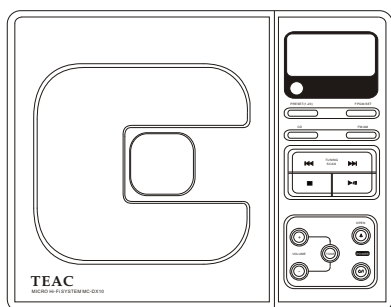




TEAC

SERVICE MANUAL

MC-DX10

MICRO Hi-Fi SYSTEM



NOTES

- PC board shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. they must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

CONTENTS

1 SPECIFICATIONS	2
2 ADJUSTMENT AND CHECKS	3
3 EXPLODED VIEW AND PARTS LIST	5
4 PC BOARDS AND PARTS LISTS	10
5 WIRING DIAGRAM	18
6 INCLUDED ACCESSORIES	20

MC-DX10

1 SPECIFICATIONS

Amplifier Section

Output Power:	5 watts per channel (RMS, 8 ohms)
Output to Subwoofer:	15 watts per channel (RMS, 8 ohms)
Frequency Responce :	50 Hz to 20 kHz

Tuner Section

FM	87.5 MHz to 108.0 MHz
AM (MW)	522 kHz to 1620 kHz

CD Player Section

Frequency Responce	50 Hz to 20 kHz
Signa-to-Noise Ratio	Better than 80 dB

GENERAL

Power Requirements:	230V AC, 50Hz	
Power Consumption:	60 W	
Dimension (W x H x D):	Main Unit	216 x 165 x 78 mm
	Speaker	193 x 156 x 65mm
	Subwoofer	161 x 218 x 355mm
Weight: (net)	Main Unit	1.1 kg
	Speaker	0.65 kg
	Subwoofer	4.8 kg
Standard Accessories:	Owner's Manual x 1	
	Warranty Card x 1	
	Subwoofer Audio Cable x 1	
	Subwoofer Power Cable x 1	
	Set of Speaker Cable x 1	
	Remote Control (with battery) x 1	

- Design and specifications are subject to change without notice.
- Illustrations may differ slightly from production models.

2 ADJUSTMENTS AND CHECKS

2-1 TUNER SECTION

- Use a screwdriver with a plastic or ceramic grip for all adjustment.

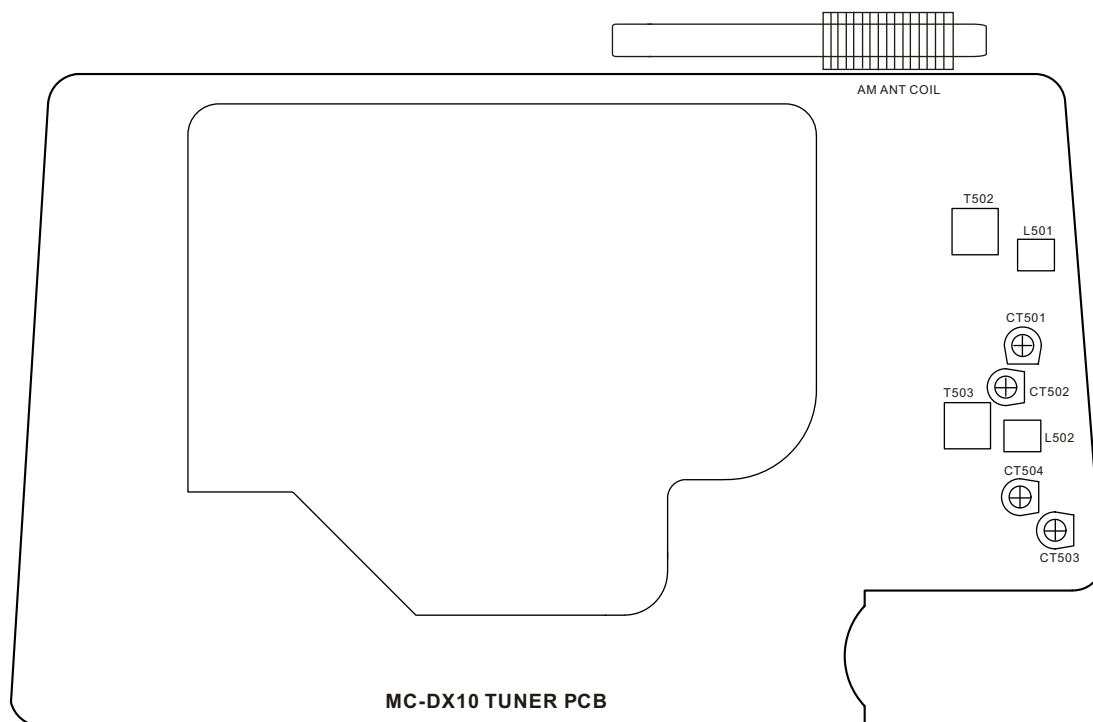
2-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

2-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

2-2 Adjustment and Test Points



MC-DX10

2-2-1 FM/AM alignment chart

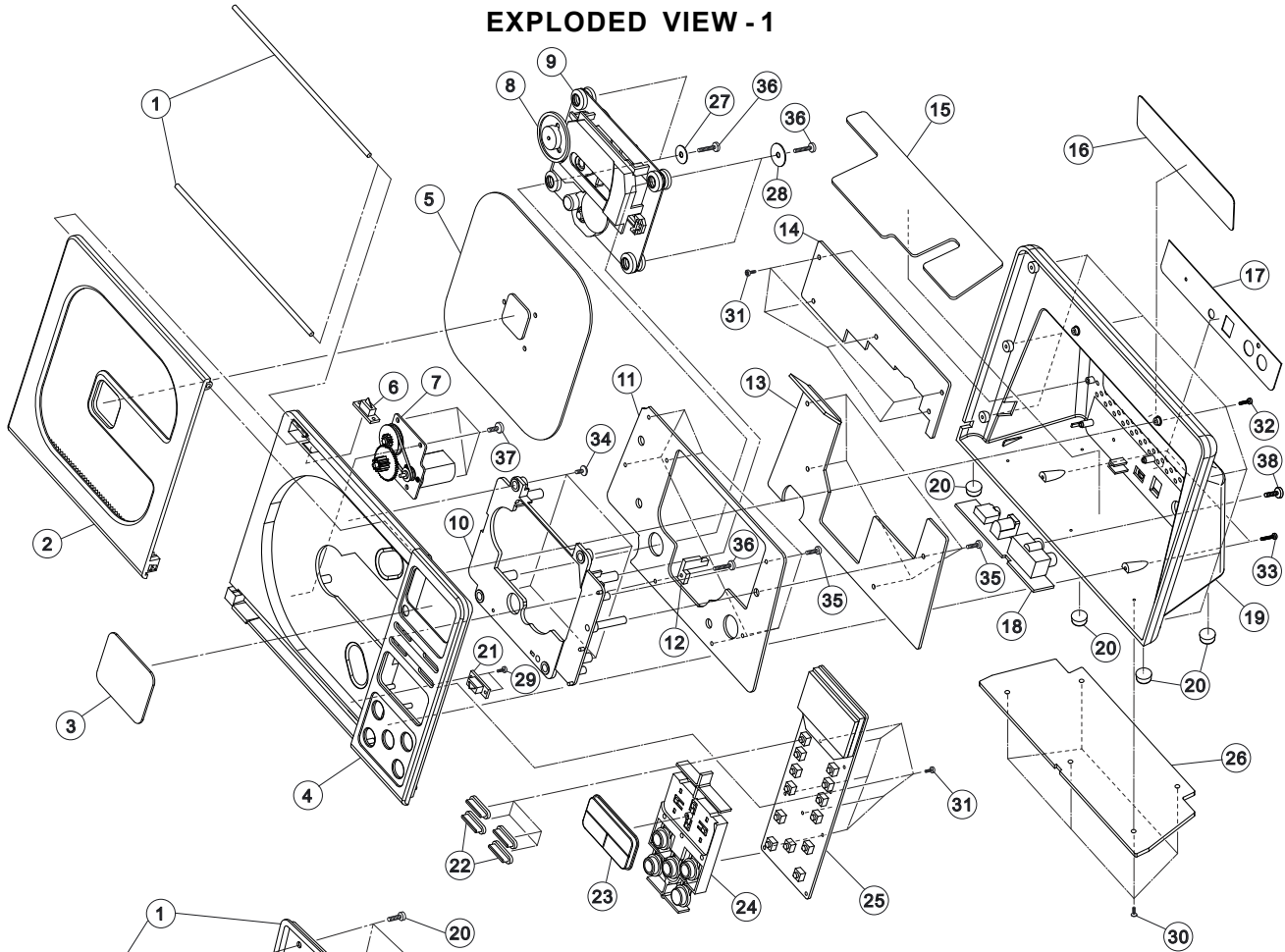
ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L502	Adjust for max.output.
2. Tracking	108MHz 1kHz, +/-22.5kHz dev.	108MHz	CT502	Adjust for max. output and best waveform.
	90MHz 1kHz, +/-22.5kHz dev.	90MHz	L501	
	106MHz 1kHz, +/-22.5kHz dev.	106MHz	CT501	
	Repeat step 2			
AM				
1. IF adjustment	450kHz 1kHz, 30% mod	603kHz	T502	Adjust for max. output.
2. AM band	522kHz 1kHz, 30% mod	522kHz	T503	Adjust for max. output and best waveform.
3. Tracking	1620kHz 1kHz, 30% mod	1620kHz	CT504	
	603kHz 1kHz, 30% mod	603kHz	AM ANT COIL	
	1404kHz 1kHz, 30% mod	1404kHz	CT503	
	Repeat step 3			

3-1 CD SECTION

Auto alignment.

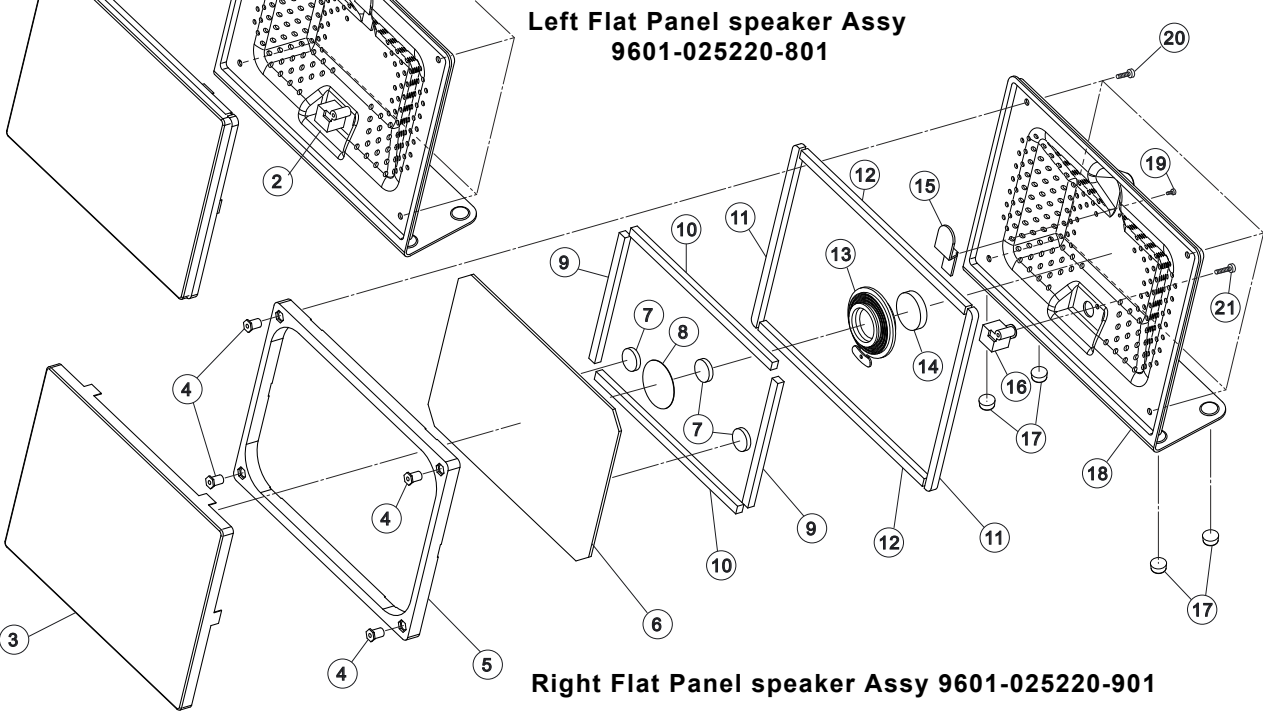
3 EXPLODED VIEWS AND PARTS LIST

EXPLODED VIEW - 1



EXPLODED VIEW-2

Left Flat Panel speaker Assy
9601-025220-801



Right Flat Panel speaker Assy 9601-025220-901

MC-DX10

EXPLODED VIEW-1

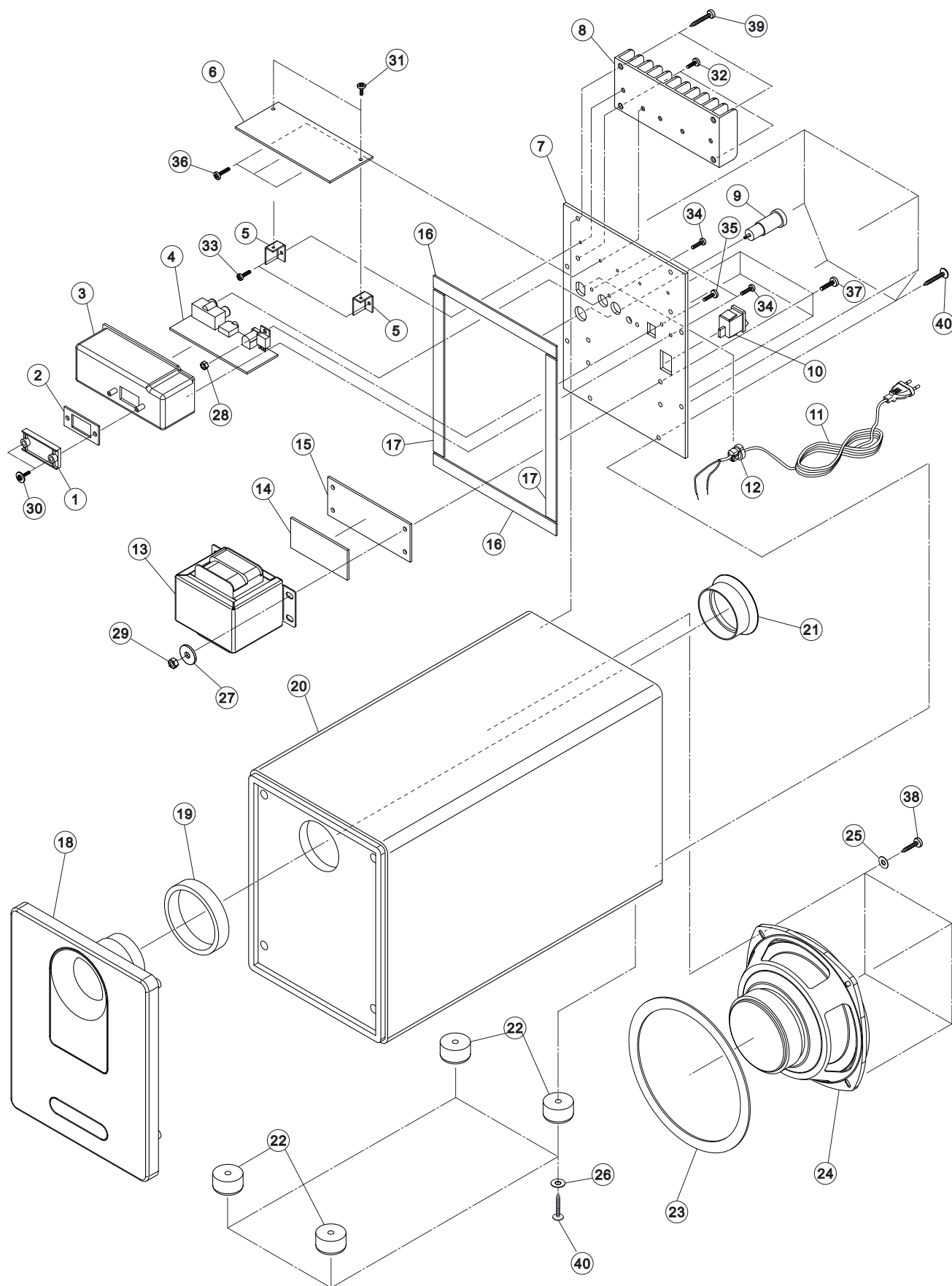
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-1	6600-020346-000	GUIDE PIN SHAFT	
1-2	6001-250301-000-04	TEAC MC-DX10 TRAY DOOR	
1-3	6001-250310-000-04	LENS DISPLAY	
1-4	6001-250303-000-03	TEAC MC-DX10 FRONT HOUSING	
1-5	6001-250302-000	WINDOW	
1-6	9401-025201-171	OPEN SWITCH PCB ASSY	
1-7	8501-025100-100	MOTOR BRACKET ASSY	
1-8	3009-213000-200	SONY CD MECH	
1-9	6600-170076-000	CUSHION 5CD, 30DEG	
1-10	6001-250304-000	BRACKET CD MECHA	
1-11	9401-025201-321	TUNER PCB ASSY	
1-12	6001-250335-000	PCB BRACKET	
1-13	9401-025201-181	SERVO PCB ASSY	
1-14	9401-025203-571	AUDIO PCB ASSY	
1-15	6501-250304-001	WEIGHT	
1-16	6001-250321-000-07	TEAC MC-DX10 RATING LABEL	
1-17	6001-250322-000-04	FUNCTION INLAY	
1-18	9401-025201-531	I/O PCB ASSY	
1-19	6001-250307-000-02	MC-DX10 W/O BN R/P	
1-20	6600-070131-000	RUBBER FOOT	
1-21	9401-025200-171	CLOSE SWITCH PCB ASSY	
1-22	6001-250306-000	BUTTON A	
1-23	6001-250305-000-04	TUNNING SCAN BUTTONS	
1-24	6001-250306-000-05	FUNCTION BUTTONS	
1-25	9401-025204-231	MCU PCB ASSY	
1-26	6501-250307-000-01	WEIGHT BOTTOM	
1-27	7102-710006-022	WASHER 2.7 x 10 x 0.6	
1-28	7102-712706-022	WASHER D2.7 x12.7X0.6	
1-29	7002-005002-022	SCREW M2x5 PTP P/H	
1-30	7002-005002-051	SCREW M2X5 PTP F/H BLK	
1-31	7002-006002-021	SCREW M2 x6 PTP P/H BLK	
1-32	7002-008002-151	SCREW M2 x 8 PTP HEX BLK	
1-33	7002-010002-021	SCREW M2 x 10 PTP P/H BLK	
1-34	7002-605002-131	SCREW M2.6 5 PTP PW/H BLK	
1-35	7002-606002-021	SCREW M2.6 x 6 PTP P/H	
1-36	7002-610002-112	SCREW M2.6 x 10 PTP B/H	
1-37	7003-006002-031	SCREW M3x6 PTP 1/P BLK	
1-38	7003-008002-111	SCREW M3x 8 PTP B/H BLK	

EXPLODED VIEW-2

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
2-1	9601-025220-801	MC-DX10(LEFT) FLAT PANEL SP ASSY	
2-2	2330-002901-006	RCR JACK (WHITE)	
2-3	6501-250301-000-01	SPEAKER GRILL	
2-4	6600-120030-930	SCREW NUT M3x9.3	
2-5	6001-250312-000	BRACKET COVER SPEAKER	
2-6	6001-250318-000	PANEL SPEAKER	
2-7	6600-170095-000	RUBBER PAD	
2-8	6600-200008-000	DOUBLE SIDE ADHESIVE RING	
2-9	6600-210109-001	SPONGE-1 98x6x5MM	
2-10	6600-210110-001	SPONGE-2 148x6x5MM	
2-11	6600-210138-004	SPONGE 139x6x6	
2-12	6600-210139-005	SPONGE 172x6x6	
2-13	4099-250800-000	EXCITER 8 OHM 25MM 10W	
2-14	6600-210121-000	SPONGE-3 25x5.2MM	
2-15	6001-250319-000	SHIELD PLATE	
2-16	2330-002901-007	RCR JACK (RED)	
2-17	6600-070131-000	RUBBER FOOT	
2-18	6501-250302-000-06	MC-DX10 SPEAKER FRAME	
2-19	7002-005002-151	SCREW M2x5 PTP HEX BLK	
2-20	7003-008010-151	SCREW M3 x8 MC HEX BLK	
2-21	7003-010002-151	SCREW M3x10 PTP HEX BLK	

MC-DX10

EXPLODED VIEW-3



EXPLODED VIEW-3

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
3-1	6001-250327-000	PLASTIC PLATE	
3-2	6600-210141-000	EVA PAD 40x19.1x1.5	
3-3	6001-250326-000	PCB COVER	
3-4	9401-025210-531	SUB-WOOFER OUTPCB ASSY	
3-5	6501-250313-000	PCB STAND	
3-6	9401-025201-091	SUB-WOOFER POWER PCB ASSY	
3-7	6501-250310-000-11	REAR PLATE	
3-8	6501-250315-000	HEAT SINK	
3-9	4031-000002-000	FUSE HOLDER	
3-10	2401-020120-009	POWER SWITCH 10A/250V	
3-11	 2610-218309-903	1830MM AC POWER CORD, VDE PLUG	
3-12	6600-180009-000	AC CORD STOPPER	
3-13	 3200-042261-403	TRANSFORMER 230V/50HZ	
3-14	6600-170098-000	RUBBER PAD 66.6x30x2	
3-15	6600-170097-001	RUBBER PAD	
3-16	6600-210131-000	EVA PAD 143x12x1.5	
3-17	6600-210130-001	EVA PAD 163x12x1.5	
3-18	6001-250334-000-03	MC-DX10 SUB-WOOFER HOUSING	
3-19	6600-210129-000	EVA PAD	
3-20	6600-990069-000	SUB-WOOFER SOUND BOX	
3-21	6001-250333-000	AIR PIPE	
3-22	6600-070130-000	FOOT - SW	
3-23	6600-210136-000	EVA PAD	
3-24	3104-000000-005	MC-DX10 SUB-WOOFER SPEAKER	
3-25	7103-709010-022	WASHER M3.7x7x9x1	
3-26	7104-010010-022	WASHER M4x10x1MM	
3-27	7104-212010-022	WASHER 4.2x12x1	
3-28	6600-120030-001	HEX NUT M3x5.5x2.4MM	
3-29	6600-120035-000	HEX NUT M3.5x6x2.8T	
3-30	7002-608002-062	SCREW M2.6x8 W/H	
3-31	7003-006001-111	SCREW M3x6 STP B/H BLK	
3-32	7003-008003-111	SCREW M3x8 BTB B/H BLK	
3-33	7003-010001-021	SCREW M3x10 STP P/H BLK	
3-34	7003-010002-021	SCREW M3x10 P-TYPE P/H BLK	
3-35	7003-010010-111	SCREW M3x10 MC B/H BLK	
3-36	7003-012010-111	SCREW M3x12 MC B/H BLK	
3-37	7003-512010-111	SCREW M3.5x12 MC B/H BLK	
3-38	7003-514012-081	SCREW M3.5x14 T/H BLK	
3-39	7003-518012-021	SCREW M3.5x18 P/H BLK	
3-40	7003-518012-081	SCREW M3.5x18 T/H BLK	

MC-DX10

4 PC BOARDS AND PARTS LIST

TUNER PCB ASSY - TOP

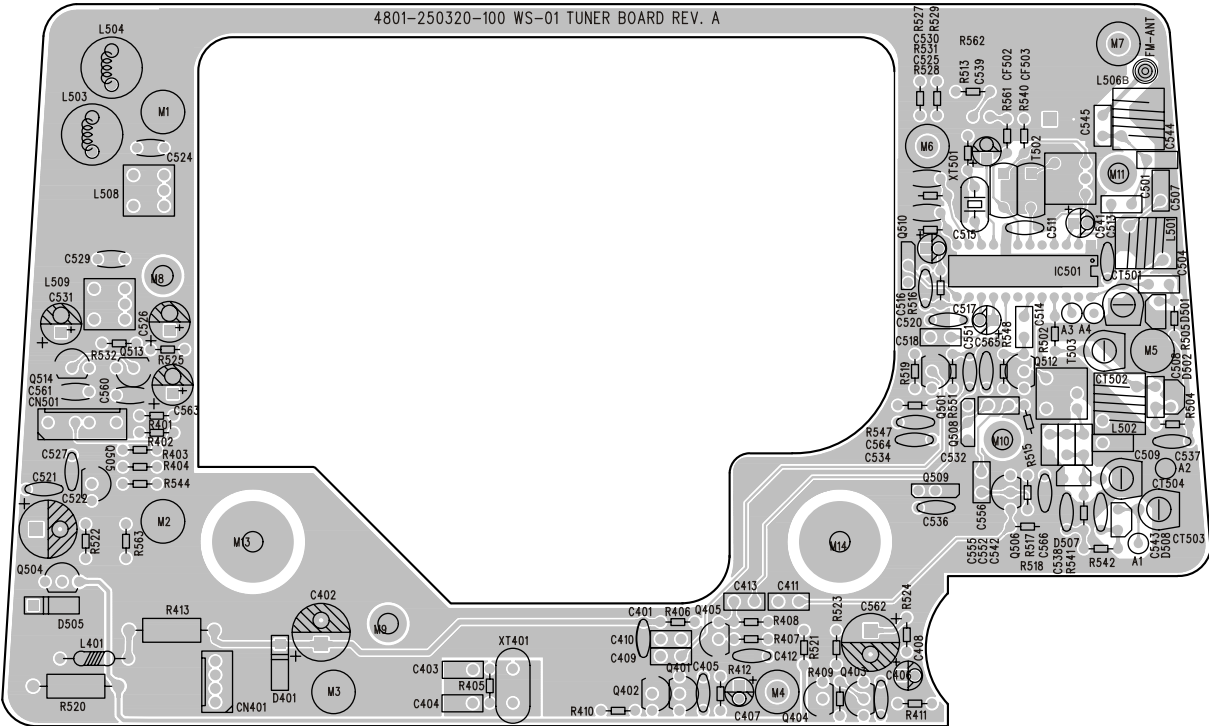
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9401-025201-321	TUNER PCB ASSY	
	4801-250320-001	TUNER PCB	
CF502	1603-107003-991A	FILTER LT10.7MA5	
CF503	1603-450001-002	FILTER LTP450B	
CN401	2300-004000-001	STRAIGHT CONN.WAFER 4PIN	
CN501	2300-006000-001	STRAIGHT CONN WAFER 6PIN	
CT501-504	1210-099900-002	TRIMMER CAP 10P	
D401	1402-471201-200	ZENER DIODE 4V7	
D501,502	1400-101000-000	DIODE ISV101	
D505	1402-430001-200	ZENER DIODE 4V3	
D507,508	1400-149000-000	DIODE ISV149	
IC501	4121-040053-000	IC - TA2104BN	
L503,504	1500-802300-000	INDUCTOR COIL 8MH	
L401	1504-470300-100	AXIAL INDUCTOR 47UH	
L501,502,506B	3201-355080-000	FM RF COIL 0.8x5x3.5T	
L508,509	3206-963190-000	4.7MH COIL	
T503	3206-962844-000	AM OSC- N02401	
T502	3206-962845-000	AM IF COIL- N0456	
Q401-404,501, Q505,506	1300-945000-100	TR - KSC945	
Q405,512	1300-167400-100	TR - C1674	
Q504	1301-855000-100	TR - SS8550	
Q508,509,510	1300-114000-400	TR - DTC114YS	
XT401	1600-720002-000	CRYSTAL 7.2 MHZ	
XT501	1603-107003-998A	FILTER JT10.7MG80	

TUNER PCB ASSY - BOTTOM

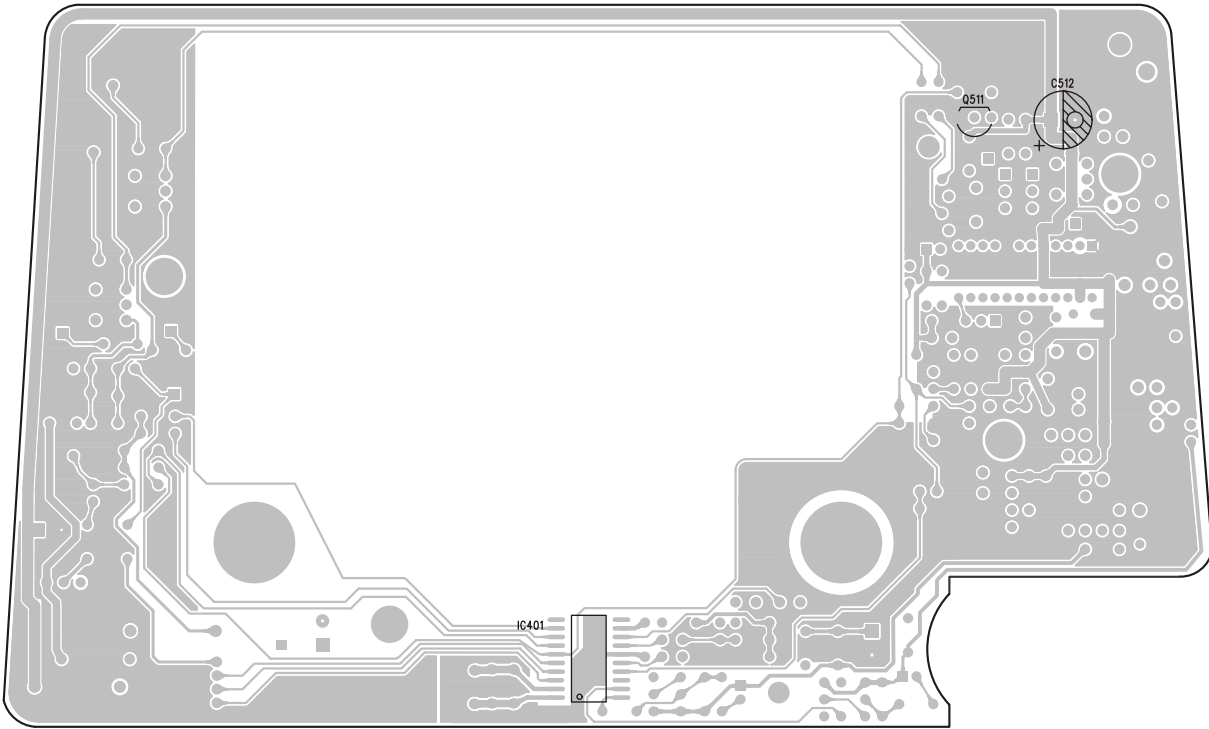
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
IC401	4192-570103-000	IC - TC9257F	
Q511	1300-945000-100	TR - KSC945	

MC-DX10

TUNER PCB - TOP



TUNER PCB - BOTTOM



MC-DX10

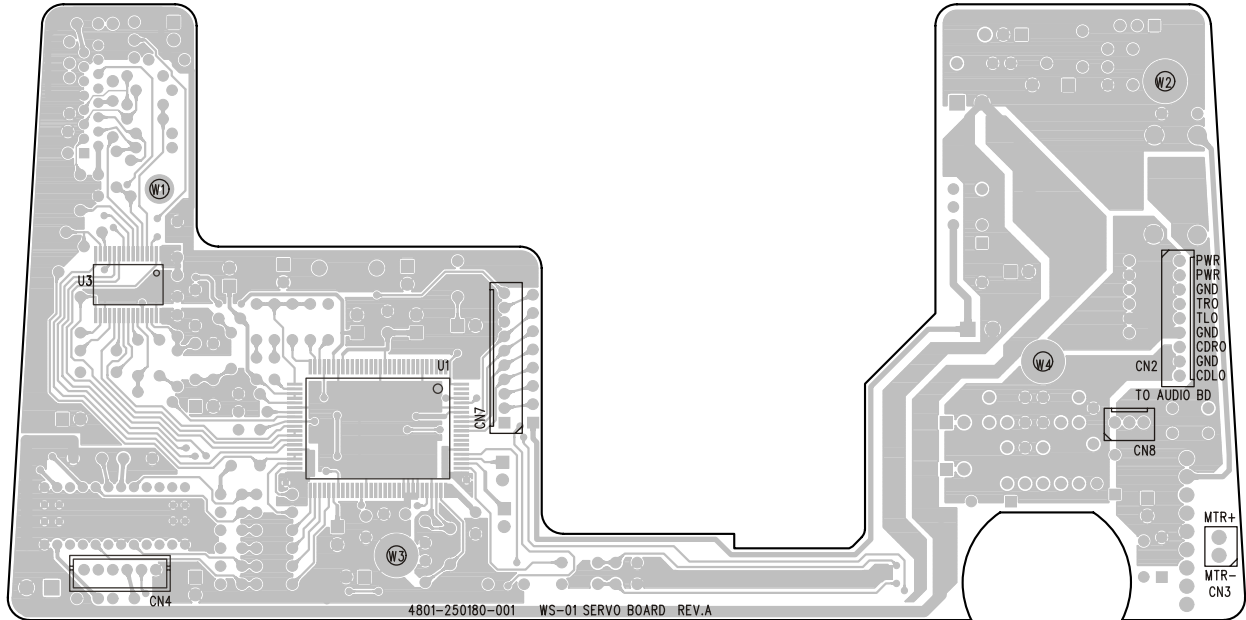
SERVO PCB ASSY - TOP

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	9401-025201-181	SERVO PCB ASSY	
	4801-250180-001	SERVO PCB	
CN2	2300-009000-000	STRAIGHT CONN WAFER 9PIN	
CN8	2300-003000-001	STRAIGHT CONN WAFER 3PIN	
U1	4194-620123-000	IC - TC9462F	
U3	4121-530103-000	IC - TA2153FN	

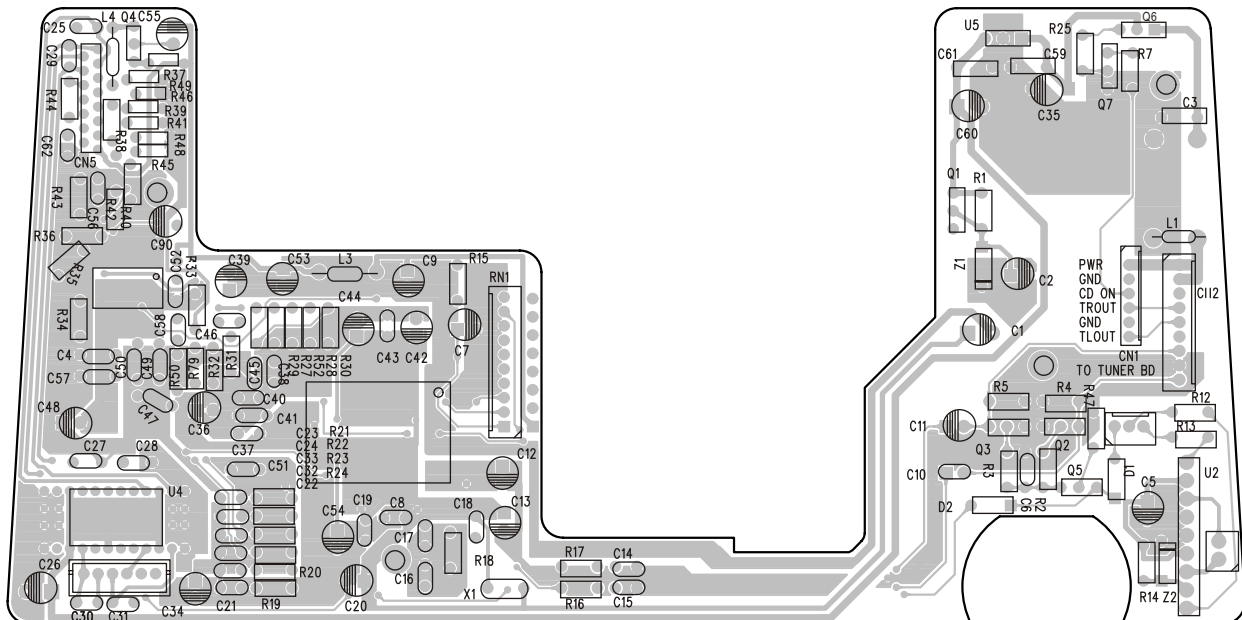
SERVO PCB ASSY - BOTTOM

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
C35	 1102-102014-000	CE, 16V 1000UF	
CN1	2300-006010-000	HORIZONTAL CONN WAFER 6PIN	
CN5	2301-016901-000	STRAIGHT CONN 16PIN FILM TYPE CABLE	
D1,2	1401-141480-000	DIODE - 1N4148	
L3	1504-470300-100	AXIAL INDUCTOR 47UH	
L4	1504-100300-100	AXIAL INDUCTOR 10UH	
Q1	1300-901300-101	TR- 9013G	
Q2,3	1300-901400-100	TR- 9014C	
Q4,5	1301-901500-100	TR- 9015C	
Q6	1301-772000-201	TR- 2SB772	
Q7	1300-212000-100	TR-C2120Y	
U2	4172-910003-000	IC - TA7291S	
U4	4120-920053-000	IC - TA2092N	
U5	4178-080302-600	IC - L7808CV	
X1	1600-169343-000	CRYSTAL 16.9343	
Z1,2	1402-560000-000	ZENER DIODE 5.6V	

SERVO PCB - TOP



SERVO PCB - BOTTOM



MC-DX10

MCU PCB ASSY - TOP

REF. NO	PARTS NO.	DESCRIPTION	REMARK
	9401-025204-231	MCU PCB ASSY	
	4801-250230-001	MCU PCB	
LCD101	3110-538300-000	LCD DISPLAY	
LED101,102	3100-334010-000	LED D3MM - BLUE	
Q104	1301-124000-400	TR - DTA124ESA	
Q105	1300-114000-400	TR - DTC114YS	
REM101	3001-203801-000	INFRARED SENSOR IRM-2038	
SW101-113	2400-020200-000	TACH SW 2P2T	

MCU PCB ASSY - BOTTOM

REF. NO	PARTS NO.	DESCRIPTION	REMARK
CN101	2300-010010-000	RIGHT-ANGLE CONN WAFER 10PIN	
D101,103,104	1401-141480-000	DIODE 1N4148	
D102	1402-620001-200	ZENER DIODE 6.2V	
IC101	4187-260103-000	IC - TMP87EP26F-1J15	
L101-103	1504-101300-100	AXIAL INDUCTOR 100UH	
Q101	1300-174000-100	TR - 2SC1740	
Q102	1300-212000-100	TR - C2120Y	
Q103	1300-114000-400	TR - DTC114YS	
XT101	1600-737282-990	CRYSTAL 7.3728MHZ	
XT102	1600-327680-991	CRYSTAL 32.768 KHZ	

I/O PCB ASSY - TOP

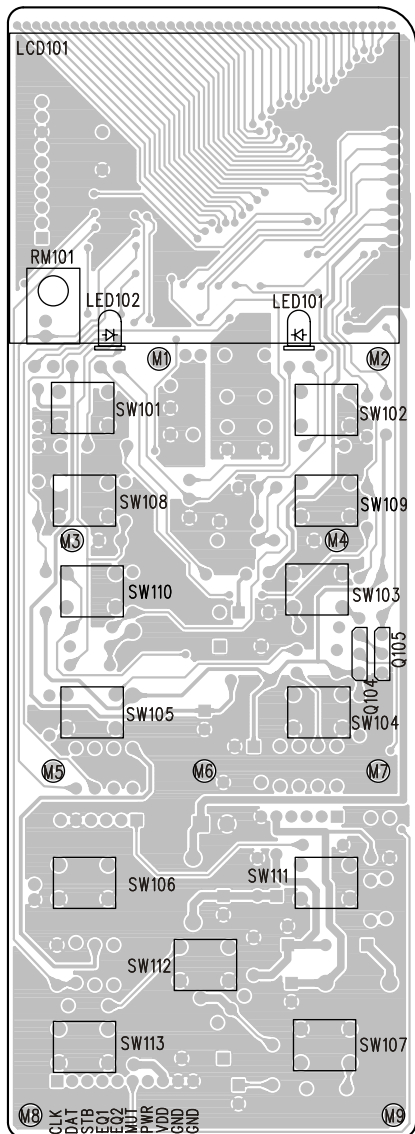
REF. NO	PARTS NO.	DESCRIPTION	REMARK
	9401-025201-531	I/O PCB ASSY	
	4801-250530-001	I/C PCB	
CN302	2303-003900-000	DC POWER JACK	
CN303	2320-003900-000	3PIN HEADPHONE JACK	
CN305	2330-004990-001	RCA JACK 4PIN	
D1	1401-141480-000	DIODE 1N4148	
Q301,303,304	1300-174000-100	TR - 2SC1740	
Q305	1301-200300-100	TR-KSR2003	

I/O PCB ASSY - BOTTOM

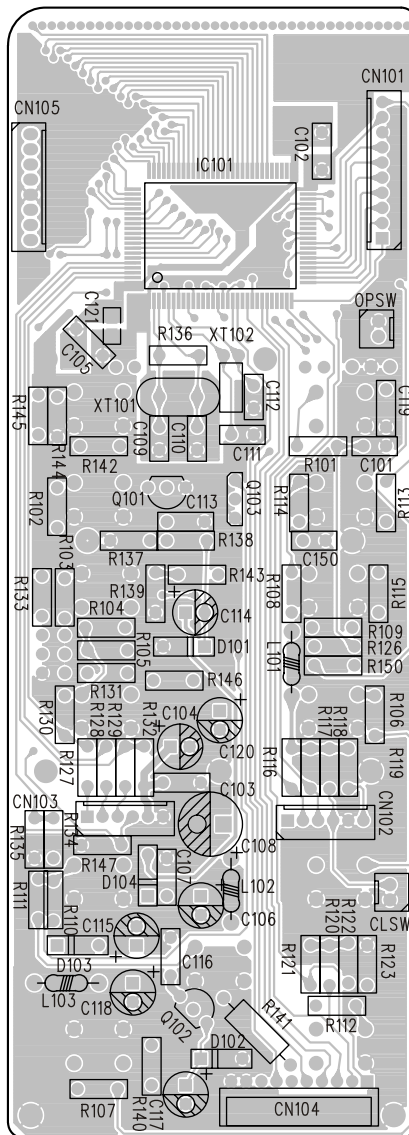
REF. NO	PARTS NO.	DESCRIPTION	REMARK
Q302	1300-174000-100	TR - 2SC1740	

MC-DX10

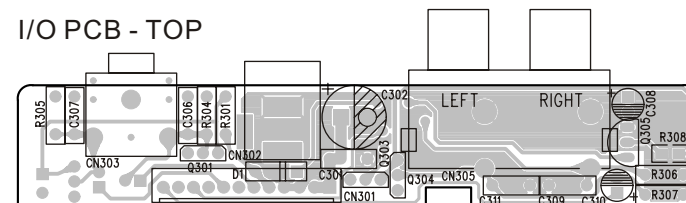
MCU PCB - TOP



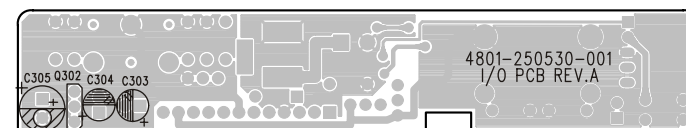
MCU PCB - BOTTOM



I/O PCB - TOP



I/O PCB - BOTTOM



MC-DX10

AUDIO PCB ASSY - TOP

REF. NO	PARTS NO.	DESCRIPTION	REMARK
	9401-025203-571	AUDIO PCB ASSY	
	4801-250570-101	AUDIO PCB	
D201	1402-471201-200	ZENER DIODE 4.7V	
D202	1401-141480-000	DIODE 1N4148	
IC202	4120-780053-000	IC - TA2078P	
IC205	4178-090311-600	IC - NJM78L09A	

AUDIO PCB ASSY - BOTTOM

REF. NO	PARTS NO.	DESCRIPTION	REMARK
IC201	4194-220103-000	IC - TC9422	
IC203,204	4145-580104-200	IC - NJM4558	

SUB-WOOFER POWER PCB ASSY

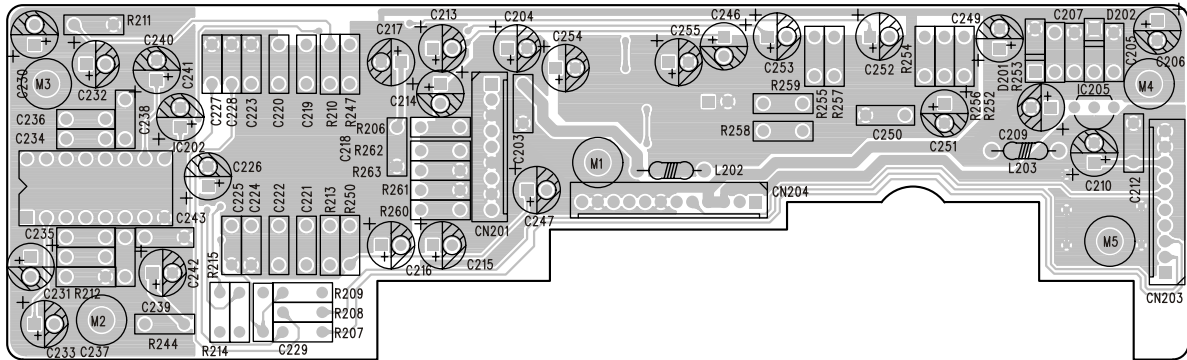
REF. NO	PARTS NO.	DESCRIPTION	REMARK
	9401-025201-091	SUBWOOFER POWER PCB ASSY	
	4801-250090-001	SUBWOOFER POWER PCB	
C301,302	⚠ 1102-332024-000	CE, 25V 3300UF	
D301-304	⚠ 1401-154010-000	DIODE 1N5401	
IC1,2	4145-580051-601	IC - NJM4558D	
IC3,4,5	4120-300342-600	IC - TDA2030AV	
JP1B	2300-004100-004	STRAIGHT WAFER 4PIN	
LSP,RSP	2300-002100-003	STRAIGHT CONN WAFER 2PIN	
Q1,2	1300-218150-100	TR - 2SC1815Y	
ZD1	1402-821201-200	ZENER DIODE 8.2V	
ZD2	1402-047401-000	ZENER DIODE 1N4740A	

SUB-WOOFER OUT PCB ASSY

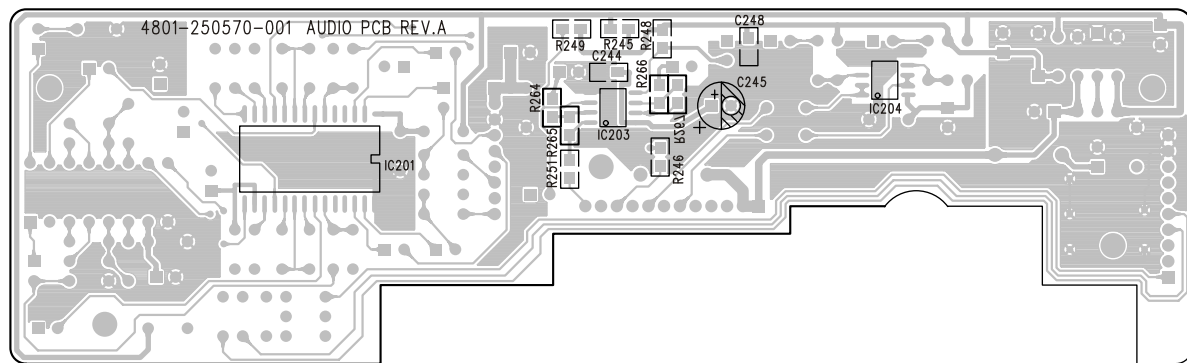
REF. NO	PARTS NO.	DESCRIPTION	REMARK
	9401-025210-531	SUBWOOFER OUT PCB ASSY	
	4801-250531-001	SUBWOOFER OUT PCB	
D305-308	1401-140040-000	DIODE 1N4004	
DC	2303-003900-000	DC POWER JACK	
FUSE2	⚠ 4030-618002-001	FUSE T2A/250V	
IC7	4178-120302-600	IC - L7812	
LED1	3100-000030-001	LED D3MM - GREEN	
LR IN	2320-005900-001	PHONE JACK 5PIN	
SP OUT	2320-004900-000	RCA JACK 4PIN	

MC-DX10

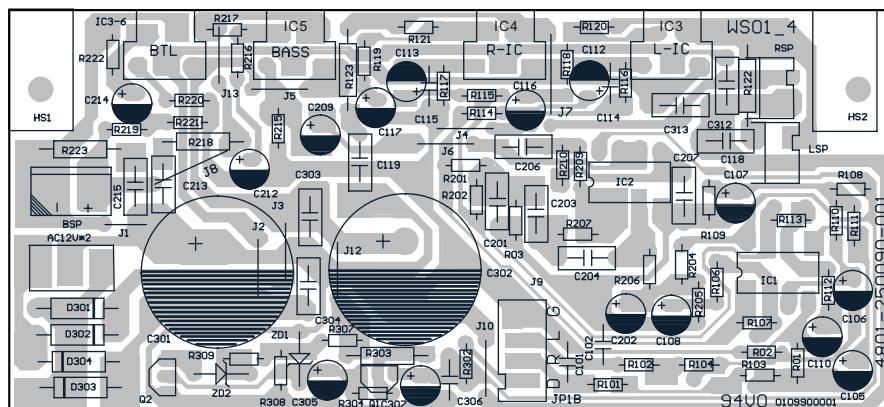
AUDIO PCB - TOP



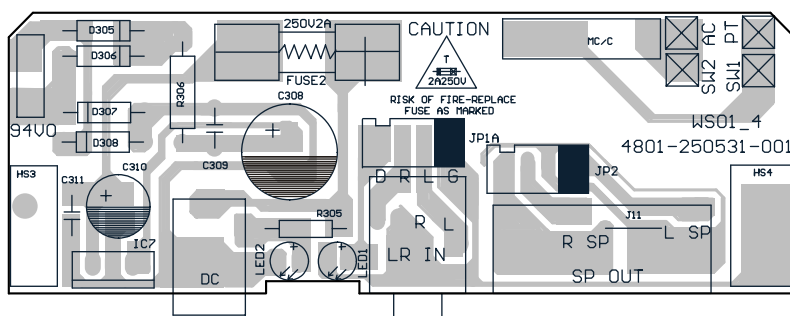
AUDIO PCB - BOTTOM



SUB-WOOFER POWER PCB

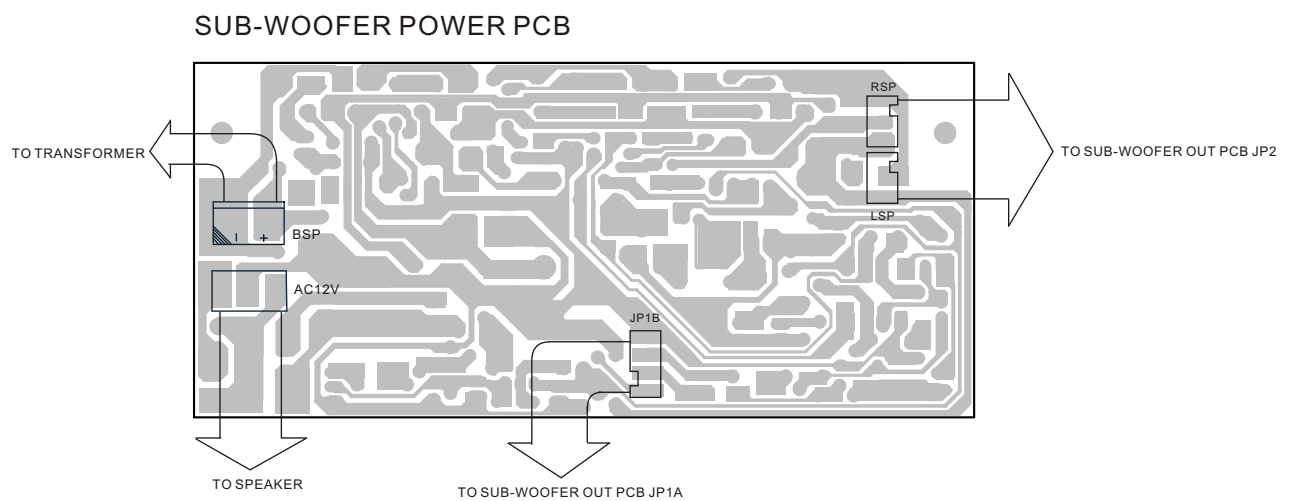
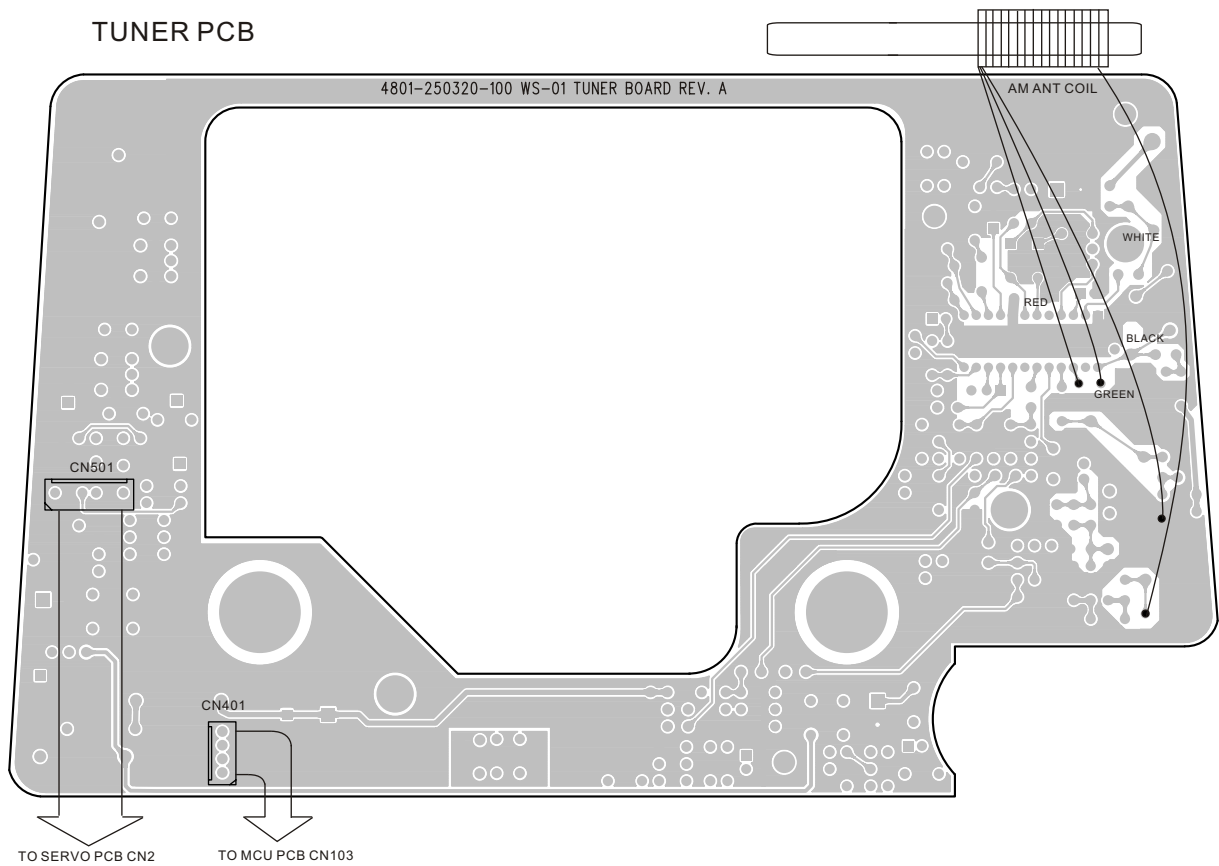


SUB-WOOFER OUT PCB

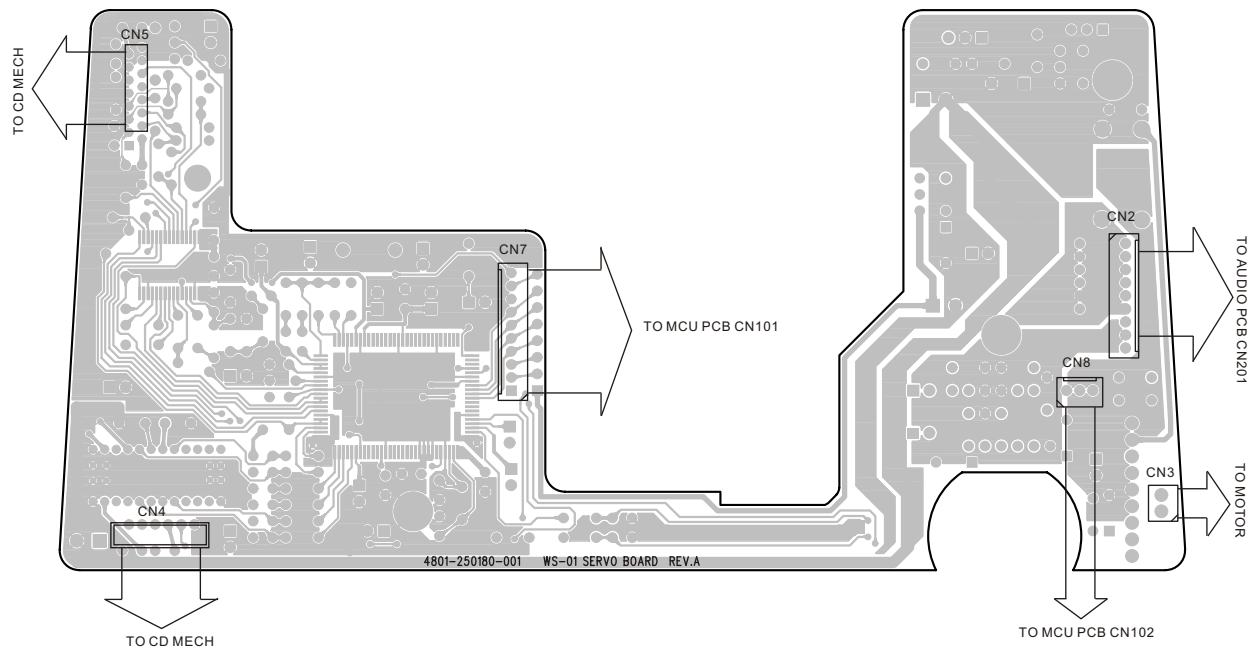


MC-DX10

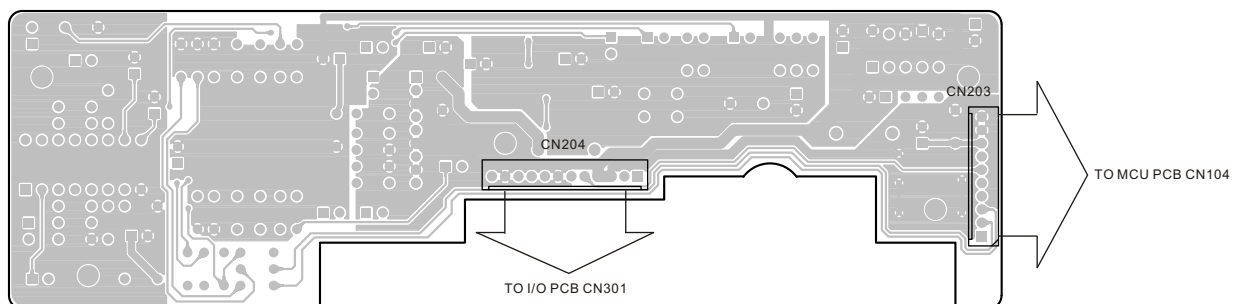
5 WIRING DIAGRAM



SERVO PCB



AUDIO PCB



MC-DX10

6 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

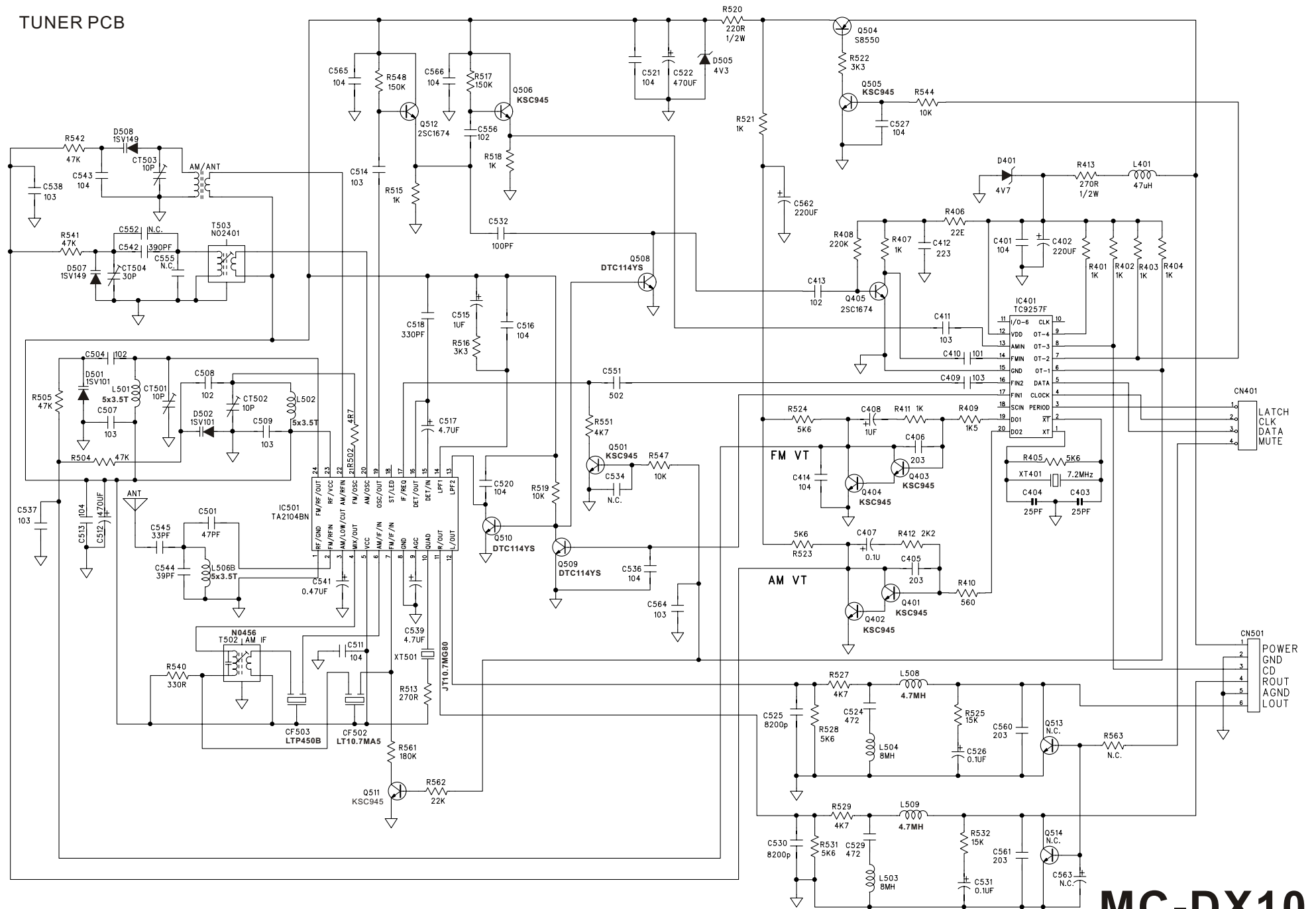
REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	5100-012500-900	INSTRUCTION BOOK - ENG/ITALIAN	
	2611-320009-900	2M DOUBLE CHANNEL AUDIO CABLE	
	2620-220000-900	2M DC POWER CABLE	
	4090-302032-001	BUTTON LI BATTERY 3V	
	9805-012500-401	REMOTE CONTROL (RC940)	

MC-DX10

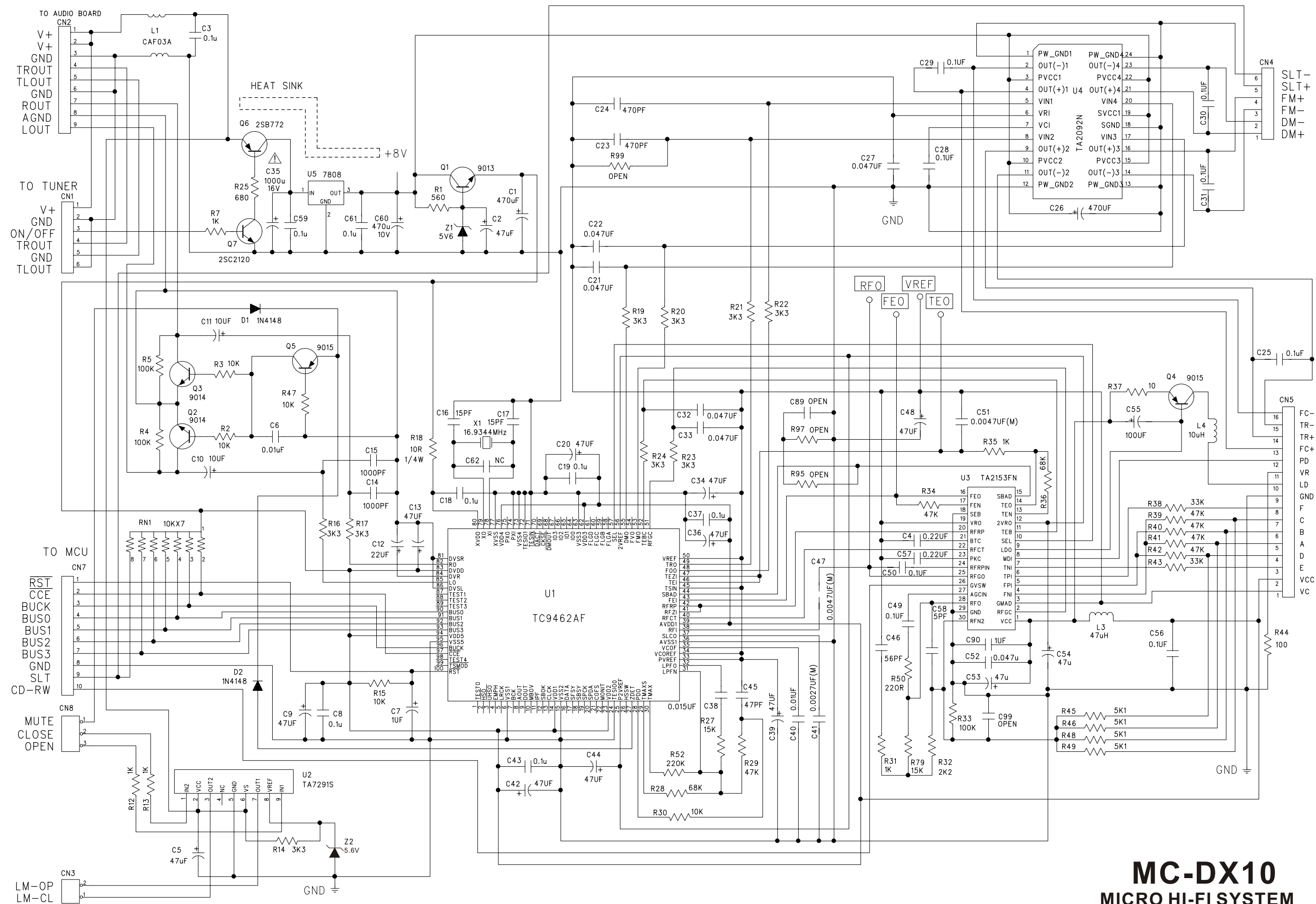
TEAC

TEAC CORPORATION	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: (905)-890-8008
TEAC MEXICO, S.A.De C.V.	Campesinos 184,Col. Granjas Esmeralda, 09810, Mexico Phone: (525)-581-5500
TEAC UK LIMITED	5 Marlin House, Croxley Business Park, Watford, Hertfordshire, WD18 8TE, U.K. Phone: 01923-819699
TEAC DEUTSCHLAND GmbH	Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany Phone:0611-71580
TEAC FRANCE S.A.	17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France Phone:(1)42.37.01.02
TEAC NEDERLAND BV	Oeverkruid 15,NL-4941 W Raamsdonksveer, Nederland Phone:0162-510210
TEAC BELGIUM NV/SA.	c/o TEAC NEDERLAND BV, Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:+31-162-510860
TEAC ITALIANA S.p.A.	Via C, Cantu 11, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD.	280 William Street, Melbourne VIC 3000, Australia Phone:(03)9672-2400
A.B.N.	80 005 408 462

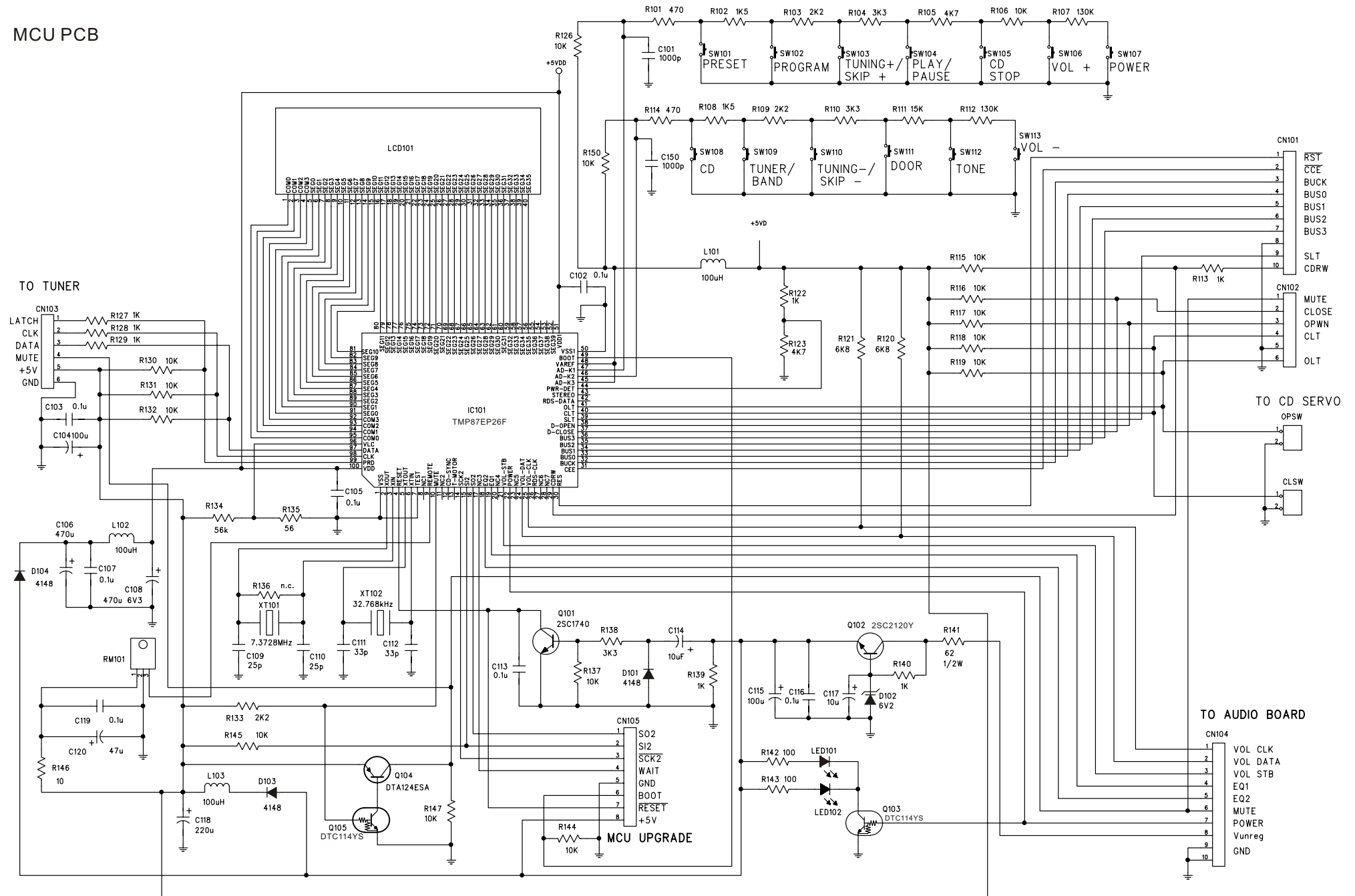
TUNER PCB



MC-DX10
MICRO HI-FI SYSTEM

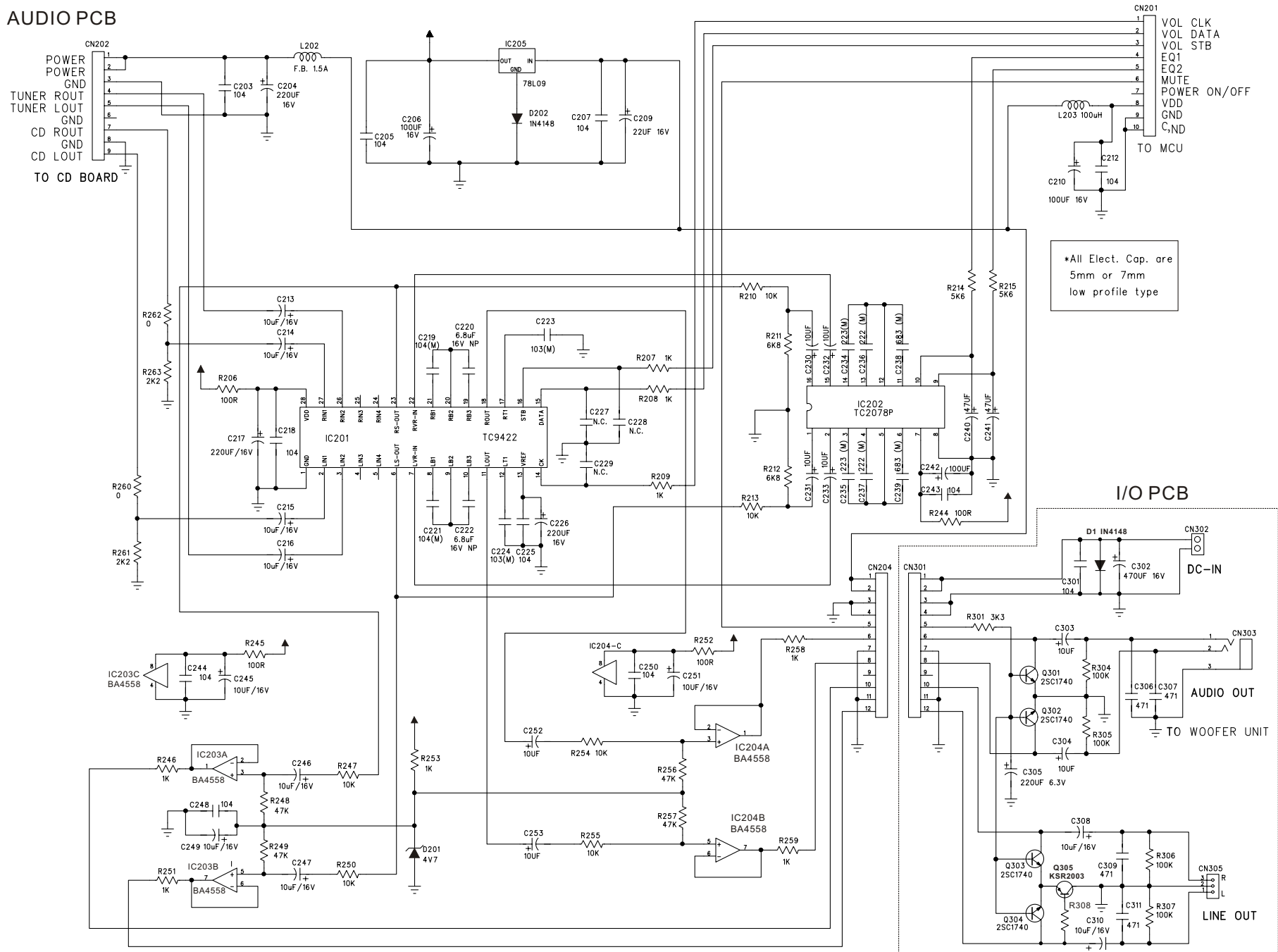


MCU PCB



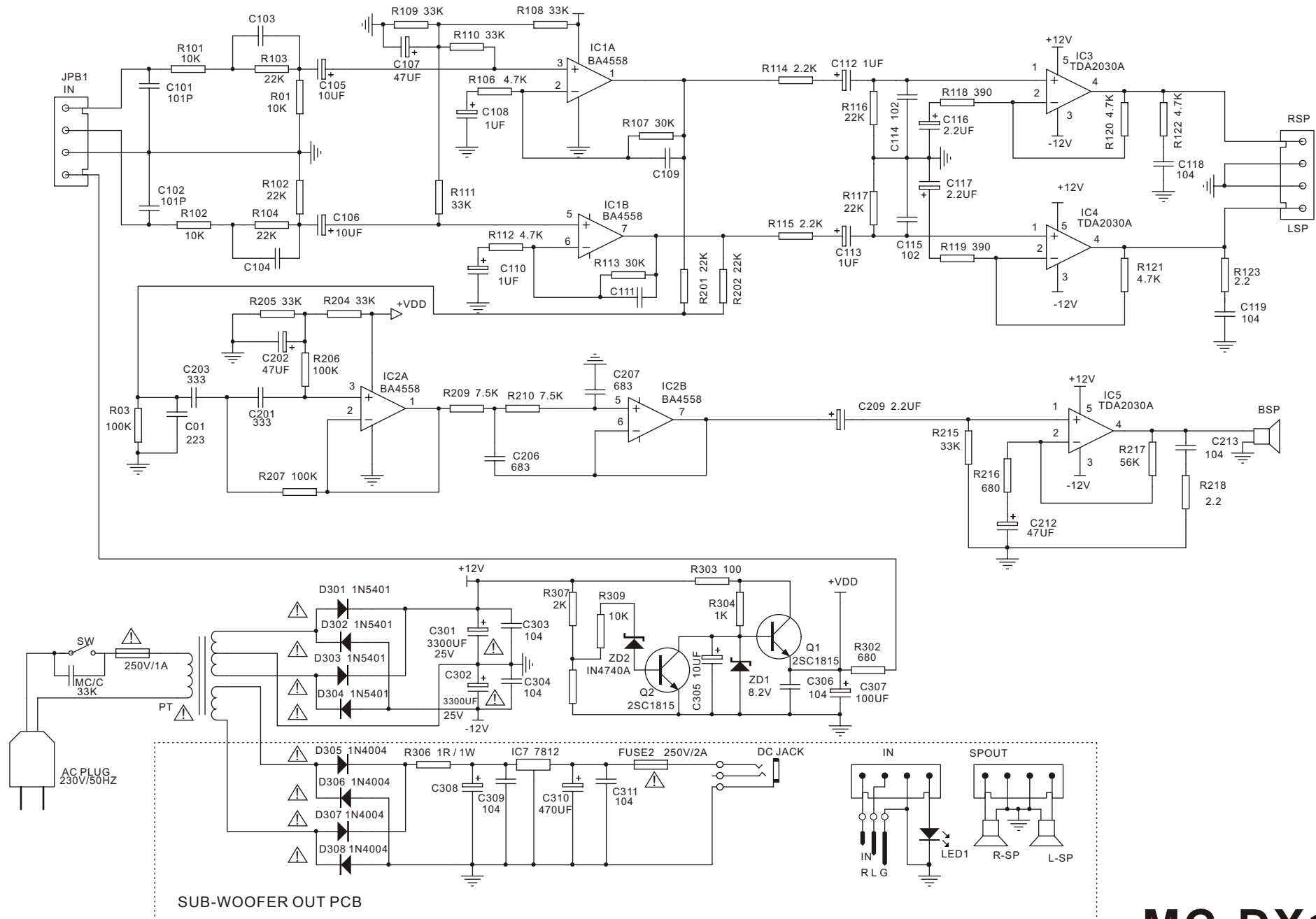
MC-DX10 MICRO HI-FI SYSTEM

AUDIO PCB



MC-DX10
MICRO HI-FI SYSTEM

SUB-WOOFER POWER PCB



MC-DX10
MICRO HI-FI SYSTEM