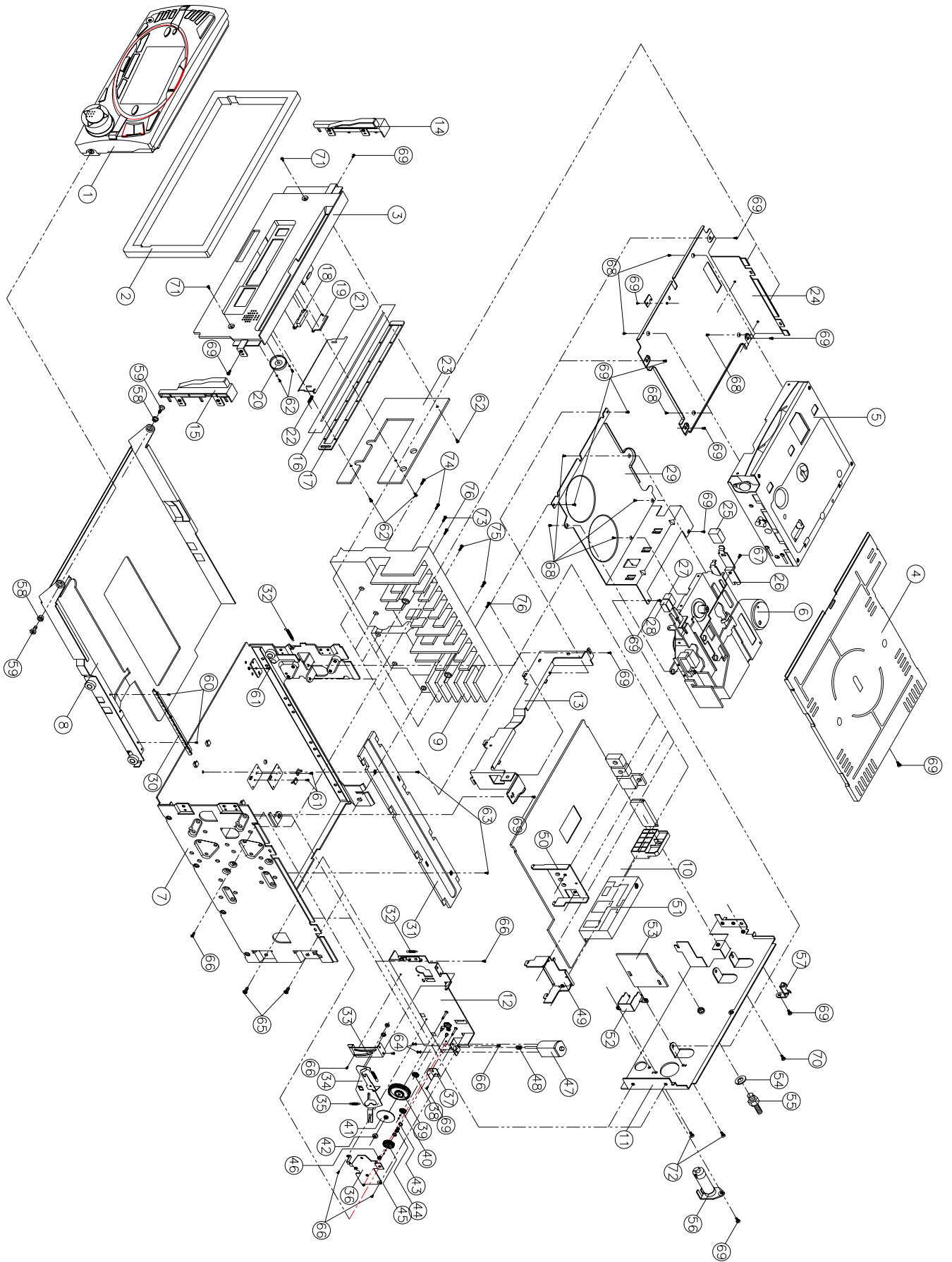
## EXPLODED VIEW PARTS LIST

### PANEL

Ref. No.	Description	RS Part No.	Mfr's Part No.
1	Lens: RM (S. OPC0000)		53-13849-31
2	T. Panel W/CDC (S. OPC0000)		51-13821-31
3	Bottom Panel /777		51-13822-00
4	Panel Bracket ASS'Y		61-13811-00
5	VOL Knob (S. OPC0000)		52-13829-31
6	Volume Knob Adaptor/Blue		52-13836-70
7	Volume Back-Light/Blue		52-13839-70
8	Right Back-Light White		52-13843-01
9	Trim Knob (L/R) Blue		52-13838-70
10	Up Left Decoration E-Silver		52-13831-90E
11	Up Right Decoration E-Silver		52-13832-90E
12	Down Decoration (Elect RO Silver)		52-13830-90E
13	Open/1-6/LOC/AS/PS (L-Up) S.0000		52-13827-31
14	Power Knob (L-Up) (S. OPC0000)		52-13825-31
15	EQ Knob (Crystal/PUMRED 198C#)		52-13837-51R
16	TUNE/SKIP/BAND/MODE/MO/ST (L-Up)		52-13826-31
17	Open/Mute/LOU/DSP (L-Up) S.0000		52-13828-32
18	EQ Adaptor Sponge		81-13801-00
19	Middle Back Light		52-13842-00
20	Left Back Light White		52-13841-01
21	CD Jack Bracket		52-13834-00
22	Band Light Cover		52-13835-00
23	Sensor Holder		52-13833-00
24	Key Board		12-01380-305
25	CD115 Rotate Encoder VOL.		18-00115-00
26	LCD Cover		39-13806-00
27	Color LCD NEG CD138X3.4		27-01380-01Y
28	LCD REFLECT Paper		44-13804-00
29	LCD Back Light		52-13840-00
30	Screw Ø2X8 BH/ST		40-12008-01
31	Screw Ø2X3 CH/MS Black		40-12003-09H
32	Screw Ø2.6X8 BH/ST Black		40-02608-21
33	Screw Ø2.6X10 BH/ST Black		40-12610-01

# EXPLODED VIEW

## CABINET



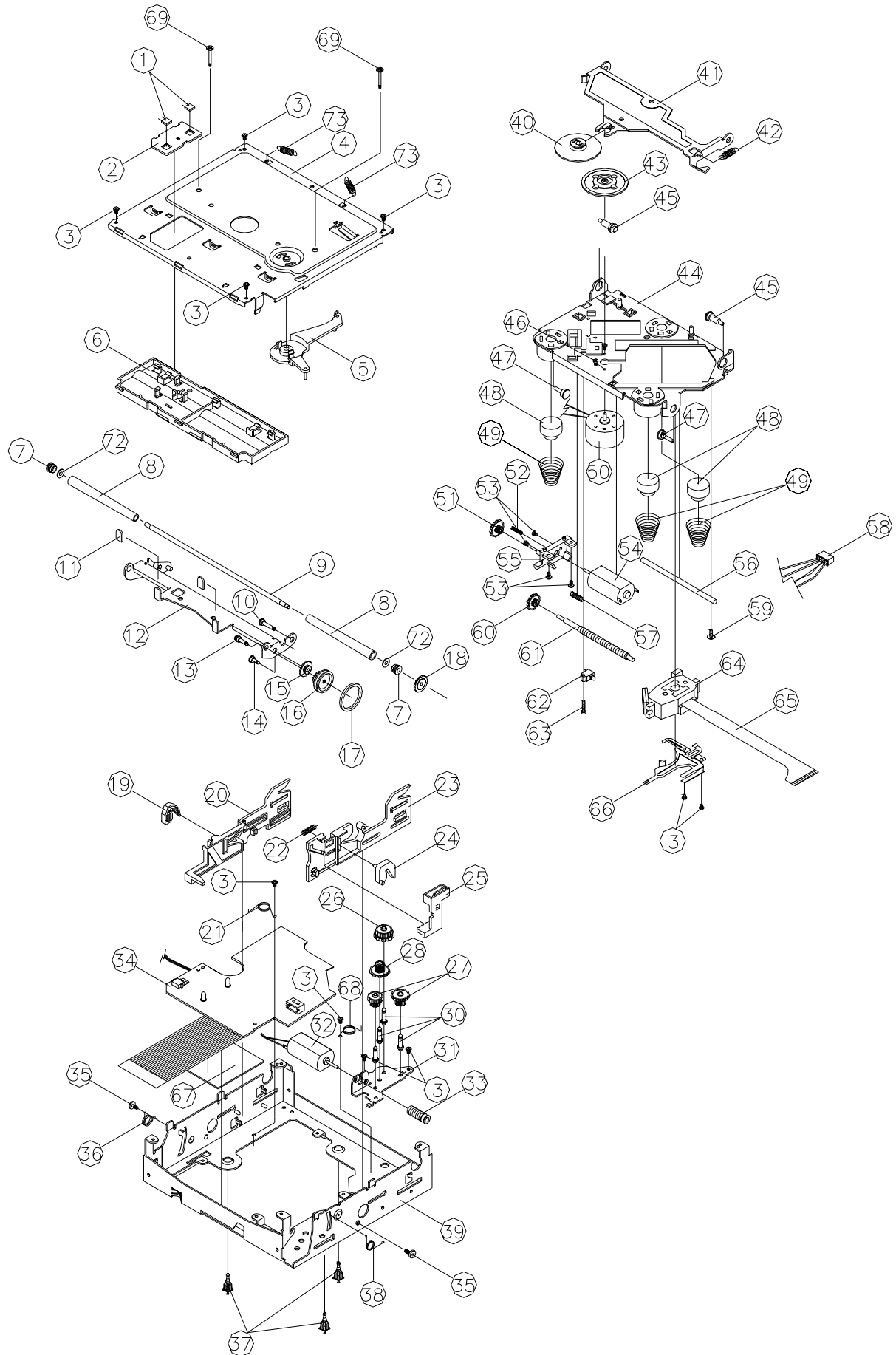
## EXPLODED VIEW PARTS LIST

### CABINET

Ref. No.	Description	RS Part No.	Mfr's Part No.
1	Panel		
2	Ring /ABS		51-13824-00
3	Base/ABS		51-13823-00
4	Top Bracket		61-13805-00
5	CD MECHA. CDM-1681 (C20/MABUCHI)		94-01681-00
6	W/F-36 (MCI5ULCKNZ/AP-4226)		94-00036-10W
7	U Cabinet		61-13801-01
8	Slider Bracket		61-13802-00
9	Heat Sink		61-13809-00
10	Main Board		12-01380-055
11	Rear Bracket		61-13807-00
12	Gear Bracket ASS'Y		61-13608-00
13	Front Bracket		61-13806-00
14	Panel Slide Way (L)		52-13853-00
15	Panel Slide Way (R)		52-13854-00
16	Shade		81-69005-02
17	CD Windows Sheet		43-A3101-00
18	CD Back Light		52-13855-00
19	Tape Back Light		52-13856-00
20	Speaker 80UH 0.25W 4.6X23MM		14-04623-00
21	Cass Door OP2320-56		66-32056-00
22	Tape Door Spring		36-13812-00
23	Front Board		12-01380-355
24	CD Bracket		61-13804-00
25	Eject Knob		52-13850-00
26	Eject Lever (A/R) 0.8MM		39-07626-00
27	FF Knob		52-13851-00
28	REW Knob		52-13852-00
29	Tape Bracket (ISO)		61-13803-01
30	Slide Gear		52-13807-00
31	Bracket Slide Way		52-13859-00
32	Spring Ø0.4		36-13802-00
33	Sway Bracket		39-13803-00
34	Sway Bar ASS'Y		39-13802-00
35	Spring Ø0.25		36-13805-02
36	Gear Holder		39-13801-00
37	Worm Holder		39-13809-00
38	Gear (1)		52-13862-00
39	Gear (5)		52-13866-00
40	Gear (2)		52-13863-00

Ref. No.	Description	RS Part No.	Mfr's Part No.
41	Star Gear Holder ASS'Y		39-13810-00
42	Gear Holder		52-13846-00
43	Pull Spring		36-13808-00
44	Gear Press Spring Ø0.8		36-13807-00
45	Gear (4)		52-13865-00
46	Gear (3)		52-13864-00
47	Motor PWN10EA10C		97-01300-03
48	Worm Shaft		52-13872-00
49	IC Bracket (8568)		39-13804-00
50	IC Bracket (7809)		39-13805-00
51	LA1787 FM/MW/LW TUNE (CET-7010EU)		29-01780-03
52	CDC FIX Bracket		39-13811-00
53	CDC Board		12-01380-615
54	Spring Washer M5		35-50001-00
55	Back Mounting Screw		34-68701-00
56	Antenna Socket J-020-03 Signal. Hole		39-00017-02
57	Antenna Clip (II)		39-A1528-00
58	Tube (II)		34-13802-00
59	Screw M6		40-13802-00
60	Screw Ø2.0X2.0X BH/MS		40-62002-01
61	Screw Ø1.7 X 6.0		40-13803-00
62	Screw Ø2.0 X 4 KH/ST Black		40-12004-23
63	Screw Ø2 X 3 CH/MS Black		40-12003-09H
64	Screw Ø2 X 3 PWH/MS HAD Tooth		40-02003-06H
65	Screw Ø2 X 4 BH/MS		40-02004-01
66	Screw M2 X 2.4 CH/MS		40-02024-09H
67	Screw Ø2.6 X 3 PH/MS		40-02603-00
68	Screw Ø2.6 X 4 PH/MS		40-02604-00
69	Screw Ø2.6X4 BH/MS		40-02604-01
70	Screw Ø2.6 X 6 BH/MS		40-02606-01
71	Screw Ø2.6 X 6 PH/MS Black (Hard)		40-02606-20H
72	Screw Ø3X 4 PH/MS		40-03004-00
73	Screw Ø3 X 6 PH/MS		40-03006-00
74	Screw Ø3 X 10 PH/MS		40-03010-00
75	Screw Ø3X12 PH/MS		40-03012-00
76	Screw Ø3X16 PH/MS		40-03016-00

# EXPLODED VIEW (CD DECK)



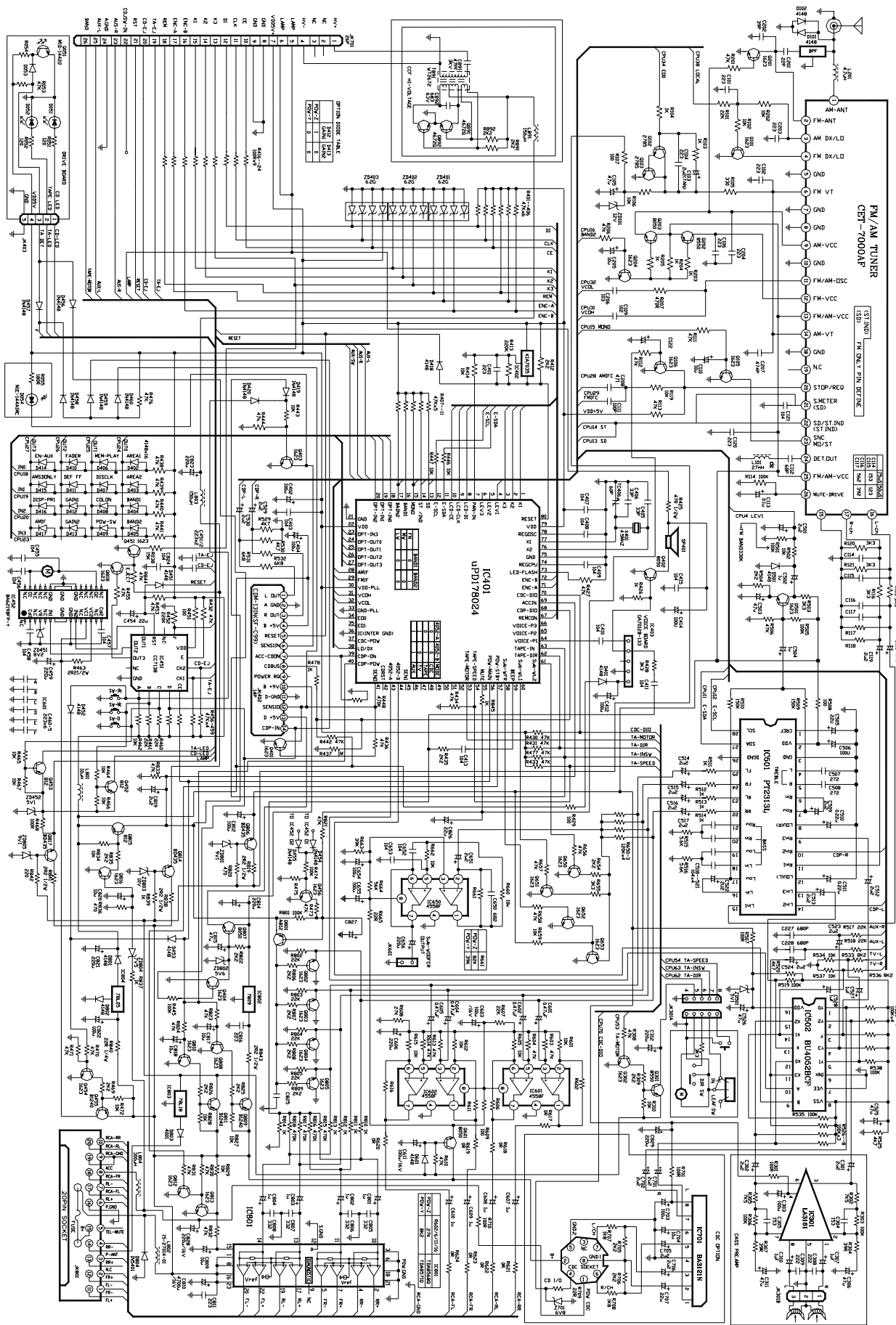


## EXPLODED VIEW PARTS LIST (CD DECK)

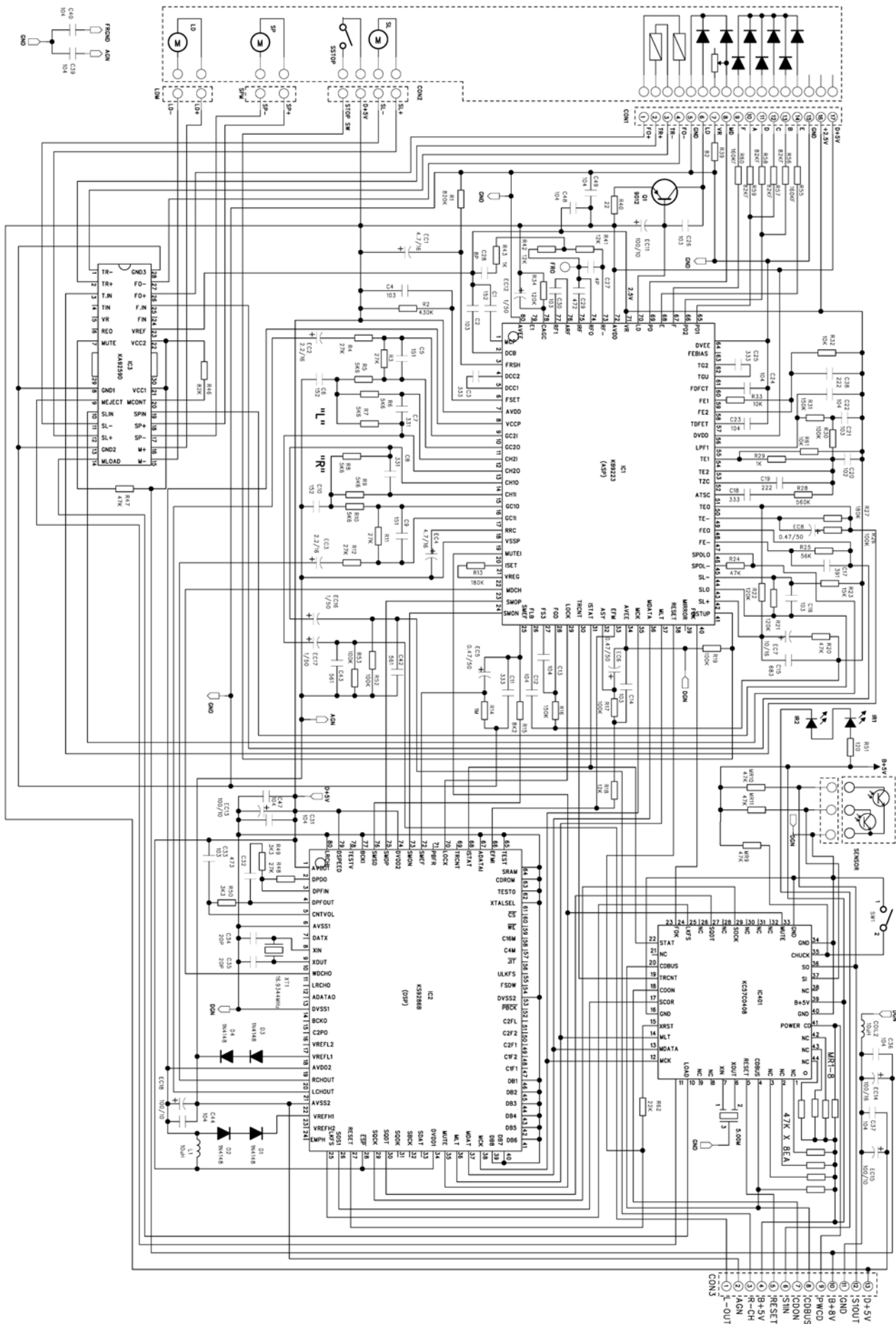
Ref. No.	Description	Parts No.	Q'ty
1	SENSOR	ST-23G	2
2	SENSOR PCB	FR	1
3	SCREW	CA/H 0" TT 2*3	12
4	COVER-UPPER	SECC T1.0	1
5	LEVER DISC	POM (F20-03)	1
6	GUIDE UP	POM (F20-03)	1
7	BUSHING ROLLER	POM (F20-03)	2
8	ROLLER DISC	SLICON	2
9	SHAFT ROLLER	SUS 303	1
10	PIN ROLLER	SUM24L-NI (PLATE)	1
11	PVC CAP	PVC	2
12	B/K ROLLER	SECC T1.0	1
13	PIN PULLEY	SUM24L-NI (PLATE)	1
14	PIN IDLE	SUM24L-NI (PLATE)	1
15	GEAR IDLE	POM (F20-03)	1
16	GEAR PULLEY	POM (F20-03)	1
17	BELT PULLEY	CR-WRT	1
18	GEAR ROLLEY	POM (F20-03)	1
19	LOCKER (L)	POM (F20-03)	1
20	CAM (L)	POM (F20-03)	1
21	S/P CAM (L)	SUS304WPB	1
22	S/P RACK	SUS304WPB	1
23	CAM (R)	POM (F20-03)	1
24	LOCKER ®	POM (F20-03)	1
25	GEAR RACK	POM (F20-03)	1
26	GEAR LOAD ©	POM (F20-03)	1
27	GEAR LOAD (D)	POM (F20-03)	1
28	GEAR LOAD (B)	POM (F20-03)	1
29	GEAR LOAD (A)	POM (F20-03)	1
30	PIN LOAD	SUM24L-NI (PLATE)	4
31	B/K GEAR	SECC T1.0	1
32	MOTOR	FF-050SH-11190	1
33	GEAR WORM	POM (F20-03)	1
34	GERVO PCB ASSY	GLASS EPOXY 1.2T	1
35	SPECIAL SCREW	P/H TTS 2*2	4
36	S/P RO (L)	SUS304WPB	1
37	SUPPORT DAMPER	POM (F20-03)	3
38	S/P RO ®	SUS304WPB	1
39	CHASSIS MAIN	SECC T1.0	1

Ref. No.	Description	Parts No.	Q'ty
40	CLAMP DISC	POM (F20-03)	1
41	HOLD CLAMPER	SECC T1.0	1
42	S/P CLAMPER	SUS304WPB	1
43	TURN TABLE	ABS G/F 20%	1
44	BASE PU	POM (F20-03)	1
45	PIN SIDE (A)	SUM24L-NI (PLATE)	2
46	SCREW	CA/H 0" M/S 1.7*2.5	2
47	PIN SIDE (B)	SUM24L-NI(PLATE)	2
48	DAMPER	BUTHYL	1
49	S/P BASE	SUS304WPB	2
50	MOTOR	RF-400CA-12265	1
51	GEAR PU (B)	HYTRELL 5526	1
52	GEAR PU (A)	POM (F20-03)	1
53	SCREW	CA/H 0" M/S 2*2	6
54	MOTOR	FF-050SH-11190	1
55	HOUSING GEAR	POM (F20-03)	1
56	SHAFT PU	KNN11 (PCD18)	1
57	SCREW	R/H (W/W) TTB2*5	1
58	4P CONT WIRE	1007 #28	1
59	SPRING TENSION	SUS304WPB	1
60	GEAR PU ©	POM (F20-03)	1
61	LEAD SCREW	BSBM	1
62	SWITCH	SW-110	1
63	SCREW	B/H TTB1.7*8	1
64	PICK UP	SF-C99	1
65	FPC WIRE	POLY AMIDE	1
66	SPRING PU	SUS T0.2	1
67	FIBER PAPER		1
68	S/P CAM ®	0.55	1
69	TRANSIT SCREW	4.5*18	2
70	INSULATOR COVER	PE	1
71	SWITCH	SW-111	1
72	WASHER PE	PE	2
73	S/P BASE ®	SUS304WPB	2

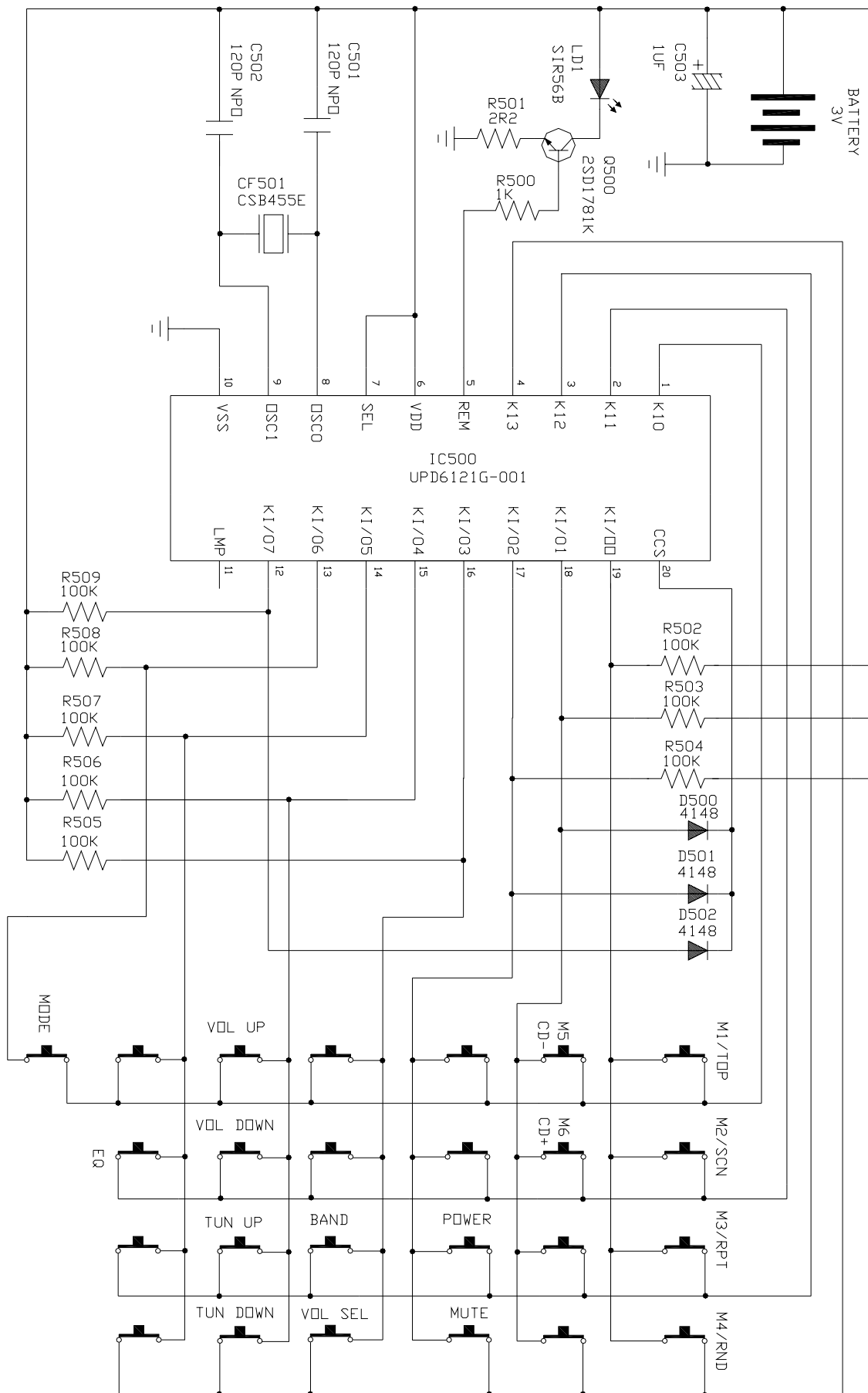
# SCHEMATIC DIAGRAM (MAIN BOARD)



# SCHEMATIC DIAGRAM (CD SERVO BOARD)



# SCHEMATIC DIAGRAM (REMOTE BOARD)



## ELECTRICAL PARTS LIST

Ref. No.	Part No.	Description	Q'ty
<b>PC BOARD ASSY, MAIN BOARD</b>			
Q806,814/7	01-00435-00	TR. BD435 NPN TO-126 SAMSUNG	3
Q452/3,801,815	01-00812-00	TR. 2SA812	4
Q455,809,811	01-01240-00	TRANSISTOR B1240	3
Q101/5/6,403/4,451/4/6,501,602,802~5 /8,810/2/3/6/8	01-01623-00	CHIP TR. C1623 "NEC"	20
Q102/3	01-02785-00C	TRANSISTOR 2SC2785 "NEC"	2
Q891/2	01-04672-00	TR. SMD 2SC4672Q	2
Q402,807	01-08050-03	TR. 8050C TO-92-B	2
Q301	01-08550-03	TR. 8550C TO-92-B	1
Q051	01-14422-00	PHOTO TRANSISTOR NPN MID-14422	1
ZD401~3	02-00062-07	E.S.D. DIODE NNCD6.2G (5PIN)	3
D054	02-00144-00	IR LED MIE 144A1MC	1
D051/2	02-01112-00F	SMD LED PG1112H GREEN "STANLEY"	2
D803	02-04001-00A	DIODE IN4001 (TAPPING)	1
D401/2/5/7,410/1/7~20,451~60,501/2	02-04148-00A	DIODE 1N-4148 (TAPPING)	23
D804	02-05401-00	DIODE IN5401	1
ZD452,501	02-50051-00A	ZENER DIODE 5.1V 0.5W AT.	2
ZD802	02-50056-00A	ZENER DIODE 5.6V 0.5W AT.	1
ZD804	02-50075-00A	ZENER DIODE 7.5V 0.5W AT.	1
ZD451	02-50082-00A	ZENER DIODE 8.2V 0.5W AT.	1
ZD801/5	02-50091-00A	ZENER DIODE 9.1V 0.5W AT.	2
ZD803	02-50100-00A	ZENER DIODE 10V 0.5W AT.	1
ZD101	02-50120-00A	ZENER DIODE 12V 0.5W AT.	1
IC451	03-01380-00	IC CCT138 MOTOR CONTROL LOGIC	1
IC501	03-02313-00	I.C. PT2313L	1
IC301	03-03161-00	I.C. LA-3161	1
IC502	03-04052-03	IC CHIP BU4052BCF ROHM	1
IC452	03-06219-00	IC KIA7035P	1
IC402	03-07035-00	IC BA6219BFP-Y	1
IC804	03-07805-11	REGULATOR L7805CV (GROUND TAP)	1
IC802	03-07809-00	IC 7809 (TO-220)	1
IC803	03-07818-00	REGULATOR LC-78L18	1
IC804	03-08571-00	IC TDA8571J (4X40W)	1
IC401	03-17802-401	IC UPD178024 GC-215-8ET	1
X401	04-00045-00	CRYSTAL 4.5MHz (HC 18U)	1
C891	05-00470-302	CAP CER 47P 3KV ±5%	1
C892	05-04683-00	METALIZED CAP 0.068µF 63V ±5%	1
C308/9	05-05222-00	AXIAL CER CAP 2200PF ±20%	1
C103	05-16225-00	TAN CAP 2.2µF 16V	1
C111	05-63101-00	CHIP 100PF ±5% NPO 0603 SMT	1
C109	05-63102-01	CHIP 1000PF ±10% X7R 0603 SMT	1

## ELECTRICAL PARTS LIST - CONTINUED

Ref. No.	Part No.	Description	Q'ty
C114/5	07-63103-01	CHIP 0.01 $\mu$ F $\pm$ 10% X7R 0603 SMT	2
C121,403/7~10/5,455~8,518~21,824	05-63104-01	CHIP 0.1 $\mu$ F $\pm$ 10% X7R 0603 SMT	16
C304/5	05-63153-01	CHIP 0.015 $\mu$ F $\pm$ 10% X7R 0603 SMT	2
C101/2/4/6,120,401,451/2,460~5,811/6	05-63223-01	CHIP 0.022 $\mu$ F $\pm$ 10% X7R 0603 SMT	16
C507/8	05-63272-01	CHIP 2700PF $\pm$ 10% X7R 0603 SMT	2
C405/6	05-63330-00	CHIP CAP 33PF $\pm$ 5% NPO 0603 SMT	2
C805~8	05-63332-01	CHIP 3300PF $\pm$ 10% X7R 0603 SMT	4
C116/7	05-63392-01	CHIP 3900PF $\pm$ 10% X7R 0603 SMT	2
C303,402/4,412/4,506,812	06-10107-01	E. CAP 100 $\mu$ F 10V ( $\varnothing$ 5X7MM MINI)	7
C306,311,503,525/6,815	06-10476-01	E. CAP 47 $\mu$ F 10V ( $\varnothing$ 4X7 MINI)	6
C110,809,818,820	06-16106-01	E. CAP 10 $\mu$ F 16V $\varnothing$ 4X7MM	4
C822	06-16107-01	E. CAP 100 $\mu$ F 16V ( $\varnothing$ 6.3X7MM)	1
C454,505,826	06-16226-01	E. CAP 22 $\mu$ F 16V ( $\varnothing$ 4X7MM)	3
C312,459,814,821/3/8/9	06-16227-01	E. CAP 220 $\mu$ F 16V ( $\varnothing$ 6.3X12MM)	7
C105	06-16476-01	E. CAP 47 $\mu$ F 16V ( $\varnothing$ 5X7MM)	1
C810	06-16478-01	E. CAP 4700 $\mu$ F 16V 105°C	1
C113	06-50104-01	E. CAP 0.1 $\mu$ F 50V MINI	1
C307,310,502/4,801~4	06-50105-01	E. CAP 1 $\mu$ F 50V ( $\varnothing$ 4X7MM)	8
C510/1	06-50224-01	E. CAP 0.22 $\mu$ F 50V ( $\varnothing$ 4X7MM) MINI	2
C118/9,301/2,501/9,512~7,522/9, 530,819	06-50225-01	E. CAP 2.2 $\mu$ F 50V ( $\varnothing$ 4X7MM)	16
R463,819,838,841/3	07-05022-10	RES. 2.2 $\Omega$ 1/2W	5
R051/2	07-05121-16	RES. 120 $\Omega$ 1/16W	2
R840	07-05220-00	RES. 22 $\Omega$ 1/4W	1
CPU162 TO TA DIR	07-05332-16	RES. 3.3k $\Omega$ 1/16W	1
R425	07-05470-10	RES. 47 $\Omega$ 1/2W	1
R053	07-05473-16	RES. 47k $\Omega$ 1/16W	1
J101/2/4/5,401,801~4,R832	07-63000-00	CHIP RES. 0 $\Omega$ 0603 SMT	10
R107,301,429,451,511~4,810~3,837/9, 845	07-63101-00	CHIP RES. 100 $\Omega$ $\pm$ 5% 0603 SMT	16
R103/4,426,478,511~4,810~3,837/9, 845	07-63102-00	CHIP RES. 1k $\Omega$ $\pm$ 5% 0603 SMT	15
R102/6,310,462/4/5,414,502,834, 827/8,472,443/6/7,119,466/7	07-63103-00	CHIP RES. 10k $\Omega$ $\pm$ 5% 0603 SMT	18
R114,303/6,474,445,505,519,521~4 /6~8,801,535/8,501	07-63104-00	CHIP RES. 100k $\Omega$ $\pm$ 5% 0603 SMT	18
R437	07-63105-00	CHIP RES. 1M $\Omega$ $\pm$ 5% 0603 SMT	1
R038	07-63153-00	CHIP RES. 15k $\Omega$ $\pm$ 5% 0603 SMT	1
R509,510	07-63154-00	CHIP RES. 150k $\Omega$ $\pm$ 5% 0603 SMT	2
R055	07-63181-00	CHIP RES. 180 $\Omega$ $\pm$ 5% 0603 SMT	1
R842	07-63221-00	CHIP RES. 220 $\Omega$ $\pm$ 5% 0603 SMT	1

## ELECTRICAL PARTS LIST - CONTINUED

Ref. No.	Part No.	Description	Q'ty
R309,412,504,806~9,822,891/2,825 /6,835,469	07-63222-00	CHIP RES. 2.2kΩ ±5% 0603 SMT	14
R101,460/1,802~5	07-63223-00	CHIP RES. 22kΩ ±5% 0603 SMT	7
R413,452	07-63224-00	CHIP RES. 220kΩ ±5% 0603 SMT	2
R105	07-63331-00	CHIP RES. 330Ω ±5% 0603 SMT	1
R115/6,503	07-63332-00	CHIP RES. 3.3kΩ ±5% 0603 SMT	3
R304/7	07-63390-00	CHIP RES. 39Ω ±5% 0603 SMT	2
R820,836	07-63471-00	CHIP RES. 470Ω ±5% 0603 SMT	2
R520/5/9,530	07-63472-00	CHIP RES. 4.7kΩ ±5% 0603 SMT	4
R111~3,308,401~6/8~11/27/30~2/4/ 38~42/4/70/1/3/6/7,453/5~9,506,821/3 /4/9~31/3/44	07-63473-00	CHIP RES. 47kΩ ±5% 0603 SMT	46
R448	07-63474-00	CHIP RES. 470kΩ ±5% 0603 SMT	1
R515/6	07-63562-00	CHIP RES. 5.6kΩ ±5% 0603 SMT	2
R531/2	07-63682-00	CHIP RES. 6.8kΩ ±5% 0603 SMT	2
R302/5	07-63752-00	CHIP RES. 7.5kΩ ±5% 0603 SMT	2
L804	09-10301-00	CHOCK COIL 300μH 1A Ø11X15MM	1
L801	09-70100-01	MICRO INDUCTOR 10UH AXIAL TYPE	1
L803,891	09-70151-03	CHOKO COIL 150μH Ø6X10X0.3	2
MB	12-01380-055	CCE138X3.4 MB HI-POW 154X149.6	1
FB	12-01380-355	PCB CCT138X3.4 FB (97.9X60X1.2)	1
MB TO KB	12-01380-395	CCT138X3.4 CCF DRIVER 43.5X29.6	1
VB	12-01380-935	CCT-138X3.4 FLEXIBLE PCB	1
SP	14-04623-00	SPK 80UH 0.25W 4.6X23MM	1
T891	15-02672-00	TRANS WT-2672 JBC-544-EFD15	1
L802	15-27012-11J	RING COIL Ø27X12MM V-TYPE	1
SW1~3	16-01380-00	DETECTOR SW	3
<b>PC BOARD ASSY, FM TUNER BOARD</b>			
FM/AM TUNER	29-17870-03	LA1787 FM/MW/LW TUNE CET-7010EU	1
<b>PC BOARD ASSY, AM TUNER BOARD</b>			
Q204	01-01623-00	CHIP TR. C1623 "NEC"	1
Q203	01-08050-03	TR. 8050C TO-92-B	3
Q202	02-08550-03	TR. 8550C TO-92-B	1
C206	05-63103-01	CHIP 0.01μF ±10% X7R 0603 SMT	2
	05-63104-01	CHIP 0.1μF ±10% X7R 0603 SMT	1
C204	05-63223-01	CHIP 0.022μF ±10% X7R 0603 SMT	1
C208	05-63471-00	CHIP 470PF ±5% NPO 0603 SMT	1
C207	05-63474-00	CHIP CAP 0.47μF Y5V +80%	3
C205	06-16106-01	E. CAP 10μF 16V Ø4X7MM	1
R203~5	07-63102-00	CHIP RES. 1kΩ ±5% 0603 SMT	1
R207	07-63471-00	CHIP RES. 470Ω ±5% 0603 SMT	1
R206	07-63473-00	CHIP RES. 47kΩ ±5% 0603 SMT	1



## ELECTRICAL PARTS LIST – CONTINUED

Ref. No.	Part No.	Description	Q'ty
L201	09-70470-02	AXIAL TYPE 4.7μH CHOKE COIL W/TC	1
<b>PC BOARD ASSY, KEY BOARD</b>			
Q091	01-01623-00	CHIP TR. C1623 “NEC”	2
ZD001	02-00062-07	E.S.D. DIODE NNCD6.2G (5PIN)	1
CCF1	02-00138-00	CF-32104F (104X3.2) CCT-138X3.4	1
D001	02-04148-00	DIODE IN-4148	1
LAMP1~16	02-30503-60D	P. LAMP 3V6MA Ø3X6MM (TAI WAH)	16
IC001	03-75873-00	IC LC75873 NW (SQFP80)	1
C008~10	05-63103-01	CHIP 0.01μF ±10% X7R 0603 SMT	3
C001/2/4/6/7	05-63104-01	CHIP 0.1μF ±10% X7R 0603 SMT	5
C003	05-63221-00	CHIP 220PF ±5% NPO 0603 SMT	1
R032/6	07-05221-00	RES. 220Ω 1/4W	2
R006~8,038/9	07-63101-00	CHIP RES. 100Ω ±5% 0603 SMT	5
R010/2/3,028,030/1	07-63102-00	CHIP RES. 1kΩ ±5% 0603 SMT	6
R009,018,027	07-63103-00	CHIP RES. 10kΩ ±5% 0603 SMT	3
R011,029	07-63152-00	CHIP RES. 1.5kΩ ±5% 0603 SMT	2
R021	07-63182-00W	CHIP RES. 1.8kΩ ±5% 0603 SMT	1
R014,023/2,032	07-63272-00	CHIP RES. 2.7kΩ ±5% 0603 SMT	4
R004	07-63274-00	CHIP RES. 270kΩ ±5% 0603 SMT	1
R015,024,033	07-63332-00	CHIP RES. 3.3kΩ ±5% 0603 SMT	3
R001~3,016,025	07-63472-00	CHIP RES. 4.7kΩ ±5% 0603 SMT	5
R005,091~3	07-63473-00	CHIP RES. 47kΩ ±5% 0603 SMT	4
R017,026	07-63822-00	CHIP RES. 8.2kΩ ±5% 0603 SMT	2
KB	12-01380-305	CCT138X3.4 KB D/S 1.2X157X91.3	1
	16-01107-01K	TACT SW. DCT/1101A 2PIN L=5MM	21
	18-00115-00	CD115 ROTRAY ENCODER VOL.	1
<b>CD BOARD ASSY, SDK/CD SERVO BOARD</b>			
TR1	01-00812-00	TR. 2SA812	1
D1,2	02-00010-01	CHIP DIODE DCC010-TB	2
IR1,2	02-00144-00	IR LED MIE 144AIMC	2
IC401	03-00408-00	IC KS57C0408	1
IC101	03-0923-00	IC KB9223	1
IC301	03-09259-00	IC KA9259D	1
IC201	03-09268-00	IC KS9286	1
X1	04-00169-00	CRYSTAL HC-49/US 16.9344MHZ	1
C27	05-03040-05	CHIP CER 4P 50V J CH TA	1
C28	05-03080-05	CHIP CER 8P 50V J CH TA	1
C20	05-03102-10	CHIP CER 1000P 50V K Y5P TA	1
C2,4,14/6,21/6,30/3	05-03103-10A	CHIP CER 0.01μF 50V K Y5P TA	8
C12/3/7,22~4,31/6/7/9,40/4/7~9	05-03104-10A	CHIP CER 0.1μF 50V K Y5P TA	15
C5,9	05-03151-10	CHIP CER CAP 150PF	2
C1,6,10	05-03152-10	CHIP CER 1500P 50V K Y5P TA	3

## ELECTRICAL PARTS LIST – CONTINUED

Ref. No.	Part No.	Description	Q'ty
C34/5	05-03200-05B	CHIP CER 20P 50V COG TA ±5%	2
C19,38	05-03222-10	CHIP CER 2200P 50V K Y5P TA	2
C7,8	05-03331-10	CHIP CER 330P 50V K Y5P TA	2
C3,11/8,25	05-03333-10B	CHIP CER 0.033µF 50V X7R ±10%	4
C17	05-03391-10	CHIP CER 390P 50V K Y5P TA	1
C29	05-03472-10A	CHIP CER 4700 50V K Y5P TA	1
C32	05-03473-10	CHIP CER 0.047µF 25V K Y5P TA	1
C42/3	05-03561-10A	CHIP CER 560P 50V K Y5P TA	2
C15	05-03683-10	CHIP CER CM21X7R683K25AT	1
EC11/3/5/8	06-10107-01	E. CAP 100µF 10V (Ø5X7MM MINI)	4
EC7	06-16106-01	E. CAP 10µF 16V Ø4X7MM	1
EC14	06-16107-01	E. CAP 100µF 16V (Ø6.3X7MM)	1
EC2,3	06-16225-01	E. CAP 2.2µF 16V (Ø4X7MM)	2
EC1,4	06-16475-03	E. CAP 4.7µF 16V (Ø3X5MM)	2
EC16/7	06-50105-01	E. CAP 1µF 50V (Ø4X7MM)	2
EC12	06-50105-02	E. CAP 1µF 50V (Ø3X5MM)	1
EC5,6,8	06-50474-01	E. CAP 0.47µF 50V (Ø4X7MM)	3
R29,43	07-05102-54	CHIP RES. 1kΩ 1/10W	2
R61	07-05103-16	RES. 10kΩ 1/16W	1
R32,33	07-05103-54	CHIP RES. 10kΩ 1/10W	2
R17,19,26,30,52/3	07-05104-54	CHIP RES. 100kΩ 1/10W	6
R14	07-05105-54	CHIP RES. 1MΩ 1/10W	1
R51	07-05121-54	CHIP RES. 120Ω 1/10W	1
R18,41/2	07-05123-54	CHIP RES. 12kΩ 1/10W	3
R21/4,34	07-05124-54	CHIP RES. 120kΩ 1/10W	3
R23	07-05153-54	CHIP RES. 15kΩ 1/10W	1
R16,31	07-05154-54	CHIP RES. 150kΩ 1/10W	2
R55,60	07-05164-56B	CHIP RES. 160kΩ 1/16W	2
R13,27	07-05184-54	CHIP RES. 180kΩ 1/10W	2
R40	07-05220-54	CHIP RES. 22Ω 1/10W	1
R62	07-05223-54	CHIP RES. 22kΩ 1/10W	1
R22	07-05224-54	CHIP RES. 220kΩ 1/10W	1
R3,4,11/2,48	07-05273-54	CHIP RES. 27kΩ 1/10W	5
R49,50	07-05332-54	CHIP RES. 3.3kΩ 1/10W	2
R2	07-05434-54	CHIP RES. 430kΩ 1/10W	1
R20,47	07-05473-54	CHIP RES. 47kΩ 1/10W	2
R5~10	07-05562-16A	RES. 5.6kΩ 1/16W (TAPPING)	1
R28	07-05562-54	CHIP RES. 5.6kΩ 1/10W	6
R51	07-05564-54	CHIP RES. 560kΩ 1/10W	1
R25	07-05680-54	CHIP RES. 68Ω 1/10W	1
R39	07-05683-54	CHIP RES. 68kΩ 1/10W	1
R15	07-05820-54	CHIP RES. 82Ω 1/10W	1

## ELECTRICAL PARTS LIST - CONTINUED

Ref. No.	Part No.	Description	Q'ty
R54	07-05822-54	CHIP RES. 8.2kΩ 1/10W	1
R46	07-05823-54	CHIP RES. 82kΩ 1/10W	1
R56~9	07-05823-56B	CHIP RES. 82kΩ 1/16W 1.6X0.8 ±1%	4
R55,60	07-63204-01	CHIP RES. 200kΩ ±1% 0603	1
MR10/1	07-63223-00	CHIP RES. 22kΩ ±5% 0603 SMT	1
MR1~9	07-63473-00	CHIP RES. 47kΩ ±5% 0603 SMT	2
X2	09-50500-01	CER FILTER (CSTS0500MG03.5 MHz)	1
L1,2	09-70100-01	MICRO INDUCTOR 10μH AXIAL TYPE	1
	12-13199-630	CDM-131N (99) PCB D/SIDE	
SW1	16-00111-00	HICRO SW SW-111 (SHIN MEI)	
<b>PC BOARD ASSY, REMOTE BOARD</b>			
Q500	01-01781-18	TR. 2SD1781K-R "ROHM"	1
LD901	02-00334-00	INFRARED LED Ø3MM MIE-334A4	1
D500~2	02-04148-00	DIODE IN-4148	3
IC500	03-06121-01	IC μPD 6121G-001	1
C504,X2	05-03105-10M	CHIP CAP KC20E1C105M-TS	2
C501/2	05-03121-06	CHIP CAP 120PF (NPO)	2
R501	07-05022-54	CHIP RES. 2.2Ω 1/10W	1
R500	07-05102-54	CHIP RES. 1kΩ 1/10W	1
R502/4~8	07-05104-54	CHIP RES. 100kΩ 1/10W	6
CF501	09-50455-05J	CER RESONATOR ZTB455E	1
	12-04931-819	KB RC06 (049X3.1) D/S 1.2X80X48	1
<b>PC BOARD ASSY, LINEOUT BOARD</b>			
Q601	01-08050-03	TR. 8050C TO-92-B	1
D601	02-04148-00A	DIODE IN-4148 AT. (TAPPING)	1
IC601/2	03-04558-06	IC KIA-4558F	2
C606	06-10227-01	E. CAP 220μF 10V (Ø6MM MINI)	1
C603/11	06-16107-01	E. CAP 100μF 16V (Ø6.3X7MM)	2
C607~10	06-50105-01	E. CAP 1μF 50V (Ø4X7MM)	4
C601/2/4/5	06-50474-01	E. CAP 0.47μF 50V Ø4X7MM	4
R617~24	07-63000-00	CHIP RES. 0Ω 0603 SMT	8
R609	07-63101-00	CHIP RES. 100Ω ±5% 0603 SMT	1
R601/5,612/5	07-63103-00	CHIP RES. 10kΩ ±5% 0603 SMT	4
R607	07-63223-00	CHIP RES. 22kΩ ±5% 0603 SMT	1
R608	07-63273-00	CHIP RES. 27kΩ ±5% 0603 SMT	1
R603/4,610/3/4	07-63473-00	CHIP RES. 47kΩ ±5% 0603 SMT	5
R602/6,611/6	07-63822-00	CHIP RES. 8.2kΩ ±5% 0603 SMT	4
<b>PC BOARD ASSY, TONE BOARD</b>			
Q591/2	01-01623-00	CHIP TR. C1623 "NEC"	2
D414	02-04148-00A	DIODE IN-4148 AT. (TAPPING)	1
C592/3	05-03105-10M	CHIP CAP KC20E1C105M-TS	2
C227/8	05-63681-00	CHIP 680PF ±5% NPO 0603 SMT	2

## ELECTRICAL PARTS LIST - CONTINUED

Ref. No.	Part No.	Description	Q'ty
C591	06-10107-01	E. CAP 100 $\mu$ F 10V ( $\varnothing$ 5X7MM MINI)	1
C527/8	06-50105-01	E. CAP 1 $\mu$ F 50V ( $\varnothing$ 4X7MM)	2
C523/4	06-50225-01	E. CAP 2.2 $\mu$ F 50V ( $\varnothing$ 4X7MM)	2
R593/6/9	07-63102-00	CHIP RES. 1k $\Omega$ $\pm$ 5% 0603 SMT	3
R534/7,597/8	07-63103-00	CHIP RES. 10k $\Omega$ $\pm$ 5% 0603 SMT	4
R517/8	07-63223-00	CHIP RES. 22k $\Omega$ $\pm$ 5% 0603 SMT	2
R592/4	07-63334-00	CHIP RES. 330k $\Omega$	2
R591/5	07-63471-00	CHIP RES. 470 $\Omega$ $\pm$ 5% 0603 SMT	2
R533/6	07-63822-00	CHIP RES. 8.2k $\Omega$ $\pm$ 5% 0603 SMT	2
CDJ	16-00035-04	$\varnothing$ 3.5MM JACK (4PIN) W/SW	1
TV IN	20-20200-10A	DOUBLE RCA 200MM BLACK W/C	1

## SPECIFICATIONS

T. H. D	Less than 0.35%
Signal to Noise Ratio	More than 55 dB
Channel Separation	More than 50 dB
Frequency Response	20Hz - 20kHz (CD Player)
Frequency Response	50Hz - 80kHz (Cassette Player)
Stereo separating (FM)	30 dB (at 1kHz)
Signal to noise ratio (FM)	Better than 50 dB
Output power	4 X 40W
Speaker output impedance	4 To 8 ohm
Power source	DC 12V, Negative ground.
Frequency range	FM 87.5 - 108 MHz
	MW 522 - 1620 kHz
	LW 144 - 288 kHz
Sensitivity	FM 3 $\mu$ V (S/N=30dB)
	MW 32 dB $\mu$ (S/N=20 dB)
	LW 35 dB $\mu$ (S/N=20 dB)

Specifications are subject to change without notice.