

ZS-PS20CP

SERVICE MANUAL

Ver. 1.0 2008.07

*AEP Model
UK Model
Australian Model
Singapore Model
Korea Model
Thai Model*



CD Section	Model Name Using Similar Mechanism	ZS-S2iP
	CD Mechanism Type	KSM-213CDP
	Optical Pick-up Name	KSS-213C

SPECIFICATIONS

CD player section

System

Compact disc digital audio system

Laser diode properties

Emission duration: Continuous

Laser output: Less than 44.6 μ W

(This output is the value measurement at a distance of 200mm from the objective lens surface on the

Optical Pick-up Block with 7mm aperture.)

Spindle speed

200 r/min (rpm) to 500 r/min (rpm) (CLV)

Number of channels

2

Frequency response

20 - 20 000 Hz +1/-2 dB

Wow and flutter

Below measurable limit

Radio section

Frequency range

FM: 87.5 - 108 MHz

AM: 531 - 1 611 kHz (9 kHz step)

530 - 1 610 kHz (10 kHz step)

Antennas

FM: Telescopic antenna

AM: Built-in ferrite bar antenna

USB section

Supported bit rate

MP3 (MPEG 1 Audio Layer-3):

32 - 320 kbps, VBR

WMA:

16-320Kbps, VBR

Sampling frequencies

MP3 (MPEG 1 Audio Layer-3):

32/44.1/48 kHz

WMA:

32/44.1/48kHz

⚡ (USB) port

USB-A (Full Speed)

General

Speaker

Full range: 8 cm (3 1/4 inches) dia., 4 Ω , cone type (2)

Input

⚡ (USB) port: Type A, maximum current 500 mA

AUDIO IN jack (stereo minijack)

Outputs

Headphones jack (stereo minijack)

For 16 - 68 Ω impedance headphones

Power output

1.7 W + 1.7 W (at 4 Ω , 10% harmonic distortion)

– Continued on next page –

PERSONAL AUDIO SYSTEM

9-889-220-01

2008G04-1

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Sony Corporation

Audio&Video Business Group

Published by Sony Techno Create Corporation

SONY[®]

ZS-PS20CP

Power requirements

For player:

Malaysia and Singapore models: 230 – 240 V AC, 50 Hz

Thailand model: 220 V AC, 50 Hz

Korea model: 220 V AC, 60 Hz

Other models: 230 V AC, 50 Hz

9 V DC, 6 R14 (size C) batteries

For remote control:

3 V DC, 2 R03 (size AAA) batteries

Power consumption

AC 13 W

Battery life

For player:

FM reception

Sony R14P: approx. 13.5 h

Sony alkaline LR14: approx. 20 h

CD playback

Sony R14P: approx. 2.5 h

Sony alkaline LR14: approx. 7 h

Dimensions

Approx. 360 × 142 × 234 mm (w/h/d)

(14 1/4 × 5 5/8 × 9 1/4 inches) (incl. projecting parts)

Mass

Approx. 2.8 kg (6 lb 2 oz) (incl. batteries)

Supplied accessories

AC power cord (1)

Remote control (1)

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

CAUTION

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

NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

FLEXIBLE CIRCUIT BOARD REPAIRING

- Keep the temperature of soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

NOTES ON DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

**LF : LEAD FREE MARK**

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.

Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.

Soldering irons using a temperature regulator should be set to about 350 °C.

Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!

- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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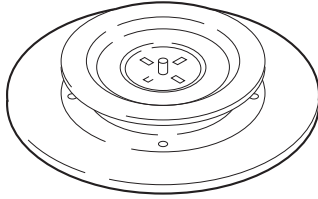
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SECTION 1 SERVICING NOTES

CHUCK PLATE JIG ON REPAIRING

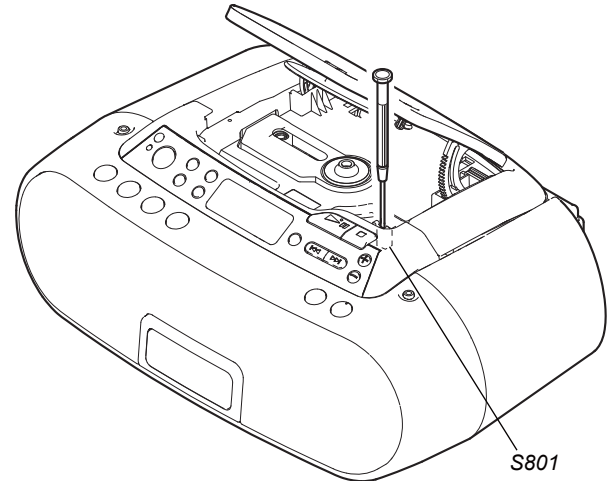
On repairing CD section, playing a disc without the lid (CD), use Chuck Plate Jig.

- Code number of Chuck Plate Jig: X-4918-255-1



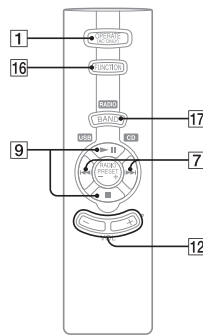
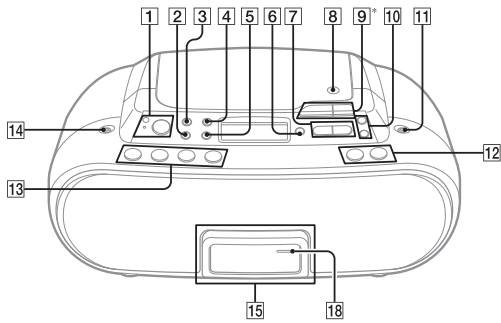
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Turn ON the [OPERATE] button and press [CD] button to CD position.
2. Open the CD lid.
3. Turn on S801 with screwdriver, etc. as following figure.
4. Press the [▶||] (CD) button.
5. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken. Objective lens moves up and down three times for focus search.



This section is extracted from instruction manual.

Basic Operations



* VOLUME + (VOL + on the remote) 12 and 11 9 on the unit have a tactile dot.

Before using the unit

About the operating voltage

The unit's operating voltage is shown on the bottom of the unit. For changing the AM tuning interval, radio frequency range, and AC operation, check the operating voltage of your unit.

To turn on/off the power

Press OPERATE 1.

To adjust the volume

Press VOLUME +, - (VOL +, - on the remote) 12.

To listen through headphones

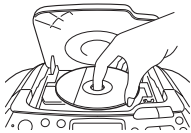
Connect the headphones to the (headphones) jack 14.

To reinforce the bass sound

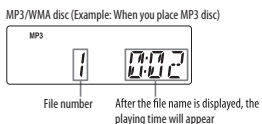
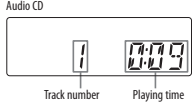
Press MEGA BASS 2 on the unit. "MEGA BASS" appears in the display. To return to normal sound, press the button again.

Playing a CD/MP3/WMA disc

- Press CD 13 on the unit. (On the remote, press OPERATE 1 and then press FUNCTION 16 repeatedly until "CD" appears in the display.)
- Press PUSH OPEN/CLOSE 8 on the unit, and place a disc with the label side up in the CD compartment. To close the CD compartment, press PUSH OPEN/CLOSE 8 on the unit.



- Press 9. The unit plays all the tracks/MP3/WMA files once. When you place MP3/WMA discs, "MP3" or "WMA" appears in the display after the unit reads the file information.



To	Press
Pause playback	9. To resume play, press it again.
Stop playback	9.
Go to the next track/MP3/WMA file	7.
Go back to the previous track/MP3/WMA file	7.
Select a folder on an MP3/WMA disc	+ on the unit to go forward and - to go backward 10.
Locate a point while listening to the sound	7 (forward) or 7 (backward) on the unit while playing and hold it until you find the point.
Locate a point while observing the display	7 (forward) or 7 (backward) on the unit in pause and hold it until you find the point.
Remove the CD	PUSH OPEN/CLOSE 8.

Tips

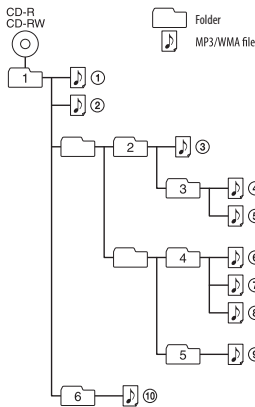
- Playback starts from the track/MP3/WMA file you last stopped playing (Resume play). During stop, the track/MP3/WMA file number to be played is displayed.
- To cancel resume play (to start play from the beginning of the first track/MP3/WMA file), press 9 or open the CD compartment in stop mode.

Note

You cannot locate a specific track/MP3/WMA file if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing MODE 4.

Example of folder structure and playing order

The playing order of folders and files is as follows:



Notes on MP3/WMA discs

- When a disc is inserted, the unit reads all the files on that disc. During this time, "READING" is displayed. If there are many folders or non-MP3/WMA files on the disc, it may take a long time for play to begin or for the next MP3/WMA file to start play. Do not save unnecessary folders or files other than MP3/WMA ones on a disc to be used for MP3/WMA listening.
- A folder that does not include an MP3/WMA file is skipped.
- Maximum number of files: 511
- Maximum number of folders: 150
- Maximum directory steps: 8
- Folder names and file names can be displayed with up to 32 characters.
- The characters A - Z, a - z, 0 - 9, and . can be displayed on this unit. Other characters are displayed as " _ ".
- This unit conforms to Version 1.1 of the ID3 tag format. If the file has the ID3 tag information, "song title", "artist name", and "album name" can be displayed.
- When naming, be sure to add the file extension ".mp3" or ".wma" to the file name.
- If you put the extension ".mp3" or ".wma" to a file other than an MP3/WMA file, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.
- The file name does not correspond to the ID3 tag.
- If an MP3/WMA disc that contains over 511 files is played, the disc may not be played as shown in the illustration.

Listening to the radio

- Press RADIO 13 on the unit (BAND 17) on the remote) repeatedly. Each time you press the button, the indication changes as follows: "FM" → "AM".
- Hold down TUNE + or - 10 until the frequency digits begin to change in the display. The unit automatically scans the radio frequencies and stops when it finds a clear station. If you cannot tune in a station, press TUNE + or - 10 repeatedly to change the frequency step by step. When an FM stereo broadcast is received, "ST" appears.

Tip

If the FM broadcast is noisy, press MODE 4 until "MONO" appears in the display and the radio will play in monaural.

Changing the AM tuning interval

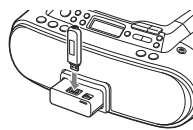
If you need to change the AM tuning interval, do the following:

- Press RADIO 13 on the unit until "AM" is displayed.
- Press DISPLAY/ENTER 5 on the unit for 2 seconds.
- Press RADIO 13 on the unit for 2 seconds. "9k STEP" or "10k STEP" flashes.
- Press PRESET + or - 7 on the unit to select "9k STEP" for 9 kHz interval or "10k STEP" for 10 kHz interval.
- Press DISPLAY/ENTER 5 on the unit. After changing the tuning interval, you need to reset your preset AM radio stations.

Opening/closing the Sliding Tray

Connecting a USB device

- Press 15. The Sliding Tray 15 is ejected.
- Connect your USB device to the (USB) port 15.

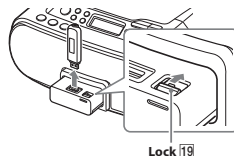


Tip

A digital music player is charged automatically in the USB mode when connected to the (USB) port 15.

Closing the Sliding Tray

- Remove the USB device (see "Listening to music of a USB device").
- Slide the Lock 19 as indicated by the arrow.



- Push the Sliding Tray 15 into the unit until it clicks.

Notes

- Do not carry the unit with a USB device inserted to the connector. Doing so may cause a malfunction.
- Be sure to store the Sliding Tray 15 before moving the unit.

Listening to music of a USB device

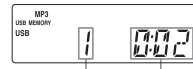
You can listen to music stored on an optional USB device (digital music player or USB storage media). Music files in WMA and MP3 format* can be played on this unit.

See "Playable USB devices" on the back page for a list of USB devices that can be connected to this unit.

* Files with copyright protection (Digital Rights Management) cannot be played on this unit.

- Press USB 13 on the unit.
- Connect the USB device to the (USB) port 15 (See "Connecting a USB device"). "USB MEMORY" appears in the display.
- Press 9.

The unit starts playing.



- Press VOLUME + or - (or VOL + or - on the remote) 12 to adjust the volume.

Other operations

To	Press
Pause playback	9. To resume play, press the button again.
Stop playback	9.
Select a folder	+ or - 10.
Select a file	7.
Find a point in a file	Hold down 7 (forward) or 7 (backward) during playback, and release the button at the desired point.
Select Repeat Play	REPEAT 6 on the unit repeatedly until "R" or "1" appears.
Remove the USB device	Hold down 9 until "NO DEV" appears, then remove the USB device.

* When playing a VBR MP3 file, the unit may resume playback from a different point.

Tips

- Playback starts from the MP3/WMA file you last stopped playing (Resume play). During stop, the MP3/WMA file number and the playing time to be played are displayed.
- To cancel resume play (to start play from the beginning of the first MP3/WMA file), press 9.

Note

Always hold down 9 and make sure that "NO DEV" appears before removing the USB device. Removing the USB device while "NO DEV" is not displayed may corrupt the data on the USB device or damage the USB device itself.

To change the play mode

Press MODE 4 repeatedly while the USB device is not playing. You can select Normal Play (all files on the USB device (or in the selected folder while " " lights up) one after another), Shuffle Play ("SHUF" or " SHUF"), or Program Play ("PGM").

Notes on the USB device

- You cannot change the play mode during playback.
- Some time may be needed before playback starts when:
 - the folder structure is complex.
 - the USB device is close to capacity.
- When a USB device is connected, the unit reads all the files on the device. If there are many folders or files on the device, it may take a long time for the unit to finish reading them.
- Do not connect a USB device to the unit through a USB hub.
- For some USB devices, when an operation is performed on the USB device, there may be a delay before it is carried out on this unit.
- This unit may not support all the functions provided on the connected USB device.
- The playback order on this unit may differ from the playback order on the connected USB device.
- During playback, folders that contain no MP3/WMA files are skipped.
- This unit can play MP3 and WMA files that have the ".mp3" or ".wma" file extension.
- If there are files on the disc that have the ".mp3" or ".wma" file extension, but are not MP3/WMA files, the unit may produce noise or malfunction.
- A maximum of 999 MP3/WMA files and 255 folders can be contained on a single USB device. The maximum number of MP3/WMA files and folders may vary, depending on the file and folder structure.
- Compatibility with all MP3/WMA encoding/writing software, recording devices, and recording media cannot be guaranteed. If you use an incompatible USB device, sound skipping or noise may be produced, or the device may not play at all.

Connecting optional components

You can enjoy the sound from an optional component such as a portable digital music player through the speakers of this unit. Be sure to turn off the power of each component before making any connections. For details, refer to the instruction manual of the component to be connected.

- Connect the AUDIO IN jack 11 on the unit to the line output jack of the portable digital music player or other components using an audio connecting cable (not supplied).
- Turn the unit and the connected component on.
- Press AUDIO IN 13 and start playing sound on the connected component.

The sound from the connected component is output from the speakers.

To connect the unit to a TV or VCR, use an extension cable (not supplied) with a stereo-mini jack on one end and two phono plugs on the other end.

Other Operations

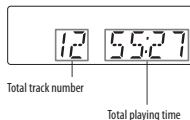
Using the display

You can check information about the CD using the display.

Checking the information of an audio CD

To check the total track number and playing time of the CD

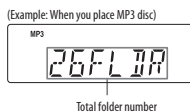
Press **[9]** to stop the CD playback.



Checking the information of an MP3/WMA disc

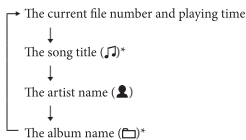
To check the total folder number on the CD

Press **[9]** to stop the CD playback.



To check file information

Press DISPLAY/ENTER **[5]** on the unit while playing an MP3/WMA disc. The display changes as follows:



* If the file does not have ID3 information, file name or folder name appears in the display.

Playing tracks/MP3/WMA files repeatedly (Repeat Play)

You can play tracks/MP3/WMA files repeatedly in normal, shuffle or program play modes.

- Press CD **[13]** on the unit. "CD" appears in the display.
- Proceed as follows:

To repeat	Do this
A single track/MP3/WMA file	<ol style="list-style-type: none"> Press REPEAT [6] on the unit until "☞" appears. Press [7] to select the track/MP3/WMA file that you want to repeat. Press [9].
All tracks/MP3/WMA files on the CD	<ol style="list-style-type: none"> Press REPEAT [6] on the unit until "☞" appears. Press [9].
A selected folder (MP3/WMA disc only)	<ol style="list-style-type: none"> Press MODE [4] until "□" appears and then press REPEAT [6] until "REP" appears. Select the folder by pressing [+] or [-]. Press [9].
Tracks/MP3/WMA files in random order	<ol style="list-style-type: none"> Start Shuffle Play (see "Playing tracks/MP3/WMA files in random order"). Press REPEAT [6] on the unit until "☞" appears. Press [9].
MP3/WMA files in a selected folder in random order (MP3/WMA disc only)	<ol style="list-style-type: none"> Start Folder Shuffle Play (see "Playing tracks/MP3/WMA files in random order"). Press REPEAT [6] on the unit until "☞" appears. Press [9].
Programmed tracks/MP3/WMA files	<ol style="list-style-type: none"> Program tracks/MP3/WMA files (see "Creating your own program"). Press REPEAT [6] on the unit until "☞" appears. Press [9].

To cancel Repeat Play

Press REPEAT **[6]** on the unit until "☞" disappears from the display.

Playing tracks/MP3/WMA files in random order (Shuffle Play)

You can play tracks/MP3/WMA files in random order.

- Press CD **[13]** on the unit. "CD" appears in the display.
- Press MODE **[4]** until "SHUF" appears in the display. When you select Folder Shuffle Play (MP3/WMA disc only), press MODE **[4]** on the unit until "□" and "SHUF" appear in the display. Then press **[+]** or **[-]** on the unit to select the folder you want.
- Press **[9]** to start Shuffle Play.

To cancel Shuffle Play

Stop playing first. Then press MODE **[4]** until "SHUF" disappears from the display.

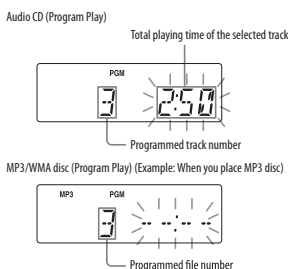
Tips

- During Shuffle Play, you cannot select the previous track/MP3/WMA file by pressing **[7]**.
- The resume function does not work during Shuffle Play.

Creating your own program (Program Play)

You can arrange the playing order of up to 25 tracks/MP3/WMA files on a CD.

- Press CD **[13]** on the unit. "CD" appears in the display.
- Press MODE **[4]** until "PGM" appears in the display.
- Press **[7]** or **[8]** to select the track/MP3/WMA file, and then press DISPLAY/ENTER **[5]** to add it to the program. Repeat to program other tracks in the order that you want. After programming the first track, "STEP 1" appears, followed by selected track/MP3/WMA file. Each time you add a track/MP3/WMA file, a step number is added.



- Press **[9]** to start Program Play.

To cancel Program Play

Stop playing first. Then press MODE **[4]** until "PGM" disappears from the display.

To clear the program you set

Press **[9]**. "NO STEP" appears in the display for 2 seconds, and the same display information as when inserting a CD appears.

Tips

- You can play the same program again, since the program is saved, until you press **[9]** or open the CD compartment.
- The resume function does not work during Program Play.

Presetting radio stations

You can store radio stations in unit's memory. You can preset up to 30 radio stations, 20 for FM and 10 for AM in any order.

- Press RADIO **[13]** repeatedly on the unit to select the band.
- Hold down RADIO **[13]** on the unit for 2 seconds until "AUTO" flashes in the display.
- Press DISPLAY/ENTER **[5]** on the unit. The stations are stored in memory from lower frequencies to higher ones.

If a station cannot be preset automatically

You may need to preset a station with a weak signal manually.

- Press RADIO **[13]** repeatedly on the unit to select the band.
- Tune in the station you want.
- Hold down DISPLAY/ENTER **[5]** on the unit for 2 seconds until the preset number flashes in the display.
- Press PRESET + or - **[7]** on the unit until the preset number you want for the station flashes in the display.
- Press DISPLAY/ENTER **[5]** on the unit. The new station replaces the old one.

Tip

The preset radio stations remain in memory even if you unplug the AC power cord or remove the batteries.

Playing preset radio stations

- Press RADIO **[13]** repeatedly on the unit to select the band.
- Press PRESET + or - **[7]** on the unit to tune in the stored station.

Falling asleep to music

- Play the music source you want.
- Press SLEEP **[3]** to display "SLEEP".
- Press SLEEP **[3]** to select the minutes until the unit goes off automatically.

Each time you press the button, the indication changes as follows:

"AUTO" → "60MIN" → "30MIN" → "20MIN" → "10MIN" → "OFF".

* When you select "AUTO", the CD and USB stops playing in 90 minutes at most and the unit goes off automatically. When you are listening to the radio and audio in, the unit goes off in 90 minutes.

When the preset time has passed, the unit goes off automatically.

If 4 seconds pass after pressing SLEEP **[3]**, the currently displayed time option is entered.

To cancel the sleep function

Press OPERATE **[1]** to turn off the power, or press SLEEP **[3]** repeatedly to set the sleep timer to "OFF" in step 3.

Playable USB devices

You can use the following Sony USB devices on this unit. Other USB devices are not playable on this unit.

Verified Sony digital music players (as of January 2008)

Product name	Model name
Walkman®	NWD-B103 / B103F / B105 / B105F
	NWZ-A815/A816/A818
	NWZ-S515/S516/S615F/S616F / S618F/S716F

Check the websites below for the latest information about compatible devices.

For customers in Europe:

<<http://support.sony-europe.com/>>

For customers in Latin America:

<<http://www.sony-latin.com/pa/info>>

For customers in Asia and Oceania:

<<http://www.sony-asia.com/section/support>>

Notes

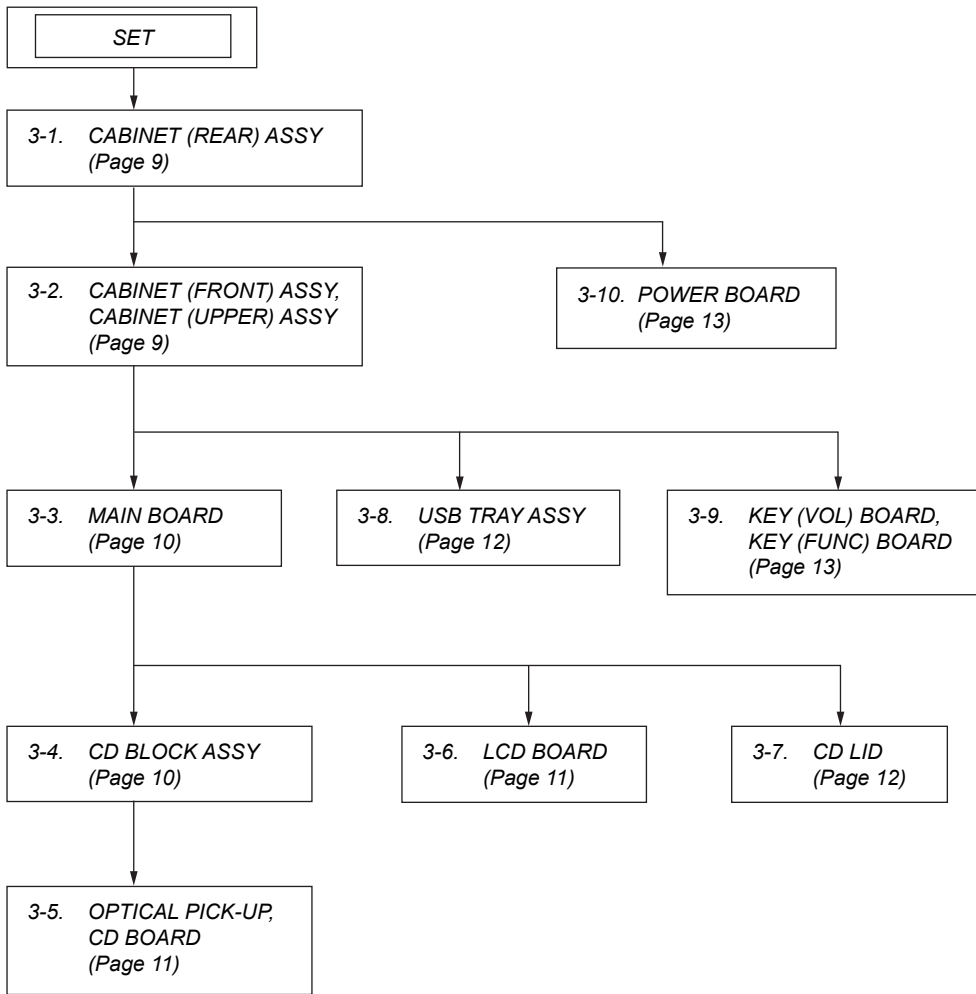
- When formatting the above models, be sure to format using the model itself or the dedicated formatting software for that model.
- Do not use any other than these USB devices. Operation of models not listed here is not guaranteed.
- Operation may not always be ensured even when using these USB devices.
- Some of these USB devices may not be available for purchase in certain areas.
- Playback of Windows Media Audio/AAC files with copyright protection is not supported.
- Files downloaded from a music download website may not be played.
- Connection through a hub is not supported.

Tips

- You can play the same program again, since the program is saved, until you press **[9]** or open the CD compartment.
- The resume function does not work during Program Play.

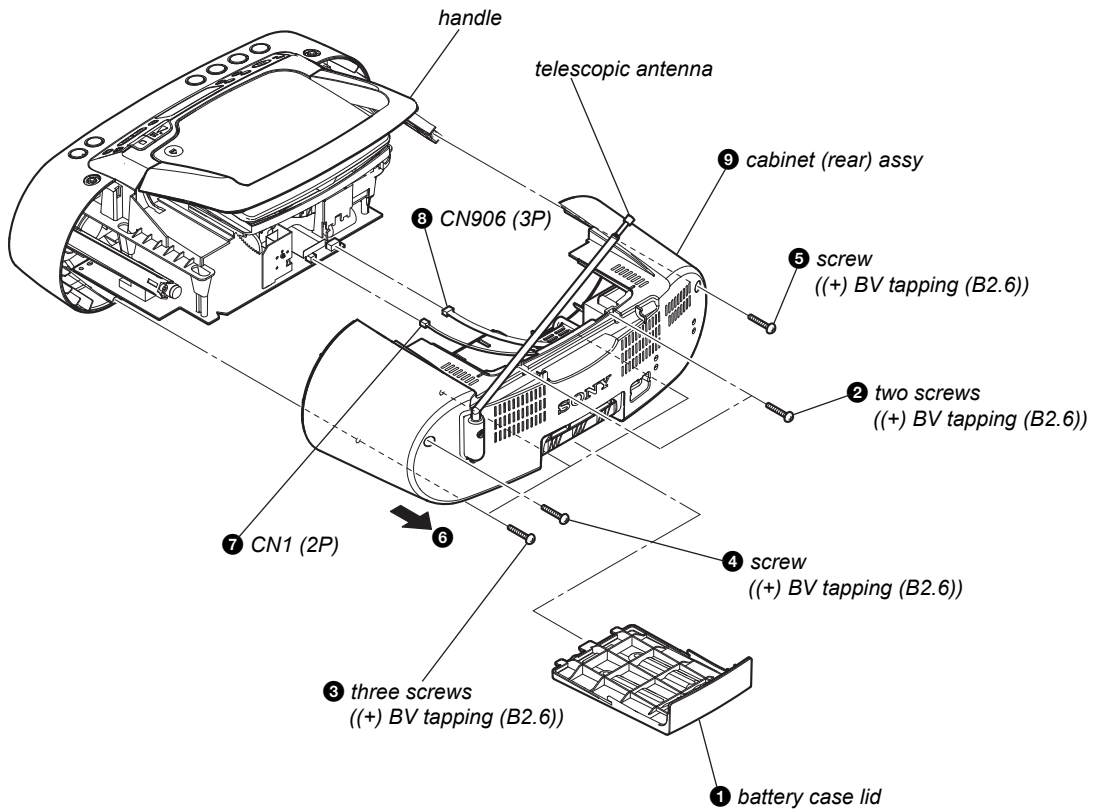
SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.

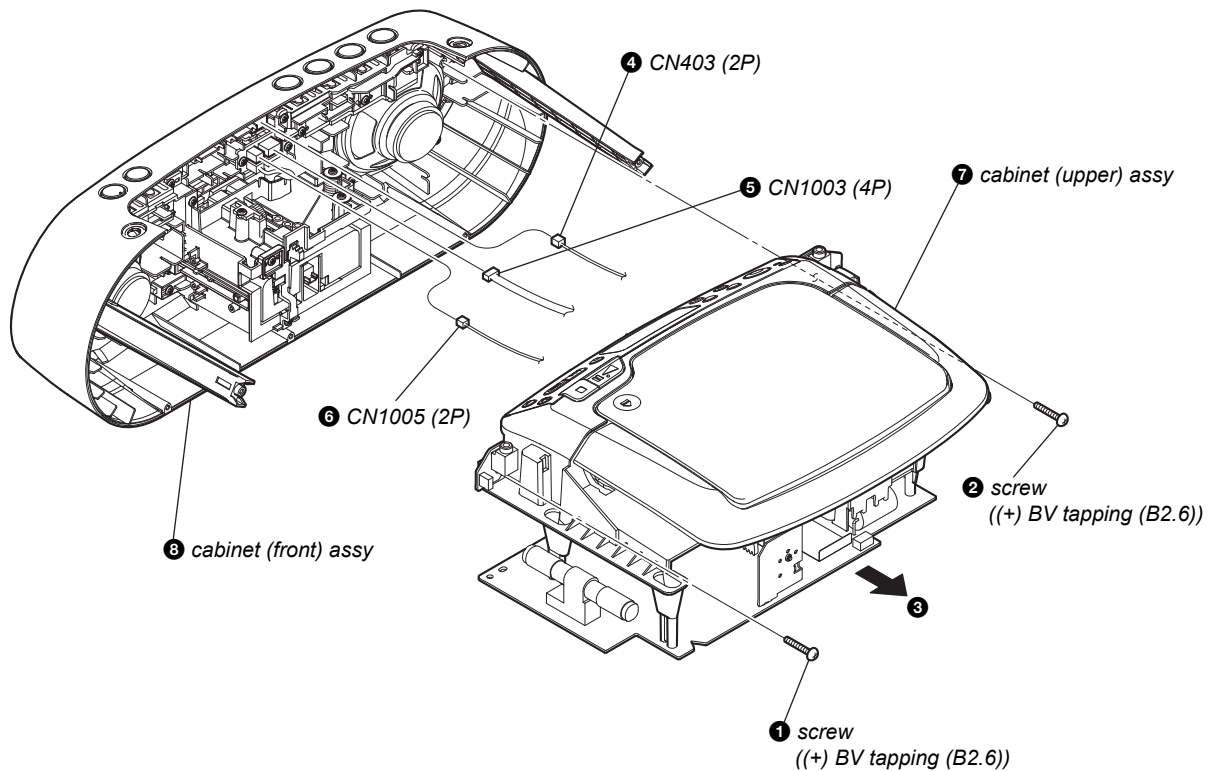


Note: Follow the disassembly procedure in the numerical order given.

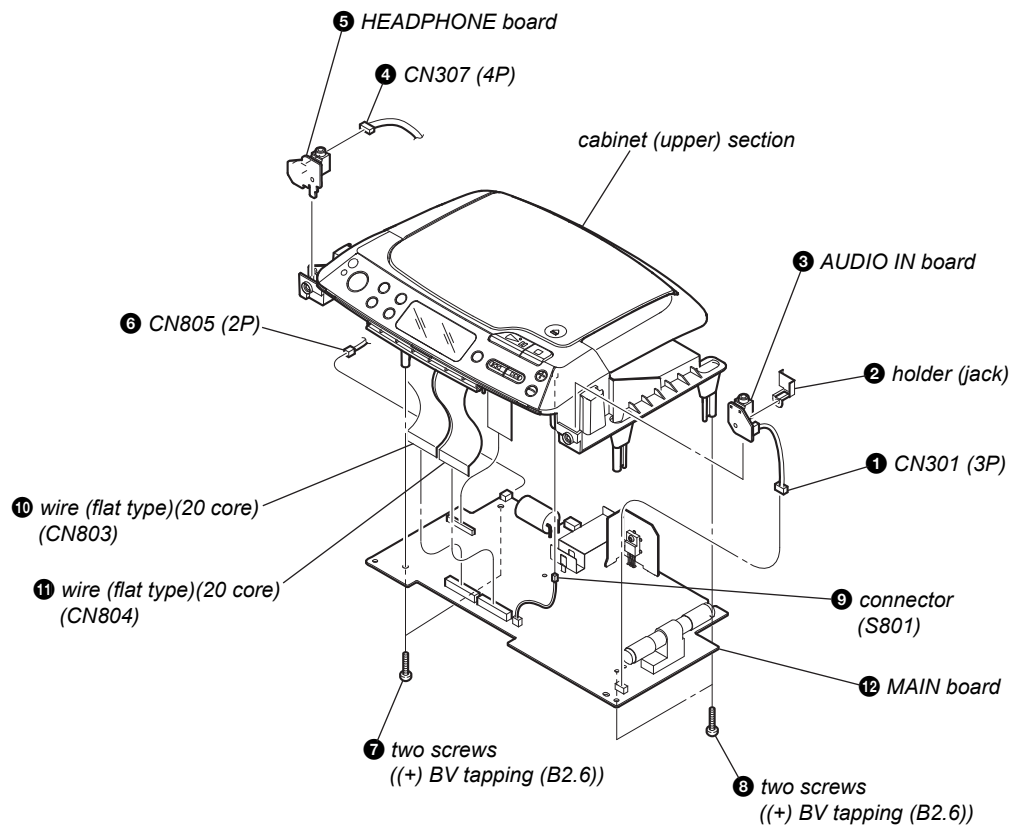
3-1. CABINET (REAR) ASSY



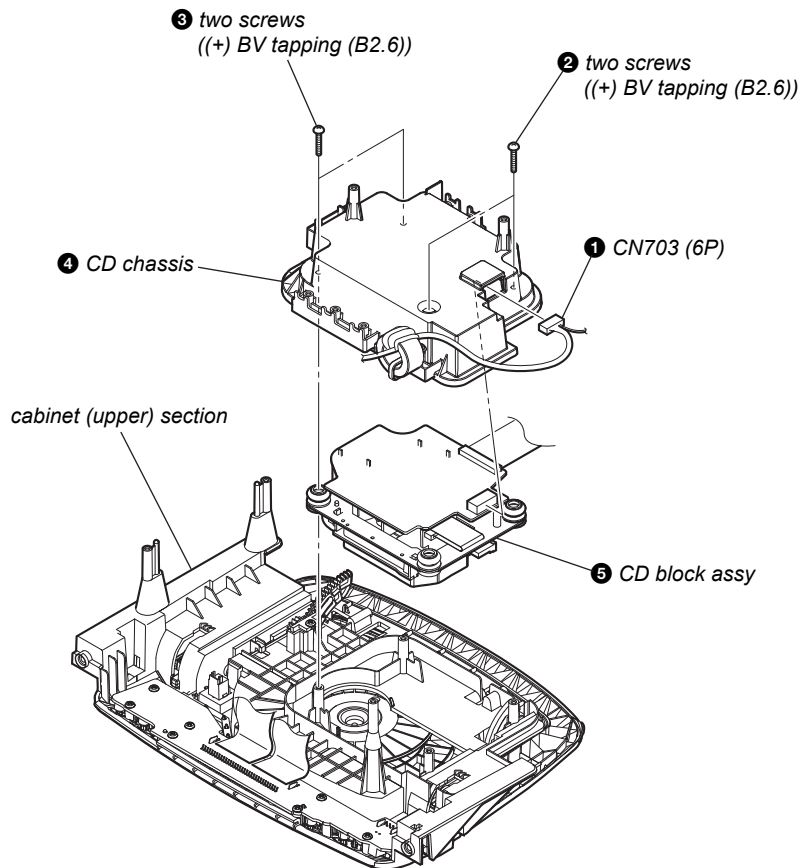
3-2. CABINET (FRONT) ASSY, CABINET (UPPER) ASSY



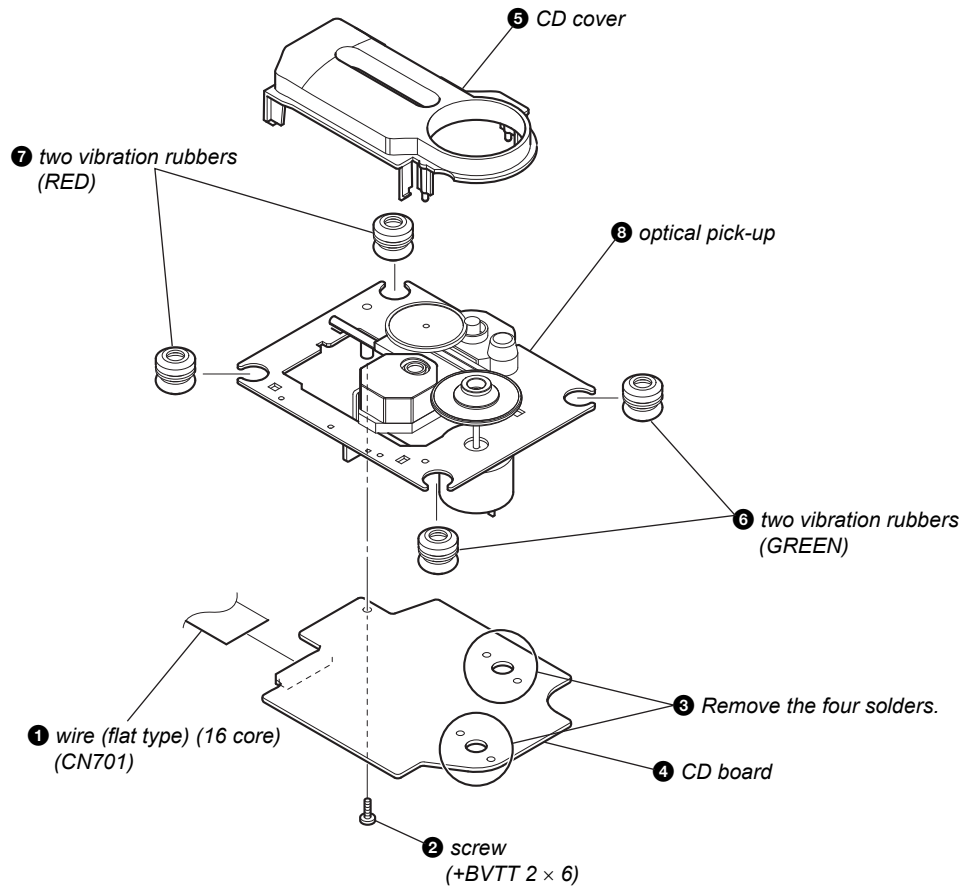
3-3. MAIN BOARD



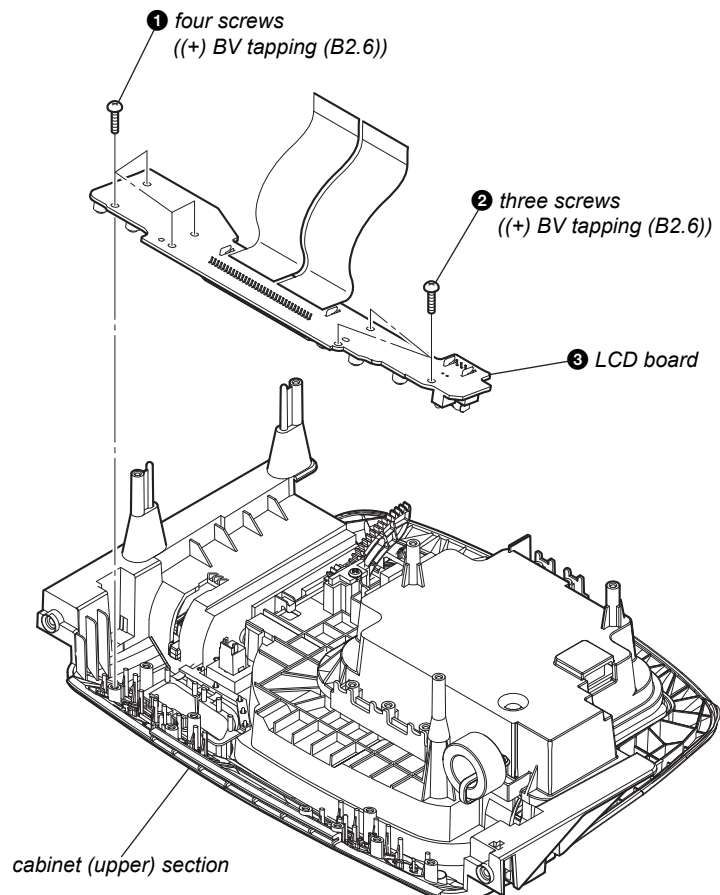
3-4. CD BLOCK ASSY



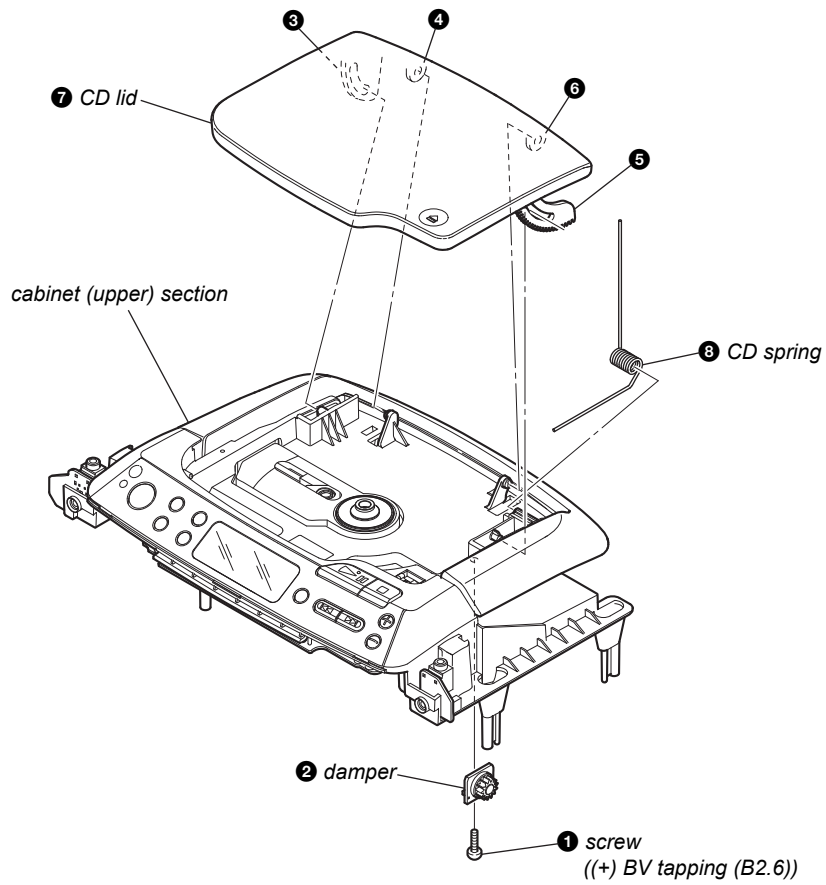
3-5. OPTICAL PICK-UP, CD BOARD



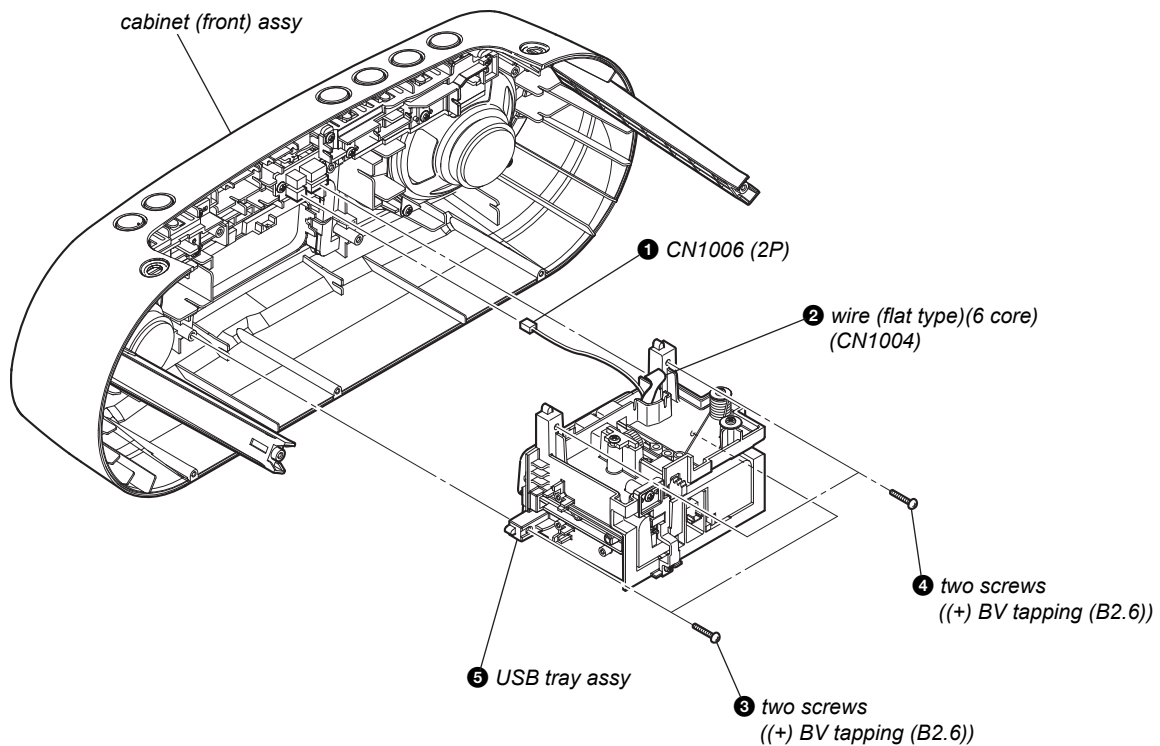
3-6. LCD BOARD



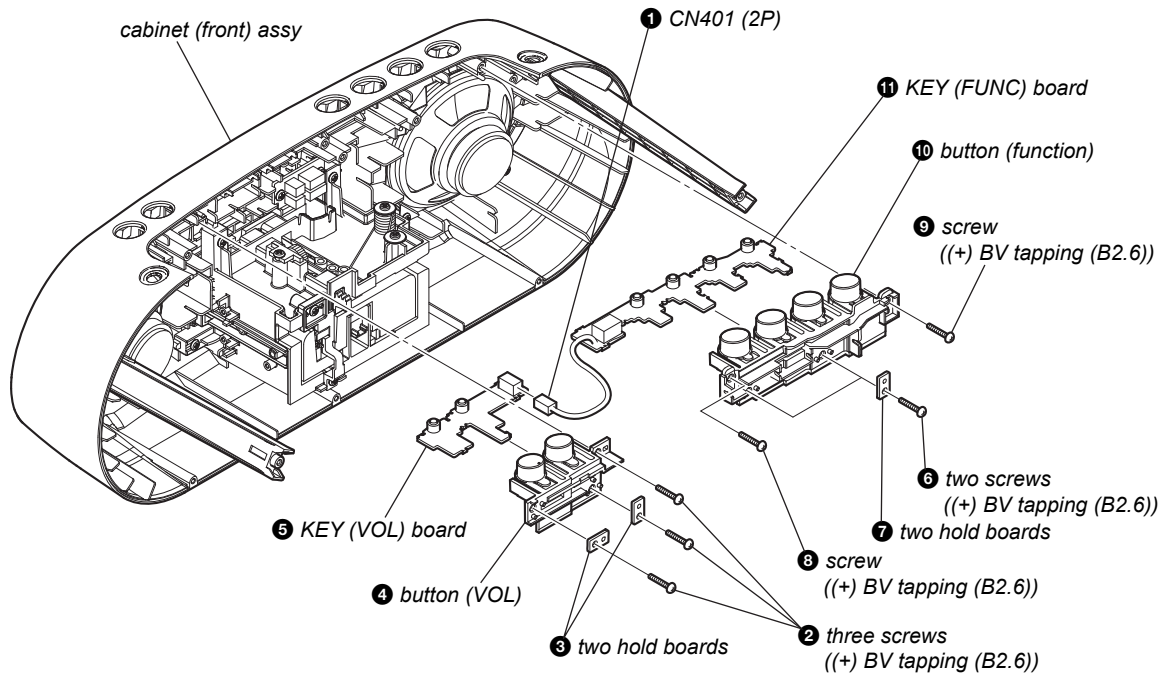
3-7. CD LID



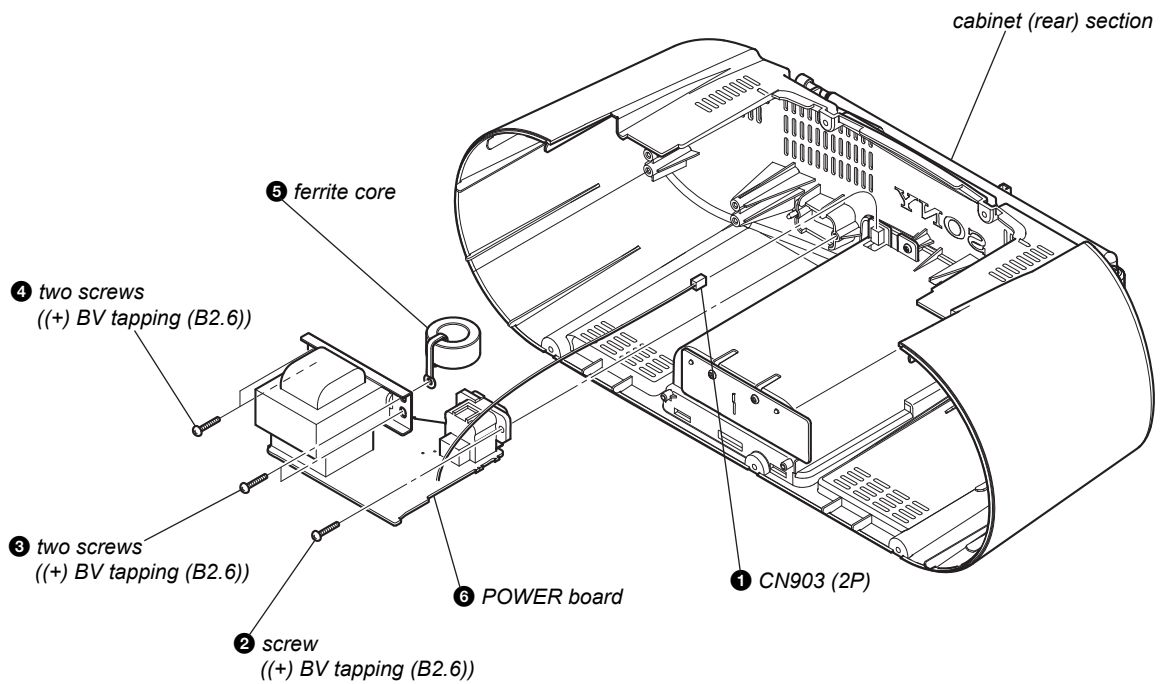
3-8. USB TRAY ASSY



3-9. KEY (VOL) BOARD, KEY (FUNC) BOARD



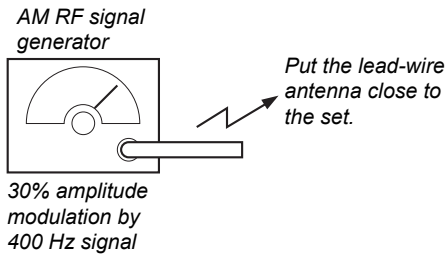
3-10. POWER BOARD



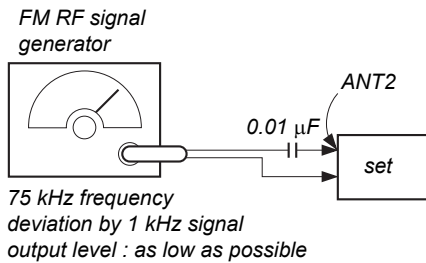
SECTION 4 ELECTRICAL ADJUSTMENTS

TUNER SECTION 0 dB = 1 μ V

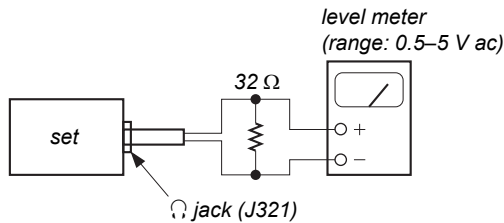
- **AM Section**
Setting:
 RADIO BAND•AUTO PRESET button: AM



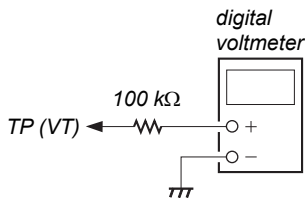
- **FM Section**
Setting:
 RADIO BAND•AUTO PRESET button: FM



- **Connecting Level Meter (FM, AM)**



- **Connecting Digital Voltmeter (FM, AM)**



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	
450 kHz	

AM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	530 kHz	1,610 kHz
Reading on Digital voltmeter	0.8 \pm 0.1 V	5.0 \pm 0.6 V
Adjustment Part	L3	<confirmation>

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
ANT1	CT3
620 kHz	1,400 kHz

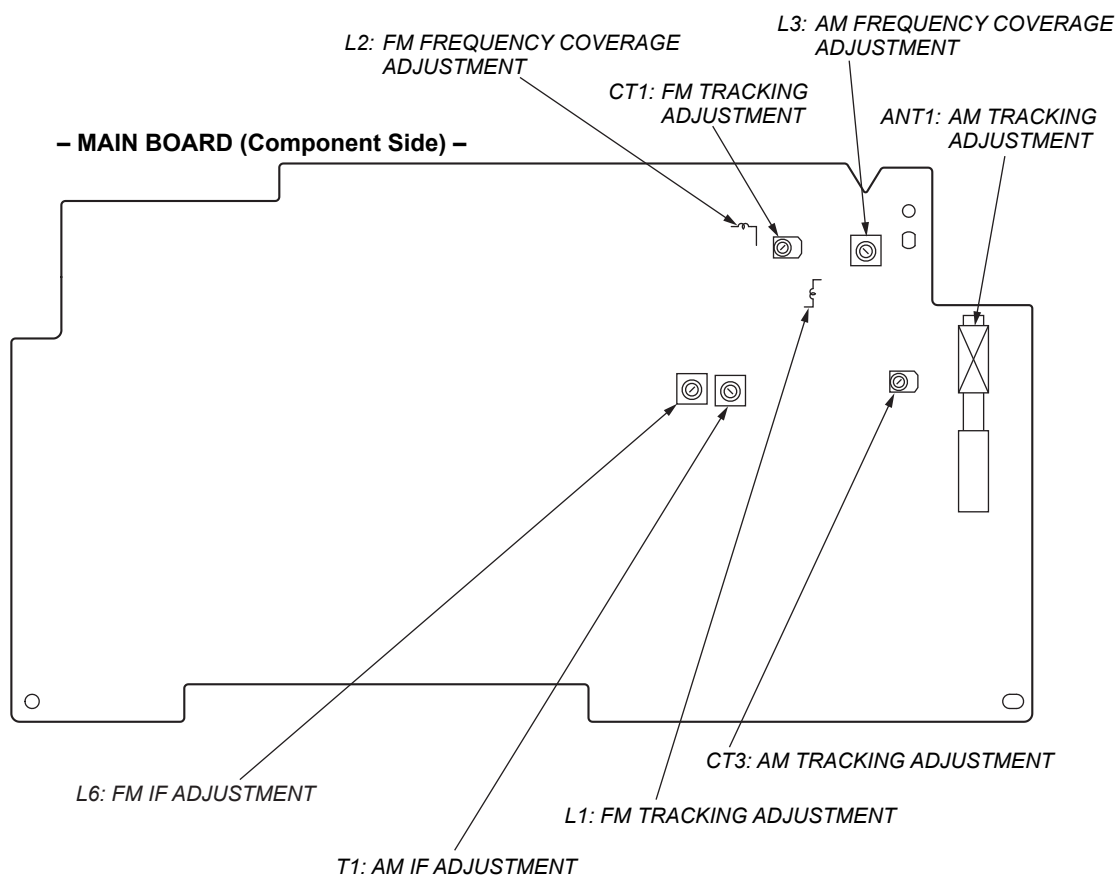
FM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L6	
10.7 MHz	

FM FREQUENCY COVERAGE ADJUSTMENT		
Frequency Display	87.5 MHz	108 MHz
Reading on Digital voltmeter	1.5 \pm 0.5 V	3.0 \pm 0.3 V
Adjustment Part	<confirmation>	L2

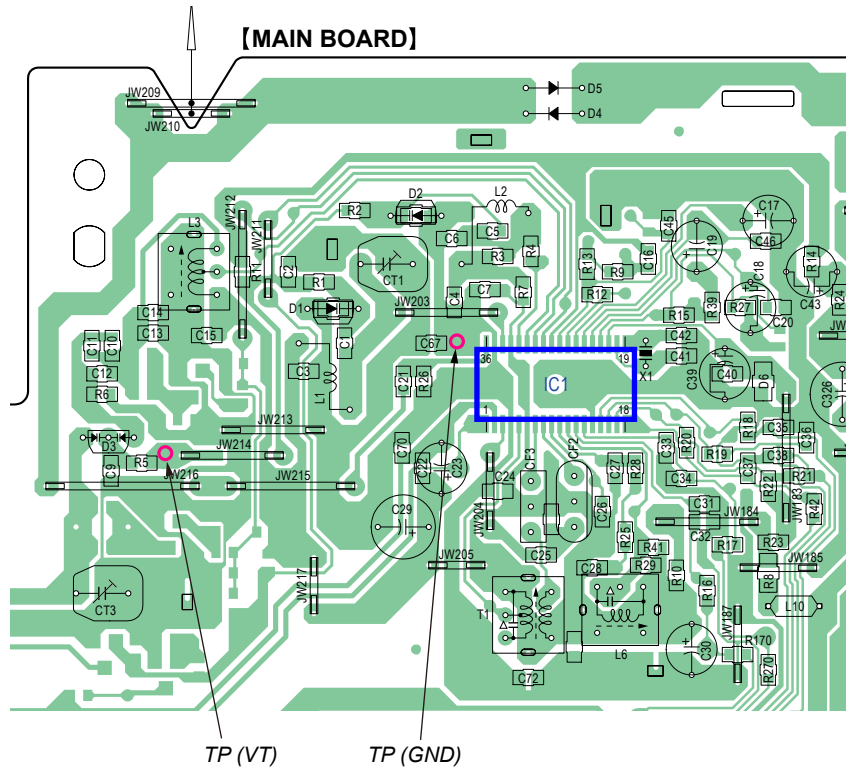
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L1	CT1
87.5 MHz	108 MHz

Adjustment Location: See page 15.

Adjustment Location:



Test Point:



CD SECTION

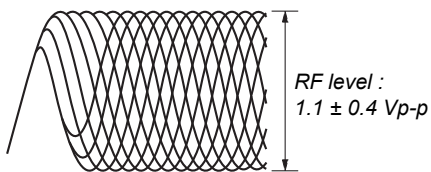
CD section adjustments are done automatically in this set.
In case of operation check, confirm that focus bias.

FOCUS BIAS CHECK

1. Connect the oscilloscope between IC701 pin ② and pin ⑪ (or TP (RF OUT) and TP (VC)).
2. Insert the disc (PATD-012 (Tr 15)). (Part No. : 4-225-203-01)
3. Press the [▶ ||] (CD) button.
4. Confirm that the oscilloscope waveform is as shown in the figure below. (eye pattern)
A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

- RF signal reference waveform (eye pattern)

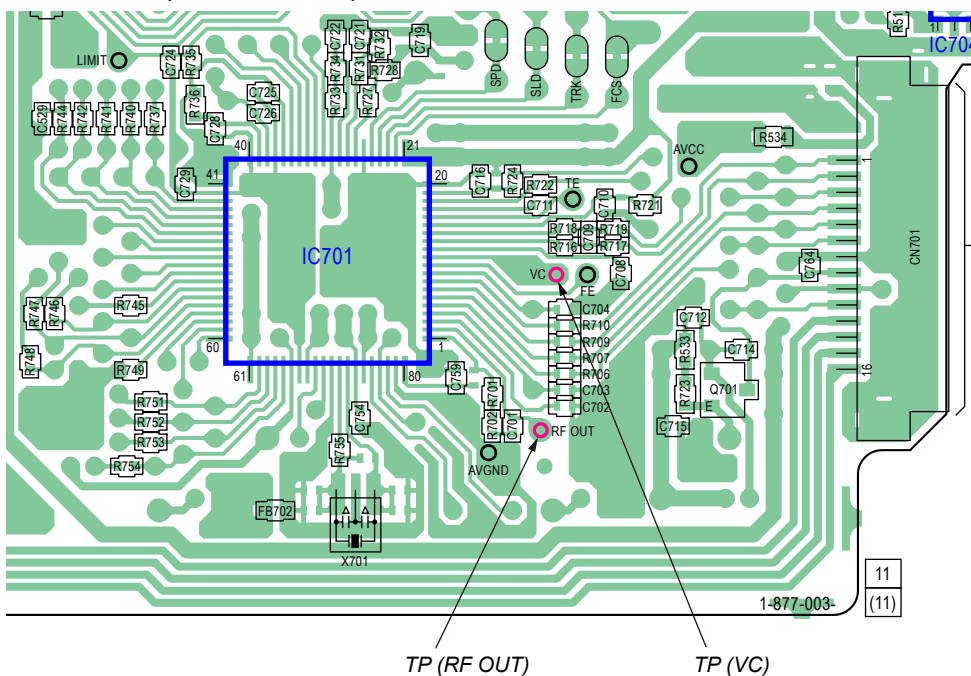
VOLT/DIV : 50 mV (10 : 1 probe in use)
TIME/DIV : 500 nS



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

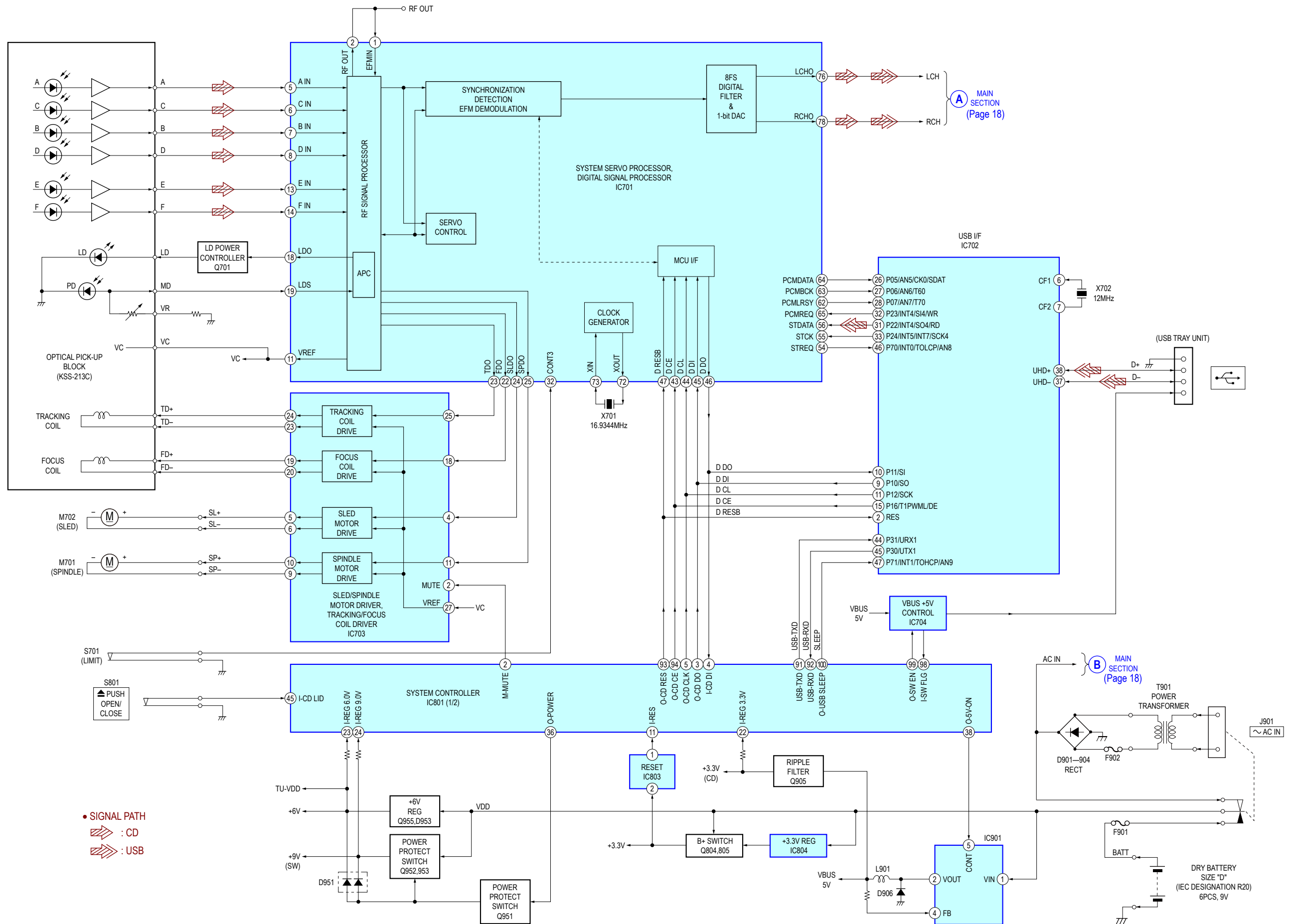
Test Point:

– CD BOARD (Conductor Side) –

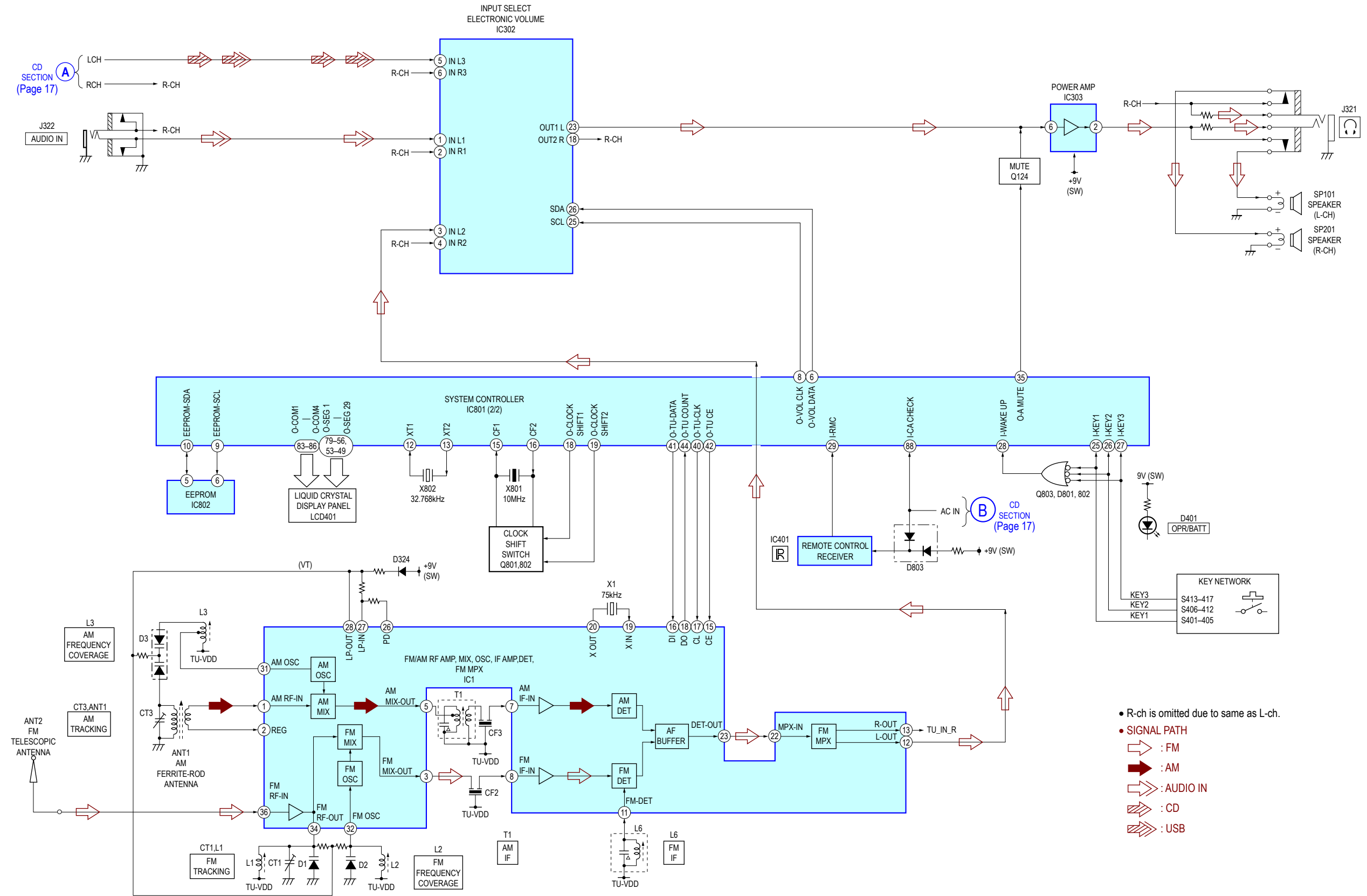


SECTION 5 DIAGRAMS

5-1. BLOCK DIAGRAM – CD Section –



5-2. BLOCK DIAGRAM – MAIN Section –



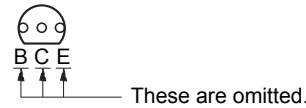
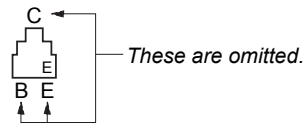
THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For Printed Wiring Boards.

- Note:**
- : Parts extracted from the component side.
 - : Parts extracted from the conductor side.
 - : indicates side identified with part number.
 - △: internal component.
 - : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

Caution:
 Pattern face side: Parts on the pattern face side seen from (Conductor Side) the pattern face are indicated.
 Parts face side: Parts on the parts face side seen from (Component Side) the parts face are indicated.

- Indication of transistor.



- Abbreviation
 AUS : Australian model
 KR : Korea model

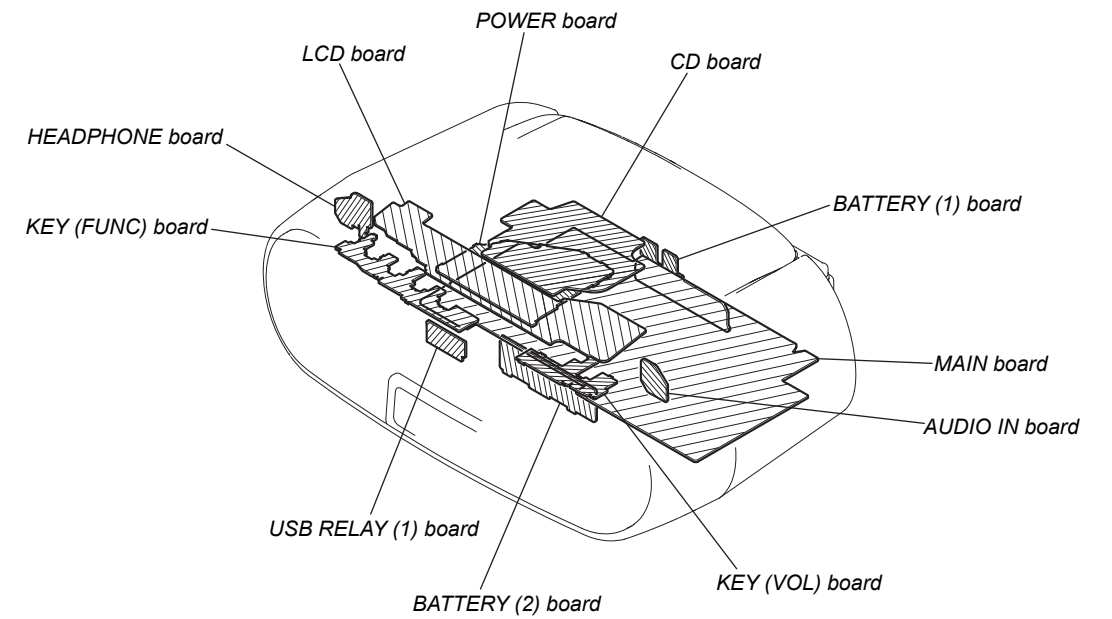
For Schematic Diagrams.

- Note:**
- All capacitors are in μF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4 W or less unless otherwise specified.
 - △: internal component.
 - : panel designation.

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

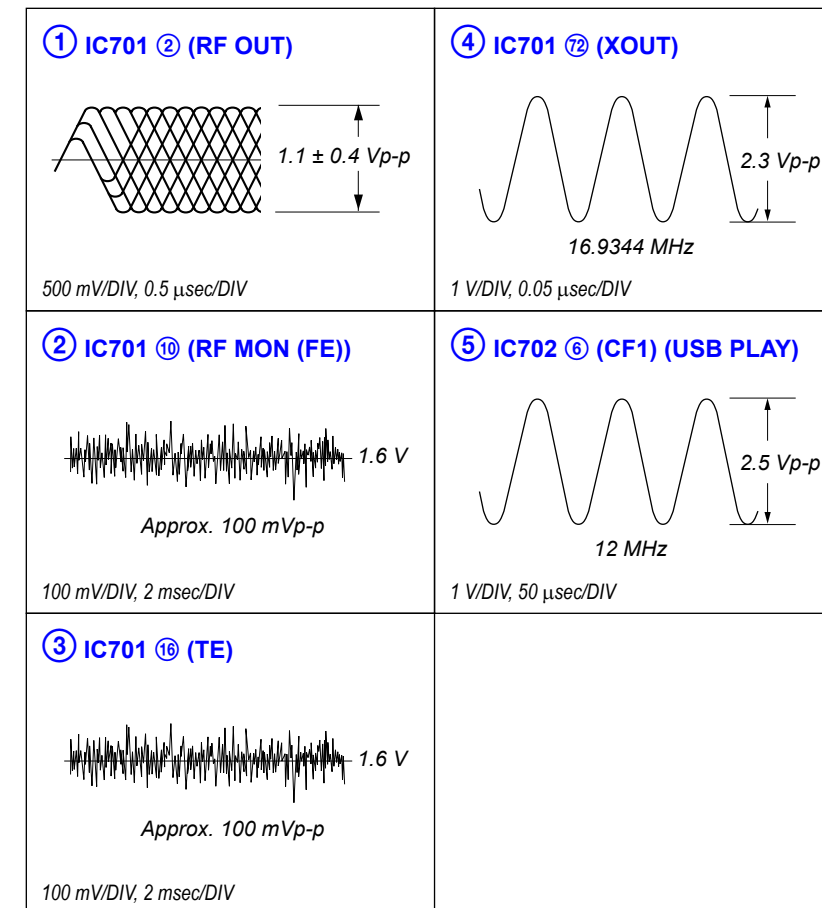
- : B+ Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- []: USB
- MAIN (1/3) Board —
 no mark: FM
 (): AM
- CD Board —
 no mark: CD PLAY
 []: USB
- MAIN (2/3), (3/3) and Other Boards —
 no mark: FM
 (): AM
 < >: CD PLAY
 []: USB
- Voltages are taken with VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 →: FM
 →: AM
 ⇨: AUDIO IN
 ⇨: CD PLAY
 ⇨: USB
- Abbreviation
 AUS : Australian model
 KR : Korea model

• Circuit Boards Location

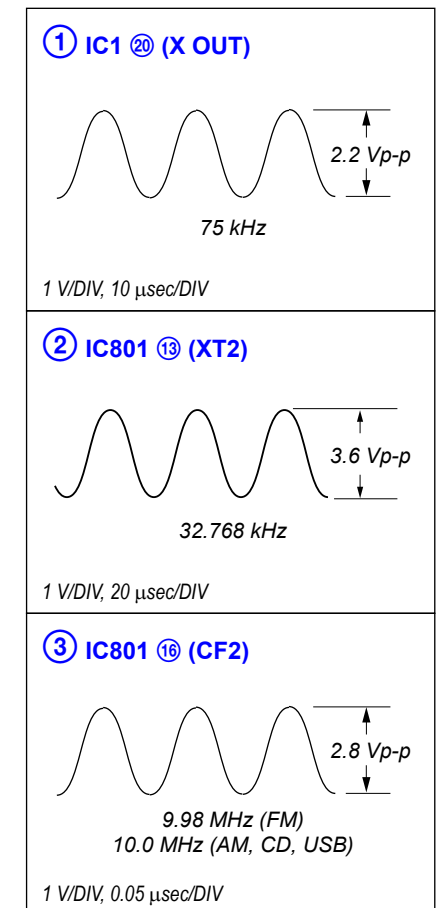



• Waveforms

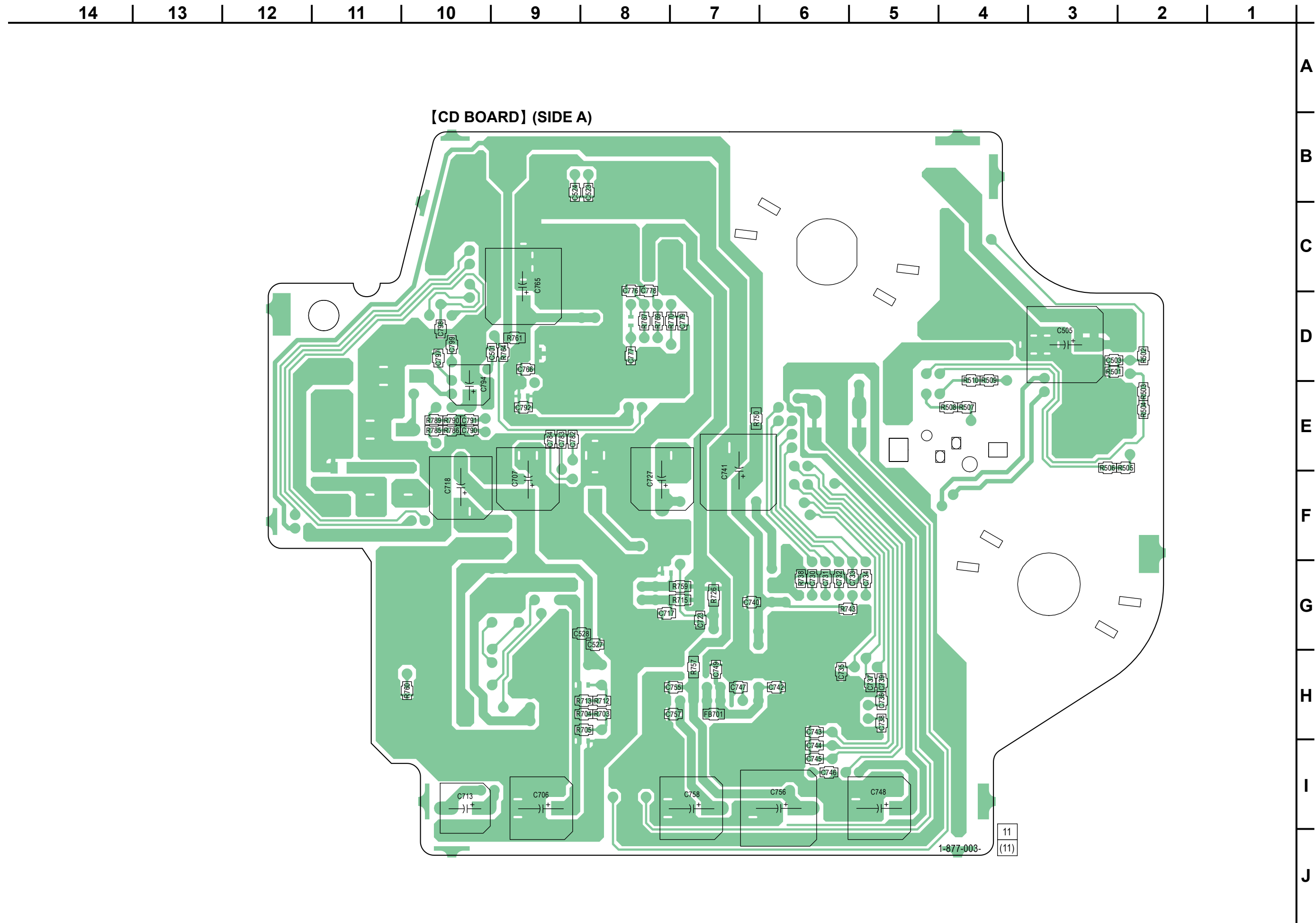
— CD Board —




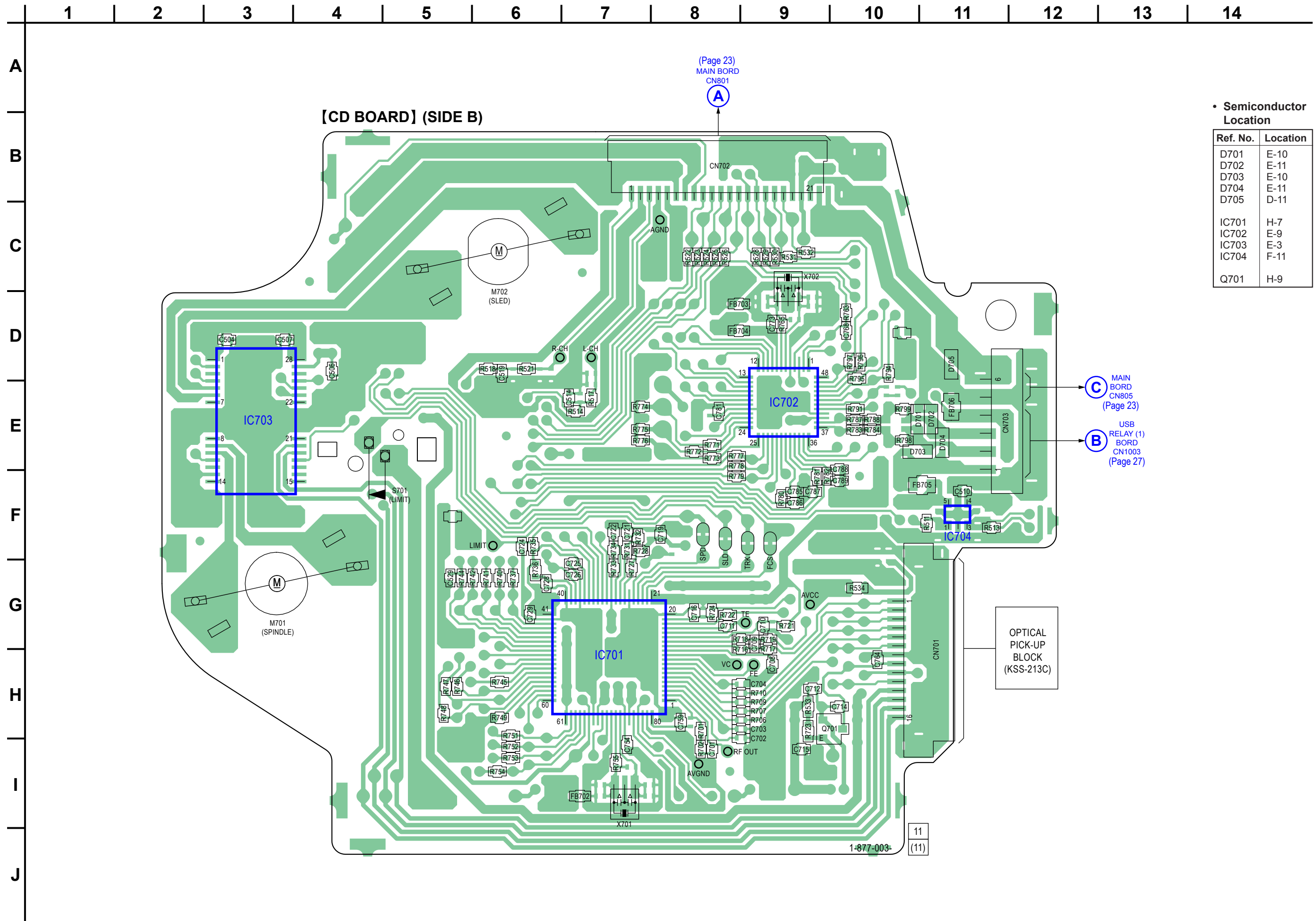
— MAIN Board —



5-3. PRINTED WIRING BOARD – CD Section (1/2) – • See page 19 for Circuit Boards Location. •  : Uses unleaded solder.



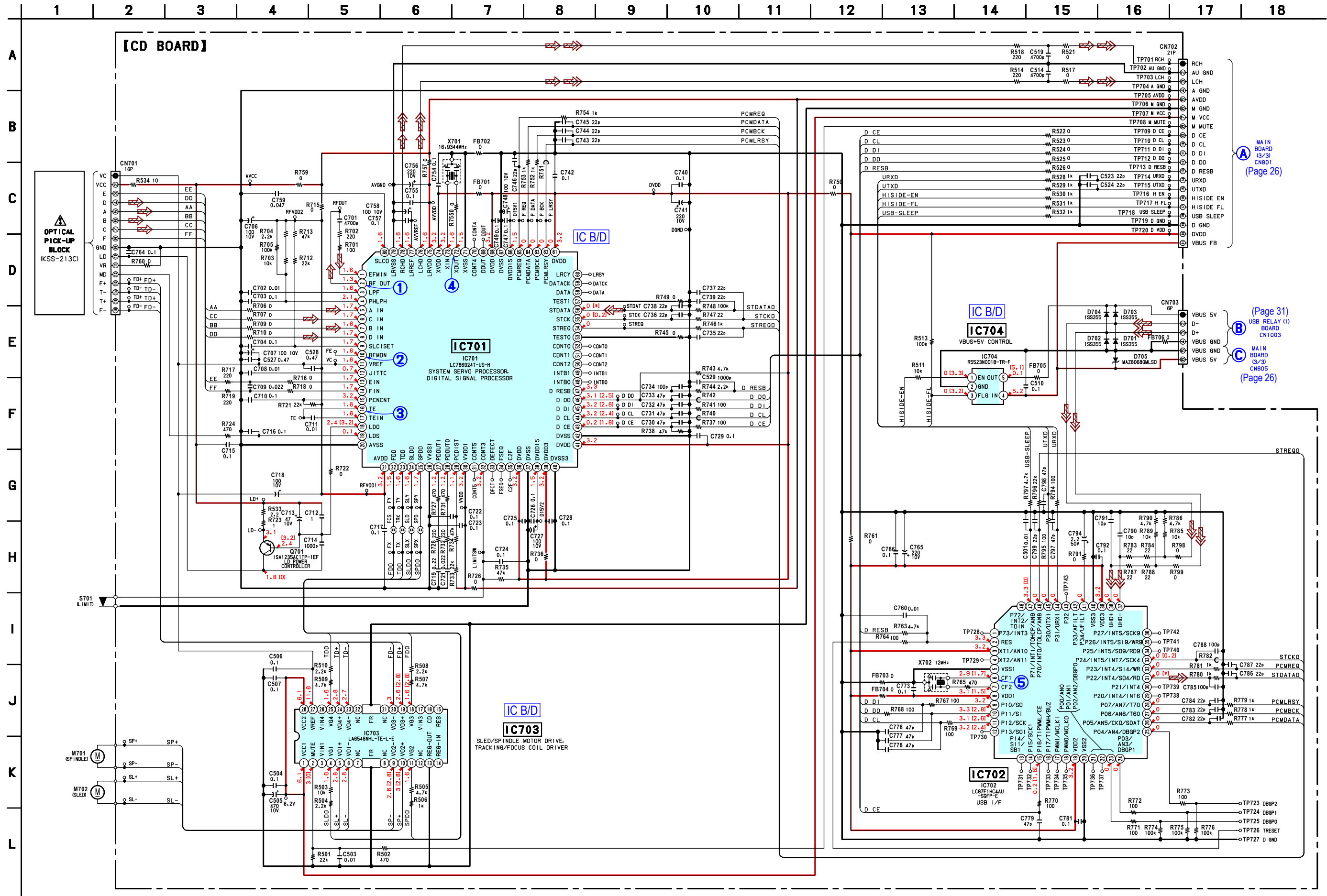
5-4. PRINTED WIRING BOARD – CD Section (2/2) – • See page 19 for Circuit Boards Location. •  : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location
D701	E-10
D702	E-11
D703	E-10
D704	E-11
D705	D-11
IC701	H-7
IC702	E-9
IC703	E-3
IC704	F-11
Q701	H-9

5-5. SCHEMATIC DIAGRAM – CD Section – • See page 19 for waveforms. • See page 32 for IC Block Diagrams. • See page 36 for IC Pin Function Description of IC702.

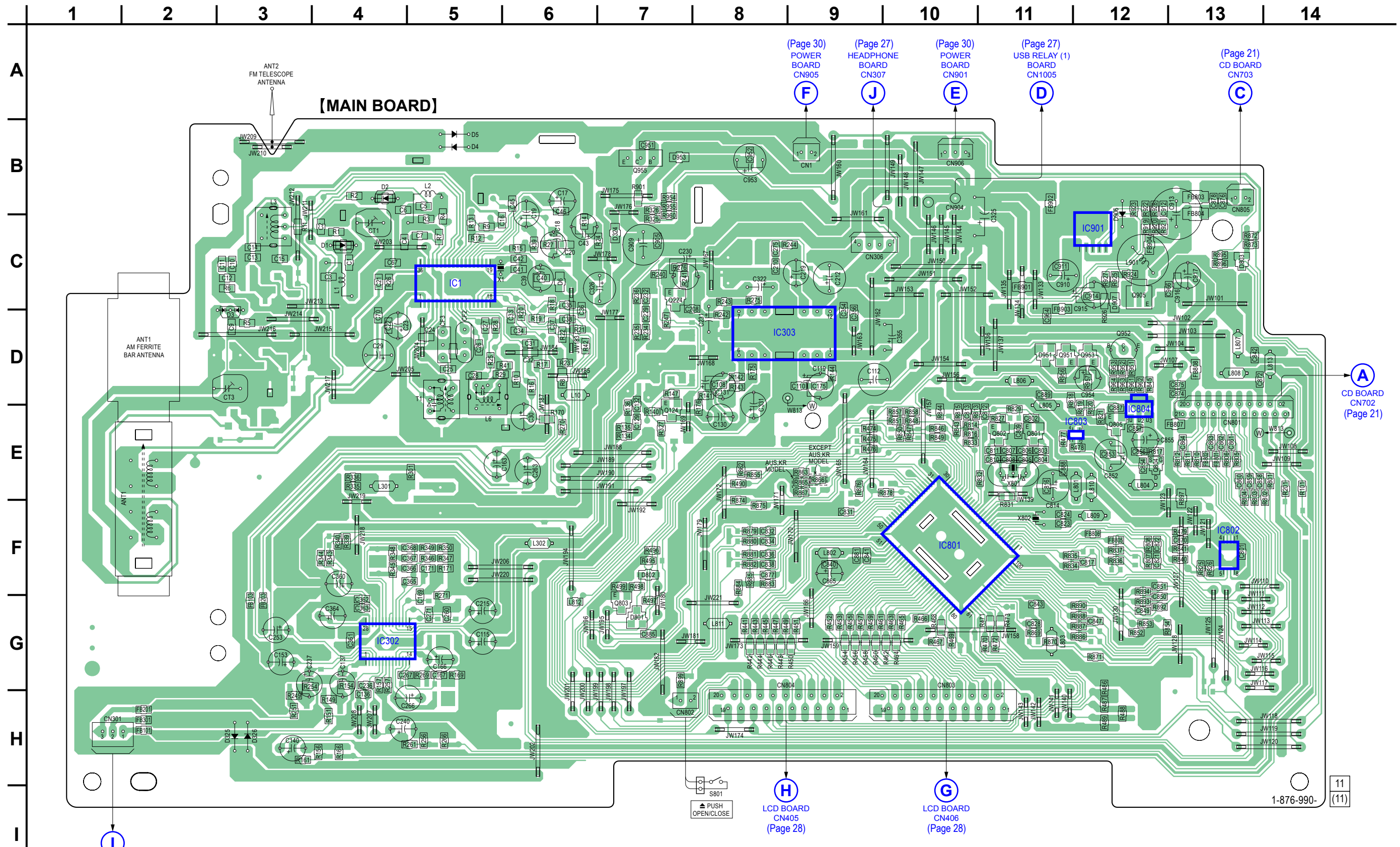


MAIN BOARD (3/3) CN801 (Page 26)

USB RELAY (1) BOARD CN1003 (Page 31)

MAIN BOARD (3/3) CN805 (Page 26)

5-6. PRINTED WIRING BOARD – MAIN Section – • See page 19 for Circuit Boards Location. •  : Uses unleaded solder.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D1	C-4	D324	C-7	D906	B-12	IC302	G-4	IC901	C-12	Q803	G-7	Q953	D-12
D2	B-4	D325	H-3	D907	C-12	IC303	D-8	Q804	E-12	Q805	E-12	Q955	B-7
D3	D-3	D326	H-3	D951	D-11	IC801	F-10	Q124	E-7	Q905	C-12		
D4	B-5	D801	G-7	D953	B-7	IC802	F-13	Q224	C-7	Q951	D-11		
D5	B-5	D802	F-7	IC1	C-5	IC803	E-12	Q801	E-11	Q952	D-12		
D6	C-6	D803	C-13			IC804	E-12	Q802	E-11				

I
AUDIO IN BOARD
CN302
(Page 27)

H
LCD BOARD
CN405
(Page 28)

G
LCD BOARD
CN406
(Page 28)

(Page 30)
POWER BOARD
CN905
F

(Page 27)
HEADPHONE BOARD
CN307
J

(Page 30)
POWER BOARD
CN901
E

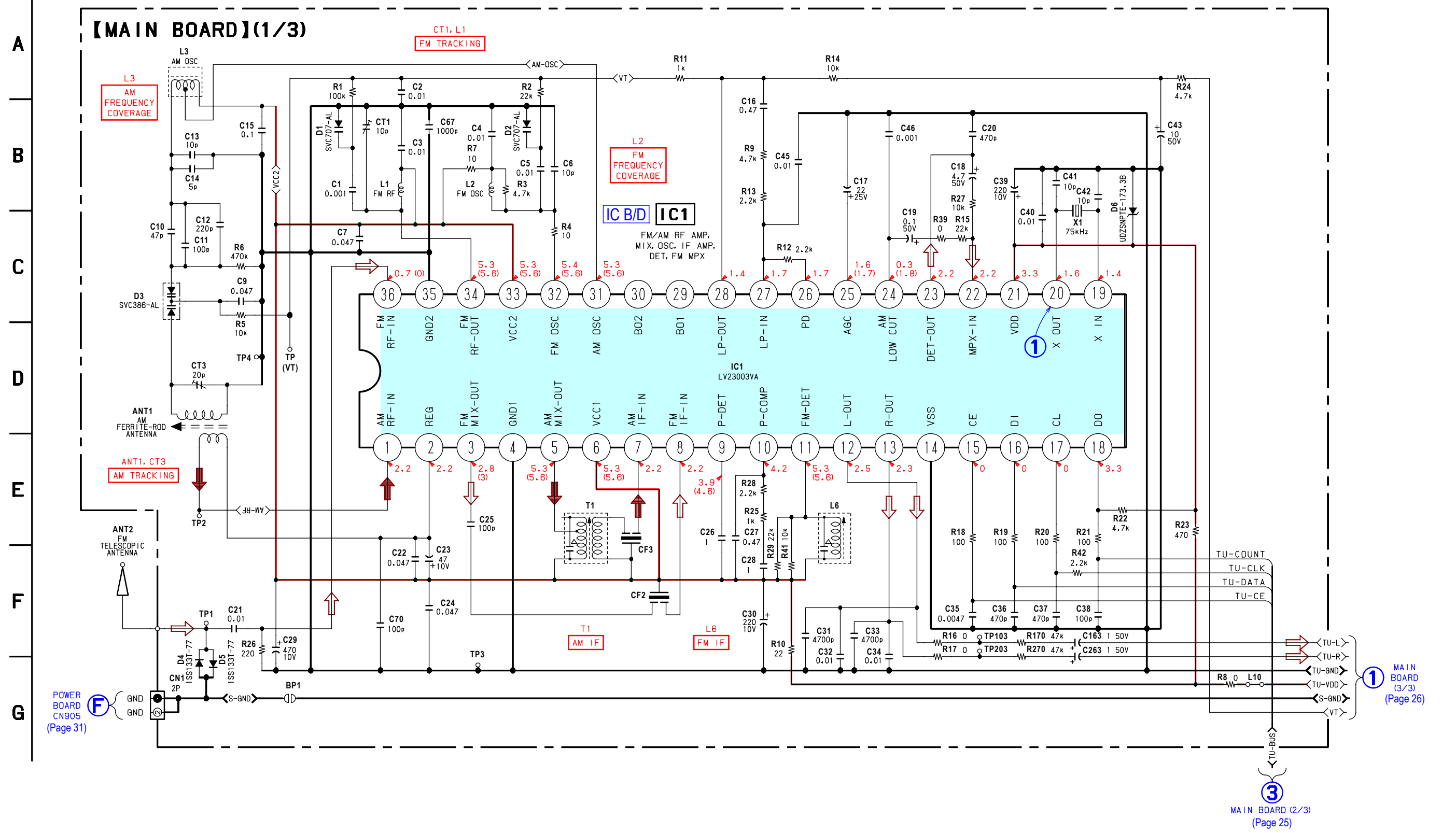
(Page 27)
USB RELAY BOARD
CN1005
D

(Page 21)
CD BOARD
CN703
C

A
CD BOARD
CN702
(Page 21)

5-7. SCHEMATIC DIAGRAM – MAIN Section (1/3) – • See page 19 for waveform. • See page 33 for IC Block Diagram.

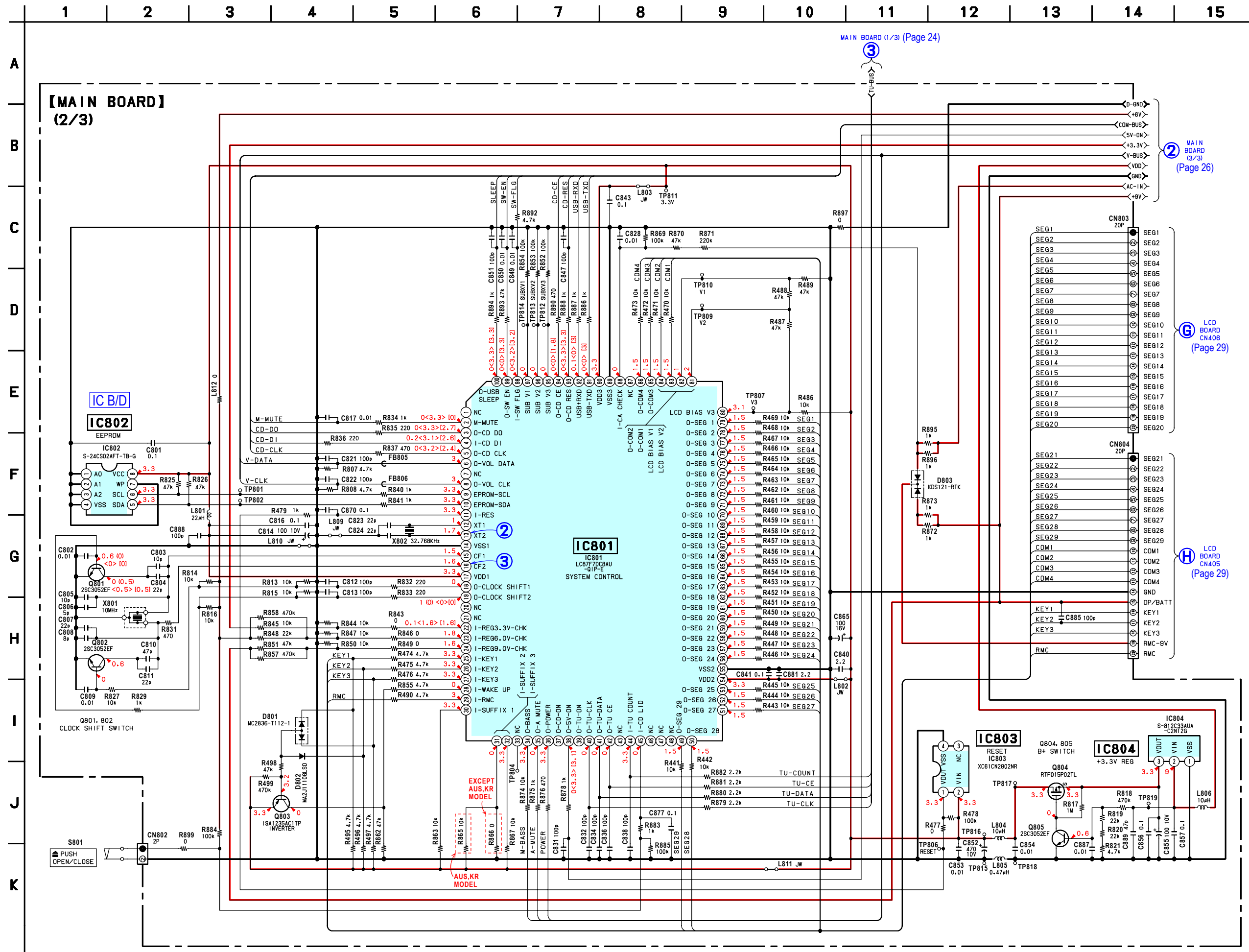
1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----



1 MAIN BOARD (3/3) (Page 26)

3 MAIN BOARD (2/3) (Page 25)

5-8. SCHEMATIC DIAGRAM – MAIN Section (2/3) – • See page 19 for waveforms. • See page 34 for IC Block Diagram. • See page 37 for IC Pin Function Description of IC801.



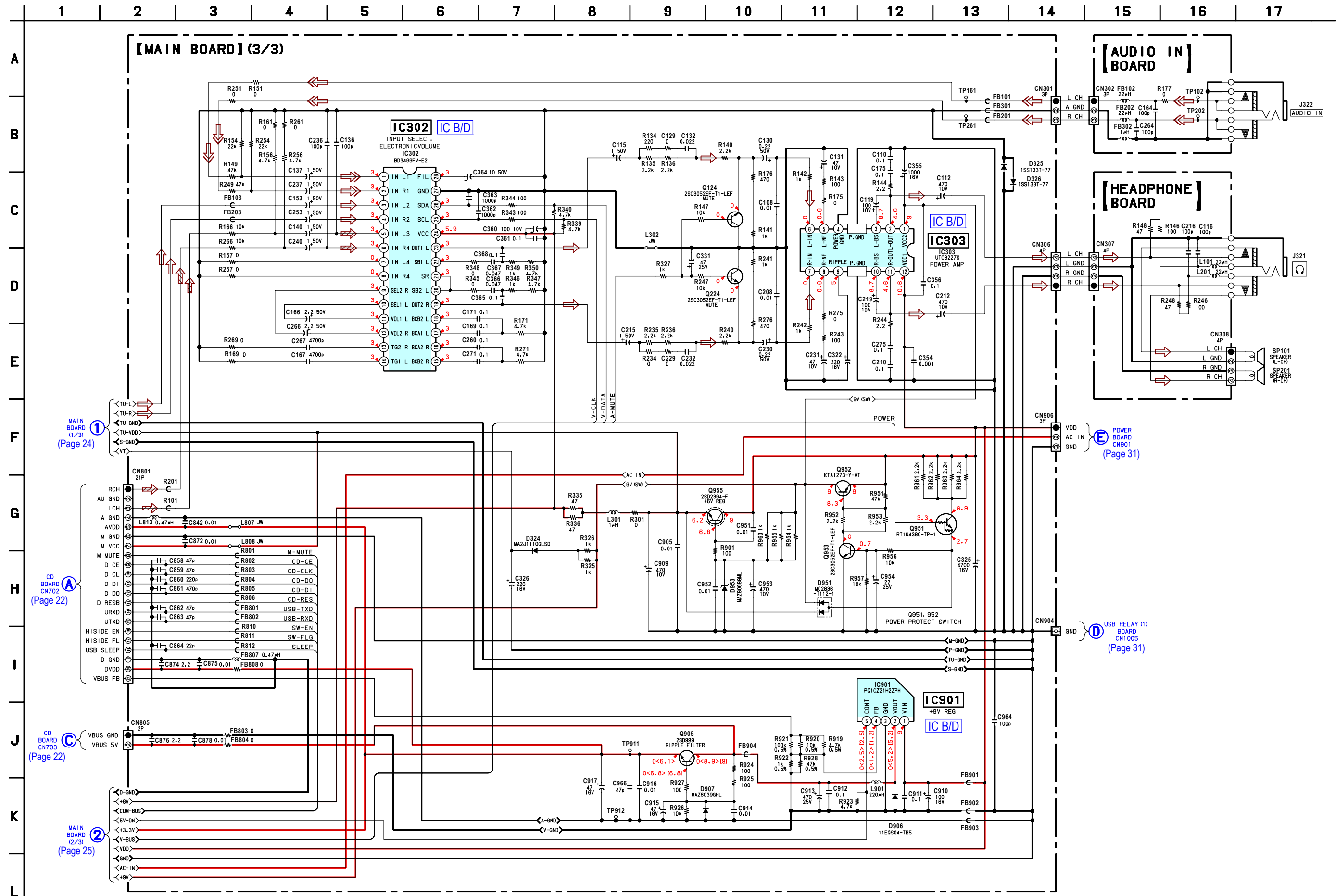
MAIN BOARD (1/3) (Page 24)

MAIN BOARD (3/3) (Page 26)

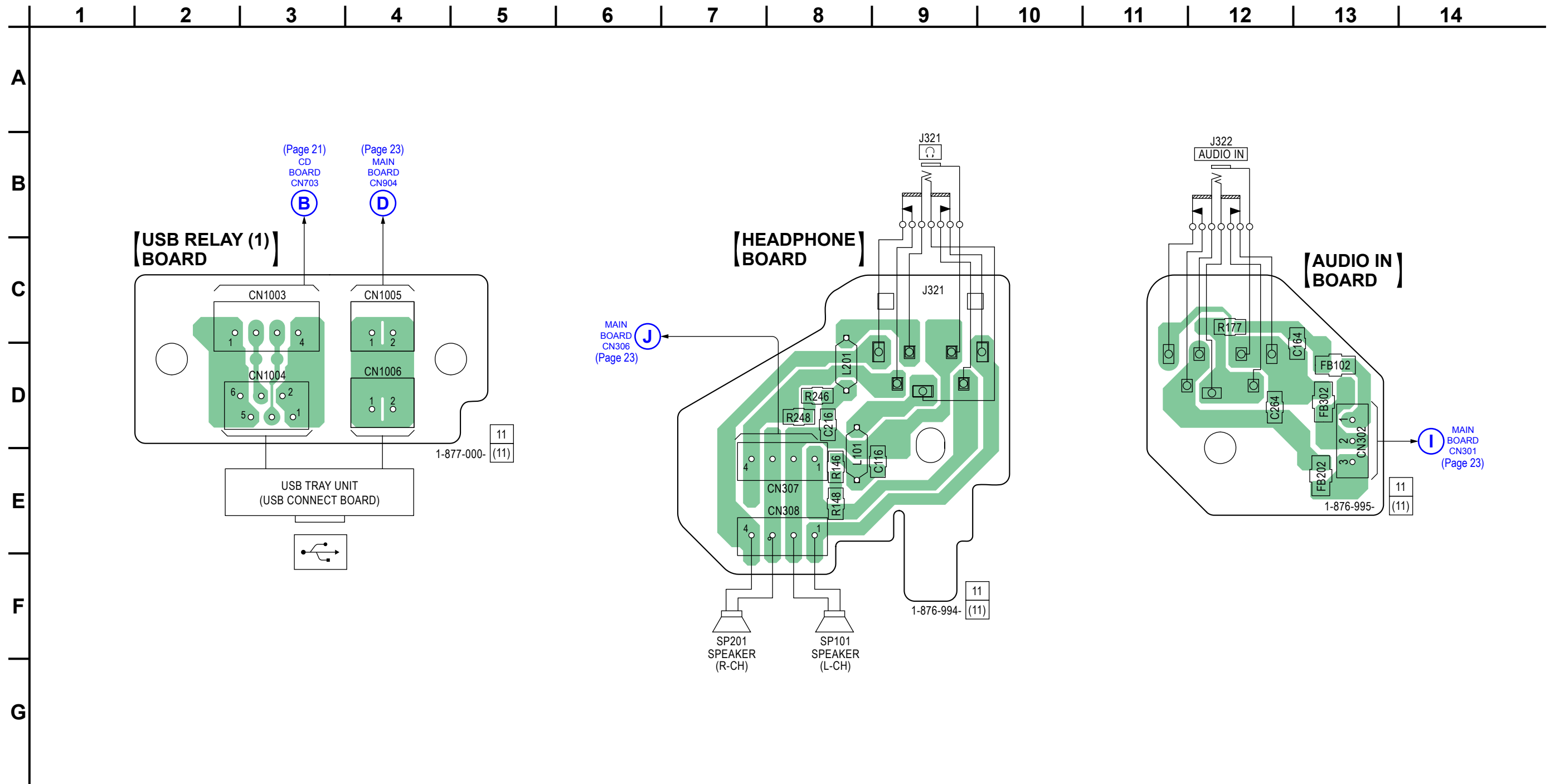
LCD BOARD CN408 (Page 29)

LCD BOARD CN405 (Page 29)

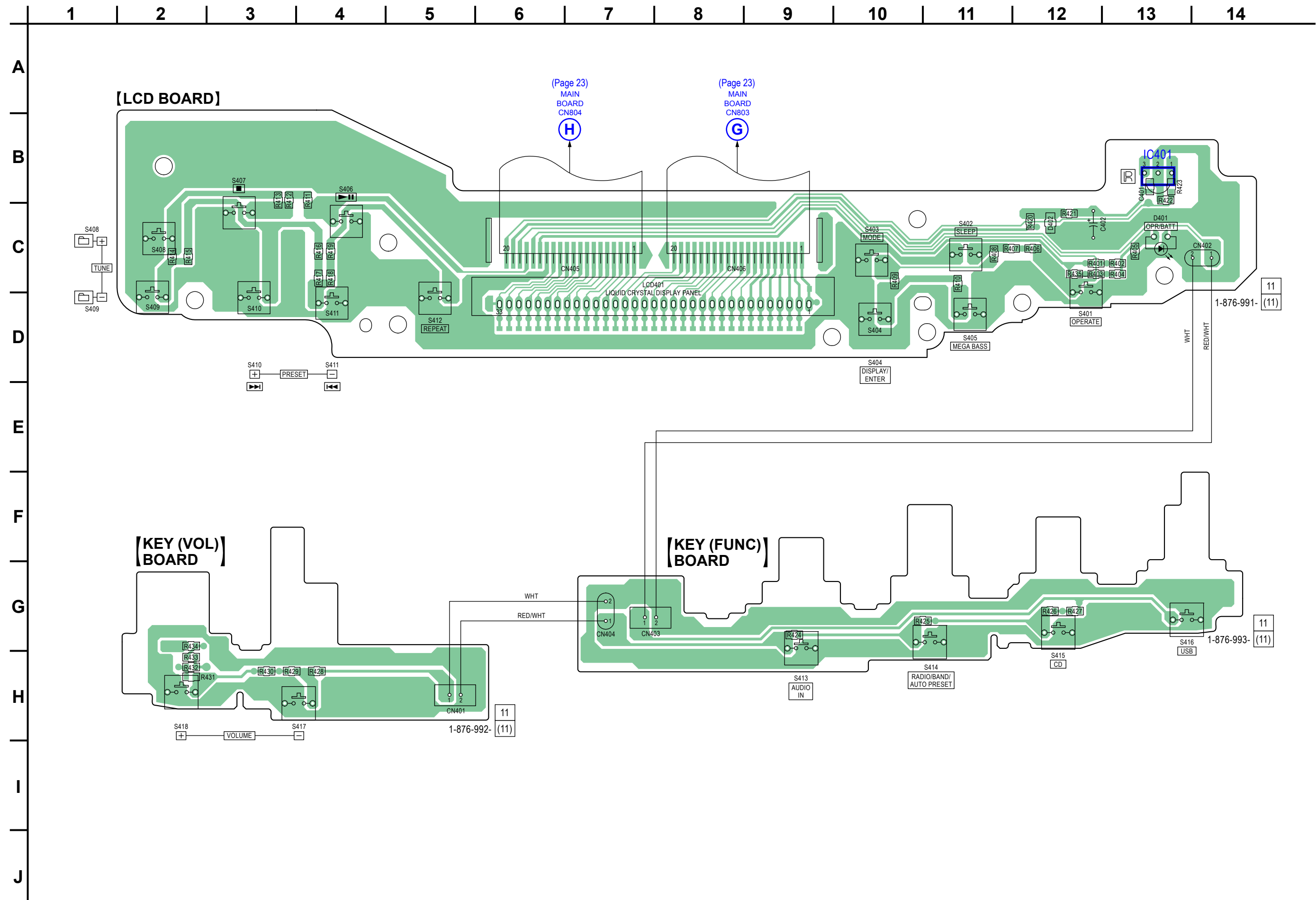
5-9. SCHEMATIC DIAGRAM – MAIN Section (3/3) – • See page 34, 35 for IC Block Diagrams.



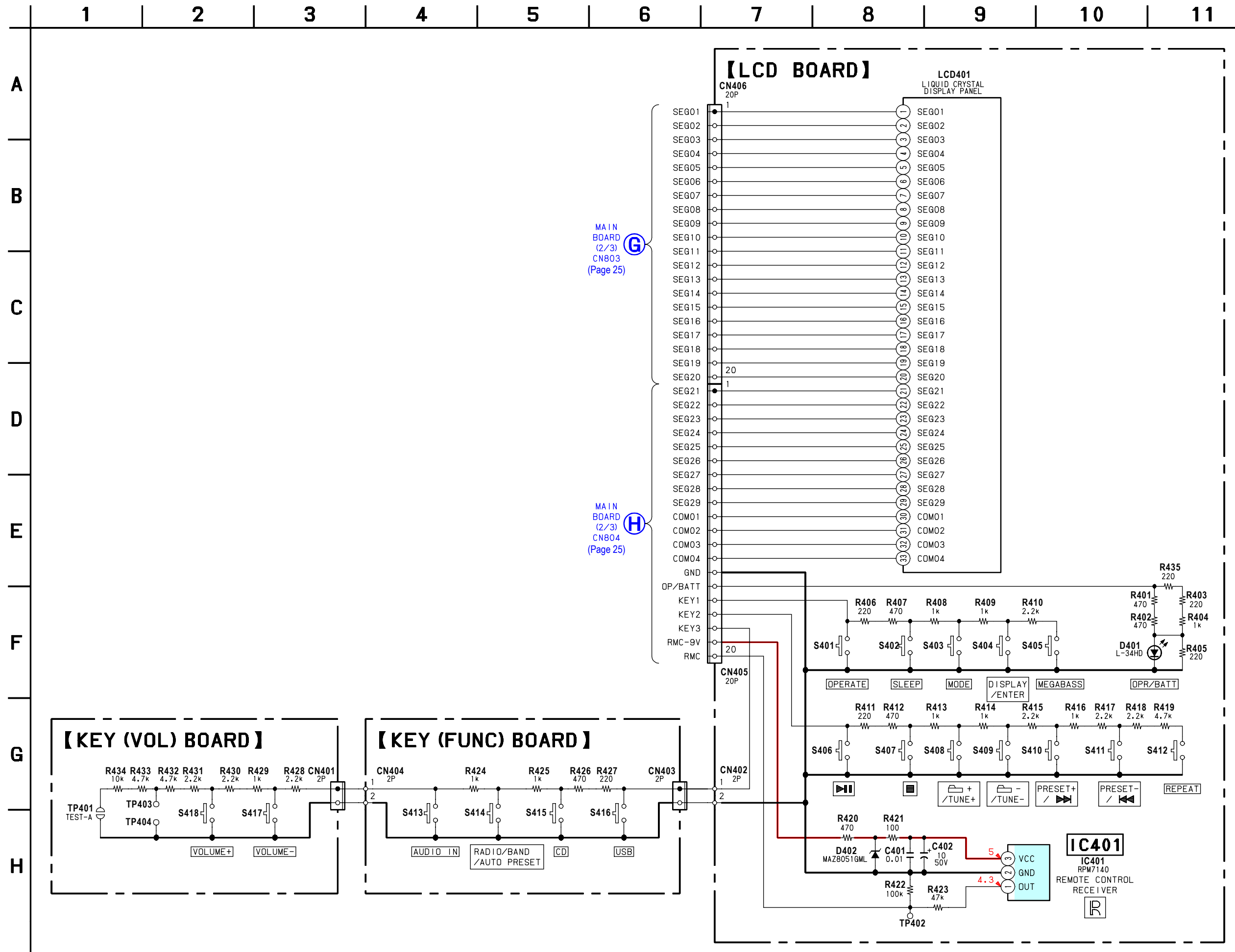
5-10. PRINTED WIRING BOARDS – AUDIO IN, HP, USB Section – • See page 19 for Circuit Boards Location. •  : Uses unleaded solder.



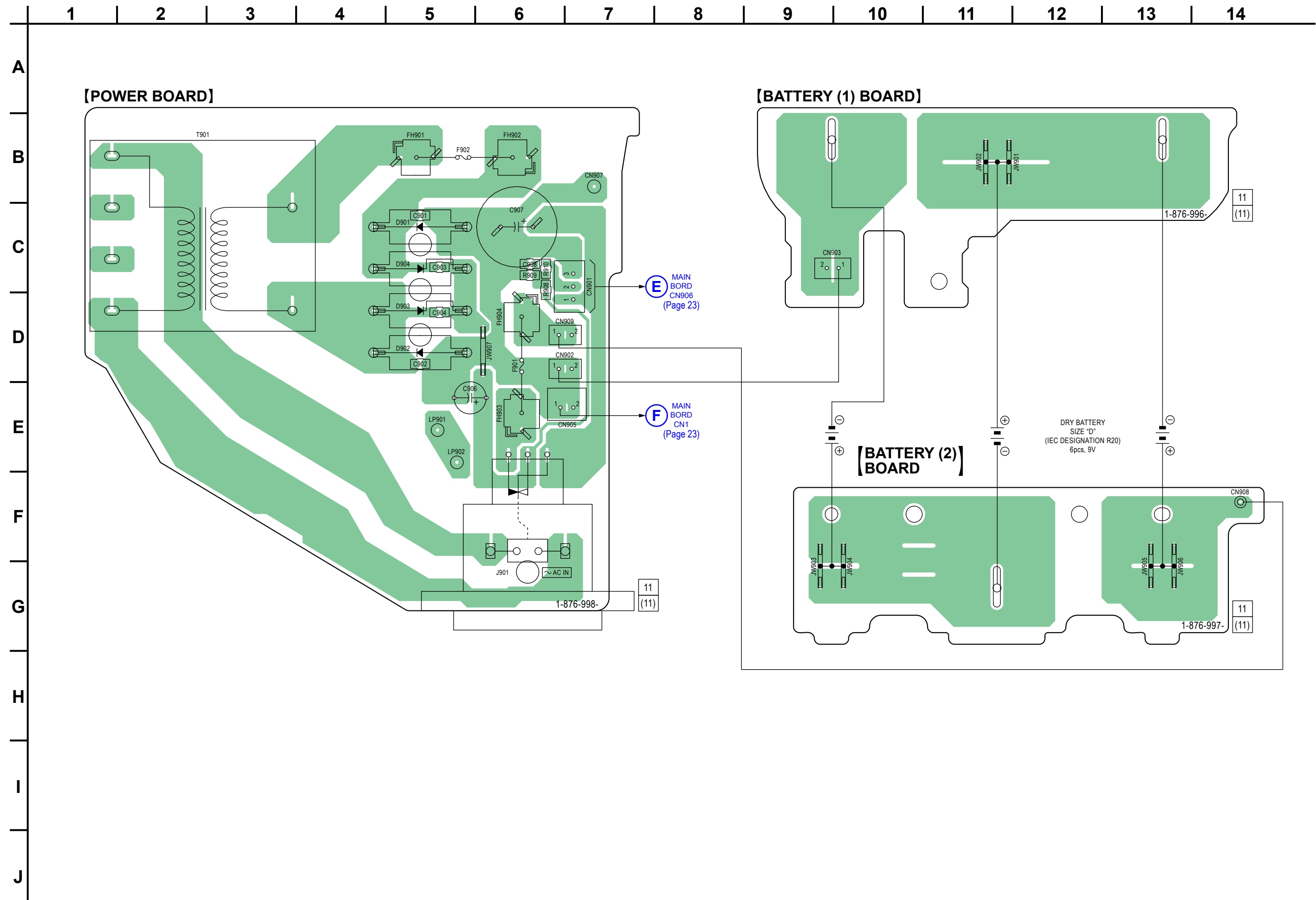
5-11. PRINTED WIRING BOARDS – KEY, LCD Section – • See page 19 for Circuit Boards Location. •  : Uses unleaded solder.



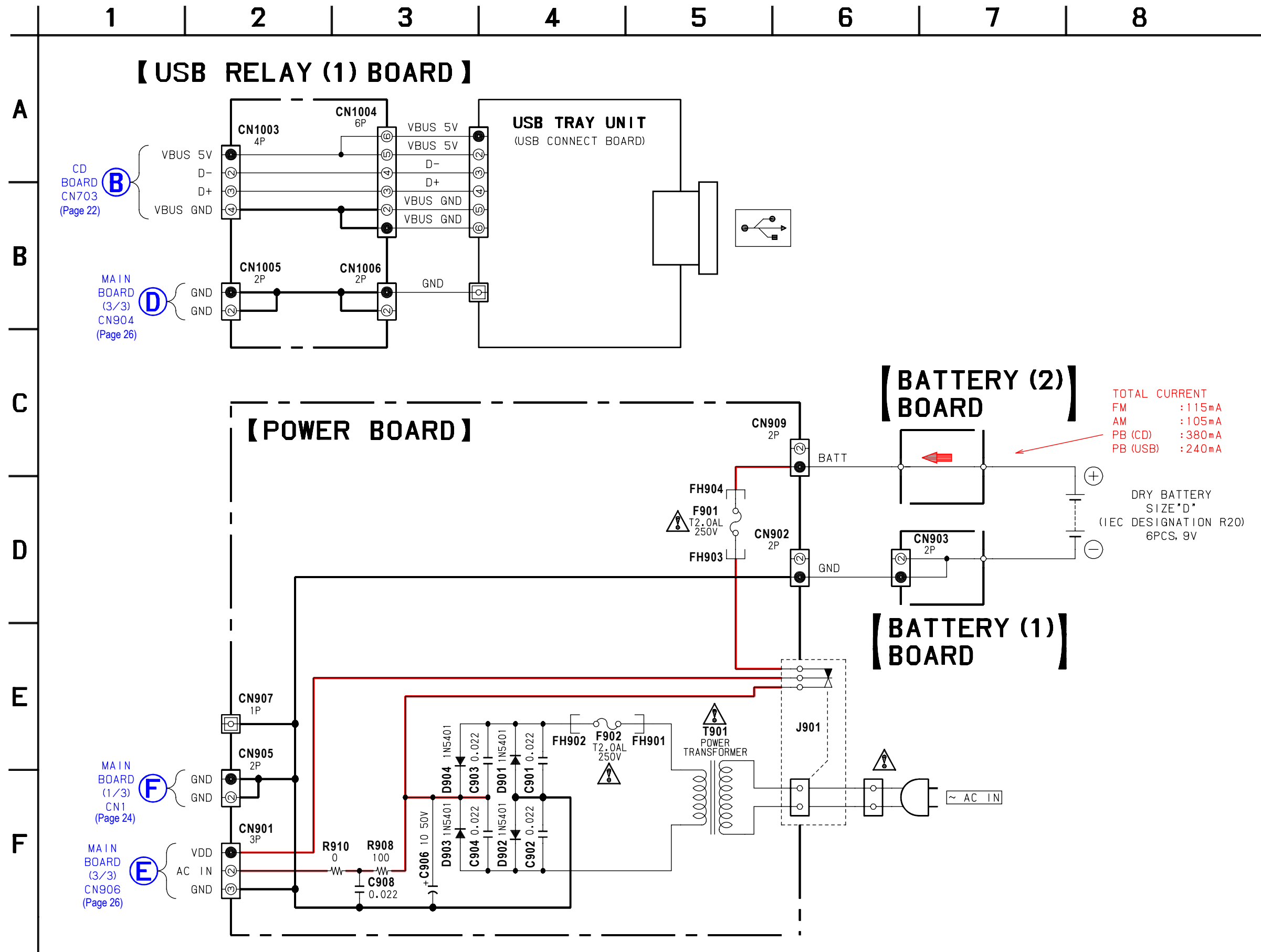
5-12. SCHEMATIC DIAGRAM – KEY, LCD Section –



5-13. PRINTED WIRING BOARDS – POWER Section – • See page 19 for Circuit Boards Location. • **L** : Uses unleaded solder.

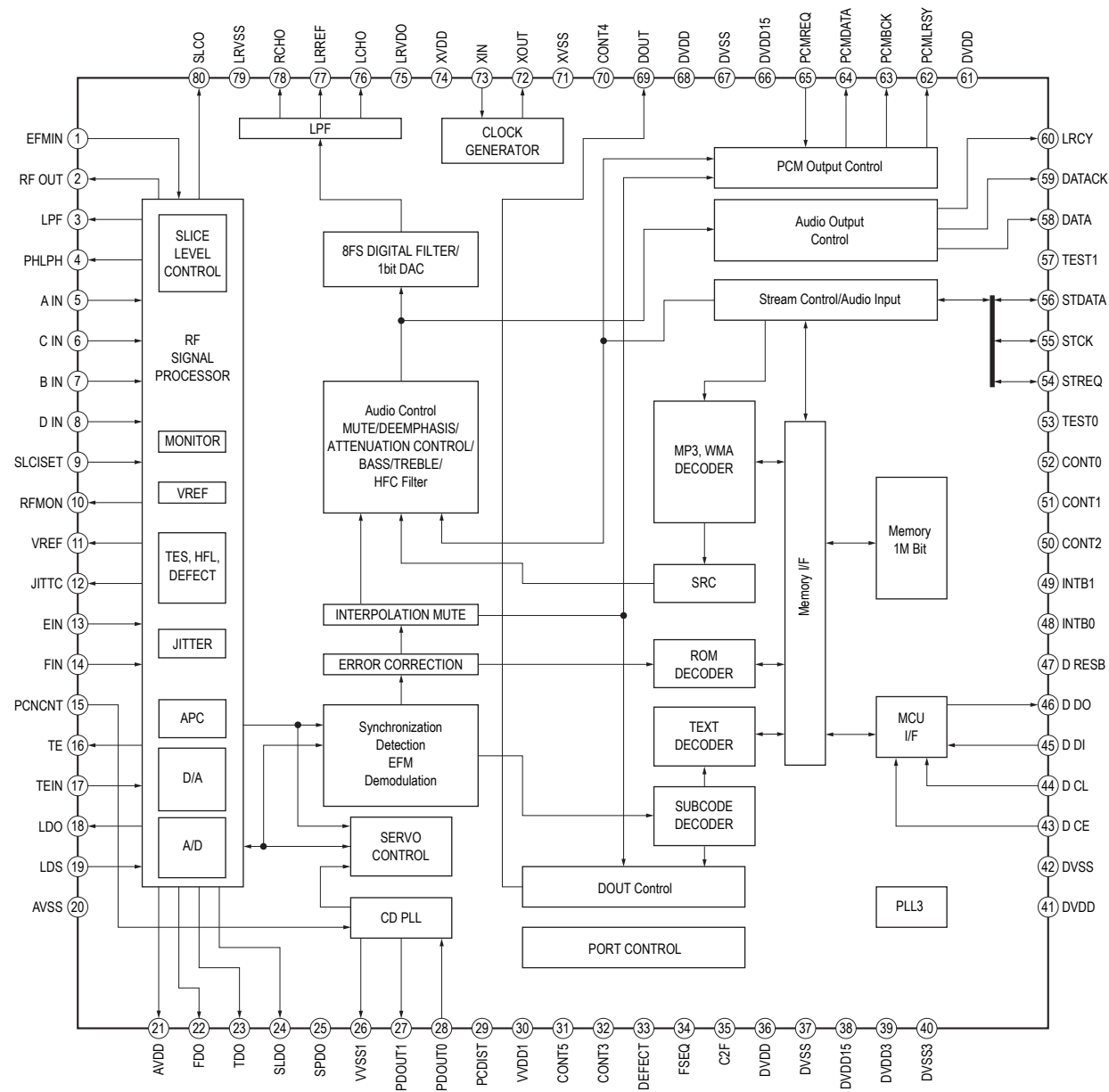


5-14. SCHEMATIC DIAGRAM – POWER Section –

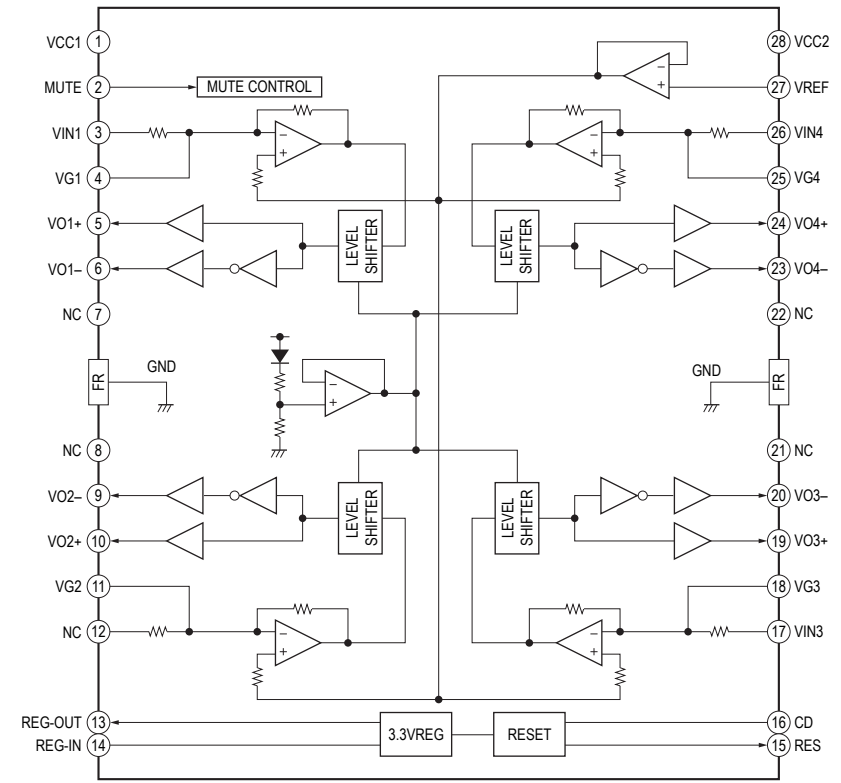


• IC Block Diagrams

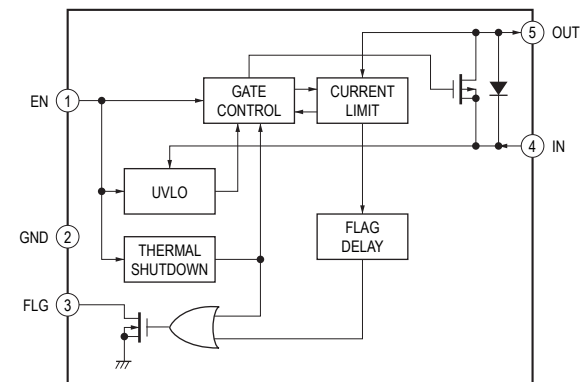
IC701 LC786924T-US-H (CD Board)



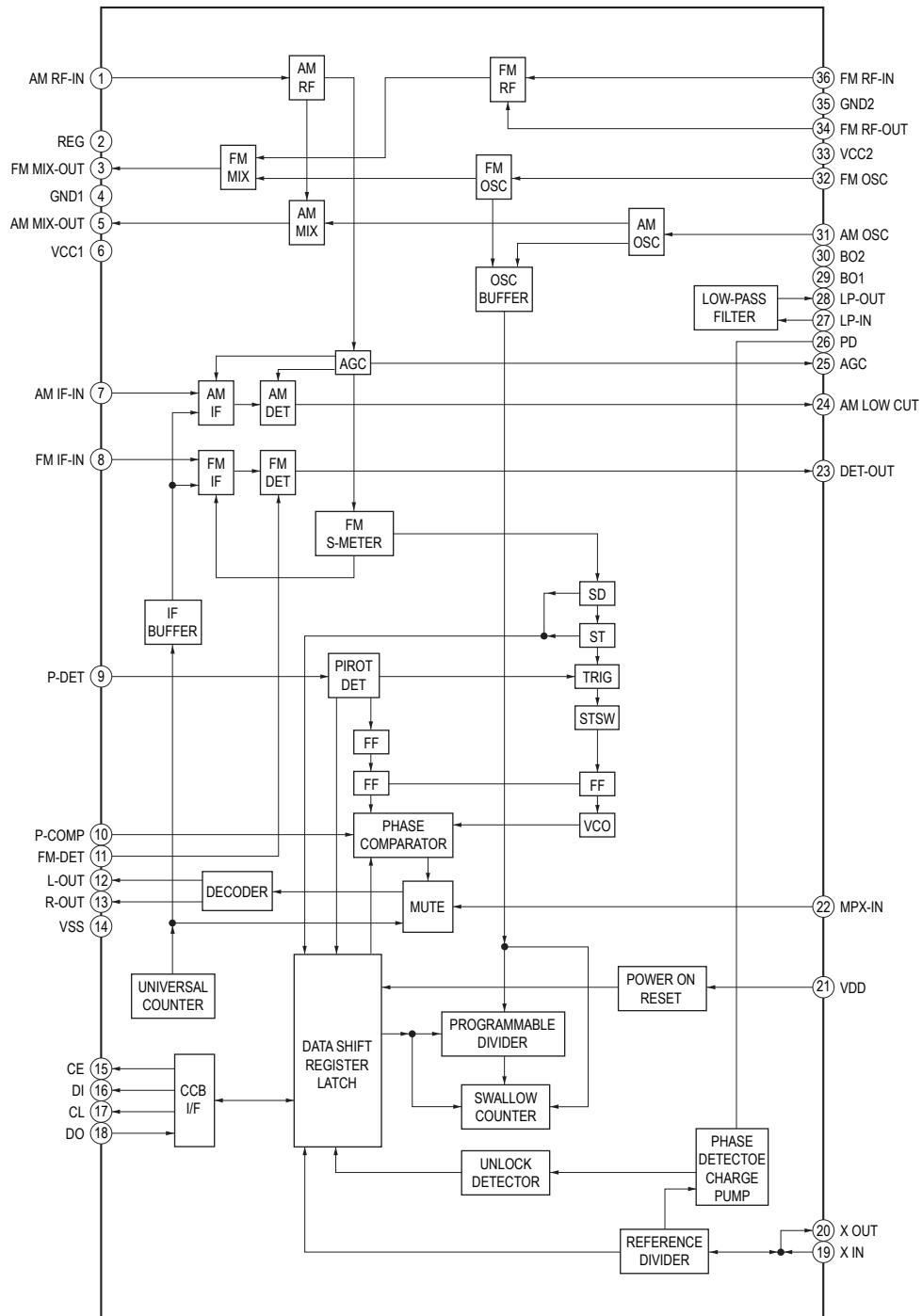
IC703 LA6548NHL-TE-L-E (CD Board)



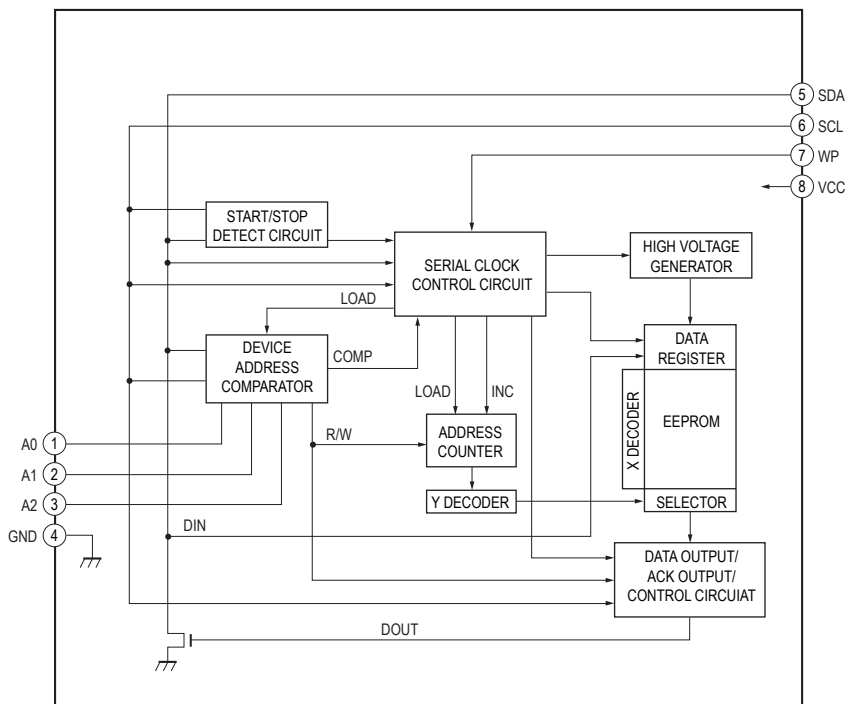
IC704 R5523N001B-TR-F (CD Board)



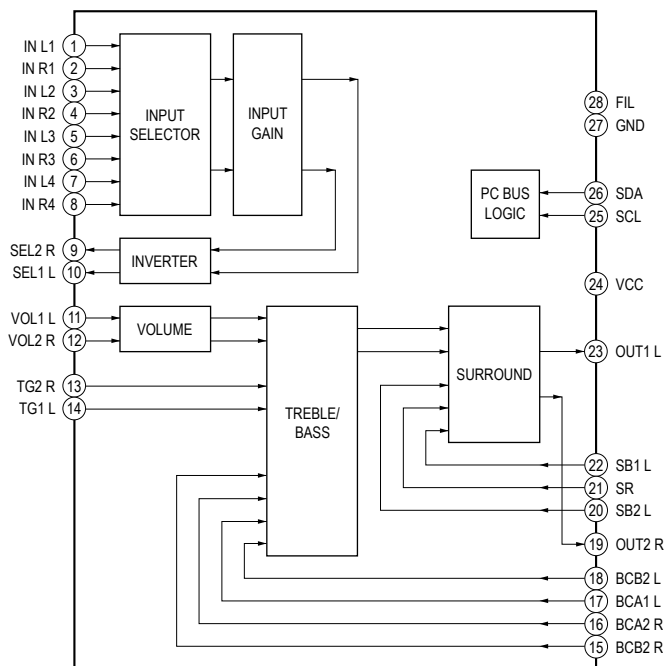
IC1 LV23003VA (MAIN Board (1/3))



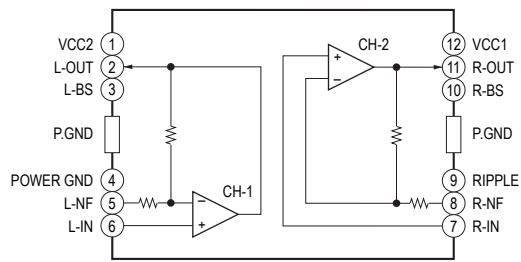
IC802 S-24CS02AFT-TB-G (MAIN Board (2/3))



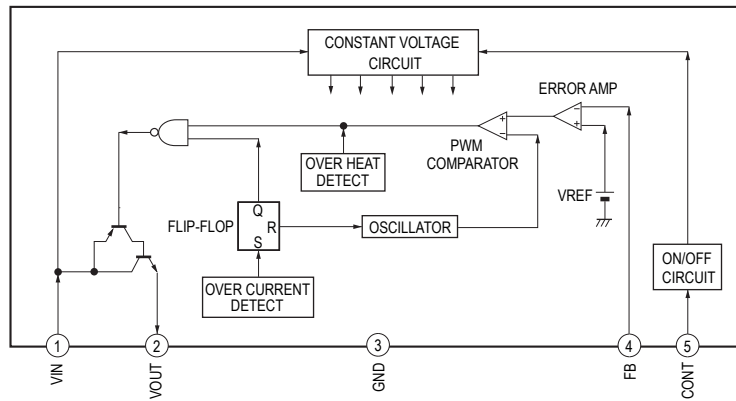
IC302 BD3499FV-E2 (MAIN Board (3/3))



IC303 UTC8227 S (MAIN Board (3/3))



IC901 PQ1C21H2ZPH (MAIN Board (3/3))



• IC Pin Function Description

CD BOARD IC702 LC87F1HC4AU-SQFP-E (USB I/F)

Pin No.	Pin Name	I/O	Description
1	P73/INT3	—	Not used (Open)
2	RES	I	Reset signal input
3	XT1/AN10	—	Not used (Connected to ground)
4	XT2/AN11	—	Not used (Open)
5	VSS1	—	Ground
6	CF1	I	Sub clock oscillation input (12MHz)
7	CF2	O	Sub clock oscillation output (12MHz)
8	VDD1	—	Power supply (+3.3 V)
9	P10/SO	O	CD DSP serial data output
10	P11/SI	I	CD DSP serial data input
11	P12/SCK	O	CD DSP serial transfer clock signal output
12	P13/SO1	—	Not used (Open)
13	P14/SI1/SB1	—	Not used (Open)
14	P15/SCK1	—	Not used (Open)
15	P16/T1PWML/CE	O	CD DSP chip enable signal output
16	P17/T1PWMH/BUZ	—	Not used (Open)
17	PWM1/MCLKI	—	Not used (Open)
18	PWM0/MCLKO	—	Not used (Open)
19	VDD2	—	Power supply (+3.3 V)
20	VSS2	—	Ground
21	P00/AN0	—	Not used (Open)
22	P01/AN1	—	Not used (Open)
23	P02/AN2/DBGP0	I	Not used (Pull down)
24	P03/AN3/DBGP1	I	Not used (Pull down)
25	P04/AN4/DBGP2	I	Not used (Pull down)
26	P05/AN5/CK0/SDAT	I	Audio serial data input
27	P06/AN6/T60	I	Audio serial data shift clock input
28	P07/AN7/T70	I	Audio Lch/Rch data signal input
29	P20/INT4/INT6	—	Not used (Open)
30	P21/INT4	—	Not used (Open)
31	P22/INT4/SO4/RD	O	Stream data output
32	P23/INT4/SI4/WR	O	Audio data request signal output
33	P24/INT5/INT7/SCK4	O	Stream data bit clock signal output
34	P25/INT5/SO9/RD9	—	Not used (Open)
35	P26/INT5/SI9/WR9	—	Not used (Open)
36	P27/INT5/SCK9	—	Not used (Open)
37	UHD-	I/O	USB data input/output
38	UHD+	I/O	USB data input/output
39	VDD3	—	Power supply (+3.3 V)
40	VSS3	—	Ground
41	P34/UFILT	—	USB I/F PLL filter terminal
42	P33/AFILT	—	Not used (Open)
43	P32	—	Not used (Open)
44	P31/URX1	I	USB I/F command serial data input
45	P30/UTX1	O	USB I/F command serial data output
46	P70/INT0/TOLCP/AN8	I	Stream data request signal input
47	P71/INT1/TOHCP/AN9	I	USB host u-com control signal input
48	P72/INT2/TOIN	—	Not used (Open)

MAIN BOARD (2/3) IC801 LC87F7DC8AU-QIP-E (SYSTEM CONTROL)

Pin No.	Pin Name	I/O	Description
1	NC	—	Not used (Open)
2	M-MUTE	O	Motor driver mute signal output
3	O-CD DO	O	CD DSP serial data output
4	I-CD DI	I	CD DSP serial data input
5	O-CD CLK	O	CD DSP serial transfer clock signal output
6	O-VOL-DATA	O	Volume command serial data output
7	NC	—	Not used (Open)
8	O-VOL-CLK	O	Volume command serial transfer clock output
9	EPROM-SCK	O	EEPROM transfer clock output
10	EPROM-SDA	I/O	EEPROM serial data input/output
11	I-RES	I	Reset signal input
12	XT1	I	Clock oscillation input (32.768kHz)
13	XT2	O	Clock oscillation output (32.768kHz)
14	VSS1	—	Ground
15	CF1	I	Main system clock oscillation input (10 MHz)
16	CF2	O	Main system clock oscillation output (10 MHz)
17	VDD1	—	Power supply (+3.3 V)
18	O-CLOCK-SHIFT1	O	Clock shift switch signal output
19	O-CLOCK-SHIFT2	O	Clock shift switch signal output
20	NC	—	Not used (Open)
21	NC	—	Not used (Open)
22	I-REG3.3V-CHK	I	Power supply +3.3V check signal input
23	I-REG6.0V-CHK	I	Power supply +6V check signal input
24	I-REG9.0V-CHK	I	Power supply +9V check signal input
25	I-KEY1	I	Key input
26	I-KET2	I	Key input
27	I-KEY3	I	Key input
28	I-WAKE-UP	I	Key wake-up signal input
29	I-RMC	I	Remote commander receiver data input
30	I-SUFFIX 1	I	Suffix distinction input
31	I-SUFFIX 2	I	Suffix distinction input
32	I-SUFFIX 3	I	Suffix distinction input
33	NC	—	Not used (Open)
34	O-BASS	O	MEGA BASS control signal output (Not used in this set)
35	O-A MUTE	O	Power AMP mute signal output
36	O-POWER	O	Main power control signal output
37	O-CD-ON	O	CD power control signal output (Not used in this set)
38	O-5V-ON	O	VBUS+5V power control signal output
39	O-TU-ON	O	Tuner power control signal output (Not used in this set)
40	O-TU-CLK	O	Tuner PLL clock signal output
41	O-TU-DATA	O	Tuner PLL data output
42	O-TU-CE	O	Tuner PLL chip enable signal output
43	NC	—	Not used (Open)
44	I-TU COUNT	I	Tuner PLL IF count signal input
45	I-CD LID	I	CD door open/close switch signal input "L: Close"
46 to 48	NC	—	Not used (Open)
49 to 53	O-SEG29 to SEG25	O	LCD drive segment signal output
54	VDD2	—	Power supply (+3.3 V)
55	VSS2	—	Ground
56 to 79	O-SEG24 to SEG1	O	LCD drive segment signal output
80	LCD BIAS V3	—	LCD bias voltage setting terminal
81	LCD BIAS V2	—	LCD bias voltage setting terminal
82	LCD BIAS V1	—	LCD bias voltage setting terminal
83 to 86	O-COM1 to COM4	O	LCD drive common signal output
87	NC	—	Not used (Open)

Pin No.	Pin Name	I/O	Description
88	I-CA CHECK	I	AC IN check signal input
89	VSS3	—	Ground
90	VDD3	—	Power supply (+3.3 V)
91	USB-TXD	O	USB I/F command serial data output
92	USB-RXD	I	USB I/F command serial data input
93	O-CD RES	O	CD DSP reset signal output
94	O-CD CE	O	CD DSP chip enable signal output
95	SUB V3	—	Not used (Pull down)
96	SUB V2	—	Not used (Pull down)
97	SUB V1	—	Not used (Pull down)
98	I-SW FLG	I	VBUS control flag signal input
99	O-SW EN	O	VBUS control enable signal output
100	O-USB SLEEP	O	USB host u-com control signal output

SECTION 6 EXPLODED VIEWS

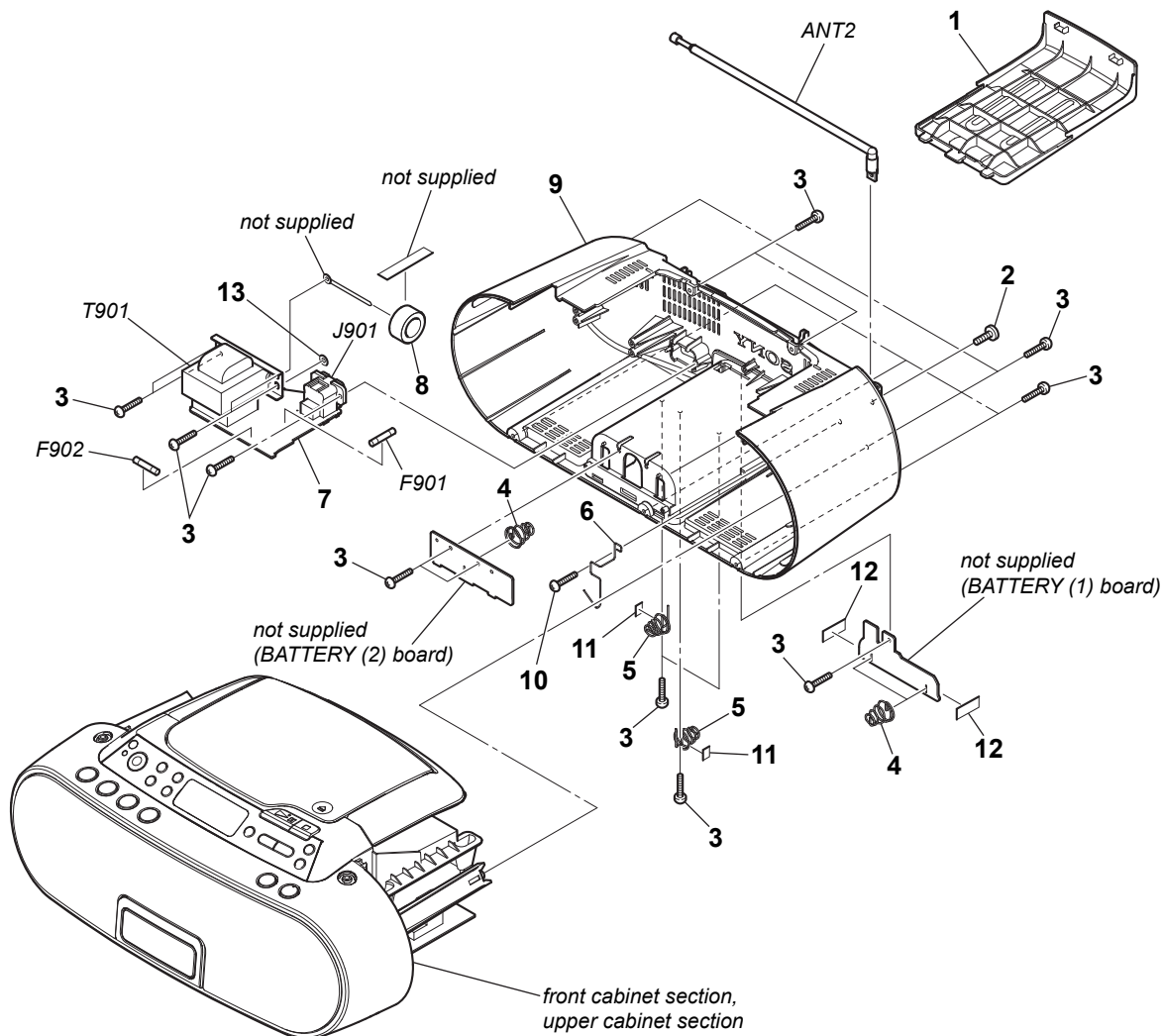
Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- Color Indication of Appearance Parts Example:
 KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color
- Abbreviation
 AUS : Australian model
 CET : East European and Russian model
 IT : Italian model
 KR : Korea model
 TH : Thai model

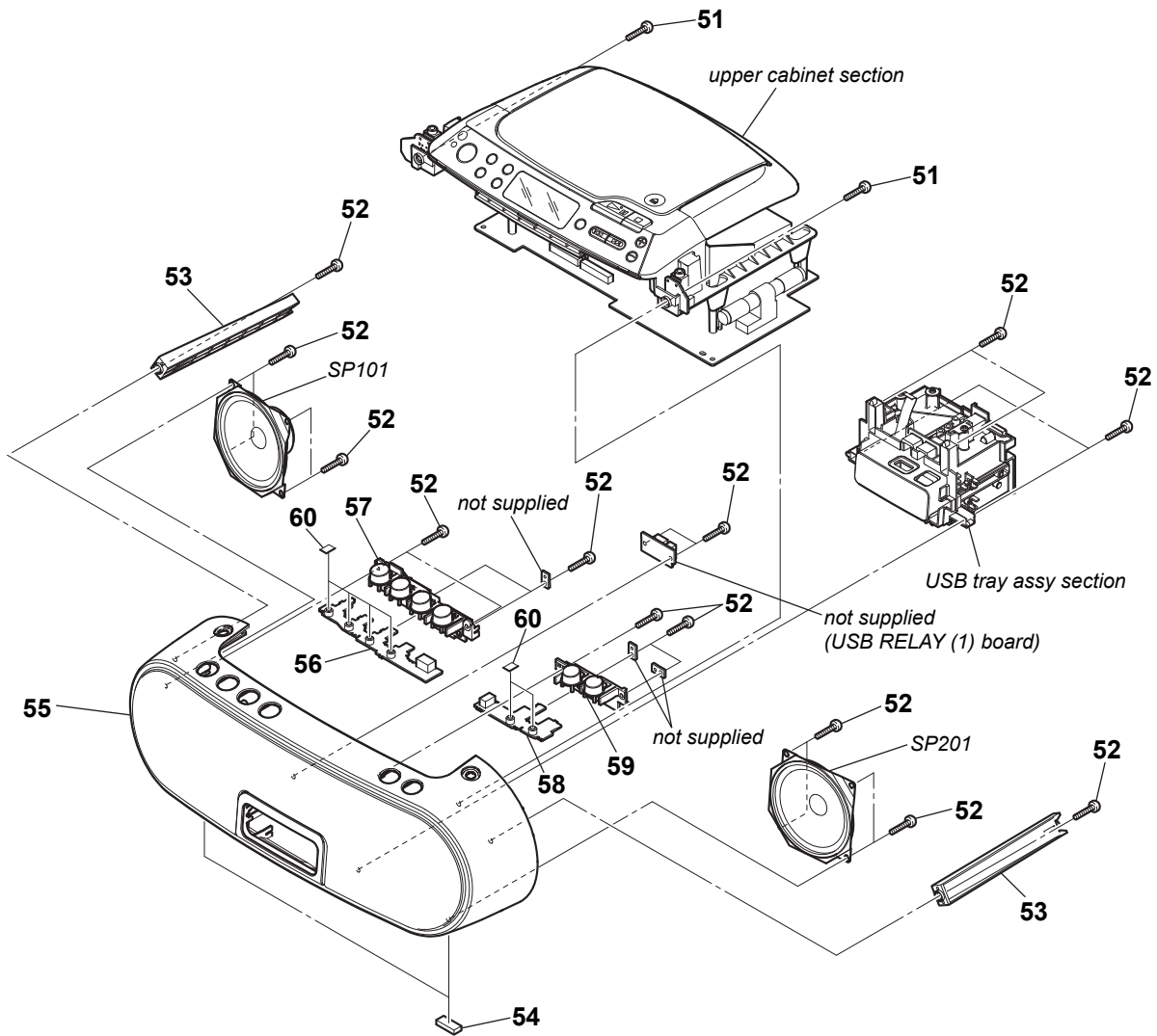
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

6-1. REAR CABINET SECTION



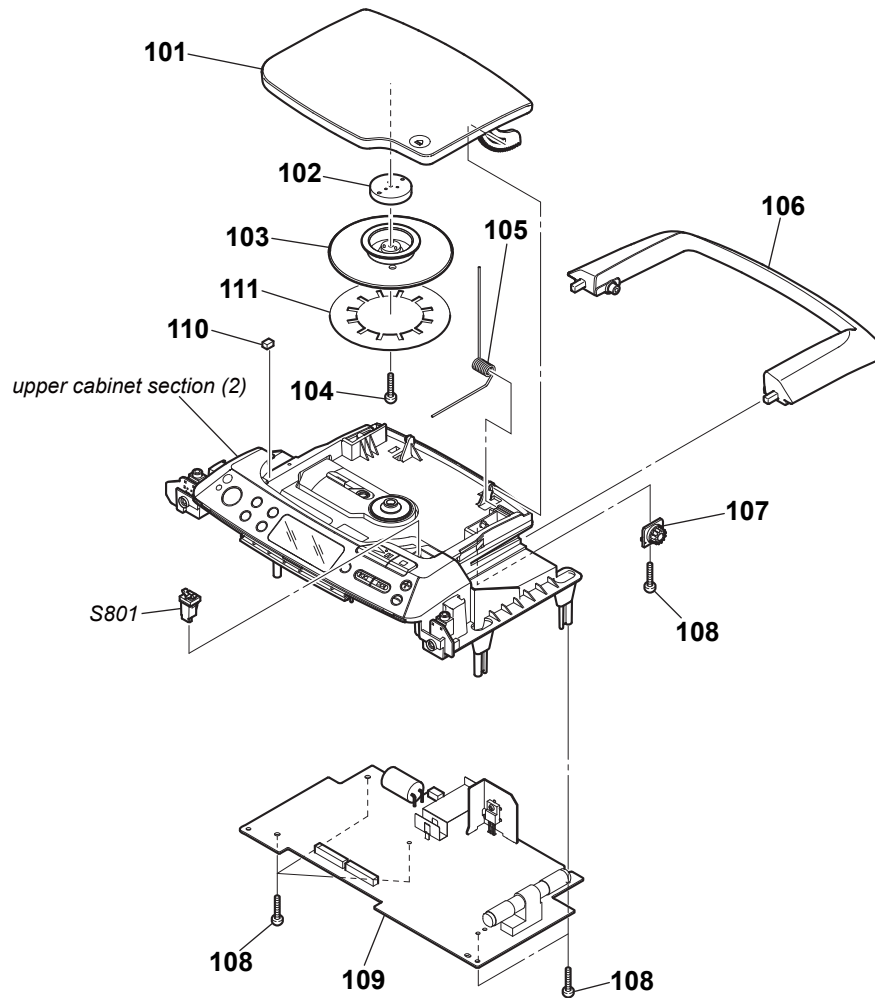
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-268-441-21	LID, BATTERY CASE		10	4-951-620-61	SCREW (2.6)	
2	3-252-833-01	SCREW (M3), (+) P		11	3-831-441-99	SHEET (1)	
3	3-252-827-01	SCREW (B2.6), (+) BV TAPPING		12	3-831-441-11	CUSHION (D)	
4	3-229-975-01	SPRING (-), BATTERY		13	3-255-102-01	WASHER, PETP	
5	3-252-540-01	SPRING (+,-), BATTERY		ANT2	1-754-376-11	ANTENNA, TELESCOPIC (FM)	
6	2-654-073-01	TERMINAL, ANTENNA		Δ F901	1-532-388-33	FUSE (2A/250V)	
7	A-1552-821-A	POWER BOARD, COMPLETE		Δ F902	1-532-388-33	FUSE (2A/250V)	
8	1-500-868-11	CORE, FERRITE		Δ J901	1-526-838-11	INLET, AC 2P (AC IN ~)	
9	3-268-440-41	CABINET (REAR)		Δ T901	1-445-470-11	TRANSFORMER, POWER	

6-2. FRONT CABINET SECTION



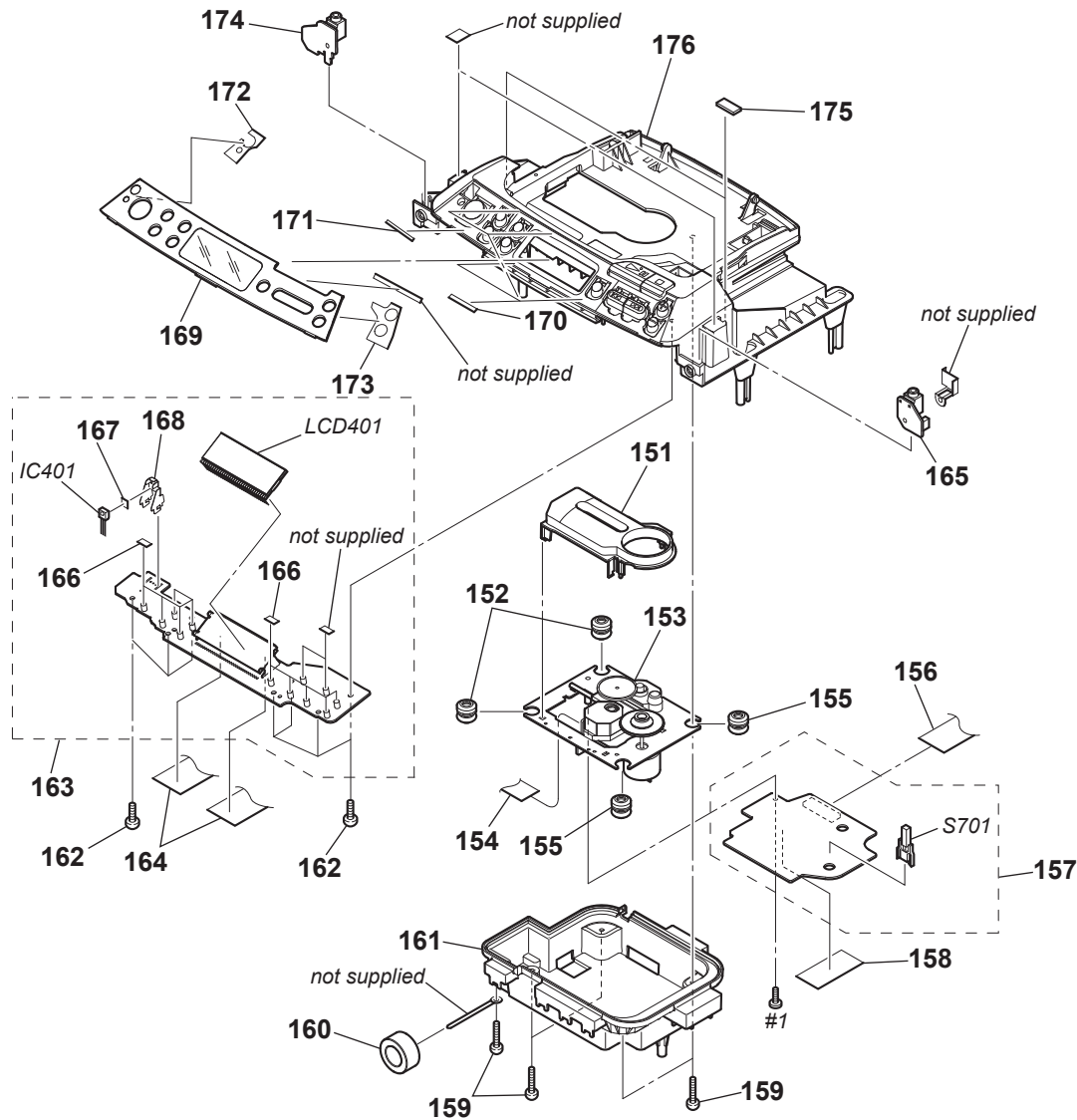
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-254-140-01	SCREW (B2.6), (+) BV TAPPING		57	3-297-345-01	BUTTON (FUNCTION)	
52	3-252-827-01	SCREW (B2.6), (+) BV TAPPING		58	A-1552-829-A	KEY (VOL) BOARD, COMPLETE	
53	2-655-159-12	JOINT, CABINET		59	3-297-344-01	BUTTON (VOL)	
54	3-040-916-11	FOOT (FRONT), RUBBER		60	3-831-441-99	SHEET (1)	
55	X-2319-036-1	NET (FRONT) SUB ASSY, CABINET		SP101	1-826-280-51	SPEAKER (7.7cm) (L-CH)	
56	A-1552-827-A	KEY (FUNC) BOARD, COMPLETE		SP201	1-826-280-51	SPEAKER (7.7cm) (R-CH)	

6-3. UPPER CABINET SECTION (1)



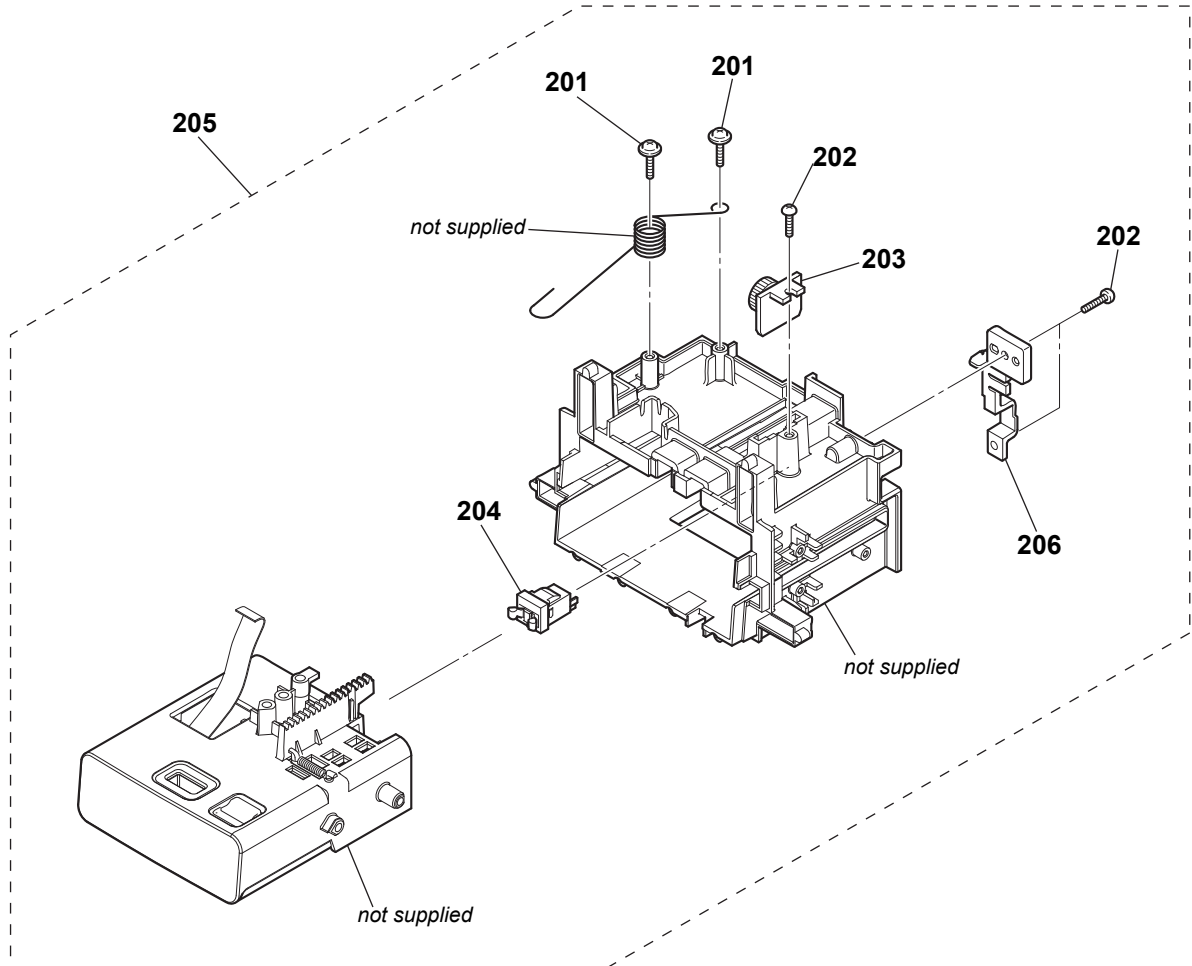
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	2-654-053-91	LID, CD		108	3-252-827-01	SCREW (B2.6), (+) BV TAPPING	
102	1-452-899-11	MAGNET		109	A-1552-840-A	MAIN BOARD, COMPLETE (EXCEPT AUS,KR)	
103	3-019-395-01	PLATE, CHUCKING		109	A-1552-868-A	MAIN BOARD, COMPLETE (AUS,KR)	
104	3-253-143-01	SCREW (B2.6), (+) P TAPPING		110	3-923-151-01	CUSHION, RUBBER	
105	2-654-072-01	SPRING, CD		111	3-258-284-01	SHEET (CHUCK)	
106	2-654-056-51	HANDLE		S801	1-692-960-11	SWITCH, PUSH (1 KEY) (▲ PUSH OPEN/CLOSE)	
107	3-047-468-21	DAMPER					

6-4. UPPER CABINET SECTION (2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	3-923-736-01	COVER, CD		167	2-673-399-01	SHEET (IR), ADHESIVE	
152	3-931-379-21	RUBBER, VIBRATION PROOF (RED)		168	2-654-085-01	HOLDER, IR	
△ 153	8-820-126-02	OPTICAL PICK-UP (KSM-213CDP/C2NP)		169	3-297-347-01	WINDOW (LCD) (UK,CET,IT)	
154	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)		169	3-297-347-11	WINDOW (LCD) (AUS,KR,SP,TH)	
155	3-931-379-31	RUBBER, VIBRATION PROOF (GREEN)		170	3-280-540-01	SHEET (LCD D), ADHESIVE	
156	1-832-747-31	CABLE, FLEXIBLE FLAT (21 CORE)		171	3-280-541-01	SHEET (LCD E), ADHESIVE	
157	A-1552-833-A	CD BOARD, COMPLETE		172	4-120-246-01	SHEET (L), ADHESIVE	
158	4-112-583-01	PAPER (CD PWB), SHIELD		173	4-120-247-01	SHEET (R), ADHESIVE	
159	3-252-827-01	SCREW (B2.6), (+) BV TAPPING		174	A-1552-843-A	HEADPHONE BOARD, COMPLETE	
160	1-500-868-11	CORE, FERRITE		175	3-283-367-01	SHEET (HANDLE)	
161	3-297-346-01	CHASSIS, CD		176	X-2319-037-1	NET (UPPER) SUB ASSY, CABINET	
162	3-254-151-01	SCREW (B2.6), (+) P TAPPING		IC401	6-600-108-01	IC RPM7140 (IR)	
163	A-1552-839-A	LCD BOARD, COMPLETE		LCD401	1-802-698-11	DISPLAY PANEL, LIQUID CRYSTAL	
164	1-832-009-21	CABLE, FLEXIBLE FLAT (20 CORE)		S701	1-572-085-21	SWITCH, LEAF (LIMIT)	
165	A-1552-844-A	AUDIO IN BOARD, COMPLETE		#1	7-685-853-04	SCREW +BVTT 2X6 (S)	
166	3-831-441-99	SHEET (1)					

6-5. USB TRAY ASSY SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-252-828-01	SCREW (B2.6), (+) PWH TAPPING		204	1-692-960-11	SWITCH, PUSH (1 KEY)	
202	3-252-827-01	SCREW (B2.6), (+) BV TAPPING		205	A-1552-823-A	TRAY ASSY, USB	
203	3-047-468-51	DAMPER		206	3-452-084-01	RETAINER	

SECTION 7 ELECTRICAL PARTS LIST

AUDIO IN **BATTERY (1)**

BATTERY (2) **CD**

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
uF: μF
- COILS
uH: μH

- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- SEMICONDUCTORS
In each case, u: μ, for example:
uA. . . : μA. . . , uPA. . . , μPA. . . ,
uPB. . . : μPB. . . , uPC. . . , μPC. . . ,
uPD. . . : μPD. . .
- Abbreviation
AUS : Australian model
CET : East European and Russian model
IT : Italian model
KR : Korea model
TH : Thai model

When indicating parts by reference number, please include the board name.

The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-1552-844-A	AUDIO IN BOARD, COMPLETE *****		C523	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
		< CAPACITOR >		C524	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
C164	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	C527	1-100-415-11	CERAMIC CHIP 0.47uF 10%	6.3V
C264	1-162-927-11	CERAMIC CHIP 100PF 5%	50V	C528	1-100-415-11	CERAMIC CHIP 0.47uF 10%	6.3V
		< COIL >		C529	1-164-937-11	CERAMIC CHIP 0.001uF 10%	50V
FB102	1-400-353-21	INDUCTOR 22uH		C701	1-164-941-11	CERAMIC CHIP 0.0047uF 10%	16V
FB202	1-400-353-21	INDUCTOR 22uH		C702	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V
FB302	1-400-135-21	INDUCTOR 1uH		C703	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
		< JACK >		C704	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
J322	1-815-629-21	JACK (AUDIO IN)		C706	1-128-995-21	ELECT CHIP 100uF 20%	10V
		< RESISTOR >		C707	1-128-995-21	ELECT CHIP 100uF 20%	10V
R177	1-216-864-11	SHORT CHIP 0		C708	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V
*****				C709	1-107-819-11	CERAMIC CHIP 0.022uF 10%	16V
		BATTERY (1) BOARD *****		C710	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
	3-229-975-01	SPRING (-), BATTERY		C711	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V
		< CONNECTOR >		C712	1-112-717-11	CERAMIC CHIP 1uF 10%	6.3V
CN903	1-815-550-11	PIN, CONNECTOR (PWB) 2P		C713	1-128-994-21	ELECT CHIP 47uF 20%	10V
*****				C714	1-164-937-11	CERAMIC CHIP 0.001uF 10%	50V
		BATTERY (2) BOARD *****		C715	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
	3-229-975-01	SPRING (-), BATTERY		C716	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
*****				C717	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
	A-1552-833-A	CD BOARD, COMPLETE *****		C718	1-128-995-21	ELECT CHIP 100uF 20%	10V
		< CAPACITOR >		C719	1-165-887-11	CERAMIC CHIP 0.22uF 10%	6.3V
C501	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V	C721	1-107-819-11	CERAMIC CHIP 0.022uF 10%	16V
C503	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V	C722	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C504	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C723	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C505	1-128-396-11	ELECT CHIP 470uF 20%	10V	C724	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C506	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C725	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C507	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C726	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C510	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	C727	1-128-995-21	ELECT CHIP 100uF 20%	10V
C514	1-164-941-11	CERAMIC CHIP 0.0047uF 10%	16V	C728	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
C519	1-164-941-11	CERAMIC CHIP 0.0047uF 10%	16V	C729	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
				C730	1-164-866-11	CERAMIC CHIP 47PF 5%	50V
				C731	1-164-866-11	CERAMIC CHIP 47PF 5%	50V
				C732	1-164-866-11	CERAMIC CHIP 47PF 5%	50V
				C733	1-164-866-11	CERAMIC CHIP 47PF 5%	50V
				C734	1-164-874-11	CERAMIC CHIP 100PF 5%	50V
				C735	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
				C736	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
				C737	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
				C738	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
				C739	1-164-858-11	CERAMIC CHIP 22PF 5%	50V
				C740	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V
				C741	1-128-394-11	ELECT CHIP 220uF 20%	10V
				C742	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C743	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	IC702	(Not supplied)	IC LC87F1HC4AU-SQFP-E	
C744	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	IC703	6-713-078-01	IC LA6548NHL-TE-L-E	
C745	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	IC704	6-710-887-01	IC R5523N001B-TR-F	
C746	1-164-858-11	CERAMIC CHIP 22PF 5%	50V			< TRANSISTOR >	
C747	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V				
C748	1-128-995-21	ELECT CHIP 100uF 20%	10V	Q701	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF	
C749	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V			< RESISTOR >	
C754	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V				
C755	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R501	1-218-969-11	RES-CHIP 22K 5%	1/16W
C756	1-128-394-11	ELECT CHIP 220uF 20%	10V	R502	1-218-949-11	RES-CHIP 470 5%	1/16W
C757	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R503	1-218-965-11	RES-CHIP 10K 5%	1/16W
C758	1-128-995-21	ELECT CHIP 100uF 20%	10V	R504	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
C759	1-119-923-11	CERAMIC CHIP 0.047uF 10%	10V	R505	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
C764	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V				
C765	1-128-394-11	ELECT CHIP 220uF 20%	10V	R506	1-218-953-11	RES-CHIP 1K 5%	1/16W
C766	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R507	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
C768	1-164-943-81	CERAMIC CHIP 0.01uF 10%	16V	R508	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
C773	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R509	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
C776	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R510	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
C777	1-164-866-11	CERAMIC CHIP 47PF 5%	50V				
C778	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R511	1-218-965-11	RES-CHIP 10K 5%	1/16W
C779	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R513	1-218-977-11	RES-CHIP 100K 5%	1/16W
C781	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R514	1-218-945-11	RES-CHIP 220 5%	1/16W
C782	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	R517	1-218-990-81	SHORT CHIP 0	
C783	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	R518	1-218-945-11	RES-CHIP 220 5%	1/16W
C784	1-164-858-11	CERAMIC CHIP 22PF 5%	50V				
C785	1-164-874-11	CERAMIC CHIP 100PF 5%	50V	R521	1-218-990-81	SHORT CHIP 0	
C786	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R522	1-218-990-81	SHORT CHIP 0	
C787	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	R523	1-218-990-81	SHORT CHIP 0	
C788	1-164-874-11	CERAMIC CHIP 100PF 5%	50V	R524	1-218-990-81	SHORT CHIP 0	
C790	1-164-850-11	CERAMIC CHIP 10PF 0.5PF	50V	R525	1-218-990-81	SHORT CHIP 0	
C791	1-164-850-11	CERAMIC CHIP 10PF 0.5PF	50V				
C792	1-125-777-11	CERAMIC CHIP 0.1uF 10%	10V	R526	1-218-990-81	SHORT CHIP 0	
C794	1-126-601-11	ELECT CHIP 2.2uF 20%	50V	R528	1-218-953-11	RES-CHIP 1K 5%	1/16W
C797	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R529	1-218-953-11	RES-CHIP 1K 5%	1/16W
C798	1-164-866-11	CERAMIC CHIP 47PF 5%	50V	R530	1-218-953-11	RES-CHIP 1K 5%	1/16W
C799	1-164-858-11	CERAMIC CHIP 22PF 5%	50V	R531	1-218-953-11	RES-CHIP 1K 5%	1/16W
		< CONNECTOR >					
CN701	1-770-425-51	CONNECTOR, FFC/FPC 16P		R532	1-218-953-11	RES-CHIP 1K 5%	1/16W
CN702	1-784-833-51	CONNECTOR, FFC (LIF(NON-ZIF)) 21P		R533	1-216-789-11	METAL CHIP 2.2 5%	1/10W
CN703	1-770-161-21	PIN, CONNECTOR (PC BOARD) 6P		R534	1-216-797-11	RES-CHIP 10 5%	1/16W
		< DIODE >		R701	1-218-941-81	RES-CHIP 100 5%	1/16W
D701	6-501-193-01	DIODE 1SS355WTE-17		R702	1-218-945-11	RES-CHIP 220 5%	1/16W
D702	6-501-193-01	DIODE 1SS355WTE-17					
D703	6-501-193-01	DIODE 1SS355WTE-17		R703	1-218-965-11	RES-CHIP 10K 5%	1/16W
D704	6-501-193-01	DIODE 1SS355WTE-17		R704	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
D705	6-501-743-01	DIODE MAZ8068GMLS0		R705	1-218-977-11	RES-CHIP 100K 5%	1/16W
		< JUMPER RESISTOR >		R706	1-218-990-81	SHORT CHIP 0	
FB701	1-216-864-11	SHORT CHIP 0		R707	1-218-990-81	SHORT CHIP 0	
FB702	1-216-864-11	SHORT CHIP 0					
FB703	1-216-864-11	SHORT CHIP 0		R709	1-218-990-81	SHORT CHIP 0	
FB704	1-216-864-11	SHORT CHIP 0		R710	1-218-990-81	SHORT CHIP 0	
FB705	1-216-295-11	SHORT CHIP 0		R712	1-218-969-11	RES-CHIP 22K 5%	1/16W
FB706	1-216-295-11	SHORT CHIP 0		R713	1-218-973-11	RES-CHIP 47K 5%	1/16W
		< IC >		R715	1-216-864-11	SHORT CHIP 0	
IC701	6-713-077-01	IC LC786924T-US-H					
				R716	1-218-990-81	SHORT CHIP 0	
				R717	1-218-945-11	RES-CHIP 220 5%	1/16W
				R718	1-218-990-81	SHORT CHIP 0	
				R719	1-218-945-11	RES-CHIP 220 5%	1/16W
				R721	1-218-969-11	RES-CHIP 22K 5%	1/16W
				R722	1-218-990-81	SHORT CHIP 0	
				R723	1-218-446-11	METAL CHIP 1 5%	1/10W
				R724	1-218-949-11	RES-CHIP 470 5%	1/16W
				R726	1-216-864-11	SHORT CHIP 0	
				R727	1-218-949-11	RES-CHIP 470 5%	1/16W
				R728	1-218-945-11	RES-CHIP 220 5%	1/16W
				R731	1-218-949-11	RES-CHIP 470 5%	1/16W

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CD **HEADPHONE** **KEY (FUNC)** **KEY (VOL)**

Ref. No.	Part No.	Description	Remark
R732	1-218-945-11	RES-CHIP 220 5%	1/16W
R733	1-218-969-11	RES-CHIP 22K 5%	1/16W
R734	1-218-973-11	RES-CHIP 47K 5%	1/16W
R735	1-218-973-11	RES-CHIP 47K 5%	1/16W
R736	1-216-864-11	SHORT CHIP 0	
R737	1-218-941-81	RES-CHIP 100 5%	1/16W
R738	1-218-973-11	RES-CHIP 47K 5%	1/16W
R740	1-400-331-11	FERRITE, EMI (SMD) (1005)	
R741	1-218-941-81	RES-CHIP 100 5%	1/16W
R742	1-400-331-11	FERRITE, EMI (SMD) (1005)	
R743	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
R744	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
R745	1-218-990-81	SHORT CHIP 0	
R746	1-218-953-11	RES-CHIP 1K 5%	1/16W
R747	1-218-933-11	RES-CHIP 22 5%	1/16W
R748	1-218-941-81	RES-CHIP 100 5%	1/16W
R749	1-218-990-81	SHORT CHIP 0	
R750	1-216-864-11	SHORT CHIP 0	
R751	1-400-331-11	FERRITE, EMI (SMD) (1005)	
R752	1-218-953-11	RES-CHIP 1K 5%	1/16W
R753	1-218-953-11	RES-CHIP 1K 5%	1/16W
R754	1-218-953-11	RES-CHIP 1K 5%	1/16W
R755	1-218-990-81	SHORT CHIP 0	
R757	1-216-864-11	SHORT CHIP 0	
R759	1-216-864-11	SHORT CHIP 0	
R760	1-218-990-81	SHORT CHIP 0	
R761	1-216-864-11	SHORT CHIP 0	
R763	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
R764	1-218-941-81	RES-CHIP 100 5%	1/16W
R765	1-218-949-11	RES-CHIP 470 5%	1/16W
R767	1-218-941-81	RES-CHIP 100 5%	1/16W
R768	1-218-941-81	RES-CHIP 100 5%	1/16W
R769	1-218-941-81	RES-CHIP 100 5%	1/16W
R770	1-218-941-81	RES-CHIP 100 5%	1/16W
R771	1-218-941-81	RES-CHIP 100 5%	1/16W
R772	1-218-941-81	RES-CHIP 100 5%	1/16W
R773	1-218-941-81	RES-CHIP 100 5%	1/16W
R774	1-218-977-11	RES-CHIP 100K 5%	1/16W
R775	1-218-977-11	RES-CHIP 100K 5%	1/16W
R776	1-218-977-11	RES-CHIP 100K 5%	1/16W
R777	1-218-953-11	RES-CHIP 1K 5%	1/16W
R778	1-218-953-11	RES-CHIP 1K 5%	1/16W
R779	1-218-953-11	RES-CHIP 1K 5%	1/16W
R780	1-218-953-11	RES-CHIP 1K 5%	1/16W
R781	1-218-953-11	RES-CHIP 1K 5%	1/16W
R782	1-400-331-11	FERRITE, EMI (SMD) (1005)	
R783	1-220-803-81	RES-CHIP 4.7 5%	1/16W
R784	1-218-933-11	RES-CHIP 22 5%	1/16W
R785	1-218-965-11	RES-CHIP 10K 5%	1/16W
R786	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
R787	1-220-803-81	RES-CHIP 4.7 5%	1/16W
R788	1-218-933-11	RES-CHIP 22 5%	1/16W
R789	1-218-965-11	RES-CHIP 10K 5%	1/16W
R790	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
R791	1-218-990-81	SHORT CHIP 0	
R794	1-218-941-81	RES-CHIP 100 5%	1/16W
R795	1-218-941-81	RES-CHIP 100 5%	1/16W
R796	1-218-957-11	RES-CHIP 2.2K 5%	1/16W
R797	1-218-961-11	RES-CHIP 4.7K 5%	1/16W
R798	1-218-990-81	SHORT CHIP 0	

Ref. No.	Part No.	Description	Remark
R799	1-218-990-81	SHORT CHIP 0	
S701	1-572-085-21	SWITCH, LEAF (LIMIT)	
X701	1-813-975-21	VIBRATOR, CERAMIC (16.9344MHz)	
X702	1-813-934-11	VIBRATOR, CERAMIC (12MHz)	

A-1552-843-A	HEADPHONE BOARD, COMPLETE		

< CAPACITOR >			
C116	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
C216	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
< CONNECTOR >			
CN307	1-815-445-21	PIN, CONNECTOR (PWB) 4P	
CN308	1-815-445-11	PIN, CONNECTOR (PWB) 4P	
< JACK >			
J321	1-815-325-11	JACK (♂)	
< COIL >			
L101	1-410-513-11	INDUCTOR 22uH	
L201	1-410-513-11	INDUCTOR 22uH	
< RESISTOR >			
R146	1-216-809-11	METAL CHIP 100 5%	1/10W
R148	1-216-805-11	METAL CHIP 47 5%	1/10W
R246	1-216-809-11	METAL CHIP 100 5%	1/10W
R248	1-216-805-11	METAL CHIP 47 5%	1/10W

A-1552-827-A	KEY (FUNC) BOARD, COMPLETE		

< CONNECTOR >			
CN403	1-815-550-11	PIN, CONNECTOR (PWB) 2P	
< RESISTOR >			
R424	1-216-821-11	METAL CHIP 1K 5%	1/10W
R425	1-216-821-11	METAL CHIP 1K 5%	1/10W
R426	1-216-817-11	METAL CHIP 470 5%	1/10W
R427	1-216-813-11	METAL CHIP 220 5%	1/10W
< SWITCH >			
S413	1-786-050-21	SWITCH, KEYBOARD (AUDIO IN)	
S414	1-786-050-21	SWITCH, KEYBOARD (RADIO/BAND/AUTO PRESET)	
S415	1-786-050-21	SWITCH, KEYBOARD (CD)	
S416	1-786-050-21	SWITCH, KEYBOARD (USB)	

A-1552-829-A	KEY (VOL) BOARD, COMPLETE		

< CONNECTOR >			
CN401	1-815-550-11	PIN, CONNECTOR (PWB) 2P	

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
		< RESISTOR >					S402	1-786-050-21	SWITCH, KEYBOARD (SLEEP)				
R428	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	S403	1-786-050-21	SWITCH, KEYBOARD (MODE)					
R429	1-216-821-11	METAL CHIP	1K	5%	1/10W	S404	1-786-050-21	SWITCH, KEYBOARD (DISPLAY/ENTER)					
R430	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	S405	1-786-050-21	SWITCH, KEYBOARD (MEGABASS)					
R431	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	S406	1-786-050-21	SWITCH, KEYBOARD (▶▶)					
R432	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	S407	1-786-050-21	SWITCH, KEYBOARD (■)					
		< SWITCH >					S408	1-786-050-21	SWITCH, KEYBOARD (☐ +/TUNE+)				
S417	1-786-050-21	SWITCH, KEYBOARD (VOLUME -)					S409	1-786-050-21	SWITCH, KEYBOARD (☐ -/TUNE-)				
S418	1-786-050-21	SWITCH, KEYBOARD (VOLUME +)					S410	1-786-050-21	SWITCH, KEYBOARD (PRESET+/▶▶▶)				
		*****					S411	1-786-050-21	SWITCH, KEYBOARD (PRESET-/◀◀◀)				
		*****					S412	1-786-050-21	SWITCH, KEYBOARD (REPEAT)				
		*****					A-1552-840-A	MAIN BOARD, COMPLETE (EXCEPT AUS,KR)					
		*****					A-1552-868-A	MAIN BOARD, COMPLETE (AUS,KR)					

	A-1552-839-A	LCD BOARD, COMPLETE					3-253-143-01	SCREW (B2.6), (+) P TAPPING					

		< CAPACITOR >											
C401	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V								
C402	1-126-964-11	ELECT	10uF	20%	50V								
		< DIODE >											
D401	8-719-059-97	LED L-34HD (OPR/BATT)											
D402	6-501-730-01	DIODE MAZ8051GMLS0											
		< IC >											
IC401	6-600-108-01	IC RPM7140 (IR)											
		< LIQUID CRYSTAL DISPLAY >											
LCD401	1-802-698-11	DISPLAY PANEL, LIQUID CRYSTAL											
		< RESISTOR >											
R401	1-216-817-11	METAL CHIP	470	5%	1/10W	C1	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		
R402	1-216-817-11	METAL CHIP	470	5%	1/10W	C2	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R403	1-216-813-11	METAL CHIP	220	5%	1/10W	C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W	C4	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R405	1-216-813-11	METAL CHIP	220	5%	1/10W	C5	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R406	1-216-813-11	METAL CHIP	220	5%	1/10W	C6	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
R407	1-216-817-11	METAL CHIP	470	5%	1/10W	C7	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		
R408	1-216-821-11	METAL CHIP	1K	5%	1/10W	C9	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		
R409	1-216-821-11	METAL CHIP	1K	5%	1/10W	C10	1-162-923-11	CERAMIC CHIP	47PF	5%	50V		
R410	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C11	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
R411	1-216-813-11	METAL CHIP	220	5%	1/10W	C12	1-164-230-11	CERAMIC CHIP	220PF	5%	50V		
R412	1-216-817-11	METAL CHIP	470	5%	1/10W	C13	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V		
R413	1-216-821-11	METAL CHIP	1K	5%	1/10W	C14	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V		
R414	1-216-821-11	METAL CHIP	1K	5%	1/10W	C15	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		
R415	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C16	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V		
R416	1-216-821-11	METAL CHIP	1K	5%	1/10W	C17	1-104-662-11	ELECT	22uF	20%	25V		
R417	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C18	1-126-963-11	ELECT	4.7uF	20%	50V		
R418	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C19	1-126-956-11	ELECT	0.1uF	20%	50V		
R419	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C20	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		
R420	1-216-817-11	METAL CHIP	470	5%	1/10W	C21	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		
R421	1-216-809-11	METAL CHIP	100	5%	1/10W	C22	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		
R422	1-216-845-11	METAL CHIP	100K	5%	1/10W	C23	1-126-947-11	ELECT	47uF	20%	35V		
R423	1-216-841-11	METAL CHIP	47K	5%	1/10W	C24	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V		
R435	1-216-813-11	METAL CHIP	220	5%	1/10W	C25	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		
		< SWITCH >					C26	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	
S401	1-786-050-21	SWITCH, KEYBOARD (OPERATE)					C27	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V	
							C28	1-165-908-11	CERAMIC CHIP	1uF	10%	10V	
							C29	1-126-925-11	ELECT	470uF	20%	10V	
							C30	1-126-923-11	ELECT	220uF	20%	10V	
							C31	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
							C32	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
							C33	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
							C34	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	
							C35	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	
							C36	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
							C37	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
							C38	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
							C39	1-126-923-11	ELECT	220uF	20%	10V	

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MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C40	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C367	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C41	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	C368	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C42	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V	C801	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C43	1-126-964-11	ELECT	10uF	20%	50V	C802	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C803	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C46	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	C804	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C67	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C805	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C70	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C806	1-162-910-11	CERAMIC CHIP	5PF	0.25PF	50V
C108	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C807	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C808	1-162-913-11	CERAMIC CHIP	8PF	0.5PF	50V
C112	1-126-925-11	ELECT	470uF	20%	10V	C809	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C115	1-126-960-11	ELECT	1uF	20%	50V	C810	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C119	1-104-658-11	ELECT	100uF	20%	10V	C811	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C129	1-216-864-11	SHORT CHIP	0			C812	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C130	1-126-957-11	ELECT	0.22uF	20%	50V	C813	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C131	1-126-947-11	ELECT	47uF	20%	35V	C814	1-104-658-11	ELECT	100uF	20%	10V
C132	1-162-995-11	CERAMIC CHIP	0.022uF		50V	C816	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C136	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C817	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C137	1-126-960-11	ELECT	1uF	20%	50V	C821	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C140	1-126-960-11	ELECT	1uF	20%	50V	C822	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C153	1-126-960-11	ELECT	1uF	20%	50V	C823	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C163	1-126-960-11	ELECT	1uF	20%	50V	C824	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C166	1-126-961-11	ELECT	2.2uF	20%	50V	C828	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C167	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C831	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C169	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C832	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C171	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C834	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C175	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C836	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C838	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C840	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C212	1-126-925-11	ELECT	470uF	20%	10V	C841	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C215	1-126-960-11	ELECT	1uF	20%	50V	C842	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C219	1-104-658-11	ELECT	100uF	20%	10V	C843	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C229	1-216-864-11	SHORT CHIP	0			C847	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C230	1-126-957-11	ELECT	0.22uF	20%	50V	C849	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C231	1-126-947-11	ELECT	47uF	20%	35V	C850	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C232	1-162-995-11	CERAMIC CHIP	0.022uF		50V	C851	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C236	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	C852	1-126-925-11	ELECT	470uF	20%	10V
C237	1-126-960-11	ELECT	1uF	20%	50V	C853	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C240	1-126-960-11	ELECT	1uF	20%	50V	C854	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C253	1-126-960-11	ELECT	1uF	20%	50V	C855	1-104-658-11	ELECT	100uF	20%	10V
C260	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C856	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C263	1-126-960-11	ELECT	1uF	20%	50V	C857	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C266	1-126-961-11	ELECT	2.2uF	20%	50V	C858	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C267	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V	C859	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C271	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C860	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C275	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C861	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C322	1-126-934-11	ELECT	220uF	20%	16V	C862	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C325	1-126-937-11	ELECT	4700uF	20%	16V	C863	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C326	1-126-934-11	ELECT	220uF	20%	16V	C864	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C331	1-126-947-11	ELECT	47uF	20%	35V	C865	1-104-658-11	ELECT	100uF	20%	10V
C354	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C870	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C355	1-126-767-11	ELECT	1000uF	20%	16V	C872	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C356	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C874	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C360	1-104-658-11	ELECT	100uF	20%	10V	C875	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C361	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C876	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C362	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C877	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C363	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V	C878	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C364	1-126-964-11	ELECT	10uF	20%	50V	C881	1-135-834-11	CERAMIC CHIP	2.2uF		6.3V
C365	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V	C885	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C366	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	C887	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C888	1-162-927-11	CERAMIC CHIP 100PF	5% 50V	FB801	1-414-445-11	FERRITE, EMI (SMD) (1608)	
C889	1-162-923-11	CERAMIC CHIP 47PF	5% 50V	FB802	1-414-445-11	FERRITE, EMI (SMD) (1608)	
C905	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	FB803	1-216-296-11	SHORT CHIP	0
C909	1-126-925-11	ELECT 470uF	20% 10V	FB804	1-216-296-11	SHORT CHIP	0
C910	1-126-933-11	ELECT 100uF	20% 16V	FB805	1-414-445-11	FERRITE, EMI (SMD) (1608)	
C911	1-100-566-11	CERAMIC CHIP 0.1uF	10% 25V	FB806	1-414-445-11	FERRITE, EMI (SMD) (1608)	
C912	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	FB807	1-410-989-21	INDUCTOR 0.47uH	
C913	1-126-941-11	ELECT 470uF	20% 25V	FB808	1-216-295-11	SHORT CHIP	0
C914	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	FB901	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C915	1-126-947-11	ELECT 47uF	20% 35V	FB902	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C916	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	FB903	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C917	1-126-947-11	ELECT 47uF	20% 35V	FB904	1-469-670-21	FERRITE, EMI (SMD) (2012)	
C951	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V			< IC >	
C952	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	IC1	6-708-840-01	IC LV23003VA	
C953	1-126-925-11	ELECT 470uF	20% 10V	IC302	6-712-055-01	IC BD3499FV-E2	
C954	1-104-662-11	ELECT 22uF	20% 25V	IC303	6-710-261-01	IC UTC8227 S	
C964	1-162-927-11	CERAMIC CHIP 100PF	5% 50V	IC801	(Not supplied)	IC LC87F7DC8AU-QIP-E	
C966	1-162-923-11	CERAMIC CHIP 47PF	5% 50V	IC802	6-703-740-01	IC S-24CS02AFT-TB-G	
		< FILTER >		IC803	6-709-458-01	IC XC61CN2802NR	
CF2	1-767-555-11	FILTER, CERAMIC		IC804	6-703-285-01	IC S-812C33AUA-C2NT2G	
CF3	1-781-962-21	FILTER, CERAMIC		IC901	6-702-472-01	IC PQ1C221H2ZPH	
		< CONNECTOR >				< COIL >	
CN1	1-815-550-11	PIN, CONNECTOR (PWB) 2P		L1	1-419-847-11	COIL, AIR-CORE	
CN301	1-815-444-11	PIN, CONNECTOR (PWB) 3P		L2	1-419-655-11	COIL, AIR-CORE	
CN801	1-779-289-11	CONNECTOR, FFC (LIF(NON-ZIF)) 21P		L3	1-411-199-31	COIL, AM OSC	
CN803	1-784-781-11	CONNECTOR, FFC 20P		L6	1-457-168-11	COIL, DET	
CN804	1-784-781-11	CONNECTOR, FFC 20P		L301	1-414-142-11	INDUCTOR	1uH
CN805	1-815-550-11	PIN, CONNECTOR (PWB) 2P		L801	1-410-513-11	INDUCTOR	22uH
CN906	1-815-551-11	PIN, CONNECTOR (PWB) 3P		L804	1-410-509-11	INDUCTOR	10uH
		< TRIMMER >		L805	1-412-698-21	INDUCTOR	0.47uH
CT1	1-141-304-21	CAP, CERAMIC TRIMMER 10PF		L806	1-410-509-11	INDUCTOR	10uH
CT3	1-141-227-00	CAP, CERAMIC TRIMMER 20PF		L812	1-216-864-11	SHORT CHIP	0
		< DIODE >		L813	1-412-698-21	INDUCTOR	0.47uH
D1	6-501-440-01	DIODE SVC707-AL		L901	1-481-245-11	INDUCTOR	220uH
D2	6-501-440-01	DIODE SVC707-AL				< TRANSISTOR >	
D3	6-501-392-01	DIODE SVC386-AL		Q124	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D4	8-719-991-33	DIODE 1SS133T-77		Q224	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D5	8-719-991-33	DIODE 1SS133T-77		Q801	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D6	6-500-697-01	DIODE UDZSNPTE-173.3B		Q802	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D324	6-501-817-01	DIODE MA2J1110GLS0		Q803	6-551-696-01	TRANSISTOR ISA1235AC1TP-1EF	
D325	8-719-991-33	DIODE 1SS133T-77		Q804	6-551-067-01	FET RTF015P02TL	
D326	8-719-991-33	DIODE 1SS133T-77		Q805	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D801	6-500-334-01	DIODE MC2836-T112-1		Q905	6-550-542-01	TRANSISTOR 2SD999-T1-AZ	
D802	6-501-817-01	DIODE MA2J1110GLS0		Q951	6-551-444-01	TRANSISTOR RT1N436C-TP-1	
D803	8-719-082-07	DIODE KDS121-RTK		Q952	8-729-040-76	TRANSISTOR KTA1273-Y-AT	
D906	8-719-085-36	DIODE 11EQS04-TB5		Q953	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
D907	6-501-719-01	DIODE MAZ8039GHLS0		Q955	8-729-018-99	TRANSISTOR 2SD2394-F	
D951	6-500-334-01	DIODE MC2836-T112-1				< RESISTOR >	
D953	6-501-743-01	DIODE MAZ8068GMLS0		R1	1-216-845-11	METAL CHIP 100K	5% 1/10W
		< FERRITE BEAD >		R2	1-216-837-11	METAL CHIP 22K	5% 1/10W
FB101	1-414-445-11	FERRITE, EMI (SMD) (1608)		R3	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
FB103	1-414-445-11	FERRITE, EMI (SMD) (1608)		R4	1-216-797-11	METAL CHIP 10	5% 1/10W
FB201	1-414-445-11	FERRITE, EMI (SMD) (1608)		R5	1-216-833-11	METAL CHIP 10K	5% 1/10W
FB203	1-414-445-11	FERRITE, EMI (SMD) (1608)		R6	1-216-853-11	METAL CHIP 470K	5% 1/10W
FB301	1-414-445-11	FERRITE, EMI (SMD) (1608)		R7	1-216-797-11	METAL CHIP 10	5% 1/10W
				R8	1-216-295-11	SHORT CHIP	0

ZS-PS20CP

MAIN

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R9	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R257	1-216-864-11	SHORT CHIP	0		
R10	1-216-801-11	METAL CHIP	22	5%	1/10W	R261	1-216-864-11	SHORT CHIP	0		
R11	1-216-821-11	METAL CHIP	1K	5%	1/10W	R266	1-216-833-11	METAL CHIP	10K	5%	1/10W
R12	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R269	1-216-864-11	SHORT CHIP	0		
R13	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R270	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R14	1-216-833-11	METAL CHIP	10K	5%	1/10W	R271	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R15	1-216-837-11	METAL CHIP	22K	5%	1/10W	R275	1-216-864-11	SHORT CHIP	0		
R16	1-216-864-11	SHORT CHIP	0			R276	1-216-817-11	METAL CHIP	470	5%	1/10W
R17	1-216-864-11	SHORT CHIP	0			R301	1-216-864-11	SHORT CHIP	0		
R18	1-216-809-11	METAL CHIP	100	5%	1/10W	R325	1-216-821-11	METAL CHIP	1K	5%	1/10W
R19	1-216-809-11	METAL CHIP	100	5%	1/10W	R326	1-216-821-11	METAL CHIP	1K	5%	1/10W
R20	1-216-809-11	METAL CHIP	100	5%	1/10W	R327	1-216-821-11	METAL CHIP	1K	5%	1/10W
R21	1-216-809-11	METAL CHIP	100	5%	1/10W	R335	1-216-805-11	METAL CHIP	47	5%	1/10W
R22	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R336	1-216-805-11	METAL CHIP	47	5%	1/10W
R23	1-216-817-11	METAL CHIP	470	5%	1/10W	R339	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R24	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R340	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R25	1-216-821-11	METAL CHIP	1K	5%	1/10W	R343	1-216-809-11	METAL CHIP	100	5%	1/10W
R26	1-216-813-11	METAL CHIP	220	5%	1/10W	R344	1-216-809-11	METAL CHIP	100	5%	1/10W
R27	1-216-833-11	METAL CHIP	10K	5%	1/10W	R345	1-216-864-11	SHORT CHIP	0		
R28	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R346	1-216-821-11	METAL CHIP	1K	5%	1/10W
R29	1-216-837-11	METAL CHIP	22K	5%	1/10W	R347	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R39	1-216-864-11	SHORT CHIP	0			R348	1-216-864-11	SHORT CHIP	0		
R41	1-216-833-11	METAL CHIP	10K	5%	1/10W	R349	1-216-821-11	METAL CHIP	1K	5%	1/10W
R42	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R350	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R101	1-414-445-11	FERRITE, EMI (SMD) (1608)				R441	1-216-833-11	METAL CHIP	10K	5%	1/10W
R134	1-216-864-11	SHORT CHIP	0			R442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R135	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R443	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R444	1-216-833-11	METAL CHIP	10K	5%	1/10W
R140	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R445	1-216-833-11	METAL CHIP	10K	5%	1/10W
R141	1-216-821-11	METAL CHIP	1K	5%	1/10W	R446	1-216-833-11	METAL CHIP	10K	5%	1/10W
R142	1-216-821-11	METAL CHIP	1K	5%	1/10W	R447	1-216-833-11	METAL CHIP	10K	5%	1/10W
R143	1-216-809-11	METAL CHIP	100	5%	1/10W	R448	1-216-833-11	METAL CHIP	10K	5%	1/10W
R144	1-216-789-11	METAL CHIP	2.2	5%	1/10W	R449	1-216-833-11	METAL CHIP	10K	5%	1/10W
R147	1-216-833-11	METAL CHIP	10K	5%	1/10W	R450	1-216-833-11	METAL CHIP	10K	5%	1/10W
R149	1-216-841-11	METAL CHIP	47K	5%	1/10W	R451	1-216-833-11	METAL CHIP	10K	5%	1/10W
R151	1-216-864-11	SHORT CHIP	0			R452	1-216-833-11	METAL CHIP	10K	5%	1/10W
R154	1-216-837-11	METAL CHIP	22K	5%	1/10W	R453	1-216-833-11	METAL CHIP	10K	5%	1/10W
R156	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R454	1-216-833-11	METAL CHIP	10K	5%	1/10W
R157	1-216-864-11	SHORT CHIP	0			R455	1-216-833-11	METAL CHIP	10K	5%	1/10W
R161	1-216-864-11	SHORT CHIP	0			R456	1-216-833-11	METAL CHIP	10K	5%	1/10W
R166	1-216-833-11	METAL CHIP	10K	5%	1/10W	R457	1-216-833-11	METAL CHIP	10K	5%	1/10W
R169	1-216-864-11	SHORT CHIP	0			R458	1-216-833-11	METAL CHIP	10K	5%	1/10W
R170	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R459	1-216-833-11	METAL CHIP	10K	5%	1/10W
R171	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R460	1-216-833-11	METAL CHIP	10K	5%	1/10W
R175	1-216-864-11	SHORT CHIP	0			R461	1-216-833-11	METAL CHIP	10K	5%	1/10W
R176	1-216-817-11	METAL CHIP	470	5%	1/10W	R462	1-216-833-11	METAL CHIP	10K	5%	1/10W
R201	1-414-445-11	FERRITE, EMI (SMD) (1608)				R463	1-216-833-11	METAL CHIP	10K	5%	1/10W
R234	1-216-864-11	SHORT CHIP	0			R464	1-216-833-11	METAL CHIP	10K	5%	1/10W
R235	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R465	1-216-833-11	METAL CHIP	10K	5%	1/10W
R236	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R466	1-216-833-11	METAL CHIP	10K	5%	1/10W
R240	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	R467	1-216-833-11	METAL CHIP	10K	5%	1/10W
R241	1-216-821-11	METAL CHIP	1K	5%	1/10W	R468	1-216-833-11	METAL CHIP	10K	5%	1/10W
R242	1-216-821-11	METAL CHIP	1K	5%	1/10W	R469	1-216-833-11	METAL CHIP	10K	5%	1/10W
R243	1-216-809-11	METAL CHIP	100	5%	1/10W	R470	1-216-833-11	METAL CHIP	10K	5%	1/10W
R244	1-216-789-11	METAL CHIP	2.2	5%	1/10W	R471	1-216-833-11	METAL CHIP	10K	5%	1/10W
R247	1-216-833-11	METAL CHIP	10K	5%	1/10W	R472	1-216-833-11	METAL CHIP	10K	5%	1/10W
R249	1-216-841-11	METAL CHIP	47K	5%	1/10W	R473	1-216-833-11	METAL CHIP	10K	5%	1/10W
R251	1-216-864-11	SHORT CHIP	0			R474	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R254	1-216-837-11	METAL CHIP	22K	5%	1/10W	R475	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R256	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	R476	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R477	1-216-864-11	SHORT CHIP	0	R858	1-216-853-11	METAL CHIP	470K 5% 1/10W
R478	1-216-845-11	METAL CHIP	100K 5% 1/10W	R862	1-216-841-11	METAL CHIP	47K 5% 1/10W
R479	1-216-821-11	METAL CHIP	1K 5% 1/10W	R863	1-216-833-11	METAL CHIP	10K 5% 1/10W
R486	1-216-833-11	METAL CHIP	10K 5% 1/10W	R865	1-216-833-11	METAL CHIP	10K 5% 1/10W
R487	1-216-841-11	METAL CHIP	47K 5% 1/10W	R866	1-216-864-11	SHORT CHIP	0 (EXCEPT AUS,KR)
R488	1-216-841-11	METAL CHIP	47K 5% 1/10W	R867	1-216-833-11	METAL CHIP	10K 5% 1/10W
R489	1-216-841-11	METAL CHIP	47K 5% 1/10W	R869	1-216-845-11	METAL CHIP	100K 5% 1/10W
R490	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R870	1-216-841-11	METAL CHIP	47K 5% 1/10W
R495	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R871	1-216-849-11	METAL CHIP	220K 5% 1/10W
R496	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R872	1-216-821-11	METAL CHIP	1K 5% 1/10W
R497	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R873	1-216-821-11	METAL CHIP	1K 5% 1/10W
R498	1-216-841-11	METAL CHIP	47K 5% 1/10W	R874	1-216-833-11	METAL CHIP	10K 5% 1/10W
R499	1-216-853-11	METAL CHIP	470K 5% 1/10W	R875	1-216-821-11	METAL CHIP	1K 5% 1/10W
R801	1-469-701-21	FERRITE, EMI (SMD) (1608)		R876	1-216-817-11	METAL CHIP	470 5% 1/10W
R802	1-469-701-21	FERRITE, EMI (SMD) (1608)		R878	1-216-821-11	METAL CHIP	1K 5% 1/10W
R803	1-469-701-21	FERRITE, EMI (SMD) (1608)		R879	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R804	1-469-701-21	FERRITE, EMI (SMD) (1608)		R880	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R805	1-469-701-21	FERRITE, EMI (SMD) (1608)		R881	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R806	1-469-701-21	FERRITE, EMI (SMD) (1608)		R882	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R807	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R883	1-216-821-11	METAL CHIP	1K 5% 1/10W
R808	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R884	1-216-845-11	METAL CHIP	100K 5% 1/10W
R810	1-469-701-21	FERRITE, EMI (SMD) (1608)		R885	1-216-845-11	METAL CHIP	100K 5% 1/10W
R811	1-469-701-21	FERRITE, EMI (SMD) (1608)		R886	1-216-821-11	METAL CHIP	1K 5% 1/10W
R812	1-469-701-21	FERRITE, EMI (SMD) (1608)		R887	1-216-821-11	METAL CHIP	1K 5% 1/10W
R813	1-216-833-11	METAL CHIP	10K 5% 1/10W	R888	1-216-821-11	METAL CHIP	1K 5% 1/10W
R814	1-216-833-11	METAL CHIP	10K 5% 1/10W	R890	1-216-817-11	METAL CHIP	470 5% 1/10W
R815	1-216-833-11	METAL CHIP	10K 5% 1/10W	R892	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R816	1-216-833-11	METAL CHIP	10K 5% 1/10W	R893	1-216-841-11	METAL CHIP	47K 5% 1/10W
R817	1-216-857-11	METAL CHIP	1M 5% 1/10W	R894	1-216-821-11	METAL CHIP	1K 5% 1/10W
R818	1-216-853-11	METAL CHIP	470K 5% 1/10W	R895	1-216-821-11	METAL CHIP	1K 5% 1/10W
R819	1-216-837-11	METAL CHIP	22K 5% 1/10W	R896	1-216-821-11	METAL CHIP	1K 5% 1/10W
R820	1-216-837-11	METAL CHIP	22K 5% 1/10W	R897	1-216-864-11	SHORT CHIP	0
R821	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R899	1-216-864-11	SHORT CHIP	0
R825	1-216-841-11	METAL CHIP	47K 5% 1/10W	R901	1-216-809-11	METAL CHIP	100 5% 1/10W
R826	1-216-841-11	METAL CHIP	47K 5% 1/10W	R919	1-218-863-11	METAL CHIP	4.7K 0.5% 1/10W
R827	1-216-833-11	METAL CHIP	10K 5% 1/10W	R920	1-218-871-11	METAL CHIP	10K 0.5% 1/10W
R829	1-216-821-11	METAL CHIP	1K 5% 1/10W	R921	1-218-895-11	METAL CHIP	100K 0.5% 1/10W
R831	1-216-817-11	METAL CHIP	470 5% 1/10W	R922	1-218-847-11	METAL CHIP	1K 0.5% 1/10W
R832	1-216-813-11	METAL CHIP	220 5% 1/10W	R923	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R833	1-216-813-11	METAL CHIP	220 5% 1/10W	R924	1-216-809-11	METAL CHIP	100 5% 1/10W
R834	1-216-821-11	METAL CHIP	1K 5% 1/10W	R925	1-216-809-11	METAL CHIP	100 5% 1/10W
R835	1-216-813-11	METAL CHIP	220 5% 1/10W	R926	1-216-833-11	METAL CHIP	10K 5% 1/10W
R836	1-216-813-11	METAL CHIP	220 5% 1/10W	R927	1-216-809-11	METAL CHIP	100 5% 1/10W
R837	1-216-817-11	METAL CHIP	470 5% 1/10W	R928	1-218-887-11	METAL CHIP	47K 0.5% 1/10W
R840	1-216-821-11	METAL CHIP	1K 5% 1/10W	R951	1-216-841-11	METAL CHIP	47K 5% 1/10W
R841	1-216-821-11	METAL CHIP	1K 5% 1/10W	R952	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R843	1-216-864-11	SHORT CHIP	0	R953	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R844	1-216-833-11	METAL CHIP	10K 5% 1/10W	R954	1-216-821-11	METAL CHIP	1K 5% 1/10W
R845	1-216-833-11	METAL CHIP	10K 5% 1/10W	R955	1-216-821-11	METAL CHIP	1K 5% 1/10W
R846	1-216-864-11	SHORT CHIP	0	R956	1-216-833-11	METAL CHIP	10K 5% 1/10W
R847	1-216-833-11	METAL CHIP	10K 5% 1/10W	R957	1-216-833-11	METAL CHIP	10K 5% 1/10W
R848	1-216-837-11	METAL CHIP	22K 5% 1/10W	R960	1-216-821-11	METAL CHIP	1K 5% 1/10W
R849	1-216-864-11	SHORT CHIP	0	R961	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R850	1-216-833-11	METAL CHIP	10K 5% 1/10W	R962	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R851	1-216-841-11	METAL CHIP	47K 5% 1/10W	R963	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R852	1-216-845-11	METAL CHIP	100K 5% 1/10W	R964	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R853	1-216-845-11	METAL CHIP	100K 5% 1/10W			< TRANSFORMER >	
R854	1-216-845-11	METAL CHIP	100K 5% 1/10W				
R855	1-216-829-11	METAL CHIP	4.7K 5% 1/10W				
R857	1-216-853-11	METAL CHIP	470K 5% 1/10W				
				T1	1-433-741-11	TRANSFORMER, IF	

ZS-PS20CP

MAIN **POWER** **USB RELAY (1)**

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1	1-795-449-11	VIBRATOR, CRYSTAL (75kHz)	
X801	1-814-180-21	VIBRATOR, CERAMIC (10MHz)	
X802	1-795-915-11	VIBRATOR, CRYSTAL (32.768kHz)	

	A-1552-821-A	POWER BOARD, COMPLETE	

	1-533-217-41	HOLDER, FUSE	
		< CAPACITOR >	
C901	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C902	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C903	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C904	1-162-995-11	CERAMIC CHIP 0.022uF	50V
C906	1-126-964-11	ELECT 10uF 20%	50V
C908	1-162-995-11	CERAMIC CHIP 0.022uF	50V
		< CONNECTOR >	
CN901	1-815-444-11	PIN, CONNECTOR (PWB) 3P	
CN905	1-815-443-11	PIN, CONNECTOR (PWB) 2P	
		< DIODE >	
D901	6-501-569-01	DIODE 1N5401-C352	
D902	6-501-569-01	DIODE 1N5401-C352	
D903	6-501-569-01	DIODE 1N5401-C352	
D904	6-501-569-01	DIODE 1N5401-C352	
		< RESISTOR >	
R908	1-216-809-11	METAL CHIP 100 5%	1/10W
R910	1-216-864-11	SHORT CHIP 0	

		USB RELAY (1) BOARD	

		< CONNECTOR >	
CN1003	1-815-445-11	PIN, CONNECTOR (PWB) 4P	
CN1004	1-794-280-51	CONNECTOR, FFC/FPC 6P	
CN1005	1-815-443-11	PIN, CONNECTOR (PWB) 2P	
CN1006	1-815-443-21	PIN, CONNECTOR (PWB) 2P	

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	

8	1-500-868-11	CORE, FERRITE	
102	1-452-899-11	MAGNET	
△ 153	8-820-126-02	OPTICAL PICK-UP (KSM-213CDP/C2NP)	
154	1-832-404-21	CABLE, FLEXIBLE FLAT (16 CORE)	
156	1-832-747-31	CABLE, FLEXIBLE FLAT (21 CORE)	
160	1-500-868-11	CORE, FERRITE	
164	1-832-009-21	CABLE, FLEXIBLE FLAT (20 CORE)	
204	1-692-960-11	SWITCH, PUSH (1 KEY)	
ANT2	1-754-376-11	ANTENNA, TELESCOPIC (FM)	
△ F901	1-532-388-33	FUSE (2A/250V)	
△ F902	1-532-388-33	FUSE (2A/250V)	
△ J901	1-526-838-11	INLET, AC 2P (AC IN ~)	
S801	1-692-960-11	SWITCH, PUSH (1 KEY) (▲ PUSH OPEN/CLOSE)	
SP101	1-826-280-51	SPEAKER (7.7cm) (L-CH)	
SP201	1-826-280-51	SPEAKER (7.7cm) (R-CH)	
△ T901	1-445-470-11	TRANSFORMER, POWER	

		ACCESSORIES	

△	1-769-412-22	CORD, POWER (UK,CET,IT)	
△	1-770-019-61	ADAPTOR, CONVERSION PLUG (UK)	
△	1-776-985-14	CORD, POWER (KR)	
△	1-834-539-12	CORD, POWER (TH)	
△	1-835-164-11	CORD SET POWER (AUS)	
	3-238-070-01	LID, BATTERY CASE (for RMT-CPS20A/CPS20AD)	
	3-878-117-11	MANUAL, INSTRUCTION (ENGLISH) (UK,IT)	
	3-878-117-21	MANUAL, INSTRUCTION (FRENCH,GERMAN)	
		(IT)	
	3-878-117-31	MANUAL, INSTRUCTION (SPANISH,ITALIAN) (IT)	
	3-878-117-41	MANUAL, INSTRUCTION (DUTCH, PORTUGUESE) (IT)	
	3-878-117-51	MANUAL, INSTRUCTION (FINNISH,SWEDISH) (CET)	
	3-878-117-61	MANUAL, INSTRUCTION (POLISH,CZECH) (CET)	
	3-878-117-71	MANUAL, INSTRUCTION (HUNGARIAN, SLOVAKIAN) (CET)	
	3-878-117-81	MANUAL, INSTRUCTION (RUSSIAN,UKRAINIAN) (CET)	
	3-878-118-11	MANUAL, INSTRUCTION (ENGLISH,SPANISH) (AUS,SP,TH)	
	3-878-118-21	MANUAL, INSTRUCTION (ENGLISH,KOREAN) (KR)	
A-1548-152-A		REMOTE COMMANDER (RMT-CPS20AD) (UK,CET,IT)	
A-1548-153-A		REMOTE COMMANDER (RMT-CPS20A) (AUS,KR,SP,TH)	

MEMO

