



AKAI

**PULL SYNTHESIZED
STEREO RADIO WITH
COMPACT DISC PLAYER
DIGITAL**

Models:
ACR-21MP
ACR-31MP
ACR-41MP

SERVICE MANUAL

Service
Service

Service Manual

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SPECIFICATIONS

■ General

Power supply:	12V DC(11V-16V) Test voltage 14.4V, negative ground
Maximum power output:	50Wx4 channels
Continuous power output:	20Wx4 channels (4Ω, 10% T.H.D.)
Suitable speaker impedance:	4-8 ohm
Pre-Amp output voltage:	2.0V (CD play mode: 1KHz, 0 dB, 10 KΩ load)
Fuse:	15A
Dimensions(WxHxD)	178x50x162mm
Weight:	1.7kg
Aux in Level(optional):	≥300mV
Sub-out(optional):	4.0V
ESP(optional):	(CD>40s, MP3>120s)

■ Components

Mounting collar	1
Tapping screws M5x6 mm	4
Mounting bolt (50 mm)	1
Wire connector	1
Removable face plate case	1
Trim plate	1
T-key	2
Operating instructions	1
Rubber cushion	1
Remote control(optional)	1

■ FM Stereo Radio

Frequency range:	87.5 - 108.0 MHz (EUROPE MODEL) 87.5 - 107.9 MHz (USA MODEL) 65.0 - 74.0 MHz (OIRT MODEL)
Usable sensitivity:	8 dBμ
quieting sensitivity(S/N=50dB):	12 dBμ
Frequency response:	30Hz-15kHz
Stereo separation:	30dB(1kHz)
Image response ratio:	50dB
IF response ratio:	70dB
Signal/noise ratio	55dB

■ MW(AM) Radio

Frequency range:	522-1620 KHz (EUROPE MODEL) 530-1710 KHz (USA MODEL)
Usable sensitivity(S/N=20dB):	30 dBμ

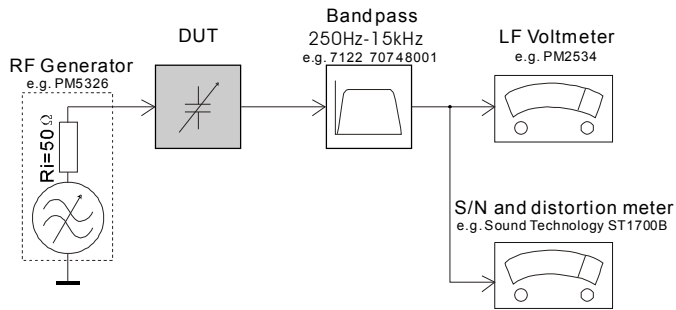
■ Disc Player

System:	Disc digital audio system
Frequency response:	20Hz - 20kHz
Signal/noise ratio:	>86 dB
Total harmonic distortion:	Less than 0.20%(1 kHz)
Wow and flutter:	Below measurable limits
Channel separation:	>60 dB

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

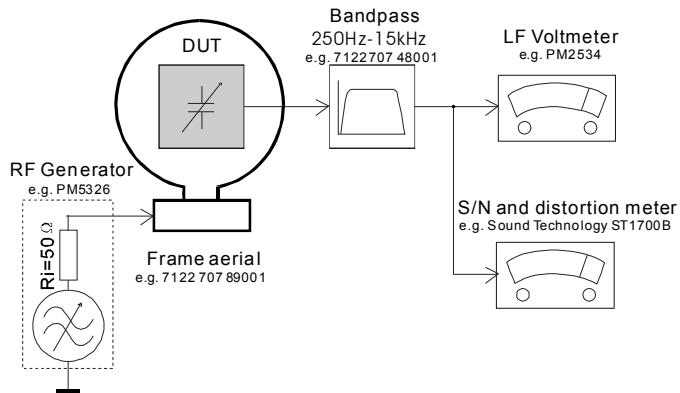
MEASUREMENT SETUP

Tuner FM



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

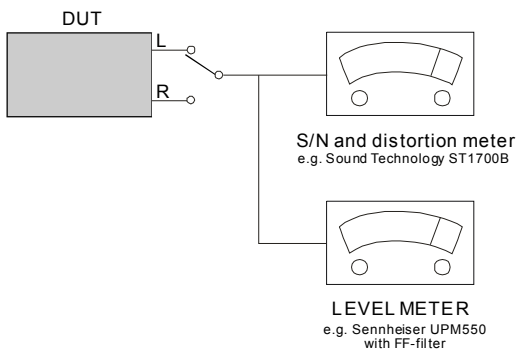
Tuner AM (MW,LW)



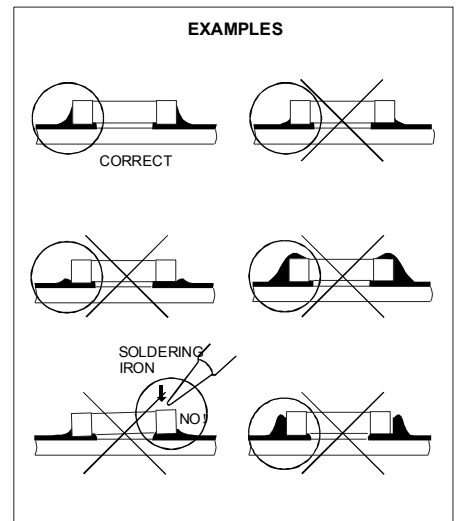
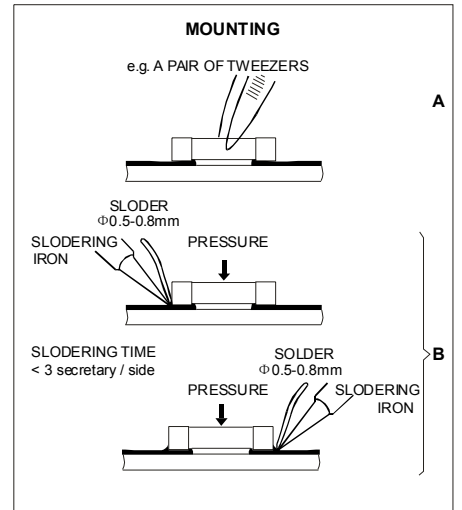
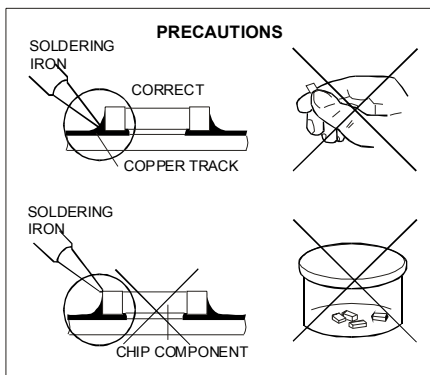
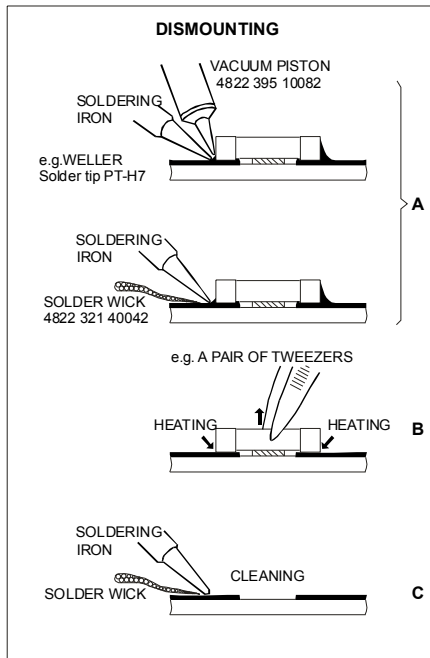
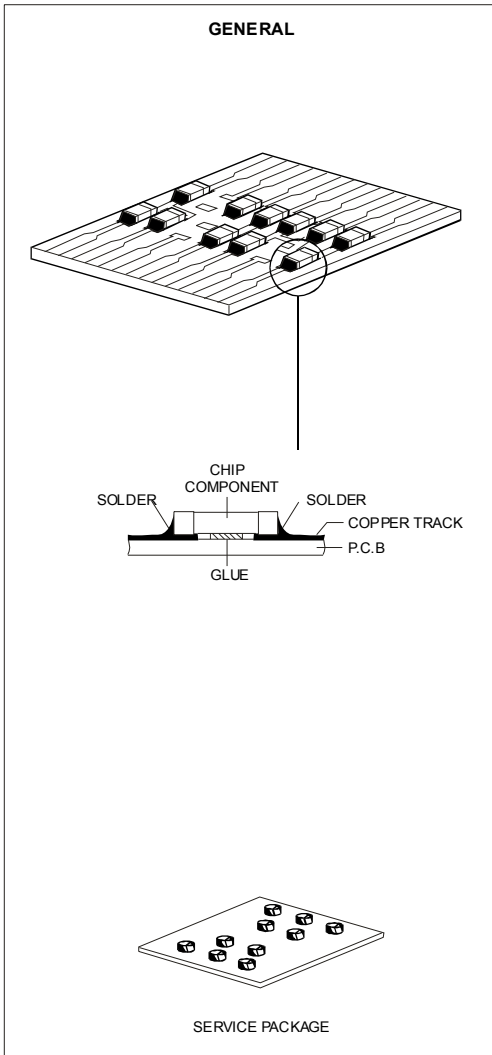
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday's cage.
Use a bandpass filter (or at least a high pass filter with 250Hz) to eliminate hum (50Hz,100Hz).

CD

Use Audio Signal Disc SBC429 4822 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 ditzelfde 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 Halbleiter sind 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 ridatta in caso di non osservazione della più grande cauzione 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 lavora 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 utilisées les pièces de rechange identiques à celles spécifiées.

GB Warning!

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

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.

S Varning!

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

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.

SF Varoitus!

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

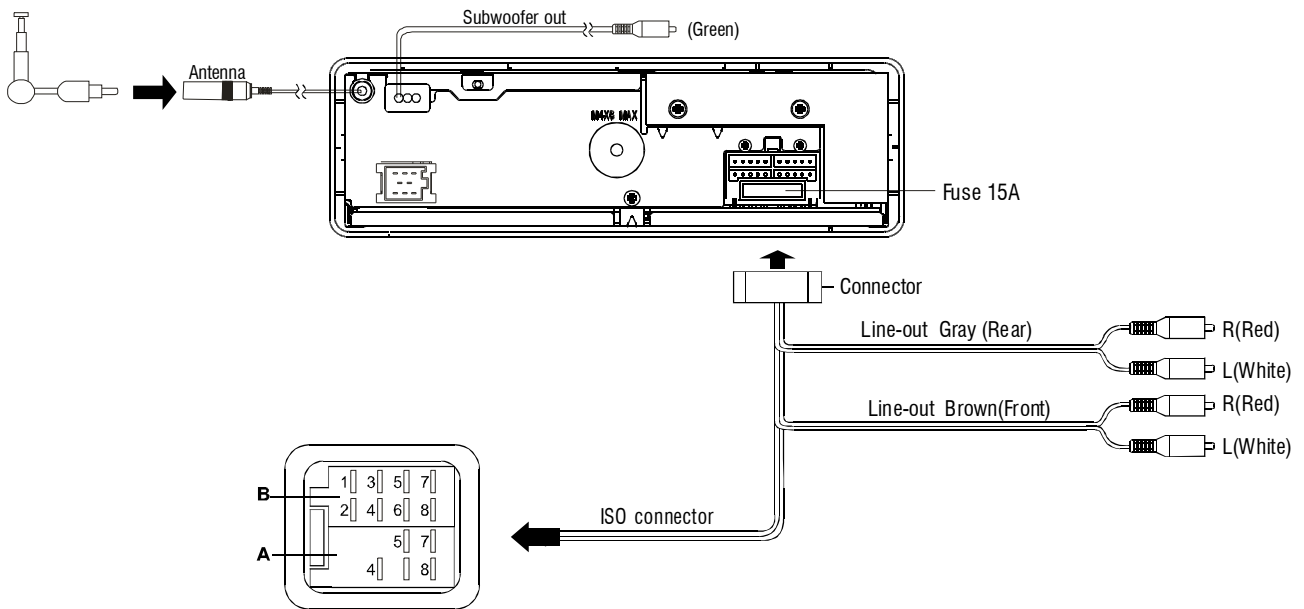
"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."

DK Advarsel!

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

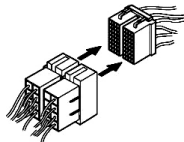
PREPARATIONS

■ Wiring Diagram

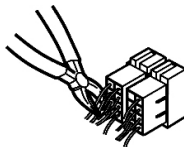


■ Using the ISO Connector

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




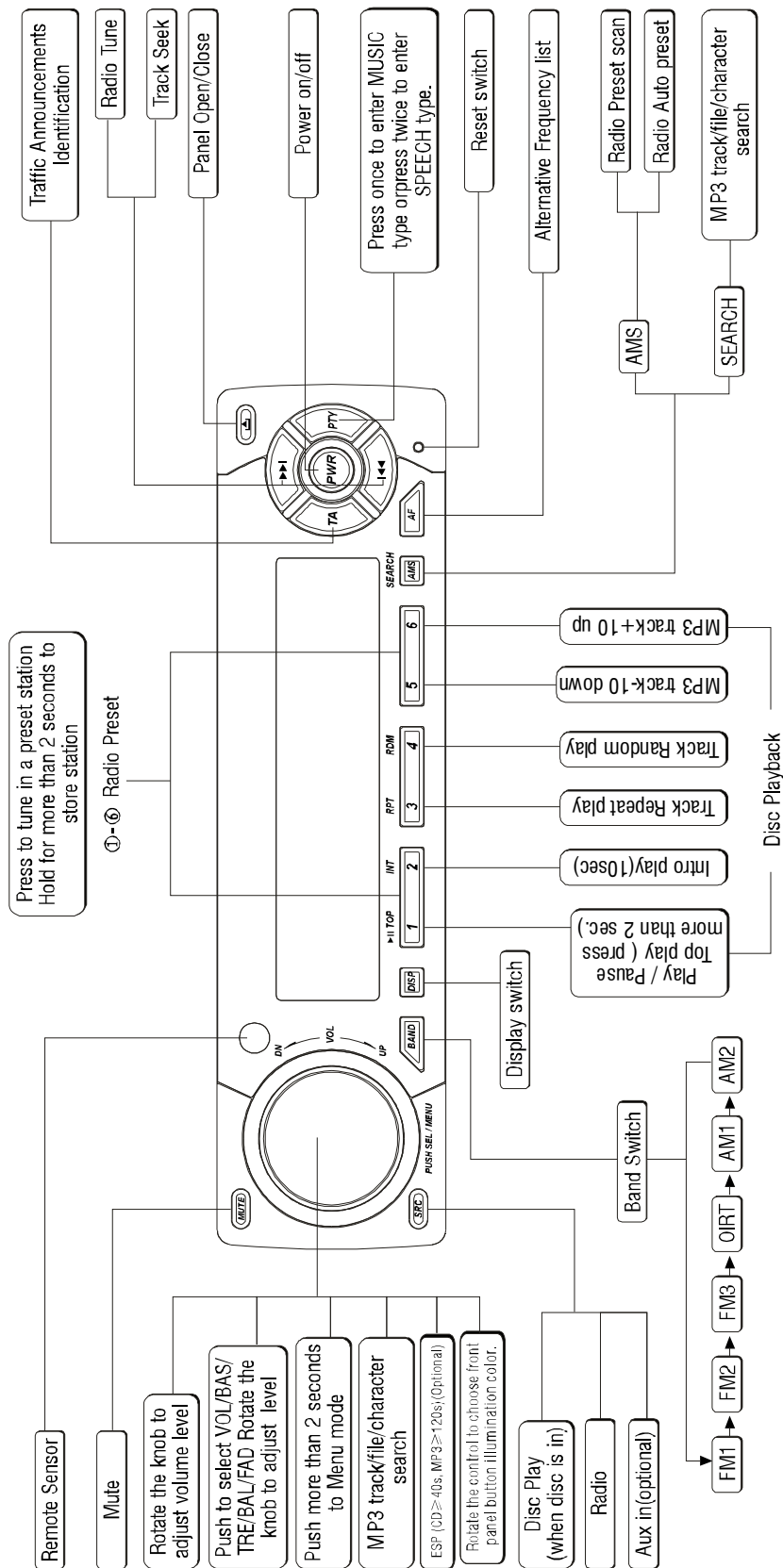
2. For connections without the ISO connectors, check the wiring in the vehicle carefully before connecting, incorrect connection may cause serious damage to this unit.
Cut the connector, connect the colored leads of the power cord to the car battery, as shown in the colour code table below for speaker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

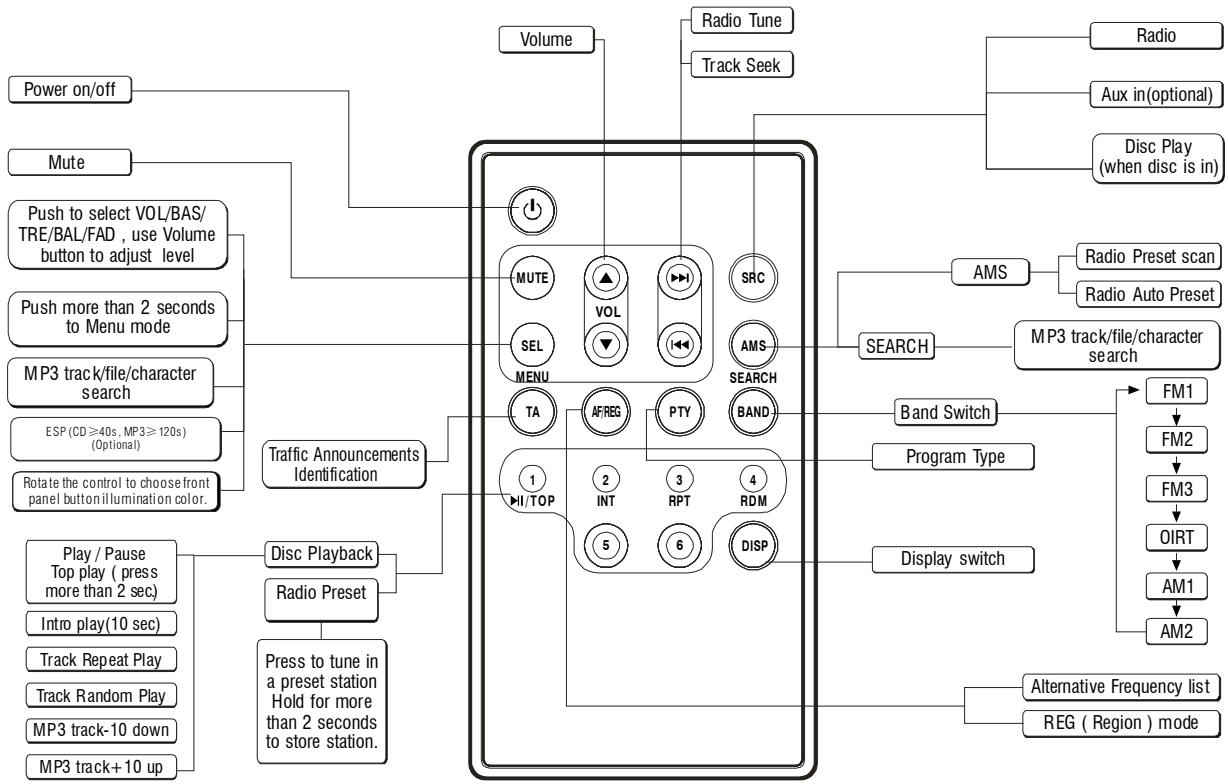
CONTROLS

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



REMOTE CONTROLS

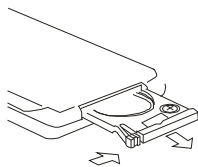
Power On : Press any button on the remote control to turn on the unit.



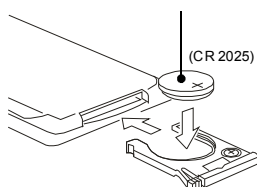
Replacing the lithium battery of remote control unit.

* 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.


CONTROLS

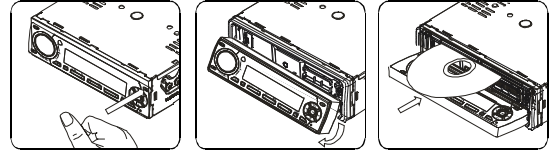
Disc Eject: Press  to slide down the panel.


If there is a disc inside, the disc will be ejected automatically.

Load: Insert the disc into the slot. The panel will close automatically.

Panel slide down/close: Press  to slide down the panel.

Press  again to close the panel.



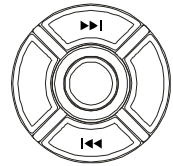
Do not apply excessive force to the panel, doing so can cause damage to the unit.
Do not press  to close the panel before the disc is inserted completely, doing so may damage the disc and the unit.

Radio: Radio Tune by step : press less than 0.5 sec.

Radio Seek automatically : press more than 0.5 sec.

Disc Playback: Track skip : press less than 0.5 second to go to the next or previous track.

Track seek : press more than 0.5 second and hold it to fast forward or reverse back the track.



AMS : Auto Memory Store

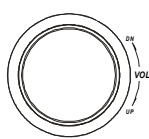
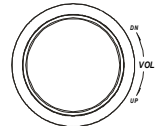
Press briefly to scan the preset station ①-⑥ for 5 seconds each. Hold more than 2 seconds, the 6 strongest available station will be automatically saved in the memory of preset button ①-⑥ .



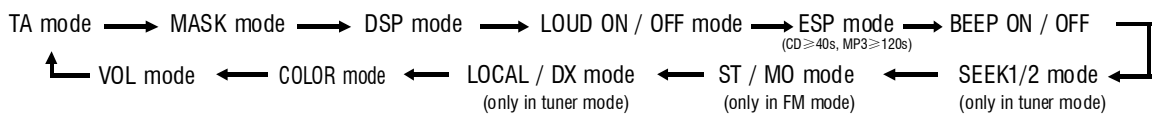
SET CLOCK

Press DISP button, time displays. Press again more than 2 seconds, time display blinks.

Rotate the knob clockwise to set hours. Rotate the knob anticlockwise to set minutes.

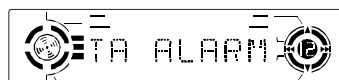


Press the button more than 2 seconds to enter menu mode , then each press changes the mode as follows:

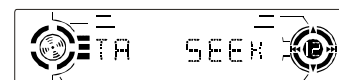


TA mode: Rotate the knob to choose TA ALARM or TA SEEK mode, When TA is turned on and no traffic program identification code has been received during the specified time, no TA/TP is displayed and according to the MENU SELECT, alarm is set off, or TA SEEK is activated.

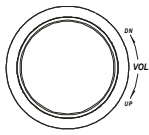
TA ALARM mode : NO TA/TP is displayed and alarm is set off.



TA SEEK mode: TA SEEK is activated.



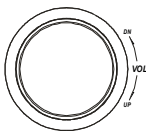
CONTROLS



MASK mode:
rotate the knob
to choose MASK DPI
or MASK ALL mode.

MASK DPI mode :
Only the AF which has different program identification is masked.

MASK ALL mode :
The AF which has different program identification and NO RDS
signal with high field strength is masked.



DSP mode: Rotate the knob to choose DSP sound effect:
LOUD mode: Rotate the knob to choose loud on or off.
BEEP ON/OFF mode: Rotate the knob to choose button beep sound on or off.

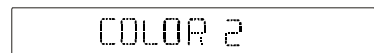
POP → ROCK → CLASSIC → FLAT → DSP OFF
↑

SEEK 1/2 mode: Rotate the knob to choose radio seek mode 1 or 2 .
SEEK 1: searching station will stop when next station is received.
SEEK 2: searching station will stop when ►► or ◄◄ button is released and next station is received.



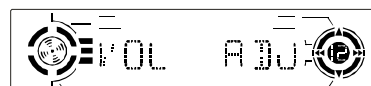
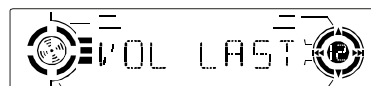
LO/DX mode: Rotate the knob to choose tuner sensitivity local or distant.
ST/MO mode: Rotate the knob to choose FM stereo or mono.

COLOR mode: Rotate the control to choose front panel button illumination color.
COLOR 1: button illumination color is RED.
COLOR 2: button illumination color is GREEN.

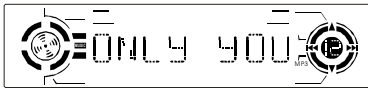


VOL LAST / ADJUST MODE

Press knob to choose VOL LAST : the turn-on volume level is the volume level of latest power off.
Rotate knob to choose VOL ADJ,
then rotate the knob to set the turn-on volume level .



MP3 PLAYBACK



While playing MP3 disc, the folder/file name and ID3 tag(Song title, Album and Artist) can entirely scroll displayed on the LCD display.

Elapsed playing time & Track number → Folder name & number → File name & number → Song title → Album title → Artist name



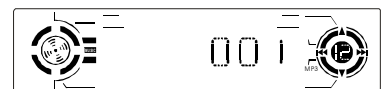
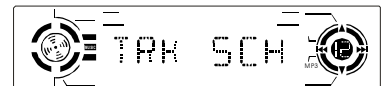
MP3 Track search



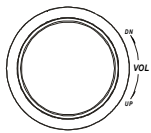
Press AMS button to select "TRACK SCH" mode. Press the knob and LCD display will show "001".

IF your desired track number is less than 100, rotate the knob to select the first digit and press it once again and rotate set the tenth digit of the track number. Press the knob again more than 0.5 second to play the track.

IF your desired track number is more than 100, rotate the knob to select the first digit and press it to confirm, rotate the knob to select the tenth digit and press it to confirm, rotate the knob to select the hundredth digit and press it to confirm, Press the knob again to play the track.

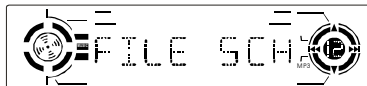


* If the track number you enter is beyond the maximum file number, last song will be played.



MP3 File search

Press AMS button twice to select "FILE SCH" mode. Press the knob to enter. Rotate the knob to select folder.



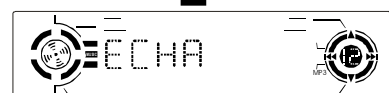
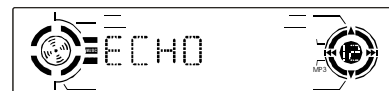
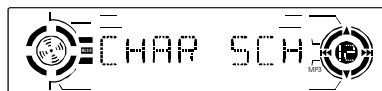
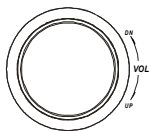
IF you just want to play songs of this folder, press the knob more than 0.5 second to play the first track of the folder. IF you want to play desired track of the folder, press the knob and rotate to select the track you want. Press the knob again to play the track.

MP3 CHARACTER SEARCH



Press AMS button three times to select "CHAR SCH" mode. Press SEL button and "A" displayed. Now If press SEL button more than 0.5 seconds. the track which first character of its name is "A" will be played. Rotate the knob to select the 1st character of the desired track name and press SEL button to confirm. Then "A" flashes at the next place, select 2nd and other character of the desired track name as steps above. Press SEL more than 0.5 seconds to play the track of the select name.

Example :to search character "ECHO".



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 lost

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.

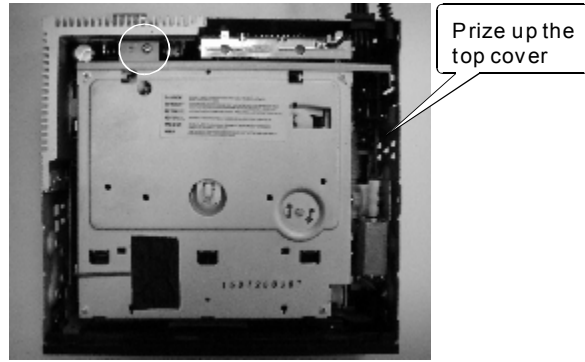
ERR-3

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.

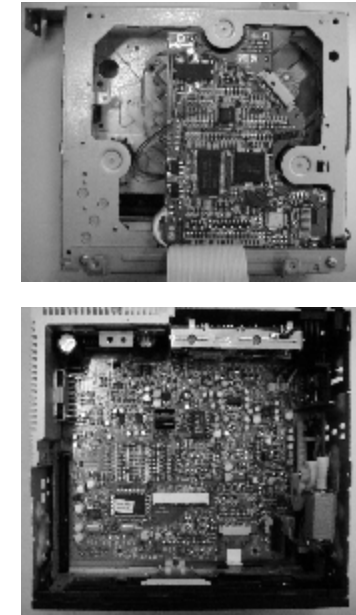
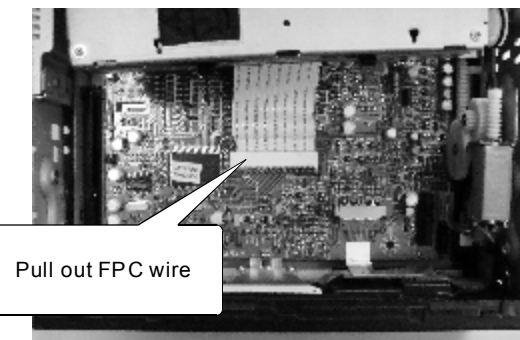
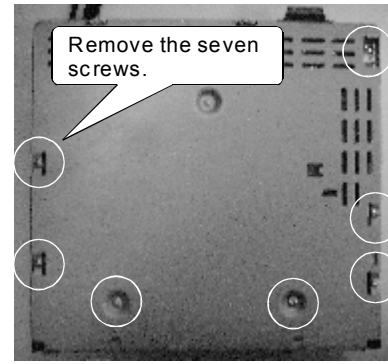
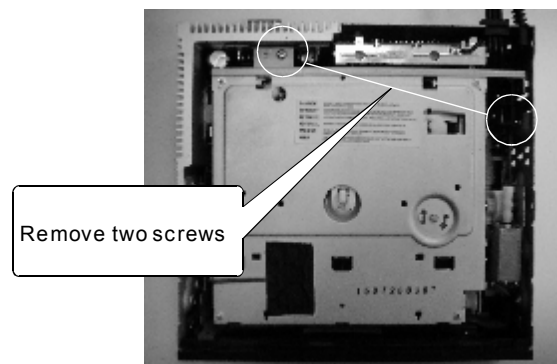
ERR-4

DISMANTLING INSTRUCTIONS

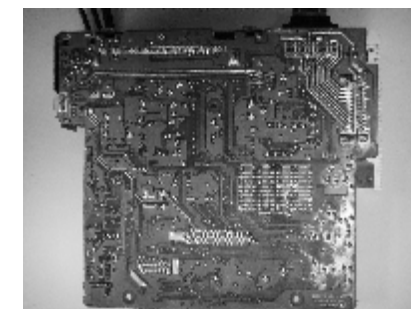
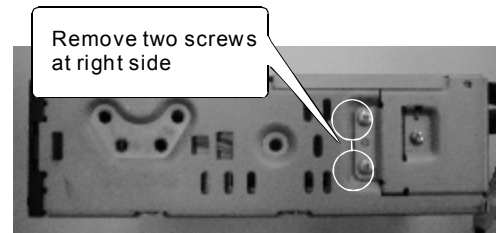
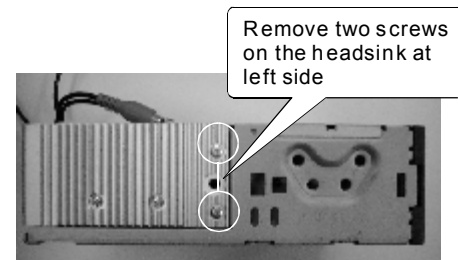
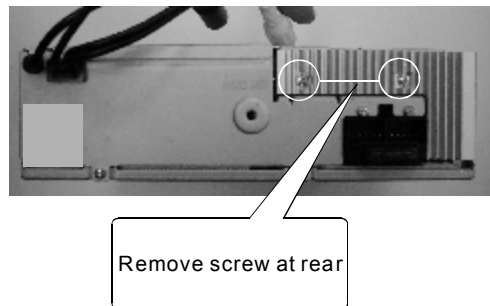
1. Remove top cover



2. Remove loader



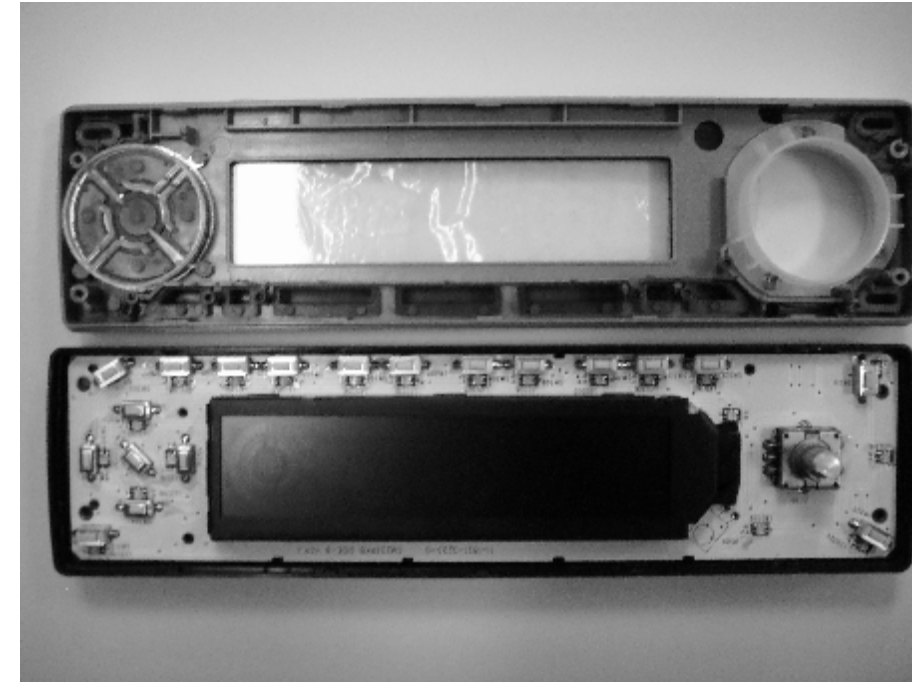
3. Remove main board



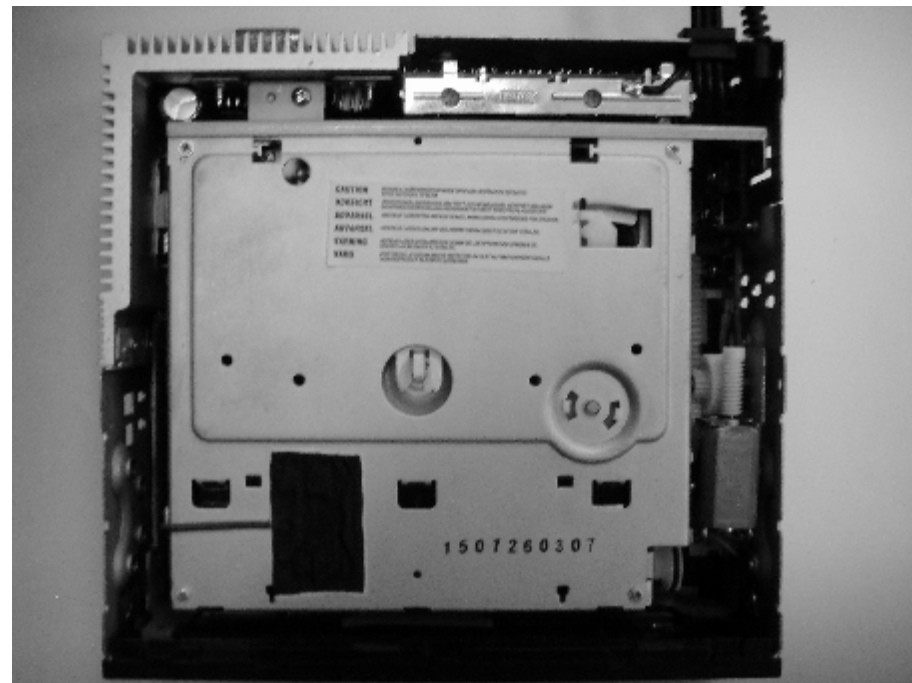
DISMANTLING INSTRUCTIONS



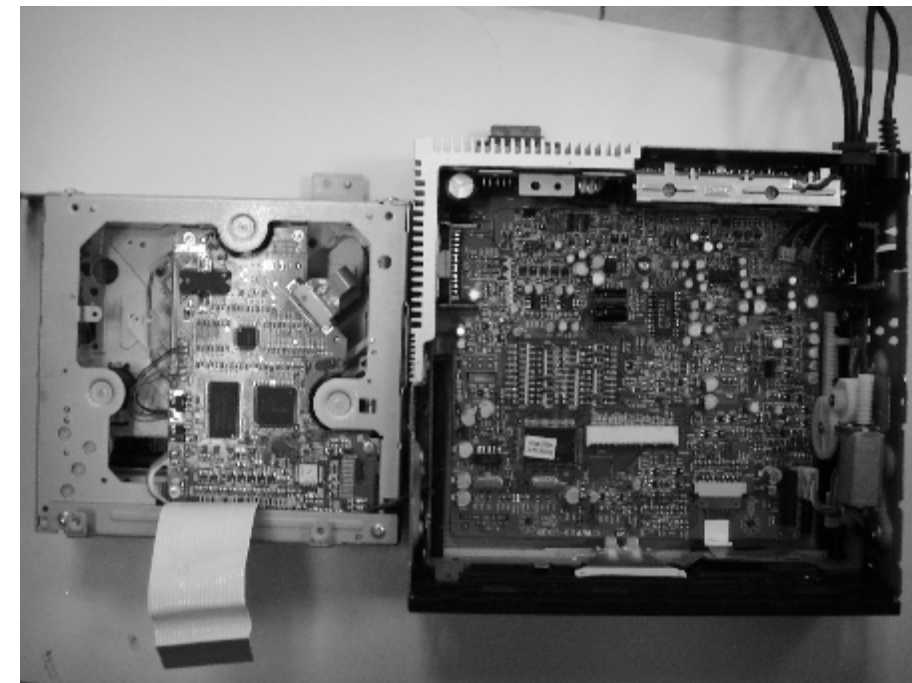
Service Position A



Service Position C

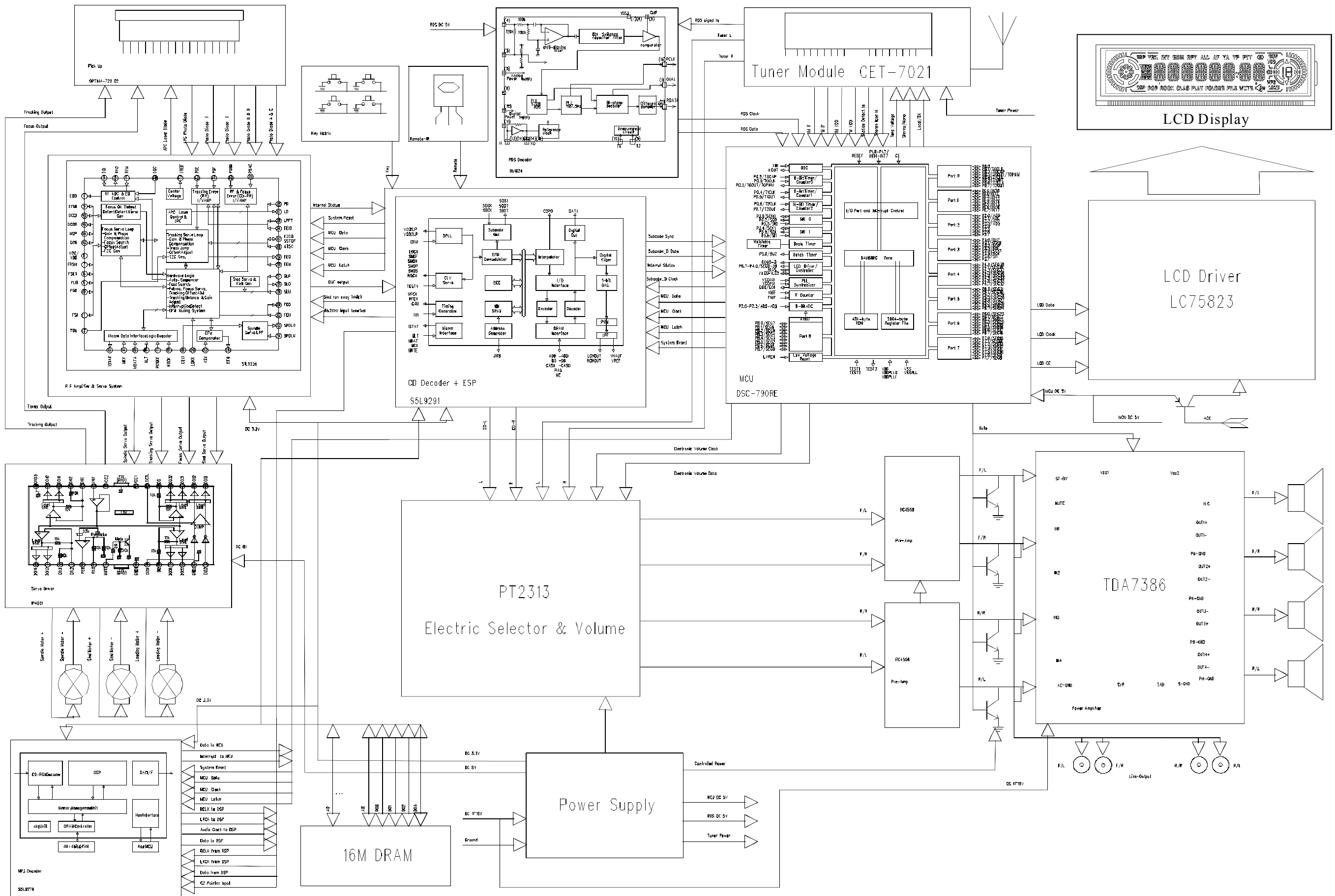


Service Position B



Service Position D

SET BLOCK DIAGRAM

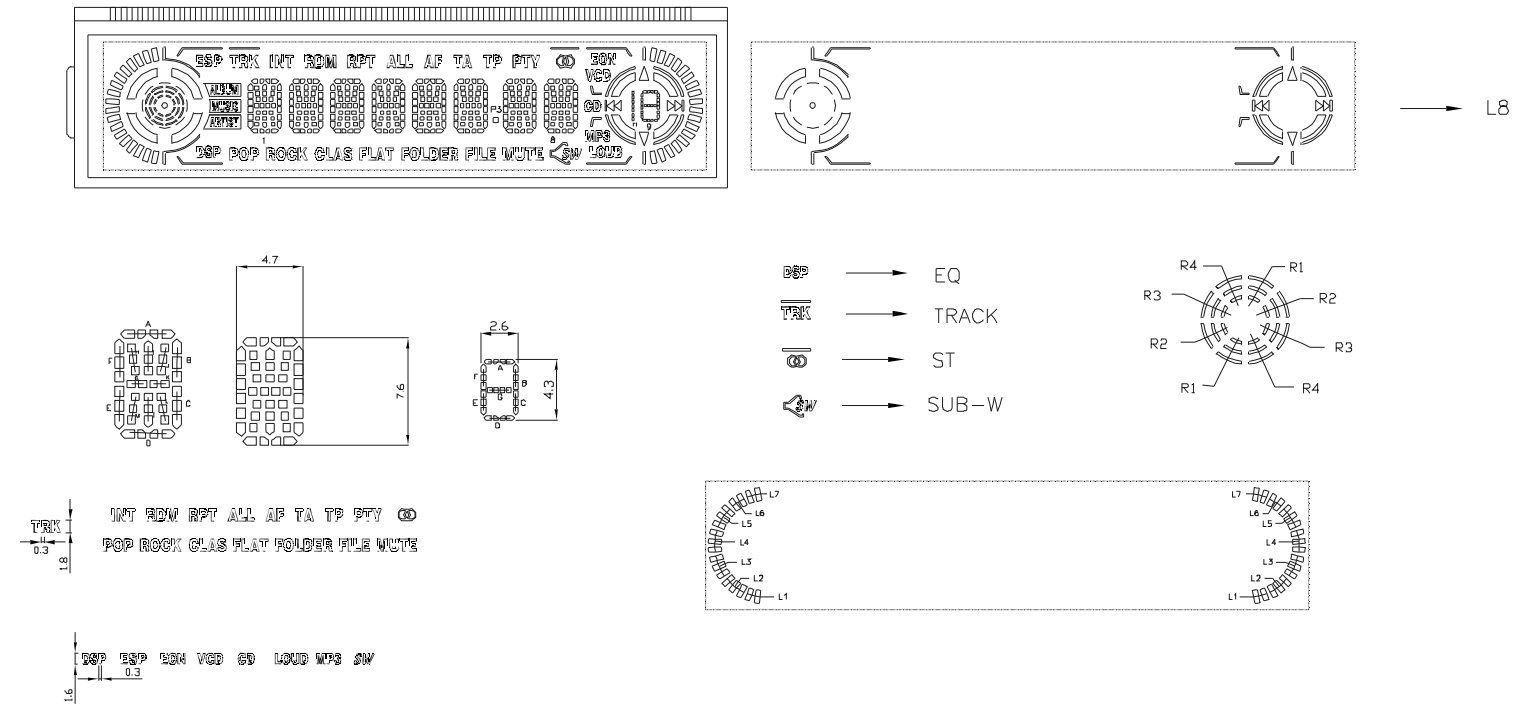


KEY BOARD

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LCD PIN CONNECTION

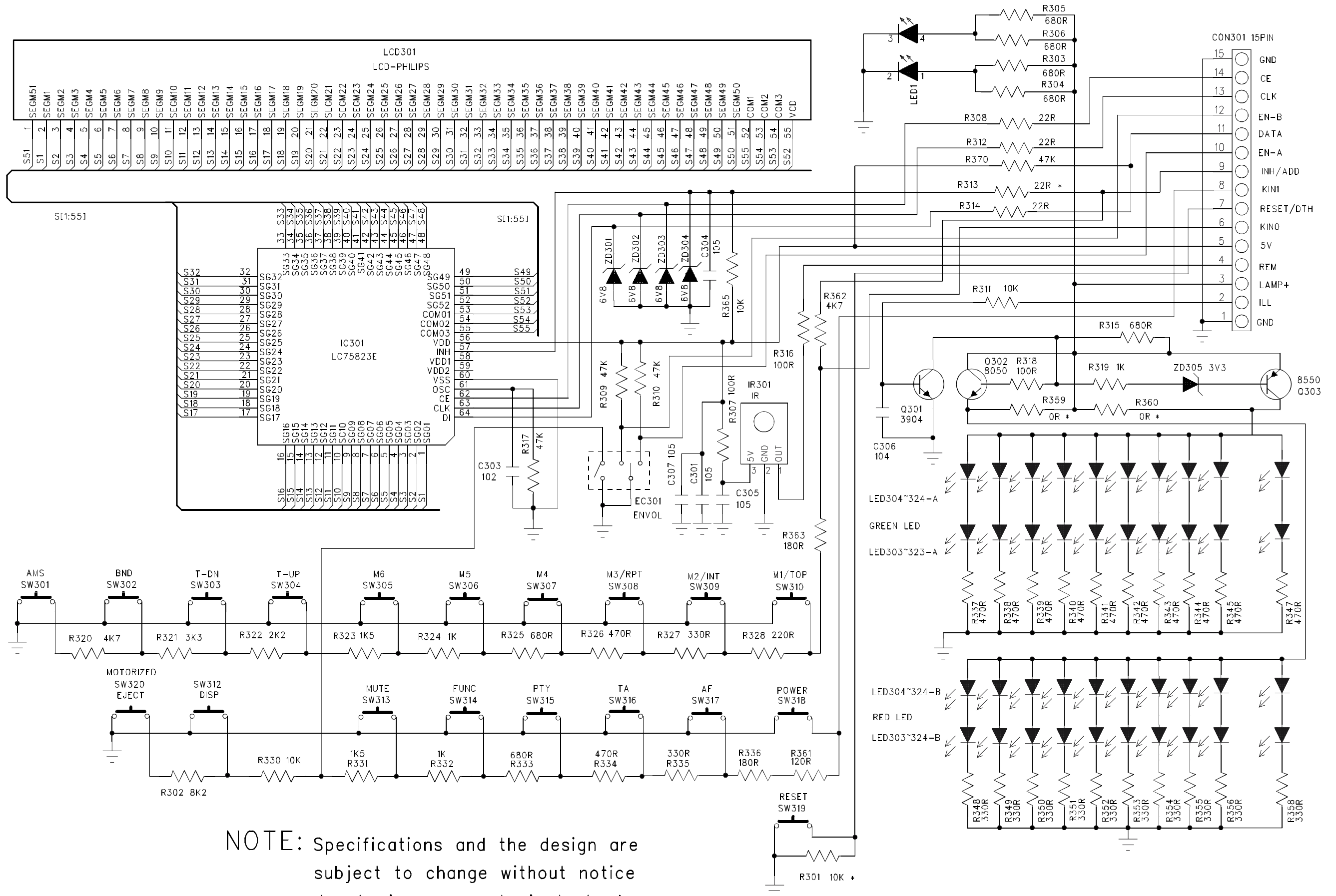


PIN SEGMENT DISPLAY:

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	L8	R1	1E	1M	1D	1L	R3	2E	2M	2D	2L	MUTE	3E	3M	3D	3L	VCD	4E	4M	4D	4L	ALL	5E	5M	5D	5L	RPT	6E
COM2	SUB-W	R4	1G	1I	1K	1C	R2	2G	2I	2K	2C	INT	3G	3I	3K	3C	TRACK	4G	4I	4K	4C	RDM	5G	5I	5K	5C	MP3	6G
COM3	ESP	1F	1H	1A	1J	1B	2F	2H	2A	2J	2B	3F	3H	3A	3J	3B	4F	4H	4A	4J	4B	5F	5H	5A	5J	5B	6F	6H

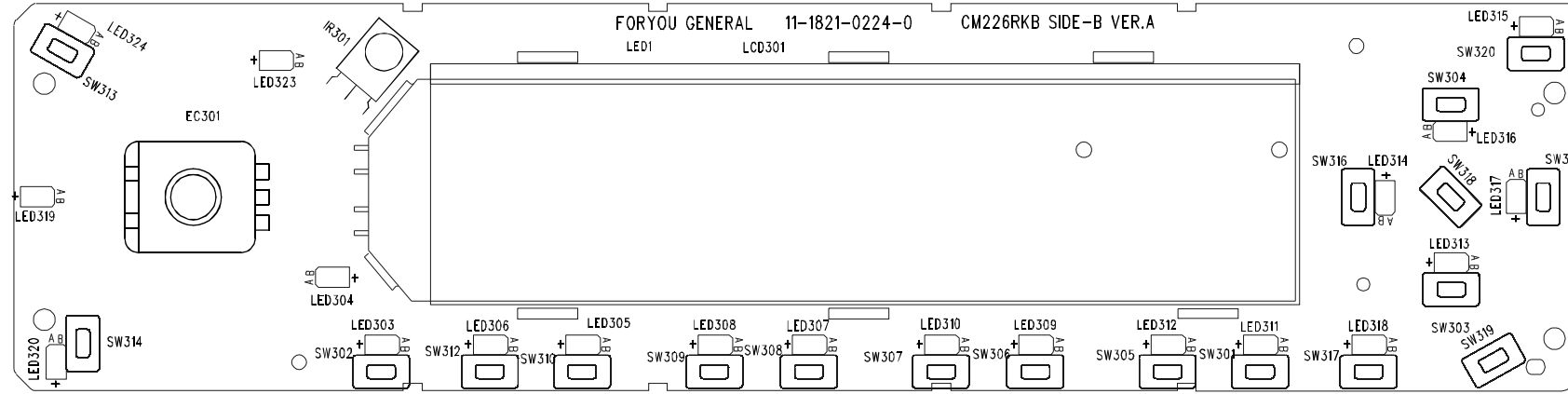
PIN	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55
COM1	6M	6D	6L	FOLDER	7E	7M	7D	7L	FILE	8E	8M	8D	8L	LOUD	PTY	EON	EQ	FLAT	CLAS	9A	9B	L6	L3	COM1	/	/	
COM2	6I	6K	6C	MUSIC	7G	7I	7K	7C	ALBUM	8G	8I	8K	8C	ARTIST	AF	TA	POP	--	9F	9G	9C	L5	L2	/	COM2	/	
COM3	6A	6J	6B	7F	7H	7A	7J	7B	8F	8H	8A	8J	8B	ST	P3	TP	T1	ROCK	9E	9D	L7	L4	L1	/	/	COM3	CD

KEY BOARD - CIRCUIT DIAGRAM

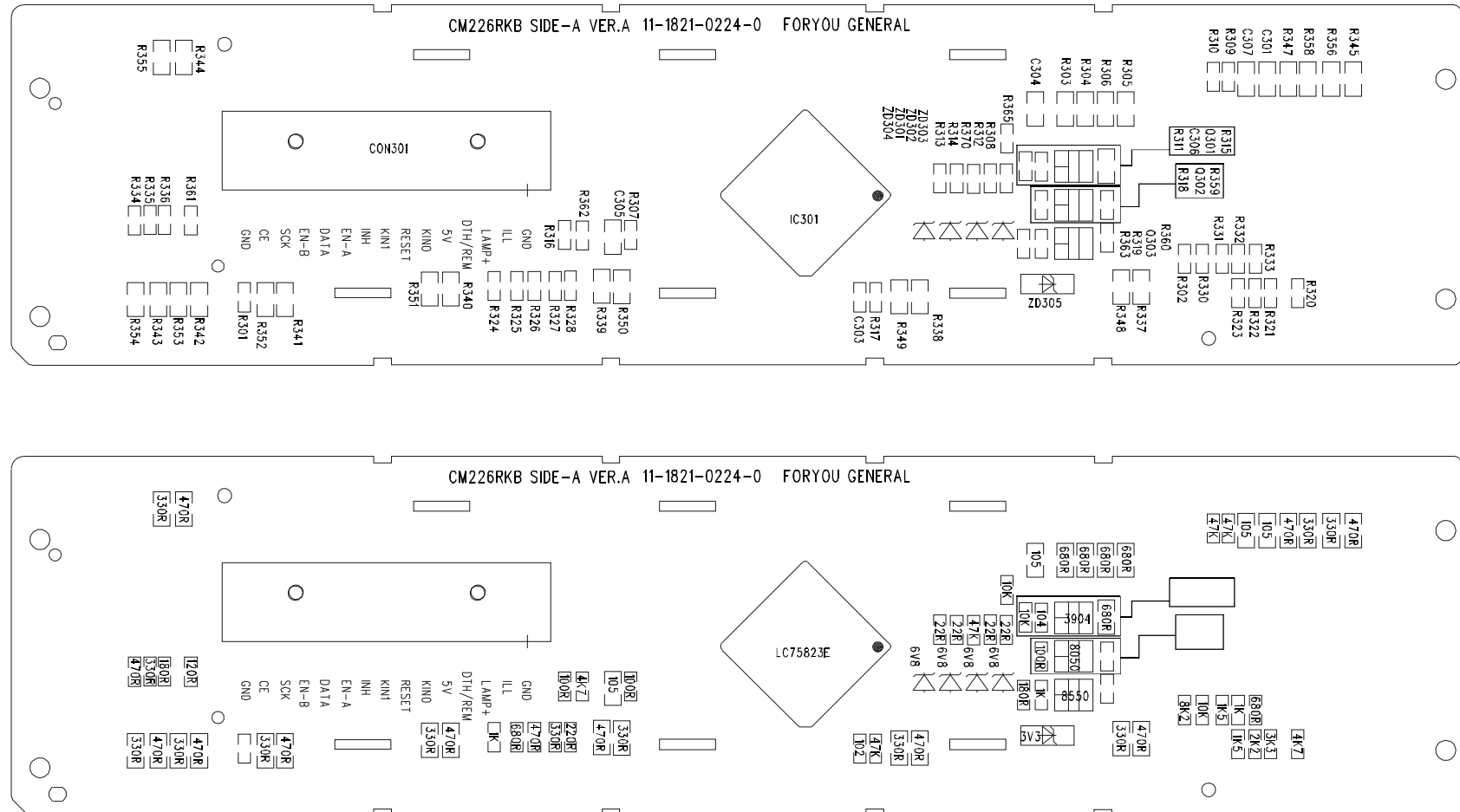


NOTE: Specifications and the design are subject to change without notice due to improvements in technology

KEY BOARD - LAYOUT DIAGRAM TOP VIEW



KEY BOARD - LAYOUT DIAGRAM BOTTOM VIEW



ELECTRICAL PARTS LIST - KEY BOARD

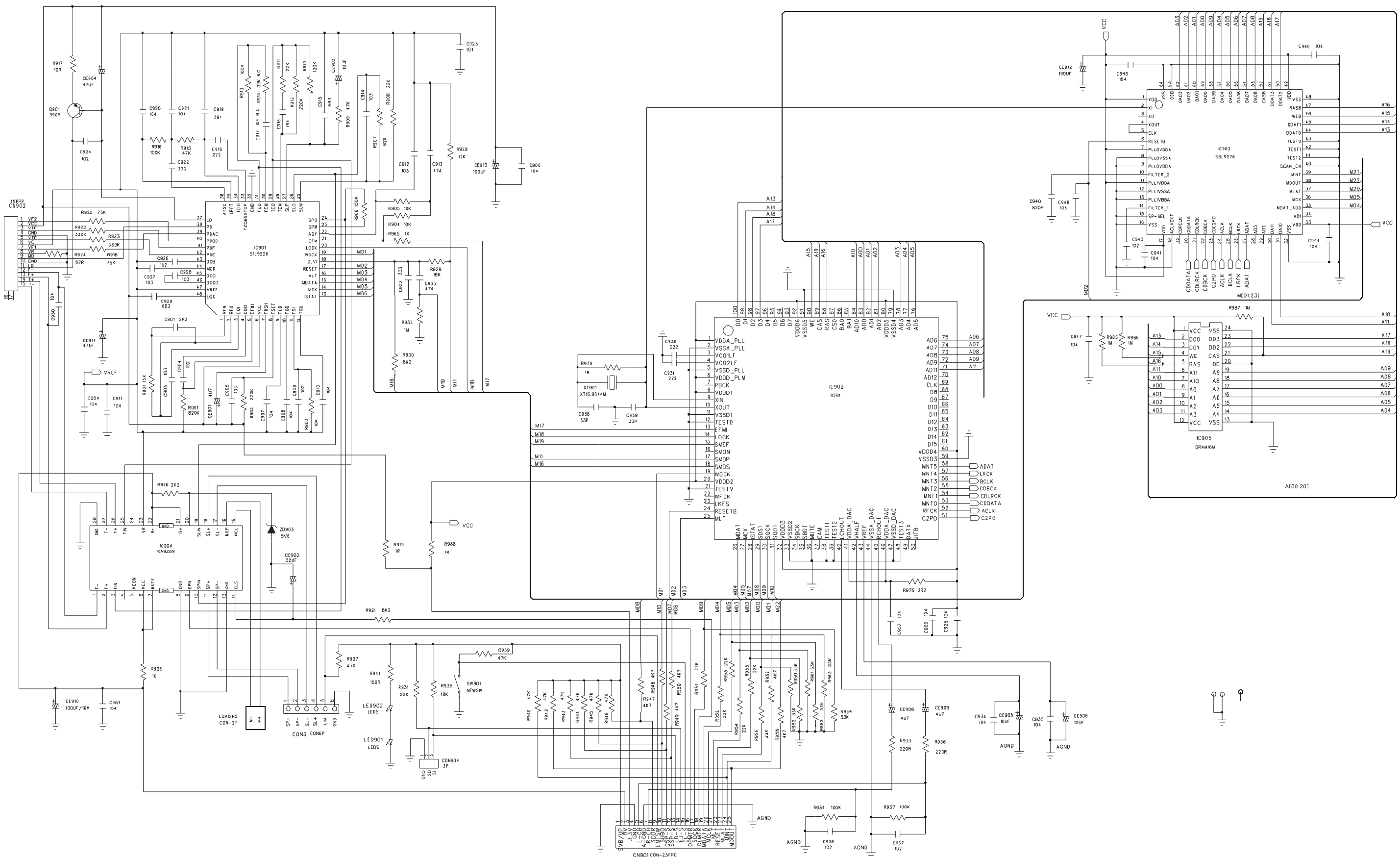
Part NO.	Description	QTY	Location
82-CM226-KB03-A	CM226 SMT KB	1	
11-0102-1022-0	RMF 1K Ω 1/16W \pm 5% SMT 0603	3	R319 R324 R332
11-0102-1521-0	RMF 1K5 Ω 1/16W \pm 5% SMT 0603	2	R323 R331
11-0102-2222-0	RMF 2K2 Ω 1/16W \pm 5% SMT 0603	1	R322
11-0102-3322-0	RMF 3K3 Ω 1/16W \pm 5% SMT 0603	1	R321
11-0102-4722-0	RMF 4K7 Ω 1/16W \pm 5% SMT 0603	2	R320,R362
11-0102-8222-0	RMF 8K2 Ω 1/16W \pm 5% SMT 0603	1	R302
11-0102-1032-0	RMF 10K Ω 1/16W \pm 5% SMT 0603	3	R311 R330 R365
11-0102-2202-0	RMF 22 Ω 1/16W \pm 5% SMT 0603	3	R308,R312,R314
11-0102-4732-0	RMF 47K Ω 1/16W \pm 5% SMT 0603	4	R309~310,R317,R370
11-0102-1012-0	RMF 100 Ω 1/16W \pm 5% SMT 0603	3	R307 R316,R318
11-0102-1211-0	RMF 120 Ω 1/16W \pm 5% SMT 0603	1	R361
11-0102-1811-0	RMF 180 Ω 1/16W \pm 5% SMT 0603	2	R336 R363
11-0102-2211-0	RMF 220 Ω 1/16W \pm 5% SMT 0603	1	R328
11-0103-3311-0	RMF 330 Ω 1/10W \pm 5% SMT 0805	10	R348~R356, R358
11-0102-3311-0	RMF 330 Ω 1/16W \pm 5% SMT 0603	2	R327,R335
11-0102-4711-0	RMF 470 Ω 1/16W \pm 5% SMT 0603	2	R326,R334
11-0103-4711-0	RMF 470 Ω 1/10W \pm 5% SMT 0805	10	R337~345, R347
11-0102-6811-0	RMF 680 Ω 1/16W \pm 5% SMT 0603	2	R325,R333
11-0103-6811-0	RMF 680 Ω 1/10W \pm 5% SMT 0805	5	R303~306,R315
11-0202-1021-0	CC1000PF/50V \pm 10% 0603(X7R)	1	C303
11-0202-1042-0	CC0.1 μ F/16V +80% -20% 0603	1	C306
11-0203-1051-0	CC 1 μ F/25V -80% +20% SMT 0805	4	C301,C304~305,C307
11-0405-0003-A	SMD LED RED/GREEN 19-22URSYGC/S 252/TR8	20	LED303~320, LED323~324
11-0431-0331-A	ZENER DIODE 3.3V \pm 5% 1/2W 1206	1	ZD305
11-0431-0681-A	ZENER DIODE 6.8V \pm 5% 1/2W 1206	4	ZD301~304
11-0501-0002-A	TR 3904(SMT SOT-23)NPN	1	Q301
11-0501-0009-A	TR S8050 SMT SOT-23	1	Q302
11-0501-0010-A	TR S8550 SMT SOT-23	1	Q303
11-0901-0087-A	IC SC75823E LCD DRIVER	1	IC301
11-1821-0224-A	PCB CM226R KB D/S R/G LAMP 166.5X41.0X1.2MM	1	
11-2011-0002-0	KEY SWITCH 4.3MM	14	SW301~SW302,SW305~SW310, SW312~SW314,SW317,SW319~ SW320
11-2011-0010-0	KEY SWITHCH 2.5 MM TS1107GS-3	5	SW315~SW316,SW303~SW304, SW318
11-3400-0003-0	ZEBRA STRIP FOR CM203	1	
11-3300-0602-0	LCD BACKLIGHT FOR CM203	1	LED1
11-3102-0017-0	15PIN SOCKET FEMALE DSTE-15-3T	1	CON301
11-0181-0015-A	ENCODER EC110201M2D-HA1-026	1	EN301
11-2601-0023-A	LCD OF CM226 BLACK MASK.JIC (TB4752N)	1	LCD301
11-0421-0001-B	REMOTE-CRM HEADER	1	IR301

SERVO BOARD

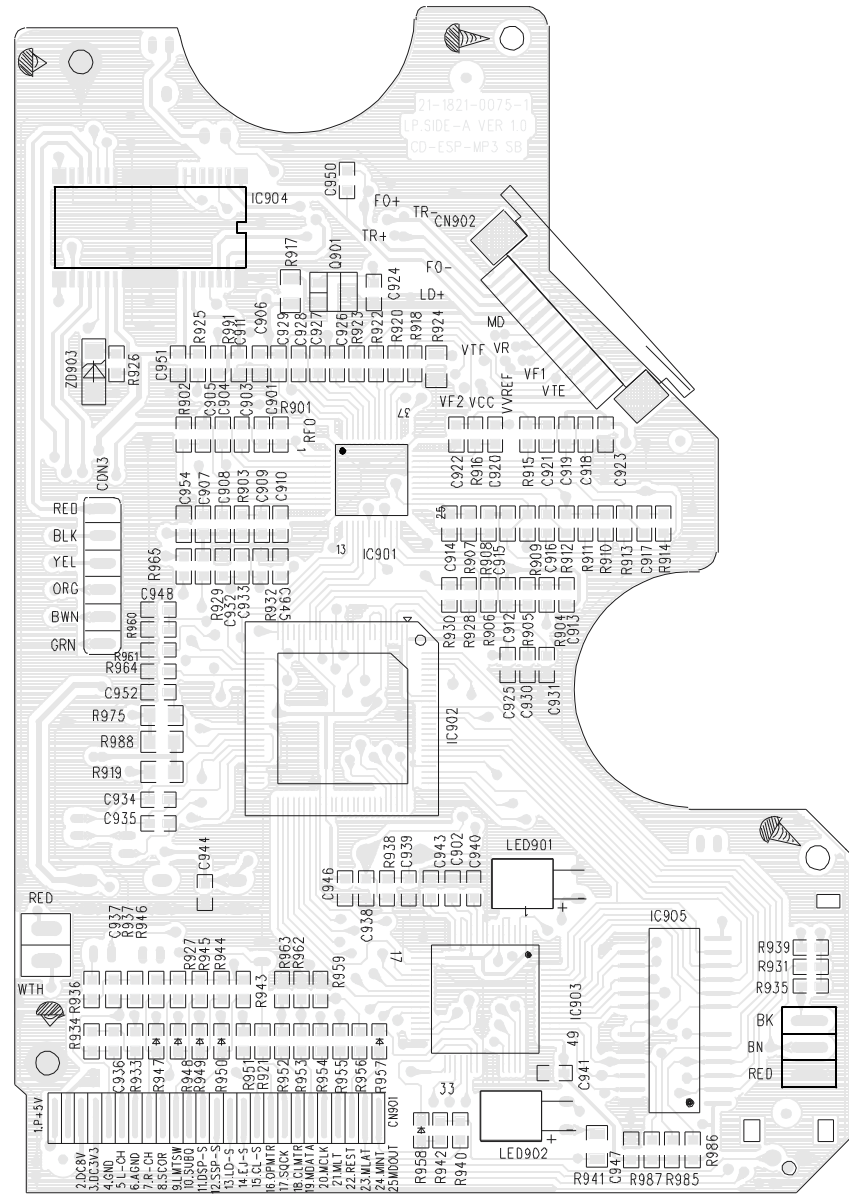
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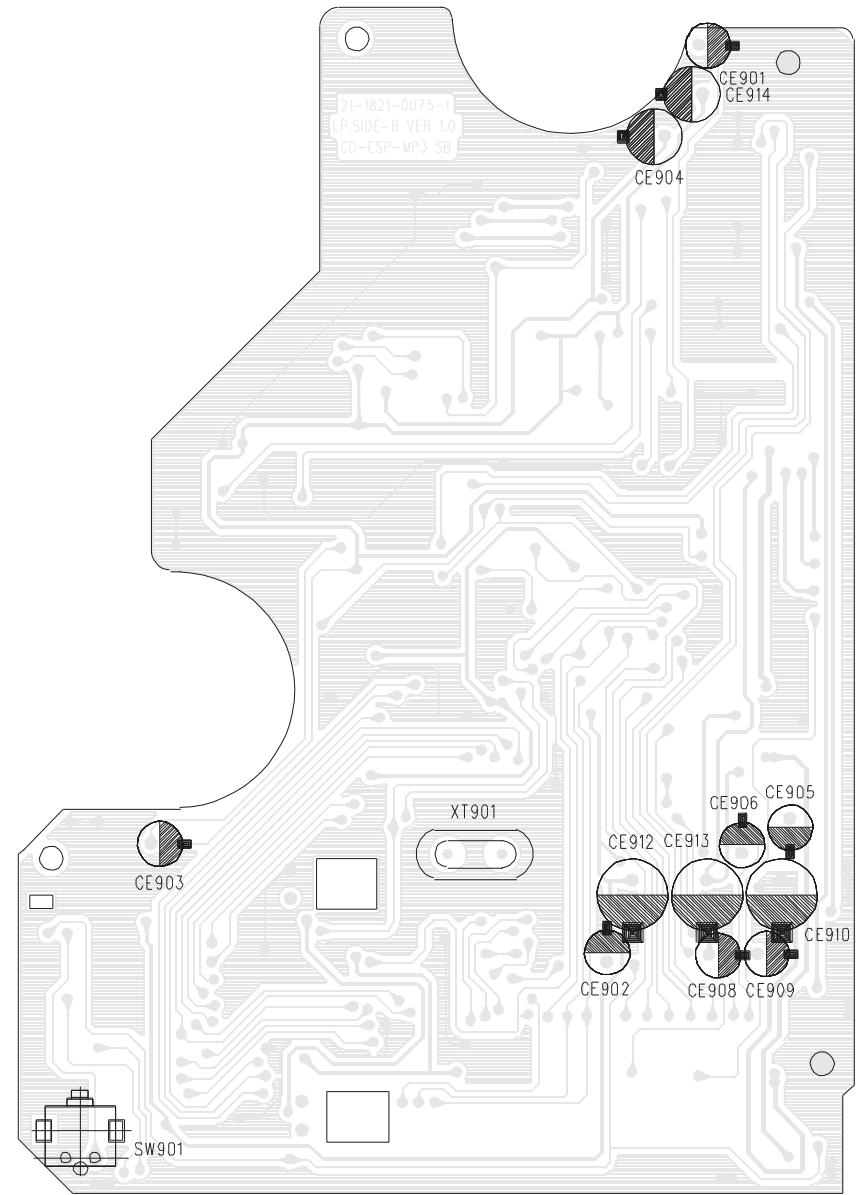
SERVO BOARD - CIRCUIT DIAGRAM



SERVO BOARD - LAYOUT DIAGRAM TOP VIEW



SERVO BOARD - LAYOUT DIAGRAM BOTTOM VIEW



ELECTRICAL PARTS LIST - SERVO BOARD

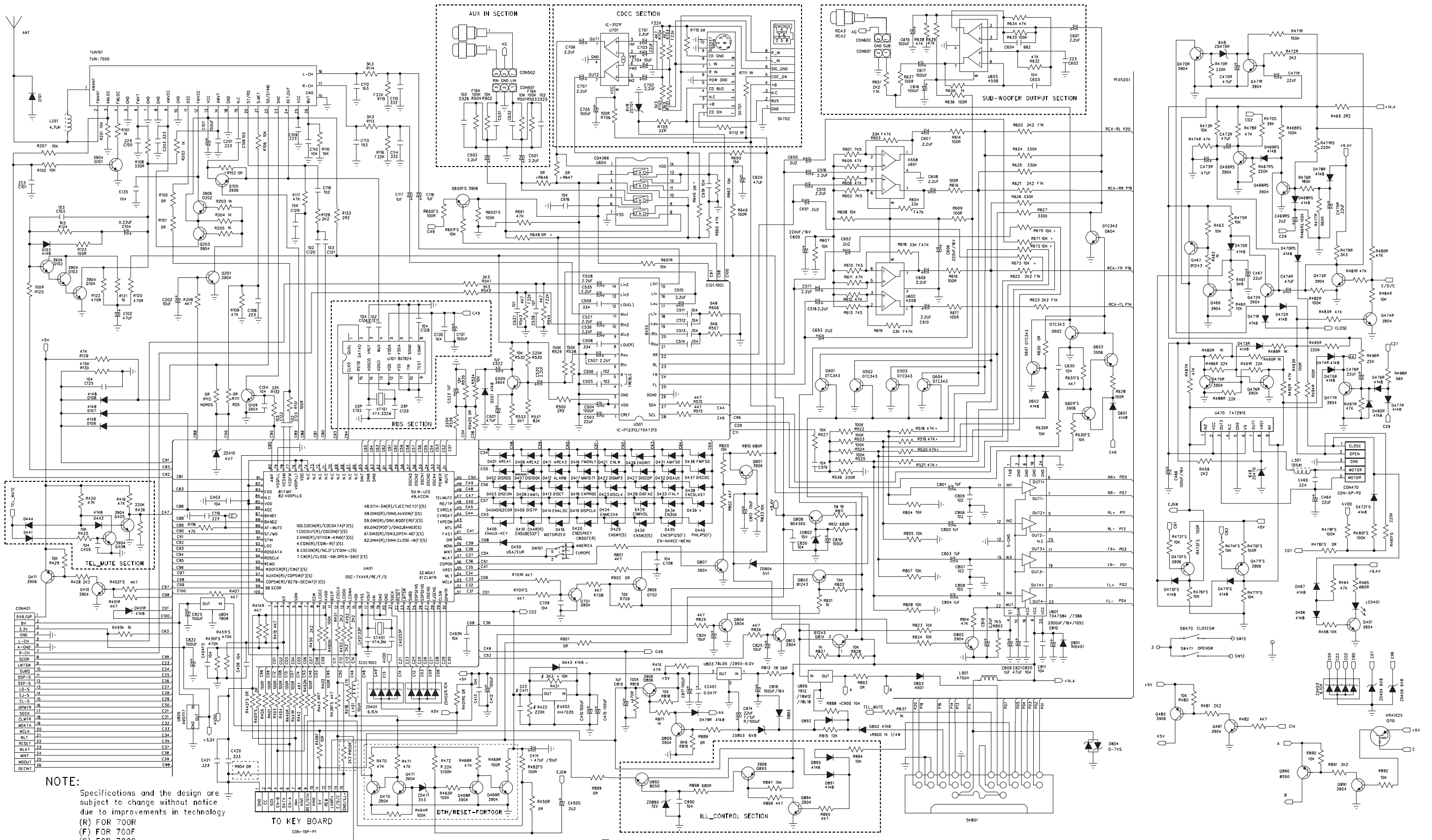
Part NO.	Description	QTY	Location	Part NO.	Description	QTY	Location
82-CAD415-SB00-A	CAD415 ESP SMT SB	1		11-3501-0008-D	CD DECK CL-C01FY6 SHINWA VER.3	1	
11-0102-1022-0	RMF 1K Ω 1/16W \pm 5% SMT 0603	2	R925,R965	14-1254-2004-0	PW,COLOR ZINC, PTS, SCREW	4	SB TO DECK
11-0102-1032-0	RMF 10K Ω 1/16W \pm 5% SMT 0603	3	R903~905	11-0224-1067-0	CE 10 μ F/16V \pm 20% 4X5 105° C	3	CE903,CE905,CE906
11-0102-1042-0	RMF 100K Ω 1/16W \pm 5% SMT 0603	3	R916,R934,R937	11-0224-1077-0	CE 100 μ F/16V \pm 20% 6.3X5 105° C	3	CE910,CE912,CE913
11-0102-1051-0	RMF 1M Ω 1/16W \pm 5% SMT 0603	5	R932,R938,R985~987	11-0224-4752-0	CE 4.7 μ F/50V \pm 20% 4X5 105° C	3	CE901,CE908,CE909
11-0102-1231-0	RMF 12K Ω 1/16W \pm 5% SMT 0603	1	R929	11-0224-4767-0	CE 47 μ F/16V \pm 20% 5X5 105° C	2	CE904,CE914
11-0102-1542-0	RMF 150K Ω 1/16W \pm 5% SMT 0603	2	R913,R906	11-0406-0011-A	PHOTOTRANSISTOR IR928-6C	2	LED901~902
11-0102-1832-0	RMF 18K Ω 1/16W \pm 5% SMT 0603	2	R928,R935	11-1500-0004-A	XT 16.9344MHZ (-20° C~+70° C)	1	XT901
11-0102-2211-0	RMF 220 Ω 1/16W \pm 5% SMT 0603	2	R933,R936	11-2011-0005-A	CD DETECTOR CDX100	1	SW901
11-0102-6811-0	RMF 680 Ω 1/16W \pm 5% SMT 0603	1	R926	16-0100-0013-A	25PIN FFC 1.25MM L=100MM	1	CN901
11-0102-2231-0	RMF 22K Ω 1/16W \pm 5% SMT 0603	9	R908,R931,R951~956,R911				
11-0102-2241-0	RMF 220K Ω 1/16W \pm 5% SMT 0603	2	R902, R912				
11-0102-3332-0	RMF 33K Ω 1/16W \pm 5% SMT 0603	6	R959~964				
11-0102-4722-0	RMF 4K7 Ω 1/16W \pm 5% SMT 0603	6	R947~950,R957~958				
11-0102-4732-0	RMF 47K Ω 1/16W \pm 5% SMT 0603	10	R909,R915,R927,R939,R940,R942~946				
11-0102-7531-0	RMF 75K Ω 1/16W \pm 5% SMT 0603	2	R918,R920				
11-0103-8201-0	RMF 82 Ω 1/10W \pm 5% SMT 0805	1	R924				
11-0102-8222-0	RMF 8K2 Ω 1/16W \pm 5% SMT 0603	2	R921,R930				
11-0102-1242-0	RMF 120K Ω 1/16W \pm 5% SMT 0603	2	R907,R910				
11-0102-8241-0	RMF 820K Ω 1/16W \pm 5% SMT 0603	1	R991				
11-0103-1R01-0	RMF 1 Ω 1/10W \pm 5% SMT 0805	2	R919,R988				
11-0103-2R21-0	RMF 2R2 Ω 1/10W \pm 5% SMT 0805	1	R975				
11-0103-1001-0	RMF 10 Ω 1/10W \pm 5% SMT 0805	1	R917				
11-0103-1512-0	RMF 150 Ω 1/10W \pm 5% SMT 0805	1	R941				
11-0202-1021-0	CC1000PF/50V \pm 10% 0603(X7R)	6	C904,C909,C924,C936~937,C943				
11-0202-1032-0	CC0.01 μ F/50V \pm 20% 0603	8	C903,C905,C912,C914,C927,C928, C948,C926				
11-0202-1042-0	CC0.1 μ F/16V +80% -20% 0603	20	C902,C906~908,C910~911,C920~921, C923,C925,C934~935,C941,C944~947 C951~952,C954				
11-0202-1541-0	CC0.15 μ F/50V+80% -20% 0603	1	C916				
11-0202-2222-0	CC2200PF/50V \pm 10% 0603(X7R)	3	C918,C930,C931				
11-0202-3301-0	CC33PF/50V \pm 5% SMT 0603	2	C938,C939				
11-0202-3332-0	CC0.033 μ F/50V \pm 20% SMT 0603	2	C922,C932				
11-0202-3911-0	CC 390PF/50V \pm 10% SMT 0603	1	C919				
11-0202-4741-0	CC0.47 μ F/25V -80% +20% 0603	2	C913,C933				
11-0202-6832-0	CC 0.068 μ F/50V \pm 20% SMT 0603	2	C915,C929				
11-0202-8211-0	CC 820PF/50V \pm 10% SMT 0603	1	C940				
11-0431-0511-A	ZENER DIODE 5.1V 1/2W SMT 1206	1	ZD903				
11-0501-0010-A	TR S8550 SMT SOT-23	1	Q901				
11-0901-0002-A	IC DRAM 4MX4 TSOP 3.3V	1	IC905				
11-0901-0003-A	IC.S1L9226	1	IC901				
11-0901-0132-A	IC IP4001D	1	IC904				
11-0901-0005-A	IC S5L9276	1	IC903				
11-0901-0118-A	IC S5L9291X100-TQFP-14 14 SAM SUNG	1	IC902				
11-1821-0075-B	CD-ESP MP3 SB D/S 4 IN 1	1					
11-3111-0004-A	15PIN FPC SOCKET PITCH=1.0MM	1	CN902				
11-0102-3342-0	RMF 330K Ω 1/16W \pm 5% SMT 0603	2	R922,R923				
11-0102-1532-0	RMF 15K Ω 1/16W \pm 5% SMT 0603	1	R901				
15-0900-0017-1	LASER WARNING LABEL FOR CMV100	1	TO CD DECK CDX100				
13-1507-0003-0	SPONGE FOR FPC FOR 206	1	TO SERVO BOARD				

MAIN BOARD

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SERVO BOARD - CIRCUIT DIAGRAM

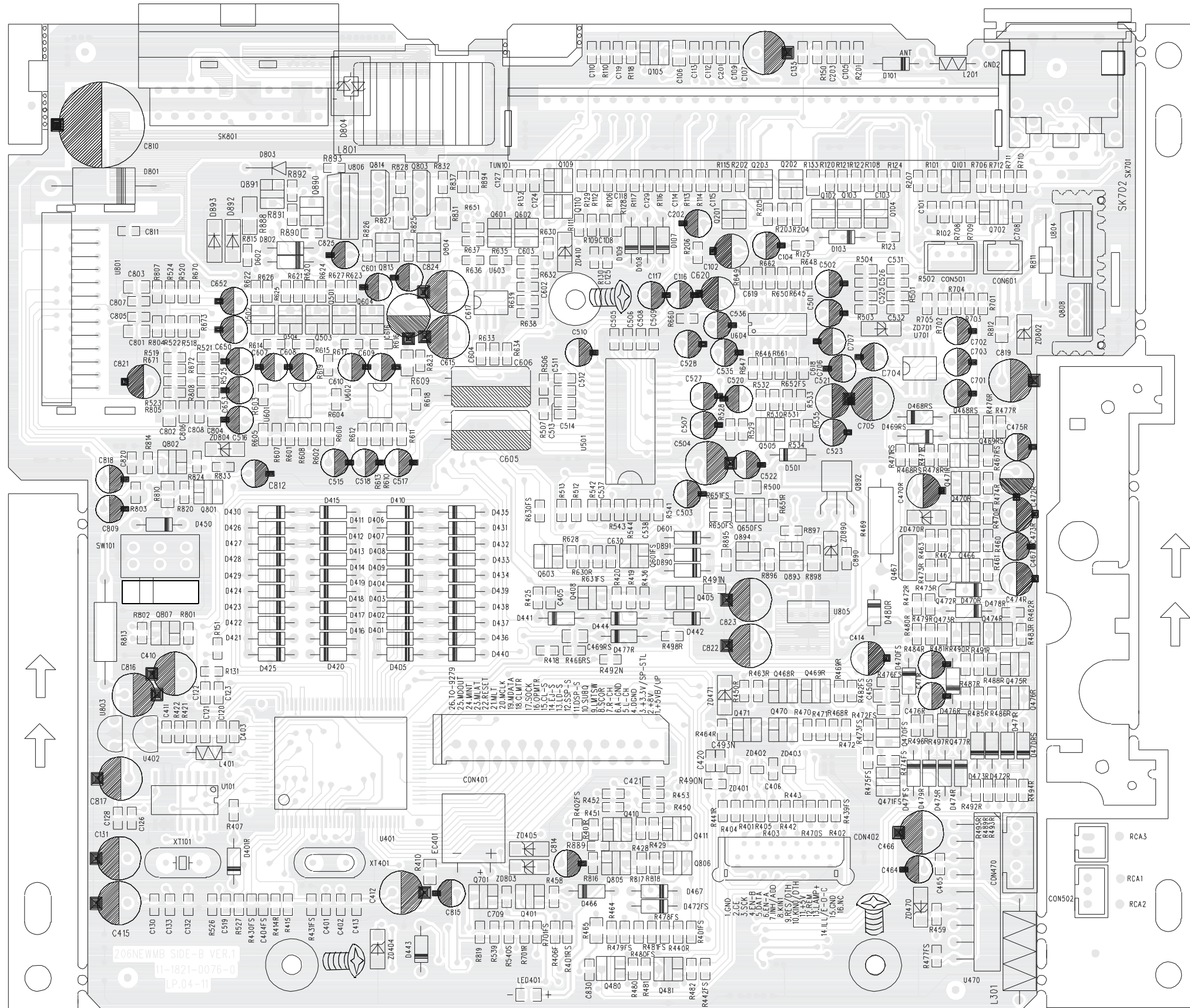


NOTE:
 Specifications and the design are subject to change without notice due to improvements in technology
 (R) FOR 700R
 (F) FOR 700F
 (S) FOR 700S
 (N) FOR 700NEO
 F* FOR PHILIPS

TO KEY BOARD
 CON-15P-P1

E/O/C

SERVO BOARD - LAYOUT DIAGRAM TOP VIEW



ELECTRICAL PARTS LIST - MAIN BOARD

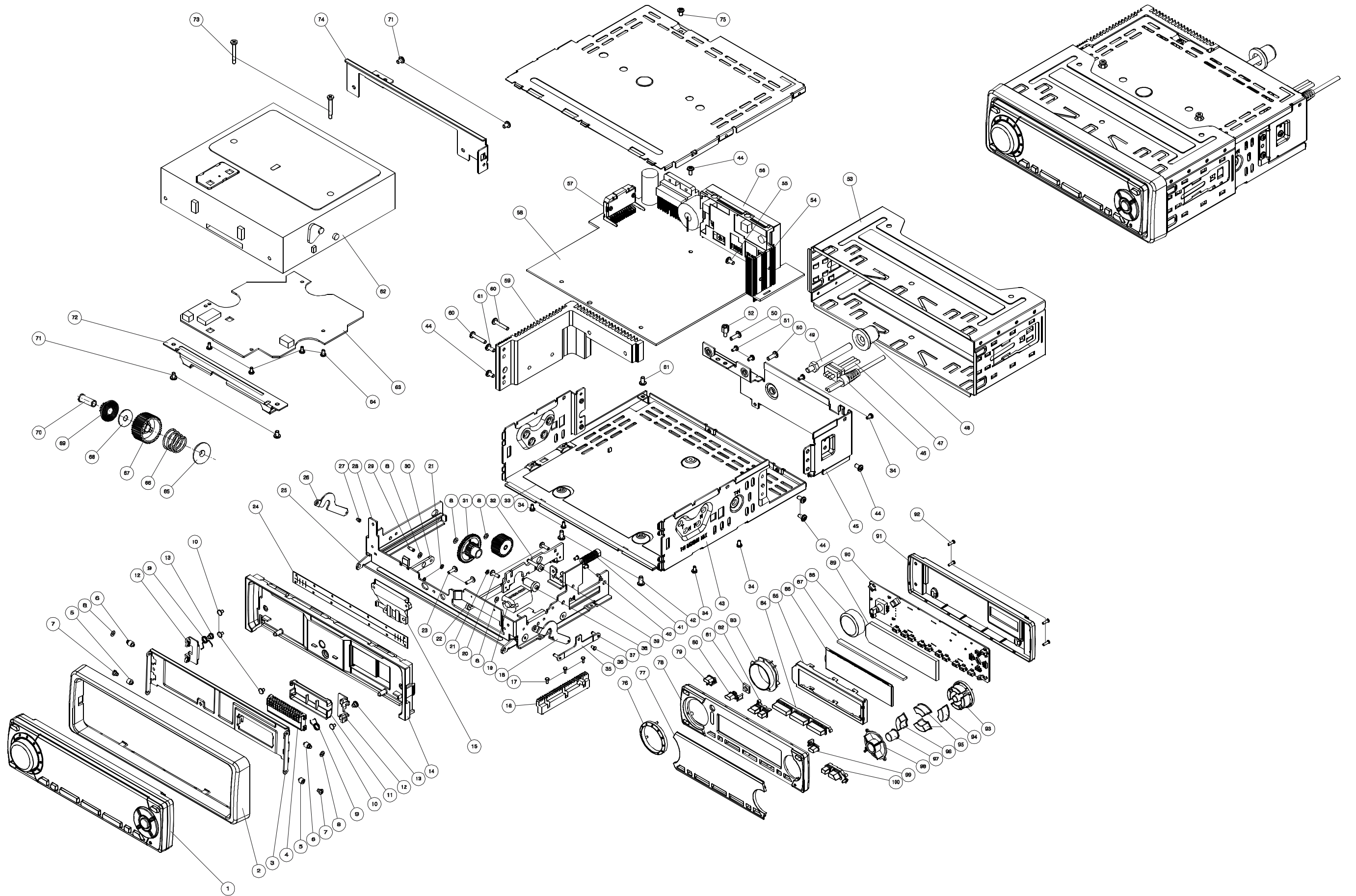
Part NO.	Description	QTY	Location
11-0311-4R70-0	COIL 4.7 μ H 3X5MM	1	L201
11-0402-4 148-A	DIODE IN4148 1/2W	30	D103,D108,D466~467,D501,D601, D802,D470FS,D471FS,D472FS, D602,D401,D406,D409~410,D415, D417~419,D431,D435~436,D443, D438,D433,D426,D434,D437,D432, D439
11-0115-0100-0	RMF 1 Ω 1W \pm 1%	1	R811
11-0125-2R22-0	RCF 2 Ω 2 1/2W \pm 5% RTS	1	R469
11-0126-5601-0	RCF 56 Ω 1W \pm 5% RTS	1	R813
11-0315-1001-0	AXIS INDUCTOR 10 μ H	1	L401
82-CM226-MB16-C	4X2V RDS ESP 2V SUB OIRT MB SMT	1	
11-0102-0R02-0	RMF 0 Ω 1/16W \pm 5% SMT 0603	11	R111,R150~151,R630,R893,R889, R401FS,R442FS,R478FS,R901,R904
11-0102-1002-0	RMF 10 Ω 1/16W \pm 5% SMT 0603	1	R406F
11-0102-1012-0	RMF 100 Ω 1/16W \pm 5% SMT 0603	18	R125,R131,R401~405,R614~617, R636~637,R482FS,R628,R473FS, R475FS,R651
11-0102-1022-0	RMF 1K Ω 1/16W \pm 5% SMT 0603	9	R101,R121,R202~205,R462,R635,R837
11-0102-1032-0	RMF 10K Ω 1/16W \pm 5% SMT 0603	34	R102,R106,R110,R429,R458,R460, R463,R527,R532,R534,R607~608, R804~805,R518~521,R807~808,R818, R820,R823~824,R828 R832~833,R207, R421,R472FS,R474FS,R630FS,R476FS, R477FS
11-0102-1042-0	RMF 100K Ω 1/16W \pm 5% SMT 0603	8	R522~525,R819,R479FS,R480FS,R633
11-0102-1231-0	RMF 12K Ω 1/16W \pm 5% SMT 0603	2	R535,R815
11-0102-1511-0	RMF 150 Ω 1/16W \pm 5% SMT 0603	1	R123
11-0102-1521-0	RMF 1K5 Ω 1/16W \pm 5% SMT 0603	1	R124
11-0102-1542-0	RMF 150K Ω 1/16W \pm 5% SMT 0603	2	R528~529
11-0102-2222-0	RMF 2K2 Ω 1/16W \pm 5% SMT 0603	11	R459,R450~453,R428,R128,R620~623
11-0102-2231-0	RMF 22K Ω 1/16W \pm 5% SMT 0603	1	R132
11-0102-2241-0	RMF 220K Ω 1/16W \pm 5% SMT 0603	4	R422,R530,R539,R481FS
11-0103-2R21-0	RMF 2R2 Ω 1/10W \pm 5% SMT 0805	2	R133,R500
11-0102-3311-0	RMF 330 Ω 1/16W \pm 5% SMT 0603	2	R108,R526
11-0102-3322-0	RMF 3K3 Ω 1/16W \pm 5% SMT 0603	4	R113~114,R541~542
11-0102-4711-0	RMF 470 Ω 1/16W \pm 5% SMT 0603	2	R120,R122
11-0102-4722-0	RMF 4K7 Ω 1/16W \pm 5% SMT 0603	14	R206,R415,R512,R513,R801,R802, R825,R826,R543,R544,R817,R402FS, R439FS,R631FS
11-0102-4732-0	RMF 47K Ω 1/16W \pm 5% SMT 0603	16	R117~118,R129,R464,R605~606, R611~612,R638~639,R814,R418, R470,R632,R436,R634
11-0102-4741-0	RMF 470K Ω 1/16W \pm 5% SMT 0603	7	R130,R430FS,R431FS,R624~R627
11-0102-5121-0	RMF 5K1 Ω 1/16W \pm 5% SMT 0603	1	R533
11-0102-5622-0	RMF 5K6 Ω 1/16W \pm 5% SMT 0603	4	R461,R506~507,R816
11-0102-7521-0	RMF 7K5 Ω 1/16W \pm 5% SMT 0603	9	R601~602,R610,R613,R803,R603, R604,R618,R619
11-0102-8232-0	RMF 82K Ω 1/16W \pm 5% SMT 0603	1	R531
11-0103-1012-0	RMF 100 Ω 1/10W \pm 5% SMT 0805	1	R609
11-0103-6811-0	RMF 680 Ω 1/10W \pm 5% SMT 0805	3	R812,R810,R465

Part NO.	Description	QTY	Location
11-0202-1013-0	CC100PF/50V \pm 5% 0603(NPO)	2	C537,C538
11-0202-1021-0	CC1000PF/50V \pm 10% 0603(X7R)	6	C118,C120,C123,C127,C505~506
11-0202-1032-0	CC0.01 μ F/50V \pm 20% 0603	4	C103,C121~122,C602
11-0202-1042-0	CC0.1 μ F/16V +80% -20% 0603	22	C110,C124~126,C128~130,C413, C511~514,C519,C603,C630,C811, C820,C135,C404FS, C406,C403,C830
11-0203-1051-0	CC 1 μ F/25V -80% +20% SMT 0805	1	C106
11-0202-1532-0	CC 0.015 μ F/50V \pm 20% SMT 0603	2	C112~113
11-0202-2232-0	CC 0.022 μ F/50V \pm 20% SMT 0603	10	C101,C105,C108,C109,C119,C201, C203,C411,C420,C421
11-0202-2241-0	CC0.22 μ F/25V \pm 10% 0603(X7R)TDK	1	C465
11-0203-2251-0	CC2.2 μ F/16V +80% -20% 0805	4	C801~804
11-0202-3301-0	CC33PF/50V \pm 5% SMT 0603	4	C132~133,C401,C402
11-0202-2222-0	CC2200PF/50V \pm 10% 0603(X7R)	2	C114,C115
11-0202-3341-0	CC 0.33 μ F/16V +80% -20% SMT0603	2	C508,C509
11-0202-6821-0	CC 6800PF/50V \pm 10% 0603(X7R)	1	C604
11-0406-0002-A	LED 2.2V 10MA RED SMT 0603	1	LED401
11-0431-1001-A	ZENER DIODE 10V \pm 5% 1/2W 1206	1	ZD802
11-0431-0511-A	ZENER DIODE 5.1V 1/2W SMT 1206	1	ZD804
11-0431-0681-A	ZENER DIODE 6.8V \pm 5% 1/2W 1206	4	ZD405,ZD470,ZD803,ZD404
11-0501-0001-A	TR DTC343TK(SMT SOT-23)	7	Q501~504,Q601~602,Q604
11-0501-0002-A	TR 3904(SMT SOT-23)NPN	16	Q101~104,Q109,Q201,Q203,Q401, Q410,Q466,Q505,Q802,Q804~805, Q807,Q813
11-0501-0003-A	TR 3906(SMT SOT-23)PNP	9	Q105,Q202,Q411,Q603,Q801,Q806, Q470FS,Q471FS,Q601FS
11-0901-0335-A	IC CSC2313F SO -28 YOUNDA	1	U501
11-0901-0337-A	IC UTC4558 SOP-8 UTC	3	U601~603
11-0901-0119-A	IC.790RE(F)	1	U401
11-0901-0038-A	IC BU1924 RDS DEMODULATOR	1	U101
11-0901-0292-A	IC,UTC1117-3.3V,SOT-23,UTC	1	U805
11-1821-0076-C	PCB CM206 NEW MB D/S 181X149X1.6MM	1	
11-0102-4R71-0	RMF 4 Ω 7 1/16W \pm 5% SMT 0603	2	R442,R443
11-0464-0002-A	ESD DIODE PG05GBUSV (5PIN KEC)	3	ZD401~403
11-0104-1021-0	RMF 1K Ω 1/4W \pm 5% SMT 1206	2	R827,R831
11-0202-4711-0	CC470PF/50V \pm 10% 0603(X7R)	4	C805~808
11-0411-0008-A	DIODE IN4148 SMT 1/2W	1	D893
11-0203-1041-0	CC0.1 μ F/16V +80% -20% 0805	1	R888
14-0922-0001-1	HEATSINK IC 7809 FOR CM226	1	TOP OF THE MB
14-0322-0007-A	BRACKET IC 7386 FOR CM226	1	TOP OF THE MB
14-1176-2607-0	PLATING NICKEL,BTB SCREW 2607	2	IC BD435 TO HEATSINK
11-0224-1053-0	CE 1 μ F/50V \pm 20% 4X5 105° C	5	C522~523,C809,C815,C814
11-0224-1067-0	CE 10 μ F/16V \pm 20% 4X5 105° C	5	C202,C824,C825,C812,C414
11-0224-1077-0	CE 100 μ F/16V \pm 20% 6.3X5 105° C	14	C107,C131,C410,C412,C504,C415, C615~617,C823,C466,C817,C816,C822
11-0229-2242-0	CE-NP 0.22UF/50V \pm 20% 4X5 85°C	1	C104
11-0224-2253-0	CE 2.2 μ F/50V \pm 20% 4X5 105° C	17	C507 C510 C515~518 C520 C527~528 C601,C607~610,C818,C116~117
11-0224-2261-0	CE 22 μ F/16V \pm 20% 4X5 105° C	3	C464,C467,C503
11-0224-4767-0	CE 47 μ F/16V \pm 20% 5X5 105° C	3	C102,C521,C821
11-0227-2272-0	CE 220 μ F/16V \pm 20% 6.3X11 85° C	2	C605,C606

ELECTRICAL PARTS LIST - MAIN BOARD

Part NO.	Description	QTY	Location
11-0231-3381-0	CE3300 μ F/16V \pm 20%12.5X25 105	1	C810
11-0311-1511-0	STAND INDUCTOR 150 μ H	1	L301
11-0321-4010-0	CHOKE INDUCTOR \geq 400 μ H ϕ \leq 24MM FOR CAD415	1	L801
11-0411-0001-A	DIODE IN5401	1	D801
11-0512-0043-A	TR BD435 TO-126C CJ	1	Q808
11-0522-0001-A	TR B1243 POWER SWITCH	3	Q467,Q803,Q814
11-0901-0055-A	IC L7809 REGULATOR ST	1	U804
11-0144-0008-A	GBX050 PTC (RILAIDA)	1	U806
11-0901-0024-0	IC 78L05 REGULATOR ST	1	U803
11-0901-0070-A	IC TA7291S MOTOR-CTC TOSHIBA	1	U470
11-0901-0082-A	I.C.TDA7386	1	U801
11-1500-0050-A	CRYSTAL,4.500MHZ, \pm 30PPm,-30 $^{\circ}$ C \sim +80 $^{\circ}$ C, HC-49/US DIP 30PF	1	XT401
11-1500-0053-A	CRYSTAL,4.332MHZ, \pm 30PPm,-20 $^{\circ}$ C+70 $^{\circ}$ C, DIP W/32PF	1	XT101
11-2101-0001-0	15A DIN FUSE	1	
11-2701-0030-A	FM/AM TC-702FYAB(FM/OIRT)	1	TUN101
11-3101-0020-1	20PIN PWR/SPK EST-KNT-20-04	1	SK801
11-3101-0019-0	P=2.0MM 5PIN WAFER	1	CON470
11-3111-0005-A	16PIN FPC SOCKET 1.0	1	CON402
11-3111-0007-0	25PIN FPC SOCKET 1.25	1	CON401
11-0411-0002-A	DIODE IN4001	1	D803
11-0226-2277-0	CE 220 μ F/16V \pm 20% 8X7 105 $^{\circ}$ C	1	C819

EXPLODED VIEW - MAIN UNIT



MECHANICAL PARTS LIST

Item	Assembly Part NO	Description	QTY
1	84-CM226-KB20-A	CMR700 FRONT PANEL ASM	1
2	13-0707-0701-A	RIM FOR 206 IN CLEAR	1
3	14-0322-0004-B	BRACKET PANEL FOR CM226	1
4	11-3101-0021-0	15PIN SOCKET MALE ESTF-15-3-Z	1
5	14-0722-0004-0	SHAFT-BOTTOM-FRAME FOR CM226	2
6	14-0722-0005-0	SHAFT BRACKET PANEL FOR CM226	2
7	14-1070-2001-0	BLACK ZINC, BM, SCREW BM20015	2
8	14-0107-0001-0	WASHER-22-025MM FOR 206	10
9	14-0207-0001-1	SPRING CABINET FOR 206	2
10	14-1070-2003-0	M2.0X3.0 BLACK, BM, SCREW	4
11	13-0807-0007-A	CONNECTOR COVER FOR 206	1
12	13-0807-0006-C	LOCK FOR 206	2
13	14-1080-2004-0	PFM CYLINDER, BLACK ZINC SCREW	2
14	13-0307-0001-B	CABINET FOR 206	1
15	13-0907-0003-A	LIGHT GUIDE CABINET FOR 206	1
16	13-1207-0001-0	RIGHT RACK FOR 206	1
17	14-1150-1604-0	PLATING NICKEL SCREW PM1604	3
18	14-0322-0001-B	RIGHT ARM FOR CM226	1
19	11-3200-0001-A	MOTOR MABUCHI FF-O50SK	1
20	14-1170-2007-0	PLATING NICKEL, BM, SCREW BM2007	2
21	14-0107-0002-0	FELT-16-025MM FOR 206	4
22	13-0807-0001-A	RIGHT SLIDE GUIDE FOR 206	1
23	14-1275-2006-0	COLOR ZINC, BTP, SCREW BTP2006	2
24	13-1807-0101-0	DUST PROOF 206 NATURAL black	1
25	14-0422-0005-A	BOTTOM FRAME FOR CM226	1
26	14-0322-0002-B	LEFT ARM FOR CM226	1
27	14-0722-0003-0	SHAFT ARM FOR CM226	2
28	14-0422-0004-A	FRONT FRAME FOR CM226	1
29	14-0722-0007-0	SHAFT FRONT FRAME L FOR CM226	2
30	13-0807-0002-A	LEFT SLIDE GUIDE FOR 206	1
31	13-1107-0001-0	GEAR-A-AND-GEAR-B FOR 206	1
32	11-1841-0071-0	PCB CM206 FB FLEX.FPC	1
33	13-1722-0001-0	INSULATING SHEET FOR CM226	1
34	14-1174-2004-0	PLATING NICKEL, BTS, SCREW BT	6
35	14-0322-0003-A	BRACKET SLIDE FOR CM226	1
36	14-1270-2003-0	COLOR, BM, SCREW BM2003	1
37	14-0722-0006-0	SHAFT BRACKET SLIDE FOR CM226	2
38	14-0722-0002-0	SHAFT-GEAR-C FOR CM226	1
39	14-0722-0001-0	SHAFT-GEAR-B FOR CM226	1
40	14-1180-2003-0	PLATING NICKEL PFM SCREW PFM20	1
41	13-1307-0001-0	WORM GEAR FOR 206	1
42	14-1176-2606-0	PLATING NICKEL, BTB SCREW M2.6X6	2
43	14-0422-0003-0	FRAME MOTOR FOR CM226	1
44	14-1176-2605-0	PLATING NI BTB SCREW M2.6X5	5
45	14-0444-0001-A	FRAME BACK SHEET FOR CM232	1
46	11-2501-0002-0	ANT SOCKET W/GND L=230MM	1
47	16-0300-0051-0	2PIN RCA 280MM SUBOUT P=2.0MM OF CAD415	1
48	13-1600-0001-0	RUBBER FOR CMV100	1
49	14-2600-0001-0	POLE FOR CMV100	1
50	14-1176-2610-0	PLATING NICKEL, BTB SCREW M2.6X10	2

Item	Assembly Part NO	Description	QTY
51	14-1155-2607-0	PLATING NICKEL, PTP SCREW 2607	2
52	14-2622-0001-0	SCREW-CU-POLE FOR CM226	1
53	14-0616-0001-E	SHORT SHEET FOR CM216	1
54	14-0922-0001-1	HEATSINK IC 7809 FOR CM226	1
55	14-1176-2607-0	PLATING NICKEL, BTB SCREW 2607	2
56	11-2701-0030-A	FM/AM TC-702FYAB(FM/OIRT)	1
57	14-0322-0007-A	BRACKET IC 7386 FOR CM226	1
58	83-CM226-MB16-C	4X2V RDS ESP 2V SUB OIRT 7386 MB ASM	1
59	14-0922-0002-0	HEATSINK MAIN FOR CM226	1
60	14-1176-2612-0	PLATING NICKEL, BTB SCREW M2.6X12	2
61	14-1176-2606-0	PLATING NICKEL, BTB SCREW M2.6X6	2
62	11-3501-0008-D	CD DECK CL-C01FY6 SHINWA VER.3	1
63	83-CAD415-SB00-A	CAD415 ESP SB ASM	1
64	14-1254-2004-0	PW,COLOR ZINC, PTS, SCREW	4
65	14-2807-0001-0	CAP1 FOR 206	1
66	14-0207-0002-0	SPRING FOR GEAR FOR 206	1
67	13-1107-0003-0	GEAR-B FOR 206	1
68	14-0107-0003-0	FELT FOR GEAR FOR 206	1
69	13-1107-0002-0	GEAR-A FOR 206	1
70	14-0807-0001-0	BUSH1 FOR 206	1
71	14-1174-2605-0	PLATING NICKEL BTS M2.6X5	4
72	14-0322-0006-A	BRACKET FRONT OF CLC01 FOR CM226	1
73	14-1200-2619-0	Pivot screw M2.6*19	2
74	14-0322-0005-A	BRACKET REAR OF CLC01 FOR CM226	1
75	14-1174-2604-0	PLATING NICKEL, BTS SCREW	1
76	13-0722-0501-A	ORNAMENT RING FOR CM226	1
77	13-0422-0843-A	LENS OF CM226 130A SITRONICS	1
78	13-0122-0701-E	PANEL FRONT FOR CM226 SILVER	1
79	13-0522-0702-A	KNOB EJECT FOR CM226	1
80	13-0522-0703-A	KNOB SRC FOR CM226	1
81	13-1507-0002-0	REMOTE CONTROL SPONGE FOR 206	1
82	13-0522-0706-A	KNOB BAND & DISP FOR CM226	1
83	13-0922-0001-A	LIGHT GUIDE VOL FOR CM226	1
84	13-0522-0704-A	KNOB NUM FOR CM226	1
85	14-0306-0002-B	LCD-COVER FOR 203	1
86	11-2601-0023-A	LCD OF CM226 BLACK MASK.JIC (TB4752N)	1
87	11-3400-0003-0	ZEBRA STRIP FOR CM203	1
88	13-0522-0501-C	KNOB ENCODER FOR CM226	1
89	11-3300-0602-0	LCD BACKLIGHT FOR CM203	1
90	82-CM226-KB03-A	CM226 SMT KBASM	1
91	13-0222-0101-D	PANEL BACK FOR CM226	1
92	14-1025-1907-0	BLACK ZINC, FTP, SCREW M1.9X7	4
93	13-0922-0002-A	LINING KNOB LOUD&POWER FOR CM226	1
94	13-0522-0710-A	SHELL KNOB PTY FOR CM226	1
95	13-0522-0708-A	SHELL KNOB NEXT FOR CM226	2
96	13-0522-0709-A	SHELL KNOB TA FOR CM226	1
97	13-0522-0717-A	SHELL KNOB PWR FOR CMV226	1
98	13-0722-0502-B	ORNAMENT RIB FOR CM226	1
99	13-0522-0705-A	KNOB SLIDE FOR CM226	1
100	13-0522-0701-A	KNOB AMS & AF FOR CM226	1