

Service
Service
Service



Service Manual



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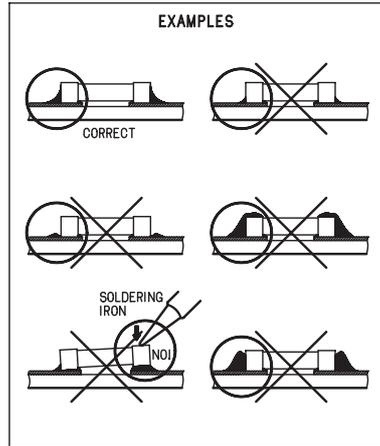
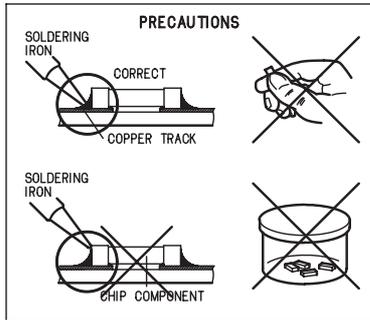
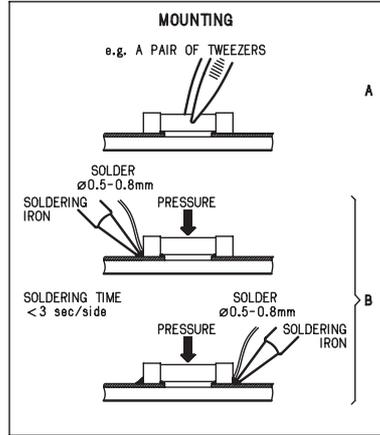
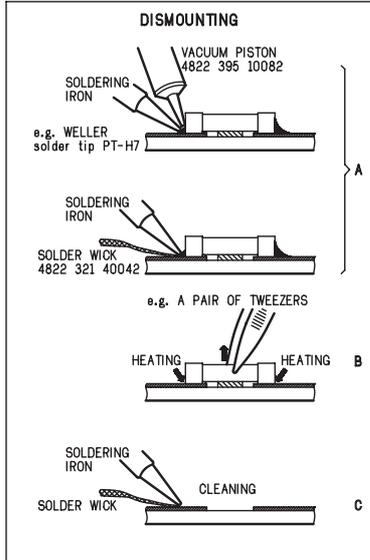
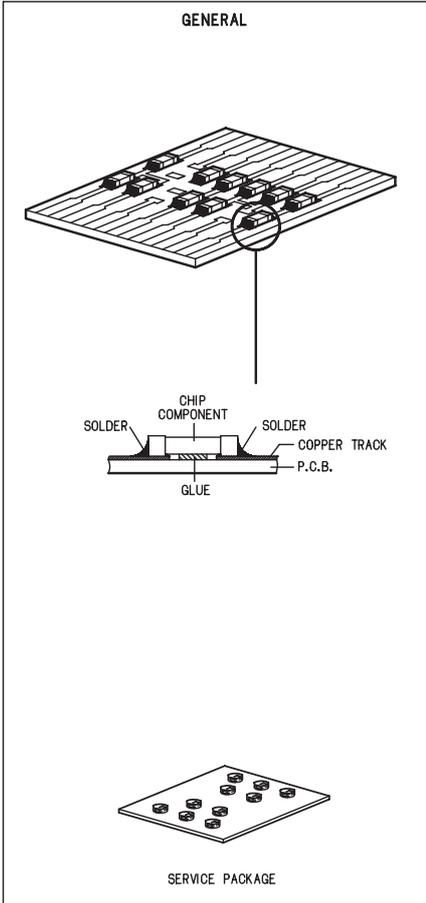
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PHILIPS

HANDLING CHIP COMPONENTS



(GB) WARNING

All ICs and many other semiconductors 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 wristband with resistance. Keep components and tools 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 enfilez le bracelet sert 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) WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Sorgen Sie dafür, daß Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind. Halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

(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 cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un bracciale a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

SAFETY



(GB)

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

(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. Les composants de sécurité sont marqués

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Gerätes darf nicht verändert werden. Für Reparaturen sind Originalersatzteile zu verwenden. Sicherheitsbauteile sind durch das Symbol markiert.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast. De Veiligheidsonderdelen zijn aangeduid met het symbool

(I)

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



(GB) DANGER:

Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.

(S) Varning !

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

(DK) Advarsel !

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

(FIN) Varoitus !

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

(GB)

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

(F)

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

TECHNICAL SPECIFICATIONS

GENERAL

Mains voltage	-/05 : 230 V
	-/17 : 120 V
Mains frequency	-/05 : 50 Hz
	-/17 : 60 Hz
Battery	mains : 12 V (R20 x 8)
Power consumption	: < 5 W typ.
Dimension (W x H x D)	: 567 x 185 x 301 mm
Weight	: 5.6 Kg

AMPLIFIER & LS WOOX

Output power	mains : 2 x 8.8 W
	battery : 2 x 8 W
Residual noise	: 60nW (volume minimum)
Channel difference	: 3dB typ. at 500mW
Hum & noise	: 500nw (Vol.max.-20dB)

TUNER - FM SECTION

Tuning range	: 87.5 - 108 MHz
IF frequency	: 10.7 MHz \pm 0.02MHz
Sensitivity	: < 25 dBf at 26dB S/N
Selectivity	: > 20 dB at S9/300kHz
IF rejection	: > 50 dB
Image rejection	: > 20 dB

TUNER - MW SECTION

Tuning range	: 531 - 1602 kHz
	-/17 : 530 - 1700 kHz
IF frequency	: 450 kHz \pm 1 kHz
Sensitivity	: < 5000 μ V/m at 26dB S/N
Selectivity	: > 16 dB at S9/300kHz
IF rejection ratio	: > 24 dB
Image rejection	: > 28 dB

USB FUNCTION

Channel balance	: \pm 2dB typ.
THD	: < 3%
Crosstalk	1 kHz : > 26 dB
Crosstalk	10 kHz : > 16 dB
Frequency response	: 63 Hz- 14kHz
SNR unwttd.	: > 50 dB
Channel difference	: < 3 dB

COMPACT DISC

S/N ratio	: > 50 dB
Channel difference	: < 3 dB
Crosstalk	1 kHz : > 26 dB
Crosstalk	10 kHz : > 16 dB
Frequency response	: +10dB \pm 2dB at 100Hz
(500mW output WOOX ON)	
Frequency response	: +1dB \pm 2dB at 10kHz
(500mW output WOOX ON)	
Shock resistance	\pm Z axis : > 2 g
	\pm X or \pm Y axis : > 3 g

SERVICE TOOLS

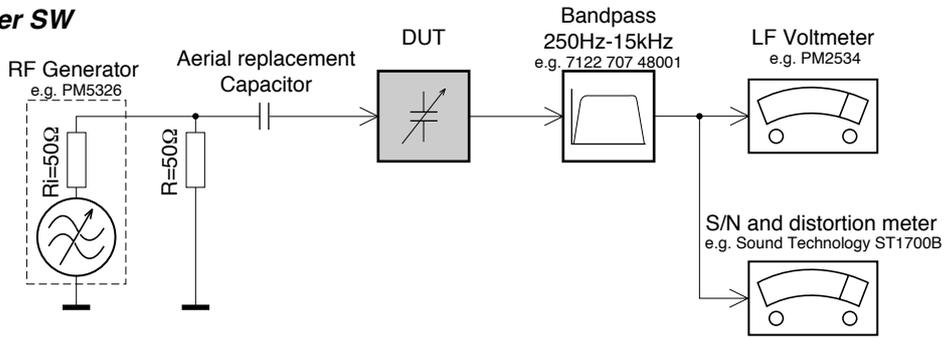
Audio signal disc SBC 429.....	4822 397 30184
Playability test disc SBC 444.....	4822 397 30245
Test disc 5 (disc without errors) +	
Test disc 5A (disc with dropout errors, black spots and fingerprints)	
SBC 426/426A.....	4822 397 30096
Burn in test disc (65 min. 1kHz signal at -30 dB level without "pause").....	4822 397 30155

AVAILABLE ESD PROTECTION EQUIPMENT

anti-static table mat	large 1200x650x1.25mm	4822 466 10953
	small 600x650x1.25m	4822 466 10958
anti-static wristband		4822 395 10223
connection box (3 press stud connections, 1M Ω)		4822 320 11307
extendible cable (2m, 2M Ω , to connect wristband to connection box)		4822 320 11305
connecting cable (3m, 2M Ω , to connect table mat to connection box)		4822 320 11306
earth cable (1M Ω , to connect any product to mat or to connection box)		4822 320 11308
KIT ESD3 (combining all 6 prior products - small table mat)		4822 310 10671
wristband tester		4822 344 13999

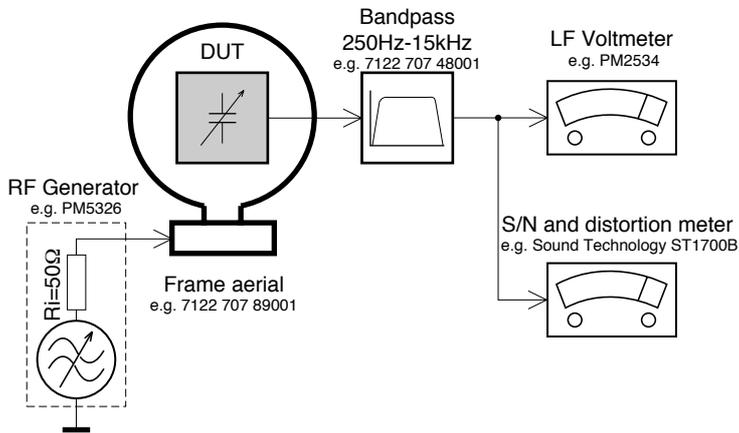
SERVICE MEASUREMENT

Tuner SW



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).

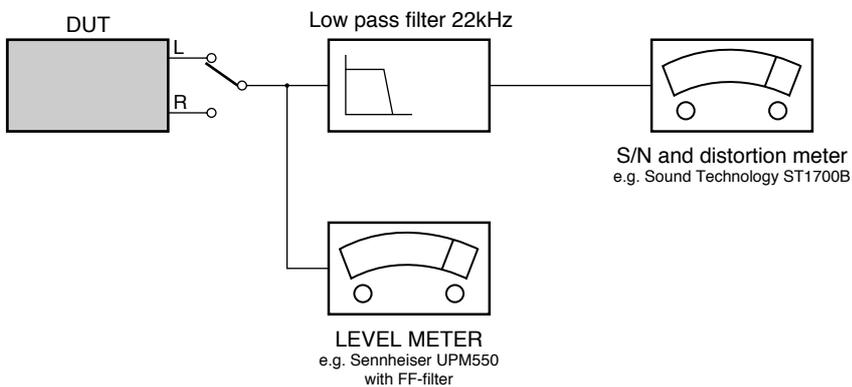
Tuner AM (MW,LW)



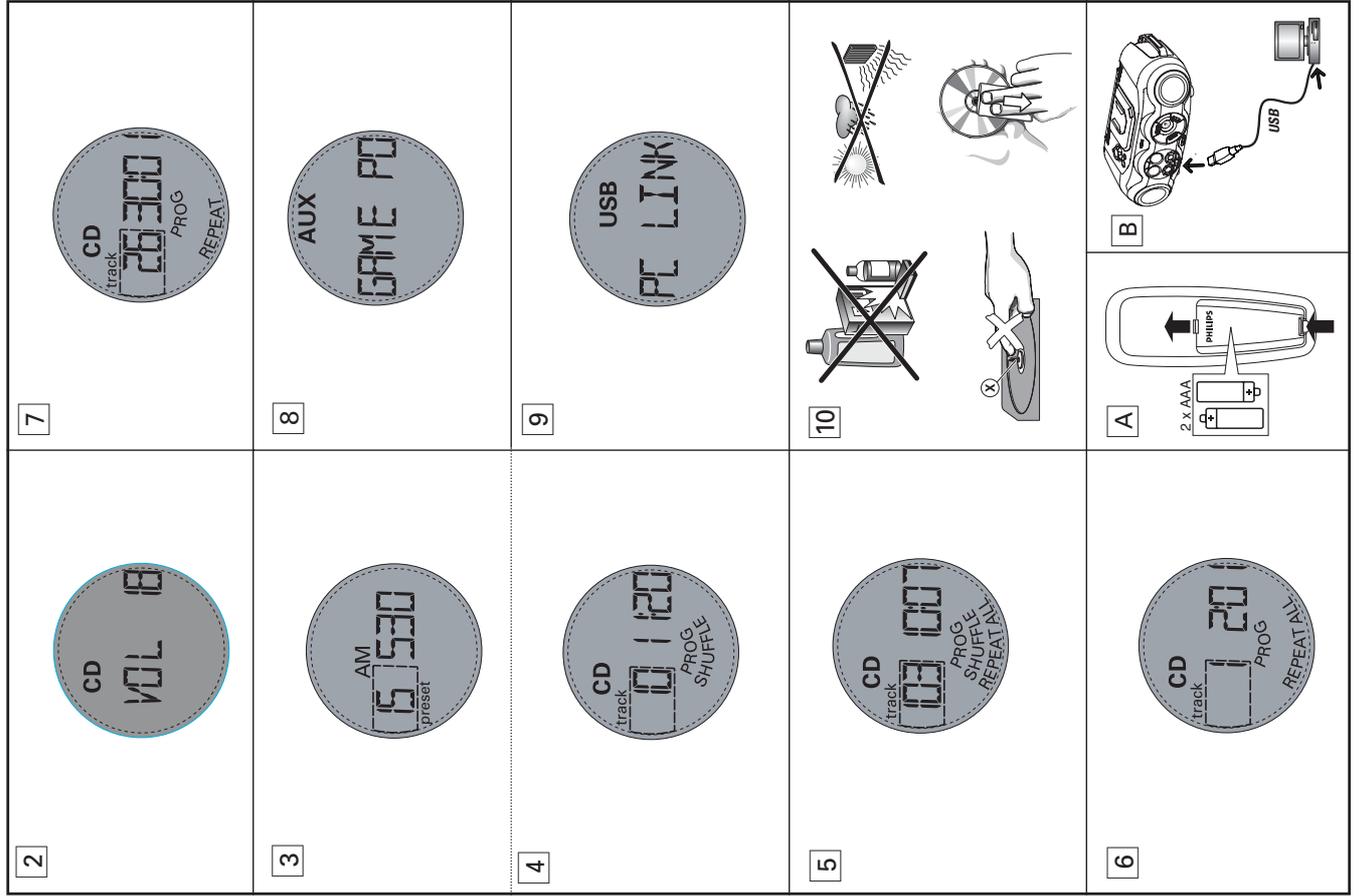
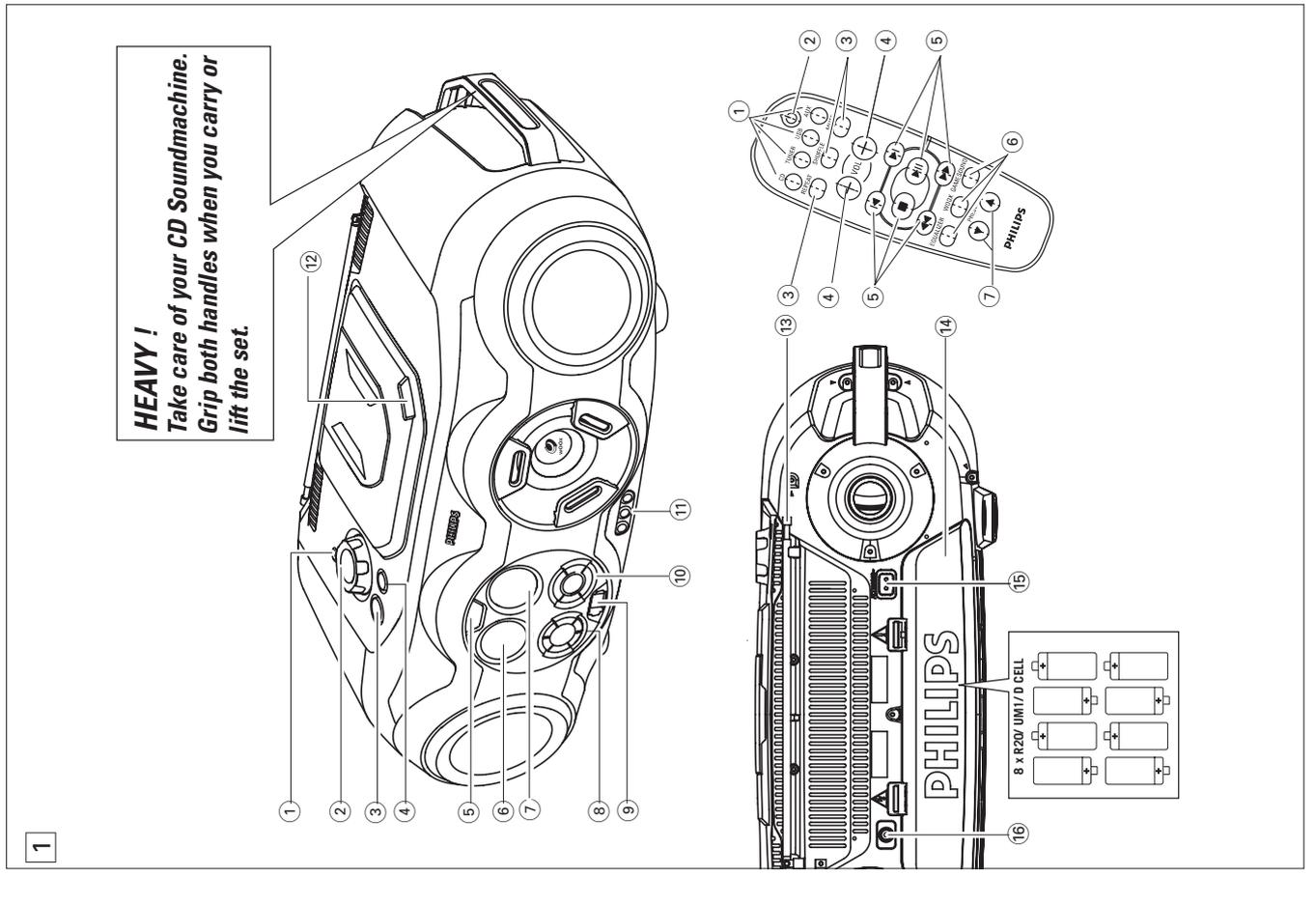
To avoid atmospheric interference all AM-measurements have to be carried out in a Faraday«s cage.

CD

Use Audio Signal Disc SBC429 4822 397 30184 (replaces test disc 3)
L.P.F. = 13th order filter 4822 395 30204



CONNECTIONS AND CONTROLS



SUPPLIED ACCESSORIES

- remote control
- USB cable
- video cable
- CD-ROM USB PC LINK installers

TOP AND FRONT PANEL (See [1])

- [1] 3.5 mm stereo headphone jack.
Note: The speakers will be muted when headphones are connected to the set.

- [2] **VOLUME** - adjust volume level or equalizer level (BASS/ MID / HIGH)
- [3] **STANDBY ON** \odot - switch the set on/ off.
- [4] **SOURCE** - selects sound source for functions: **CD/ TUNER/ USB PC LINK/ GAME •AUX**
- [5] **IR SENSOR** - infrared sensor for remote control
- [6] **LCD Display** - shows the status of the set
- [7] **[dB]**: - display to indicate bass power.
- [8] **PRESET** ∇ , \blacktriangle - selects a preset radio station.
- SEARCH** \leftarrow , \rightarrow

CD: - searches backward or forward within a track;
 - skips to the beginning of a current track/ previous/ later track.

USB PC LINK - skips to the beginning of a previous/ later track.

- TUNER:** - tunes to radio stations
- \blacktriangleright **II** - starts or pauses CD / USB PC LINK playback
- \blacksquare - stop CD / USB PC LINK playback;

MODE - selects different CD play modes: e.g. REPEAT or SHUFFLE order.

- shows current track name in **USB PC LINK** mode

- [9] **USB** - connect the supplied USB cable here to the USB port of your computer
- [10] **GAMESOUND** - select sound effects: **BLAST/ PUNCH/ SPEED/ NORMAL** in **GAME •AUX** mode
- WOOX** - selects special bass enhancement on/ off
- EQUALIZER** - selects bass, mid and treble frequencies, and volume **BASS/ MID /HIGH/ VOL PROG**
- CD:** - programs tracks and reviews the programmed songs;

TUNER: - programs preset radio stations.

FM•AM - selects FM / AM waveband

CONTROL

- [1] **AUDIO IN (LEFT / RIGHT) - LINE-IN** jack for external audio appliance.

VIDEO IN - to keep video plug in place

- [2] **OPEN•CLOSE** - press to open/ close CD door

BACK PANEL (See [1])

- [3] **Telescopic antenna** - improved FM reception
- [4] **Battery compartment** - for 8 batteries, type R-20, UM-1 or D-cells
- [5] **AC MAINS** - inlet for power cord
- [6] **VIDEO OUT** - connect to the **VIDEO IN** jack on a TV or VCR for viewing or recording.

REMOTE CONTROL (See [1])

- [1] **CD** - selects CD sound source
- TUNER** - selects tuner source / wavebands
- USB** - selects **USB PC LINK**
- AUX** - selects **GAME •AUX**
- [2] \odot - switches the set to standby / on if set operating on AC power. (Switches set off only if battery powered)
- [3] **REPEAT** - repeat all tracks in **USB PC LINK** source or selects the repeat modes in **CD** source
- SHUFFLE** - plays CD tracks in random order in **CD / USB PC LINK** source
- [4] **MUTE** - interrupts/ resumes sound level (BASS/ MID /HIGH)
- [5] \blacktriangle , \blacktriangleright - select previous/ next track in CD / USB PC LINK playback
- \blacksquare - stop CD / USB PC LINK playback;
- erases a CD program.
- \blacktriangleright **II** - starts or pauses CD or USB PC LINK playback
- \blacktriangleleft , \blacktriangleleft - searches backwards/ forwards within a CD track.

TUNER - tunes to radio stations

[6] **EQUALIZER** -- selects bass, mid and treble frequencies

WOOX -- select special bass enhancement on/ off

GAMESOUND - select sound effects: **BLAST/ PUNCH/ SPEED/ NORMAL** in game mode

- [7] **PRESET** ∇ , \blacktriangle - selects a previous/ next radio preset station

POWER SUPPLY**CAUTION**

Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

POWER SUPPLY

Whenever convenient, use the power supply to conserve battery life. Make sure you remove the power cord from the set and wall jack before inserting batteries.

Batteries (not included) (See [1])

- Insert 8 batteries, type **R-20, UM-1** or **D-cells**, (preferably alkaline) with the correct polarity.

Remote control (See [A])

- Insert 2 batteries, type **AAA, R03** or **UM4** (preferably alkaline).

Incorrect use of batteries can cause electrolyte leakage and will corrode the compartment or cause the batteries to burst.

- Do not mix battery types: e.g. alkaline with carbon zinc. Only use batteries of the same type for the set.
- When inserting new batteries, do not try to mix old batteries with the new ones.
- Batteries contain chemical substances, so they should be disposed of properly.

Using AC Power

1. Check if the AC power supply, as shown on the **type plate located on the bottom of the set**, corresponds to your local power supply. If it does not, consult your dealer or service center.
2. If your set is equipped with a voltage selector, adjust the selector so that it matches with the local power supply.
3. Connect the power cord to the wall jack and the set is now ready for use.
4. To disconnect the power supply, unplug the set from the wall jack.

BASIC FUNCTIONS**POWER-SAVING AUTOMATIC STANDBY**

As a power-saving feature, the system automatically switches to standby 15 minutes after CD has reached the end and no control is operated.

The type plate is located on the bottom of the set.

BASIC FUNCTIONS**Switching on and off and selecting function**

1. Press **STANDBY ON** \odot on the set to switch on.
2. Press **SOURCE** once or more to select your desired function: **CD, TUNER, USB PC LINK** or **GAME•AUX**.
3. Press **STANDBY ON** \odot to switch off the set.

Note : The tone, sound settings, tuner presets and the volume level (up to a maximum volume level of VOL 20) will be retained in the set's memory.

Adjusting volume and sound (See [2])

The sound features **WOOX, EQUALIZER** and **GAMESOUND** are mutually exclusive.

1. Adjust the volume with the **VOLUME** control.
 → Display shows the volume level $\sqrt{\square}$ and a number from 0-32.

2. WOOX

To enhance the bass response: press **WOOX** once or more to switch on / off.

→ **WOOX**-key backlight lights up when **WOOX** is turned on.

Notes:

- **WOOX** can be used when you play **TUNER, CD, USB PC LINK** and **GAME•AUX** source.
- Some discs might be recorded in high modulation, which causes a distortion at high volume. If this occurs, deactivate **WOOX** or reduce the volume.

INSTRUCTION FOR USE

DIGITAL TUNER

3. EQUALIZER

To adjust the bass, mid and treble frequencies press **EQUALIZER** once or more, then rotate **VOLUME** within 3 seconds to adjust each level.
 → Display briefly shows **BASS**, **MID**, or **HIGH** level (**-5** to **+5**) or **VOL**.

Note: EQUALIZER can be used during **TUNER**, **CD**, **USB PC LINK** and **GAME•AUX** source.

4. GAMESOUND

To adjust the game sound, press **GAMESOUND** once or more to select your option.
 → Display briefly shows **BALST**, **PLNCH**, **SPEED** or **NEUTRAL**.

Note: GAMESOUND is only available when you play in **GAME•AUX** source.

How to MUTE the sound

- Press **MUTE** on the remote control to interrupt sound reproduction instantly.
 → Playback continues without sound and the display flashes **MUTE**.
- To reactivate sound reproduction you can:
 - press **MUTE** again;
 - adjust the volume controls;
 - press **▶II** / **■** in **CD** / **USB PC LINK** source;
 - change to another source.

DIGITAL TUNER (See [3])

Tuning to stations

- Press **STANDBY ON** **⏻** on, then press **SOURCE** once or more to select **TUNER** (or press **TUNER** once on the remote control).
 → Display: shows **TUNER** briefly followed by waveband, frequency, and preset station number if already stored.
- Press **FM•AM** once or more to select your waveband, (**TUNER** on the remote control)
- Tuning to stations:** you can tune to your stations manually or by automatic search tuning: Press down on **◀◀** or **▶▶** and release button when the frequency in the display starts running.
 → The radio automatically tunes to a station of sufficient reception. Display shows **SEARCH**

USB PC LINK

- Launch **MUSICMATCH JUKEBOX** and create your own playlist of favorite songs by dragging and dropping the music track from anywhere on your PC into the playlist window.

Note:

– If you encounter any problem using the **USB PC LINK**, please refer to the **FAQ (Frequently Asked Questions)** stored in your **USB PC LINK** installer disc or visit www.audio.philips.com for the latest **FAQ updates**.

After setup, refer to "Connecting to USB PC Link" for details on the USB PC LINK operations.

Enable digital CD audio output

Before playing CDs on your PC's CD-ROM drive, it is necessary to configure your PC's hardware as follows:

For Windows ME/2000/XP

- Enter the system panel menu and select **'SYSTEM', 'PROPERTIES', 'HARDWARE', 'DEVICE MANAGER', 'CD-ROM DRIVES'** and **'PROPERTIES'**.

For Windows 98

- Check the **Enable digital CD audio for this CD-ROM device** setting option is selected (enabled).

Note: For windows 98 you may need to refer to your PC's manual for correct configuration.

Connecting to USB PC Link (See [9])

The **USB PC LINK** allows you to playback your music collection from the PC via the powerful amplifier and speakers of this system.

IMPORTANT!

Make sure the MusicMatch software has been installed. Refer to "Quick Setup Guide" for the USB PC Link.

- Turn on your set and computer.
 ⇒ Check your PC volume is suitably adjusted and not set to minimum / mute.
- Press **SOURCE (USB** on the remote control) once or more to select **USB PC LINK**.
- If correctly connected your PC will automatically launch **MUSICMATCH JUKEBOX**.
 ⇒ If the audio streaming is detected, the current track name scrolls.
 ⇒ If **NO CONNECTION** scrolls for a while, check the

MAINTENANCE & SAFETY

connection between your PC and set.

- Press **◀** or **▶** until the desired track in the playlist is highlighted.
- Press **▶II** to start playback.
 ⇒ The track time appears and the track name scrolls once.

Note: The display only supports English characters in uppercase.

- If you want to see the track details displayed press **MODE**.

During playback,

- Press **SHUFFLE** on the remote control to play all available tracks in the playlist in random order.
- Press **REPEAT** on the remote control to repeat playback all the tracks in the playlist.
- To cancel play modes/ stop playback, press **■** or select another sound sources.

MAINTENANCE & SAFETY (See [10])

CD player and disc handling

- If the CD player cannot read CDs correctly, use a cleaning CD to clean the lens before taking the set to repair.
- The lens of the CD player should *never be touched!*
- Sudden changes in the surrounding temperature can cause condensation on the lens of your CD player. Playing a CD is then not possible. Do not attempt to clean the lens but leave the set in a warm environment until the moisture evaporates.
- Always close the CD door to avoid dust on the lens.
- To take a CD out of its box, press the center spindle while lifting the CD.
- To clean the CD, wipe in a straight line from the center towards the edge using a soft, lint-free cloth. Do not use cleaning agents as they may damage the disc.
- Never write on a CD or attach any stickers to it.

Safety Information

- Don't expose the set, batteries, CDs to humidity, rain, sand or excessive heat.
- Clean the set with a dry cloth. Don't use any cleaning agents containing alcohol, ammonia, benzene or abrasives as these may harm the set.
- Place the set on a hard and flat surface so that the system does not tilt. Make sure there is good ventilation to prevent the set from overheating.

CD PLAYER

- Repeat the above four steps to store other stations.
Note : You can erase a preset station by storing another frequency in its place.

To listen to a preset station

Press **PRESET - / +** once or more until the desired preset station is displayed.

CD Operation

Playing a CD

This CD player plays Audio Discs including CD-Recordables and CD-Rewritables.

- Press **STANDBY ON** \odot once or more to on, then select **CD SOURCE**.
- Press **OPEN•CLOSE** to open the CD door.
 \Rightarrow **[] OPEN** is displayed when the CD door is open.
- Insert a CD with the printed side facing up and press down on **OPEN•CLOSE** to close the CD door.
 \Rightarrow Display show **REAR]**, then scrolls **INSERT DISC / CHECK DISC** or **DISC ERROR** if no CD inserted/ CD dirty, incorrectly inserted or damaged.

- Press **▶II** to start playback.

- To pause playback press **▶II**. Press **▶II** again to resume play.
 \rightarrow Time digits flashes during pause.

- To stop CD playback, press **■**.

Note: CD play will also stop when:

- the CD door is opened
- the CD has reached the end
- you select an other sound source.

Selecting a different track

- Press **SEARCH◀◀** or **▶▶** (on the remote control **◀** or **▶**) once or repeatedly until the desired track number appears in the display.
- If you have selected a track number shortly after loading a disc or in the **PAUSE** position, you will need to press **▶II** to start playback.

GAMESOUND

is shown briefly **PROG** flashes.

\rightarrow If you attempt to program without first selecting a track number, **SELECT TRACK** is shown.

- Repeat steps **1-2** to select and store all desired tracks.

\rightarrow Display: **FULL** if you try to program more than 20 tracks.

- To start playback of your disc program, press **▶II**.

Note: During normal playback, you can press **PROG** to add a current track to your program list.

Reviewing the program

In stop / play position, press and hold down **PROG** for a while until the display shows all your stored track numbers in sequence.

Erasing a program

You can erase the program by:

- pressing **■** twice;
- \rightarrow **CLERR** displayed briefly, and **PROG** disappears.

- pressing **STANDBY ON** \odot

- selecting another sound sources

- opening the CD door.

GAMESOUND (See [8])

PLAYING WITH GAMESOUND:

- Press **SOURCE** once or more on the set to select the **GAME•AUX** function (**AUX** on the remote control)
 \rightarrow Display scrolls : **GAME PORT**

- Connect your console to the cinches on the front of the set **AUDIO IN (LEFT / RIGHT)** and **VIDEO IN**.

- Press **GAMESOUND** once or more to select your game sound option.

\rightarrow Display briefly shows **BURST** , **PUNCH** , **SPEED** or **NORMAL**.

USB PC LINK

Connecting other equipment to your system

Use the supplied video cable to connect the **VIDEO OUT** terminal on the back of the set to **VIDEO IN** on a TV or VCR for viewing or recording.

USB PC LINK

Quick Setup Guide

PC system requirements

- USB port with Windows 98 / 98 SE / ME / 2000 / XP
- Intel Pentium MMXX200 or higher
- CD-ROM drive
- Free hard disk space : 15 MB for the software

Installing MusicMatch software

- The supplied USB cable to connect the set to the USB port on your computer. (See [6])
- Press **SOURCE (USB)** on the remote control) once or more to select **USB PC LINK**.
- Turn on your PC then insert the supplied USB PC LINK installer disc in the PC's CD-ROM drive. This application software can also be downloaded from <http://www.audio.philips.com>.

IMPORTANT!

Please use this customized MusicMatch software for your USB PC Link application. Remember to un-install all other MusicMatch jukebox software first from your PC system (if available).

- The installation guide will appear automatically. If it does not, go to the CD-ROM drive in **Windows Explorer** and double click on the **USB PC LINK.exe**.

Then perform the following steps:

- Select your desired language from the list.
- Select **installer driver**.
- Select **installer MusicMatch jukebox**.
- Select other options (**Tutorial**, **Free goodies**, **FAQ**).

Note:

- You are advised to read the MusicMatch tutorial before using it for the first time. Make sure the volume on your PC is suitably adjusted to ensure sound output on the set. For optimum performance, the equalizer function in MusicMatch should be set to a low level.

INSTRUCTION FOR USE

TROUBLESHOOTING

If a fault occurs, first check the points listed below before taking the set for repair. If you are unable to remedy a problem by following these hints, consult your dealer or service center.

WARNING: Do not open the set as there is a risk of electric shock! Under no circumstances should you try to repair the set yourself, as this will invalidate the warranty.

No sound /power

- Volume not adjusted
- Adjust the VOLUME
- Power cord not securely connected
- Connect the AC power cord properly
- Batteries flat / incorrectly inserted
- Insert (fresh) batteries correctly
- Headphones connected to the set
- Disconnect headphones
- Electrostatic discharge/interference
- Unplug the set. If batteries inserted, remove batteries from the battery compartment.. Press and hold

STANDBY ON  for 10 seconds, then re-plug / replace battery supply, and try activating the set again.

- When in USB PC LINK mode, check that your PC's volume is audible and not set to minimum.
- When playing a CD from the PC's CD-ROM drive, refer to **USB PC Link - Enable digital CD audio output.**

Severe radio hum or noise

- Electrical interference: set too close to TV, VCR or computer
- Increase the distance

Remote control does not function properly

- Batteries flat/ incorrectly inserted
- Insert (fresh) batteries correctly
- Distance/ angle between the set too large
- Reduce the distance/ angle

Poor radio reception

- Weak radio signal
- FM: Adjust the FM telescopic antenna

INSERT DISC / CHECK DISC / DISC ERROR indication

- No CD inserted
- Insert a suitable disc
- CD badly scratched or dirty
- Replace/ clean CD, see Maintenance
- Laser lens steamed up
- Wait until lens has cleared

The CD skips tracks

- CD damaged or dirty
- Replace or clean CD
- SHUFFLE or PROG is active
- Switch off SHUFFLE / PROG

NO CONNECTION is displayed in USB PC LINK mode for more than 10 seconds

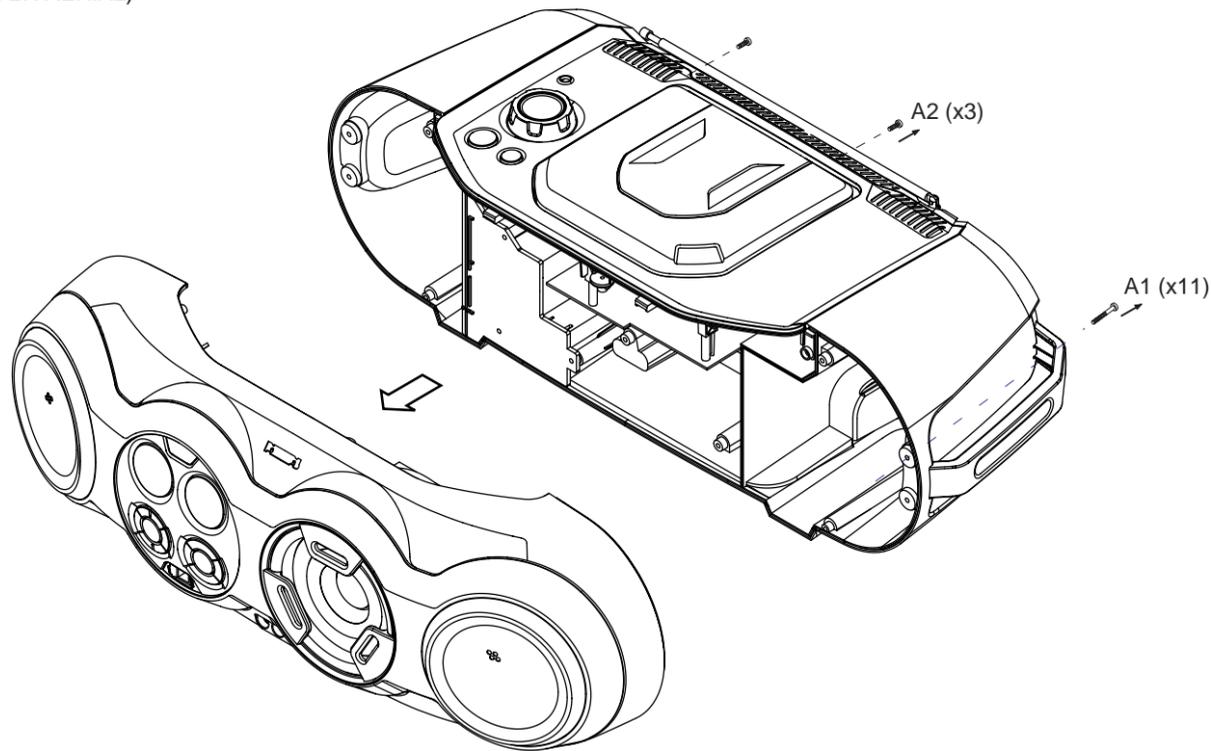
- Check the connection between your PC and the set. If necessary, please refer to the chapter **Connecting to USB PC Link** for the initial setup required.
- Make sure the connected PC is turned on and the MusicMatch software is working.

For more information on operation instruction please visit Philips Audio internet site : <http://www.audio.philips.com>

DISASSEMBLY DIAGRAM

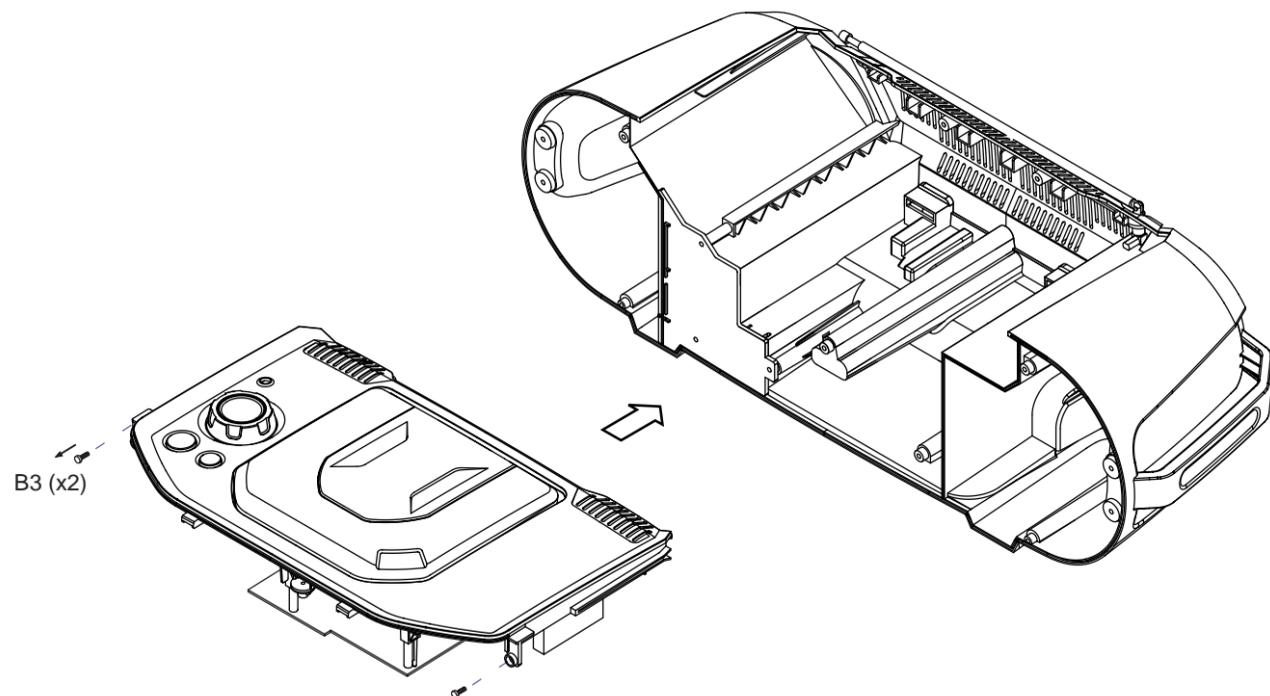
A. REMOVE FRONT CABINET ASSEMBLY

- REMOVE SCREWS A1 (3X16) 11 PCS.
- REMOVE SCREW A2 (3X10) 3 PC (UNDER AERIAL)



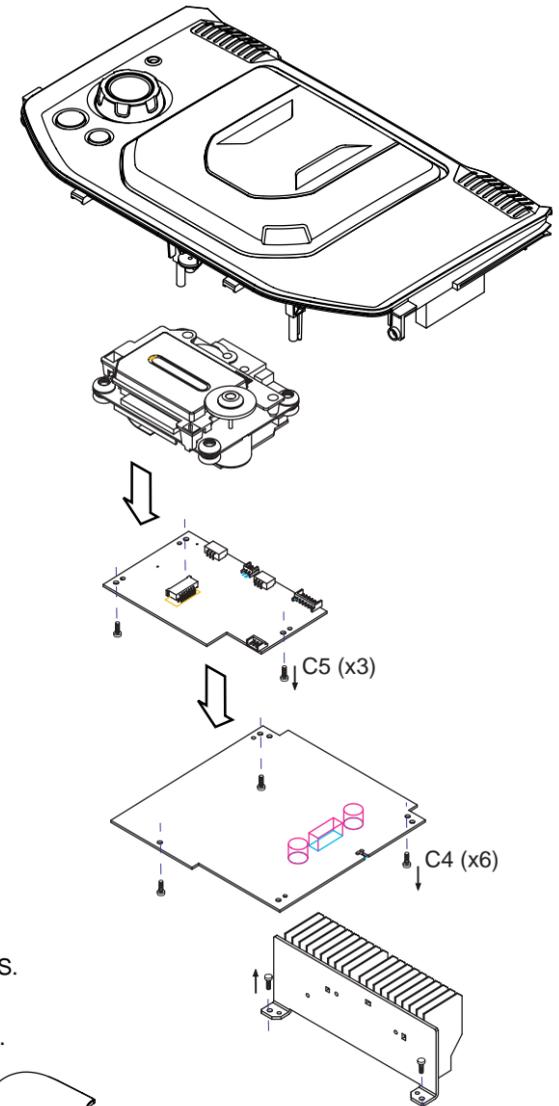
B. REMOVE BOTTOM CABINET ASSEMBLY

- REMOVE SCREWS B3 (3X10) 2 PCS.



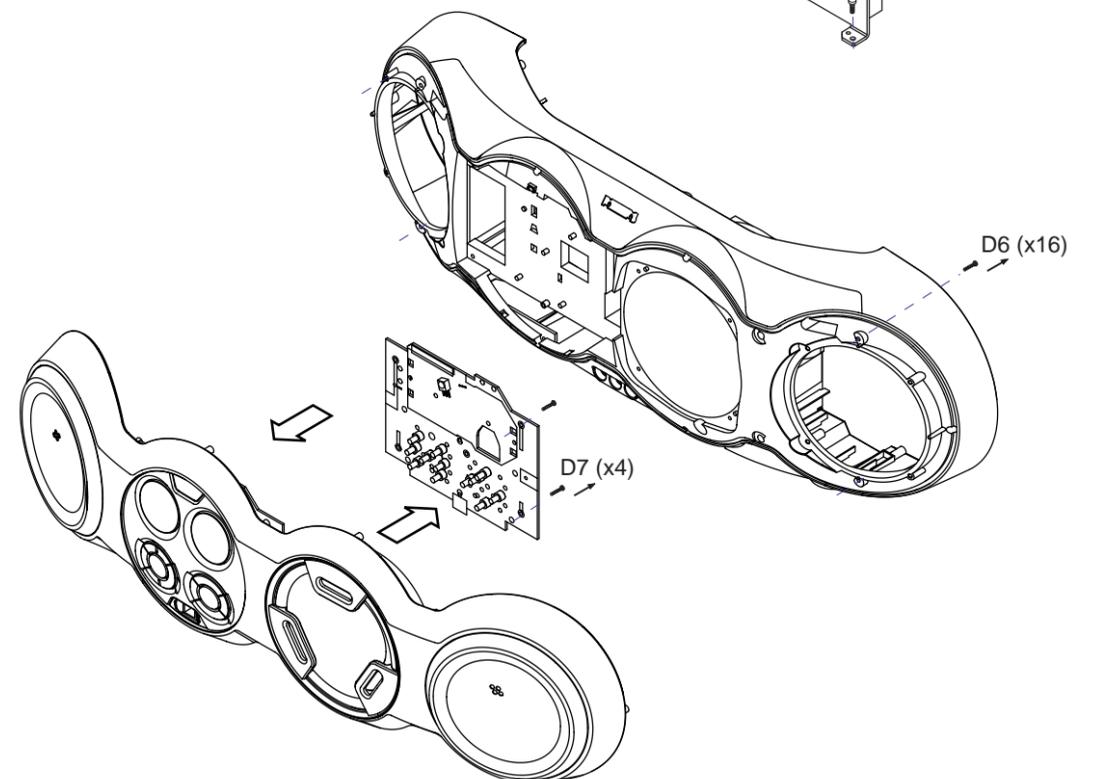
C. REMOVE DECK MECHANISM

- REMOVE SCREWS C4 (3X10) 6 PCS.
- REMOVE POWER BOARD
- REMOVE SCREWS C5 (3X10) 3 PCS.
- REMOVE CD BOARD



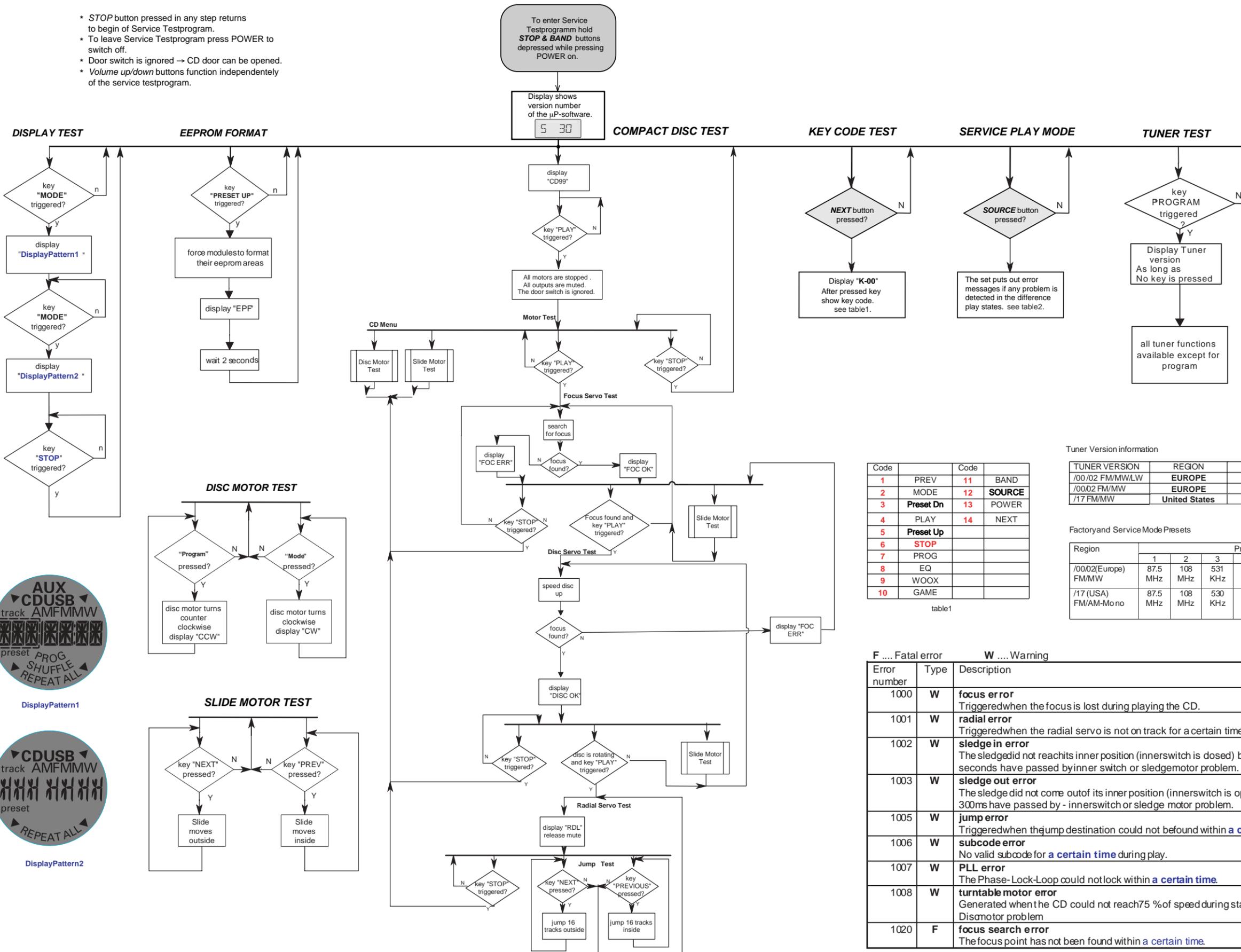
D. REMOVE KEY BOARD

- REMOVE SCREWS D6 (2.5X10) 16 PCS.
- REMOVE FRONT PANEL ASSEMBLY
- REMOVE SCREWS D7 (2.5X10) 4 PCS.

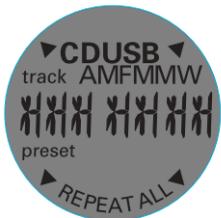


SERVICE TEST PROGRAM

- STOP button pressed in any step returns to begin of Service Testprogram.
- To leave Service Testprogram press POWER to switch off.
- Door switch is ignored → CD door can be opened.
- Volume up/down buttons function independently of the service testprogram.



DisplayPattern1



DisplayPattern2

Code		Code	
1	PREV	11	BAND
2	MODE	12	SOURCE
3	Preset Dn	13	POWER
4	PLAY	14	NEXT
5	Preset Up		
6	STOP		
7	PROG		
8	EQ		
9	WOOX		
10	GAME		

table1

Tuner Version information

TUNER VERSION	REGION	DISPLAY
/00/02 FM/MW/LW	EUROPE	EUR 3B
/00/02 FM/MW	EUROPE	EUR 2B
/17 FM/MW	United States	USA

Factory and Service Mode Presets

Region	Preset						
	1	2	3	4	5	6	7
/00/02(Europe) FM/MW	87.5 MHz	108 MHz	531 KHz	1602 KHz	558 KHz	1494 KHz	-
/17 (USA) FM/AM-Mono	87.5 MHz	108 MHz	530 KHz	1700 KHz	560 KHz	1500 KHz	-

Error number	Type	Description
1000	W	focus error Triggered when the focus is lost during playing the CD.
1001	W	radial error Triggered when the radial servo is not on track for a certain time during playing the CD.
1002	W	sledge in error The sledge did not reach its inner position (innerswitch is dosed) before approximately 6 seconds have passed by inner switch or sledge motor problem.
1003	W	sledge out error The sledge did not come out of its inner position (innerswitch is open) before approximately 300ms have passed by - innerswitch or sledge motor problem.
1005	W	jump error Triggered when the jump destination could not be found within a certain time.
1006	W	subcode error No valid subcode for a certain time during play.
1007	W	PLL error The Phase-Lock-Loop could not lock within a certain time.
1008	W	turntable motor error Generated when the CD could not reach 75% of speed during start-up within a certain time Disc motor problem
1020	F	focus search error The focus point has not been found within a certain time.

table2

Abbreviations and Pin-description of CD ICs

SERVO PROCESSOR SAA7325H

SYMBOL	PIN	DESCRIPTION
HFREF	1	comparator common mode input
HFIN	2	comparator signal input
ISLICE	3	current feedback output from data slicer
V _{SSA1}	4 ⁽¹⁾	analog ground 1
V _{DDA1}	5 ⁽¹⁾	analog supply voltage 1
I _{ref}	6	reference current output pin
V _{RIN}	7	reference voltage for servo ADC's
D1	8	unipolar current input (central diode signal input)
D2	9	unipolar current input (central diode signal input)
D3	10	unipolar current input (central diode signal input)
D4	11	unipolar current input (central diode signal input)
R1	12	unipolar current input (satellite diode signal input)
R2	13	unipolar current input (satellite diode signal input)
V _{SSA2}	14 ⁽¹⁾	analog ground 2
CROUT	15	crystal/resonator output
CRIN	16	crystal/resonator input
V _{DDA2}	17 ⁽¹⁾	analog supply voltage 2
LN	18	DAC left channel differential output - negative
LP	19	DAC left channel differential output - positive
V _{neg}	20	DAC negative reference input
V _{pos}	21	DAC positive reference input
RN	22	DAC right channel differential output - negative
RP	23	DAC right channel differential output - positive
SELPLL	24	selects whether internal clock multiplier PLL is used
TEST1	25	test control input 1; this pin should be tied LOW
CL16	26	16.9344 MHz system clock output
DATA	27	serial d4(1)ata output (3-state)
WCLK	28	word clock output (3-state)
SCLK	29	serial bit clock output (3-state)
EF	30	C2 error flag output (3-state)
TEST2	31	test control input 2; this pin should be tied LOW
KILL	32	kill output (programmable; open-drain)
V _{SSD1}	33 ⁽¹⁾	digital ground 2
V2/V3	34	versatile I/O: input versatile pin 2 or output versatile pin 3 (open-drain)
WCLI	35	word clock input (for data loopback to DAC)
SDI	36	serial data input (for data loopback to DAC)
SCLI	37	serial bit clock input (for data loopback to DAC)
RESET	38	power-on reset input (active LOW)
SDA	39	microcontroller interface data I/O line (open-drain output)
SCL	40	microcontroller interface clock line input

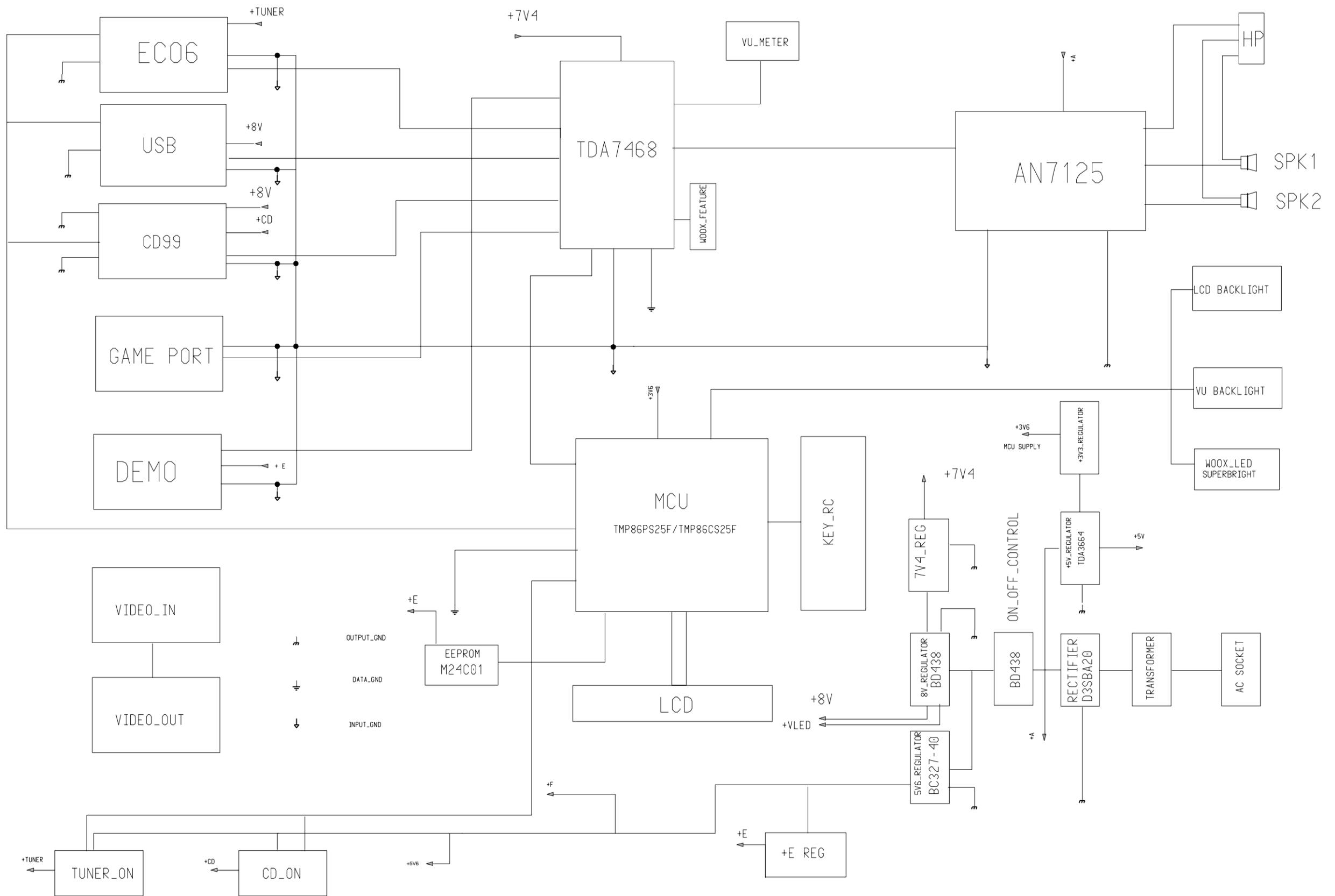
Abbreviations and Pin-description of CD ICs

SERVO PROCESSOR SAA7325H

SYMBOL	PIN	DESCRIPTION
RAB	41	microcontroller interface R/W and load control line input (4-wire bus mode)
SILD	42	microcontroller interface R/W and load control line input (4-wire bus mode)
STATUS	43	servo interrupt request line/decoder status register output (open-drain)
TEST3	44	test control input 3; this pin should be tied LOW
RCK	45	subcode clock input
SUB	46	P-to-W subcode bits output (3-state)
SFSY	47	subcode frame sync output (3-state)
SBSY	48	subcode block sync output (3-state)
CL11/4	49	11.2896 MHz or 4.2336 MHz (for microcontroller) clock output
V _{SSD2}	50 ⁽¹⁾	digital ground 3
DOBM	51	bi-phase mark output (externally buffered; 3-state)
V _{DD1(P)}	52 ⁽¹⁾	digital supply voltage 2 for periphery
CFLG	53	correction flag output (open-drain)
RA	54	radial actuator output
FO	55	focus actuator output
SL	56	sledge control output
V _{DD2(C)}	57 ⁽¹⁾	digital supply voltage 3 for core
V _{SSD3}	58 ⁽¹⁾	digital ground 4
MOTO1	59	motor output 1; versatile (3-state)
MOTO2	60	motor output 2; versatile (3-state)
V4	61	versatile output pin 4
V5	62	versatile output pin 5
V1	63	versatile input pin 1
LDON	64	laser drive on output (open-drain)

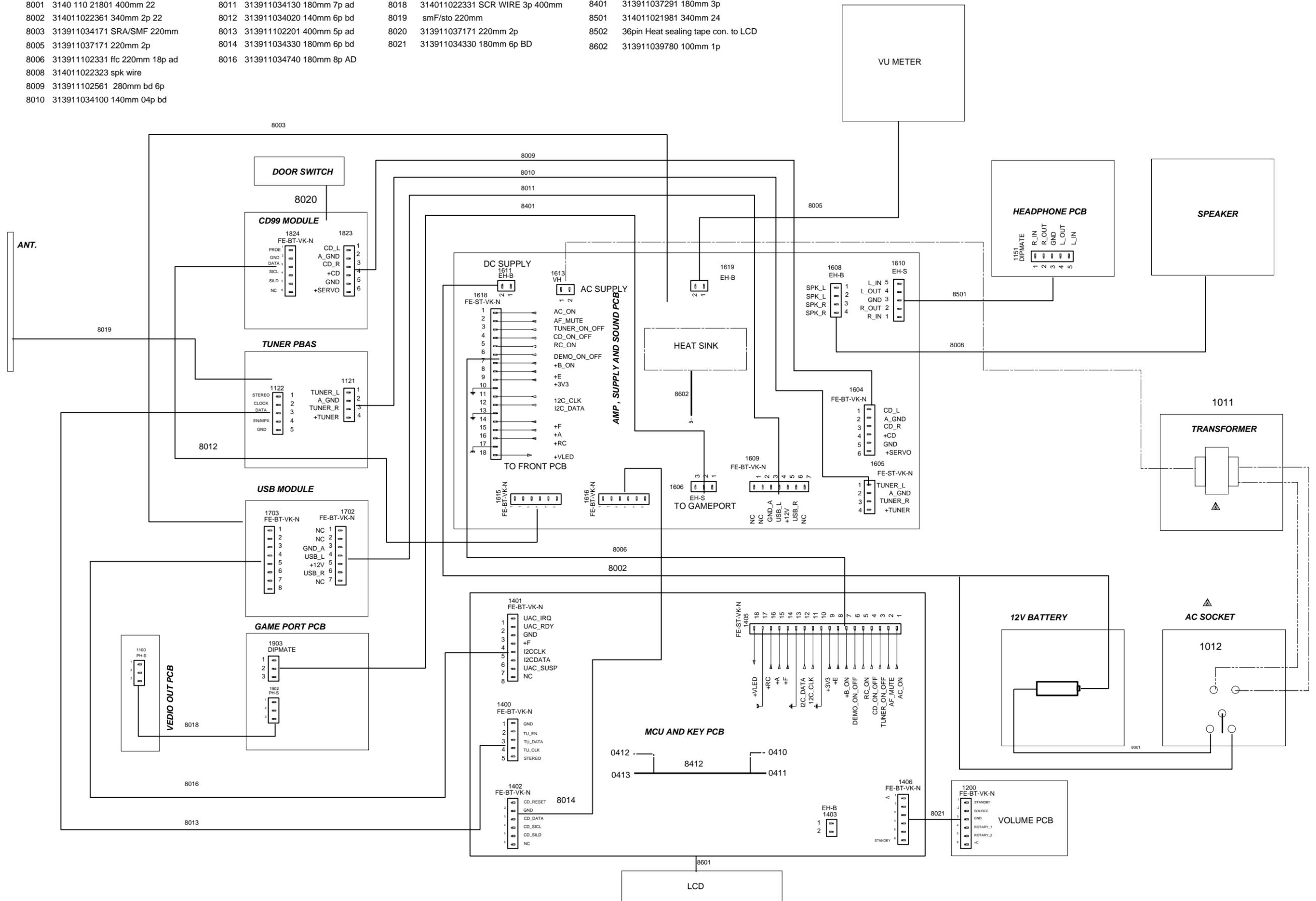
Note : All supply pins must be connected to the same external power supply voltage.

BLOCK DIAGRAM

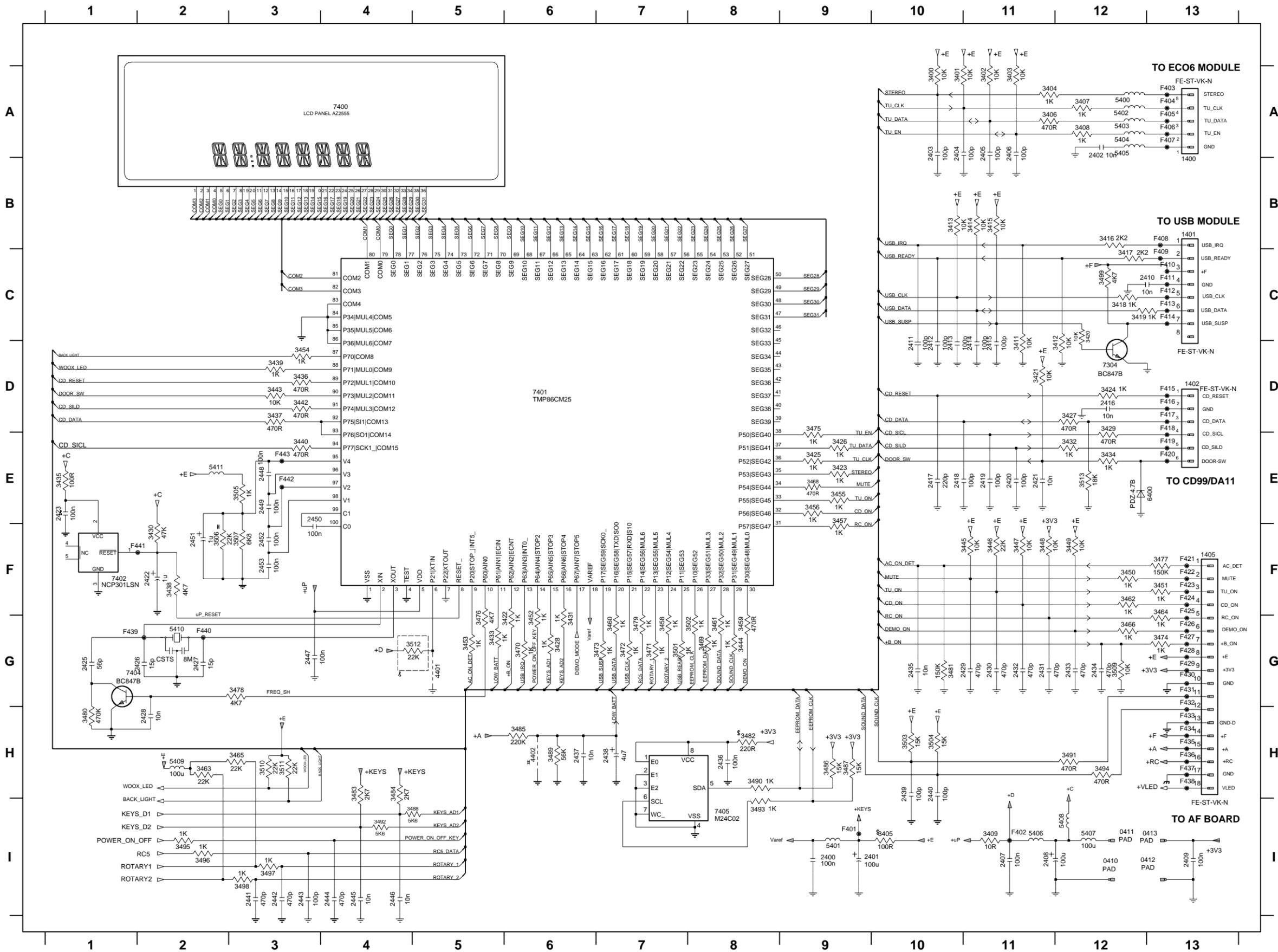


WIRING DIAGRAM

8001	3140 110 21801 400mm 22	8011	313911034130 180mm 7p ad	8018	314011022331 SCR WIRE 3p 400mm	8401	313911037291 180mm 3p
8002	314011022361 340mm 2p 22	8012	313911034020 140mm 6p bd	8019	smF/sto 220mm	8501	314011021981 340mm 24
8003	313911034171 SRA/SMF 220mm	8013	313911102201 400mm 5p ad	8020	313911037171 220mm 2p	8502	36pin Heat sealing tape con. to LCD
8005	313911037171 220mm 2p	8014	313911034330 180mm 6p bd	8021	313911034330 180mm 6p BD	8602	313911039780 100mm 1p
8006	313911102331 ffc 220mm 18p ad	8016	313911034740 180mm 8p AD				
8008	314011022323 spk wire						
8009	313911102561 280mm bd 6p						
8010	313911034100 140mm 04p bd						



KEY BOARD - CIRCUIT DIAGRAM

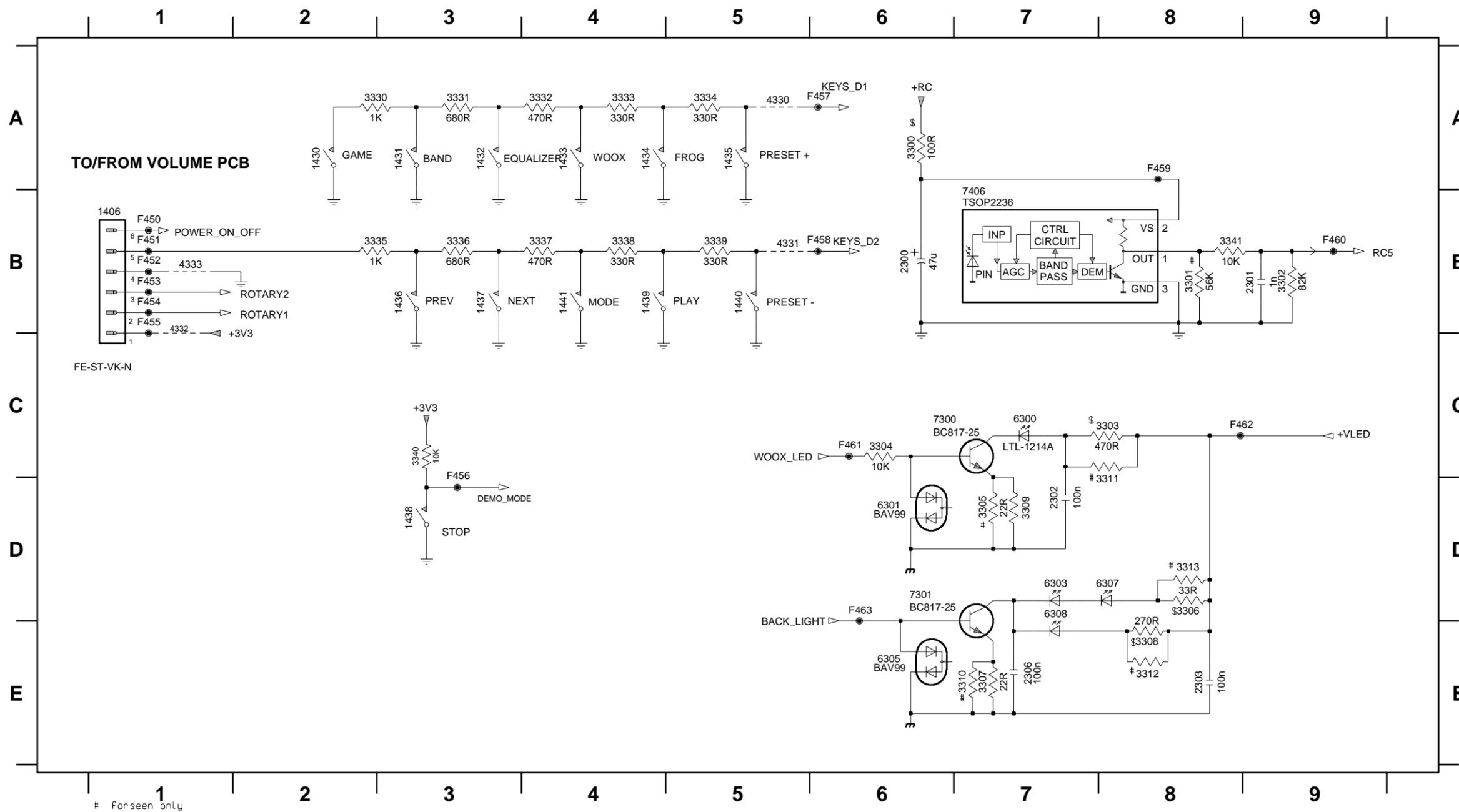


0410 I12	3459 G8
0411 I12	3460 G7
0412 I13	3461 G8
0413 I13	3462 F12
1400 A13	3463 H2
1401 B13	3464 F13
1402 D13	3465 H3
1405 F13	3466 G12
2400 I9	3468 E9
2401 I10	3469 G8
2402 A12	3470 G6
2403 A10	3471 G7
2404 A10	3472 G7
2405 A11	3473 G7
2406 A11	3474 G13
2407 H11	3475 D9
2408 H11	3476 G5
2409 I13	3477 F13
2410 C13	3478 G3
2411 D10	3479 G7
2412 D10	3480 H1
2413 D10	3481 G10
2414 D11	3482 H4
2415 D11	3483 H4
2416 D12	3484 H4
2417 E10	3485 H6
2418 E10	3486 H9
2419 E11	3487 H9
2420 E11	3488 I5
2421 E11	3489 H6
2422 F2	3490 H8
2423 E1	3491 H12
2425 G1	3492 I4
2426 G2	3493 I8
2427 G2	3494 H12
2428 H2	3495 I2
2429 G11	3496 I2
2430 G11	3497 I3
2431 G11	3498 I3
2432 G11	3499 C12
2433 G12	3501 G7
2434 G12	3502 G8
2435 G10	3503 H10
2436 H8	3504 H10
2437 H6	3505 E3
2438 H7	3506 F2
2439 H10	3507 F3
2440 H10	3509 G12
2441 I3	3510 H3
2442 I3	3511 H3
2443 I3	3512 G5
2444 I4	3513 E12
2445 I4	4401 G5
2446 I4	4402 H6
2447 G3	5400 A12
2448 E3	5401 I9
2449 E3	5402 A12
2450 E3	5403 A12
2451 F2	5404 A12
2452 F3	5405 A12
2453 F3	5406 I11
3400 A10	5407 I12
3401 A10	5408 I12
3402 A11	5409 H2
3403 A11	5410 G2
3404 A11	5411 E2
3405 I10	6400 E13
3406 A11	7304 D12
3407 A12	7400 A4
3408 A12	7401 D6
3409 I11	7402 F1
3411 D11	7404 G2
3412 D12	7405 I8
3413 B10	F401 I9
3414 B11	F402 I11
3415 B11	F403 A13
3416 B12	F404 A13
3417 C12	F405 A13
3418 C12	F406 A13
3419 C12	F407 A13
3420 C12	F408 B13
3421 D11	F409 C13
3422 G6	F410 C13
3423 E9	F411 C13
3424 D12	F412 C13
3425 E9	F413 C13
3426 E9	F414 C13
3427 D12	F415 D12
3428 G6	F416 D13
3429 D12	F417 D13
3430 F2	F418 D13
3431 G6	F419 E13
3432 E12	F420 E13
3433 G5	F421 F13
3434 E12	F422 F13
3435 E1	F423 F13
3436 D3	F424 F13
3437 D3	F425 F13
3438 F2	F426 G13
3439 D3	F427 G13
3440 E3	F428 G13
3442 D3	F429 G13
3443 D3	F430 G13
3444 G8	F431 G13
3445 F11	F432 G13
3446 F11	F433 H13
3447 F11	F434 H13
3448 F11	F435 H13
3449 F12	F436 H13
3450 F12	F437 H13
3451 F13	F438 H13
3452 G6	F439 G1
3453 G5	F440 G2
3454 D3	F441 F2
3455 E9	F442 E3
3456 E9	F443 E3
3457 E9	
3458 G7	

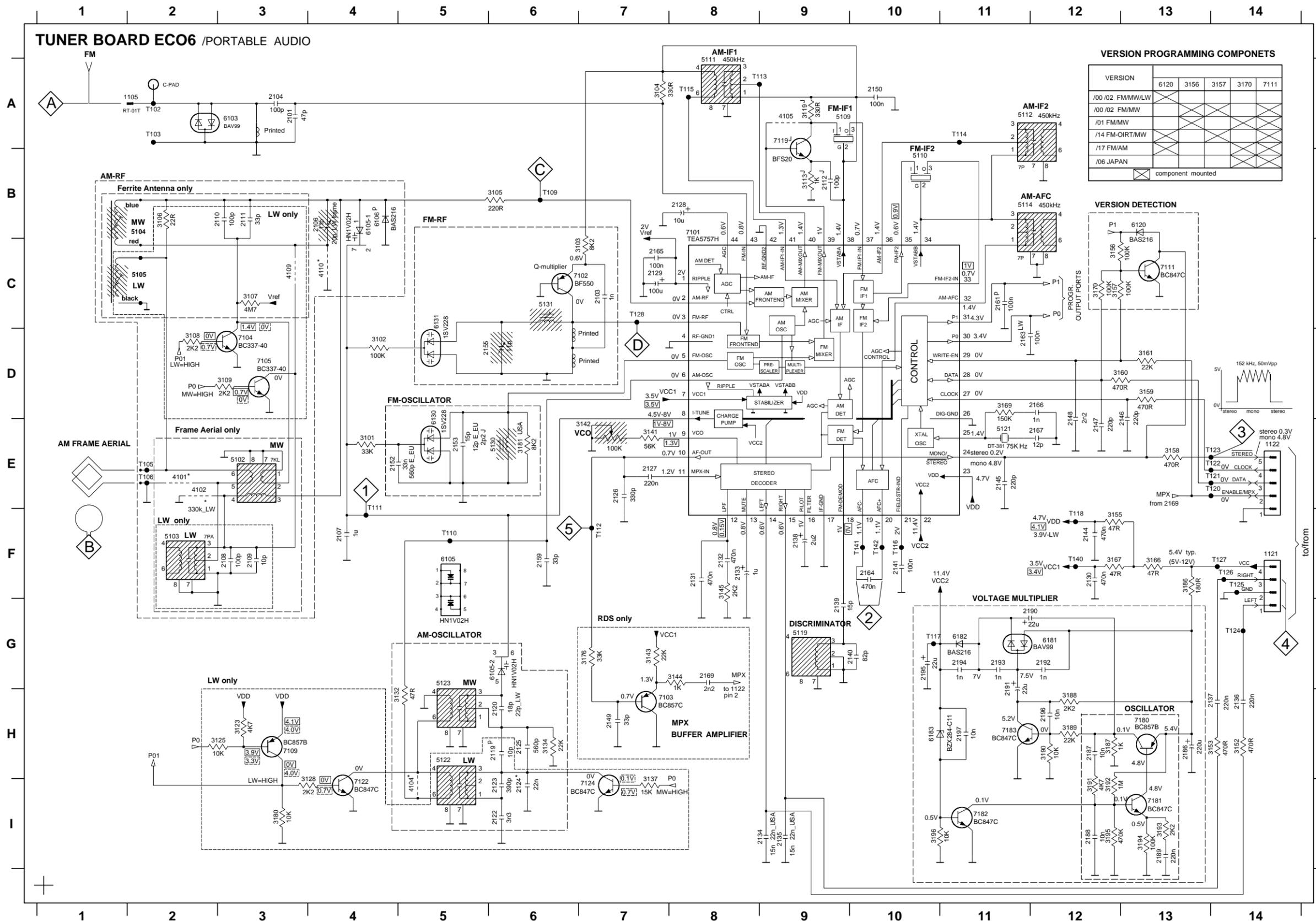
forseen only
 & for DEMO function only

KEY BOARD - CIRCUIT DIAGRAM

1406 B1	1432 A3	1435 A5	1438 D3	1441 B4	2302 D7	3300 A6	3303 C8	3306 D8	3309 D7	3312 E8	3331 A3	3334 A5	3337 B4	3340 C3	4331 B5	6300 C7	6304 D7	7300 C6	F450 B1	F453 B1	F456 D3	F459 A8	F462 C8
1430 A2	1433 A4	1436 B3	1439 B4	2300 B6	2303 E8	3301 B8	3304 C6	3307 E7	3310 E7	3313 D8	3332 A4	3335 B2	3338 B4	3341 B8	4332 B1	6301 D6	6305 E6	7301 D6	F451 B1	F454 B1	F457 A6	F460 B9	F463 D6
1431 A3	1434 A4	1437 B3	1440 B5	2301 B9	2306 E7	3302 B9	3305 D7	3308 E8	3311 D8	3330 A2	3333 A4	3336 B3	3339 B5	4330 A5	4333 B1	6303 D7	6307 D8	7406 B7	F452 B1	F455 B1	F458 B6	F461 C6	



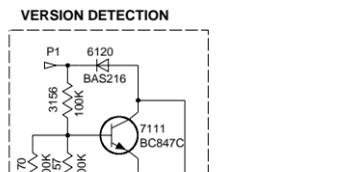
TUNER BOARD - CIRCUIT DIAGRAM



VERSION PROGRAMMING COMPONENTS

VERSION	6120	3156	3157	3170	7111
/00 /02 FM/MW/LW					
/00 /02 FM/MW					
/01 FM/MW					
/14 FM-OIRT/MW					
/17 FM/AM					
/06 JAPAN					

component mounted



- 1105 A1
- 1121 F14
- 1122 E14
- 2101 A3
- 2103 C7
- 2104 A3
- 2106 B4
- 2107 F4
- 2108 F3
- 2109 F3
- 2110 B3
- 2111 B3
- 2112 B9
- 2119 H6
- 2120 H6
- 2122 I6
- 2123 I6
- 2124 I6
- 2125 H6
- 2126 E7
- 2127 E7
- 2128 B8
- 2129 C7
- 2130 F12
- 2131 F8
- 2132 F8
- 2133 F8
- 2134 I9
- 2135 I9
- 2136 H14
- 2137 H14
- 2138 F9
- 2139 G9
- 2140 G10
- 2141 F10
- 2144 F12
- 2145 E11
- 2146 D13
- 2147 E12
- 2148 D12
- 2149 H7
- 2150 A10
- 2152 E4
- 2153 E5
- 2155 D5
- 2159 F6
- 2161 C11
- 2163 D11
- 2164 F10
- 2165 C7
- 2166 D12
- 2167 E12
- 2169 G8
- 2186 H13
- 2187 H12
- 2188 H12
- 2189 H13
- 2190 G12
- 2191 H11
- 2192 G12
- 2193 G11
- 2194 G11
- 2195 G10
- 2196 H12
- 2197 H11
- 3101 E4
- 3102 D4
- 3103 C7
- 3104 A7
- 3105 B6
- 3106 B2
- 3107 C3
- 3108 D2
- 3109 D3
- 3113 B9
- 3119 A9
- 3123 H3
- 3125 H3
- 3128 H4
- 3132 H5
- 3134 H6
- 3137 I7
- 3141 E7
- 3142 E7
- 3143 G7
- 3144 G8
- 3145 F8
- 3152 H4
- 3153 H4
- 3155 F12
- 3156 C12
- 3157 C12
- 3158 E13
- 3159 D13
- 3160 D13
- 3161 D13
- 3166 F13
- 3167 F12
- 3169 D11
- 3170 C12
- 3176 G7
- 3180 I3
- 3181 E6
- 3186 F13
- 3187 H12
- 3188 H12
- 3189 H12
- 3190 H12
- 3191 H12
- 3192 H12
- 3193 H13
- 3194 H3
- 3195 H12
- 3196 H10
- 4101 E2
- 4102 E2
- 4104 I5
- 4105 A9
- 4109 C3
- 4110 C4
- 5102 E3
- 5103 F2
- 5109 A9
- 5110 B10
- 5111 A8
- 5112 A11
- 5114 B11
- 5119 G9
- 5121 E11
- 5122 H5
- 5123 G5
- 5130 E6
- 5131 C6
- 6103 A3
- 6105-1 B4
- 6105-2 G6
- 6106 B4
- 6120 B13
- 6130 D5
- 6131 C5
- 6181 G12
- 6183 H10
- 7101 B8
- 7102 C7
- 7103 H7
- 7104 D3
- 7105 D3
- 7109 H3
- 7111 C13
- 7119 A9
- 7122 I4
- 7124 I7
- 7180 H13
- 7181 H13
- 7182 H11
- 7183 H11
- 7184 A2
- 7185 A2
- 7186 E2
- 7187 E2
- 7188 H11
- 7189 H11
- 7190 G12
- 7191 H11
- 7192 G14
- 7193 G14
- 7194 G14
- 7195 G14
- 7196 H12
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- 7235 H11
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- 7260 H11
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- 7263 H11
- 7264 H11
- 7265 H11
- 7266 H11
- 7267 H11
- 7268 H11
- 7269 H11
- 7270 H11
- 7271 H11
- 7272 H11
- 7273 H11
- 7274 H11
- 7275 H11
- 7276 H11
- 7277 H11
- 7278 H11
- 7279 H11
- 7280 H11
- 7281 H11
- 7282 H11
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- 7284 H11
- 7285 H11
- 7286 H11
- 7287 H11
- 7288 H11
- 7289 H11
- 7290 H11
- 7291 H11
- 7292 H11
- 7293 H11
- 7294 H11
- 7295 H11
- 7296 H11
- 7297 H11
- 7298 H11
- 7299 H11
- 7300 H11

LEGEND

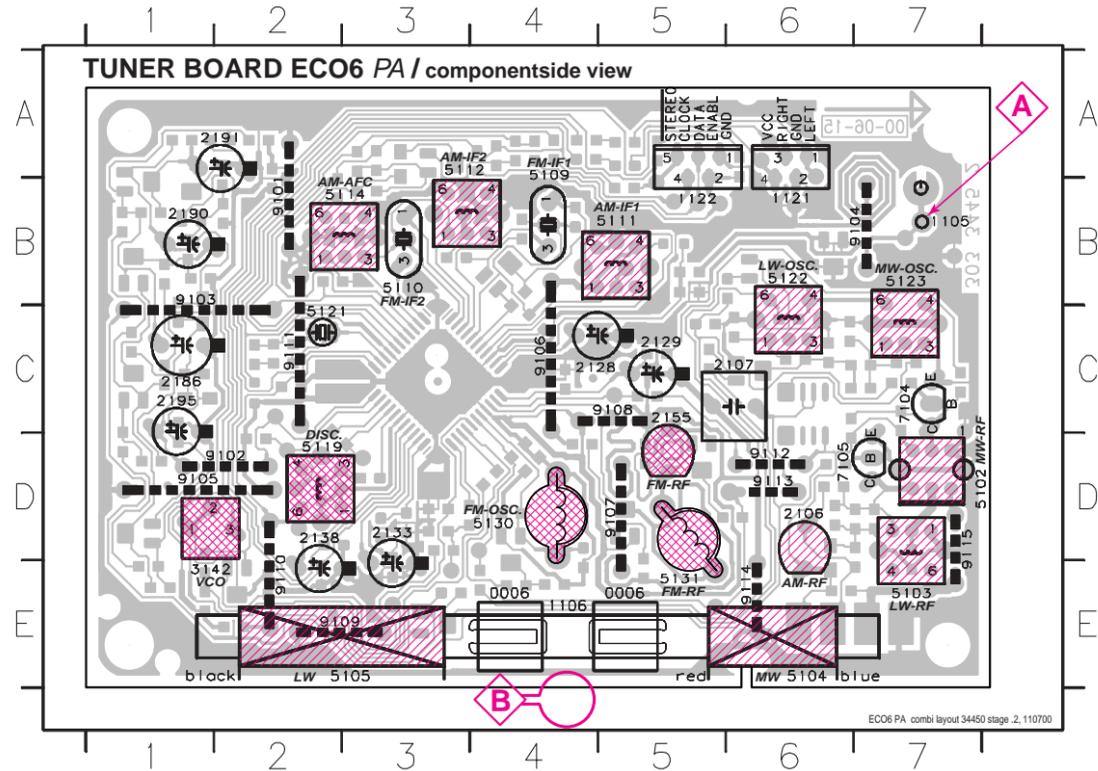
- * ... only assembled in FM/AM-version
- p... for provision only
- USA... for USA version only
- LW... for LW version only
- LW frame... for LW version with frame aerial only
- E_EU... for East European version only
- J... for JAPAN version only

...V FM mode stereo
 ...V MW mode
 ...V LW mode

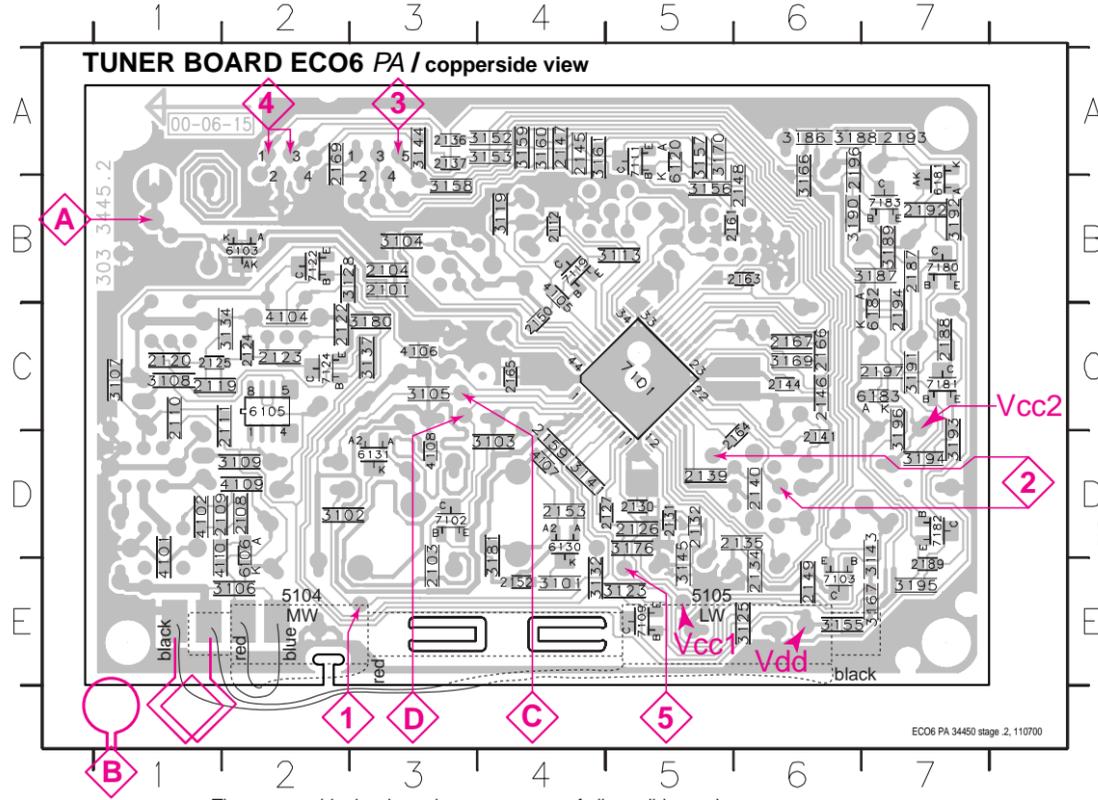
voltages measured while set is tuned to a strong transmitter

TUNER BOARD ECO6 - LAYOUT DIAGRAM

1105 B7 2106 D6 2129 C5 2155 C5 2191 A2 5102 D7 5110 B3 5114 B3 5122 B6 5131 E5 9101 B2 9104 B7 9107 D5 9110 E2 9113 D6
 1121 B6 2107 C6 2133 D3 2186 C1 2195 C1 5103 E7 5111 B4 5119 D2 5123 B7 7104 C7 9102 D2 9105 D1 9108 C5 9111 C2 9114 E6
 1122 B5 2128 C4 2138 D2 2190 B1 3142 E1 5109 B4 5112 B3 5121 C2 5130 D4 7105 D6 9103 B1 9106 C4 9109 E2 9112 D6 9115 D7



2101 B3 2119 C1 2130 D5 2140 D6 2150 C4 2166 C6 2194 C7 3106 E2 3128 B2 3152 A4 3161 A4 3186 A6 3194 D7 4107 D4 6130 D4 7109 E5 7183 B7
 2103 E3 2120 C1 2131 D5 2141 D6 2152 E4 2167 C6 2196 A6 3107 C1 3132 E4 3153 A4 3166 B6 3187 B7 3195 E7 4108 D3 6131 D3 7111 A5
 2104 B3 2122 C2 2132 D5 2144 C6 2153 D4 2169 A2 2197 C7 3108 C1 3134 C2 3155 E6 3167 E7 3188 A6 3196 C7 4109 D2 6181 B7 7119 B5
 2108 D2 2123 C2 2134 E6 2145 A4 2159 D4 2187 B7 3101 E4 3109 D2 3137 C3 3156 B5 3169 C6 3189 B7 4101 D1 4110 D1 6182 C7 7122 B2
 2109 D1 2124 C2 2135 D6 2146 C6 2161 B5 2188 C7 3102 D2 3113 B5 3141 D4 3157 A5 3170 A5 3190 B6 4102 D1 6103 B2 6183 C7 7124 C2
 2110 C1 2125 C1 2136 A3 2147 A4 2163 B6 2189 E7 3103 D4 3119 B5 3143 D7 3158 B3 3176 D5 3191 C7 4104 C2 6105 C2 7101 C5 7180 B7
 2111 C2 2126 D5 2137 A3 2148 B6 2164 D6 2192 B7 3104 B3 3123 E5 3144 A3 3159 A4 3180 C3 3192 B7 4105 B4 6106 D2 7102 D3 7181 C7
 2112 B4 2127 D5 2139 D5 2149 E6 2165 C4 3105 C3 3125 E6 3145 E5 3160 A4 3181 D4 3193 D7 4106 C3 6120 A5 7103 E6 7182 D7



These assembly drawings show a summary of all possible versions.
 For components used in a specific version see schematic diagram respectively partslist.

TUNER ADJUSTMENT TABLE (ECO6 FM/MW- and FM/MW/LW - versions with ferrite antenna)

Waverange	Input frequency	Input	Tuned to	Adjust	Output	Scope/Voltmeter
VARICAP ALIGNMENT						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)			108MHz	5130		8V -0.2V
			87.5MHz (65.81MHz)	check		4.3V -0.5V (1.2V -0.5V)
MW FM/AM-version, 10kHz grid 530 - 1700kHz			1700kHz	5123		8V -0.2V
			530kHz	check		1.1V -0.4V
FM/MW-version, 9kHz grid 531 - 1602kHz			1602kHz	5123	1	6.9V -0.2V
			531kHz	check		1.1V -0.4V
LW 153 - 279kHz			279kHz	5122		8V -0.2V
			153kHz	check		1.1V -0.4V
MW FM/MW/LW- version, 9kHz grid 531 - 1602kHz			1602kHz	5123		8V -0.2V
			531kHz	check		1.1V -0.4V
FM IF						
FM	10.7MHz, 45mV continuous wave	D		5119	2	0 - 3 mV DC
FM RF						
FM 87.5 - 108MHz (65.81 - 74, 87.5 - 108MHz)	108MHz	A mod=1kHz $\Delta f = -22.5\text{kHz}$	108MHz	2155	4	MAX
	87.5MHz (65.81MHz)		87.5MHz (65.81MHz)	5131		
VCO						
FM	98MHz, 1mV continuous wave	A	98MHz	3142	3	152kHz -1kHz ¹⁾
AM IF						
MW	450kHz connect pin 6 of IC 7101 (AM Osc.) with 2.2k% to Vcc	C $\Delta f = -10\text{kHz}$ $V_{RF} = 0.5\text{mV}$ (as low as possible) see remark 2)		5111	5	
				5112		
AM AFC		C		5114	2	0 - 2 mV DC
AM RF³⁾						
LW	198kHz	B 	198kHz	5105 LW ferrite coil	5	
MW FM/MW/LW- and FM/MW-version (9kHz grid) 531 - 1602kHz	1494kHz		2106			
	558kHz		5104 MW ferrite coil			
MW FM/AM-version, 10kHz grid 530 - 1700kHz	1500kHz		2106			
	560kHz	5104 MW ferrite coil				

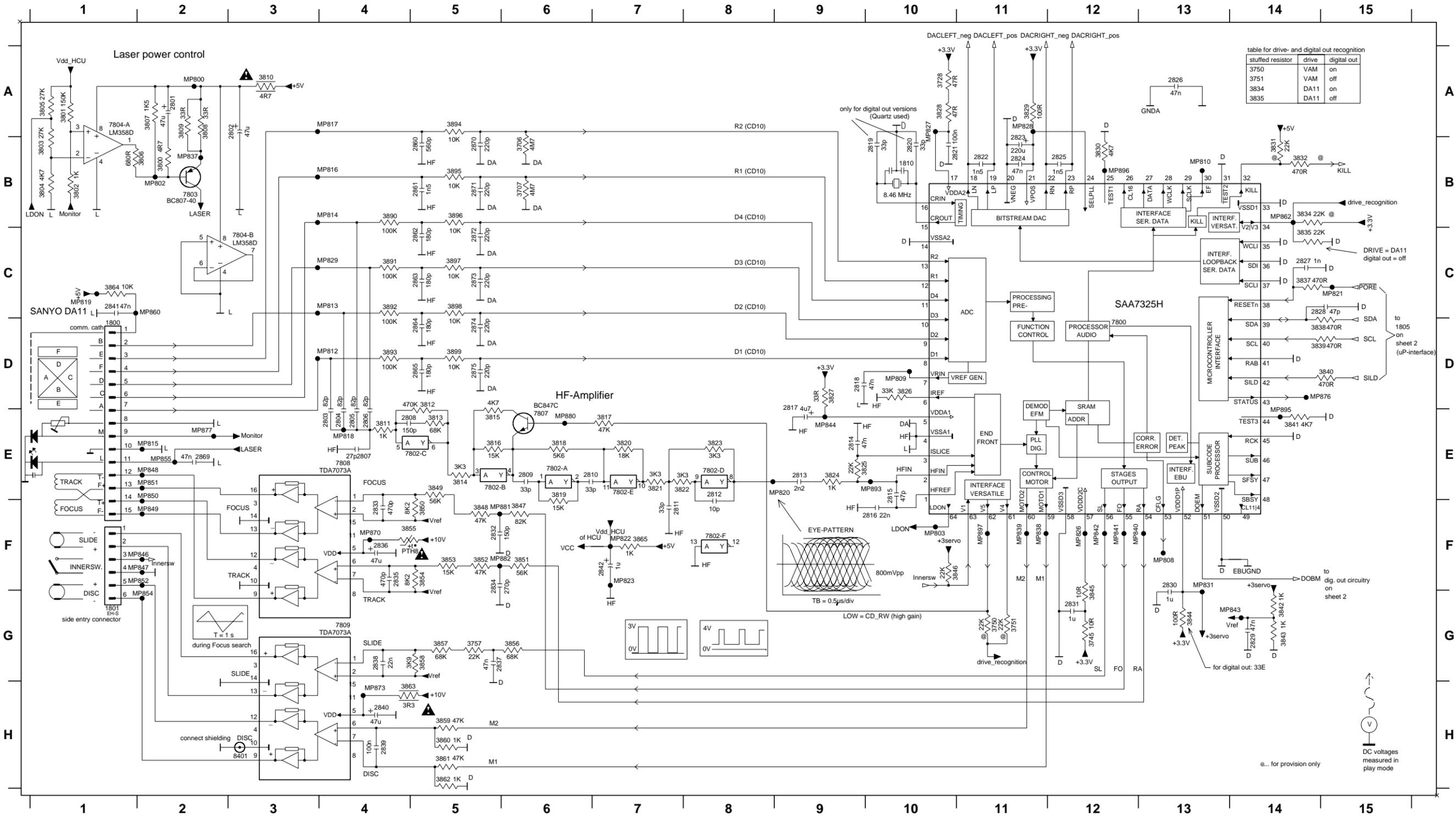
Use Service Testprogram. By selecting the TUNER TEST test frequencies will be stored as preset frequencies automatically.

- 1) If sensitivity of frequency counter is too low adjust to max. channel separation (input signal: stereo left 90% + 9%, adjust output on right channel to minimum)
- 2) RC network serves for damping the IF-filter while adjusting the other one.
- 3) LW has to be aligned before MW.

Repeat

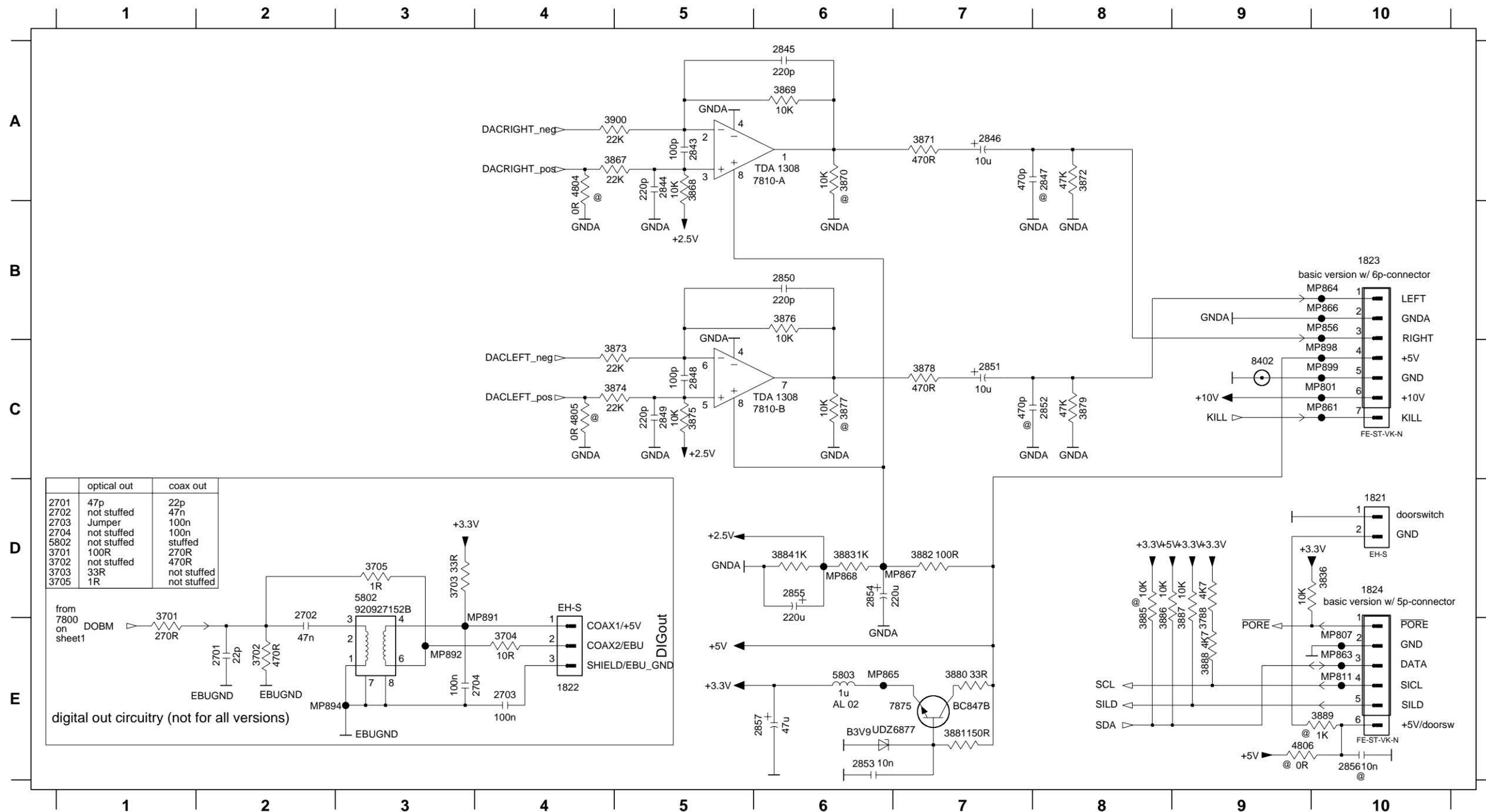
CD BOARD - CIRCUIT DIAGRAM

1800 D1	2807 E4	2815 E10	2823 B11	2831 G12	2839 H4	2864 D5	2875 D5	3800 B2	3808 A2	3816 E5	3824 E9	3832 B14	3842 G14	3850 F5	3858 G5	3890 B4	3898 C5	7802-F F8	MP800 A2	MP814 B4	MP822 F7	MP838 F11	MP847 F2	MP860 C2	MP882 F5
1801 G1	2808 E4	2816 F10	2824 B11	2832 F5	2840 H4	2865 D5	2876 B6	3801 A1	3809 A2	3817 E7	3825 E9	3834 B14	3843 G14	3851 F6	3859 H5	3891 C4	3899 D5	7803 B2	MP802 B2	MP815 E2	MP823 F7	MP839 F11	MP848 E2	MP862 B14	MP883 E10
2801 A2	2809 E6	2817 D9	2825 B12	2833 F4	2841 C1	2869 E2	2877 B6	3802 B1	3810 A3	3818 E6	3826 D10	3835 C14	3844 G13	3852 F5	3860 H5	3892 C4	3899 D12	7804-A A1	MP803 F10	MP816 B4	MP826 F12	MP840 F12	MP849 F2	MP870 F4	MP895 E14
2802 A3	2810 E6	2818 D9	2826 A13	2834 F5	2842 F7	2870 B5	2878 A10	3803 B1	3811 E4	3819 E6	3827 D9	3837 C14	3845 G12	3853 F5	3861 H5	3893 D4	3899 D10	7804-B C3	MP808 F13	MP817 A4	MP827 A10	MP841 F12	MP850 E2	MP873 H4	MP896 B12
2803 A4	2811 F7	2819 B10	2827 C14	2835 F4	2843 B5	2871 B5	2879 G12	3804 B1	3812 D5	3820 E7	3828 A10	3838 D14	3846 F10	3854 F5	3862 H5	3894 A5	3899 D13	7804-C E5	MP809 D10	MP818 E4	MP828 A11	MP842 F12	MP851 E2	MP876 D14	MP897 F11
2804 E4	2812 E8	2820 B10	2828 C14	2836 F4	2844 B5	2872 C5	2879 G11	3805 A1	3813 E5	3821 E7	3829 A11	3839 D14	3847 F6	3855 F4	3863 H4	3895 B5	3899 D14	7804-D E8	MP810 B13	MP819 C1	MP829 C4	MP843 G14	MP852 G2	MP877 E2	
2805 E4	2813 E9	2821 B11	2829 G14	2837 F5	2845 B5	2873 C5	2879 G11	3806 B2	3814 E5	3822 E7	3830 B12	3840 D15	3848 F5	3856 G6	3864 C1	3896 B5	3899 D15	7802-E E7	MP812 D4	MP820 E9	MP831 F13	MP844 E9	MP854 G2	MP880 E6	
2806 E4	2814 E9	2822 B11	2830 F13	2838 G4	2846 C5	2874 D5	2879 G5	3807 A2	3815 E5	3823 E8	3831 B14	3841 E14	3849 E5	3857 G5	3865 F7	3897 C5	3899 D16	7802-E E7	MP813 C4	MP821 C15	MP837 B2	MP846 F2	MP855 E2	MP881 F5	

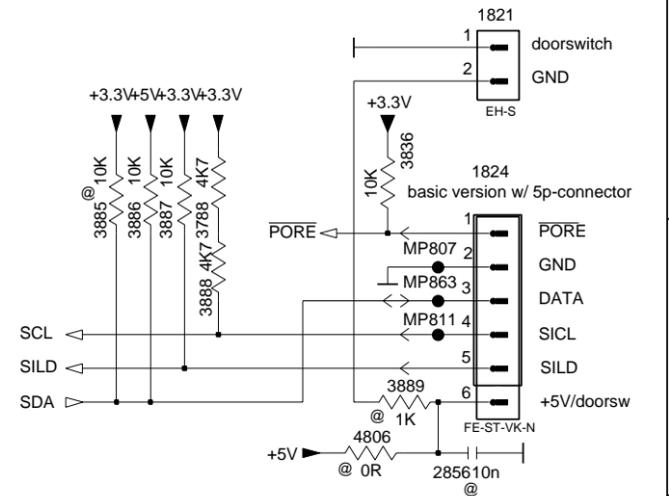
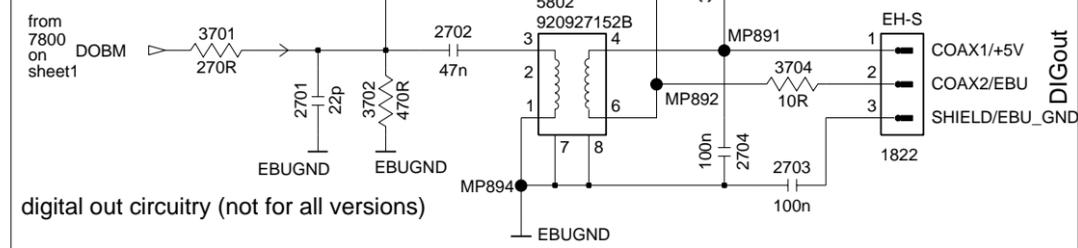


CD BOARD - CIRCUIT DIAGRAM

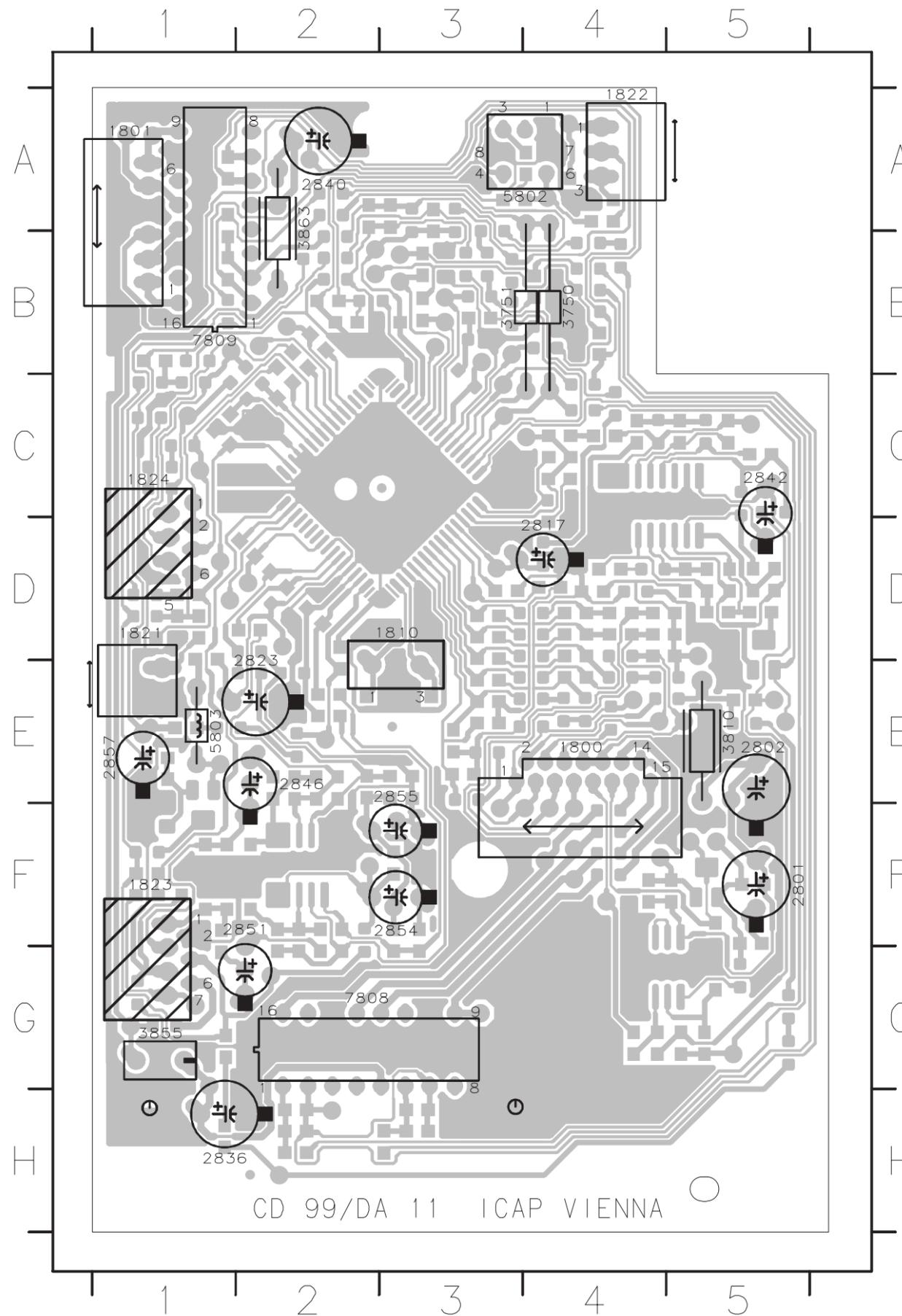
1821 D10	2702 E2	2845 A6	2850 B6	2855 D6	3703 D3	3867 A5	3872 A8	3877 C6	3882 D7	3887 E9	4805 C4	7810-A A5	MP807 E10	MP864 B10	MP891 E4
1822 E4	2703 E4	2846 A7	2851 C7	2856 E10	3704 E4	3868 A5	3873 C5	3878 C7	3883 D6	3888 E9	4806 E9	7810-B C5	MP811 E10	MP865 E6	MP892 E3
1823 B10	2704 E3	2847 A8	2852 C8	2857 E6	3705 D3	3869 A6	3874 C5	3879 C8	3884 D6	3889 E10	5802 D3	7875 E7	MP856 B10	MP866 B10	MP894 E2
1824 D10	2843 A5	2848 C5	2853 E6	3701 E1	3788 E9	3870 A6	3875 C5	3880 E7	3885 E8	3900 A5	5803 E6	8402 C9	MP861 C10	MP867 D7	MP898 C10
2701 E2	2844 A5	2849 C5	2854 D6	3702 E2	3836 D10	3871 A7	3876 B6	3881 E7	3886 E8	4804 A4	6877 E7	MP801 C10	MP863 E10	MP868 D6	MP899 C10



	optical out	coax out
2701	47p	22p
2702	not stuffed	47n
2703	Jumper	100n
2704	not stuffed	100n
5802	not stuffed	stuffed
3701	100R	270R
3702	not stuffed	470R
3703	33R	not stuffed
3705	1R	not stuffed



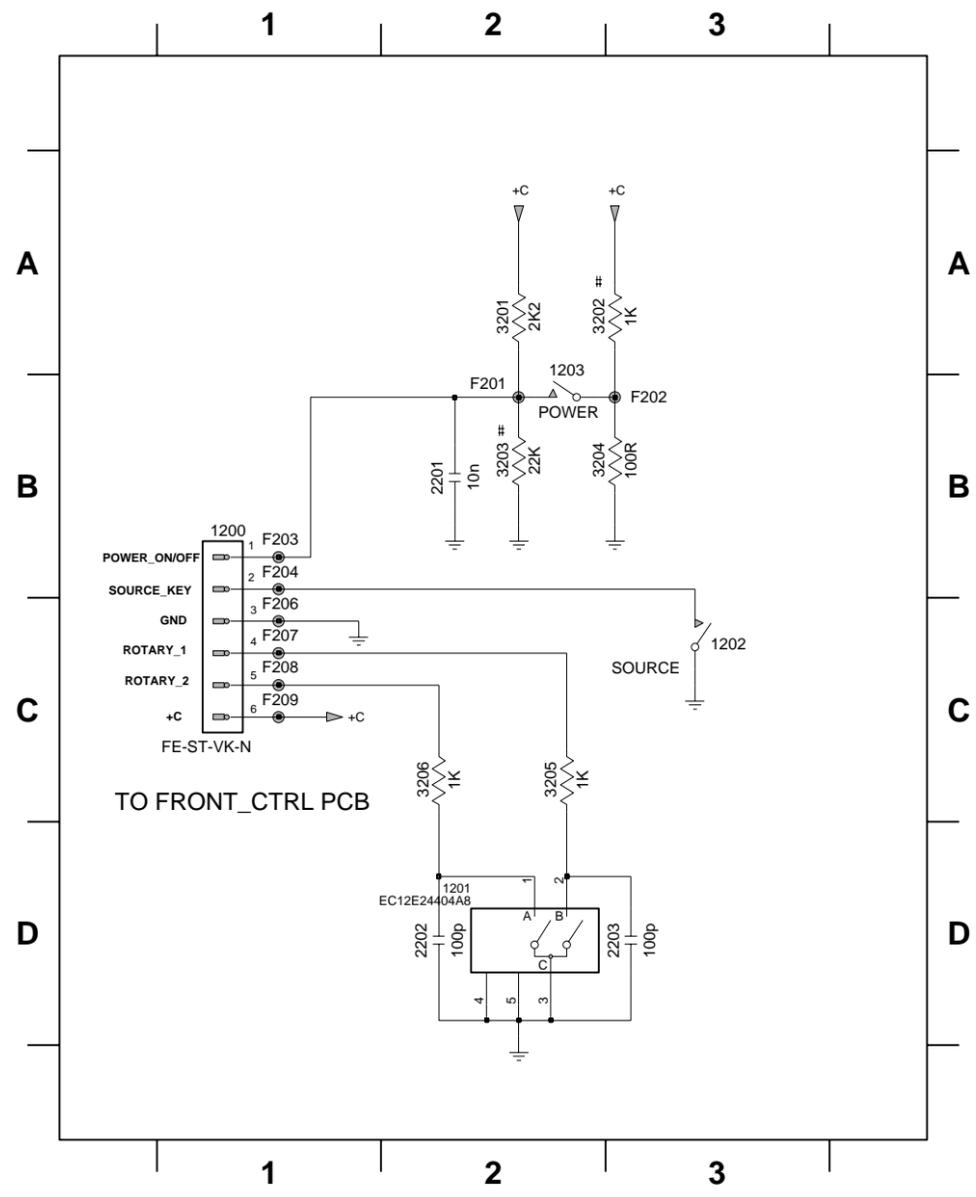
CD BOARD - LAYOUT DIAGRAM
(COMPONENT SIDE VIEW)



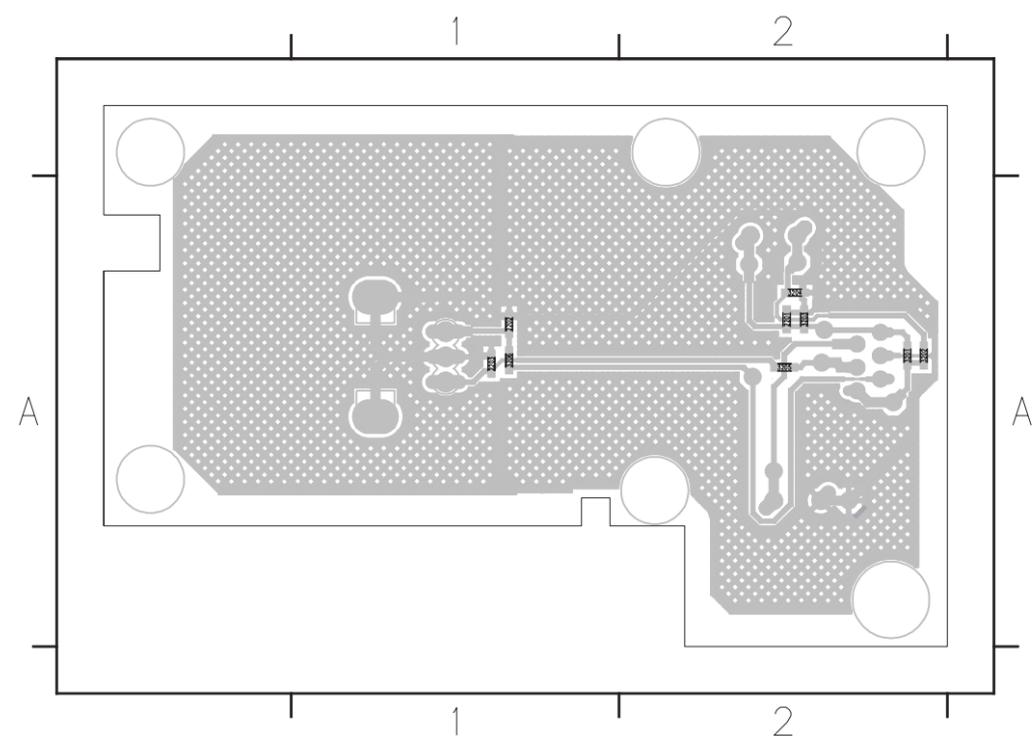
- 1800 F4
- 1801 A1
- 1810 D3
- 1821 E1
- 1822 A4
- 1823 G1
- 1824 D1
- 2801 F5
- 2802 E5
- 2817 D4
- 2823 E2
- 2836 G1
- 2840 A2
- 2842 C5
- 2846 E2
- 2851 G2
- 2854 F3
- 2855 E3
- 2857 E1
- 3750 B4
- 3751 B4
- 3810 E5
- 3855 G1
- 3863 A2
- 5802 A4
- 5803 E1
- 7808 G2
- 7809 A1
- 8401 H3
- 8402 H1

VOLUME BOARD - CIRCUIT DIAGRAM

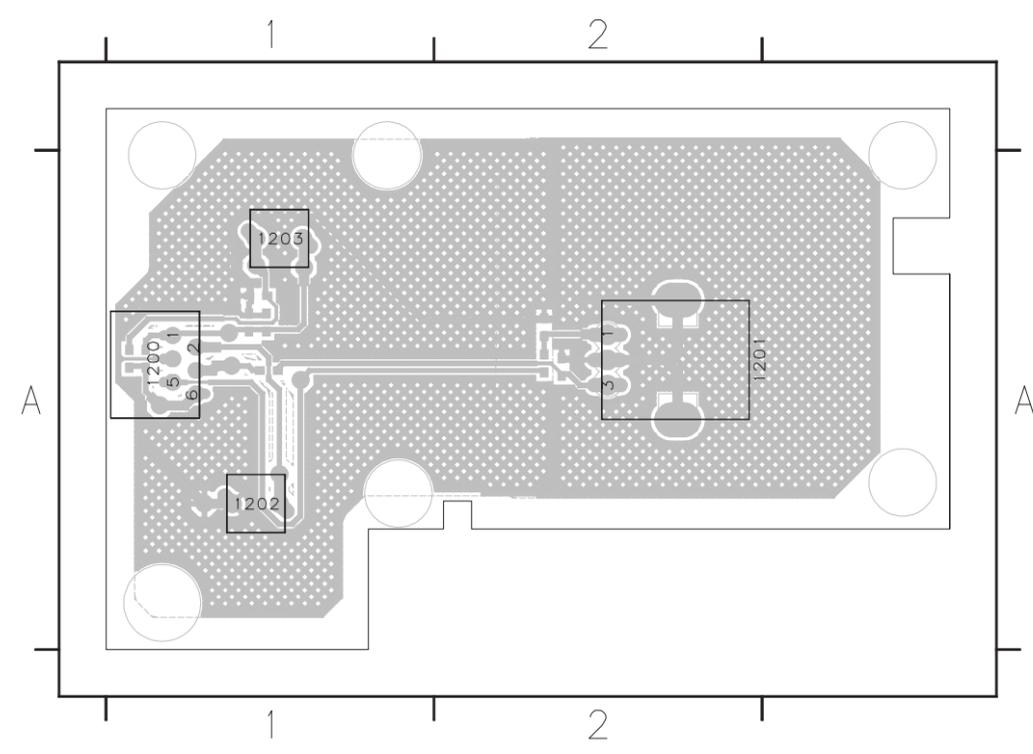
1200 B1	1203 B2	2203 D3	3203 B2	3206 C2	F203 B1	F207 C1
1201 D2	2201 B2	3201 A2	3204 B2	F201 B2	F204 B1	F208 C1
1202 C3	2202 D2	3202 A2	3205 C2	F202 B3	F206 C1	F209 C1



VOLUME BOARD - LAYOUT DIAGRAM



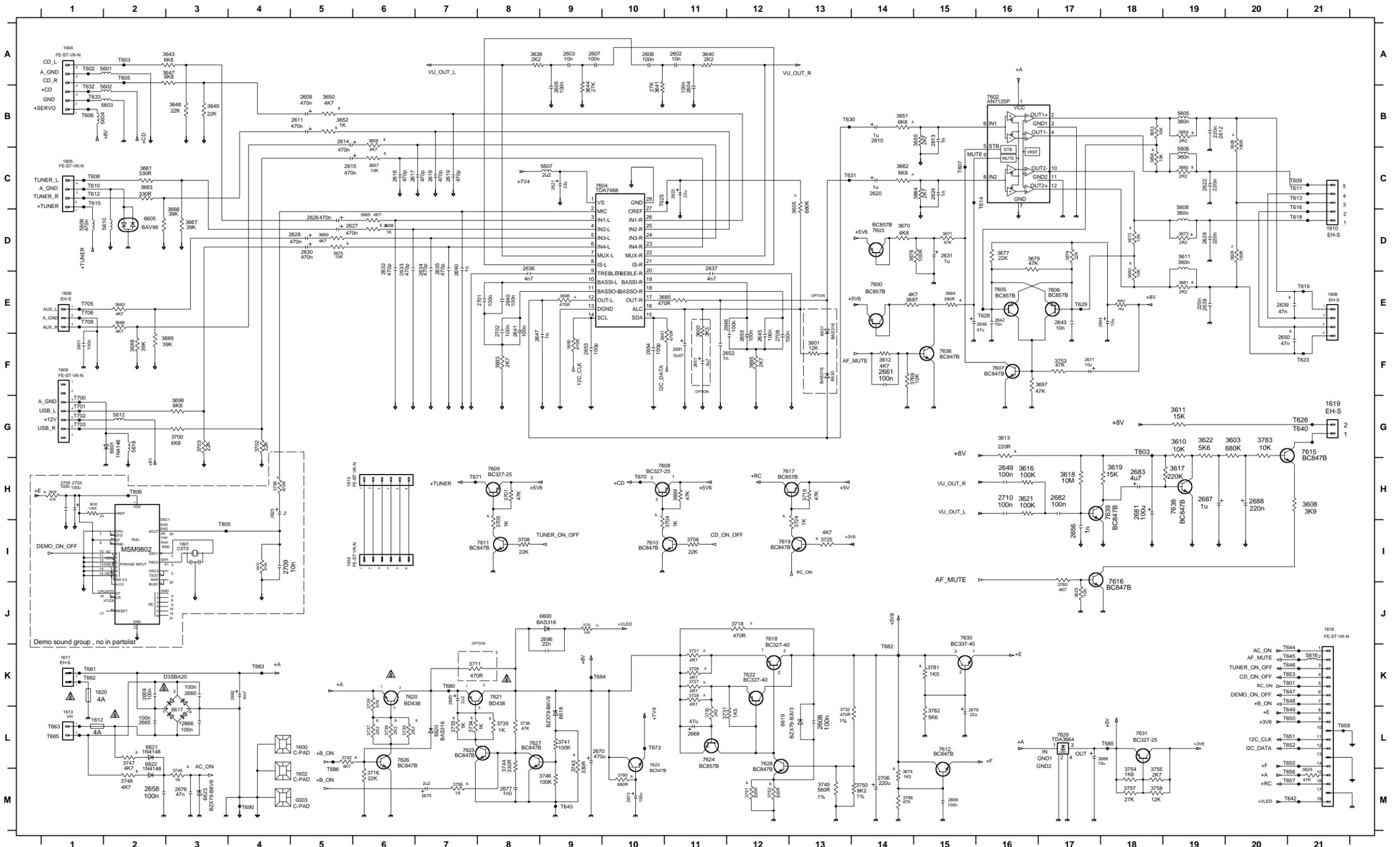
2201	A2
2202	A1
2203	A1
2201	A2
2202	A2
2203	A2
2204	A2
2205	A2
3206	A1



1200	A1
1201	A2
1202	A1
1203	A1

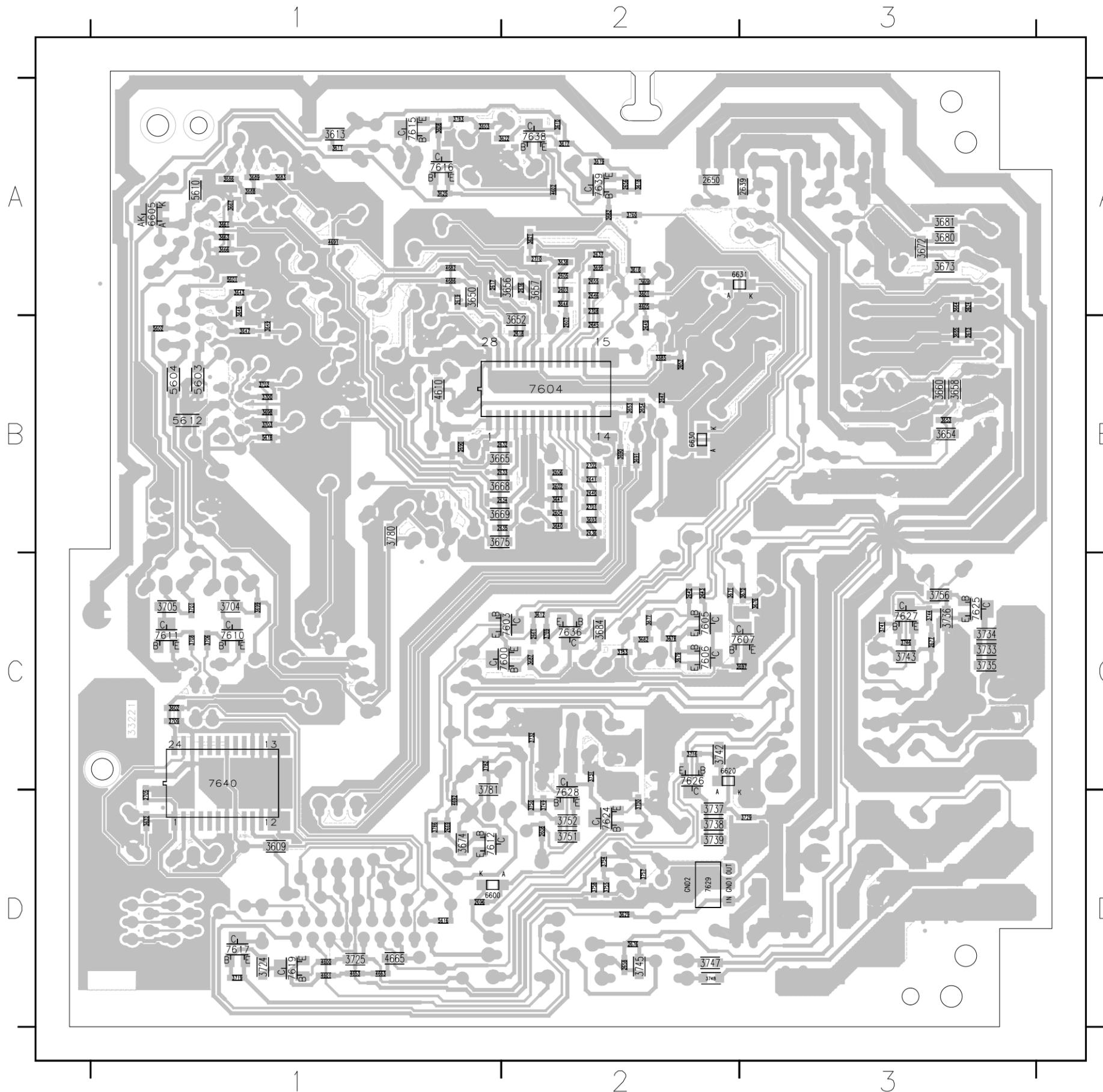
POWER BOARD - CIRCUIT DIAGRAM

0003 M5	1610 D21	2601 F1	2610 B14	2619 C7	2628 D5	2637 D11	2646 E12	2655 F12	2666 L3	2679 L15	2696 J9	3600 E11	3612 F14	3626 B20	3647 A3	3656 B6	3666 D3	3675 D5	3684 E15	3695 F12	3704 H1	3720 J9	3731 L11	3741 L9	3750 M14	3760 J17	5603 B2	5612 G2	6620 L7	7604 C9	7615 G21	7624 L11	7638 H19	T609 C21	T619 E21	T633 B1	T649 L21	T661 K1	T683 K4	T705 E1
1600 L5	1611 K1	2602 A11	2611 B5	2620 C14	2629 D19	2638 E19	2647 F9	2656 H17	2668 L11	2681 H18	2701 E8	3601 F13	3613 G16	3628 D29	3648 B3	3657 C6	3667 D3	3676 D14	3686 E11	3696 E9	3705 I8	3721 K11	3732 L13	3742 L5	3751 M12	3769 F15	5604 B1	5616 K21	6621 L2	7605 E16	7616 H18	7625 L7	7639 H18	T610 C1	T623 F21	T640 G21	T650 L21	T662 K1	T684 K9	T706 E1
1601 L3	1612 L1	2603 A9	2612 B19	2621 C9	2630 D5	2639 E20	2648 E16	2658 M2	2669 M15	2682 H17	2702 E8	3602 I4	3616 H16	3629 M21	3649 B3	3658 C18	3668 D6	3677 D16	3686 E14	3697 F17	3706 H1	3724 H3	3733 L7	3743 L8	3752 M12	3760 M10	5605 B19	5618 G2	6622 L2	7606 F17	7617 H13	7626 L6	7640 I2	T611 C21	T625 C10	T642 M21	T651 L21	T663 L1	T685 L18	T708 E1
1602 M5	1613 L1	2604 B11	2613 B15	2622 C19	2631 D15	2640 E8	2649 H16	2659 K2	2670 L9	2683 H18	2703 H1	3603 G20	3617 H19	3632 H1	3650 B5	3660 C19	3669 D5	3678 D17	3687 E14	3698 G3	3708 I8	3725 H3	3734 L7	3744 L8	3753 F17	3761 K15	5606 C19	5609 J9	6623 M3	7607 F16	7618 J12	7627 L9	T602 A1	T612 C1	T626 G21	T643 M9	T652 L21	T665 L1	T686 M5	T801 K21
1604 A1	1615 H5	2605 B9	2614 B5	2623 C11	2632 D6	2641 E8	2650 F20	2660 K3	2671 F17	2686 L18	2705 H1	3605 C13	3618 H17	3638 A8	3651 B14	3661 C2	3670 D14	3679 D16	3688 F2	3699 H11	3709 H4	3728 K11	3735 L8	3745 M3	3754 M18	3762 L15	5607 C9	5609 G2	6630 F13	7608 H11	7619 H13	7628 L12	T603 A2	T613 C21	T628 E16	T644 K21	T653 K21	T670 H10	T690 M4	T803 G18
1605 C1	1616 L5	2606 A10	2615 C5	2624 C15	2633 D6	2642 E16	2651 F11	2661 F14	2673 M10	2687 H19	2706 H14	3608 H21	3619 H18	3640 A11	3652 B5	3662 C14	3671 D15	3680 E18	3689 F3	3700 G3	3711 K7	3727 K11	3736 L8	3746 M9	3755 M18	3763 G20	5608 D19	5605 D2	6631 E13	7609 H8	7629 K6	7639 L17	T605 A2	T614 C16	T629 E17	T645 K21	T655 L21	T671 H7	T700 G1	T805 I3
1606 E1	1618 J21	2607 A9	2616 C6	2625 H4	2634 D7	2643 E17	2652 F12	2662 K4	2675 M7	2688 H20	2708 F12	3609 H1	3621 H16	3641 B10	3653 B18	3663 C2	3672 D18	3681 E9	3690 F9	3701 H8	3716 M6	3728 K11	3737 L6	3747 L2	3756 M7	3766 M14	5609 D1	5617 L3	7600 E14	7610 H10	7621 K8	7630 J15	T606 B1	T615 C1	T630 B13	T646 K21	T656 M21	T673 L10	T701 G1	T806 H2
1608 E21	1619 G21	2608 L13	2617 C6	2626 D5	2635 D7	2644 E18	2653 F9	2663 K7	2676 M3	2690 D7	2709 I4	3610 G19	3622 G19	3643 A3	3654 B19	3664 C15	3673 D19	3682 E18	3691 F10	3702 G4	3718 J12	3729 K6	3738 L6	3748 M2	3757 M18	5601 A2	5610 D1	6618 L9	7602 B14	7611 B8	7622 K12	7631 L18	T607 C15	T616 C21	T631 C13	T647 K21	T657 M21	T680 K7	T702 G1	T807 G1
1609 F1	1620 K1	2609 B5	2618 C7	2627 D5	2636 D8	2645 F12	2654 F10	2665 L2	2677 M8	2691 F11	2710 H16	3611 G19	3625 J17	3644 B9	3655 B15	3665 D6	3674 M14	3683 E2	3693 F8	3703 G3	3719 H13	3730 L11	3739 L6	3749 M13	3758 M18	5602 B2	5611 D19	6619 L12	7603 D14	7612 L15	7623 L10	7636 F15	T608 C1	T618 D21	T632 B1	T648 K21	T658 L21	T682 K14	T703 G1	



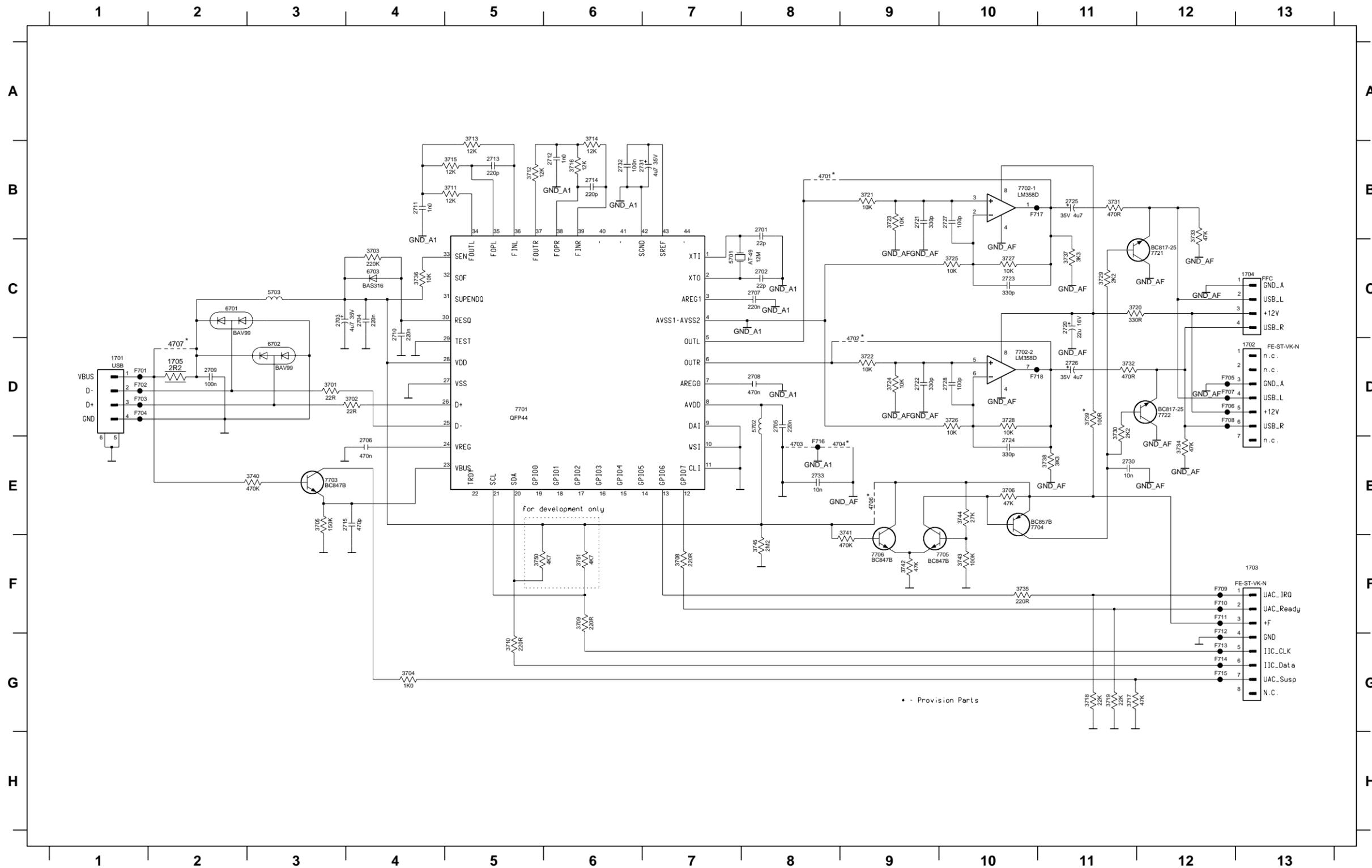
NOTE
 & EXPRESS 0805 INSTANCES
 A EXPRESS AI INSTANCES

POWER BOARD - LAYOUT DIAGRAM
(COPPER SIDE VIEW)



A	1	3613	3614	3615	3616	3617	3618	3619	3620	3621	3622	3623	3624	3625	3626	3627	3628	3629	3630	3631	3632	3633	3634	3635	3636	3637	3638	3639	3640	3641	3642	3643	3644	3645	3646	3647	3648	3649	3650	3651	3652	3653	3654	3655	3656	3657	3658	3659	3660	3661	3662	3663	3664	3665	3666	3667	3668	3669	3670	3671	3672	3673	3674	3675	3676	3677	3678	3679	3680	3681	3682	3683	3684	3685	3686	3687	3688	3689	3690	3691	3692	3693	3694	3695	3696	3697	3698	3699	3700	3701	3702	3703	3704	3705	3706	3707	3708	3709	3710	3711	3712	3713	3714	3715	3716	3717	3718	3719	3720	3721	3722	3723	3724	3725	3726	3727	3728	3729	3730	3731	3732	3733	3734	3735	3736	3737	3738	3739	3740	3741	3742	3743	3744	3745	3746	3747	3748	3749	3750	3751	3752	3753	3754	3755	3756	3757	3758	3759	3760	3761	3762	3763	3764	3765	3766	3767	3768	3769	3770	3771	3772	3773	3774	3775	3776	3777	3778	3779	3780	3781	3782	3783	3784	3785	3786	3787	3788	3789	3790	3791	3792	3793	3794	3795	3796	3797	3798	3799	3800			
B	1	5610	5611	5612	5613	5614	5615	5616	5617	5618	5619	5620	5621	5622	5623	5624	5625	5626	5627	5628	5629	5630	5631	5632	5633	5634	5635	5636	5637	5638	5639	5640	5641	5642	5643	5644	5645	5646	5647	5648	5649	5650	5651	5652	5653	5654	5655	5656	5657	5658	5659	5660	5661	5662	5663	5664	5665	5666	5667	5668	5669	5670	5671	5672	5673	5674	5675	5676	5677	5678	5679	5680	5681	5682	5683	5684	5685	5686	5687	5688	5689	5690	5691	5692	5693	5694	5695	5696	5697	5698	5699	5700	5701	5702	5703	5704	5705	5706	5707	5708	5709	5710	5711	5712	5713	5714	5715	5716	5717	5718	5719	5720	5721	5722	5723	5724	5725	5726	5727	5728	5729	5730	5731	5732	5733	5734	5735	5736	5737	5738	5739	5740	5741	5742	5743	5744	5745	5746	5747	5748	5749	5750	5751	5752	5753	5754	5755	5756	5757	5758	5759	5760	5761	5762	5763	5764	5765	5766	5767	5768	5769	5770	5771	5772	5773	5774	5775	5776	5777	5778	5779	5780	5781	5782	5783	5784	5785	5786	5787	5788	5789	5790	5791	5792	5793	5794	5795	5796	5797	5798	5799	5800
C	1	3705	3706	3707	3708	3709	3710	3711	3712	3713	3714	3715	3716	3717	3718	3719	3720	3721	3722	3723	3724	3725	3726	3727	3728	3729	3730	3731	3732	3733	3734	3735	3736	3737	3738	3739	3740	3741	3742	3743	3744	3745	3746	3747	3748	3749	3750	3751	3752	3753	3754	3755	3756	3757	3758	3759	3760	3761	3762	3763	3764	3765	3766	3767	3768	3769	3770	3771	3772	3773	3774	3775	3776	3777	3778	3779	3780	3781	3782	3783	3784	3785	3786	3787	3788	3789	3790	3791	3792	3793	3794	3795	3796	3797	3798	3799	3800																																																																																															
D	1	3322.1	3322.2	3322.3	3322.4	3322.5	3322.6	3322.7	3322.8	3322.9	3322.10	3322.11	3322.12	3322.13	3322.14	3322.15	3322.16	3322.17	3322.18	3322.19	3322.20	3322.21	3322.22	3322.23	3322.24	3322.25	3322.26	3322.27	3322.28	3322.29	3322.30	3322.31	3322.32	3322.33	3322.34	3322.35	3322.36	3322.37	3322.38	3322.39	3322.40	3322.41	3322.42	3322.43	3322.44	3322.45	3322.46	3322.47	3322.48	3322.49	3322.50	3322.51	3322.52	3322.53	3322.54	3322.55	3322.56	3322.57	3322.58	3322.59	3322.60	3322.61	3322.62	3322.63	3322.64	3322.65	3322.66	3322.67	3322.68	3322.69	3322.70	3322.71	3322.72	3322.73	3322.74	3322.75	3322.76	3322.77	3322.78	3322.79	3322.80	3322.81	3322.82	3322.83	3322.84	3322.85	3322.86	3322.87	3322.88	3322.89	3322.90	3322.91	3322.92	3322.93	3322.94	3322.95	3322.96	3322.97	3322.98	3322.99	3322.100																																																																																											

USB BOARD - CIRCUIT DIAGRAM



- 1701 D1
- 1702 D13
- 1703 F13
- 1704 C13
- 1705 D2
- 1706 E4
- 1707 C8
- 1708 C4
- 1709 D8
- 1710 F12
- 1711 F12
- 1712 F12
- 1713 G12
- 1714 G12
- 1715 G12
- 1716 E8
- 1717 B10
- 1718 D10
- 1719 D1
- 1720 C11
- 1721 B9
- 1722 D9
- 1723 C10
- 1724 E10
- 1725 B11
- 1726 D11
- 1727 B10
- 1728 D10
- 1729 E11
- 1730 B7
- 1731 B6
- 1732 B6
- 1733 E8
- 1734 D3
- 1735 D4
- 1736 C4
- 1737 G4
- 1738 E3
- 1739 E10
- 1740 F7
- 1741 F6
- 1742 G5
- 1743 B5
- 1744 B5
- 1745 A5
- 1746 A6
- 1747 B5
- 1748 B6
- 1749 G11
- 1750 G11
- 1751 G11
- 1752 C11
- 1753 B9
- 1754 D9
- 1755 B9
- 1756 D9
- 1757 C10
- 1758 D10
- 1759 C10
- 1760 D10
- 1761 C11
- 1762 D11
- 1763 B11
- 1764 B11
- 1765 D11
- 1766 B12
- 1767 E12
- 1768 F10
- 1769 C4
- 1770 C11
- 1771 E11
- 1772 D11
- 1773 E3
- 1774 E9
- 1775 F9
- 1776 F10
- 1777 E10
- 1778 F8
- 1779 F5
- 1780 F6
- 1781 B8
- 1782 D9
- 1783 E8
- 1784 E8
- 1785 E9
- 1786 D2
- 1787 C7
- 1788 D8
- 1789 C3
- 1790 C2
- 1791 D3
- 1792 C4
- 1793 D5
- 1794-1 B10
- 1795-2 D10
- 1796 E3
- 1797 E10
- 1798 F10
- 1799 F9
- 1800 C12
- 7701 QFP44
- 7702 LM558D
- 7702-2 LM558D
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- 8000 BC847B

• - Provision Parts

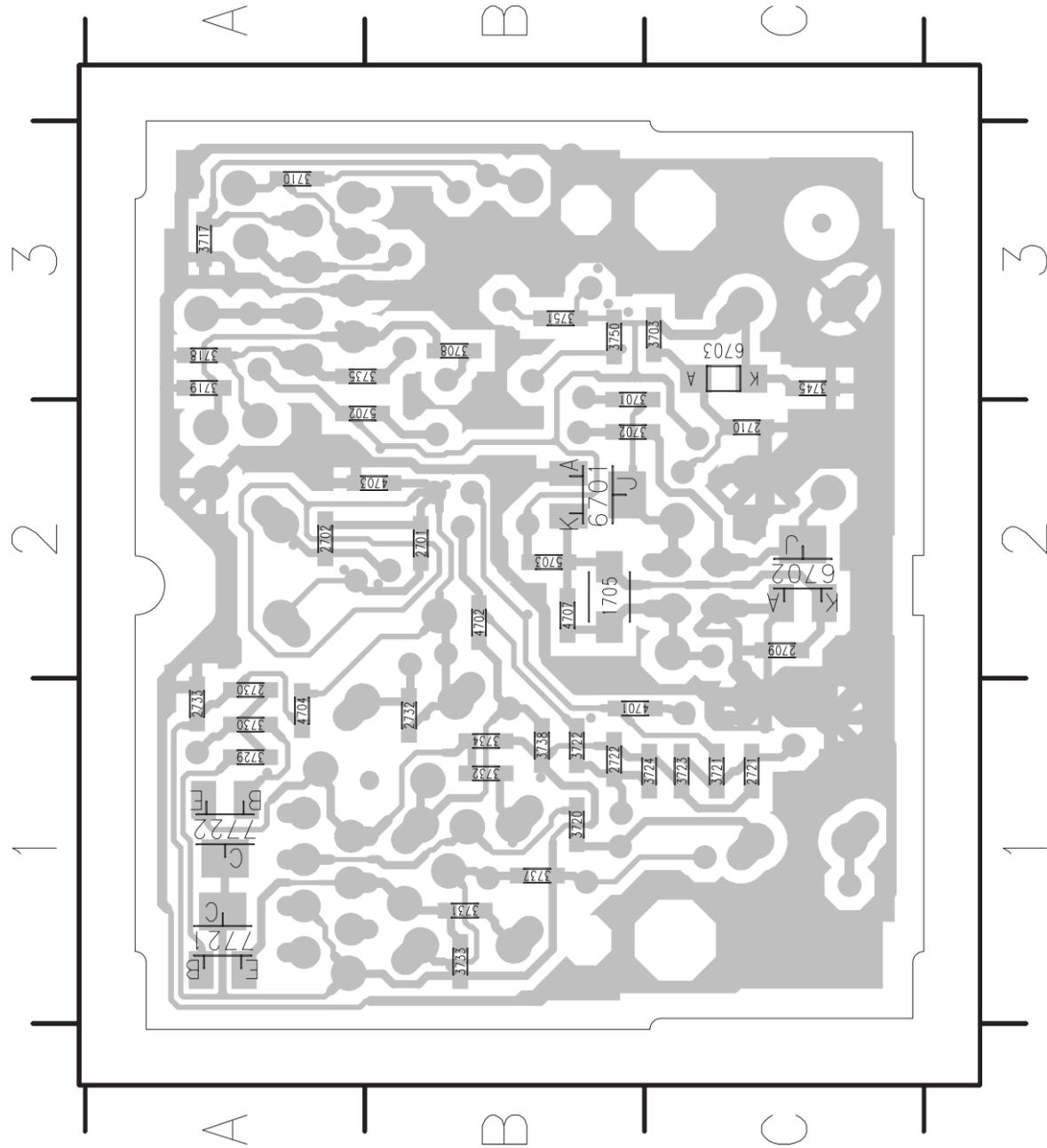
USB BOARD - LAYOUT DIAGRAM

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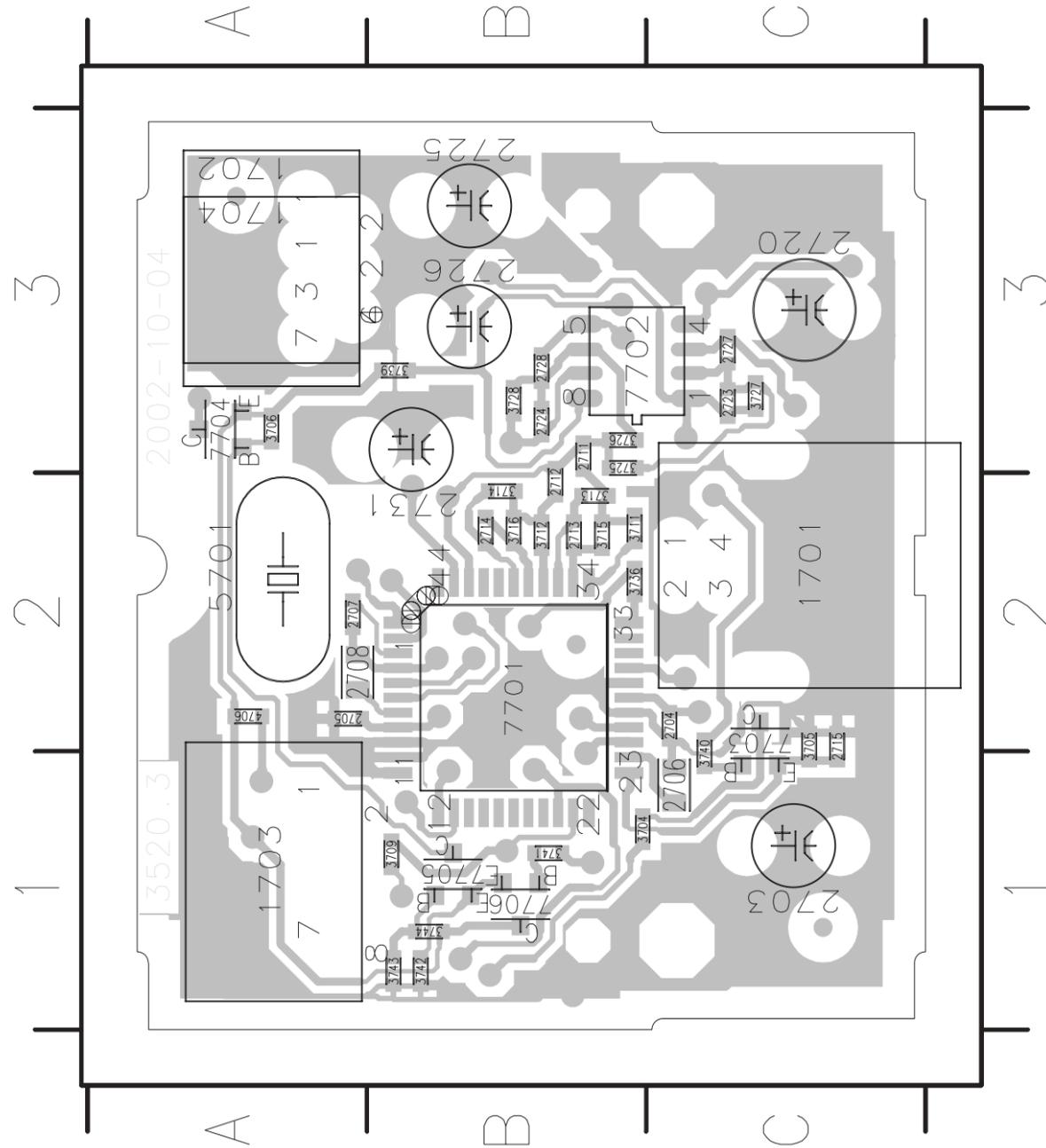


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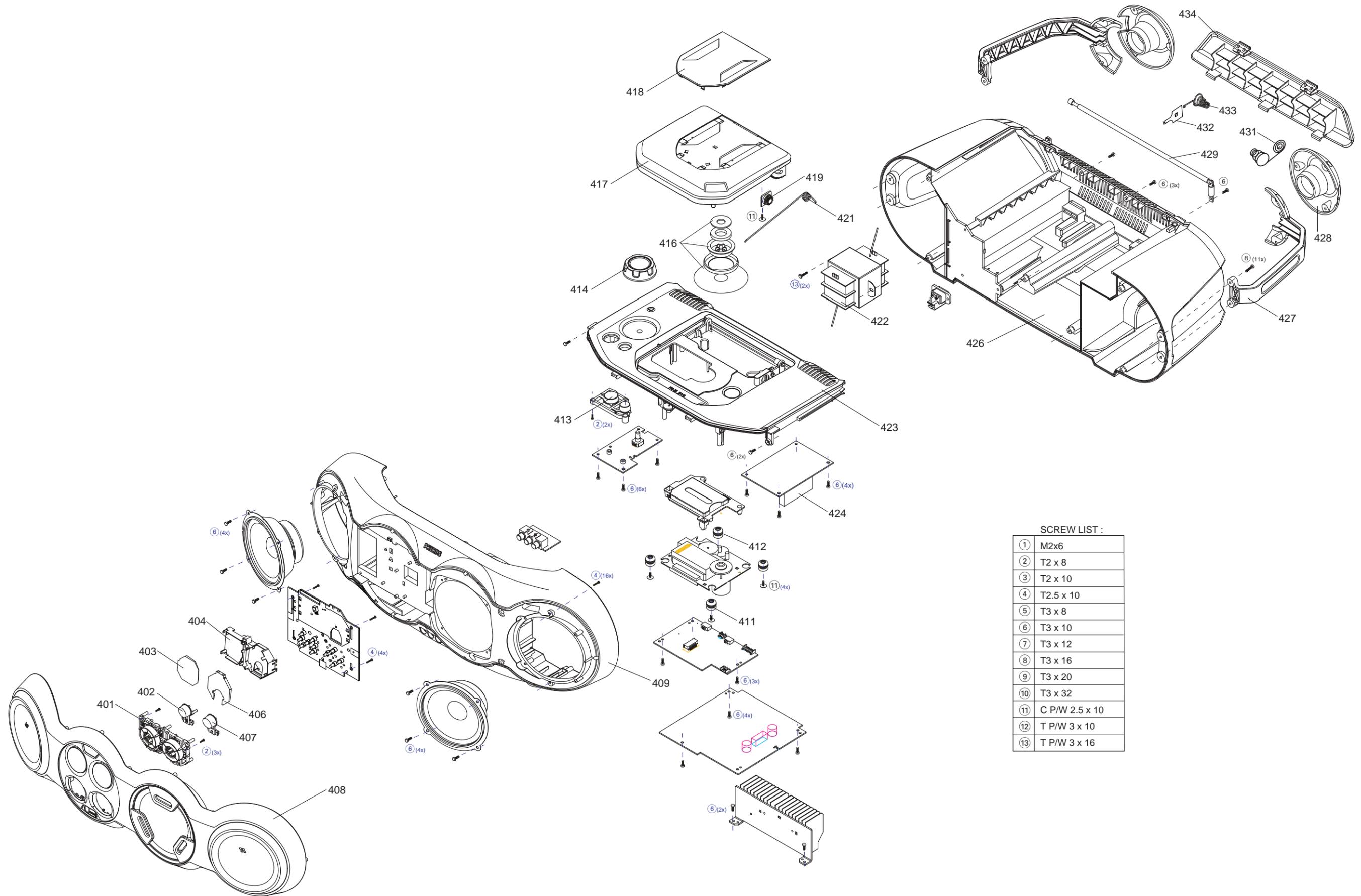
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222223341234461123456
7777777777777777777777
33333333333333334577777

2313122122322222333333321231222222
CAAAACUCACAAABBBBBUCUBBBBUCABBBBBBBB

1123456781234567814569123456
70034345678123456777777777777777777
11112222222222222222233333333333333



EXPLODED VIEW DIAGRAM - CABINET



SCREW LIST :

①	M2x6
②	T2 x 8
③	T2 x 10
④	T2.5 x 10
⑤	T3 x 8
⑥	T3 x 10
⑦	T3 x 12
⑧	T3 x 16
⑨	T3 x 20
⑩	T3 x 32
⑪	C P/W 2.5 x 10
⑫	T P/W 3 x 10
⑬	T P/W 3 x 16

MECHANICAL PARTSLIST - CABINET

401	3140 117 66681	BUTTON TREE PNT PRT
402	3140 117 66671	PLAY/PAUSE BUTTON PNT PRT
403	3140 114 49271	LIGHT GUIDE-LCD
404	3140 114 49231	BRACKET-LCD
406	3140 114 49261	LIGHT GUIDE-VU
407	3140 117 66661	WOOX BUTTON PRT
408	3140 117 66541	FRONT PANEL ASSY
409	3140 117 66561	FRONT CABINET ASSY
411	4822 529 10387	DAMPER - RUBBER (40 DEG)
412	4822 529 10386	DAMPER - RUBBER (30 DEG)
413	3140 117 66611	POWER-SOURCE BUTTON PNT PRT
414	3140 117 66711	VOLUME KNOB ASSY
416	3140 117 59800	CLAMPER RING ASSY CDM-DA11
417	3140 117 66601	CD DOOR PRT
418	3140 117 66621	CD DOOR DETAIL PRT
419	4822 529 10322	DAMPER ASSY
421	3140 111 22761	SPRING-CD (LONG)
422	4822 263 21206	P50 ADAPTOR
423	3140 118 01541	CD TRAY ASSY AZ2555
424	4822 256 90463	HOLDER FERRITE BAR
426	3140 117 66531	BACK CABINET ASSY
427	3140 117 67111	HANDLE PNT
428	3140 117 66741	BASS PORT CAP PNT
429	3140 118 71790	ROD ANTENNA EXTEND 660MM
431	4822 492 51733	SPRING
432	3140 111 21320	CONTACT PLATE
433	3140 111 22951	SPRING-COMPRESSION
434	3140 117 68141	BATTERY DOOR PNT AZ2555
	2422 070 98246	MAINSKORD UL 7A 1M5 DET 2P B
	3139 228 61871	PROD.ASSY RC19621001/01 PACKED
	3140 110 22391	CBLE USB-A/1500/USB-B

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - KEY BOARD

- MISCELLANEOUS -

1101	4822 267 31996	CONNECTOR 1P
1150	2422 026 05099	CONNECTOR PHONE H 1P
1400	4822 267 10958	SOCKET FFC 5P
1401	4822 265 11535	SOCKET FFC 8P
1402	4822 265 11207	SOCKET FFC 6P
1405	4822 265 11184	SOCKET FFC 18P
1406	4822 265 11207	SOCKET FFC 6P
1430	2422 128 02922	SWITCH-TACT
1431	2422 128 02922	SWITCH-TACT
1432	2422 128 02922	SWITCH-TACT
1433	2422 128 02922	SWITCH-TACT
1434	2422 128 02922	SWITCH-TACT
1435	2422 128 02922	SWITCH-TACT
1436	2422 128 02922	SWITCH-TACT
1437	2422 128 02922	SWITCH-TACT
1438	2422 128 02922	SWITCH-TACT
1439	2422 128 02922	SWITCH-TACT
1440	2422 128 02922	SWITCH-TACT
1441	2422 128 02922	SWITCH-TACT
8502	3140 110 22341	CABLE 36P/040/36P

- CAPACITORS -

2101	2238 586 59812	100nF +80-20% Y5V 50V
2150	5322 126 11578	1nF 10% X7R 50V
2151	5322 126 11578	1nF 10% X7R 50V
2300	4822 124 80483	47µF 20% 6,3V
2301	3198 016 31020	1nF NP0 25V
2302	2238 586 59812	100nF +80-20% Y5V 50V
2303	2238 586 59812	100nF +80-20% Y5V 50V
2400	2238 586 59812	100nF +80-20% Y5V 50V
2401	4822 124 23432	100µF 20% 10V
2402	5322 126 11583	10nF 10% X7R 50V
2403	2020 552 94427	100pF 5% NP0 50V
2404	2020 552 94427	100pF 5% NP0 50V
2405	2020 552 94427	100pF 5% NP0 50V
2406	2020 552 94427	100pF 5% NP0 50V
2407	2238 586 59812	100nF +80-20% Y5V 50V
2408	4822 124 23432	100µF 20% 10V
2409	2238 586 59812	100nF +80-20% Y5V 50V
2410	5322 126 11583	10nF 10% X7R 50V
2411	2020 552 94427	100pF 5% NP0 50V
2412	2020 552 94427	100pF 5% NP0 50V
2413	2020 552 94427	100pF 5% NP0 50V
2414	2020 552 94427	100pF 5% NP0 50V
2415	2020 552 94427	100pF 5% NP0 50V
2416	5322 126 11583	10nF 10% X7R 50V
2417	4822 126 13883	220pF 5% 50V

- CAPACITORS -

2418	2020 552 94427	100pF 5% NP0 50V
2419	2020 552 94427	100pF 5% NP0 50V
2420	2020 552 94427	100pF 5% NP0 50V
2421	5322 126 11583	10nF 10% X7R 50V
2422	4822 124 22651	1,0µF 20% 50V
2423	2238 586 59812	100nF +80-20% Y5V 50V
2425	4822 126 14225	56pF 5% NP0 50V
2426	4822 122 33752	15pF 5% NP0 50V
2427	4822 122 33752	15pF 5% NP0 50V
2428	5322 126 11583	10nF 10% X7R 50V
2429	4822 126 13881	470pF 5% 50V
2430	4822 126 13881	470pF 5% 50V
2431	4822 126 13881	470pF 5% 50V
2432	4822 126 13881	470pF 5% 50V
2433	4822 126 13881	470pF 5% 50V
2434	4822 126 13881	470pF 5% 50V
2435	5322 126 11583	10nF 10% X7R 50V
2436	2238 586 59812	100nF +80-20% Y5V 50V
2437	5322 126 11583	10nF 10% X7R 50V
2438	4822 124 12032	4,7µF 20% 50V
2439	2020 552 94427	100pF 5% NP0 50V
2440	2020 552 94427	100pF 5% NP0 50V
2441	4822 126 13881	470pF 5% 50V
2442	4822 126 13881	470pF 5% 50V
2443	2020 552 94427	100pF 5% NP0 50V
2444	4822 126 13881	470pF 5% 50V
2445	5322 126 11583	10nF 10% X7R 50V
2446	5322 126 11583	10nF 10% X7R 50V
2447	2238 586 59812	100nF +80-20% Y5V 50V
2448	2238 586 59812	100nF +80-20% Y5V 50V
2449	2238 586 59812	100nF +80-20% Y5V 50V
2450	2238 586 59812	100nF +80-20% Y5V 50V
2451	4822 124 21913	1µF 20% 63V
2452	2238 586 59812	100nF +80-20% Y5V 50V
2453	2238 586 59812	100nF +80-20% Y5V 50V

- RESISTORS -

3150	4822 116 52219	330R 5% 0,5W
3151	4822 116 52219	330R 5% 0,5W
3152	4822 116 52219	330R 5% 0,5W
3153	4822 116 52219	330R 5% 0,5W
3154	4822 116 52226	560R 5% 0,5W
3155	4822 116 52226	560R 5% 0,5W
3300	4822 117 11373	100R 1% RC12H
3302	4822 117 12864	82K 5% 0,6W
3303	4822 051 20471	470R 5% 0,1W
3304	4822 051 30103	10K 5% 0,062W

ELECTRICAL PARTSLIST - KEY BOARD

- RESISTORS -

3305	4822 051 20229	22R 5% 0,1W
3306	2322 734 63309	33R 1% RC12H
3307	4822 051 20159	15R 5% 0,1W
3308	4822 117 11504	270R 1% 0,1W
3330	4822 051 30102	1K 5% 0,062W
3331	4822 051 30681	680R 5% 0,062W
3332	4822 051 30471	470R 5% 0,062W
3333	4822 051 30331	330R 5% 0,062W
3334	4822 051 30331	330R 5% 0,062W
3335	4822 051 30102	1K 5% 0,062W
3336	4822 051 30681	680R 5% 0,062W
3337	4822 051 30471	470R 5% 0,062W
3338	4822 051 30331	330R 5% 0,062W
3339	4822 051 30331	330R 5% 0,062W
3340	4822 051 30103	10K 5% 0,062W
3341	4822 051 30103	10K 5% 0,062W
3400	4822 051 30103	10K 5% 0,062W
3401	4822 051 30103	10K 5% 0,062W
3402	4822 051 30103	10K 5% 0,062W
3403	4822 051 30103	10K 5% 0,062W
3404	4822 051 30102	1K 5% 0,062W
3405	4822 117 11373	100R 1% RC12H
3406	4822 051 30471	470R 5% 0,062W
3407	4822 051 30102	1K 5% 0,062W
3408	4822 051 30102	1K 5% 0,062W
3409	4822 051 30109	10K 5% 0,062W
3411	4822 051 30103	10K 5% 0,062W
3412	4822 051 30103	10K 5% 0,062W
3413	4822 051 30103	10K 5% 0,062W
3414	4822 051 30103	10K 5% 0,062W
3415	4822 051 30103	10K 5% 0,062W
3416	4822 051 30222	2,2K 5% 0,062W
3417	4822 051 30222	2,2K 5% 0,062W
3418	4822 051 30102	1K 5% 0,062W
3419	4822 051 30102	1K 5% 0,062W
3420	4822 051 30103	10K 5% 0,062W
3421	4822 051 30103	10K 5% 0,062W
3422	4822 051 30102	1K 5% 0,062W
3423	4822 051 30102	1K 5% 0,062W
3424	4822 051 30102	1K 5% 0,062W
3425	4822 051 30102	1K 5% 0,062W
3426	4822 051 30102	1K 5% 0,062W
3427	4822 051 30471	470R 5% 0,062W
3428	4822 051 30102	1K 5% 0,062W
3429	4822 051 30471	470R 5% 0,062W
3430	4822 117 12925	47K 1% 0,063W
3431	4822 051 30102	1K 5% 0,062W
3432	4822 051 30102	1K 5% 0,062W
3433	4822 051 30102	1K 5% 0,062W
3434	4822 051 30102	1K 5% 0,062W

- RESISTORS -

3435	4822 117 11373	100R 1% RC12H
3436	4822 051 30471	470R 5% 0,062W
3437	4822 051 30471	470R 5% 0,062W
3438	4822 051 30472	4,7K 5% 0,062W
3439	4822 051 30102	1K 5% 0,062W
3440	4822 051 30471	470R 5% 0,062W
3442	4822 051 30471	470R 5% 0,062W
3443	4822 051 30103	10K 5% 0,062W
3444	4822 051 30102	1K 5% 0,062W
3445	4822 051 30103	10K 5% 0,062W
3446	4822 051 30223	22K 5% 0,062W
3447	4822 051 30103	10K 5% 0,062W
3448	4822 051 30103	10K 5% 0,062W
3449	4822 051 30103	10K 5% 0,062W
3450	4822 051 30102	1K 5% 0,062W
3451	4822 051 30102	1K 5% 0,062W
3452	4822 051 30102	1K 5% 0,062W
3453	4822 051 30102	1K 5% 0,062W
3454	4822 051 30102	1K 5% 0,062W
3455	4822 051 30102	1K 5% 0,062W
3456	4822 051 30102	1K 5% 0,062W
3457	4822 051 30102	1K 5% 0,062W
3458	4822 051 30102	1K 5% 0,062W
3459	4822 051 30471	470R 5% 0,062W
3460	4822 051 30102	1K 5% 0,062W
3461	4822 051 30102	1K 5% 0,062W
3462	4822 051 30102	1K 5% 0,062W
3463	4822 051 30223	22K 5% 0,062W
3464	4822 051 30102	1K 5% 0,062W
3465	4822 051 30223	22K 5% 0,062W
3466	4822 051 30102	1K 5% 0,062W
3468	4822 051 30471	470R 5% 0,062W
3469	4822 051 30102	1K 5% 0,062W
3470	4822 051 30102	1K 5% 0,062W
3471	4822 051 30102	1K 5% 0,062W
3472	4822 051 30102	1K 5% 0,062W
3473	4822 051 30102	1K 5% 0,062W
3474	4822 051 30102	1K 5% 0,062W
3475	4822 051 30102	1K 5% 0,062W
3476	4822 051 30472	4,7K 5% 0,062W
3477	4822 051 30154	150K 5% 0,062W
3478	4822 051 30472	4,7K 5% 0,062W
3479	4822 051 30102	1K 5% 0,062W
3480	4822 051 30474	470K 5% 0,062W
3481	4822 051 30154	150K 5% 0,062W
3482	4822 117 11503	220R 1% 0,1W
3483	4822 051 30272	2,7K 5% 0,062W
3484	4822 051 30272	2,7K 5% 0,062W
3485	4822 117 12891	220K 1% ERJ3E
3486	4822 051 30153	15K 5% 0,062W

ELECTRICAL PARTSLIST - KEY BOARD

- RESISTORS -

3487	4822 051 30153	15K 5% 0,062W
3488	4822 051 30562	5,6K 5% 0,063W
3489	4822 051 30563	56K 5% 0,062W
3490	4822 051 30102	1K 5% 0,062W
3491	4822 051 30471	470R 5% 0,062W
3492	4822 051 30562	5,6K 5% 0,063W
3493	4822 051 30102	1K 5% 0,062W
3494	4822 051 30471	470R 5% 0,062W
3495	4822 051 30102	1K 5% 0,062W
3496	4822 051 30102	1K 5% 0,062W
3497	4822 051 30102	1K 5% 0,062W
3498	4822 051 30102	1K 5% 0,062W
3499	4822 051 30472	4,7K 5% 0,062W
3501	4822 051 30102	1K 5% 0,062W
3502	4822 051 30102	1K 5% 0,062W
3503	4822 051 30153	15K 5% 0,062W
3504	4822 051 30153	15K 5% 0,062W
3505	4822 051 30102	1K 5% 0,062W
3507	4822 051 30682	6,8K 5% 0,062W
3509	4822 051 30103	10K 5% 0,062W
3510	4822 051 30223	22K 5% 0,062W
3511	4822 051 30223	22K 5% 0,062W
3513	4822 051 30223	22K 5% 0,062W
4330	4822 051 30008	0R JUMPER
4331	4822 051 30008	0R JUMPER
4332	4822 051 20008	0R JUMPER(0805)
4333	4822 051 30008	0R JUMPER
4401	4822 051 30008	0R JUMPER
4450	4822 051 30008	0R JUMPER
4451	4822 051 30008	0R JUMPER
4453	4822 051 30008	0R JUMPER
4454	4822 051 30008	0R JUMPER
4455	4822 051 30008	0R JUMPER
4456	4822 051 30008	0R JUMPER
4457	4822 051 30008	0R JUMPER
4458	4822 051 30008	0R JUMPER
4459	4822 051 30008	0R JUMPER
4460	4822 051 30008	0R JUMPER
4461	4822 051 30008	0R JUMPER
4462	4822 051 30008	0R JUMPER
4463	4822 051 30008	0R JUMPER
4467	4822 051 30008	0R JUMPER
4468	4822 051 30008	0R JUMPER
4469	4822 051 30008	0R JUMPER

- COILS & FILTERS -

5150	2422 549 44919	EMI 100MHZ 600R
5400	2422 549 43062	EMI 100MHZ 600R
5401	2422 549 44393	EMI 100MHZ 2,7K
5402	2422 549 43062	EMI 100MHZ 600R
5403	2422 549 43062	EMI 100MHZ 600R
5404	2422 549 43062	EMI 100MHZ 600R
5405	2422 549 43062	EMI 100MHZ 600R
5406	2422 549 44393	EMI 100MHZ 2,7K
5407	4822 157 11228	100UH LAN02TB101J 5%
5408	2422 549 44393	EMI 100MHZ 2,7K
5409	4822 157 11228	100UH LAN02TB101J 5%
5410	2422 540 98518	8MHZ CSTS*MG03 A
5411	2422 549 44393	EMI 100MHZ 2,7K
5500	3140 110 51881	METER VU

- DIODES -

6300	9322 172 75676	LED VS LTL-1CHKFK
6301	5322 130 34337	BAV99
6303	9322 172 75676	LED VS LTL-1CHKFK
6305	5322 130 34337	BAV99
6307	9322 172 75676	LED VS LTL-1CHKFK
6308	9322 172 75676	LED VS LTL-1CHKFK
6400	4822 130 11148	UDZ4,7B

- IC & TRANSISTORS -

7300	4822 130 42804	BC817-25
7301	4822 130 42804	BC817-25
7304	5322 130 60159	BC846B
7400	3140 110 51871	LCD PANEL
7401	3140 110 51851	MCU TMP86CS25F
7402	9322 178 88685	NCP301LSN27
7404	5322 130 60159	BC846B
7405	9965 000 04931	M24C01-WMN6
7406	9322 185 95667	TSOP4836

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - TUNER BOARD**- MISCELLANEOUS -**

1106	4822 526 10176	BAR FERRITE
1121	4822 267 10733	SOCKET FFC 4P
1122	4822 267 10954	SOCKET FFC 5P

- CAPACITORS -

2101	4822 126 13692	47PF 1% NP0 63V
2103	5322 122 31647	1nF 10%X7R 63V
2104	5322 122 32531	100pF 5% NP0 50V
2106	2020 800 00191	CTRM 100V 3pF-11pF N450
2107	4822 121 51319	1µF 10% 63V

2120	4822 126 13689	18pF 1% NP0 63V
2124	5322 122 32654	22nF 10% X7R 63V
2125	2238 861 18561	560pF 1% NP0 50V
2126	5322 122 31863	330pF 5% NP0 63V
2127	4822 126 14076	220nF 25V P8020

2128	4822 124 40248	10µF 20% 63V
2129	4822 124 41584	100µF 20% 10V
2130	4822 126 13482	470nF +80-20% 16V
2131	4822 126 13482	470nF +80-20% 16V
2132	4822 126 13482	470nF +80-20% 16V

2133	4822 124 21913	1µF 20% 63V
2134	5322 122 32654	22nF 10% X7R 63V
2135	5322 122 32654	22nF 10% X7R 63V
2136	4822 126 14076	220nF 25V +80-20%
2137	4822 126 14076	220nF 25V +80-20%

2138	4822 124 22652	2,2µF 20% 50V
2139	4822 126 14236	15pF 5% 50V
2140	4822 126 13695	82pF 1% NP0 63V
2141	4822 126 13838	100nF Y5V 50V +80-20%
2144	4822 126 13482	470nF +80-20% 16V

2145	4822 122 33575	220pF 5% NP0 63V
2146	4822 122 33575	220pF 5% NP0 63V
2147	4822 122 33575	220pF 5% NP0 63V
2148	4822 122 33127	2,2nF 10% X7R 63V
2150	4822 126 13838	100nF Y5V 50V +80-20%

2152	4822 126 12105	33nF 5% X7R 50V
2153	4822 126 13486	15pF 2% NP0 63V
2155	2020 800 00191	CTRM 100V 3P-11P N450
2159	5322 122 32659	33pF 5% 50V
2164	4822 126 13482	470nF +80-20% 16V

2165	4822 126 13838	100nF Y5V 50V +80-20%
2166	5322 122 31647	1nF 10% X7R 63V
2167	4822 122 33926	12PF 50V
2186	4822 124 40196	220µF 20% 16V
2187	4822 122 33177	10nF 20% X7R 50V

2188	4822 122 33177	10nF 20% X7R 50V
2189	4822 126 14076	220nF 25V +80-20%
2190	4822 124 81151	22µF 50V
2191	4822 124 81151	22µF 50V
2192	5322 122 31647	1nF 10% X7R 63V

- CAPACITORS -

2193	5322 122 31647	1nF 10% X7R 63V
2194	5322 122 31647	1nF 10% X7R 63V
2195	4822 124 81151	22µF 50V
2196	4822 122 33177	10nF 20% X7R 50V
2197	4822 122 33177	10nF 20% X7R 50V

- RESISTORS -

3101	4822 051 20333	33K 5% 0,1W
3102	4822 117 10837	100K 1% 0,1W
3103	4822 051 20822	8,2K 5% 0,1W
3104	4822 117 13577	330R 1% 1,25W
3105	4822 117 11503	220R 1% 0,1W

3132	4822 051 20479	47R 5% 0,1W
3134	4822 051 20223	22K 5% 0,1W
3141	4822 117 11148	56K 1% 0,1W
3142	4822 100 12159	100K 30%
3145	4822 117 11449	2,2K 5% 0,1W

3152	4822 051 20471	470R 5% 0,1W
3153	4822 051 20471	470R 5% 0,1W
3155	4822 051 20479	47R 5% 0,1W
3158	4822 051 20471	470R 5% 0,1W
3159	4822 051 20471	470R 5% 0,1W

3160	4822 051 20471	470R 5% 0,1W
3161	4822 051 20223	22K 5% 0,1W
3166	4822 051 20479	47R 5% 0,1W
3167	4822 051 20479	47R 5% 0,1W
3169	4822 051 20154	150K 5% 0,1W

3170	4822 117 10837	100K 1% 0,1W
3181	4822 051 10102	1K 2% 0,25W
3186	4822 117 11448	180R 1% 0,1W
3187	4822 051 10102	1K 2% 0,25W
3188	4822 117 11449	2,2K 5% 0,1W

3189	4822 051 20223	22K 5% 0,1W
3190	4822 117 10833	10K 1% 0,1W
3191	4822 051 20472	4,7K 5% 0,1W
3192	4822 051 20105	1M 5% 0,1W
3193	4822 117 11449	2,2K 5% 0,1W

3194	4822 117 10837	100K 1% 0,1W
3195	4822 051 20474	470K 5% 0,1W
3196	4822 117 10833	10K 1% 0,1W
4104	4822 051 20008	0R JUMPER(0805)
4105	4822 051 20008	0R JUMPER(0805)

4107	4822 051 20008	0R JUMPER(0805)
4108	4822 051 20008	0R JUMPER(0805)
4110	4822 051 20008	0R JUMPER(0805)

ELECTRICAL PARTSLIST - TUNER BOARD**- COILS & FILTERS -**

5104	2422 535 91074	ANT FM046-B 185 μ H
5104	2422 536 00364	ANT FM065 190 μ H
5109	4822 242 70665	SFE10,7MS3-A
5110	4822 242 70665	SFE10,7MS3-A
5111	2422 549 44023	IND VAR 7MM 7PY 450KHZ
5112	4822 157 70302	F7MCS-12216N
5114	4822 157 70302	F7MCS-12216N
5119	4822 157 11443	2,4 μ H 10,7MHZ \square
5121	4822 242 10261	T6252F00 (75KHZ)
5123	2422 549 44108	IND VAR 7MM 7PY 796KHZ
5130	4822 157 11843	MD7B-01F
5131	4822 157 11843	MD7B-01F

- DIODES -

6103	5322 130 34337	BAV99
6105	4822 130 83075	HN1V02H-B
6120	4822 130 83757	MCL4148
6130	4822 130 82833	1SV228
6131	4822 130 82833	1SV228
6181	5322 130 34337	BAV99
6182	4822 130 83757	MCL4148
6183	9340 386 90115	BZX284-C11

- IC & TRANSISTORS -

7101	4822 209 90924	TEA5757H/V1
7102	4822 130 42131	BF550
7111	5322 130 42755	BC847C
7180	4822 130 60373	BC856B
7181	5322 130 42755	BC847C
7182	5322 130 42755	BC847C
7183	5322 130 42755	BC847C

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - CD BOARD**- MISCELLANEOUS -**

1800	4822 265 10925	SOCKET FFC 15P
1810	4822 242 73557	CST8,46MTW-TF01
1823	4822 265 11207	SOCKET FFC 6P
1824	4822 265 11207	SOCKET FFC 6P

- CAPACITORS -

2801	4822 124 41751	47µF 20% 50V
2802	4822 124 41751	47µF 20% 50V
2803	4822 126 14226	82pF 5% NPO 50V
2804	4822 126 14226	82pF 5% NPO 50V
2805	4822 126 14226	82pF 5% NPO 50V
2806	4822 126 13695	82pF 1% NPO 63V
2807	4822 126 11669	27pF
2808	5322 122 33538	150pF 2% NPO 63V
2809	4822 126 11669	27pF
2810	4822 126 13692	47pF 1% NPO 63V
2811	4822 126 11671	33pF
2812	4822 122 33741	10pF 10% NPO 50V
2813	4822 126 14238	2,2nF X7R 50V
2814	3198 024 44730	47nF Y5V 50V
2815	4822 122 33777	47pF 5% NPO 63V
2816	5322 122 32654	22nF 10% X7R 63V
2817	4822 124 40769	4,7µF 20% 100V
2818	3198 024 44730	47nF Y5V 50V
2821	4822 126 14305	100nF 10% X7R 16V
2822	4822 126 13344	1,5nF 5% 63V
2823	4822 124 42383	220µF 20% 4V
2824	4822 126 13751	47nF 10% X7R 63V
2825	4822 126 13344	1,5nF 5% 63V
2826	3198 024 44730	47nF Y5V 50V
2827	5322 126 11578	1nF 10% X7R 50V
2828	4822 122 33777	47pF 5% NPO 63V
2829	3198 024 44730	47nF Y5V 50V
2830	3198 017 41050	1µF Y5V 10V
2831	4822 126 14043	1µF +80-20% Y5V 16V
2832	4822 122 33753	150pF 5% NPO 50V
2833	4822 126 13881	470pF 5% 50V
2834	4822 126 14506	270pF 5% 50V NPO
2835	4822 126 13881	470pF 5% 50V
2836	4822 124 41751	47µF 20% 50V
2837	3198 024 44730	47nF Y5V 50V
2838	3198 017 42230	22nF Y5V 50V
2839	4822 126 14305	100nF 10% X7R 16V
2840	4822 124 41751	47µF 20% 50V
2841	4822 126 13751	47nF 10% X7R 63V
2842	4822 124 21913	1µF 20% 63V

- CAPACITORS -

2843	4822 122 31765	100pF 2% NPO 63V
2844	4822 126 13883	220pF 5% 50V
2845	4822 126 13883	220pF 5% 50V
2846	4822 124 40248	10µF 20% 63V
2848	4822 122 31765	100pF 2% NPO 63V
2849	4822 126 13883	220pF 5% 50V
2850	4822 126 13883	220pF 5% 50V
2851	4822 124 40248	10µF 20% 63V
2853	5322 126 11583	10nF 10% X7R 50V
2854	4822 124 11912	220µF 20% 6,3V
2855	4822 124 11912	220µF 20% 6,3V
2857	4822 124 12362	47µF 4V 20%
2860	5322 116 80853	560pF 5%NPO 63V
2861	4822 126 13344	1,5nF 5% 63V
2862	4822 126 14508	180pF 5% 50V NPO
2863	4822 126 14508	180pF 5% 50V NPO
2864	4822 126 14508	180pF 5% 50V NPO
2865	4822 126 14508	180pF 5% 50V NPO
2869	3198 024 44730	47nF Y5V 50V
2870	4822 126 13883	220pF 5% 50V
2871	4822 126 13883	220pF 5% 50V
2872	4822 126 13883	220pF 5% 50V
2873	4822 126 13883	220pF 5% 50V
2874	4822 126 13883	220pF 5% 50V
2875	4822 126 13883	220pF 5% 50V

- RESISTORS -

3728	4822 051 20479	47R 5% 0,1W
3745	4822 051 30338	3,3R 5% 0,062W
3757	4822 051 20223	22K 5% 0,1W
3788	4822 051 20472	4,7K 5% 0,1W
3800	4822 117 13608	4,7R 5% 0,0016W
3801	4822 051 30154	150K 5% 0,062W
3802	4822 051 30102	1K 5% 0,062W
3803	4822 051 30273	27K 5% 0,062W
3804	4822 051 30472	4,7K 5% 0,062W
3805	4822 051 30273	27K 5% 0,062W
3806	4822 117 10361	680R 1% 0,1W
3807	4822 051 30152	1,5K 5% 0,062W
3808	4822 051 30339	33R 5% 0,062W
3809	4822 051 30339	33R 5% 0,062W
3810	4822 052 10478	4,7R 5% 0,33W
3811	4822 051 30102	1K 5% 0,062W
3812	4822 051 30474	470K 5% 0,062W
3813	4822 051 30683	68K 5% 0,062W
3814	4822 051 30332	3,3K 5% 0,062W
3815	4822 051 30472	4,7K 5% 0,062W

ELECTRICAL PARTSLIST - CD BOARD**- RESISTORS -**

3816	4822 051 30153	15K 5% 0,062W
3817	4822 117 10834	47K 1% 0,1W
3818	4822 051 20562	5,6K 5% 0,1W
3819	4822 051 30153	15K 5% 0,062W
3820	4822 051 30183	18K 5% 0,062W
3821	4822 051 20332	3,3K 5% 0,1W
3822	4822 051 30332	3,3K 5% 0,062W
3823	4822 051 20332	3,3K 5% 0,1W
3824	4822 051 30102	1K 5% 0,062W
3825	4822 051 30223	22K 5% 0,062W
3826	4822 051 30273	27K 5% 0,062W
3827	4822 051 20339	33R 5% 0,1W
3828	4822 051 20479	47R 5% 0,1W
3829	4822 051 30101	100R 5% 0,062W
3830	4822 051 30472	4,7K 5% 0,062W
3835	4822 051 30223	22K 5% 0,062W
3836	4822 117 10833	10K 1% 0,1W
3837	4822 051 20471	470R 5% 0,1W
3838	4822 051 20471	470R 5% 0,1W
3839	4822 051 30471	470R 5% 0,062W
3840	4822 051 30471	470R 5% 0,062W
3841	4822 051 30472	4,7K 5% 0,062W
3842	4822 051 10102	1K 2% 0,25W
3843	4822 051 30102	1K 5% 0,062W
3844	4822 051 30101	100R 5% 0,062W
3845	2120 108 92668	3,3R 5%
3846	4822 051 20223	22K 5% 0,1W
3847	4822 117 12864	82K 5% 0,6W
3848	4822 117 10834	47K 1% 0,1W
3849	4822 051 30563	56K 5% 0,062W
3850	4822 117 12902	8,2K 1% 0,063W
3851	4822 051 30563	56K 5% 0,062W
3852	4822 117 10834	47K 1% 0,1W
3853	4822 051 30153	15K 5% 0,062W
3854	4822 117 12902	8,2K 1% 0,063W
3855	4822 116 40227	4,6R 25% 12V
3856	4822 051 20683	68K 5% 0,1W
3857	4822 051 20154	150K 5% 0,1W
3858	4822 051 30392	3,9K 5% 0,063W
3859	4822 117 10834	47K 1% 0,1W
3860	4822 051 30102	1K 5% 0,062W
3861	4822 117 10834	47K 1% 0,1W
3862	4822 051 10102	1K 2% 0,25W
3863	4822 052 10338	3,3R 5% 0,33W
3864	4822 117 10833	10K 1% 0,1W
3865	4822 051 30102	1K 5% 0,062W
3867	4822 051 20223	22K 5% 0,1W
3868	4822 051 30103	10K 5% 0,062W
3869	4822 051 30103	10K 5% 0,062W
3871	4822 051 30471	470R 5% 0,062W

- RESISTORS -

3872	4822 117 12925	47K 1% 0,063W
3873	4822 051 30223	22K 5% 0,062W
3874	4822 051 30223	22K 5% 0,062W
3875	4822 051 30103	10K 5% 0,062W
3876	4822 051 30103	10K 5% 0,062W
3878	4822 051 30471	470R 5% 0,062W
3879	4822 117 12925	47K 1% 0,063W
3880	4822 051 20339	33R 5% 0,1W
3881	4822 051 30151	150R 5% 0,062W
3882	4822 117 11373	100R 1%
3883	4822 051 30102	1K 5% 0,062W
3884	4822 051 30102	1K 5% 0,062W
3886	4822 117 10833	10K 1% 0,1W
3887	4822 117 10833	10K 1% 0,1W
3888	4822 051 20472	4,7K 5% 0,1W
3889	4822 051 30102	1K 5% 0,062W
3890	4822 117 10837	100K 1% 0,1W
3891	4822 117 10837	100K 1% 0,1W
3892	4822 117 13632	100K 1% 0,62W
3893	4822 117 13632	100K 1% 0,62W
3894	4822 117 10833	10K 1% 0,1W
3895	4822 117 10833	10K 1% 0,1W
3896	4822 117 10833	10K 1% 0,1W
3897	4822 117 10833	10K 1% 0,1W
3898	4822 117 10833	10K 1% 0,1W
3899	4822 117 10833	10K 1% 0,1W
3900	4822 051 30223	22K 5% 0,062W
4801	4822 051 30008	OR JUMPER
4802	4822 051 20008	OR JUMPER(0805)
4807	4822 051 20008	OR JUMPER(0805)
4808	4822 051 30008	OR JUMPER
4809	4822 051 20008	OR JUMPER(0805)
4810	4822 051 20008	OR JUMPER(0805)
4812	4822 051 20008	OR JUMPER(0805)
4813	4822 051 20008	OR JUMPER(0805)
4814	4822 051 20008	OR JUMPER(0805)
4815	4822 051 20008	OR JUMPER(0805)
4823	4822 051 20008	OR JUMPER(0805)
4824	4822 051 20008	OR JUMPER(0805)
4828	4822 051 20008	OR JUMPER(0805)
4831	4822 051 20008	OR JUMPER(0805)
4832	4822 051 20008	OR JUMPER(0805)
4838	4822 051 20008	OR JUMPER(0805)
4845	4822 051 20008	OR JUMPER(0805)
4847	4822 051 20008	OR JUMPER(0805)
4848	4822 051 20008	OR JUMPER(0805)
4850	4822 051 20008	OR JUMPER(0805)
4853	4822 051 20008	OR JUMPER(0805)
4856	4822 051 30008	OR JUMPER
4857	4822 051 20008	OR JUMPER(0805)

ELECTRICAL PARTSLIST - CD BOARD

- RESISTORS -

4859	4822 051 20008	0R JUMPER(0805)
4863	4822 051 20008	0R JUMPER(0805)
4865	4822 051 20008	0R JUMPER(0805)
4866	4822 051 20008	0R JUMPER(0805)
4872	4822 051 20008	0R JUMPER(0805)
4877	4822 051 30008	0R JUMPER
4881	4822 051 20008	0R JUMPER(0805)
4884	4822 051 20008	0R JUMPER(0805)
4885	4822 051 30008	0R JUMPER
4886	4822 051 20008	0R JUMPER(0805)
4888	4822 051 20008	0R JUMPER(0805)
4889	4822 051 20008	0R JUMPER(0805)

- COILS & FILTERS -

5803	4822 157 11231	LAN02TB1R0J
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- DIODES -

6877	9322 129 34685	BZM55-C3V9
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- IC & TRANSISTORS -

7800	9352 684 20557	SAA7325H/T/M2B
7800	9352 690 17557	SAA7325H/T/M2B/WD
7802	5322 209 11517	PC74HCU04T
7803	5322 130 60123	BC807-40
7804	5322 209 82941	LM358D
7807	5322 130 42755	BC847C
7808	4822 209 32852	TDA7073A/N2
7809	4822 209 32852	TDA7073A/N2
7810	4822 209 33165	TDA1308T/N1
7875	4822 130 60511	BC847B

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - POWER BOARD**- MISCELLANEOUS -**

1604	4822 265 11207	SOCKET FFC 6P
1605	4822 265 11183	SOCKET FFC 4P
1609	4822 267 10956	SOCKET FFC 7P
1612	4822 253 10126	FUSE 4,0A
1613	2422 025 16043	CONNECTOR H 2P
1615	4822 267 10731	06FE-BT-VK-N
1616	4822 265 11207	CONNECTOR SOCKET 6P
1618	4822 265 11184	SOCKET FFC 18P
1620	4822 253 10126	FUSE 4,0A
1904	8240 009 37971	SOCKET CINCH H 3P

- CAPACITORS -

2601	5322 121 42386	100nF 5% 63V
2602	5322 126 11583	10nF 10% X7R 50V
2603	5322 126 11583	10nF 10% X7R 50V
2604	2238 586 59812	100nF +80-20% Y5V 50V
2605	2238 586 59812	100nF +80-20% Y5V 50V
2606	2238 586 59812	100nF +80-20% Y5V 50V
2607	2238 586 59812	100nF +80-20% Y5V 50V
2608	2238 586 59812	100nF +80-20% Y5V 50V
2609	4822 124 41407	0,47µF 20% 63V
2610	4822 124 21913	1µF 20% 63V
2611	4822 124 41407	0,47µF 20% 63V
2612	4822 121 42408	220nF 5% 63V
2613	3198 016 31020	1nF NP0 25V
2614	4822 124 41407	0,47µF 20% 63V
2615	4822 124 41407	0,47µF 20% 63V
2616	4822 126 13881	470pF 5% 50V
2617	4822 126 13881	470pF 5% 50V
2618	4822 126 13881	470pF 5% 50V
2619	4822 126 13881	470pF 5% 50V
2620	4822 124 21913	1µF 20% 63V
2621	4822 124 81151	22µF 50V
2622	4822 121 42408	220nF 5% 63V
2623	4822 124 81151	22µF 50V
2624	3198 016 31020	1nF NP0 25V
2626	4822 124 41407	0,47µF 20% 63V
2627	4822 124 41407	0,47µF 20% 63V
2628	4822 124 41407	0,47µF 20% 63V
2629	4822 121 42408	220nF 5% 63V
2630	4822 124 41407	0,47µF 20% 63V
2631	4822 124 21913	1µF 20% 63V
2632	4822 126 13881	470pF 5% 50V
2633	4822 126 13881	470pF 5% 50V
2634	4822 126 13881	470pF 5% 50V
2635	4822 126 13881	470pF 5% 50V
2636	4822 126 13193	4,7nF 10% X7R 63V

- CAPACITORS -

2637	4822 126 13193	4,7nF 10% X7R 63V
2638	4822 121 42408	220nF 5% 63V
2639	4822 126 13751	47nF 10% X7R 63V
2640	2238 586 59812	100nF +80-20% Y5V 50V
2641	2238 586 59812	100nF +80-20% Y5V 50V
2642	5322 126 11583	10nF 10% X7R 50V
2643	5322 126 11583	10nF 10% X7R 50V
2644	4822 124 40248	10µF 20% 63V
2645	2238 586 59812	100nF +80-20% Y5V 50V
2646	2238 586 59812	100nF +80-20% Y5V 50V
2647	3198 016 31020	1nF NP0 25V
2648	4822 124 40433	47µF 20% 25V
2649	2238 586 59812	100nF +80-20% Y5V 50V
2650	4822 126 13751	47nF 10% X7R 63V
2651	4822 124 22726	4,7µF 35V
2652	3198 016 31020	1nF NP0 25V
2653	2020 552 94427	100pF 5% NP0 50V
2654	2020 552 94427	100pF 5% NP0 50V
2655	2238 586 59812	100nF +80-20% Y5V 50V
2656	3198 016 31020	1nF NP0 25V
2658	2238 586 59812	100nF +80-20% Y5V 50V
2659	5322 121 42386	100nF 5% 63V
2660	5322 121 42386	100nF 5% 63V
2661	2238 586 59812	100nF +80-20% Y5V 50V
2662	4822 124 12012	4700µF 20% 25V
2663	4822 124 22652	2,2µF 20% 50V
2665	5322 121 42386	100nF 5% 63V
2666	5322 121 42386	100nF 5% 63V
2668	4822 124 40433	47µF 20% 25V
2669	2238 586 59812	100nF +80-20% Y5V 50V
2670	4822 124 80791	470µF 16V 20%
2671	4822 124 40248	10µF 20% 63V
2673	4822 124 41584	100µF 20% 10V
2675	4822 124 22652	2,2µF 20% 50V
2676	3198 017 34730	47nF X7R 16V
2677	3198 016 31020	1nF NP0 25V
2679	4822 124 81151	22µF 50V
2681	4822 124 41584	100µF 20% 10V
2682	2238 586 59812	100nF +80-20% Y5V 50V
2683	4822 124 12032	4,7µF 20% 50V
2686	4822 124 40248	10µF 20% 63V
2687	4822 124 22651	1,0µF 20% 50V
2688	4822 124 40746	0,22µF 20% 63V
2690	3198 016 31020	1nF NP0 25V
2691	5322 124 41948	470nF+80-20% 50V
2696	2238 916 15641	22nF 10% X7R 25V
2701	2238 586 59812	100nF +80-20% Y5V 50V
2702	2238 586 59812	100nF +80-20% Y5V 50V
2706	4822 124 40196	220µF 20% 16V
2708	2238 586 59812	100nF +80-20% Y5V 50V

ELECTRICAL PARTSLIST - POWER BOARD**- CAPACITORS -**

2710	2238 586 59812	100nF +80-20% Y5V 50V
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- RESISTORS -

3600	4822 051 30332	3,3K 5% 0,062W
3601	4822 051 30123	12K 5% 0,062W
3603	4822 051 30684	680K 5% 0,062W
3605	4822 116 52298	680K 5% 0,5W
3608	4822 051 30392	3,9K 5% 0,063W

3610	4822 051 30103	10K 5% 0,062W
3611	4822 051 30153	15K 5% 0,062W
3612	4822 051 30472	4,7K 5% 0,062W
3613	4822 117 11503	220R 1% 0,1W
3616	4822 117 13632	100K 1% 0,62W

3617	4822 117 12891	220K 1%
3619	4822 051 30153	15K 5% 0,062W
3621	4822 117 13632	100K 1% 0,62W
3622	4822 051 30562	5,6K 5% 0,063W
3625	4822 051 30103	10K 5% 0,062W

3626	4822 116 52213	180R 5% 0,5W
3628	4822 116 52213	180R 5% 0,5W
3629	4822 117 12925	47K 1% 0,063W
3638	4822 051 30222	2,2K 5% 0,062W
3640	4822 051 30222	2,2K 5% 0,062W

3641	4822 051 30273	27K 5% 0,062W
3643	4822 051 30682	6,8K 5% 0,062W
3644	4822 051 30273	27K 5% 0,062W
3647	4822 051 30682	6,8K 5% 0,062W
3648	4822 051 30223	22K 5% 0,062W

3649	4822 051 30223	22K 5% 0,062W
3650	4822 051 20472	4,7K 5% 0,1W
3651	4822 116 83961	6,8K 5%
3652	4822 051 10102	1K 2% 0,25W
3653	4822 051 30103	10K 5% 0,062W

3654	4822 051 20228	2,2R 5% 0,1W
3655	4822 051 30272	2,7K 5% 0,062W
3656	4822 051 20472	4,7K 5% 0,1W
3657	4822 117 10833	10K 1% 0,1W
3658	4822 117 10833	10K 1% 0,1W

3660	4822 051 20228	2,2R 5% 0,1W
3661	4822 051 30331	330R 5% 0,062W
3662	4822 116 83961	6,8K 5%
3663	4822 051 30331	330R 5% 0,062W
3664	4822 051 30272	2,7K 5% 0,062W

3665	4822 051 20472	4,7K 5% 0,1W
3666	4822 051 30393	39K 5% 0,062W
3667	4822 051 30393	39K 5% 0,062W
3668	4822 051 10102	1K 2% 0,25W
3669	4822 051 20472	4,7K 5% 0,1W

- RESISTORS -

3670	4822 051 30682	6,8K 5% 0,062W
3671	4822 117 12925	47K 1% 0,063W
3672	4822 117 10833	10K 1% 0,1W
3673	4822 051 20228	2,2R 5% 0,1W
3674	4822 051 10102	1K 2% 0,25W

3675	4822 117 10833	10K 1% 0,1W
3676	4822 117 13632	100K 1% 0,62W
3677	4822 051 30223	22K 5% 0,062W
3678	4822 051 30223	22K 5% 0,062W
3679	4822 117 12925	47K 1% 0,063W

3680	4822 117 10833	10K 1% 0,1W
3681	4822 051 20228	2,2R 5% 0,1W
3682	4822 051 30102	1K 5% 0,062W
3683	4822 051 30472	4,7K 5% 0,062W
3684	4822 051 20391	390R 5% 0,1W

3685	4822 051 30471	470R 5% 0,062W
3686	4822 051 30472	4,7K 5% 0,062W
3687	4822 051 30472	4,7K 5% 0,062W
3688	4822 051 30393	39K 5% 0,062W
3689	4822 051 30393	39K 5% 0,062W

3690	4822 051 30471	470R 5% 0,062W
3691	4822 051 30471	470R 5% 0,062W
3693	4822 051 30272	2,7K 5% 0,062W
3695	4822 051 30272	2,7K 5% 0,062W
3696	4822 116 83883	470R 5% 0,5W

3697	4822 117 12925	47K 1% 0,063W
3698	4822 051 30682	6,8K 5% 0,062W
3699	4822 117 12925	47K 1% 0,063W
3700	4822 051 30682	6,8K 5% 0,062W
3701	4822 117 12925	47K 1% 0,063W

3702	4822 051 30223	22K 5% 0,062W
3703	4822 051 30223	22K 5% 0,062W
3704	4822 051 10102	1K 2% 0,25W
3705	4822 051 10102	1K 2% 0,25W
3706	4822 051 30223	22K 5% 0,062W

3708	4822 051 30223	22K 5% 0,062W
3716	4822 051 30223	22K 5% 0,062W
3718	4822 116 83883	470R 5% 0,5W
3719	4822 117 12925	47K 1% 0,063W
3720	4822 116 52176	10R 5% 0,5W

3721	4822 050 24708	4,7R 1% 0,6W
3724	4822 051 10102	1K 2% 0,25W
3725	4822 051 20472	4,7K 5% 0,1W
3726	4822 050 24708	4,7R 1% 0,6W
3727	4822 050 24708	4,7R 1% 0,6W

3728	4822 050 24708	4,7R 1% 0,6W
3729	4822 117 12925	47K 1% 0,063W
3730	4822 051 30222	2,2K 5% 0,062W
3731	4822 051 30152	1,5K 5% 0,062W
3732	5322 117 13049	470R 1% 0,063W

ELECTRICAL PARTSLIST - POWER BOARD**- RESISTORS -**

3733	4822 051 10102	1K 2% 0,25W
3734	4822 051 10102	1K 2% 0,25W
3735	4822 051 10102	1K 2% 0,25W
3736	4822 117 10834	47K 1% 0,1W
3737	4822 117 11449	2,2K 5% 0,1W
3738	4822 117 11449	2,2K 5% 0,1W
3739	4822 117 11449	2,2K 5% 0,1W
3741	4822 117 13632	100K 1% 0,62W
3742	4822 051 20472	4,7K 5% 0,1W
3743	4822 117 13577	330R 1% 1,25W
3744	4822 051 30331	330R 5% 0,062W
3745	4822 051 10102	1K 2% 0,25W
3746	4822 117 13632	100K 1% 0,62W
3747	4822 051 20472	4,7K 5% 0,1W
3748	4822 051 20472	4,7K 5% 0,1W
3749	5322 117 13059	560R 1% 0,063W
3750	5322 117 13056	8,2K 1% 0,063W
3751	4822 117 11454	820R 1% 0,1W
3752	4822 117 11454	820R 1% 0,1W
3753	4822 117 12925	47K 1% 0,063W
3754	4822 117 12903	1,8K 1% 0,063W
3755	4822 051 30272	2,7K 5% 0,062W
3756	4822 051 10102	1K 2% 0,25W
3757	4822 051 30273	27K 5% 0,062W
3758	4822 051 30123	12K 5% 0,062W
3760	4822 051 30472	4,7K 5% 0,062W
3769	4822 051 30103	10K 5% 0,062W
3780	4822 117 10361	680R 1% 0,1W
3781	4822 117 11139	1,5K 1% 0,1W
3782	4822 051 30562	5,6K 5% 0,063W
3783	4822 051 30103	10K 5% 0,062W
3786	4822 117 12925	47K 1% 0,063W
4600	4822 051 30008	OR00 JUMPER
4601	4822 051 30008	OR00 JUMPER
4602	4822 051 30008	OR00 JUMPER
4605	4822 051 30008	OR00 JUMPER
4610	4822 051 20008	OR JUMPER(0805)
4653	4822 051 30008	OR00 JUMPER
4663	4822 051 30008	OR00 JUMPER
4665	4822 051 20008	OR JUMPER(0805)
4682	4822 051 30008	OR00 JUMPER
4686	4822 051 30008	OR00 JUMPER
4691	4822 051 30008	OR00 JUMPER
4692	4822 051 30008	OR00 JUMPER
4693	4822 051 30008	OR00 JUMPER
4698	4822 051 20008	OR JUMPER(0805)
4880	4822 051 20008	OR JUMPER(0805)

- COILS & FILTERS -

5601	2422 549 43062	EMI 100MHZ 600R
5602	2422 549 43062	EMI 100MHZ 600R
5603	2422 549 44919	EMI 100MHZ 600R
5604	2422 549 44919	EMI 100MHZ 600R
5605	4822 157 11837	0,36µH 10% 5,6X5
5606	4822 157 11837	0,36µH 10% 5,6X5
5607	4822 157 62552	2,2µH
5608	4822 157 11837	0,36µH 10% 5,6X5
5609	4822 157 10686	CHOKE COIL 0,47µF
5610	2422 549 44393	EMI 100MHZ 2,7K
5611	4822 157 11837	0,36µH 10% 5,6X5
5612	2422 549 44919	EMI 100MHZ 600R
5616	2422 549 43062	EMI 100MHZ 600R
5618	2422 549 43062	EMI 100MHZ 600R

- DIODES -

6600	4822 130 11397	BAS316
6601	4822 130 30621	1N4148
6605	5322 130 34337	BAV99
6617	4822 130 82079	D3SBA20
6618	4822 130 34278	BZX79-B6V8
6619	3198 010 53380	BZX79-B3V3
6620	4822 130 11397	BAS316
6621	4822 130 30621	1N4148
6622	4822 130 30621	1N4148
6623	4822 130 34278	BZX79-B6V8
6630	4822 130 11397	BAS316
6631	4822 130 11397	BAS316

- IC & TRANSISTORS -

7600	4822 130 60373	BC856B
7602	9322 133 18682	AN7125P
7603	4822 130 60373	BC856B
7604	9322 150 74668	TDA7468D
7605	4822 130 60373	BC856B
7606	4822 130 60373	BC856B
7607	5322 130 60159	BC846B
7608	4822 130 41246	BC327-25
7609	4822 130 41246	BC327-25
7610	5322 130 60159	BC846B
7611	5322 130 60159	BC846B
7612	5322 130 60159	BC846B
7615	5322 130 60159	BC846B
7616	5322 130 60159	BC846B
7617	4822 130 60373	BC856B

ELECTRICAL PARTSLIST - POWER BOARD**- IC & TRANSISTORS -**

7618	4822 130 41327	BC327-40
7619	5322 130 60159	BC846B
7620	4822 130 40995	BD438
7621	4822 130 40995	BD438
7622	4822 130 41327	BC327-40
7623	4822 130 40959	BC547B
7624	4822 130 60373	BC856B
7625	5322 130 60159	BC846B
7626	5322 130 60159	BC846B
7627	5322 130 60159	BC846B
7628	5322 130 60159	BC846B
7629	9352 621 95135	TDA3664/N
7630	4822 130 40855	BC337
7631	4822 130 41246	BC327-25
7636	5322 130 60159	BC846B
7638	5322 130 60159	BC846B
7639	5322 130 60159	BC846B

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - USB BOARD**- MISCELLANEOUS -**

1701	2422 025 16747	SOCKET USB H 4P	3712	4822 051 30123	12K 5% 0,062W
1702	4822 267 10956	SOCKET FFC 7P	3713	4822 051 30123	12K 5% 0,062W
1703	4822 265 11535	SOCKET FFC 8P	3714	4822 051 30123	12K 5% 0,062W
1705	4822 117 11748	FUSE 2,2R 1206 5%	3715	4822 051 30123	12K 5% 0,062W
			3716	4822 051 30123	12K 5% 0,062W

3717	4822 117 12925	47K 1% 0,063W
3718	4822 051 30223	22K 5% 0,062W
3719	4822 051 30223	22K 5% 0,062W
3720	4822 051 30331	330R 5% 0,062W
3721	4822 117 12706	10K 1% 0,063W

- CAPACITORS -

2701	4822 122 33761	22pF 5% NP0 50V	3722	4822 117 12706	10K 1% 0,063W
2702	4822 122 33761	22pF 5% NP0 50V	3723	4822 117 12706	10K 1% 0,063W
2703	4822 124 22726	4,7µF 35V	3724	4822 117 12706	10K 1% 0,063W
2704	4822 126 13879	220nF +80-20% 16V	3725	4822 117 12706	10K 1% 0,063W
2705	4822 126 13879	220nF +80-20% 16V	3726	4822 117 12706	10K 1% 0,063W
2706	4822 126 14583	470nF 10% 16V	3727	4822 117 12706	10K 1% 0,063W
2707	4822 126 13879	220nF +80-20% 16V	3728	4822 117 12706	10K 1% 0,063W
2708	4822 126 14583	470nF 10% 16V	3729	4822 051 30222	2,2K 5% 0,062W
2709	2238 586 59812	100nF +80-20% Y5V 50V	3730	4822 051 30222	2,2K 5% 0,062W
2710	4822 126 13879	220nF +80-20% 16V	3731	4822 051 30471	470R 5% 0,062W
2711	3198 016 31020	1nF NP0 25V	3732	4822 051 30471	470R 5% 0,062W
2712	3198 016 31020	1nF NP0 25V	3733	4822 117 12925	47K 1% 0,063W
2713	4822 126 13883	220pF 5% 50V	3734	4822 117 12925	47K 1% 0,063W
2714	4822 126 13883	220pF 5% 50V	3735	4822 051 30221	220R 5% 0,062W
2715	4822 126 13881	470pF 5% 50V	3736	4822 051 30103	10K 5% 0,062W
2720	4822 124 41796	22µF 20% 16V	3737	4822 051 30332	3,3K 5% 0,062W
2721	4822 126 14241	330pF NP0 50V	3738	4822 051 30332	3,3K 5% 0,062W
2722	4822 126 14241	330pF NP0 50V	3740	4822 051 30474	470K 5% 0,062W
2723	4822 126 14241	330pF NP0 50V	3741	4822 051 30474	470K 5% 0,062W
2724	4822 126 14241	330pF NP0 50V	3742	4822 117 12925	47K 1% 0,063W
2725	4822 124 22726	4,7µF 35V	3743	4822 117 13632	100K 1% 0,62W
2726	4822 124 22726	4,7µF 35V	3744	4822 051 30273	27K 5% 0,062W
2727	2020 552 94427	100pF 5% NP0 50V	3745	3198 021 32250	2,2M 5%
2728	2020 552 94427	100pF 5% NP0 50V	4703	4822 051 30008	0R JUMPER
2730	5322 126 11583	10nF 10% X7R 50V			
2731	4822 124 22726	4,7µF 35V			
2732	2238 586 59812	100nF +80-20% Y5V 50V			
2733	5322 126 11583	10nF 10% X7R 50V			

- RESISTORS -

3701	4822 117 12139	22R 5% 0,062W
3702	4822 117 12139	22R 5% 0,062W
3703	4822 117 12891	220K 1%
3704	4822 051 30102	1K 5% 0,062W
3705	4822 051 30154	150K 5% 0,062W

3706	4822 117 12925	47K 1% 0,063W
3708	4822 051 30221	220R 5% 0,062W
3709	4822 051 30221	220R 5% 0,062W
3710	4822 051 30221	220R 5% 0,062W
3711	4822 051 30123	12K 5% 0,062W

- COILS & FILTERS -

5701	2422 543 01243	OSC XTL 12MHZ 7P AT-49
5702	2422 549 43062	EMI 100MHZ 600R
5703	4822 157 11499	BLM11P600SPT

- DIODES -

6701	5322 130 34337	BAV99
6702	5322 130 34337	BAV99
6703	4822 130 11397	BAS316

ELECTRICAL PARTSLIST - USB BOARD

- IC & TRANSISTORS -

7701	9322 190 70671	UAC3553-B-QG-F5
7702	5322 209 82941	LM358D
7703	5322 130 60159	BC846B
7704	4822 130 60373	BC856B
7705	5322 130 60159	BC846B
7706	5322 130 60159	BC846B
7721	4822 130 42804	BC817-25
7722	4822 130 42804	BC817-25

Note: Only these parts mentioned in the list are normal service parts.

ELECTRICAL PARTSLIST - VOLUME BOARD

- MISCELLANEOUS -

1200	4822 265 11207	SOCKET FFC 6P
1201	2422 129 16545	ROTARY ENCODER 24P
1202	2422 128 02917	SWITCH-TACT
1203	2422 128 02917	SWITCH-TACT

- CAPACITORS -

2201	5322 126 11583	10nF 10% X7R 50V
2202	2020 552 94427	100pF 5% NP0 50V
2203	2020 552 94427	100pF 5% NP0 50V

- RESISTORS -

3201	4822 051 30222	2,2K 5% 0,062W
3204	4822 051 30101	100R 5% 0,062W
3205	4822 051 30102	1K 5% 0,062W
3206	4822 051 30102	1K 5% 0,062W

- MISCELLANEOUS -

1009	2440 257 40406	LOUDSPEAKER 6R 10W
1010	2440 257 40406	LOUDSPEAKER 6R 10W
1011	 3140 118 33721	TFM POW EI-57 UL (-/17)
1011	 3140 118 33731	TFM POW (-/05)
1012	2422 030 00374	CON NBM SUPP H 2P M TC08 B

1013	4822 276 13963	CD DOOR SWITCH
8006	3139 111 02331	FFC FOIL 18P/220/18P AD
8009	3139 111 02561	FFC FOIL 06P/280/06P BD
8010	3139 110 34100	CWAS FFC BD 04P 140
8011	4822 320 12752	7P - 180MM
8012	4822 320 12702	6P - 140MM
8013	3139 110 34660	FFC FOIL 06P/400/06P AD
8014	3139 110 34330	FFC FOIL
8016	3139 110 34740	FFC FOIL 08P/180/08P AD
8021	3139 110 34330	FFC FOIL

8800	4822 320 12178	15P - 65MM
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Note: Only these parts mentioned in the list are normal service parts.