

Service
Service

Elenberg MX-390DVD

Service Manual

TABLE OF CONTENTS

	Page
Technical Specifications	1-2
Measurement setup	1-3
Service Aids, Safety Instruction, etc	1-4 to 1-5
Preparations & Controls	1-6 to 1-8
Maintenance & Troubleshooting	1-9
Disassembly Instructions & Service positions	2
Set Block diagram	3
Set Wiring diagram	4
Key Board	5
Servo Board	6
Main Board	7
Set Mechanical Exploded view & parts list	8

SPECIFICATIONS

■ General

Power supply:	12V DC(11V-16V) Test voltage 14.4V, negative ground
Maximum power output:	45Wx4 channels
Continuous power output:	20Wx4 channels (4 Ω 10% T.H.D.)
Suitable speaker impedance:	4-8 ohm
Pre-Amp output voltage:	2.0V
Fuse:	15A
Dimensions(WxHxD)	178x50x155mm
Weight:	1.7kg

■ FM Stereo Radio

Frequency range:	87.5 - 108.0 MHz 65.0-74.0 MHz (OIRT mode)
Sensitivity:	8 dB μ
Frequency response:	30Hz-15KHz
Stereo separation:	30dB(1KHz)
Image response ratio:	50dB
IF response ratio:	70dB
Signal/noise ratio	55dB

■ Disc Player

System:	Disc digital audio system
Frequency response:	20 Hz - 20KHz
Signal/noise ratio:	>80 dB
Total harmonic distortion:	Less than 0.20%(1KHz)
Channel separation:	>60 dB
Video signal format system:	PAL/NTSC
Video:	
video output:	1 \pm 0.2V
horizontal nesowtiou:	\geq 500 lines

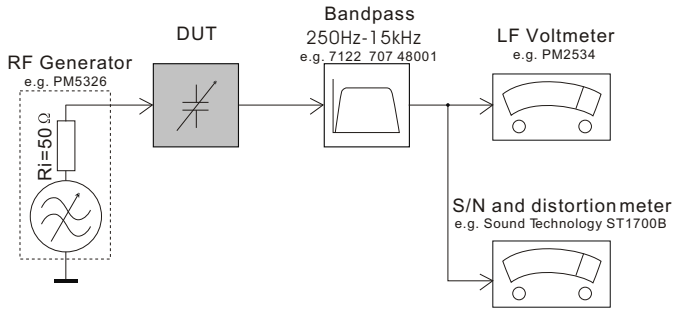
■ Components

Mounting collar	1
Tappingscrews M5x6 mm	4
M4x6 mm	4
Mountingbolt (50 mm)	1
Wire connector	1
Removable face plate case	1
Trimplate	1
T-key	2
User manual	1
Rubber cushion	1
Remote control	1

Note: Specifications and design are subject to change without notice for product improvements.

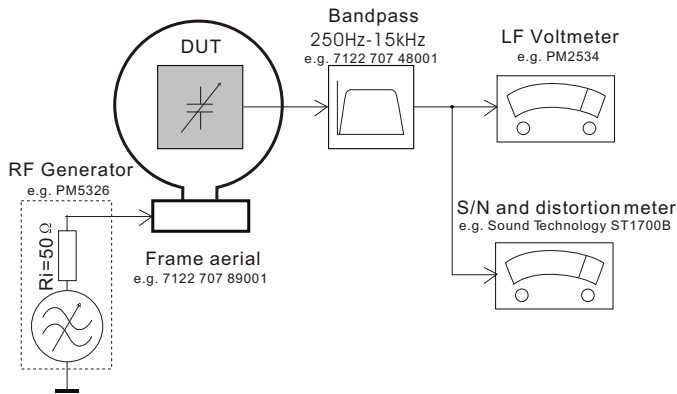
MEASUREMENT SETUP

Tuner FM



Use a bandpass filter to eliminate hum(50Hz,100Hz) and disturbance from the pilotone(19kHz,38kHz).

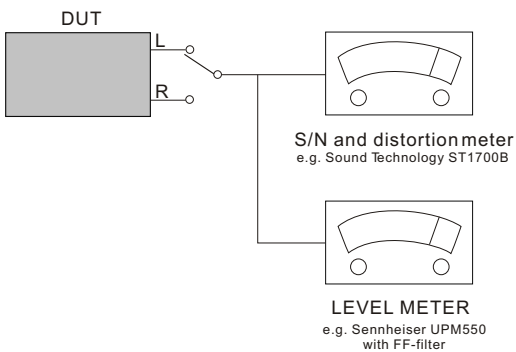
Tuner AM (MW,LW)



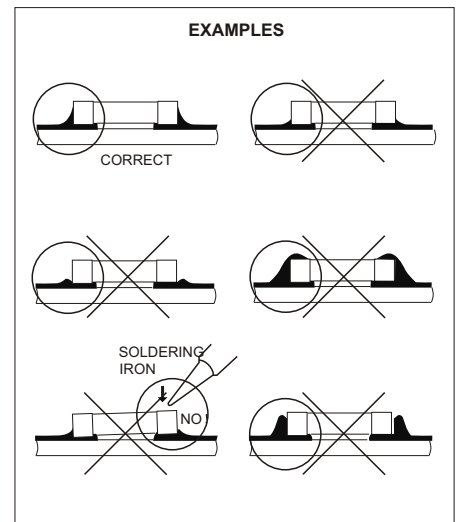
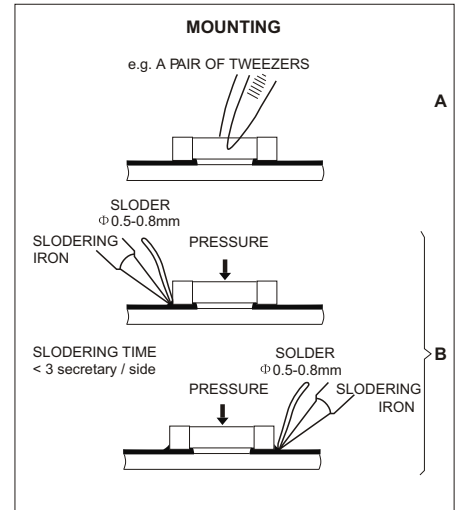
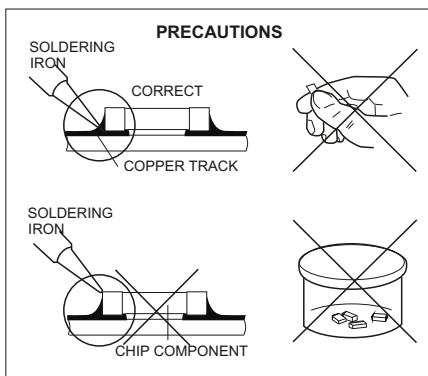
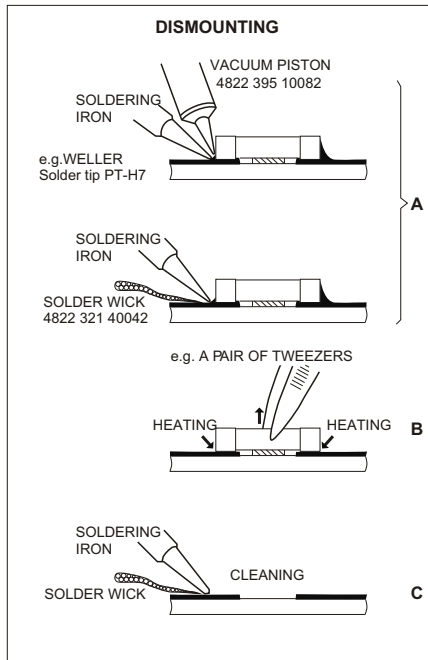
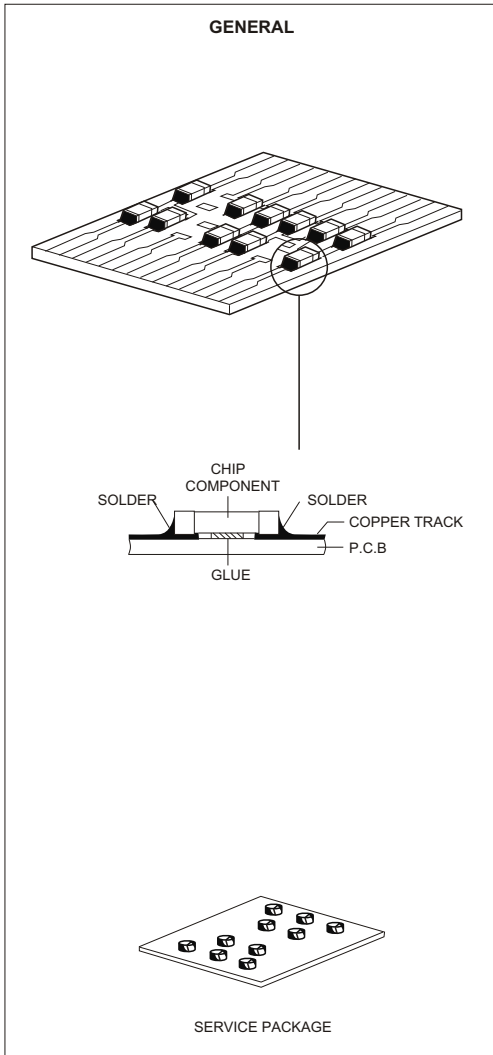
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage. Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz,100Hz).

CD

Use Audio Signal Disc SBC4294822 397 30184 (replaces test disc 3)



HANDLING CHIP COMPONENTS



GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

ESD**NL WAARSCHUWING**

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op hetzelfde potentiaal.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).

Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.

Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.

Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNING

Alle ICs und viele andere Halbleitersind empfindlich gegenüber elektrostatischen Entladungen (ESD).

Unvorsichtige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren.

Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.

Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).

La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cautela alla loro manipolazione.

Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.

Assicurarsi che i componenti e anche gli utensili con quali si lavorano siano anche a questo potenziale.

GB ATTENTION

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne."

NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisés les pièces de rechange identiques à celles spécifiées.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

**GB Warning!**

Invisible laser radiation when open.
Avoid direct exposure to beam.

S Warning!

Osynlig laserstrålning när apparaten är öppnad och spärrar är urkopplad. Beträkta ej strålen.

SF Varoitus!

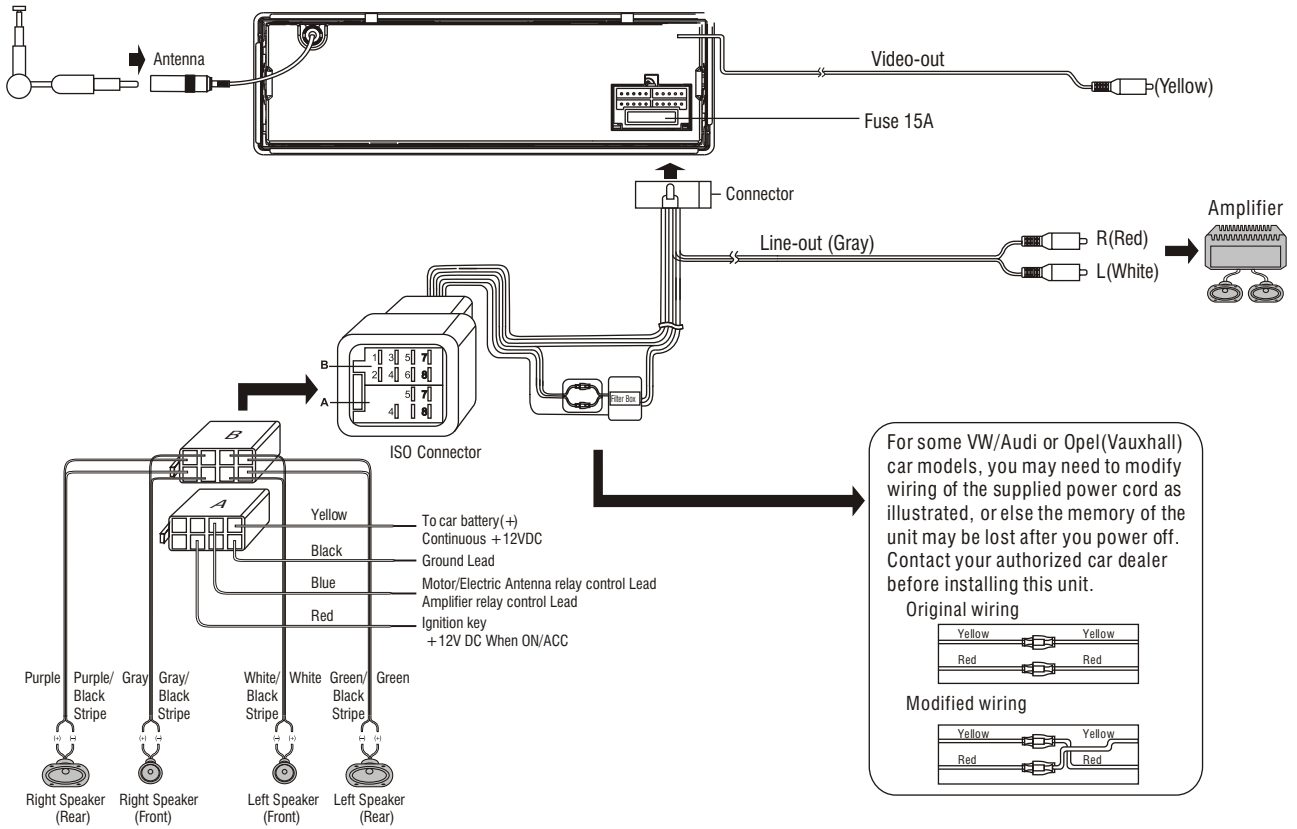
Avatussa laitteessa ja suojalukituksen ohitettaessa olet alttiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

DK Advarsel!

Usynlig laserstrålning ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

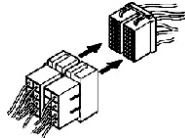
PREPARATIONS

■ Wiring Diagram

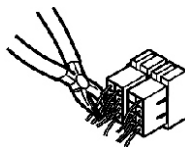


■ Using the ISO Connector

1. If your car is equipped with the ISO connector, then connect the ISO connectors as illustrated.




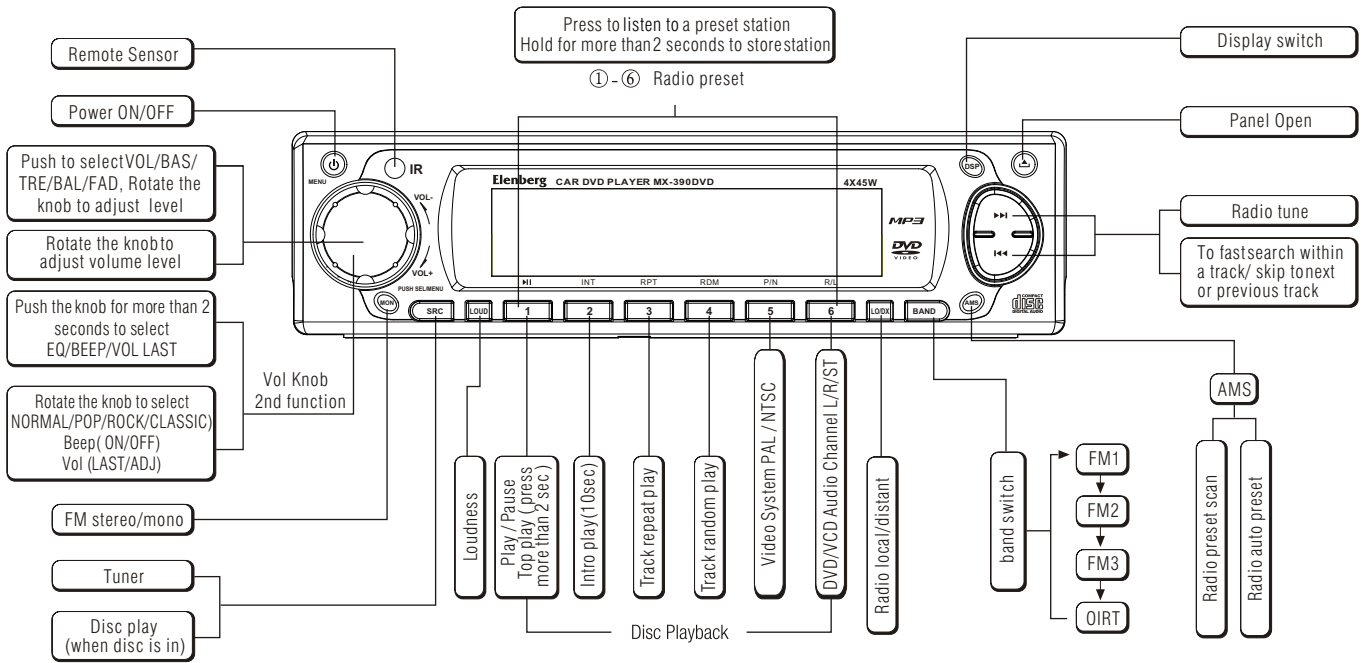
2. For connections without the ISO connectors, check the wiring in the vehicle carefully before connecting, incorrect connection may cause serious damage to this unit. Cut the connector, connect the colored leads of the power cord to the car battery, as shown in the colour code table below for speaker and power cable connections



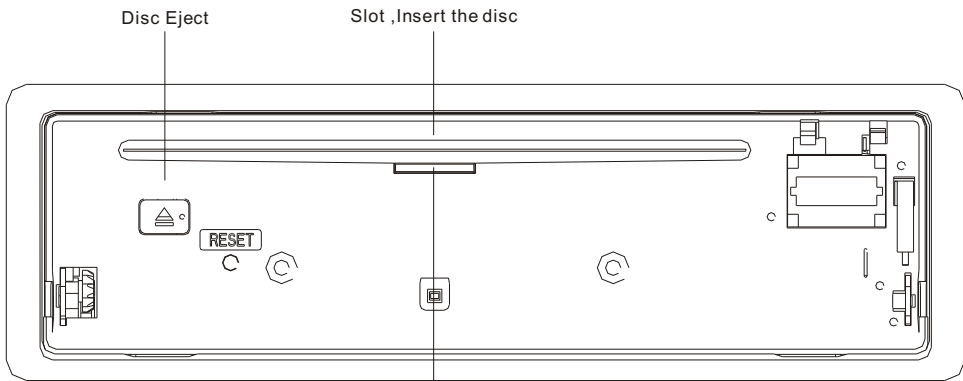
LOCATION	FUNCTION	
	A	B
1		Rear Right (+) - Purple
2		Rear Right (-) - Purple / Black Stripe
3		Front Right (+) - Gray
4	ACC+/red	Front Right (-) - Gray / Black Stripe
5	ANT or AMP controll/blue	Front Left (+) - White
6		Front Left (-) - White / Black Stripe
7	Battery 12V(+)/yellow	Rear Left (+) - Green
8	Ground/black	Rear Left (-) - Green / Black Stripe

CONTROLS

Power On : Press any button on the panel except  to turn on the unit.



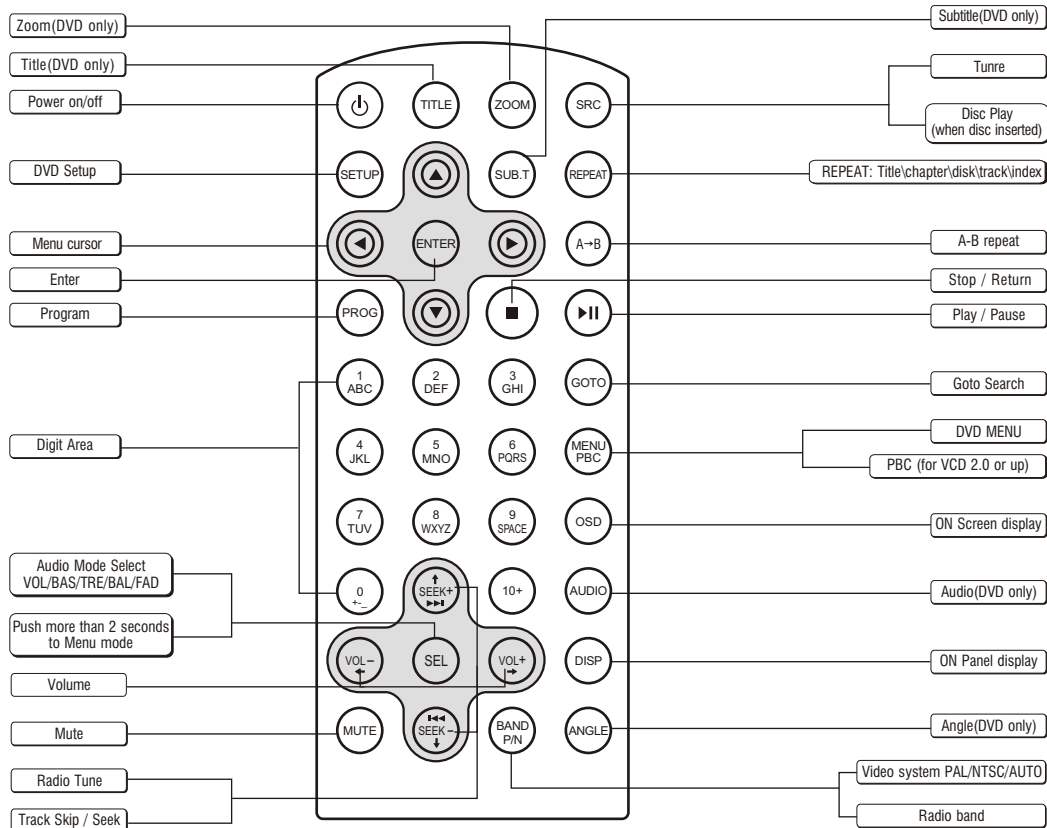
Press the  button to open the panel and press  to eject the disc.



Panel status indication:
When the panel slide down it will light up.
When the panel detached from body it will flash.

REMOTE CONTROLS

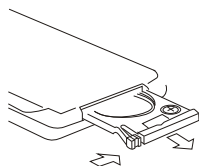
Power On/Off : Press  to turn on/off the unit.



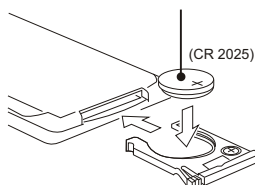
Replacing the lithium battery of remote control unit.

* When the operation range of the card remote control becomes short or no Properly, replace the lithium battery with a new one. Make sure the battery polarity replacement is correct.

1. Pull out the battery holder while pressing the stopper.



2. Insert the button-type lithium battery with the (+) mark facing upward. Insert the battery holder into the remote control.



WARNINGS:

- Store the battery in place where children cannot reach. If a child accidentally swallows the battery, consult a doctor immediately.
- Do not recharge, short, disassemble or heat the battery or dispose it in a fire.
- Doing any of these things may cause the battery to give off heat, crack or start a fire.
- Do not leave the battery with other metallic materials. Doing this may cause the battery to give off heat, crack or start a fire.
- When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack or start a fire.
- Do not poke the battery with tweezers or similar tools. Doing this may cause the battery to give off heat, crack or start a fire.

MAINTENANCE AND TROUBLESHOOTING

Maintenance

Clearing disc

When a disc becomes dirty clean it with a cleaning cloth.
Wipe the disc from the center out.

Cleaning the disc lens

After prolonged use, dirt or dust may accumulate at the lens. To ensure good playback quality, clean the disc with Philips CD Lens Cleaner or any commercially available cleaner. Follow the instructions supplied with cleaner.

Cleaning the heads and the Tape Parts

To ensure good playback quality, clean the heads (A), the capstan (B), and pressure roller (C) after every 50 hours of tape operation. Use a cotton swab slightly moistened with cleaning fluid or alcohol. You can also clean the heads by playing a cleaning tape once.

Troubleshooting

If you suspect something is wrong, immediately switch power off. Immediately stop using it and call the store where you purchased it. Never try to repair the unit yourself because it is dangerous to do so.

General

No power or no sound → Car's engine switch is not on. **Turn your car's key to ACC or ON.** Cable is not correctly connected. **Check connection.** Fuse is burnt. **Replace fuse.** **Check volume or mute on / off.** If the above solutions cannot help, **press the RESET button.**

Radio

Much noise in broadcasts → Station is too far, or signals are too weak. **Select other stations of higher signal level.**

Preset station is reset → Battery cable is not correctly connected. **Connect the battery cable to the terminal that is always live.**

Disc

Disc is inserted but no sound. → Disc is upside down. **Place disc in the correct direction, and the label side up.** Disc is dirty or damaged. **Clean disc or change another disc.**

Disc sound skips, tone quality is low. → Disc is dirty or damaged. **Clean CD or change another CD.**

Sound skips due to vibration. → Mounting angle is over 30°. **Adjust mounting angle to less than 30°.**

→ Unstable mounting. **Mount the unit securely with the mounting parts.**

Error Display Messages

NO FILE → Disc is not CD or contains no MP3 files.

ERR-7 → Disc upside down.

ERR-10 → Recovery error, check the disc.

ERR-11 → MP3 error, check the disc.

ERR-3 → Disc mechanism error: **Press (EJECT) button to eject the disc.** In case that the disc cannot be ejected by pressing (EJECT) button, **press the RESET switch and press the (EJECT) button again.** If still not ejecting consult your dealer.

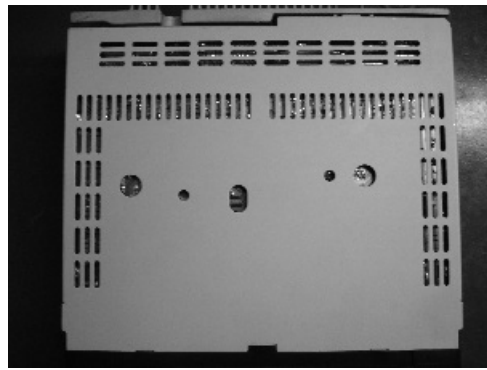
ERR-4 →

DISMANTLING INSTRUCTIONS

1 Pull out the short sheet from main set.

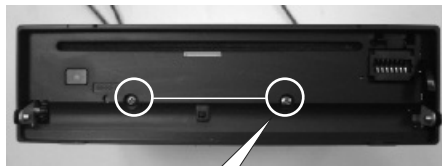


2 Remove top and bottom covers.

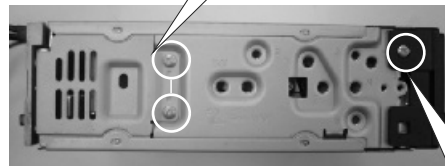
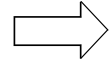


Loosen 8 screws to remove heatsink & top cover & bottom cover.

3 Loosen 4 pcs screw to remove Front Cabinet.

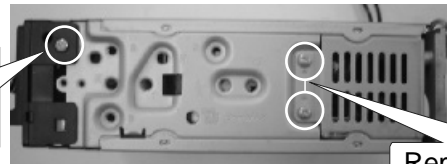


Remove 2 pcs screw from front cabinet.



Remove the 2 pcs screw to dismantle the frame.

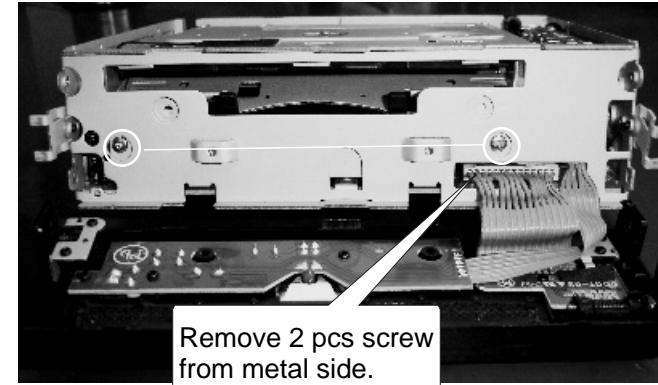
Remove the screw on the left side of the cabinet.



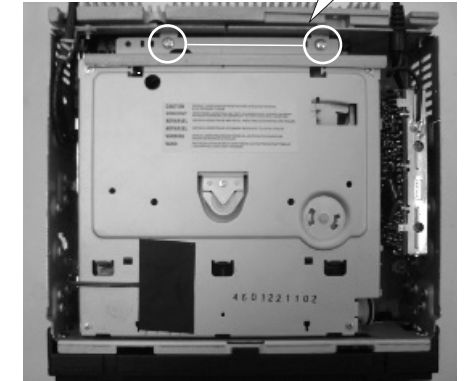
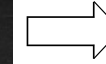
Remove the screw on the right side of the cabinet.

Remove the 2 pcs screw to dismantle the frame.

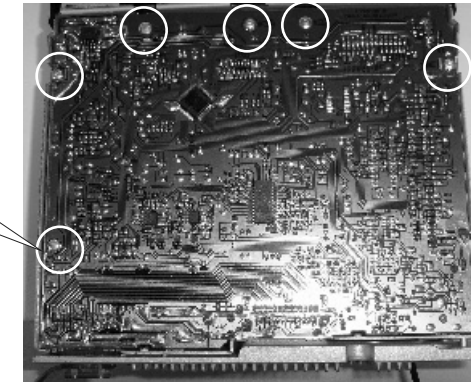
4 Remove CD loader



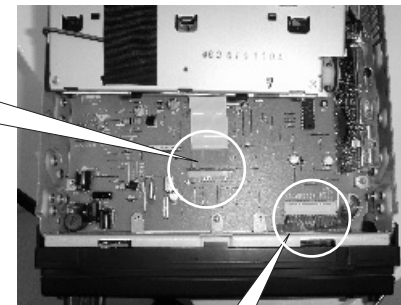
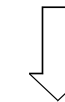
Remove 2 pcs screw from metal side.



Remove 2 pcs screw on the top of loader.

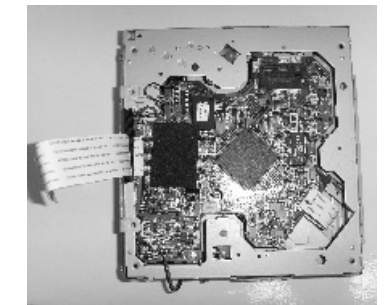
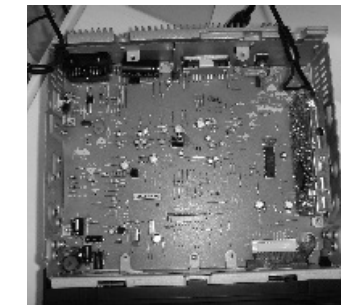


Remove 6 pcs screw on the main board.

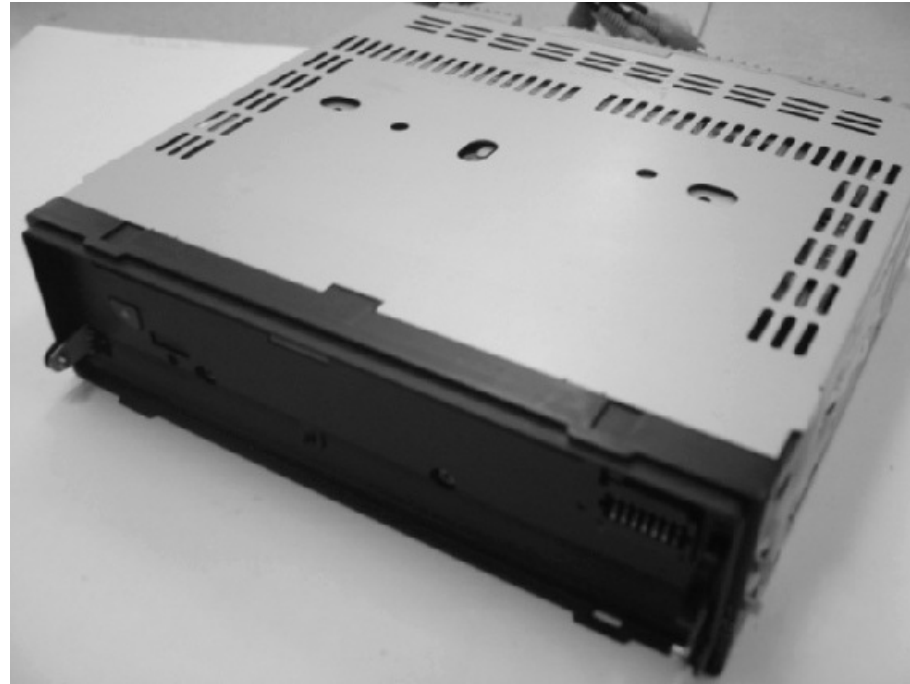


Pull out FPC wire.

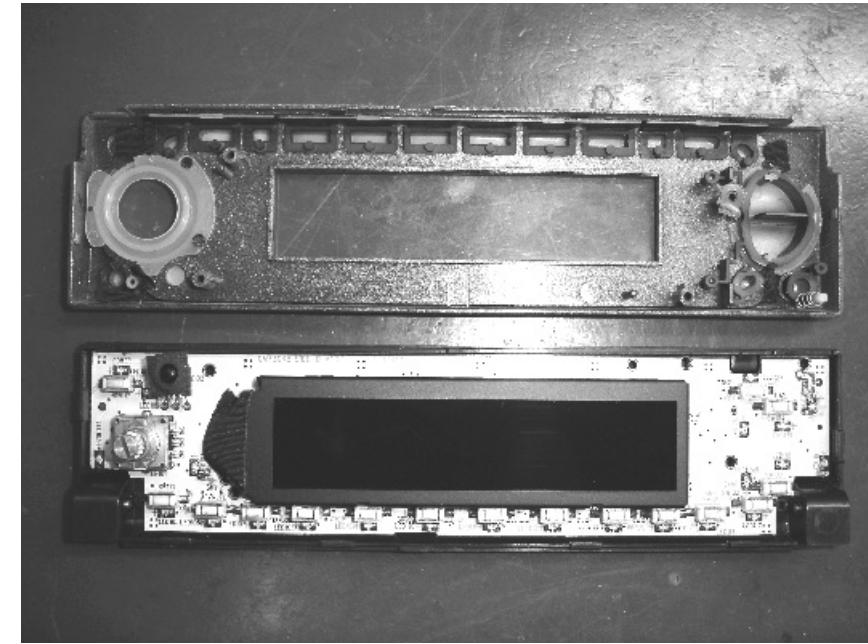
Remove the connector from the mainboard.



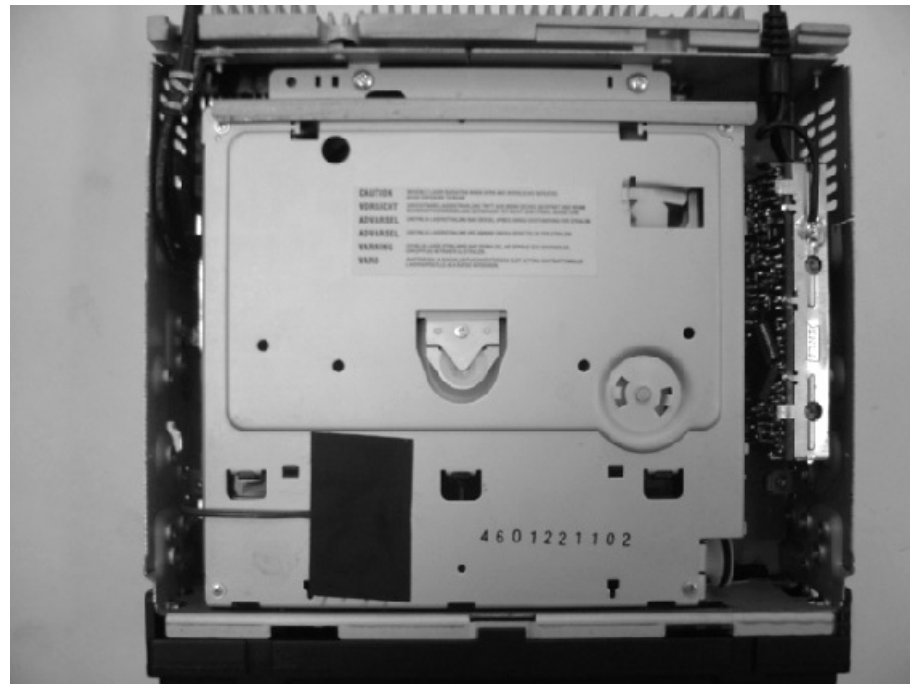
DISMANTLING INSTRUCTIONS



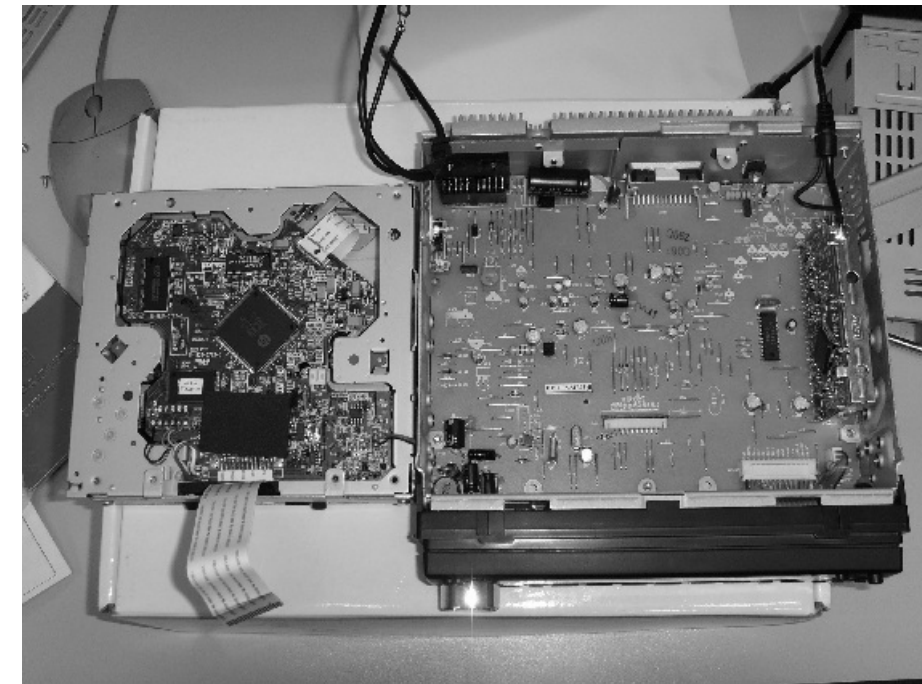
Service Position A



Service Position C

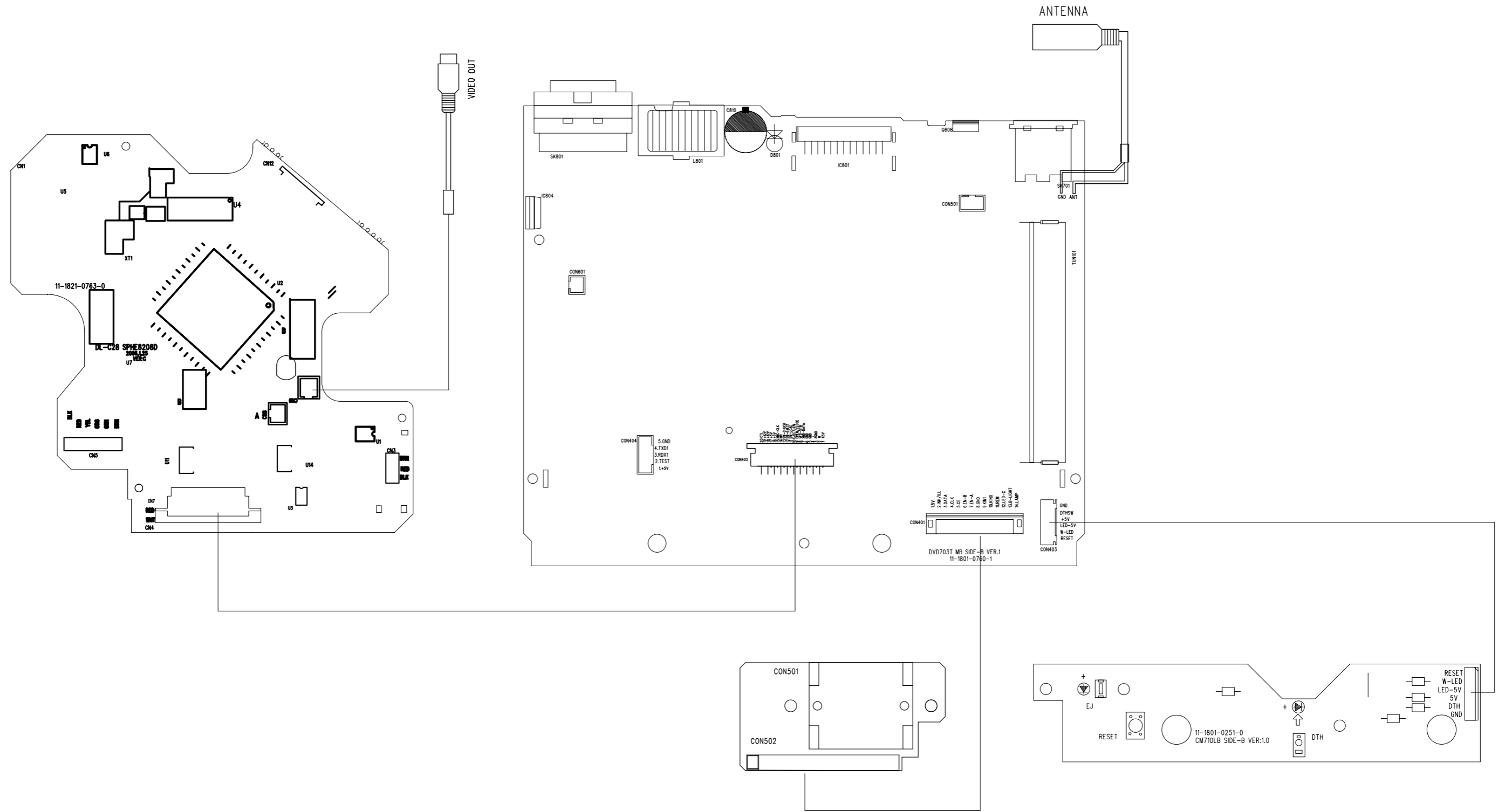


Service Position B



Service Position D

SET WIRING DIAGRAM



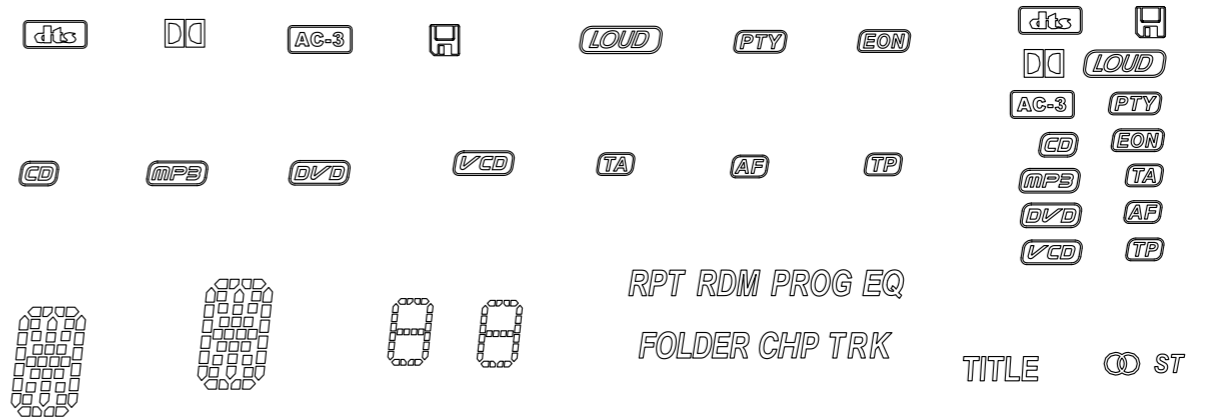
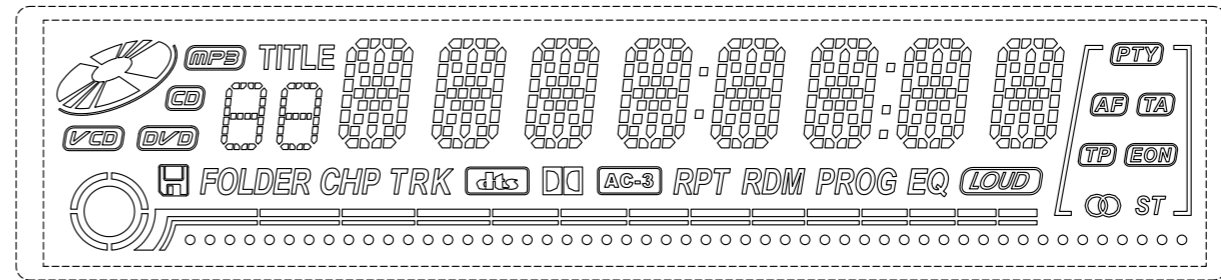
KEY BOARD

TABLE OF CONTENTS

LCD Display 5-1
 Circuit Diagram 5-2
 Layout Diagram 5-3
 Electrical Parts List 5-4

LCD PIN CONNECTION

[●] IS CROSSING POINT(SIZE=0.05MMX0.05MM)
 TOTAL ABOUT 6 POINTS IN V.A

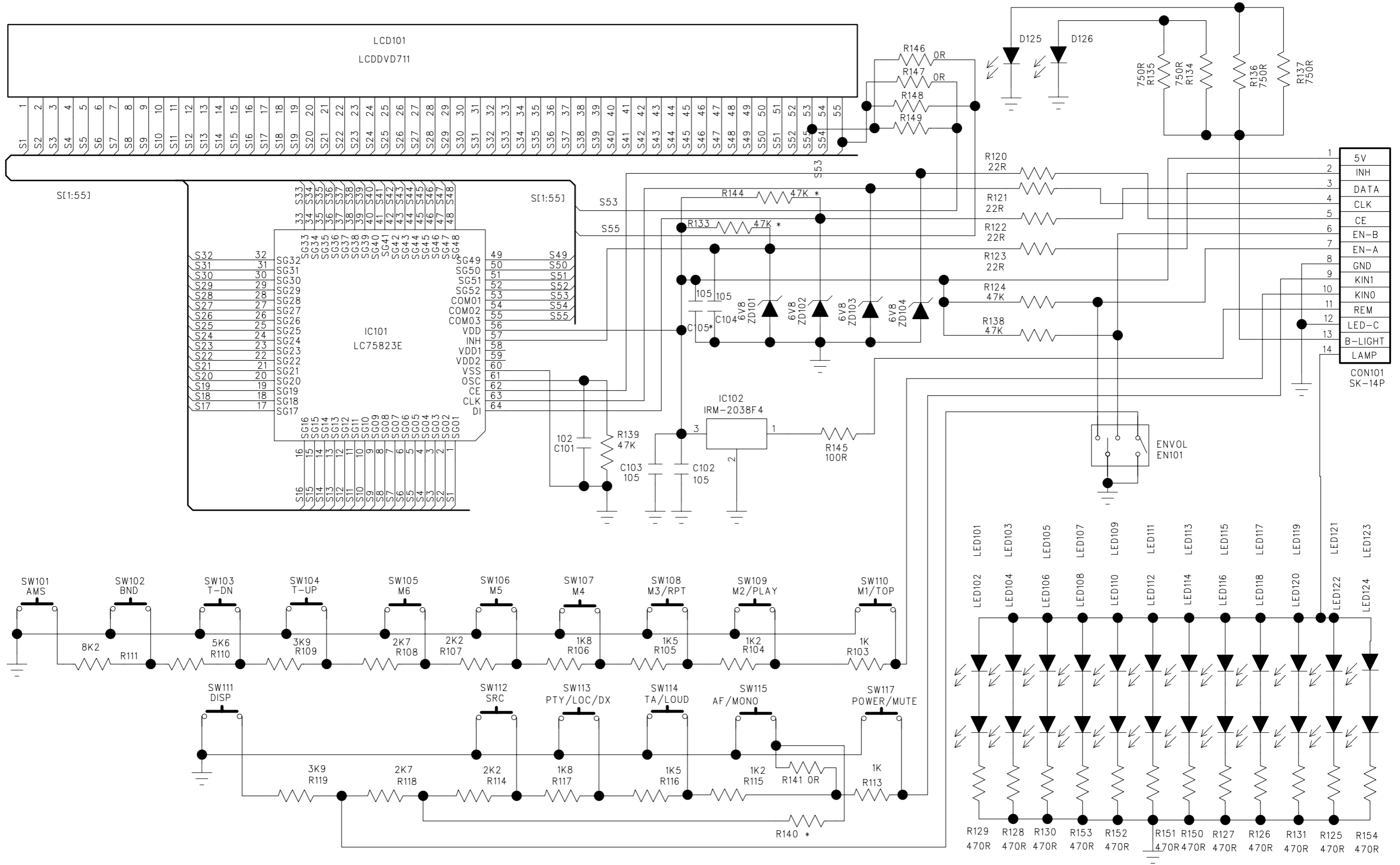


PIN SEGMENT DISPLAY

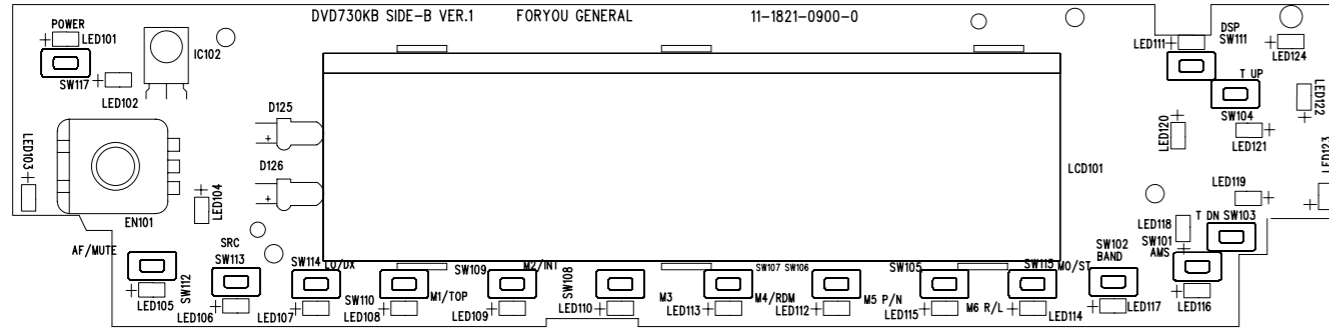
PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
COM1	TITLE	9A	9B	10A	10B	CD	1E	1M	1D	1L	R2	2E	2M	2D	2L	VCD	3E	3M	3D	3L	CHP	4E	4M	4D	4L	DP1	5E	5M
COM2	9F	9G	9C	10D	10C	DVD	1G	1I	1K	1C	R3	2G	2I	2K	2C	DP2	3G	3I	3K	3C	TRK	4G	4I	4K	4C	RDM	5G	5I
COM3	9E	9D	10G	10E	10F	1F	1H	1A	1J	1B	2F	2H	2A	2J	2B	3F	3H	3A	3J	3B	4F	4H	4A	4J	4B	5F	5H	5A

PIN	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
COM1	5D	5L	RPT	6E	6M	6D	6L	FOLDER	7E	7M	7D	7L	LOUD	8E	8M	8D	8L	R4	EON	PTY	DTS	DOLBY	L6	L3	COM1	/	/
COM2	5K	5C	MP3	6G	6I	6K	6C	FILE	7G	7I	7K	7C	ST	8G	8I	8K	8C	R1	DP3	AF	PROG	AC-3	L5	L2	/	COM2	/
COM3	5J	5B	6F	6H	6A	6J	6B	7F	7H	7A	7J	7B	8F	8H	8A	8J	8B	L8	TA	TP	EQ	L7	L4	L1	/	/	COM3

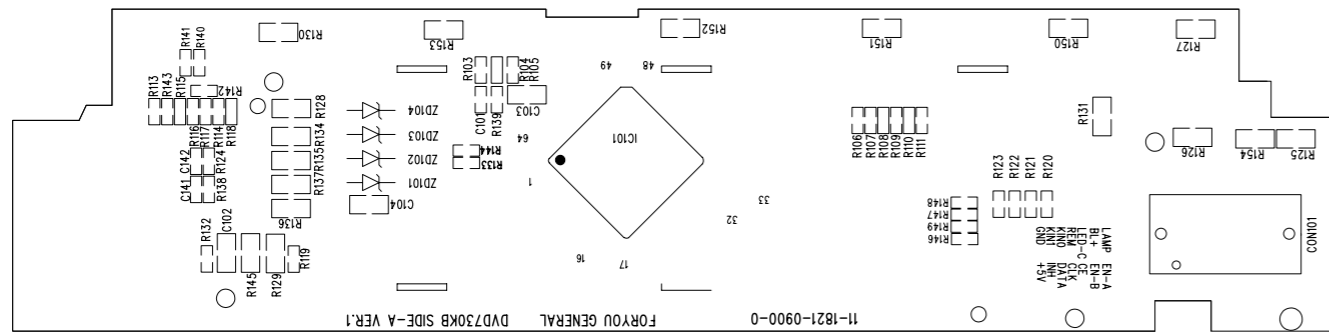
CIRCUIT DIAGRAM - KEY BOARD



LAYOUT DIAGRAM - KEY BOARD TOP VIEW



LAYOUT DIAGRAM - KEY BOARD BOTTOM VIEW



ELECTRICAL PARTS LIST - KEY BOARD

Part No.	Description	QTY	Location
83802DVD730EKB000	DVD730 RED KB SMT Assm	1	
143010000259	PCB,KB,DVD730,FR4,1.2mm,165X40.5mm	1	
143405000069	LED,RED,0603,10mA,2.2V	24	LED101~LED124
142400000338	IC,SC75823E,QFP-64-14X14-0.8,SL	1	IC101
121604000000	RES,0Ω,±5%,1/16W,0603	3	R141,R146,R147
121604000220	RES,22Ω,±5%,1/16W,0603	4	R120~R123
121606000101	RES,100Ω,±5%,1/10W,0805	1	R145
121604000473	RES,47KΩ,±5%,1/16W,0603	3	R124,R138,R139
121606000751	RES,750Ω,±5%,1/10W,0805	4	R134~137
121604000122	RES,1K2Ω,±5%,1/16W,0603	2	R104,R115
121604000182	RES,1K8Ω,±5%,1/16W,0603	2	R106,R117
121604000272	RES,2K7Ω,±5%,1/16W,0603	2	R108,R118
121604000392	RES,3K9Ω,±5%,1/16W,0603	2	R109,R119
121604000562	RES,5K6Ω,±5%,1/16W,0603	1	R110
121604000102	RES,1KΩ,±5%,1/16W,0603	2	R103,R113
121604000152	RES,1K5Ω,±5%,1/16W,0603	2	R105,R116
121604000222	RES,2K2Ω,±5%,1/16W,0603	2	R107,R114
121604000822	RES,8K2Ω,±5%,1/16W,0603	1	R111
121606000471	RES,470Ω,±5%,1/10W,0805	12	R125~131,R150~154
121806000105	CAP,0805,105,50V,Y5V,+80%-20%	3	C102,C103,C104
121803000102	CAP,1nF,±10%,16V,X7R,0603	1	C101
143210000016	TACT SW,KPS-1107YB-130	16	SW101~SW115,SW117
123805000016	14PIN,2.0mm,SOCKET MALE ESTF2-14-01(90°)	1	CON101
141662000008	ENCODER,ECB12,(7X5)(PV)S17	1	EN101
143400000009	DVD711,NEGATIVE COLOR,JIC-TB6240N	1	LCD101
142212010002	PHOTO DIODE,IRM2,638AF4,5V/1.1	1	IC102
121490000120	CM203,ZEBRA STRIP	1	

SERVO BOARD

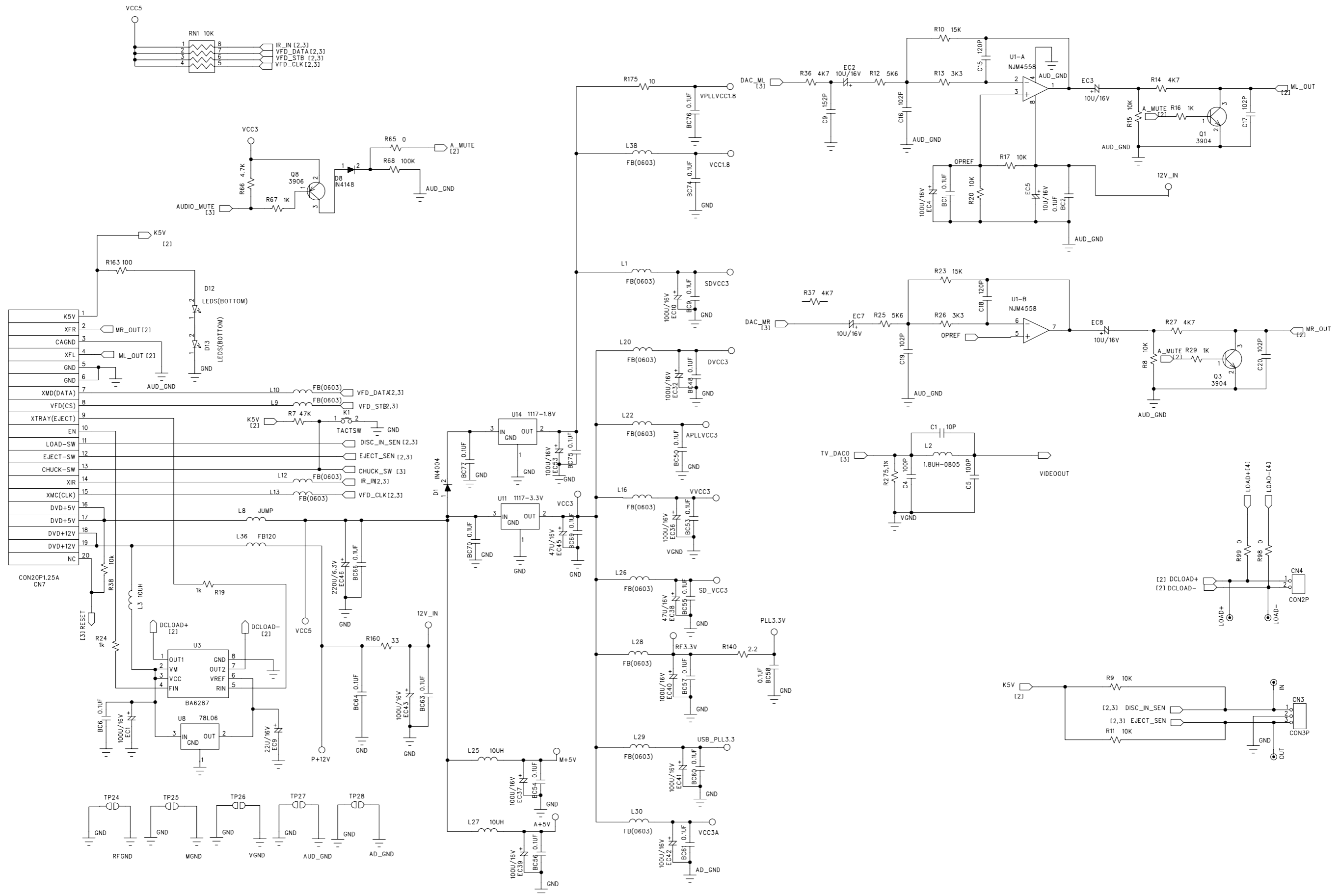
TABLE OF CONTENTS

Circuit Diagram	6-2
Layout Diagram	6-3
Electrical Parts List	6-4

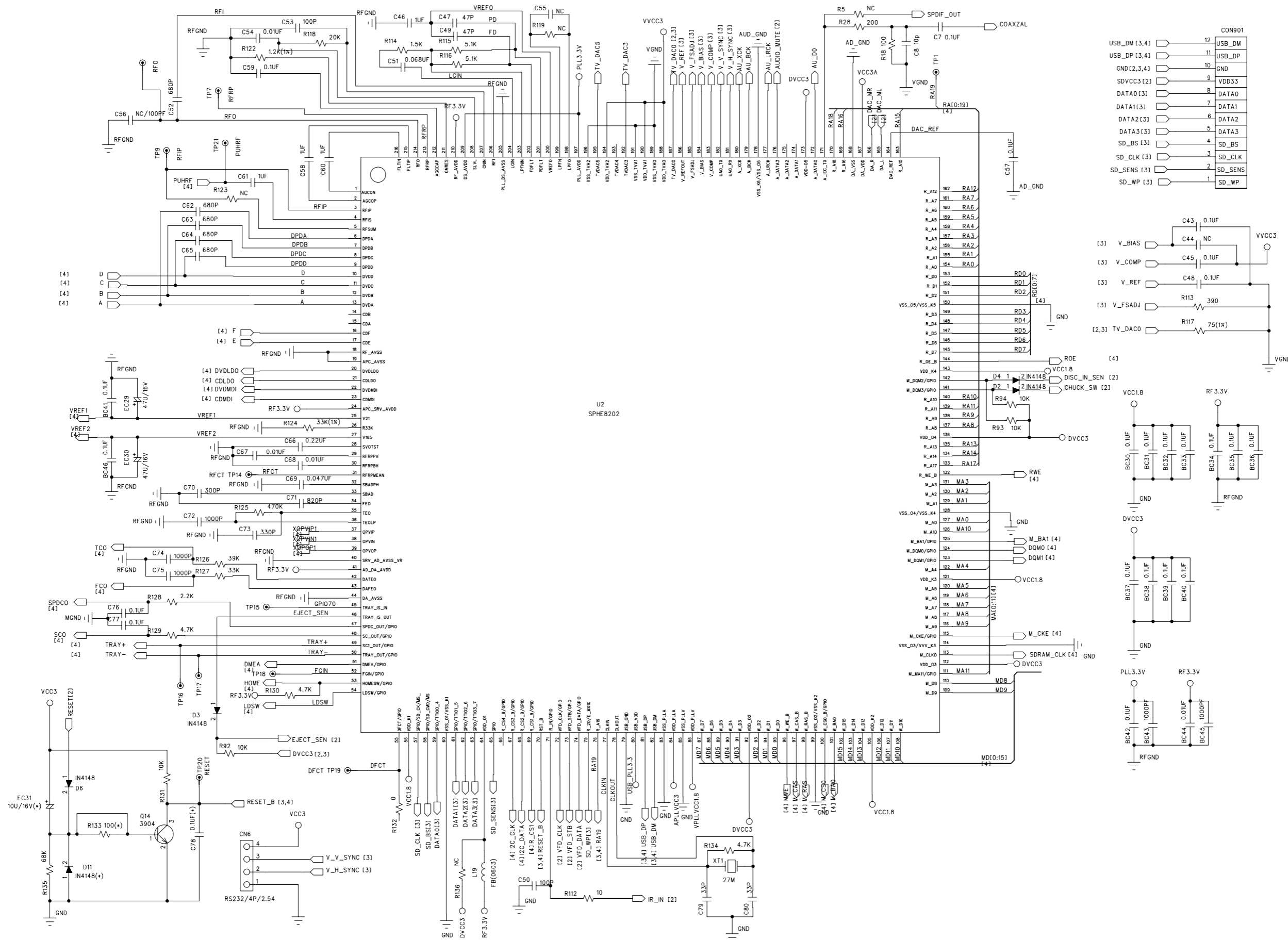
CIRCUIT DIAGRAM - SERVO BOARD

6-2

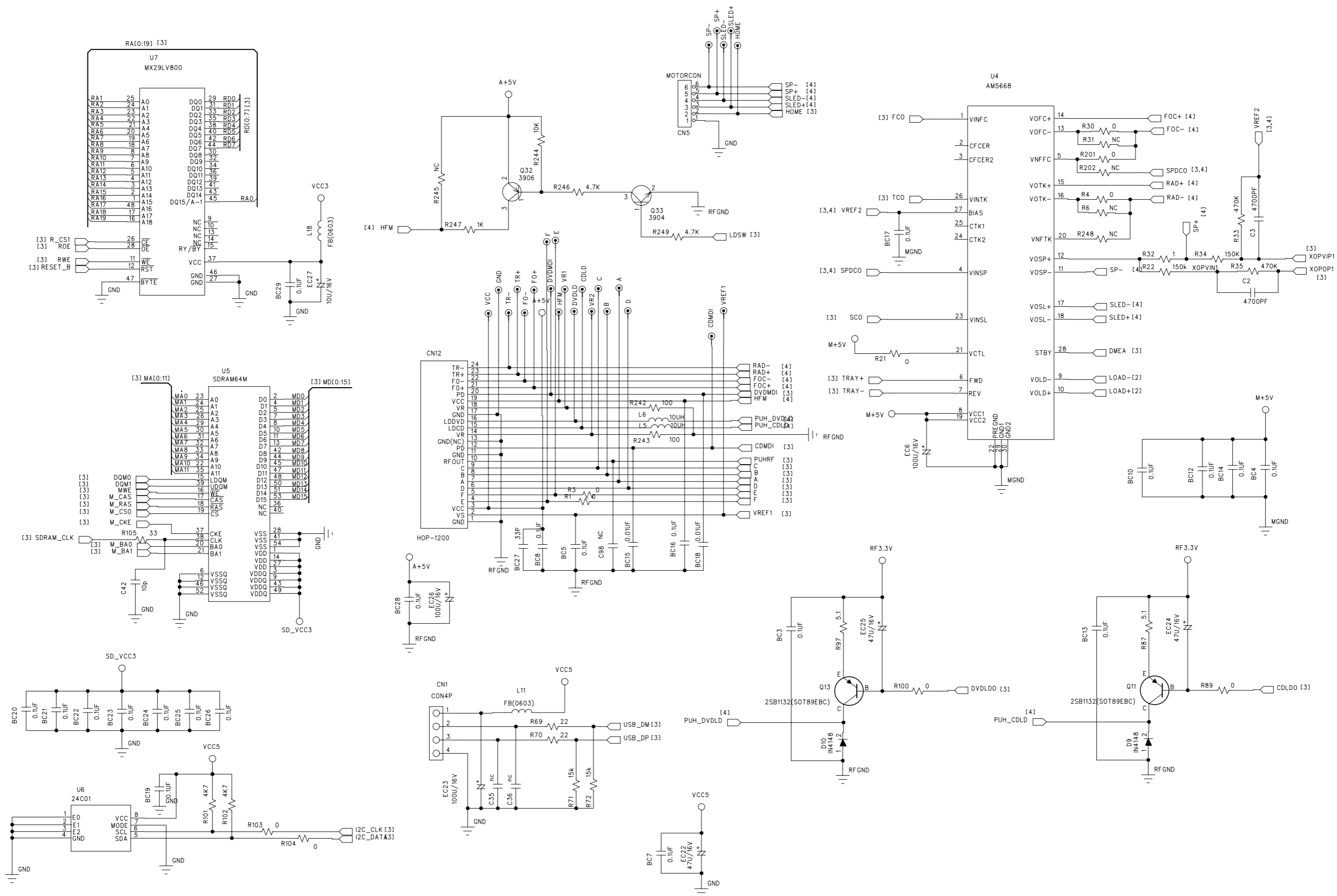
6-2



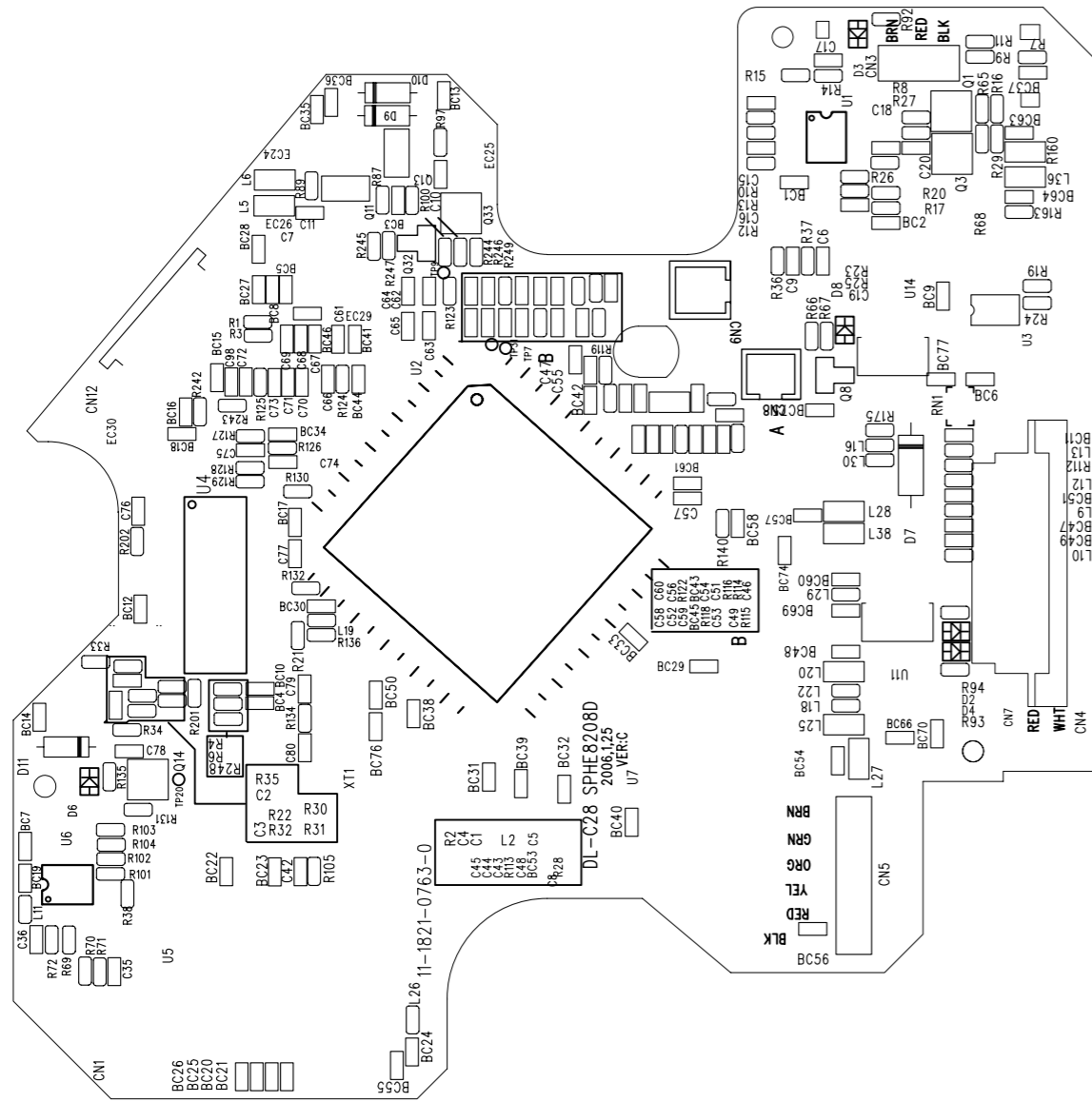
CIRCUIT DIAGRAM - SERVO BOARD



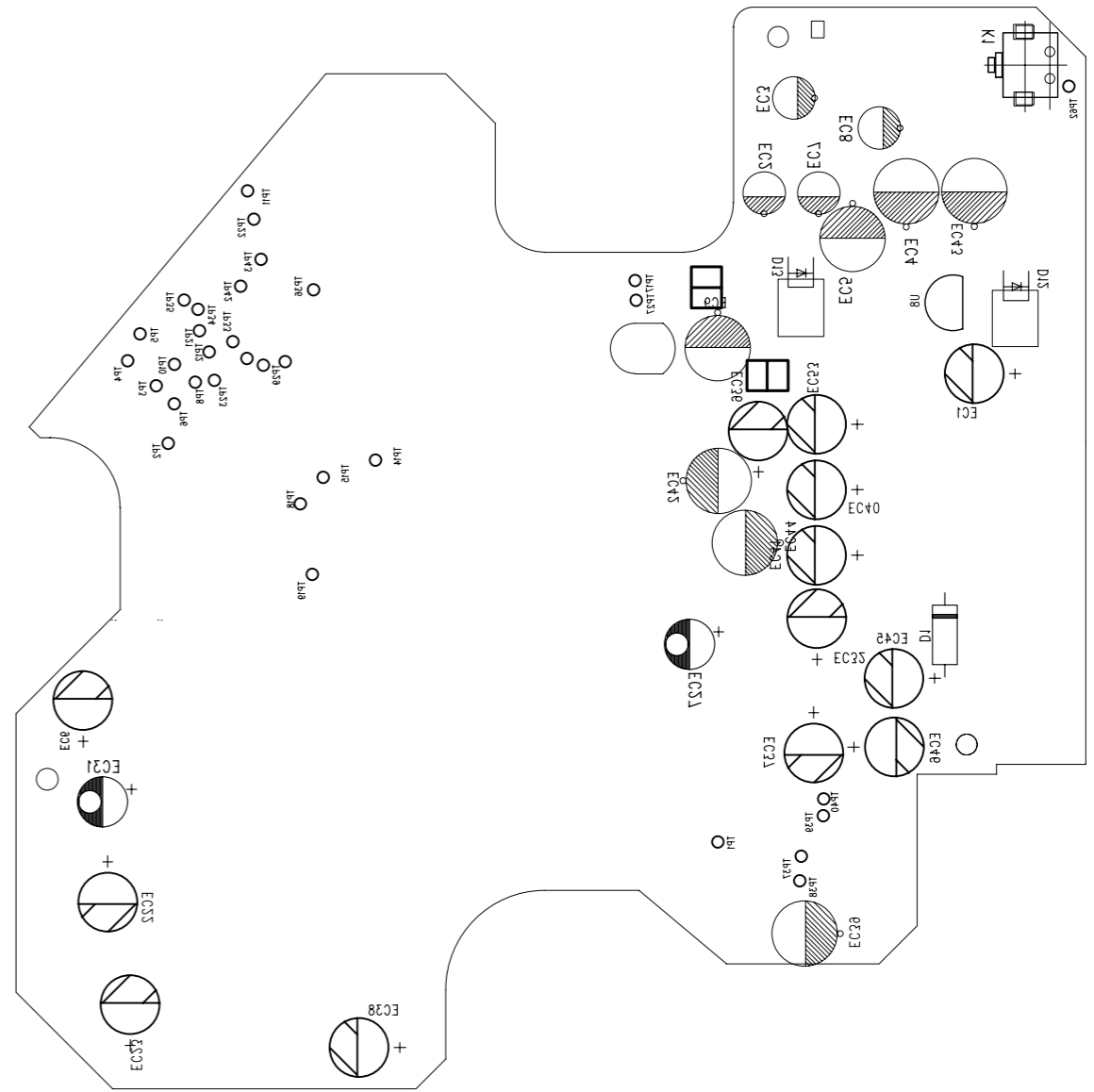
CIRCUIT DIAGRAM - SERVO BOARD



LAYOUT DIAGRAM - SERVO BOARD TOP VIEW



LAYOUT DIAGRAM - SERVO BOARD BOTTOM VIEW



ELECTRICAL PARTS LIST - SERVO BOARD

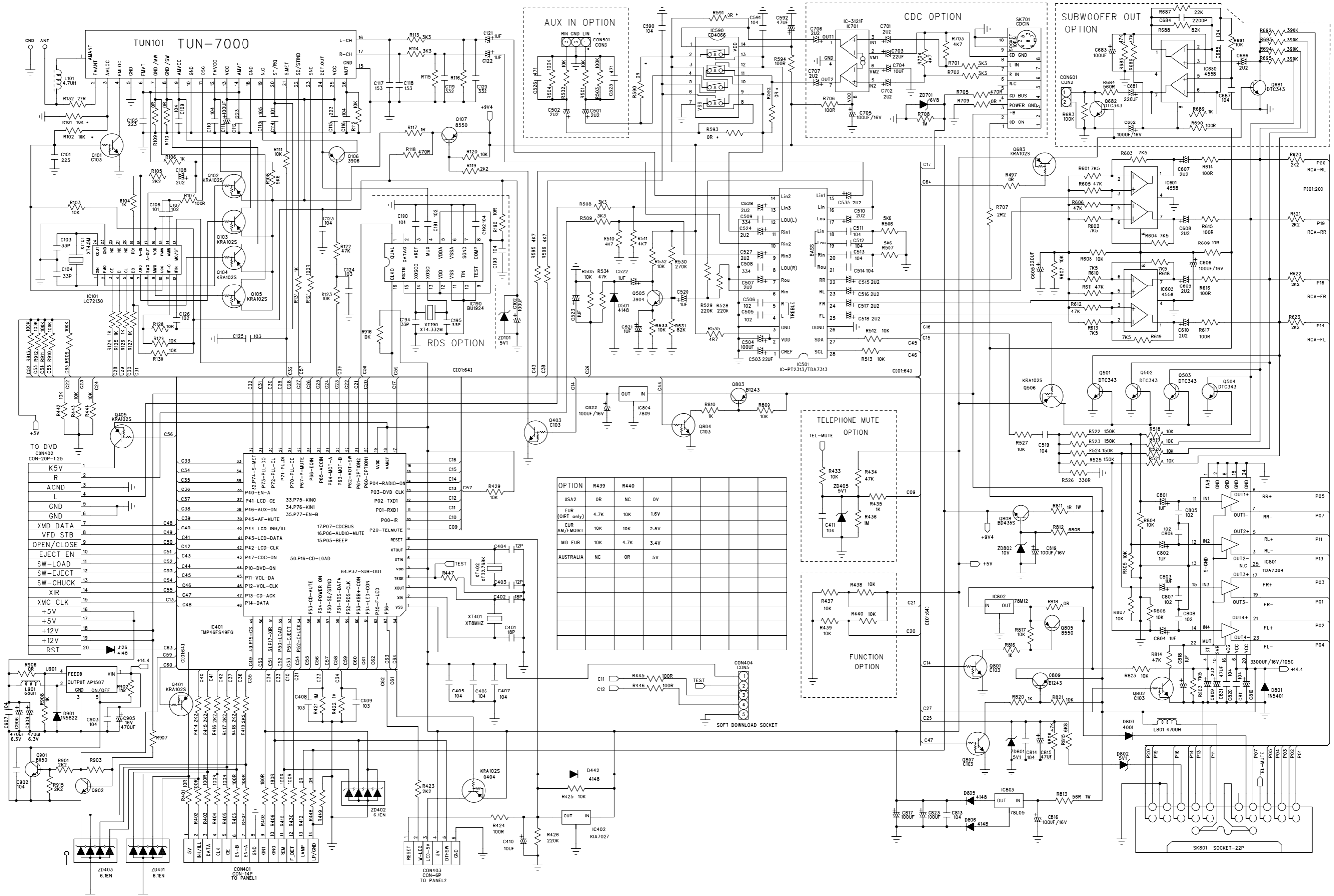
Part No.	Description	QTY	Location	Part No.	Description	QTY	Location
83802DVD705ESB010	DVD705E (DVD730E-43A) SB SMT Assm	1		121803000330	CAP,33pF,±5%,50V,NPO,0603	6	BC47 BC51 C79 C80 BC49 BC11
121604000000	RES,0Ω,±5%,1/16W,0603	11	R1 R3 R4 R21 R89 R65 R100 R103 R104 R201 R30	121803010331	CAP,0603,330p,16V,±5%,NPO	1	C73
121604000100	RES,10Ω,±5%,1/16W,0603	2	R112 R175	121803000470	CAP,47pF,±5%,16V,NPO,0603	2	C47 C49
121604000101	RES,100Ω,±5%,1/16W,0603	4	R163 R242 R243 R18	121803000472	CAP,4700pF,±10%,50V,X7R,0603	2	C2 C3
121604010102	RES,1kΩ,±1%,1/16W,0603	6	R19 R24 R29 R16 R67 R247	121803000473	CAP,0.047μF,±10%,50V,X7R,0603	1	C69
121604000103	RES,10KΩ,±5%,1/16W,0603	9	R17 R20 R92 R93 R94 R244 R38 R9 R11	121803000681	CAP,680pF,±10%,16V,X7R,0603	5	C62 C63 C64 C65 C52
121604000332	RES,3K3Ω,±5%,1/16W,0603	3	R13 R26 R128	121803000683	CAP,0.068μF,±10%,50V,X7R,0603	1	C51
121604010122	RES,1K2Ω,±1%,1/16W,0603	1	R122	121803000821	CAP,0603,820pf,±10%,16V,X7R	1	C71
121604000152	RES,1K5Ω,±5%,1/16W,0603	1	R114	121845090107	TAN.CAP,100μF,±20%,6.3V,C	5	EC26 EC24 EC25 EC29 EC30
121604000153	RES,15KΩ,±5%,1/16W,0603	4	R71 R72 R10 R23	122000000179	INDUCTOR,1.8μH,±10%,50MA,0805	1	L2
121604000154	RES,150KΩ,±5%,1/16W,0603	2	R22 R34	122040000011	CHIP BEAD,0603,1.6X0.8X0.8,800mA,100MHZ,0.6	10	L9,L10,L12,L13,L18,L19,L22,L26 L29,L16
121604000010	RES,1Ω,±5%,1/16W,0603	1	R32	122040000061	CHIP BEAD,120Ω,L2XW1.25XT1.25XA0.5,3A,100MHZ,DCR17Ω	3	L20,L28,L38
121604000223	RES,22KΩ,±5%,1/16W,0603	1	R40(2ÔQ14μ"B""E""¼É)	122040000042	CHIP BEAD,0805,2.0X1.2X0.9X0.5,200mA,100MHZ,0.40Ω	5	L5 L6 L25 L27 L36
121604000203	RES,20KΩ,±5%,1/16W,0603	1	R118	142206000020	SW DIODE,1N4148,25mA,0.9V,100V,MINI-MELF	7	D8 D9 D10 D2 D3 D4 D6
121604000220	RES,22Ω,±5%,1/16W,0603	2	R69 R70	142251000001	TR,2N3904(NPN),SOT-23	1	Q33
121604000330	RES,0603,33Ω,±5%,1/16W	1	R105	142245000048	TR,MMBT3906LT1,SOT-23,PNP	2	Q8 Q32
121604000333	RES,33KΩ,±5%,1/16W,0603	1	R124	142251000005	TR,2SB1132,SOT-89	2	Q11 Q13
121604000391	RES,390Ω,±5%,1/16W,0603	1	R113	142400000635	IC,24C02BN,SOP8,ATMEL	1	U6
121604000393	RES,39KΩ,±5%,1/16W,0603	1	R127	142400000416	IC,UTC4558,SOP-8,UTC	1	U1
121604000047	RES,4Ω7,±5%,1/16W,0603	2	R87 R97	142400000108	IC,BA6287F,SOP-8,ROMH	1	U3
121604000472	RES,4K7,±5%,1/16W,0603	12	R66 R130 R134 R246 R249 R14 R27 R101~R102 R36 R37 R131	142400000504	IC,UTC1117-3.3V,SOT-23,UTC	1	U11
121604000474	RES,470K,±5%,1/16W,0603	3	R33 R125 R35	142400000505	IC,UTC1117-1.8V,SOT-223,UTC	1	U14
121604000512	RES,5K1,±5%,1/16W,0603	2	R115 R116	142400000179	IC,IS42S16400A,TSOPII-54,ISSI	1	U5
121604000750	RES,75,±5%,1/16W,0603	1	R2	142410000024	IC,AM5668S,HSOP28,AMTEK	1	U4
121604000022	RES,22,±5%,1/16W,0603	2	R140 L30	142410000108	IC,SPHE8202D,LQFP216,SUNPLUS	1	U2
121606000330	RES,33,±5%,1/10W,0805	1	R160	123800000018	24PIN,0.5mm,FPC SOCKET SMT TYPE TOP CONNECT TYPE	1	CN12
121618000103	RES,10KΩ4,±5%,1/16W,0603	1	RN1	133010000355	PCB,SB,DVD705E,1.2mm,107X109mm(SUNPLUS)	1	
121803000100	CAP,10pF,±1%,50V,NPO,0603	2	C1 C42	121604000562	RES,5K6Ω,±5%,1/16W,0603	3	R12 R25 R129
121803000101	CAP,100pF,±5%,50V,NPO,0603	3	C4 C5 C53	121803000272	0603,2n7/16V,X7R,±10%	2	C16 C19
121803000102	CAP,1nF,±10%,16V,X7R,0603	9	BC43 BC45 C72 C74 C75 C17 C20, C10,C11	121604000473	RES,47KΩ,±5%,1/16W,0603	1	R7
121803000103	CAP,0.01μF,±10%,50V,X7R,0603	6	C54 BC44 BC18 BC15 C67 C68	142245000015	TR,DTC343TK,SOT-23	1	Q14
121803000104	CAP,0.1μF,+80%-20%,16V,Y5V,0603	64	BC1 BC2 BC3 BC4 BC5 BC7 BC8 BC10 BC12 BC13 BC14 BC16 BC17 BC19 BC20 BC21 BC6 BC22 BC23 BC24 BC25 BC26 BC28 BC29 BC30 BC31 BC32 BC33 BC34 BC35 BC36 BC37 BC38 BC39 BC40 BC41 BC42 BC46 BC48 BC50 BC53 BC54 BC55 BC56 BC57 BC58 BC60 BC61 BC63 BC64 BC66 BC69 BC70,BC74, BC75,BC76,BC77,C43,C45,C48,C57, C76, C77,C59	144840000023	DVD PLAYER,DL-30H,Foryou	1	R126
				143820000149	FFC,20PIN,1.0mm,120mm,E	1	
				121827050227	CAP,220μF,±20%,6.3X7,10V,-55°C--105°C	2	EC46,EC9
				121830020106	E.CAP,10μF,±20%,4X5.5,16V,85°C	4	EC2 EC3 EC7 EC8
				121830020107	E.CAP,100μF,±20%,6.3X5,16V,105°C	15	EC1 EC4 EC6 EC32 EC36 EC37 EC39 EC40 EC41 EC42 EC43 EC44 EC53 EC5 EC45
				121830040476	E.CAP,47μF,±20%,5X5,16V,105°C	3	EC22 EC38 EC27
				143405000004	INFRARED RECEIVER,IR928-6C	2	D12 D13
				142820000010	CRYSTAL,27.000MHz,±20ppm,-30°C~+80°C,CL=18pF,HC-49/US	1	XT1
				143210000004	DETECT SW,SW111	1	K1
				127070010965	CMV100,LASER WARNING LABEL	1	
				142400000040	IC,78L05,TO-92,UTC/ST/KEC	1	U8
121803040105	CAP,1uF,±10%,25V,X5R,0603	4	C46 C58 C60 C61	123800000022	2PIN,SOCKET 2.0mm 90°	1	CN9
121803010221	CAP,220pF,±5%,25V,NPO,0603	2	C15 C18	113850000002	Φ0.5mm,10mm	1	D7
121803000152	CAP,1500pF,±10%,50V,X7R,0603	2	C6&C9	121830000226	E.CAP,22μF,±20%,4X5,16V,105°C	1	EC10
121803010224	CAP,0.22μF,±10%,25V,X5R,0603	1	C66	142206000004	REC DIODE,1N4001,1A,1V,50V,DO-41	1	D1
121803010301	CAP,300pF,±5%,50V,NPO,0603	1	C70	142224000022	ZENER DIODE,5V6,1/2W,DO-35	1	D11

MAIN BOARD

TABLE OF CONTENTS

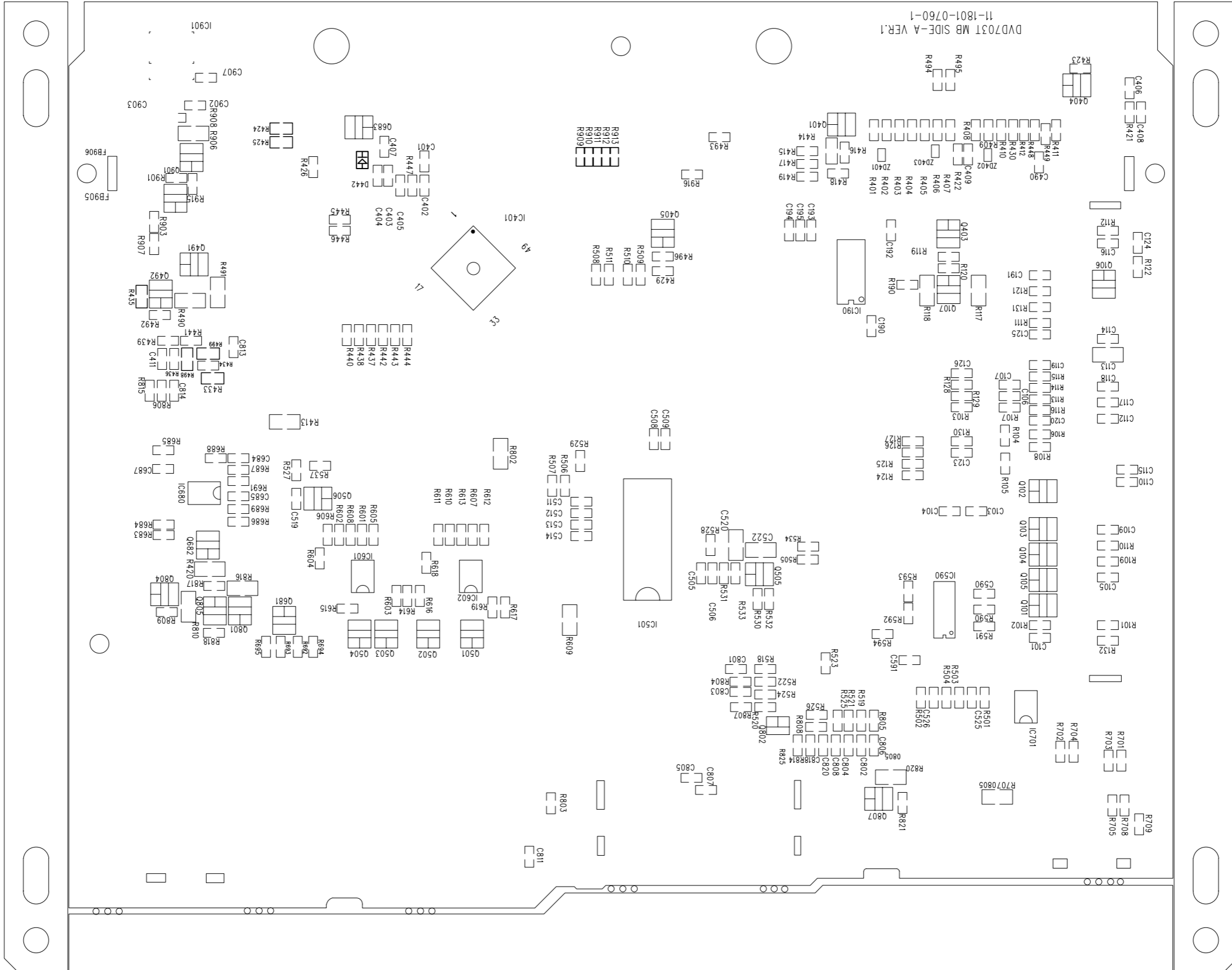
Circuit Diagram 7-2
Layout Diagram 7-3 to 7-4
Electrical Parts List 7-5 to 7-6

CIRCUIT DIAGRAM - MAIN BOARD



LAYOUT DIAGRAM - MAIN BOARD
BOTTOM VIEW

7-4

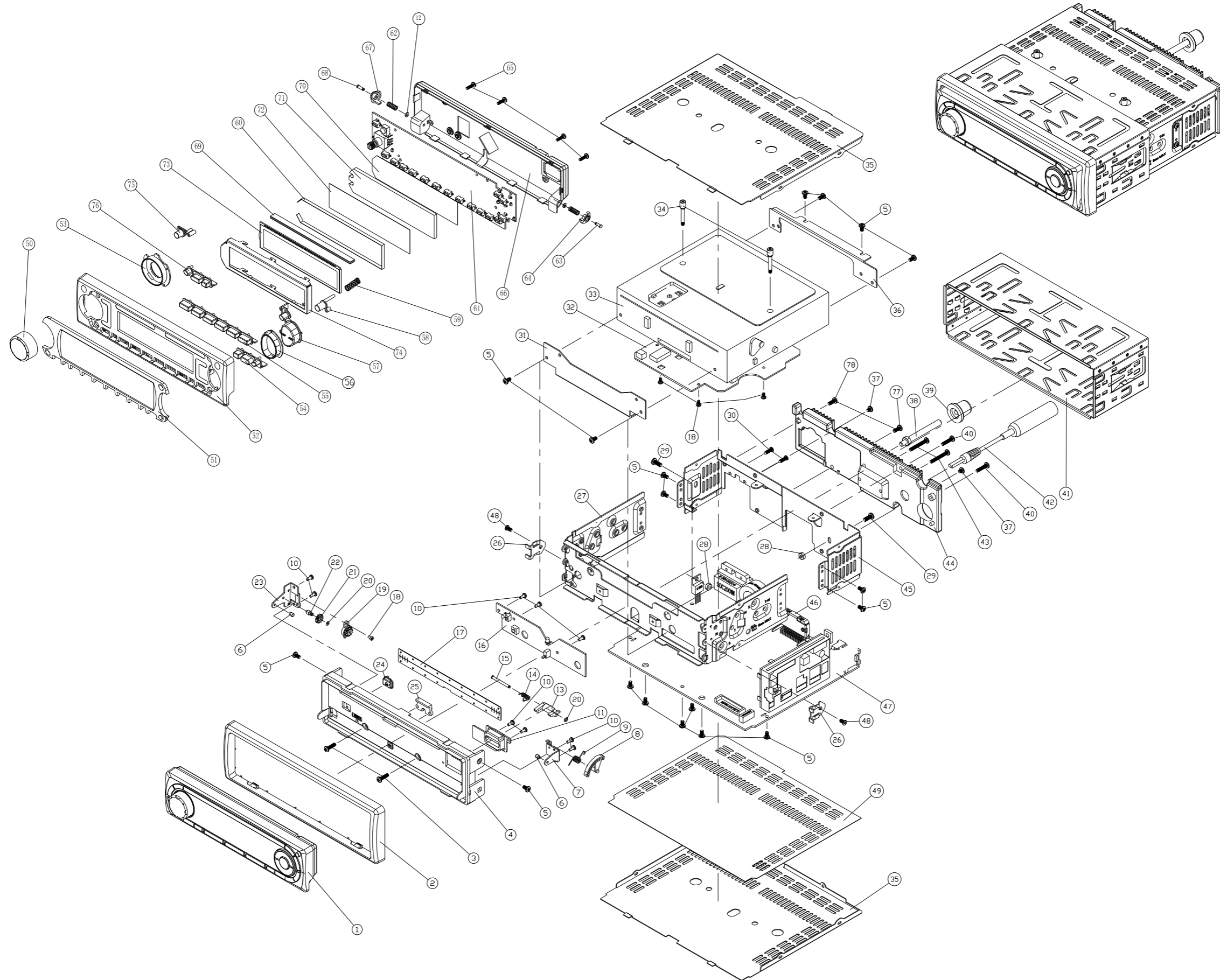


7-4

ELECTRICAL PARTS LIST - MAIN BOARD

Part No.	Description	QTY	Location
142400000140	IC,CSC2313F,SO-28,YOUDA	1	IC501
142400000416	IC,UTC4558,SOP-8,UTC	2	IC601 IC602
142400000080	IC,AP1507-5V,TO252-5L,ANACHIP	1	IC901
121604000220	RES,22Ω,±5%,1/16W,0603	1	R132
121830000105	E.CAP,1μF,±20%,4X5,50V,105oC	5	C809,C121,C122,C521,C523
121830020106	E.CAP,10μF,±20%,4X5.5,16V,85oC	1	C410
121830020107	E.CAP,100μF,±20%,6.3X5,16V,105oC	9	C817 C823 C111 C102 C504 C819 C816 C822 C606
121830000225	E.CAP,2.2μF,±20%,4X5,50V,105oC	12	C507 C510 C515 C516 C517 C518 C527 C528 C607 C608 C609 C610
121830000226	E.CAP,22μF,±20%,4X5,16V,105oC	1	C503
121830040476	E.CAP,47μF,±20%,5X5,16V,105oC	2	C821 C815
121833000227	E.CAP,220μF,±20%,6.3X7,10V,85oC	1	C605
121836000477	E.CAP,470uF,±20%,8X11,16V,105oC	1	C905
121842030225	E.CAP,2.2μF,±20%,4X5,50V,105oC,NON-POLARITY	1	C108
121842000477	E.CAP,470μF,±20%,6.3X11,6.3V,105oC	2	C906 C909
121842030338	E.CAP,3300μF,±20%,13X26,16V,105oC	1	C810
142206000006	REC DIODE,1N5401,3A,1V,100V,DO-27,HY	1	D801
142257000001	TR,2SB1243TV2Q(PNP),ATV	2	Q803 Q809
142400000218	IC,LM2950-5V,TO-92,HTC	1	IC803
141670000109	GBX050,PTC(RILAIDA)	1	IC802
142400000203	IC,LC72130,DIP24S,SANYO	1	IC101
142400000378	IC,TDA7384,FLEXIWATT25,ST	1	IC801
142400000184	IC,KIA7027,TO-92,KEC	1	IC402
142206000008	REC DIODE,1N5822,3A,0.9V,40V,DO-27	1	D901
142820000031	CRYSTAL,4.500MHZ,±30PPm,-30oC~+80oC, HC-49/US DIP 30PF	1	XT101
142820000032	CRYSTAL,8.000MHZ,±30PPm,-20oC +70oC, HC-49/US DIP 18PF	1	XT401
142820000014	CRYSTAL, 32.768MHz,±20ppm,-20oC +70oC,CL=12.5pF, Tuning Fork	1	XT402
144815000004	TUNER,CET-702CFYA,FM/OIRT	1	TUN101
123805000095	6PIN,2.0mm,WAFER DIP 180o	1	CON403
123805000017	14PIN,2.0mm,WAFER 90o	1	CON401
123830010086	CM700,20PIN,PWR/SPK EST-KNT-20-04	1	SK801
143825000190	CONNECTOR,20PIN,1.0mm,CONNECTOR FZC6A-020	1	CON402
141000000319	CM226,BRACKET IC 7386,SECC,T0.8	1	
122015000014	CHOKE COIL,470UH,1A,±30%,26mm(D)X10mm(L)X14mm(H) (CM206)	1	
133000010010	PCB,CB,CM206,94-V0,36x30x1.6mm	1	
122005000010	STAND INDUCTOR DR4X10,150UH,±10%,500mA,62X15X6mm	1	L902
122005000017	STAND INDUCTOR,68μH,±10%,φ0.4	1	L901
121640000222	RCF,2K2Ω,±5%,1/8W	4	R620 R621 R622 R623
124800000025	FUSE,ZH270,15A,SLOW FUSE TYPE	1	

EXPLODED VIEW - MAIN UNIT



MECHANICAL PARTS LIST

Item	Assembly Part NO	Description	QTY
1	83803DVD730EKB000	FRONT PANEL DVD730E-43A	1
2	141298000021	CM700,RIM,ABS(BLACK)	1
3	121040000089	SCREW,BTS,BLACK Zinc,M2.6X10.0	2
4	141240050056	CM700,Cabinet,PC	1
5	121040000083	SCREW,BTS,White Ni,M2.6X5	18
6	121025010154	CM700,RIVET GEAR	2
7	141000010034	CM700,BRACKET-PANEL-RIGHT,SECC,T1.0	1
8	141200000083	PUSH,CM700,POM	1
9	121035000135	CM700,EJECT-SPRING,Ø0.60	1
10	121040000185	SCREW,PTP,BLACK Zinc,M2X5	9
11	133010050415	SK,CM700,FR4,1.2mm,103.3X67.8mm	1
12	121440000037	CM700E-WASHER,4X0.5	2
13	141290000241	CM700,LOCKER,POM	1
14	121035000137	CM700,LOCK SPRING,Ø0.60	1
15	121025000156	CM700,SHAFT LOCK	1
16	133000010027	PCB,LB,CM710,1.2mm,94V0,109.5X24mm	1
17	121450000071	CM700S,DUSTPROOF,	1
18	121040000186	SCREW,PTS,Color Zinc,M2.0X4	4
19	121200000081	CM226N,DAMPER(N65g),NYLON	1
20	121440000031	CD206,FELT-16-025,Ø3.5XØ1.5X0.25,Graphite fibre	2
21	141200010082	CM700,GEAR ,POM	1
22	121025010155	CM700,RIVET PANEL	1
23	141000000063	CM700,BRACKET-DAMR,SECC,T1.0	1
24	141237010225	CM700,KNOB-EJECT,PC	1
25	141290000240	CM700,LENS GATE,PC	1
26	141000000068	CM700,SIDE STOPR,SECC,T1.0	2
27	141000030069	CAD310,BRACKET-FRONT-U-CD,SECC,T1.0	1
28	121050000005	NUT,White Zinc,M3X2.5	2
29	121040000047	SCREW,BM,White Ni,M3X8	2
30	121040000154	SCREW,PA ,White Ni,M2.6X8	2
31	141000000358	CMU706,BRACKET DECK FRONT OF CLC01,SECC,T1.0	1
32	83803DVD705ESB011	SB ASSM	1
33	144840000023	DVD PLAYER,DL-30H,Foryou	1
34	121040000101	Pivot screw M2.6*19	2
35	141000020341	CM701,TOPCOVER,SECC,T0.6	2
36	141000000778	DVD703S,BRACKET REAR DECK,SECC,1.0mm	1
37	121040000069	SCREW,BTS,White Zinc,M2.6X3	2
38	121050000003	CMV100,POLE	1
39	121410000026	CMV100,RUBBER	1
40	121040000077	SCREW,BTS,White Ni,M2.6X14	2
41	141000000067	CAD310,SHORT SHEET,SECC,T0.6	1
42	124845000001	ANTENNA,W/GROUND 230mm	1
43	121040000059	SCREW,BTB,White Ni,M2.6X21	2
44	141010020047	CME0CM700,HEATSINK	1
45	121000030076	CAD510,BRACKET-REAR-U,SECC,T1.0	1
46	141000000319	CM226,BRACKET IC 7386,SECC,T0.8	1
47	83803DVD705MB002	MB ASSM	1
48	121040000222	SCREW,FM,BLACK Zinc,M2.6X5	2
49	121290000662	CM725,ISOLATOR SHEET,PC SHEET(T=0.185mm)	1
50	141235020037	CM730,KNOB VOL,PC	1
51	141228010675	LENS,DVD730E-43A,LENS,PMMA(ELENBERG)	1

Item	Assembly Part NO	Description	QTY
52	141218030139	DVD730,PANEL-FRONT BLACK	1
53	141290000257	CM730,LIGHT GUIDE L,PMMA	1
54	141238000291	CM730,KNOB LO/DX AMS &BAND,PC	1
55	141238010292	CM730,KNOBNUM,PC	1
56	141290000258	CM730,LIGHT GUIDE R,PMMA	1
57	141238010297	CM730,KNOBSKIP,PC	1
58	141238020293	CM730,KNOB OPEN,PC	1
59	121035000332	CMV100,SPRING RELEASE NEW,0.3mm,	1
60	121460000027	CAD415,LIGHT SHIELDING SHEET,Tinsel Sheet,T0.15	1
61	83802DVD730EKB000	KB ASSM	1
62	121035000136	CM700,L&R ROTATING SPRING,Ø0.40	2
63	121025000153	CM700,RIGHT SLIDE BLOCK SHAFT	1
64	141200000084	CM700,RIGHT-SLIDE,POM	1
65	121040000120	SCREW,FTP,BLACK Zinc,M2.0X8	4
66	141218010058	CM730,PANEL BACK,ABS	1
67	141200000085	CM700,LEFT-SLIDE,POM	1
68	121025000152	CM700,LEFT SLIDE BLOCK SHAFT	1
69	121490000120	CM203,ZEBRA STRIP	1
70	121290000237	CM700,BACK LIGHTING SHEET	1
71	141290000043	CA-C310,BACKLIGHTGUIDE,PMMA	1
72	121290010238	CM700,FILTER SHEET	1
73	143400000009	DVD711,NEGATIVE COLOR,JIC-TB6240N	1
74	141002000002	CAD415,LCD COVER,T0.5	1
75	141238000296	CM730,KNOB PWR SYMBOL,PC	1
76	141238010445	DVD730,KNOB TA&SRC&LO/DXBLACK,PC	1
77	121040000086	SCREW,BTS,White Ni,M2.6X7	1
78	121040000075	SCREW,BTS,White Ni,M2.6X10	1