

# XDR-S3HD

## SERVICE MANUAL

US Model

Ver. 1.0 2007. 05



HD Radio Broadcasting was approved by the Federal Communications Commission in October 2002 as the system for digital AM and FM broadcasting in the U.S.

HD Radio technology features include:

- Static-free, clear radio reception.
- FM Multicasting – the ability to broadcast multiple program streams over a single FM frequency.
- A variety of “data services,” including text-based information – artist name, song title, etc. scrolled across your receiver display.
- Digital broadcasts in the same frequencies as analog broadcasts; listeners do not need to learn a new station number and today’s stations remain at their current place on the dial.

HD Radio technology is developed and licensed by iBiquity Digital Corporation and supported by the leaders of the broadcasting, consumer electronics and automotive industries.

HD Radio™ Technology Manufactured Under License From iBiquity Digital Corporation. iBiquity Digital, the HD Radio logo, and the HD logo are registered trademarks of iBiquity Digital Corporation. HD Radio™ is a trademark of iBiquity Digital Corporation. U.S. and Foreign Patents.

### SPECIFICATIONS

Time display	12-hour system
Frequency range	FM : 87.5 – 108 MHz AM : 530 – 1,710 kHz
Speaker	Approx. 6.6 cm (2 5/8 inches) dia. 4 Ω
Output	Φ (headphone) jack (φ 3.5 mm stereo minijack)
Input	LINE IN jack (φ 3.5 mm stereo minijack)
Antenna terminal	75 Ω antenna terminal for FM Antenna terminal for AM
Power output	2.8 W + 2.8 W (at 10% harmonic distortion)
Power requirements	120 V AC, 60 Hz
Dimensions	Approx. 300 × 120 × 169 mm (w/h/d) (11 7/8 × 4 3/4 × 6 3/4 inches) not incl. projecting parts and controls
Mass	Approx. 3.6 kg (7 lb 15.8 oz) incl. power supply unit
Supplied accessories	Remote commander (1) FM wire antenna (1) FM dipole antenna (1) AM loop antenna (1) Audio connecting cable (1)

*Design and specifications are subject to change without notice.*

**FM/AM DIGITAL RADIO**

**SAFETY CHECK-OUT**

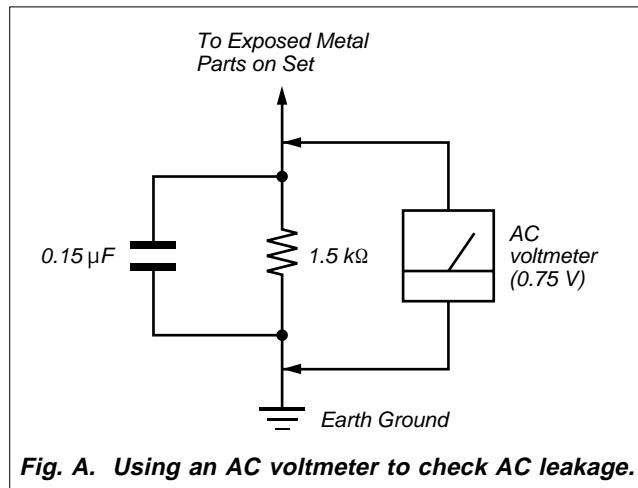
After correcting the original service problem, perform the following safety check before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

**LEAKAGE TEST**

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



**Fig. A. Using an AC voltmeter to check AC leakage.**

**SERVICE NOTES****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.

**● 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.

**TABLE OF CONTENTS****1. GENERAL ..... 3****2. DISASSEMBLY**

2-1. Panel (Front) Assy .....	6
2-2. DC Fan (M950) .....	7
2-3. Wires .....	7
2-4. Chassis Assy .....	8
2-5. MAIN Board .....	8
2-6. POWER Board .....	9
2-7. KEY Board .....	9
2-8. VOL Board, TUNE Board .....	10
2-9. Assembly of the Power Cord .....	10

**3. DIAGRAMS**

3-1. Block Diagram .....	11
3-2. Printed Wiring Board – Main Section – .....	13
3-3. Schematic Diagram – Main Section – .....	14
3-4. Printed Wiring Boards – Power Section – .....	15
3-5. Schematic Diagram – Power Section – .....	16
3-6. Printed Wiring Board – Micon Section – .....	17
3-7. Schematic Diagram – Micon Section – .....	18
3-8. Printed Wiring Boards – Key Section – .....	19
3-9. Schematic Diagram – Key Section – .....	20

**4. EXPLODED VIEWS**

4-1. Main Section .....	25
4-2. Front Panel Section .....	26
4-3. KEY Board Section .....	27
4-4. Cabinet Section .....	28
4-5. Chassis Section .....	29

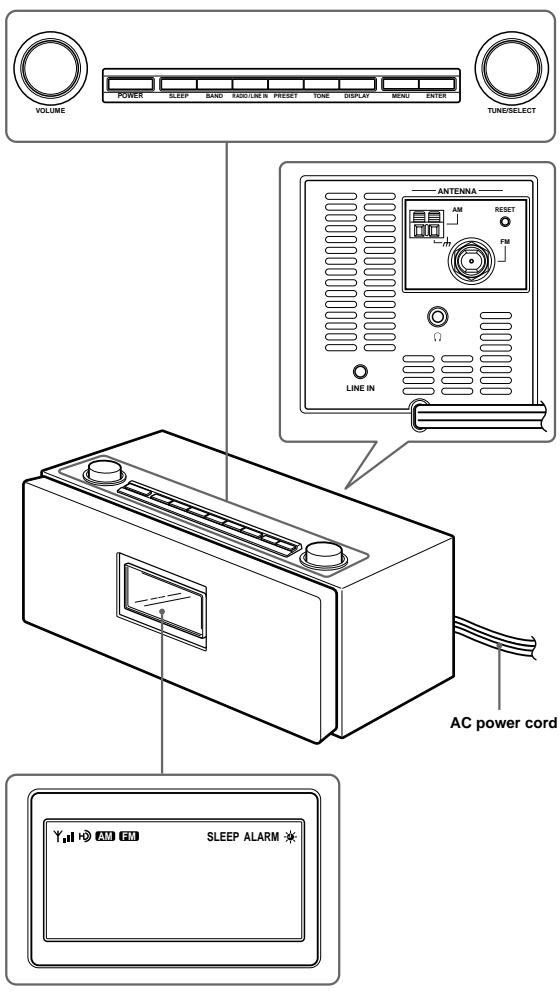
**5. ELECTRICAL PARTS LIST ..... 30****SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK △ OR DOTTED LINE WITH MARK △ 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.**

## SECTION 1 GENERAL

This section is extracted from instruction manual.

A



### Setting the clock

- 1 Plug in the unit.  
The display will flash "AM 12:00."
- 2 Press MENU to show the menu display.



- 3 Turn TUNE/SELECT clockwise to select "TIME SET," then press ENTER.  
The hour will start to flash in the display.



- 4 Turn TUNE/SELECT clockwise or counterclockwise until current hour appears in the display, then press ENTER.  
The hour is set and the minutes start to flash.

5 Repeat step 4 to set the minute.

**Note**

If you do not set the menu within 65 seconds, the setting mode is canceled.

### To change the display to the daylight saving time (summer time) indication

- 1 Press MENU to show the menu display.
- 2 Turn TUNE/SELECT clockwise or counterclockwise to select "DST," then press ENTER.
- 3 Turn TUNE/SELECT counterclockwise to select "ON," then press ENTER.  
"\*" appears and the time indication changes to summer time.

To deactivate the DST function, select "OFF" in step 3.

### Playing the radio

#### —Manual tuning

- 1 Press POWER to turn on the radio.  
If "LINE IN" is displayed, press RADIO/LINE IN so that the band (AM or FM) appears.
- 2 Press BAND to select the band AM or FM.
- 3 Turn TUNE/SELECT clockwise or counterclockwise to tune in to a desired frequency.  
A beep sounds when the minimum frequency of each band is received during tuning.
- 4 Adjust the volume using VOLUME.

**Tip**

To attenuate the volume, turn VOLUME counterclockwise quickly.

**Note**

The frequency cannot be input with the number buttons of the remote commander.

#### —Preset tuning

You can preset 20 stations each for AM and FM.

##### Presetting a station

- 1 Follow steps 1 to 3 in "Manual tuning" to tune the frequency you wish to preset.
- 2 Press and hold PRESET for a few seconds.  
You will hear a beep.



- 3 Turn TUNE/SELECT clockwise or counterclockwise to select the preset number, then press ENTER.  
The frequency is stored in the selected preset number and you will hear a beep.

To preset another station, repeat these steps.

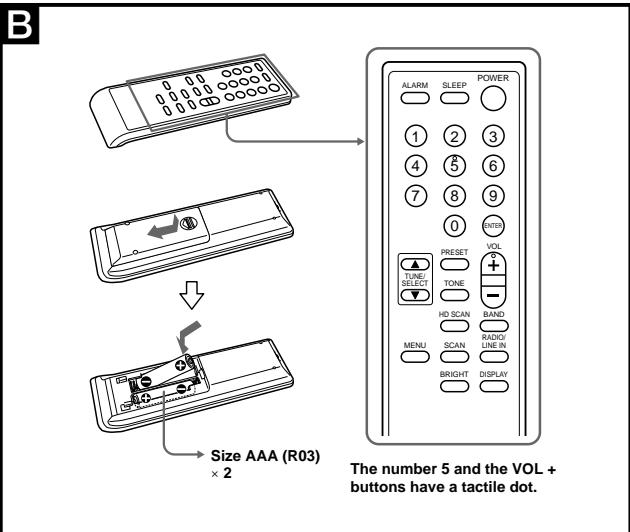
**Note**

If you try to store another station in the same preset number, the previously stored station will be replaced.

#### Tuning in to a station

- 1 Press POWER to turn on the radio.
- 2 Press BAND to select the band AM or FM.
- 3 Press PRESET.
- 4 The preset number appears in upper left in the display.
- 4 Turn TUNE/SELECT clockwise or counterclockwise to select the preset number.
- 5 Adjust the volume using VOLUME.

B



### Preparing the remote commander

#### Installing the batteries into the remote commander (See Fig. B)

Insert two size AAA (R03) batteries (not supplied).

#### When to replace the batteries

With normal use, the batteries should last for about six months. When the remote commander no longer operates the unit, replace all the batteries with new ones.

**Notes**

- Do not charge dry batteries.
- When you are not going to use the remote commander for a long time, remove the batteries to avoid any damage caused by leakage and corrosion.

**Tip**

The preset can be selected by pressing the number button of the remote commander. Press ENTER after the preset number is selected.

#### —Scan tuning

The unit will automatically scan the selected band. In HD scan, HD Radio stations are scanned.

- 1 Press POWER to turn on the radio.
- 2 Press BAND to select the band AM or FM.
- 3 Press MENU to show the menu display.
- 4 Turn TUNE/SELECT clockwise or counterclockwise to select "SCAN" or "HD SCAN," then press ENTER.  
Scanning of the selected band starts.  
When a station is received, scanning pauses for 3 seconds and then continues.
- 5 When the unit tunes in to the desired station, do any of the following operations to stop scanning.
  - Press ENTER on the unit or remote commander.
  - Press SCAN or HD SCAN on the remote commander.
- 6 If necessary, turn TUNE/SELECT clockwise or counterclockwise to tune in to the station more precisely.
- 7 Adjust the volume using VOLUME.

**Tip**

You can scan a station directly by pressing SCAN or HD SCAN on the remote commander.

#### To listen with the headphones

You can enjoy the radio and external equipment connected to the line in by the headphones (not supplied). Connect the headphones (not supplied) to the  $\ominus$  (headphone) jack. The speaker is deactivated when the headphones are connected.

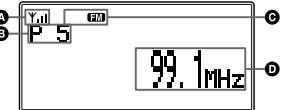
### Changing the display mode and settings

#### To change the display mode

Press DISPLAY.

The display changes as follows:

#### When an analog radio station is received



#### A Field strength level indicator

#### B Preset number\*

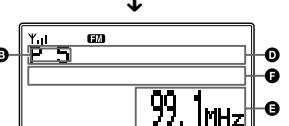
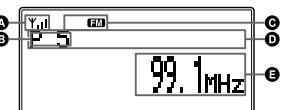
#### C Band

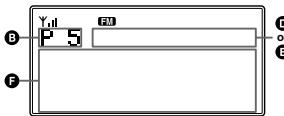
#### D Frequency

#### E Current time

\* When you tune in a station by selecting a preset number.

#### When an analog FM broadcast that supports RDS (Radio Broadcast Data System) is received



**A** Field strength level indicator**B** Preset number\***C** Band**D** Station name

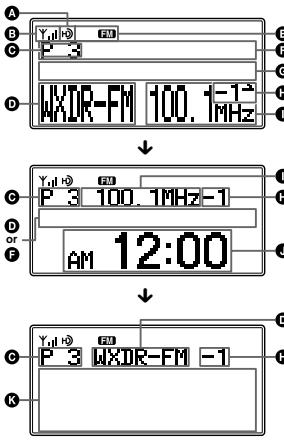
Name of station currently tuned in.

**E** Frequency**F** Text information

Text information transmitted from station.

**G** Current time

\* When you tune in a station by selecting a preset number.

**Note**  
The display item differs depending on the content of a broadcast or the station.**When an HD Radio station is received**

If you press DISPLAY for 2 seconds while the display above appears, the beep is heard and the scroll speed of the display item becomes slow. To return to normal scroll speed, press DISPLAY again for 2 seconds.

**H** HD indicatorLights: HD Radio reception level is sufficient (indicator flashes momentarily, and then stays lit).  
The sound changes from analog to digital.Flashes: HD Radio reception level is too low.  
The sound stays analog.

If a HD Radio station signal is very weak, the indicator will not flash.

**I** Field strength level indicator**J** Preset number\***K** Current station's call letters**L** Band**M** Station name and information**N** Title/Artist name**O** Sub channel (FM only)Appears when HD Radio broadcasts multiple programs.  
Turn TUNE/SELECT clockwise or counterclockwise to select a sub channel.**P** Frequency**Q** Current time**R** Text information

\* When you tune in a station by selecting a preset number.

**Note**  
The display item differs depending on the content of a broadcast or the station.**To change the display settings (BRIGHTNESS/CONTRAST)**

- 1 Press MENU to show the menu display.
- 2 Turn TUNE/SELECT clockwise or counterclockwise to select "BRIGHTNESS" or "CONTRAST," then press ENTER.
- 3 Turn TUNE/SELECT clockwise or counterclockwise to select the setting or to adjust the level, then press ENTER.

**BRIGHTNESS:**

The brightness of the display is selected from "HIGH," "MIDDLE" or "LOW."

**CONTRAST:**

The contrast of the display can be adjusted by 11 levels.

**Note**

If you do not set the menu within 10 seconds, the setting mode is canceled.

**Tip**

You can adjust "BRIGHTNESS" directly by pressing BRIGHT on the remote commander.

**Adjusting the tone**

- 1 Press POWER to turn on the radio.
- 2 Press TONE to show the tone setting display.



- 3 Turn TUNE/SELECT clockwise or counterclockwise to set "TREBLE," then press TONE.
- 4 Turn TUNE/SELECT clockwise or counterclockwise to set "BASS," then press TONE.
- 5 Turn TUNE/SELECT clockwise or counterclockwise to set "SURROUND," then press TONE.

**Tip**The adjustable range of "TREBLE" and "BASS" is from -6 to +6.  
"SURROUND" switches "ON" or "OFF."**Setting the alarm**

You can set the unit to turn on automatically at a preset time. The alarm can be set, even if the unit is off. To adjust the hour and minute, see "Setting the clock."

**To set the alarm time**

- 1 Press MENU to show the menu display.
- 2 Turn TUNE/SELECT clockwise or counterclockwise to select "ALARM TIME SET," then press ENTER.

The hour sign starts flashing.

**Example of display when unit is off**

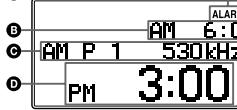
- 3 Turn TUNE/SELECT clockwise or counterclockwise to set the hour, then press ENTER.
- The minute sign starts flashing.
- 4 Turn TUNE/SELECT clockwise or counterclockwise to set the minutes, then press ENTER.
- The source sign starts flashing.
- 5 Turn TUNE/SELECT clockwise or counterclockwise to select the source from "RADIO AM," "RADIO FM," "LINE IN" or "BUZZER," then press ENTER.
- If you select "RADIO AM," "RADIO FM" or "LINE IN" continue the following steps.
- 6 Turn TUNE/SELECT clockwise or counterclockwise to select the preset number, then press ENTER.
- If you selected "LINE IN" in step 5, this step is not necessary.
- 7 Turn TUNE/SELECT clockwise or counterclockwise to set the volume, then press ENTER.

**To set the alarm**

- 1 Press MENU to show the menu display.
- 2 Turn TUNE/SELECT clockwise or counterclockwise to select "ALARM SET," then press ENTER.

- 3 Turn TUNE/SELECT counterclockwise to select "ON," then press ENTER.

"ALARM" appears in the display.

**Example of display when unit is off**

If you press DISPLAY while the display above appears, the display changes to the following.



To return to the previous display, press DISPLAY again.

- A** ALARM indicator
- B** Alarm setting time
- C** Alarm setting (Source, Frequency, etc.)
- D** Current time

To deactivate the alarm function, turn TUNE/SELECT clockwise to select "OFF" in step 3.

**To stop the alarm**

Press POWER on the unit or remote commander.

**Tips**

- To enter "ALARM TIME SET" mode directly, press and hold ALARM on the remote commander for 2 seconds.
- You can activate or deactivate the alarm function directly by pressing ALARM on the remote commander.

**Notes**

- If you do not set the menu within 10 seconds, the setting mode is canceled.
- If you do not operate the unit for 60 minutes after alarm sounds, the power is turned off.
- If you select "LINE IN" source in "ALARM TIME SET," start playback on the external equipment. You cannot control the external equipment from this unit.

**Tip**

To display the current time, press DISPLAY.

**To return to the radio**

Press RADIO/LINE IN.

The band (AM or FM) is shown in the display.

**Notes**

- Refer also to the connected equipment's manual.
- The supplied audio connecting cable may not be used with some external equipment. In this case, use a cord suitable for the external equipment you are using.
- When you listen to the radio with external equipment connected, turn off the connected equipment because noise may be caused. If noise continues, even when the equipment is turned off, disconnect and place the external equipment away from the unit.

**Setting the sleep timer**

You can enjoy falling asleep to the radio using the built-in sleep timer that turns off the radio automatically after a preset duration.

**1 Press SLEEP.**

"SLEEP" and the digits for the sleep timer duration appear.



If you press SLEEP while the unit is turned off, the unit is turned on.

- 2 Press SLEEP repeatedly to select the desired sleep timer setting.

Each press changes the setting time as follows:

→ 60 → 45 → 30 → 15 → OFF →

A beep sounds when the display returns to "SLEEP 60."

After about 4 seconds, "SLEEP" lights in the display when the duration time is set.

The unit automatically turns off when the duration time is passed.

**To change the sleep timer setting**

You can press SLEEP repeatedly to select the desired sleep timer setting even after the sleep timer has been activated.

**To deactivate the sleep timer**

Press POWER to turn off the unit before the setting time has elapsed, or press SLEEP repeatedly to set the sleep timer to "SLEEP OFF" in step 2.

**Using the remote commander**

Buttons shared on both the remote commander and the unit control the same functions.

**VOL +/- buttons**To adjust the volume.  
Press and hold the VOL - button for 2.5 seconds, the volume becomes minimized.**ALARM button**Press to set the alarm to "ON" or "OFF."  
Press and hold for 2 seconds to enter "ALARM TIME SET."**HD SCAN button**

The selected band is scanned, and receivable HD Radio stations are received for 3 seconds in order of frequency.

**SCAN button**

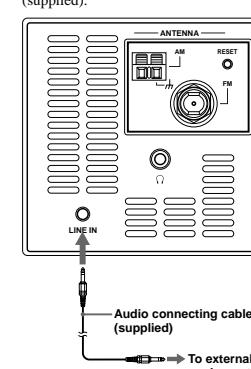
The selected band is scanned, and receivable radio stations are received for 3 seconds in order of frequency.

**BRIGHT button**

To adjust the brightness of the display.

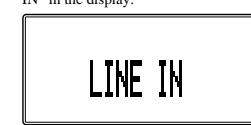
**Number buttons**To select a preset number (1 to 20).  
Press ENTER after the preset number is selected.  
If you input the number 0 or more than 21 and press ENTER, "ERROR" appears in the display.**Listening to the external equipment**

- 1 Connect the LINE IN jack of the unit to the line out jack or headphone jack of the external equipment using the audio connecting cable (supplied).



- 2 Press POWER to turn on the radio.

- 3 Press RADIO/LINE IN to select "LINE IN" in the display.



- 4 Play the equipment connected to the LINE IN jack.

- 5 Adjust the volume using VOLUME.

## Connecting the antenna

### To connect the AM loop antenna

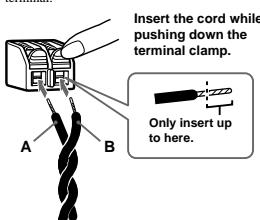
The shape and the length of the antenna is designed to receive AM signals. Do not dismantle or roll up the antenna.

- 1 Remove only the loop part from the plastic stand.
- 2 Set up the AM loop antenna.



- 3 Connect the cords to the AM antenna terminals.

Cord (A) or cord (B) can be connected to either terminal.



- 4 Make sure the AM loop antenna is connected firmly by pulling softly.

### Adjusting the AM loop antenna

Find a place and an orientation that provide good reception.

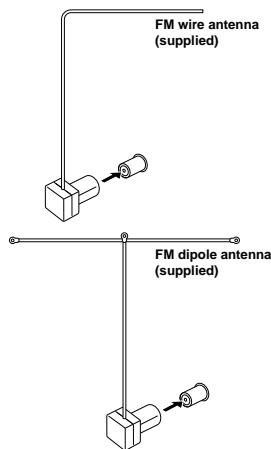
- Do not place the AM loop antenna near the unit or other AV equipment, as noise may result.
- If you use an external polarized AM antenna, be sure to connect the ground cord to the  $\text{G}$  terminal. The supplied AM antenna cord has no polarity.

#### Tip

Adjust the direction of the AM loop antenna for best AM broadcast sound.

### To connect the FM antenna

This unit comes supplied with an FM wire antenna and FM dipole antenna. Connect an antenna that provides good reception to the FM antenna terminal.



### Adjusting the FM wire antenna

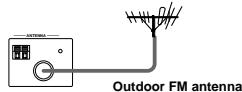
Be sure to fully extend the FM wire antenna, and keep it as horizontal or vertical as possible.

### Adjusting the FM dipole antenna

Be sure to fully extend the FM dipole antenna. Attach the antenna in the shape of a T to a high position on a wall away from this unit.

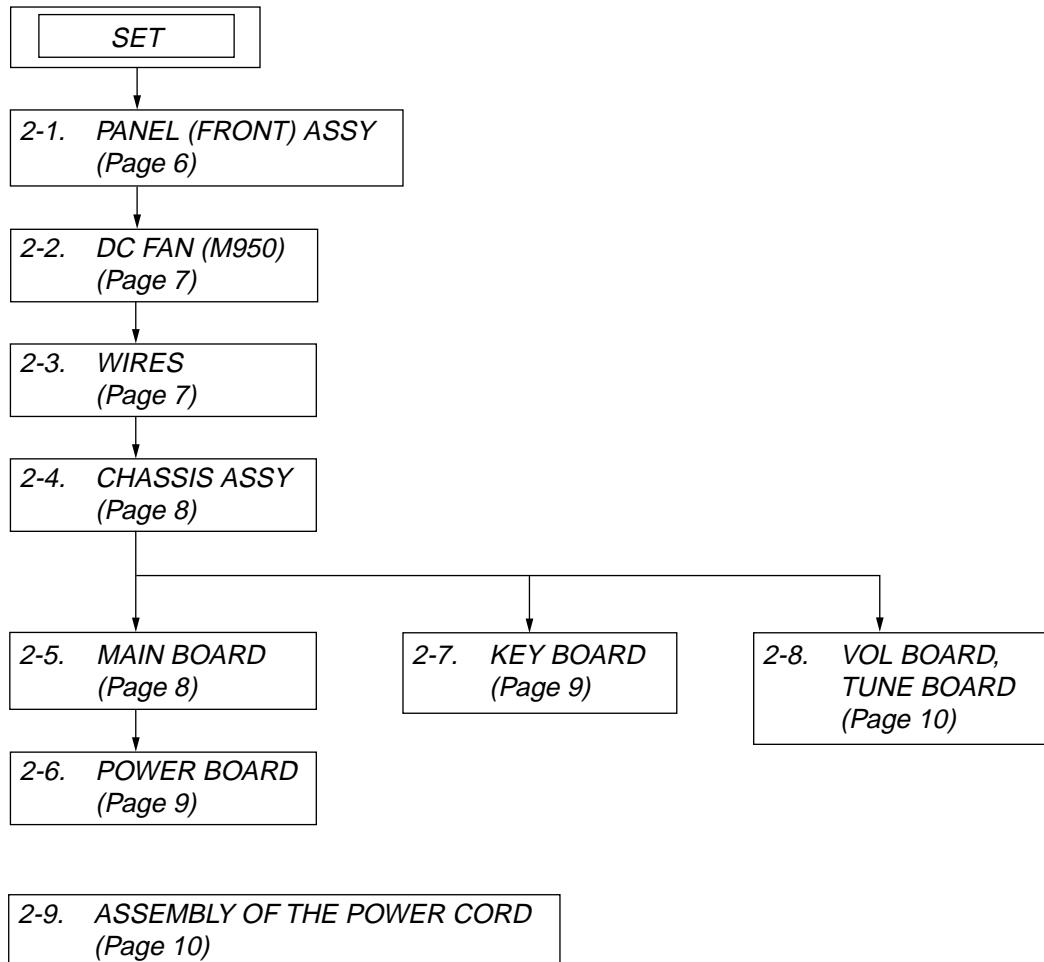
#### Tip

If you have poor FM reception, use a  $75 \Omega$  coaxial cable (not supplied) to connect the unit to an outdoor FM antenna as shown below.



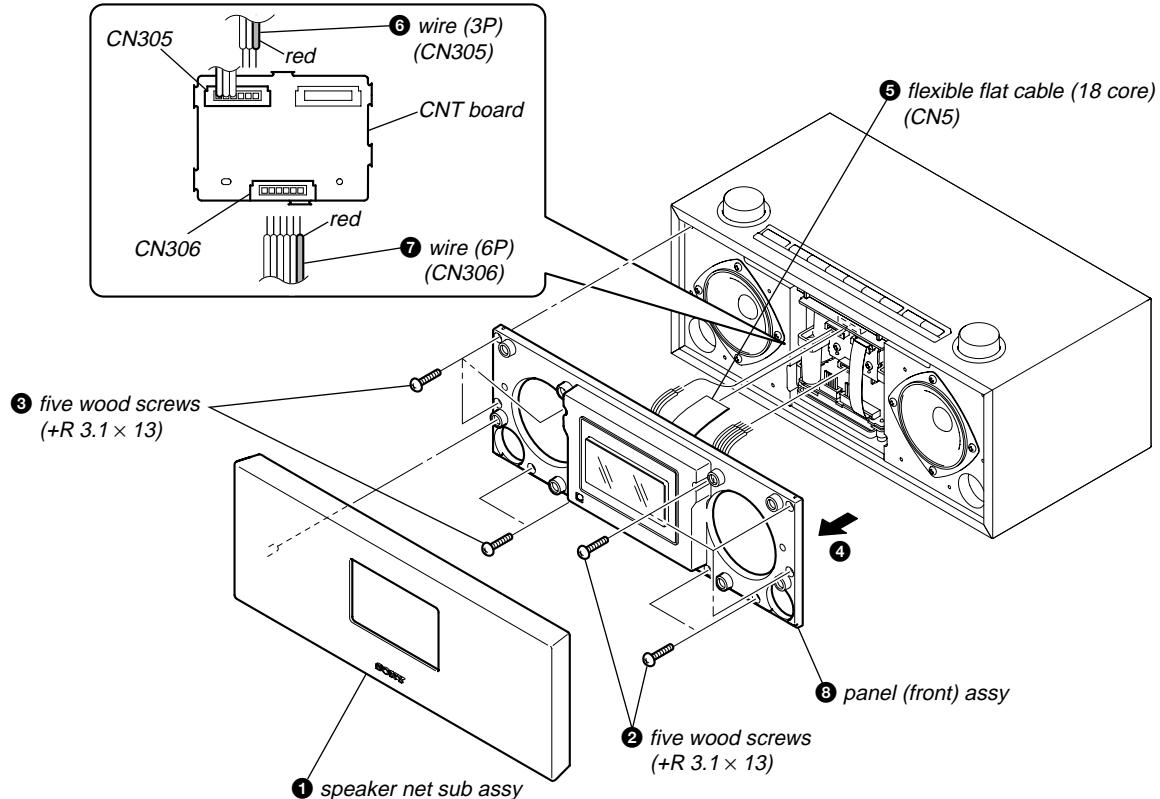
## SECTION 2 DISASSEMBLY

**Note :** This set can be disassemble according to the following sequence.

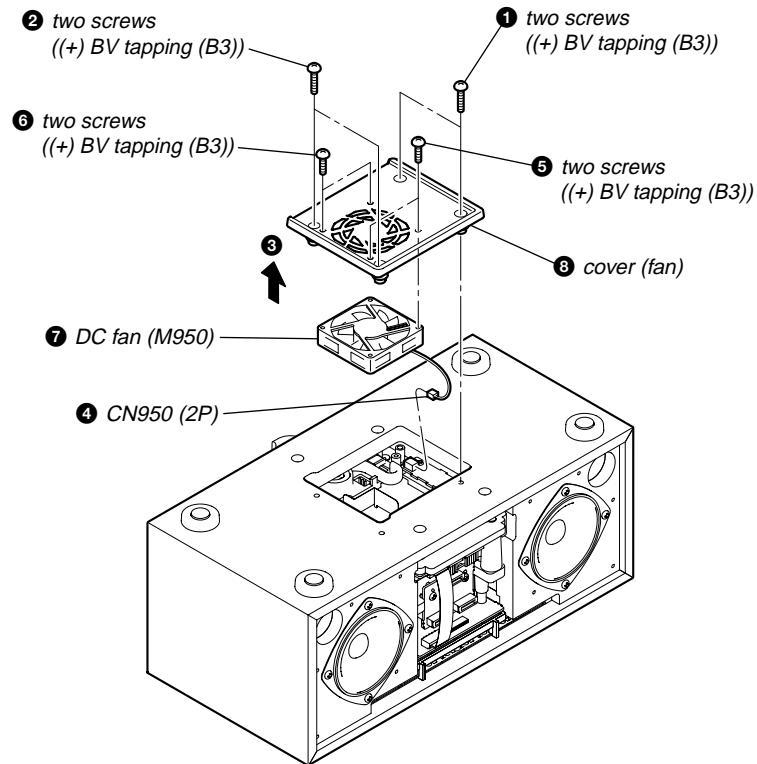


**Note :** Follow the disassembly procedure in the numerical order given.

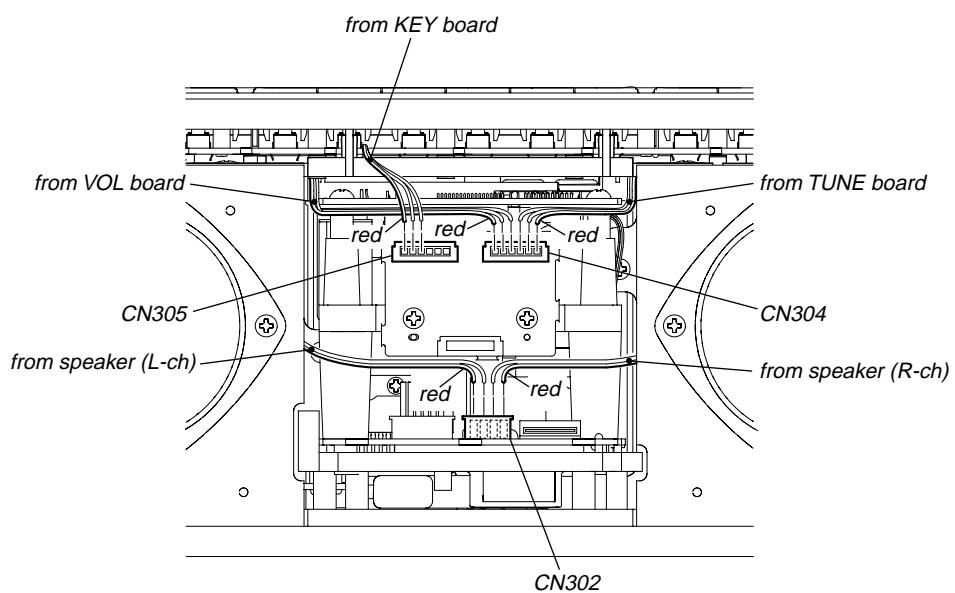
### 2-1. PANEL (FRONT) ASSY



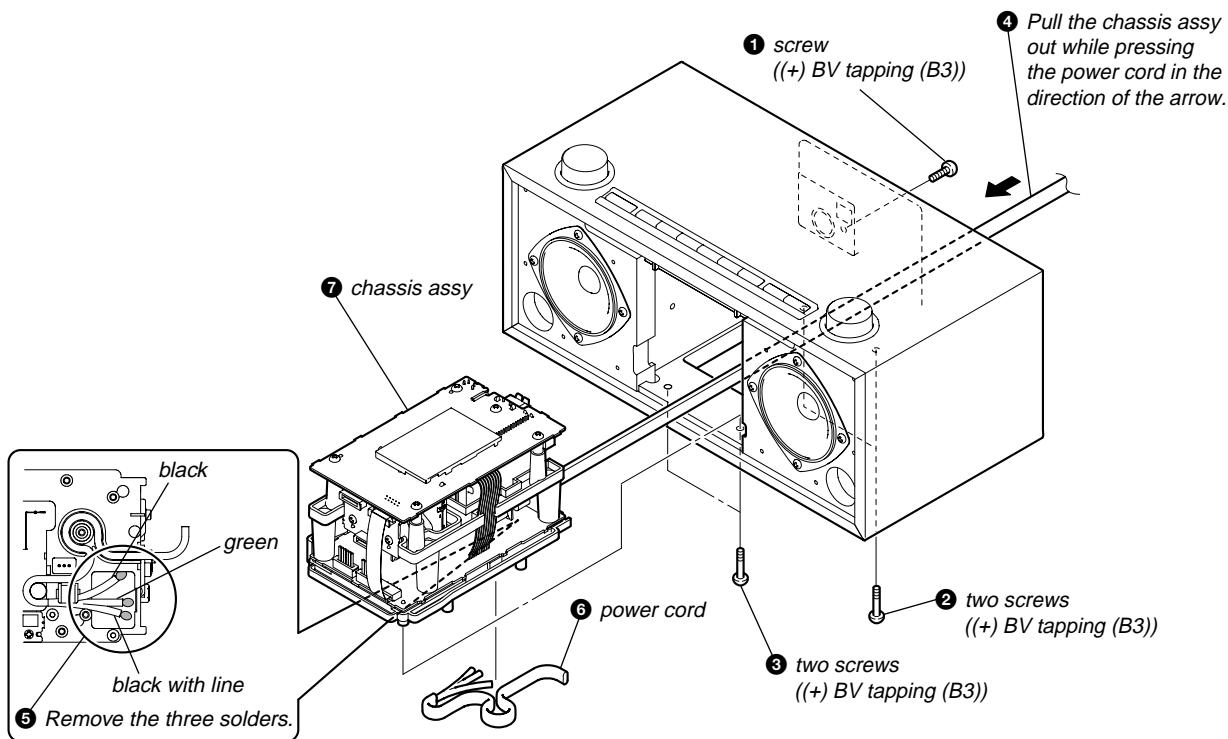
## 2-2. DC FAN (M950)



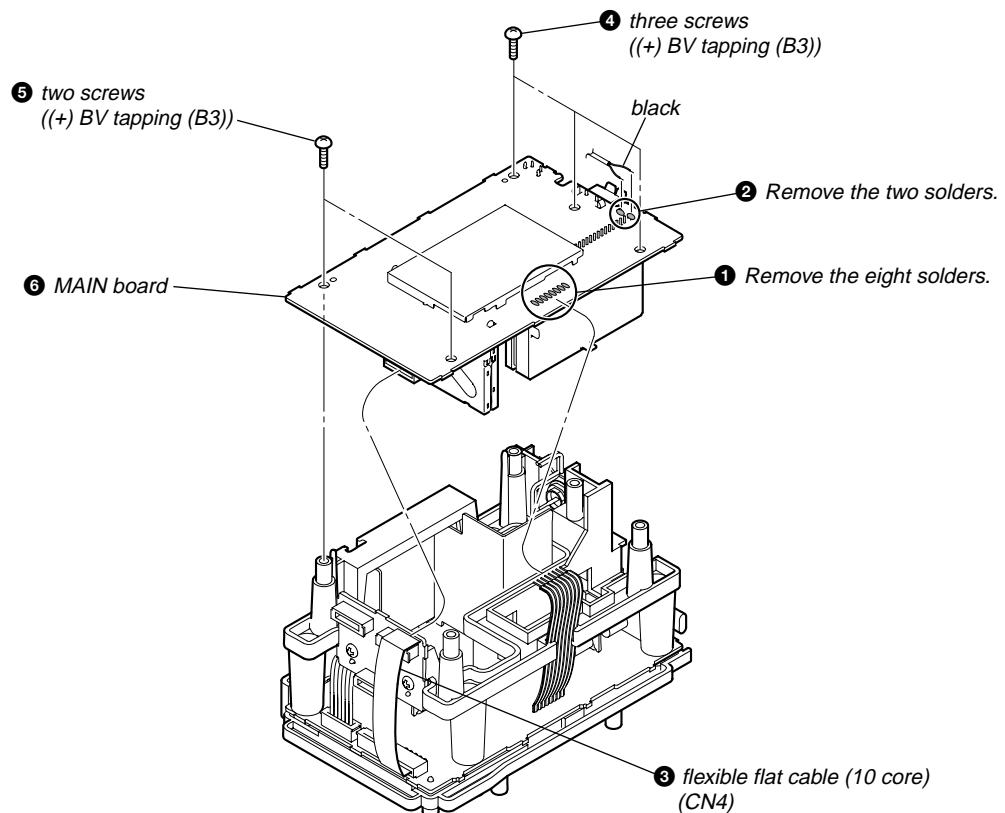
## 2-3. WIRES



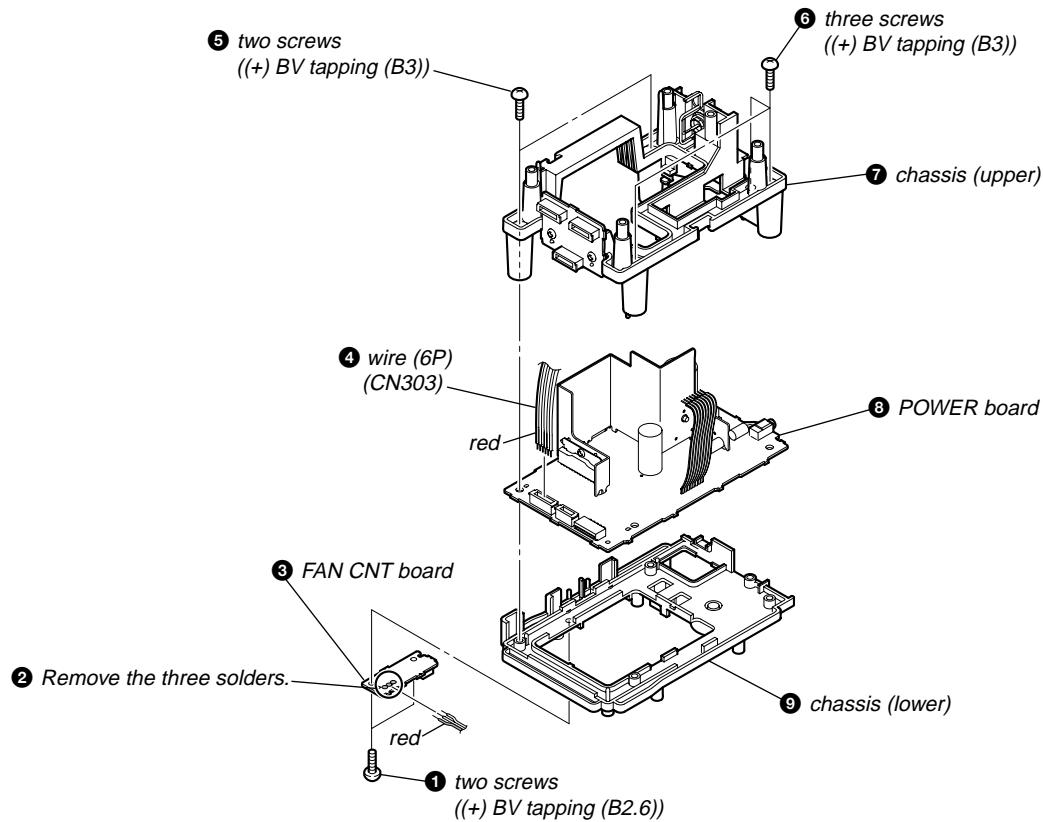
## 2-4. CHASSIS ASSY



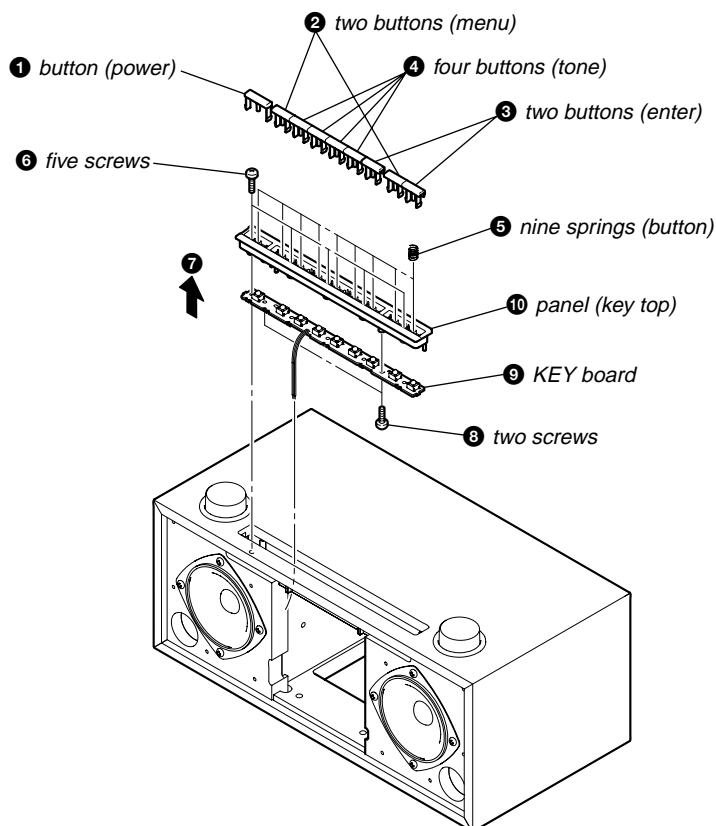
## 2-5. MAIN BOARD

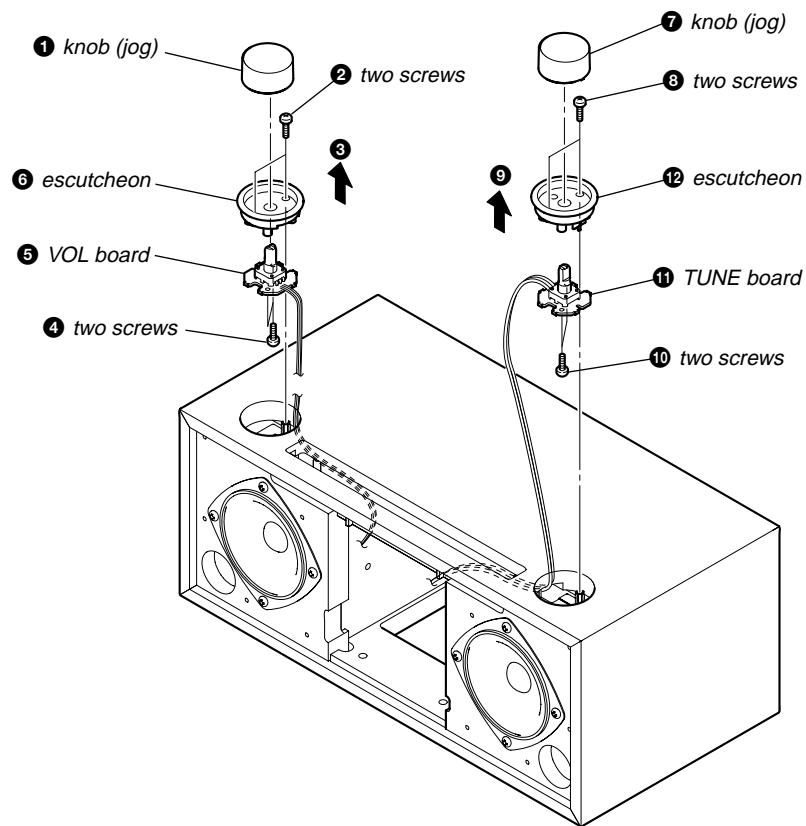
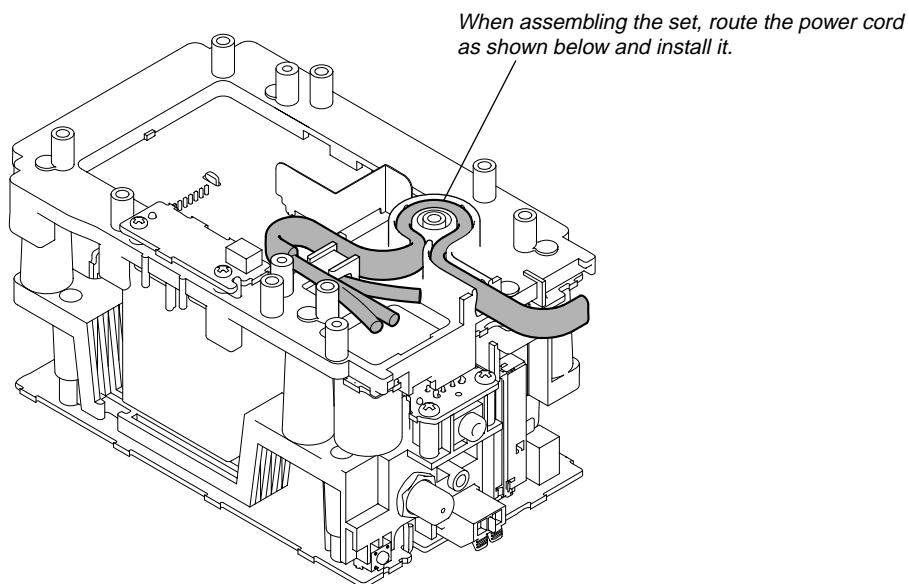


## 2-6. POWER BOARD



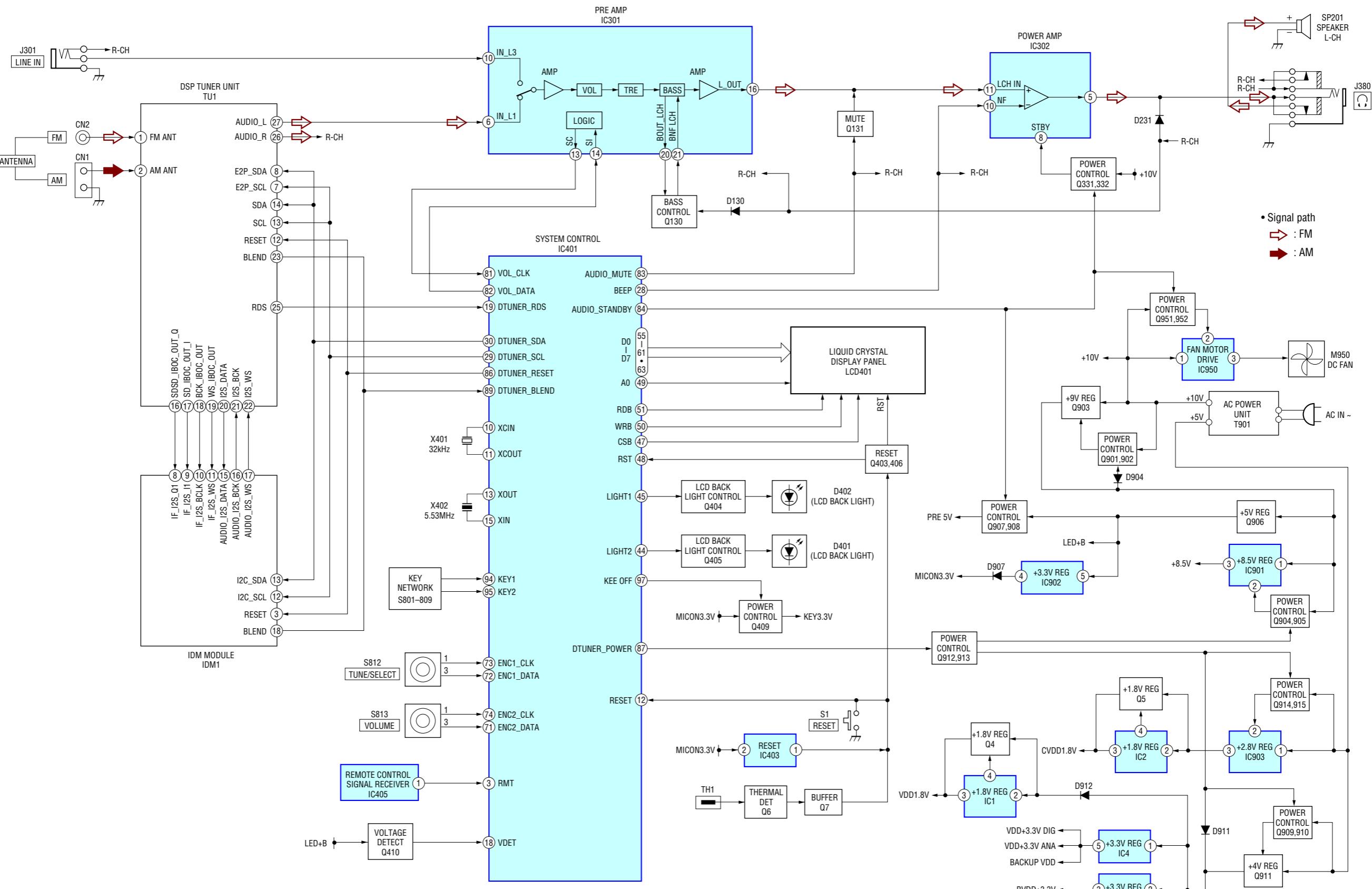
## 2-7. KEY BOARD



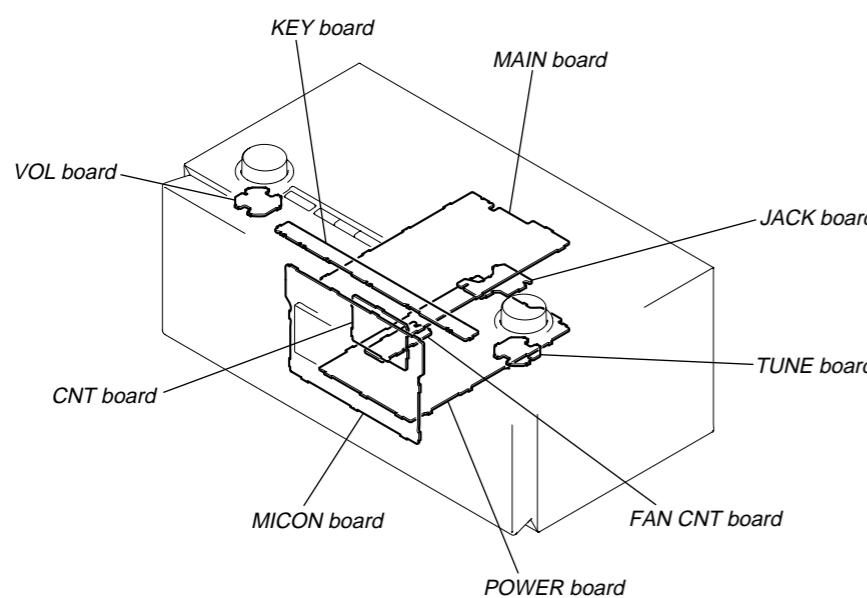
**2-8. VOL BOARD, TUNE BOARD****2-9. ASSEMBLY OF THE POWER CORD**

## **SECTION 3 DIAGRAMS**

### **3-1. BLOCK DIAGRAM**



• Circuit Boards Location



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

**for schematic diagrams:**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted. (p:  $\text{pF}$ )  
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- % : indicates tolerance.
- $\triangle$  : internal component.
- $\boxed{\quad}$  : panel designation.

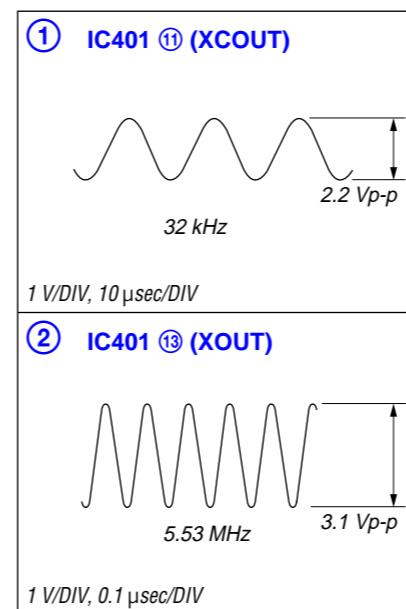
**Note:** The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

- $\text{---}$  : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : FM1
- Voltages are taken with a VOM (Input impedance  $10\text{ M}\Omega$ ).  
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 waveform.
- Signal path.
- $\Rightarrow$  : FM
- $\blackrightarrow$  : AM

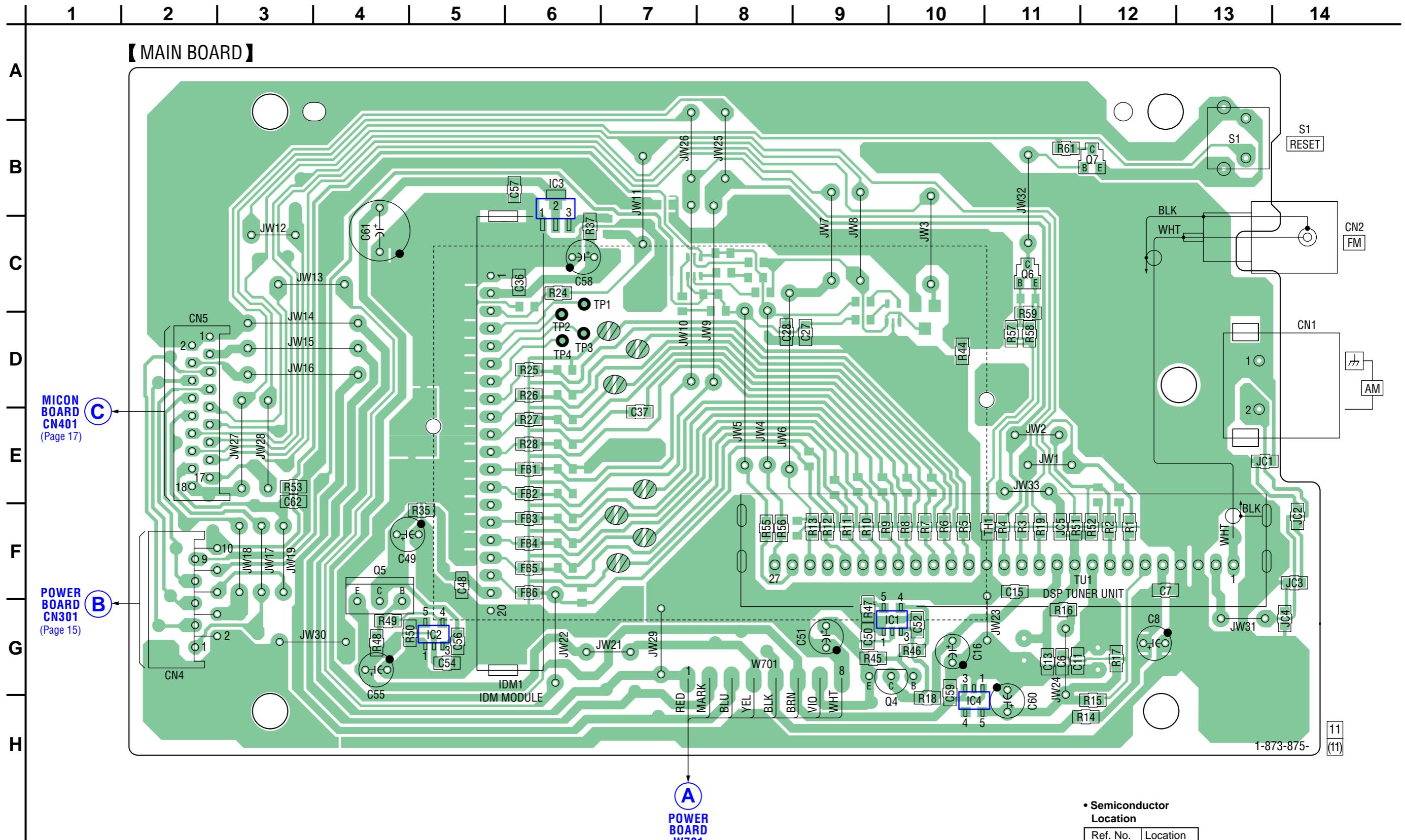
**for printed wiring boards:**

- $\circ$  : parts extracted from the component side.
- $\text{---}$  : parts extracted from the conductor side.
- $\triangle$  : internal component.
- $\blacksquare$  : Pattern from the side which enables seeing.

• Waveforms  
— MICON Board —



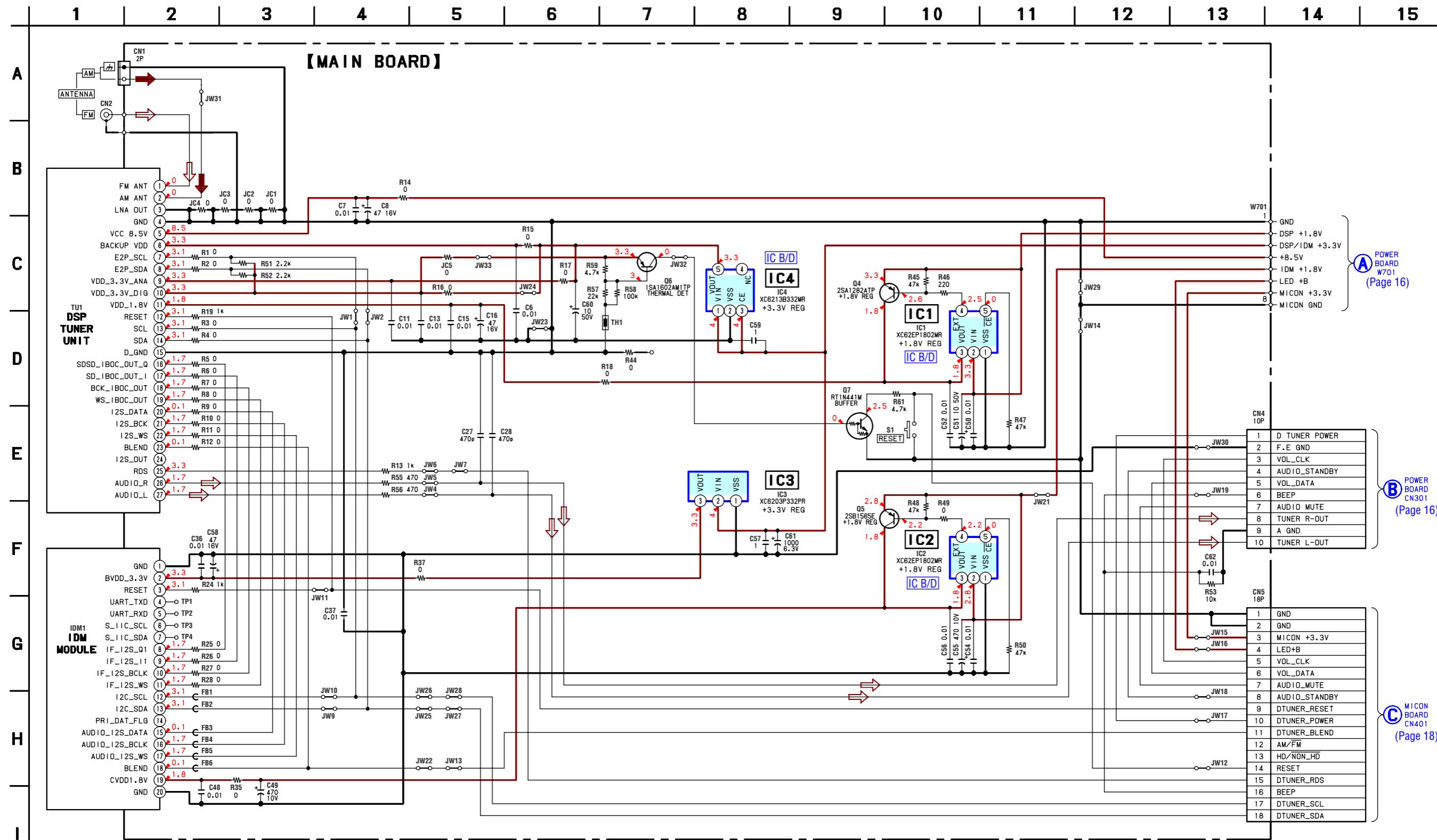
**3-2. PRINTED WIRING BOARD — MAIN SECTION —** • Refer to page 12 for Circuit Boards Location.  : Uses unleaded solder.



- Semiconductor Location

Ref. No.	Location
IC1	G-10
IC2	G-5
IC3	B-6
IC4	H-10
Q4	G-10
Q5	F-4
Q6	C-11
Q7	B-12

## 3-3. SCHEMATIC DIAGRAM — MAIN SECTION — • Refer to page 20 for IC Block Diagrams.



3-4. PRINTED WIRING BOARDS — POWER SECTION — • Refer to page 12 for Circuit Boards Location. : Uses unleaded solder.

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

A

## 【POWER BOARD】

MAIN

BOARD

CN4

(Page 13)

(Page 13)  
MAIN  
BOARD  
W701

SP101  
SPEAKER  
R-CH  
RED  
BLK  
BLK  
RED

SP201  
SPEAKER  
L-CH

BRN

BLK

YEL

BLU

MARK

RED

CN301

CN302

CN303

CN304

CN305

CN306

CN307

CN308

CN309

CN310

CN311

CN312

CN313

CN314

CN315

CN316

CN317

CN318

CN319

CN320

CN321

CN322

CN323

CN324

CN325

CN326

CN327

CN328

CN329

CN330

CN331

CN332

CN333

CN334

CN335

CN336

CN337

CN338

CN339

CN340

CN341

CN342

CN343

CN344

CN345

CN346

CN347

CN348

CN349

CN350

CN351

CN352

CN353

CN354

CN355

CN356

CN357

CN358

CN359

CN360

CN361

CN362

CN363

CN364

CN365

CN366

CN367

CN368

CN369

CN370

CN371

CN372

CN373

CN374

CN375

CN376

CN377

CN378

CN379

CN380

CN381

CN382

CN383

CN384

CN385

CN386

CN387

CN388

CN389

CN390

CN391

CN392

CN393

CN394

CN395

CN396

CN397

CN398

CN399

CN400

CN401

CN402

CN403

CN404

CN405

CN406

CN407

CN408

CN409

CN410

CN411

CN412

CN413

CN414

CN415

CN416

CN417

CN418

CN419

CN420

CN421

CN422

CN423

CN424

CN425

CN426

CN427

CN428

CN429

CN430

CN431

CN432

CN433

CN434

CN435

CN436

CN437

CN438

CN439

CN440

CN441

CN442

CN443

CN444

CN445

CN446

CN447

CN448

CN449

CN450

CN451

CN452

CN453

CN454

CN455

CN456

CN457

CN458

CN459

CN460

CN461

CN462

CN463

CN464

CN465

CN466

CN467

CN468

CN469

CN470

CN471

CN472

CN473

CN474

CN475

CN476

CN477

CN478

CN479

CN480

CN481

CN482

CN483

CN484

CN485

CN486

CN487

CN488

CN489

CN490

CN491

CN492

CN493

CN495

CN496

CN497

CN498

CN499

CN500

CN501

CN502

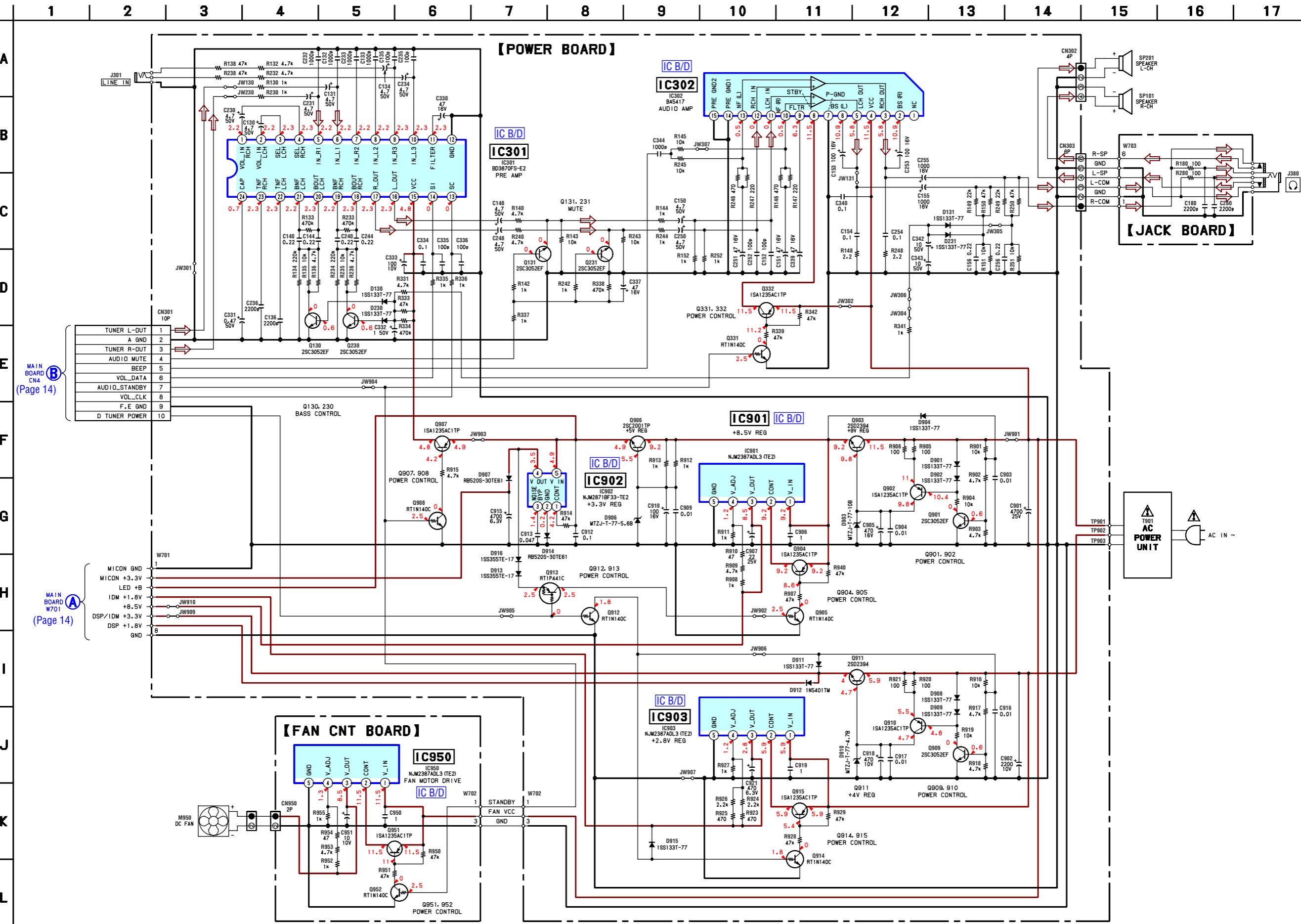
CN503

CN504

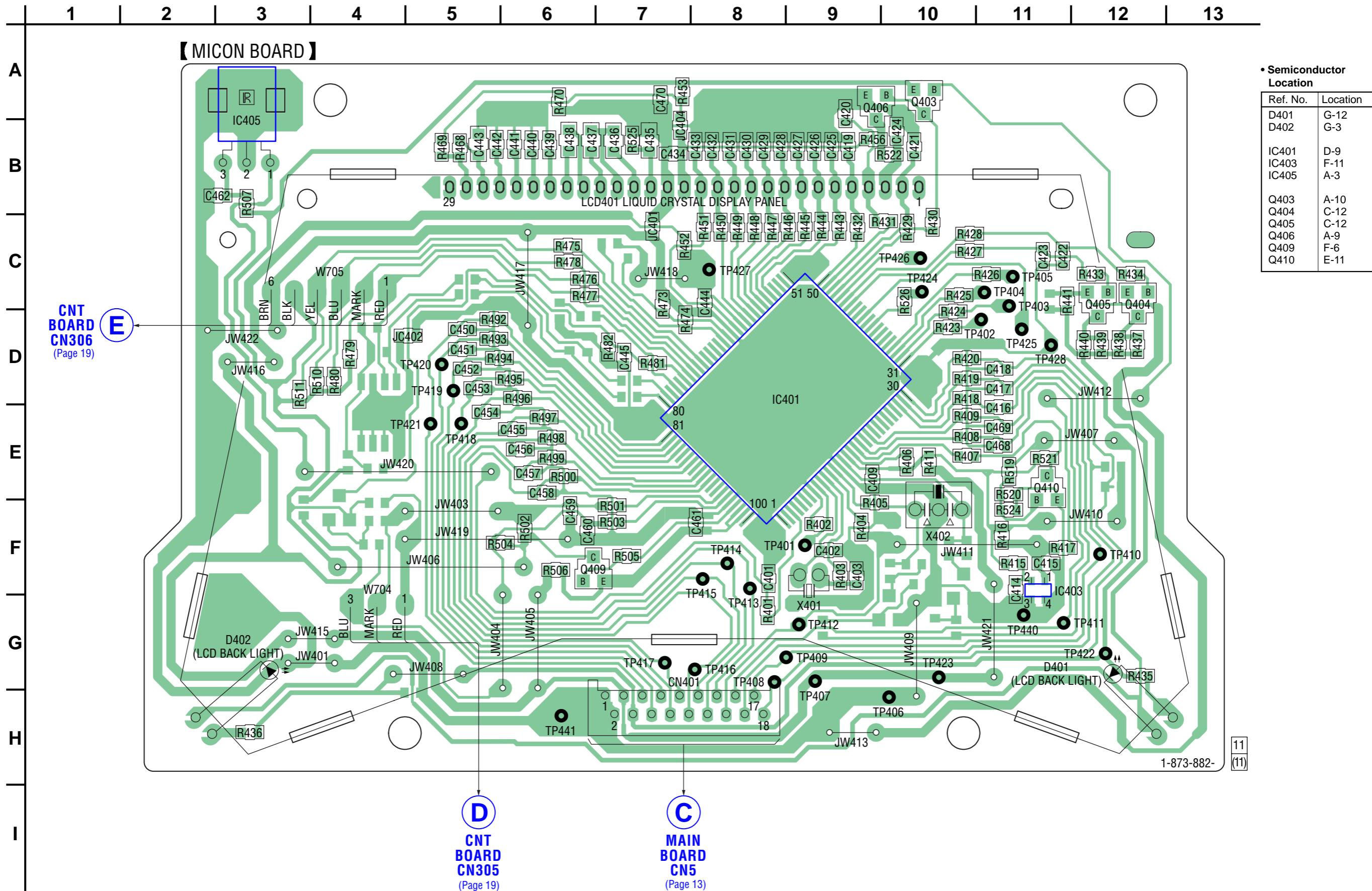
CN505

CN506

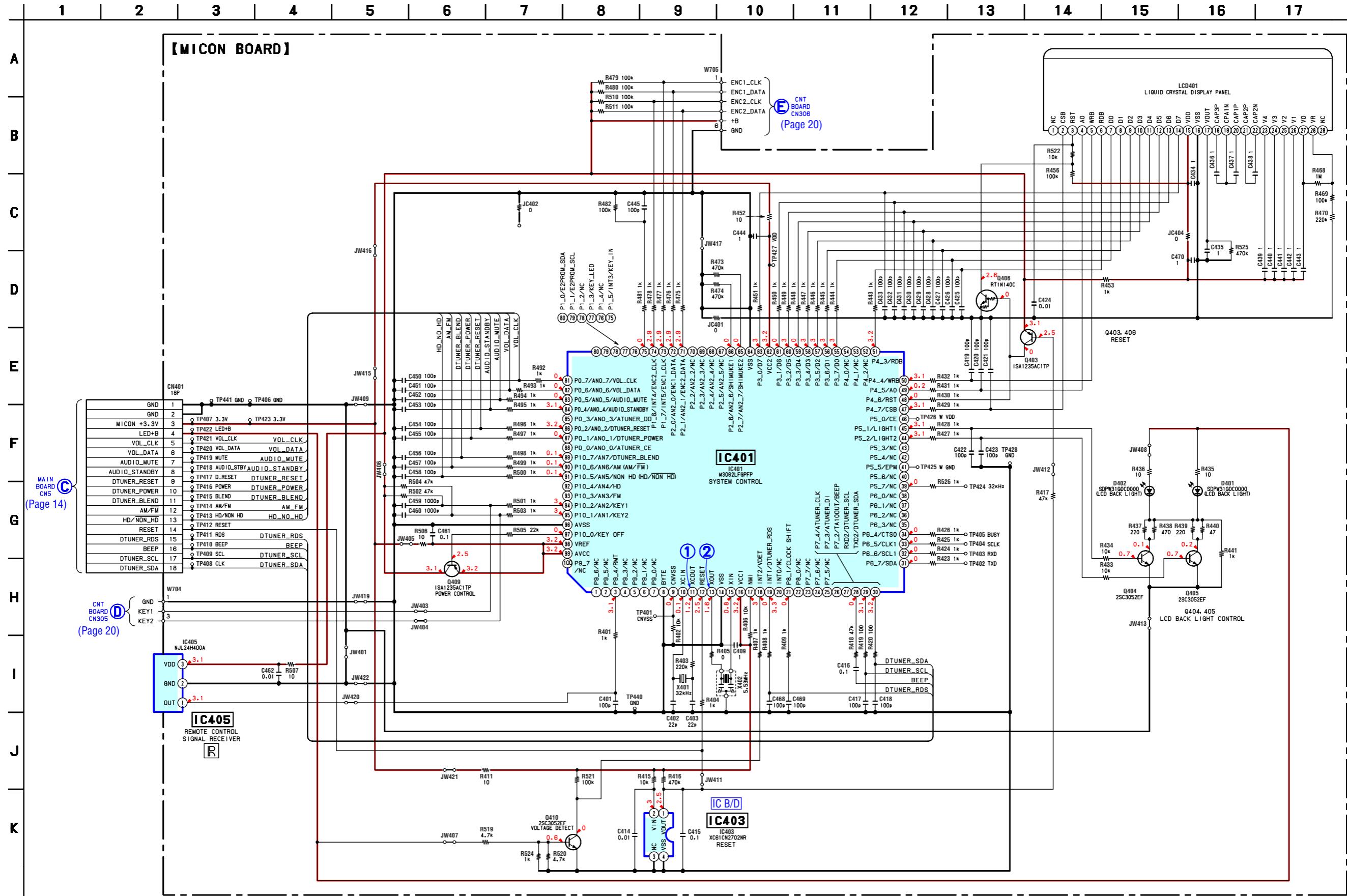
## 3-5. SCHEMATIC DIAGRAM — POWER SECTION — • Refer to page 20 for IC Block Diagrams.



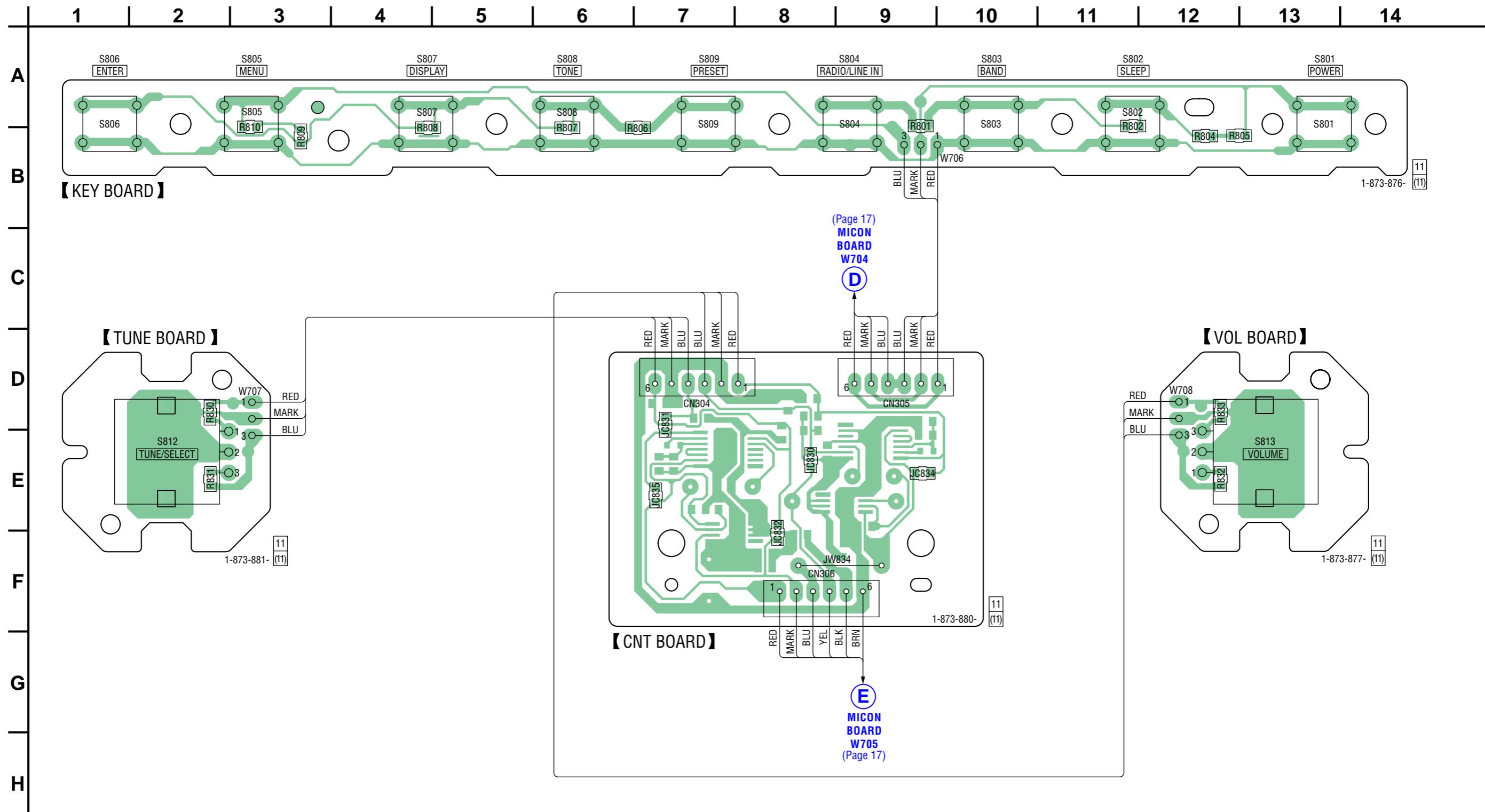
3-6. PRINTED WIRING BOARD — MICON SECTION — • Refer to page 12 for Circuit Boards Location.  : Uses unleaded solder.



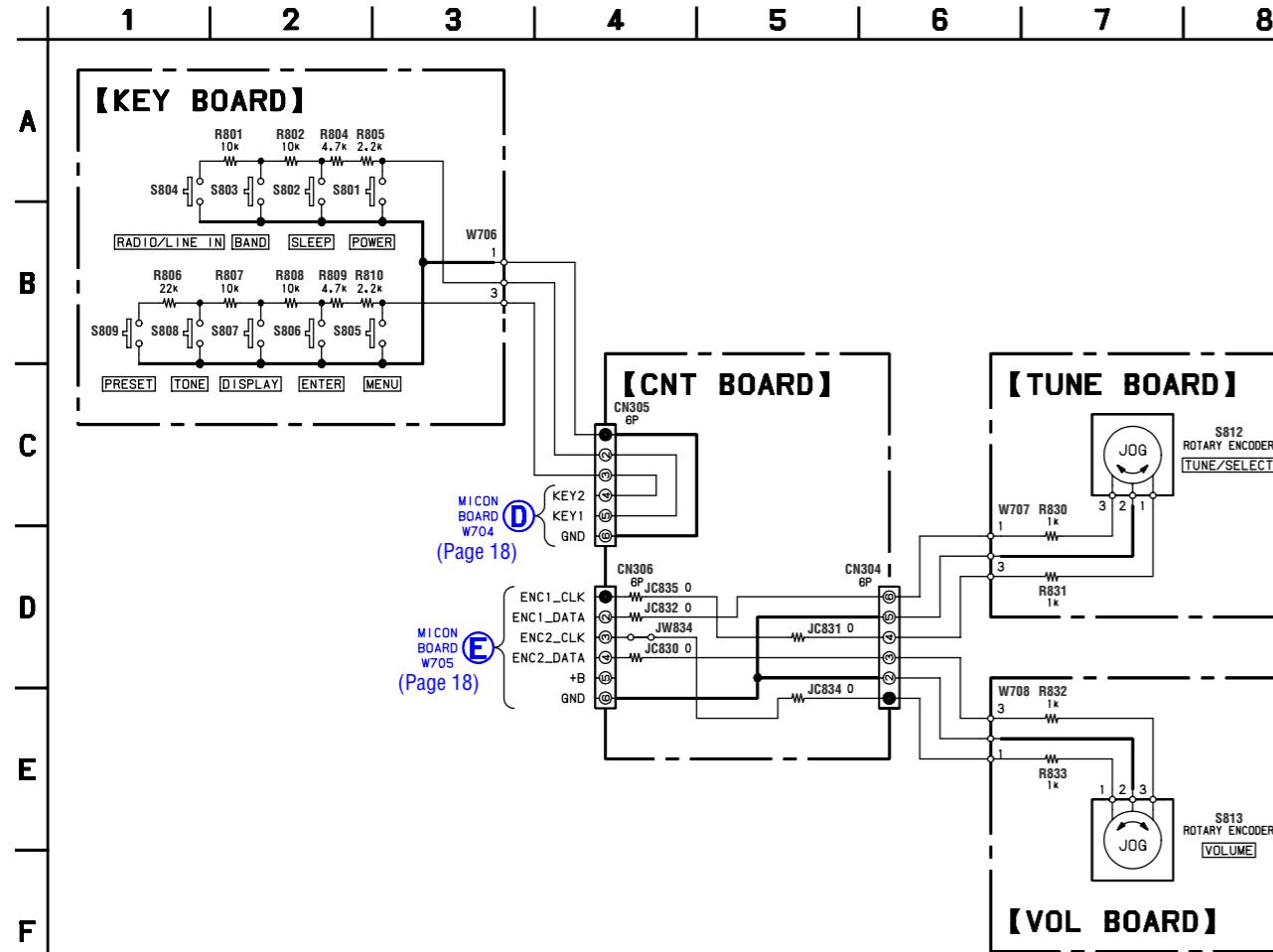
**3-7. SCHEMATIC DIAGRAM — MICON SECTION —** • Refer to page 12 for Waveforms, page 21 for IC Block Diagrams and page 22 for IC Pin Description.



3-8. PRINTED WIRING BOARDS — KEY SECTION — • Refer to page 12 for Circuit Boards Location.  : Uses unleaded solder.

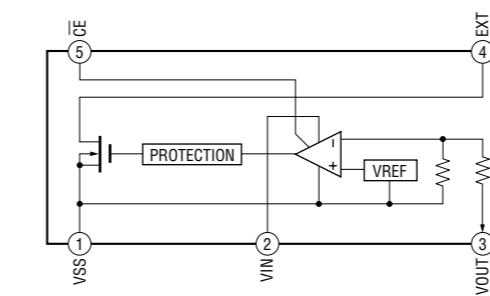


## 3-9. SCHEMATIC DIAGRAM — KEY SECTION —

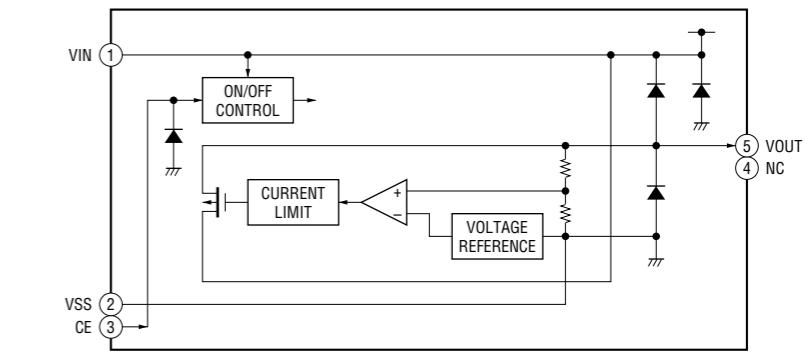


## • IC Block Diagrams

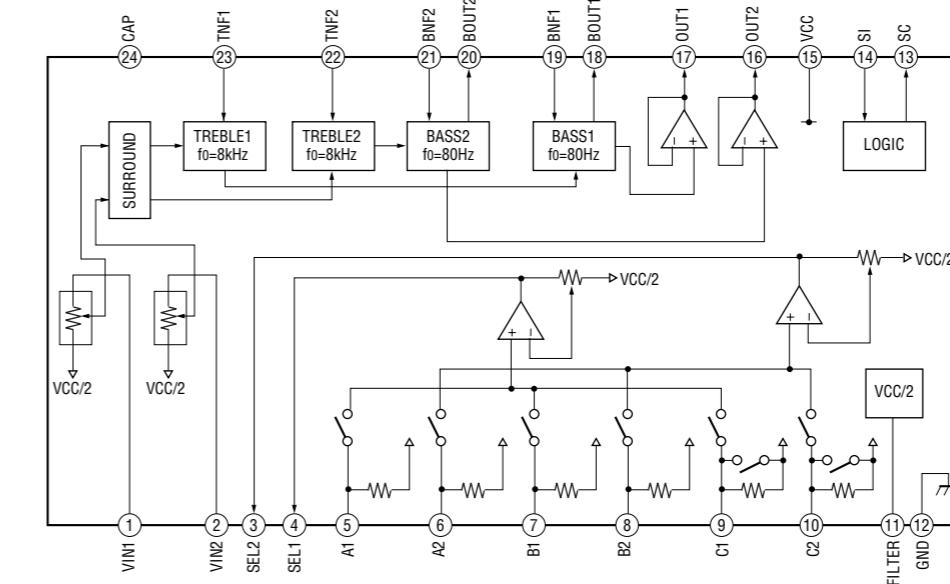
IC1 XC62EP1802MR (MAIN BOARD)  
IC2 XC62EP1802MR (MAIN BOARD)



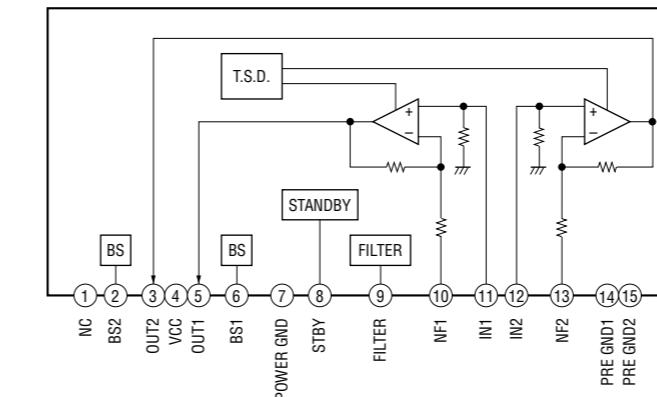
IC4 XC6213B332MR (MAIN BOARD)



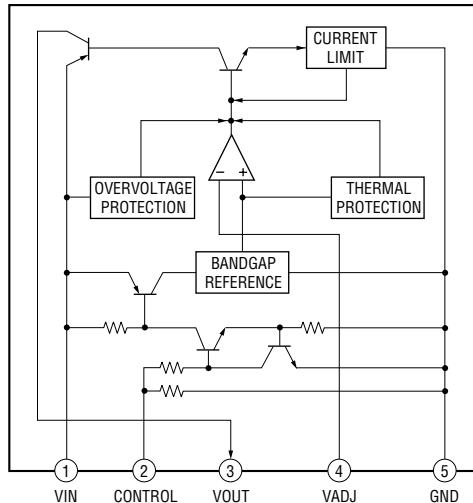
IC301 BD3870FS-E2 (POWER BOARD)



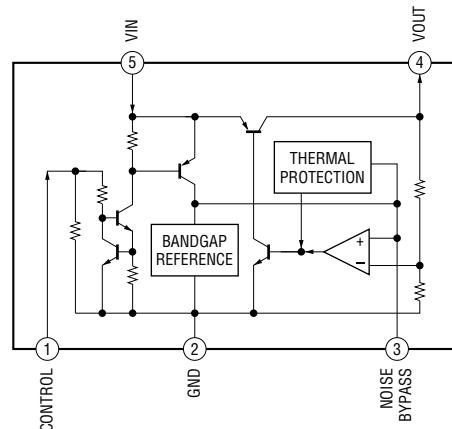
IC302 BA5417 (POWER BOARD)



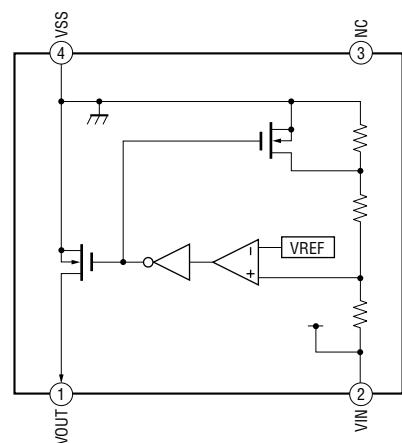
**IC901 NJM2387ADL3(TE2) (POWER BOARD)**  
**IC903 NJM2387ADL3(TE2) (POWER BOARD)**  
**IC950 NJM2387ADL3(TE2) (FAN CNT BOARD)**



**IC902 NJM2871BF33-TE2 (POWER BOARD)**



**IC403 XC61CN2702NR (MICON BOARD)**



- IC Pin Description

IC401 M3062LFGPFP (SYSTEM CONTROL) (MICON BOARD)

Pin No.	Pin Name	I/O	Pin Description
1	P9_6/NC	O	Fixed at L level (Not used)
2	P9_5/NC	O	Fixed at L level (Not used)
3	P9_4/RMT	I	Remote commander signal input
4	P9_3/NC	O	Fixed at L level (Not used)
5	P9_2/NC	O	Fixed at L level (Not used)
6	P9_1/NC	O	Fixed at L level (Not used)
7	P9_0/NC	O	Fixed at L level (Not used)
8	BYTE	I	Not used. (Connect to VSS)
9	CNVSS	I	Not used. (Fixed at L level)
10	XCIN	I	System sub clock signal input (32 kHz)
11	XCOOUT	O	System sub clock signal output (32 kHz)
12	RESET	I	Micon reset input (L: Micon reset)
13	XOUT	O	System main clock signal output (5.53 MHz)
14	VSS	—	Ground
15	XIN	I	System main clock signal input (5.53 MHz)
16	VCC1	—	Power supply pin (+3.3 V)
17	NMI	I	NMI interruption signal input (Fixed at H level)
18	INT2/VDET	I	Power failure detection signal input (H: backup mode)
19	INT1/DTUNER_RDS	I	RDS data interruption signal input (Not used)
20	INT0/NC	I	Not used. (Open)
21	P8_1/CLOCK SHIFT	O	Control pin for system main clock frequency shift. (H: active)
22	P8_0/NC	O	Fixed at L level (Not used)
23	P7_7/NC	O	Fixed at L level (Not used)
24	P7_6/NC	O	Fixed at L level (Not used)
25	P7_5/NC	O	Fixed at L level (Not used)
26	P7_4/ATUNER_CLK	O	Analog tuner clock signal output (Not used)
27	P7_3/ATUNER_DI	O	Analog tuner data output (Not used)
28	P7_2/TA100OUT/BEEP	O	Beep signal output
29	RXD2/DTUNER_SCL	—	Communication pin for digital tuner.
30	TXD2/DTUNER_SDA	—	Communication pin for digital tuner.
31	P6_7/SDA	O	Flash write pin (Normally: output port)
32	P6_6/SCL1	O	Flash write pin (Normally: output port)
33	P6_5/CLK1	O	Flash write pin (Normally: output port)
34	P6_4/CTS0	O	Flash write pin (Normally: output port)
35	P6_3/NC	O	Fixed at L level (Not used)
36	P6_2/NC	O	Fixed at L level (Not used)
37	P6_1/NC	O	Fixed at L level (Not used)
38	P6_0/NC	O	Fixed at L level (Not used)
39	P5_7/NC	O	Fixed at L level (Not used)
40	P5_6/NC	O	Fixed at L level (Not used)
41	P5_5/EPM	O	Flash write pin (Normally: output port)
42	P5_4/NC	O	Fixed at L level (Not used)
43	P5_3/NC	O	Fixed at L level (Not used)
44	P5_2/LIGHT2	O	LCD back light control signal output
45	P5_1/LIGHT1	O	LCD back light control signal output
46	P5_0/CE	O	Flash write pin (Normally: output port)
47	P4_7/CSB	O	LCD driver control signal output
48	P4_6/RST	O	LCD driver reset signal output (H: driver reset)
49	P4_5/A0	O	LCD driver control signal output
50	P4_4/WRB	O	LCD driver control signal output
51	P4_3/RDB	O	LCD driver control signal output

Pin No.	Pin Name	I/O	Pin Description
52	P4_2/NC	O	Fixed at L level (Not used)
53	P4_1/NC	O	Fixed at L level (Not used)
54	P4_0/NC	O	Fixed at L level (Not used)
55	P3_7/D0	O	LCD data output
56	P3_6/D1	O	LCD data output
57	P3_5/D2	O	LCD data output
58	P3_4/D3	O	LCD data output
59	P3_3/D4	O	LCD data output
60	P3_2/D5	O	LCD data output
61	P3_1/D6	O	LCD data output
62	VCC2	—	Power supply pin (+3.3 V)
63	P3_0/D7	O	LCD data output
64	VSS	—	Ground
65	P2_7/AN2_7/SHIMUKE2	I	Destination select signal input (Fixed at L level)
66	P2_6/AN2_6/SHIMUKE1	I	Destination select signal input (Fixed at L level)
67	P2_5/AN2_5/NC	O	Fixed at L level (Not used)
68	P2_4/AN2_4/NC	O	Fixed at L level (Not used)
69	P2_3/AN2_3/NC	O	Fixed at L level (Not used)
70	P2_2/AN2_2/NC	O	Fixed at L level (Not used)
71	P2_1/AN2_1/ENC2_DATA	I	Rotary encoder (VOLUME) data input
72	P2_0/AN2_0/ENC1_DATA	I	Rotary encoder (TUNE/SELECT) data input
73	P1_7/INT5/ENC1_CLK	I	Rotary encoder (TUNE/SELECT) clock signal input
74	P1_6/INT4/ENC2_CLK	I	Rotary encoder (VOLUME) clock signal input
75	P1_5/INT3/KEY_IN	I	Valid key interruption signal input at power off (Fixed at L level).
76	P1_4/NC	O	Fixed at L level (Not used)
77	P1_3/KEY_LED	O	Key LED control signal output (Not used)
78	P1_2/NC	O	Fixed at L level (Not used)
79	P1_1/E2PROM_SCL	O	E2PROM clock signal output (Not used)
80	P1_0/E2PROM_SDA	I/O	E2PROM data output (Not used)
81	P0_7/AN0_7/VOL_CLK	O	Clock signal output for sound IC communication.
82	P0_6/AN0_6/VOL_DATA	O	Data output for sound IC communication.
83	P0_5/AN0_5/AUDIO_MUTE	O	Audio mute detection signal output (H: mute ON)
84	P0_4/AN0_4/AUDIO_STANDBY	O	Audio standby detection signal output (H: power ON)
85	P0_3/AN0_3/ATUNER_DO	I	Analog tuner DO signal input (Not used)
86	P0_2/AN0_2/DTUNER_RESET	O	DSP tuner/DSP reset signal output (L: reset)
87	P0_1/AN0_1/DTUNER_POWER	O	DSP tuner power control signal output (L: radio function)
88	P0_0/AN0_0/ATUNER_CE	O	Analog tuner chip enable signal output (Not used)
89	P10_7/AN7/DTUNER_BLEND	I	DSP tuner blend signal input (H: HD digital audio)
90	P10_6/AN6/AM(AM/FM)	O	Radio (AM) receive signal output (H: AM)
91	P10_5/AN5/NON HD (HD/NON HD)	O	Radio (HD) receive signal output (H: HD)
92	P10_4/AN4/HD	O	Radio (HD) receive signal output (L: HD) (Not used)
93	P10_3/AN3/FM	O	Radio (FM) receive signal output (H: FM) (Not used)
94	P10_2/AN2/KEY1	I	A/D converter analog signal input
95	P10_1/AN1/KEY2	I	A/D converter analog signal input
96	AVSS	—	Ground for A/D converter.

Pin No.	Pin Name	I/O	Pin Description
97	P10_0/KEY OFF	O	A/D key, remote control receiver and rotary encoder power control signal output. (L: normally, H: backup)
98	VREF	—	Reference voltage input for A/D converter. (+3.3 V)
99	AVCC	—	Power supply pin for A/D converter. (+3.3 V)
100	P9_7/NC	O	Fixed at L level (Not used)

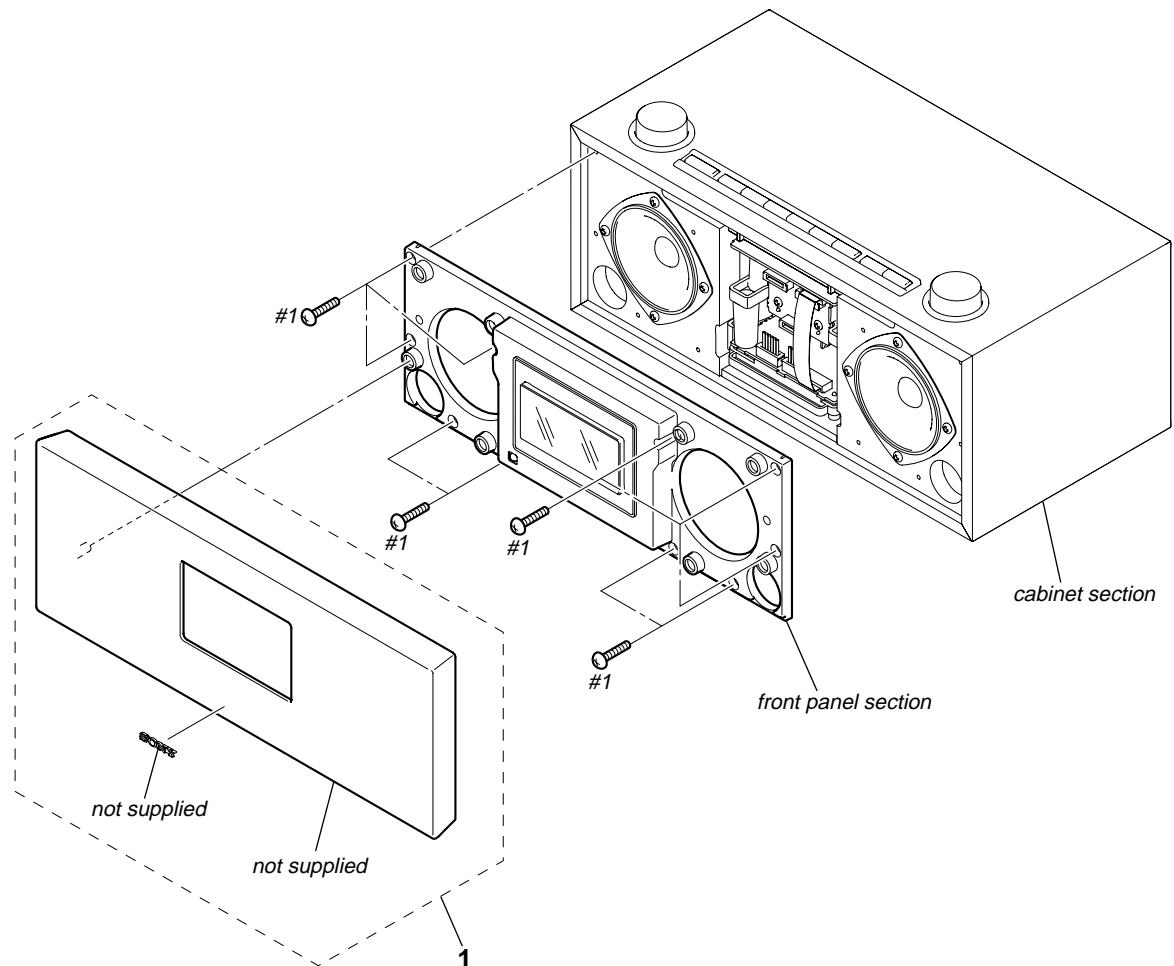
## SECTION 4 EXPLODED VIEWS

**NOTE:**

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

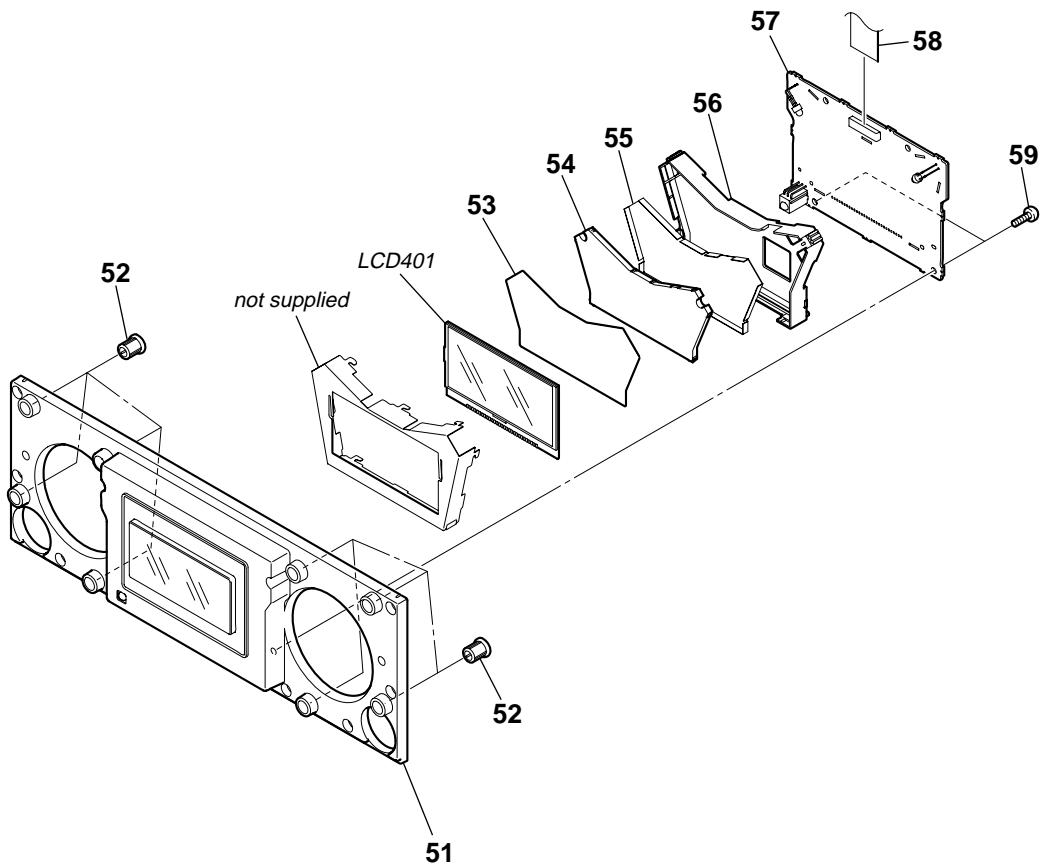
- Color Indication of Appearance Parts  
Example :  
KNOB, BALANCE (WHITE) ... (RED)  
↑                              ↑  
Parts Color Cabinet's Color
- Accessory and parts list are given in the last of this parts list.

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

**4-1. MAIN SECTION**

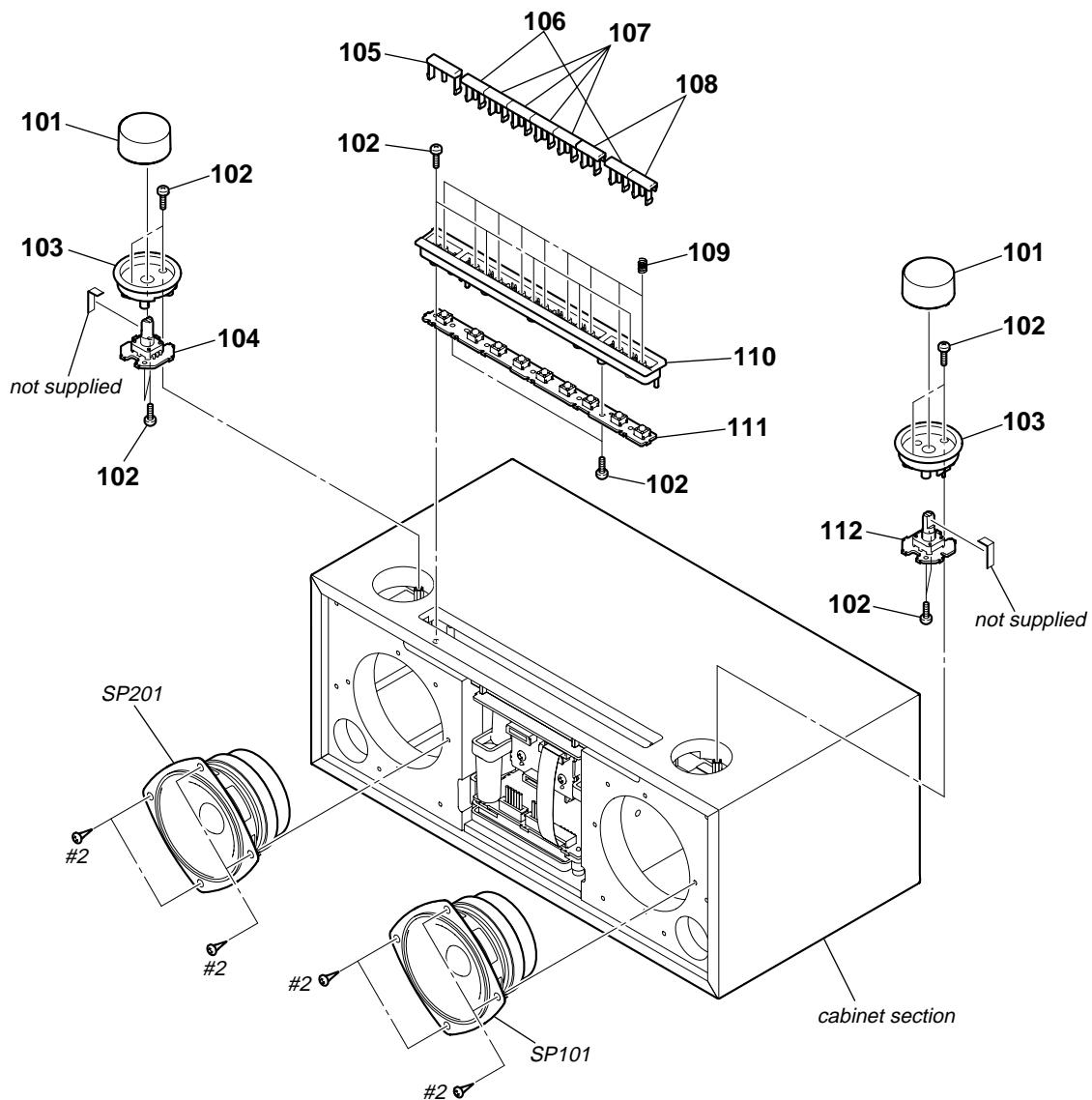
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	X-2177-965-1	NET SUB ASSY, SPEAKER		#1	7-621-849-10	SCREW, WOOD +R 3.1X13	

## 4-2. FRONT PANEL SECTION



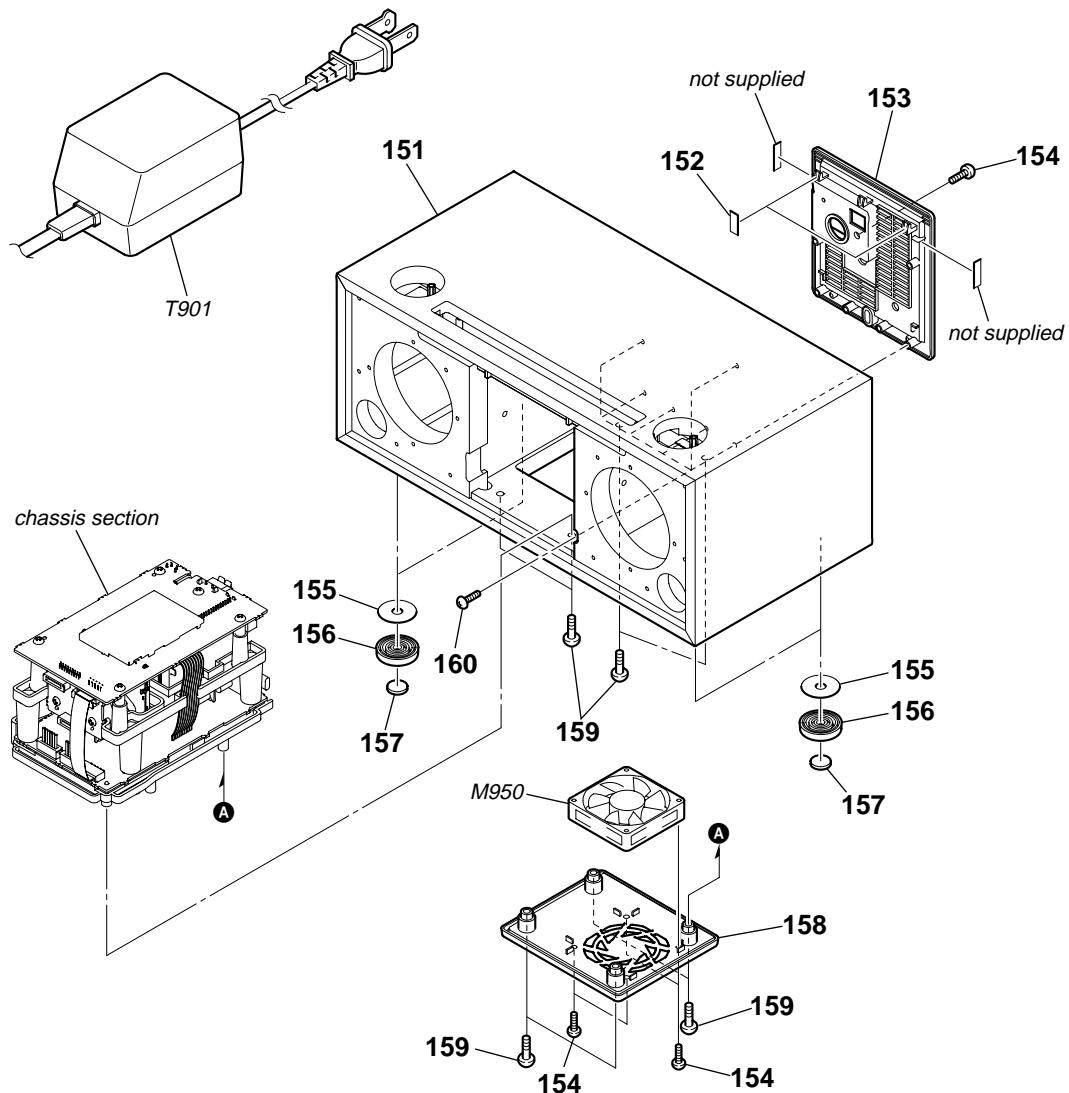
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
51	X-2179-523-1	PANEL (FRONT) SUB ASSY		56	3-100-678-01	HOLDER (LCD)	
52	2-667-343-01	BUSHING		57	X-2179-670-1	MICON BOARD, COMPLETE	
53	3-100-681-01	SHEET (LCD), DIFFUSION		58	1-834-138-21	CABLE, FLEXIBLE FLAT (18 CORE)	
54	3-100-680-01	PLATE (LCD), LIGHT GUIDE		59	3-252-827-01	SCREW (B2.6), (+) BV TAPPING	
55	3-100-679-01	REFLECTOR (LCD)		LCD401	1-802-474-11	DISPLAY PANEL, LIQUID CRYSTAL	

## 4-3. KEY BOARD SECTION



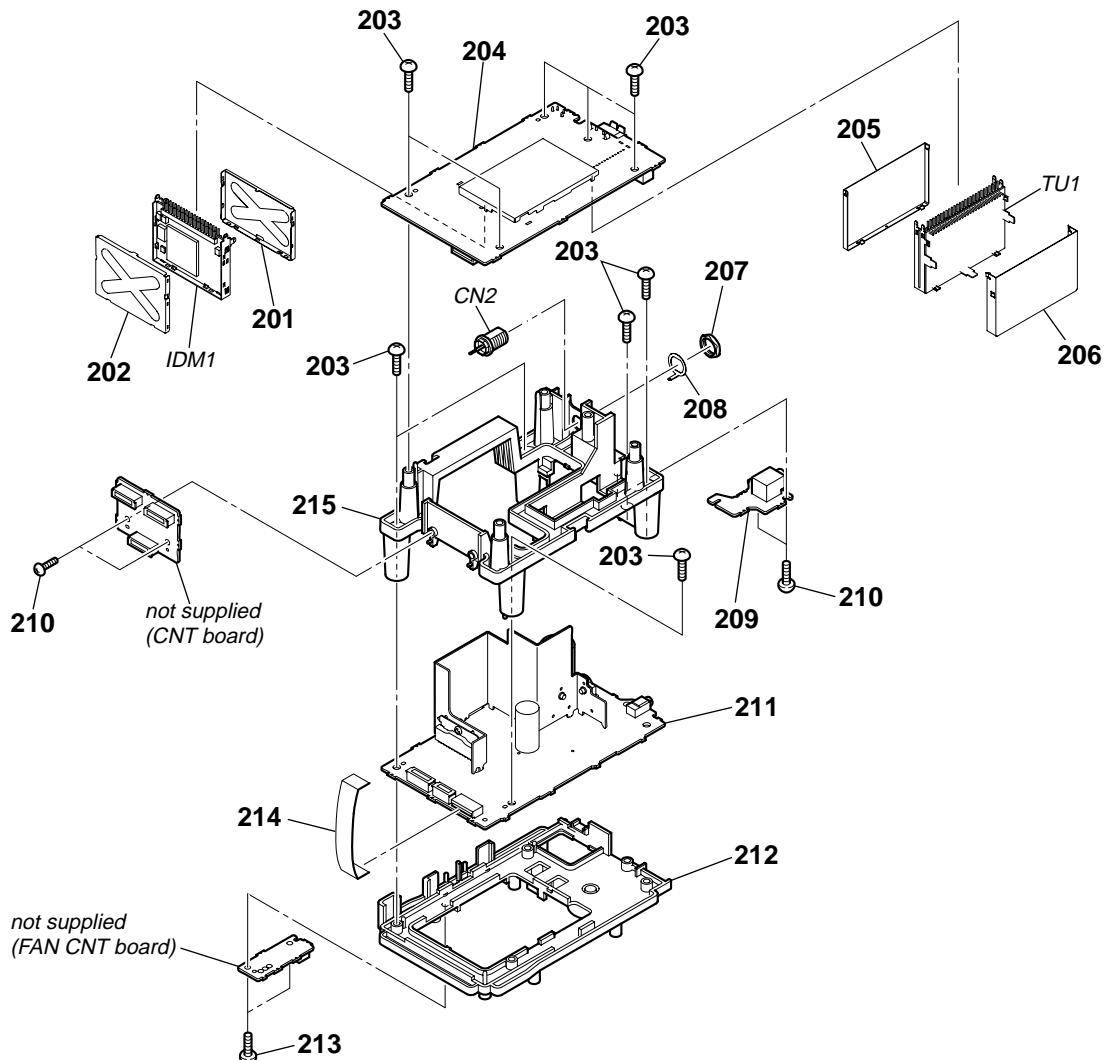
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-100-675-01	KNOB (JOG)		109	3-100-694-01	SPRING (BUTTON)	
102	3-254-081-11	SCREW		110	3-100-671-01	PANEL (TOP, KEY)	
103	3-100-674-01	ESCUTCHEON		111	A-1257-296-A	KEY BOARD, COMPLETE	
104	A-1257-298-A	VOL BOARD, COMPLETE		112	A-1257-300-A	TUNE BOARD, COMPLETE	
105	3-100-672-01	BUTTON (POWER)		SP101	1-826-688-11	SPEAKER (6.6cm) (R-CH)	
106	3-100-673-01	BUTTON (MENU)		SP201	1-826-688-11	SPEAKER (6.6cm) (L-CH)	
107	3-106-282-01	BUTTON (TONE)		#2	7-621-843-25	SCREW, WOOD +R 3.1X10	
108	3-106-281-01	BUTTON (ENTER)					

## 4-4. CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-2177-282-1	CABINET ASSY		157	2-667-344-01	FOOT, RUBBER	
152	3-218-790-01	CUSHION (REAR COVER)		158	3-214-708-01	COVER (FAN)	
153	3-100-682-01	COVER (REAR)		159	3-254-145-11	SCREW (B3), (+) BV TAPPING	
154	3-254-143-11	SCREW (B3), (+) BV TAPPING		160	3-252-827-01	SCREW (B2.6), (+) BV TAPPING	
155	3-100-687-01	SHEET (FOOT), ADHESIVE		M950	1-787-396-11	FAN, D.C. (50 SQUARE)	
156	3-100-683-01	FOOT		△ T901	1-480-224-11	POWER UNIT, AC	

## 4-5. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-197-151-01	CASE (LID), SHIELD		211	A-1257-291-A	POWER BOARD, COMPLETE	
202	3-197-151-11	CASE (LID), SHIELD		212	3-100-676-01	CHASSIS (LOWER)	
203	3-254-143-11	SCREW (B3), (+) BV TAPPING		213	3-253-143-01	SCREW (B2.6), (+) P TAPPING	
* 204	A-1257-209-A	MAIN BOARD, COMPLETE		214	1-834-139-21	CABLE, FLEXIBLE FLAT (10 CORE)	
205	3-198-658-01	COVER (DSP01, A)		215	3-100-677-01	CHASSIS (UPPER)	
206	3-198-659-01	COVER (DSP01, B)		CN2	1-817-371-21	CONNECTOR, COAXIAL (F TYPE)	
207	2-667-338-01	NUT (ANTENNA)					(ANTENNA (FM))
208	2-667-342-01	LUG		IDM1	A-1256-714-A	IDM MODULE	
209	A-1257-294-A	JACK BOARD, COMPLETE		TU1	A-1256-754-A	TUNER UNIT, DSP	
210	3-252-827-01	SCREW (B2.6), (+) BV TAPPING					

## SECTION 5

### ELECTRICAL PARTS LIST

## 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.
- RESISTORS  
All resistors are in ohms.  
METAL: Metal-film resistor.  
METAL OXIDE: Metal oxide-film resistor.  
F: nonflammable

- Items marked “\*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS  
In each case, u : μ, for example:  
uA.. : μA.. uPA.. : μPA..  
uPB.. : μPB.. uPC.. : μPC.. uPD.. : μPD..
- CAPACITORS  
uF : μF
- COILS  
uH : μH

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

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

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark						
		CNT BOARD			*****		A-1257-294-A	JACK BOARD, COMPLETE			*****						
<b>&lt; CONNECTOR &gt;</b>																	
*****																	
CN304	1-568-272-11	SOCKET, CONNECTOR 6P				C180	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V						
CN305	1-568-272-11	SOCKET, CONNECTOR 6P				C280	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V						
CN306	1-568-272-11	SOCKET, CONNECTOR 6P				<b>&lt; CAPACITOR &gt;</b>											
<b>&lt; JUMPER RESISTOR &gt;</b>																	
JC830	1-216-864-11	SHORT CHIP	0			J380	1-819-829-11	JACK (HEADPHONE)									
JC831	1-216-864-11	SHORT CHIP	0			<b>&lt; JACK &gt;</b>											
JC832	1-216-864-11	SHORT CHIP	0			<b>&lt; RESISTOR &gt;</b>											
JC834	1-216-864-11	SHORT CHIP	0			R180	1-216-809-11	METAL CHIP	100	5%	1/10W						
JC835	1-216-864-11	SHORT CHIP	0			R280	1-216-809-11	METAL CHIP	100	5%	1/10W						
*****																	
<b>FAN CNT BOARD</b>																	
*****																	
<b>&lt; CAPACITOR &gt;</b>																	
C950	1-115-156-11	CERAMIC CHIP	1uF		10V	A-1257-296-A	KEY BOARD, COMPLETE				*****						
C951	1-124-261-00	ELECT	10uF	20%	10V	<b>&lt; RESISTOR &gt;</b>											
<b>&lt; CONNECTOR &gt;</b>																	
CN950	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P				R801	1-216-833-11	METAL CHIP	10K	5%	1/10W						
<b>&lt; IC &gt;</b>						R802	1-216-833-11	METAL CHIP	10K	5%	1/10W						
IC950	6-709-213-01	IC NJM2387ADL3(TE2)				R804	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
<b>&lt; TRANSISTOR &gt;</b>						R805	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
*****						R806	1-216-837-11	METAL CHIP	22K	5%	1/10W						
<b>&lt; RESISTOR &gt;</b>						R807	1-216-833-11	METAL CHIP	10K	5%	1/10W						
*****						R808	1-216-833-11	METAL CHIP	10K	5%	1/10W						
*****						R809	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
*****						R810	1-216-825-11	METAL CHIP	2.2K	5%	1/10W						
<b>&lt; SWITCH &gt;</b>																	
*****																	
Q951	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF			S801	1-786-958-11	SWITCH, TACTILE (POWER)									
Q952	8-729-027-44	TRANSISTOR	DTC114TKA-T146			S802	1-786-958-11	SWITCH, TACTILE (SLEEP)									
<b>&lt; RESISTOR &gt;</b>						S803	1-786-958-11	SWITCH, TACTILE (BAND)									
*****						S804	1-786-958-11	SWITCH, TACTILE (RADIO/LINE IN)									
*****						S805	1-786-958-11	SWITCH, TACTILE (MENU)									
R950	1-216-841-11	METAL CHIP	47K	5%	1/10W	S806	1-786-958-11	SWITCH, TACTILE (ENTER)									
R951	1-216-841-11	METAL CHIP	47K	5%	1/10W	S807	1-786-958-11	SWITCH, TACTILE (DISPLAY)									
R952	1-216-821-11	METAL CHIP	1K	5%	1/10W	S808	1-786-958-11	SWITCH, TACTILE (TONE)									
R953	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	S809	1-786-958-11	SWITCH, TACTILE (PRESET)									
R954	1-216-805-11	METAL CHIP	47	5%	1/10W	*****											
R955	1-216-821-11	METAL CHIP	1K	5%	1/10W	*****											
*****																	

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
*	A-1257-209-A	MAIN BOARD, COMPLETE				*****			< TRANSISTOR >				
< CAPACITOR >													
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		Q4	8-729-034-00	TRANSISTOR	2SA1282ATP-EF			
C7	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		Q5	8-729-024-93	TRANSISTOR	2SB1565E			
C8	1-126-947-11	ELECT	47uF	20%	35V		Q6	6-551-700-01	TRANSISTOR	ISA1602AM1TP-1F			
C11	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		Q7	8-729-029-14	TRANSISTOR	DTC144EUA-T106			
C13	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		< RESISTOR >						
C15	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R1	1-216-864-11	SHORT CHIP	0			
C16	1-126-947-11	ELECT	47uF	20%	35V		R2	1-216-864-11	SHORT CHIP	0			
C27	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		R3	1-216-864-11	SHORT CHIP	0			
C28	1-164-315-11	CERAMIC CHIP	470PF	5%	50V		R4	1-216-864-11	SHORT CHIP	0			
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R5	1-216-864-11	SHORT CHIP	0			
C37	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R6	1-216-864-11	SHORT CHIP	0			
C48	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R7	1-216-864-11	SHORT CHIP	0			
C49	1-126-935-11	ELECT	470uF	20%	16V		R8	1-216-864-11	SHORT CHIP	0			
C50	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R9	1-216-864-11	SHORT CHIP	0			
C51	1-126-964-11	ELECT	10uF	20%	50V		R10	1-216-864-11	SHORT CHIP	0			
C52	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R11	1-216-864-11	SHORT CHIP	0			
C54	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R12	1-216-864-11	SHORT CHIP	0			
C55	1-126-935-11	ELECT	470uF	20%	16V		R13	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C56	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R14	1-216-864-11	SHORT CHIP	0			
C57	1-115-156-11	CERAMIC CHIP	1uF		10V		R15	1-216-864-11	SHORT CHIP	0			
C58	1-126-947-11	ELECT	47uF	20%	35V		R16	1-216-864-11	SHORT CHIP	0			
C59	1-115-156-11	CERAMIC CHIP	1uF		10V		R17	1-216-864-11	SHORT CHIP	0			
C60	1-126-964-11	ELECT	10uF	20%	50V		R18	1-216-864-11	SHORT CHIP	0			
C61	1-126-168-11	ELECT	1000uF	20%	6.3V		R19	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C62	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R24	1-216-821-11	METAL CHIP	1K	5%	1/10W	
< TERMINAL BOARD >													
CN1	1-780-519-11	TERMINAL BOARD (2P) (ANTENNA (AM))					R25	1-216-864-11	SHORT CHIP	0			
< CONNECTOR >													
CN4	1-784-732-11	CONNECTOR, FFC 10P					R37	1-216-864-11	SHORT CHIP	0			
CN5	1-779-555-21	CONNECTOR, FFC (LIF(NON-ZIF)) 18P					R44	1-216-864-11	SHORT CHIP	0			
< FERRITE BEAD >													
FB1	1-414-227-11	INDUCTOR, FERRITE BEAD					R45	1-216-841-11	METAL CHIP	47K	5%	1/10W	
FB2	1-414-227-11	INDUCTOR, FERRITE BEAD					R46	1-216-813-11	METAL CHIP	220	5%	1/10W	
FB3	1-414-227-11	INDUCTOR, FERRITE BEAD					R47	1-216-841-11	METAL CHIP	47K	5%	1/10W	
FB4	1-414-227-11	INDUCTOR, FERRITE BEAD					R48	1-216-841-11	METAL CHIP	47K	5%	1/10W	
FB5	1-414-227-11	INDUCTOR, FERRITE BEAD					R49	1-216-864-11	SHORT CHIP	0			
FB6	1-414-227-11	INDUCTOR, FERRITE BEAD					R50	1-216-841-11	METAL CHIP	47K	5%	1/10W	
< IC >													
IC1	6-701-114-01	IC	XC62EP1802MR				R51	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
IC2	6-701-114-01	IC	XC62EP1802MR				R52	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
IC3	6-707-747-01	IC	XC6203P332PR				R53	1-216-833-11	METAL CHIP	10K	5%	1/10W	
IC4	6-710-962-01	IC	XC6213B332MR				R55	1-216-817-11	METAL CHIP	470	5%	1/10W	
< JUMPER RESISTOR >													
JC1	1-216-864-11	SHORT CHIP	0				R56	1-216-817-11	METAL CHIP	470	5%	1/10W	
JC2	1-216-864-11	SHORT CHIP	0				R57	1-216-837-11	METAL CHIP	22K	5%	1/10W	
JC3	1-216-864-11	SHORT CHIP	0				R58	1-216-845-11	METAL CHIP	100K	5%	1/10W	
JC4	1-216-864-11	SHORT CHIP	0				R59	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
JC5	1-216-864-11	SHORT CHIP	0				R61	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
< SWITCH >													
S1	1-554-088-00	SWITCH, KEYBOARD (RESET)					< THERMISTOR >						
TH1	1-805-074-11	THERMISTOR					*****						

# XDR-S3HD

## MICON

Ref. No.	Part No.	Description			Remark		Ref. No.	Part No.	Description			Remark								
	X-2179-670-1	MICON BOARD, COMPLETE							< CONNECTOR >											
*****																				
< CAPACITOR >																				
C401	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		D401	6-501-880-01	LED	SDPW31G0C0000 (LCD BACK LIGHT)										
C402	1-162-919-11	CERAMIC CHIP	22PF	5%	50V		D402	6-501-880-01	LED	SDPW31G0C0000 (LCD BACK LIGHT)										
C403	1-162-919-11	CERAMIC CHIP	22PF	5%	50V															
C409	1-115-156-11	CERAMIC CHIP	1uF		10V															
C414	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V															
C415	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		☆ IC401	(not supplied)	IC	M3062LFGPFP										
C416	1-164-156-11	CERAMIC CHIP	0.1uF		25V		IC403	6-702-148-01	IC	XC61CN2702NR										
C417	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		IC405	6-600-349-31	IC	NJL24H400A (IR)										
C418	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															
C419	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															
C420	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		JC401	1-216-864-11	SHORT CHIP	0										
C421	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		JC402	1-216-864-11	SHORT CHIP	0										
C422	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		JC404	1-216-864-11	SHORT CHIP	0										
C423	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															
C424	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V															
C425	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		LCD401	1-802-474-11	DISPLAY PANEL, LIQUID CRYSTAL											
C426	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															
C427	1-162-927-11	CERAMIC CHIP	100PF	5%	50V															
C428	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q403	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF										
C429	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q404	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF										
C430	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q405	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF										
C431	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q406	8-729-027-44	TRANSISTOR	DTC114TKA-T146										
C432	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q409	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF										
C433	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		Q410	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF										
C434	1-115-156-11	CERAMIC CHIP	1uF		10V															
C435	1-164-346-11	CERAMIC CHIP	1uF		16V															
C436	1-164-346-11	CERAMIC CHIP	1uF		16V		R401	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C437	1-164-346-11	CERAMIC CHIP	1uF		16V		R402	1-216-833-11	METAL CHIP	10K	5%	1/10W								
C438	1-164-346-11	CERAMIC CHIP	1uF		16V		R403	1-216-849-11	METAL CHIP	220K	5%	1/10W								
C439	1-115-156-11	CERAMIC CHIP	1uF		10V		R404	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C440	1-115-156-11	CERAMIC CHIP	1uF		10V		R405	1-216-864-11	SHORT CHIP	0										
C441	1-115-156-11	CERAMIC CHIP	1uF		10V		R406	1-216-833-11	METAL CHIP	10K	5%	1/10W								
C442	1-115-156-11	CERAMIC CHIP	1uF		10V		R407	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C443	1-164-346-11	CERAMIC CHIP	1uF		16V		R408	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C444	1-115-156-11	CERAMIC CHIP	1uF		10V		R409	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C445	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R411	1-216-797-11	METAL CHIP	10	5%	1/10W								
C450	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R415	1-216-833-11	METAL CHIP	10K	5%	1/10W								
C451	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R416	1-216-853-11	METAL CHIP	470K	5%	1/10W								
C452	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R417	1-216-841-11	METAL CHIP	47K	5%	1/10W								
C453	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R418	1-216-841-11	METAL CHIP	47K	5%	1/10W								
C454	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R419	1-216-809-11	METAL CHIP	100	5%	1/10W								
C455	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R420	1-216-809-11	METAL CHIP	100	5%	1/10W								
C456	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R423	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C457	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R424	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C458	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R425	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C459	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		R426	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C460	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V		R427	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C461	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V		R428	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C462	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V		R429	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C468	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R430	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C469	1-162-927-11	CERAMIC CHIP	100PF	5%	50V		R431	1-216-821-11	METAL CHIP	1K	5%	1/10W								
C470	1-115-156-11	CERAMIC CHIP	1uF		10V		R432	1-216-821-11	METAL CHIP	1K	5%	1/10W								
							R433	1-216-833-11	METAL CHIP	10K	5%	1/10W								

☆ IC401 on the MICON board cannot be replaced as a single component.  
When IC401 is faulty, replace the IC together with the board by a new  
IC complete MICON board (X-2179-670-1).

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Remark
R434	1-216-833-11	METAL CHIP	10K	5%	1/10W			< VIBRATOR >		
R435	1-216-797-11	METAL CHIP	10	5%	1/10W					
R436	1-216-797-11	METAL CHIP	10	5%	1/10W	X401	1-813-202-11	VIBRATOR, CRYSTAL (32kHz)		
R437	1-216-813-11	METAL CHIP	220	5%	1/10W	X402	1-813-988-21	VIBRATOR, CERAMIC (5.53MHz)		
R438	1-216-817-11	METAL CHIP	470	5%	1/10W			*****		
R439	1-216-813-11	METAL CHIP	220	5%	1/10W		A-1257-291-A	POWER BOARD, COMPLETE		
R440	1-216-805-11	METAL CHIP	47	5%	1/10W			*****		
R441	1-216-821-11	METAL CHIP	1K	5%	1/10W					
R443	1-216-821-11	METAL CHIP	1K	5%	1/10W	3-253-143-01	SCREW (B2.6), (+) P TAPPING			
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W					
R445	1-216-821-11	METAL CHIP	1K	5%	1/10W			< CAPACITOR >		
R446	1-216-821-11	METAL CHIP	1K	5%	1/10W	C130	1-126-963-11	ELECT	4.7uF	20% 50V
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W	C131	1-126-963-11	ELECT	4.7uF	20% 50V
R448	1-216-821-11	METAL CHIP	1K	5%	1/10W	C132	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V
R449	1-216-821-11	METAL CHIP	1K	5%	1/10W	C133	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V
R450	1-216-821-11	METAL CHIP	1K	5%	1/10W	C134	1-126-963-11	ELECT	4.7uF	20% 50V
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W	C135	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R452	1-216-797-11	METAL CHIP	10	5%	1/10W	C136	1-162-966-11	CERAMIC CHIP	0.0022uF	10% 50V
R453	1-216-821-11	METAL CHIP	1K	5%	1/10W	C140	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R456	1-216-845-11	METAL CHIP	100K	5%	1/10W	C144	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R468	1-216-857-11	METAL CHIP	1M	5%	1/10W	C148	1-126-963-11	ELECT	4.7uF	20% 50V
R469	1-216-845-11	METAL CHIP	100K	5%	1/10W	C150	1-126-963-11	ELECT	4.7uF	20% 50V
R470	1-216-849-11	METAL CHIP	220K	5%	1/10W	C151	1-126-947-11	ELECT	47uF	20% 35V
R473	1-216-853-11	METAL CHIP	470K	5%	1/10W	C152	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R474	1-216-853-11	METAL CHIP	470K	5%	1/10W	C153	1-126-933-11	ELECT	100uF	20% 16V
R475	1-216-821-11	METAL CHIP	1K	5%	1/10W	C154	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V
R476	1-216-821-11	METAL CHIP	1K	5%	1/10W	C155	1-126-767-11	ELECT	1000uF	20% 16V
R477	1-216-821-11	METAL CHIP	1K	5%	1/10W	C156	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R478	1-216-821-11	METAL CHIP	1K	5%	1/10W	C230	1-126-963-11	ELECT	4.7uF	20% 50V
R479	1-216-845-11	METAL CHIP	100K	5%	1/10W	C231	1-126-963-11	ELECT	4.7uF	20% 50V
R480	1-216-845-11	METAL CHIP	100K	5%	1/10W	C232	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V
R481	1-216-821-11	METAL CHIP	1K	5%	1/10W	C233	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V
R482	1-216-845-11	METAL CHIP	100K	5%	1/10W	C234	1-126-963-11	ELECT	4.7uF	20% 50V
R492	1-216-821-11	METAL CHIP	1K	5%	1/10W	C235	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R493	1-216-821-11	METAL CHIP	1K	5%	1/10W	C236	1-162-966-11	CERAMIC CHIP	0.0022uF	10% 50V
R494	1-216-821-11	METAL CHIP	1K	5%	1/10W	C240	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R495	1-216-821-11	METAL CHIP	1K	5%	1/10W	C244	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R496	1-216-821-11	METAL CHIP	1K	5%	1/10W	C248	1-126-963-11	ELECT	4.7uF	20% 50V
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W	C250	1-126-963-11	ELECT	4.7uF	20% 50V
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W	C251	1-126-947-11	ELECT	47uF	20% 35V
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W	C252	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R500	1-216-821-11	METAL CHIP	1K	5%	1/10W	C253	1-126-933-11	ELECT	100uF	20% 16V
R501	1-216-821-11	METAL CHIP	1K	5%	1/10W	C254	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V
R502	1-216-841-11	METAL CHIP	47K	5%	1/10W	C255	1-126-767-11	ELECT	1000uF	20% 16V
R503	1-216-821-11	METAL CHIP	1K	5%	1/10W	C256	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V
R504	1-216-841-11	METAL CHIP	47K	5%	1/10W	C330	1-126-947-11	ELECT	47uF	20% 35V
R505	1-216-837-11	METAL CHIP	22K	5%	1/10W	C331	1-126-959-11	ELECT	0.47uF	20% 50V
R506	1-216-797-11	METAL CHIP	10	5%	1/10W	C332	1-126-960-11	ELECT	1uF	20% 50V
R507	1-216-797-11	METAL CHIP	10	5%	1/10W	C333	1-104-665-11	ELECT	100uF	20% 25V
R510	1-216-845-11	METAL CHIP	100K	5%	1/10W	C334	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V
R511	1-216-845-11	METAL CHIP	100K	5%	1/10W	C335	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R519	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C336	1-162-927-11	CERAMIC CHIP	100PF	5% 50V
R520	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C337	1-126-947-11	ELECT	47uF	20% 35V
R521	1-216-845-11	METAL CHIP	100K	5%	1/10W	C339	1-126-947-11	ELECT	47uF	20% 35V
R522	1-216-833-11	METAL CHIP	10K	5%	1/10W	C340	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V
R524	1-216-821-11	METAL CHIP	1K	5%	1/10W	C342	1-126-964-11	ELECT	10uF	20% 50V
R525	1-216-853-11	METAL CHIP	470K	5%	1/10W	C343	1-126-964-11	ELECT	10uF	20% 50V
R526	1-216-821-11	METAL CHIP	1K	5%	1/10W	C344	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V

# XDR-S3HD

## POWER

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark		
C901	1-107-892-11	ELECT	4700uF	20%	25V	Q231	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
C902	1-126-927-11	ELECT	2200uF	20%	10V	Q331	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
C903	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q332	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
C904	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q901	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
C905	1-126-935-11	ELECT	470uF	20%	16V	Q902	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
C906	1-115-156-11	CERAMIC CHIP	1uF		10V	Q903	8-729-018-99	TRANSISTOR	2SD2394-F		
C907	1-128-551-11	ELECT	22uF	20%	63V	Q904	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
C909	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q905	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
C910	1-126-933-11	ELECT	100uF	20%	16V	Q906	8-729-011-92	TRANSISTOR	2SC2001TP-K1K2		
C912	1-164-156-11	CERAMIC CHIP	0.1uF		25V	Q907	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
C913	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V	Q908	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
C915	1-126-918-11	ELECT	4700uF	20%	6.3V	Q909	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
C916	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q910	6-551-696-01	TRANSISTOR	ISA1235AC1TP-1EF		
C917	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	Q911	8-729-018-99	TRANSISTOR	2SD2394-F		
C918	1-126-935-11	ELECT	470uF	20%	16V	Q912	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
C919	1-115-156-11	CERAMIC CHIP	1uF		10V	Q913	8-729-027-38	TRANSISTOR	DTA144EKA-T146		
C921	1-104-655-11	ELECT	470uF	20%	6.3V	Q914	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
< CONNECTOR >											
CN301	1-784-732-11	CONNECTOR, FFC 10P				< RESISTOR >					
CN302	1-568-270-11	SOCKET, CONNECTOR 4P				R130	1-216-821-11	METAL CHIP	1K	5%	1/10W
CN303	1-568-272-11	SOCKET, CONNECTOR 6P				R132	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
< DIODE >											
D130	8-719-991-33	DIODE 1SS133T-77				R133	1-216-853-11	METAL CHIP	470K	5%	1/10W
D131	8-719-991-33	DIODE 1SS133T-77				R134	1-216-849-11	METAL CHIP	220K	5%	1/10W
D230	8-719-991-33	DIODE 1SS133T-77				R135	1-216-833-11	METAL CHIP	10K	5%	1/10W
D231	8-719-991-33	DIODE 1SS133T-77				R136	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
D901	8-719-991-33	DIODE 1SS133T-77				R138	1-216-841-11	METAL CHIP	47K	5%	1/10W
D902	8-719-991-33	DIODE 1SS133T-77				R140	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
D903	8-719-110-17	DIODE RD10ESB2				R142	1-216-821-11	METAL CHIP	1K	5%	1/10W
D904	8-719-991-33	DIODE 1SS133T-77				R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
D906	8-719-109-89	DIODE RD5.6ESB2				R144	1-216-821-11	METAL CHIP	1K	5%	1/10W
D907	8-719-069-29	DIODE RB520S-30TE61				R145	1-216-833-11	METAL CHIP	10K	5%	1/10W
D908	8-719-991-33	DIODE 1SS133T-77				R146	1-216-817-11	METAL CHIP	470	5%	1/10W
D909	8-719-991-33	DIODE 1SS133T-77				R147	1-216-813-11	METAL CHIP	220	5%	1/10W
D910	8-719-921-40	DIODE MTZJ-4.7C				R148	1-216-789-11	METAL CHIP	2.2	5%	1/10W
D911	8-719-991-33	DIODE 1SS133T-77				R149	1-216-837-11	METAL CHIP	22K	5%	1/10W
D912	8-719-046-47	DIODE 1N5401TM				R150	1-216-841-11	METAL CHIP	47K	5%	1/10W
D913	8-719-988-61	DIODE 1SS355TE-17				R151	1-216-833-11	METAL CHIP	10K	5%	1/10W
D914	8-719-069-29	DIODE RB520S-30TE61				R152	1-216-821-11	METAL CHIP	1K	5%	1/10W
D915	8-719-991-33	DIODE 1SS133T-77				R230	1-216-821-11	METAL CHIP	1K	5%	1/10W
D916	8-719-988-61	DIODE 1SS355TE-17				R232	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
< IC >											
IC301	6-701-824-11	IC BD3870FS-E2				R233	1-216-853-11	METAL CHIP	470K	5%	1/10W
IC302	8-759-426-51	IC BA5417				R234	1-216-849-11	METAL CHIP	220K	5%	1/10W
IC901	6-709-213-01	IC NJM2387ADL3(TE2)				R235	1-216-833-11	METAL CHIP	10K	5%	1/10W
IC902	6-708-637-01	IC NJM2871BF33-TE2				R236	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
IC903	6-709-213-01	IC NJM2387ADL3(TE2)				R238	1-216-841-11	METAL CHIP	47K	5%	1/10W
< JACK >											
J301	1-563-857-31	JACK, HEADPHONE (LINE IN)				R240	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
< TRANSISTOR >											
Q130	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R242	1-216-821-11	METAL CHIP	1K	5%	1/10W
Q131	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R243	1-216-833-11	METAL CHIP	10K	5%	1/10W
Q230	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF				R244	1-216-821-11	METAL CHIP	1K	5%	1/10W
< JACK >											
R245	1-216-833-11	METAL CHIP	10K	5%	1/10W	R246	1-216-817-11	METAL CHIP	470	5%	1/10W
R247	1-216-813-11	METAL CHIP	220	5%	1/10W	R248	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R249	1-216-837-11	METAL CHIP	22K	5%	1/10W	R250	1-216-841-11	METAL CHIP	47K	5%	1/10W
R251	1-216-833-11	METAL CHIP	10K	5%	1/10W	R252	1-216-821-11	METAL CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description	Remark
R331	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			< ROTARY ENCODER >	
R333	1-216-841-11	METAL CHIP	47K	5%	1/10W			S813	1-480-223-11 ENCODER, ROTARY (VOLUME)
R334	1-216-853-11	METAL CHIP	470K	5%	1/10W			*****	*****
R335	1-216-821-11	METAL CHIP	1K	5%	1/10W				
R336	1-216-821-11	METAL CHIP	1K	5%	1/10W				
									MISCELLANEOUS
R337	1-216-821-11	METAL CHIP	1K	5%	1/10W				*****
R338	1-216-853-11	METAL CHIP	470K	5%	1/10W			58	1-834-138-21 CABLE, FLEXIBLE FLAT (18 CORE)
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W			214	1-834-139-21 CABLE, FLEXIBLE FLAT (10 CORE)
R341	1-216-821-11	METAL CHIP	1K	5%	1/10W			CN2	1-817-371-21 CONNECTOR, COAXIAL (F TYPE)
R342	1-216-841-11	METAL CHIP	47K	5%	1/10W				(ANTENNA (FM))
R901	1-216-833-11	METAL CHIP	10K	5%	1/10W			IDM1	A-1256-714-A IDM MODULE
R902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			LCD401	1-802-474-11 DISPLAY PANEL, LIQUID CRYSTAL
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W				
R904	1-216-833-11	METAL CHIP	10K	5%	1/10W			M950	1-787-396-11 FAN, D.C. (50 SQUARE)
R905	1-216-809-11	METAL CHIP	100	5%	1/10W			SP101	1-826-688-11 SPEAKER (6.6cm) (R-CH)
R906	1-216-809-11	METAL CHIP	100	5%	1/10W			SP201	1-826-688-11 SPEAKER (6.6cm) (L-CH)
R907	1-216-841-11	METAL CHIP	47K	5%	1/10W			▲ T901	1-480-224-11 POWER UNIT, AC
R908	1-216-821-11	METAL CHIP	1K	5%	1/10W			TU1	A-1256-754-A TUNER UNIT, DSP
R909	1-216-829-11	METAL CHIP	4.7K	5%	1/10W				*****
R910	1-216-805-11	METAL CHIP	47	5%	1/10W				ACCESSORIES
R911	1-216-821-11	METAL CHIP	1K	5%	1/10W				*****
R912	1-216-821-11	METAL CHIP	1K	5%	1/10W			1-754-102-31	ANTENNA, LOOP (AM)
R913	1-216-821-11	METAL CHIP	1K	5%	1/10W			1-754-537-11	ANTENNA, DIPOLE (FM)
R914	1-216-841-11	METAL CHIP	47K	5%	1/10W			1-793-184-23	CONNECTOR (F TYPE ADAPTOR) (FM)
R915	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			1-833-072-11	CORD (WITH PLUG) (SP-SP) (AUDIO)
								3-208-169-11	MANUAL, INSTRUCTION (ENGLISH)
R916	1-216-833-11	METAL CHIP	10K	5%	1/10W				
R917	1-216-829-11	METAL CHIP	4.7K	5%	1/10W			A-1259-028-A	REMOTE COMMANDER (RMT-CS3A)
R918	1-216-829-11	METAL CHIP	4.7K	5%	1/10W				(including BATTERY LID)
R919	1-216-833-11	METAL CHIP	10K	5%	1/10W				
R920	1-216-809-11	METAL CHIP	100	5%	1/10W				
R921	1-216-809-11	METAL CHIP	100	5%	1/10W				
R923	1-216-817-11	METAL CHIP	470	5%	1/10W				
R924	1-216-825-11	METAL CHIP	2.2K	5%	1/10W				
R925	1-216-817-11	METAL CHIP	470	5%	1/10W				
R926	1-216-825-11	METAL CHIP	2.2K	5%	1/10W				
R927	1-216-821-11	METAL CHIP	1K	5%	1/10W				
R928	1-216-841-11	METAL CHIP	47K	5%	1/10W				
R929	1-216-841-11	METAL CHIP	47K	5%	1/10W				
R940	1-216-841-11	METAL CHIP	47K	5%	1/10W				
*****									
A-1257-300-A TUNE BOARD, COMPLETE									
*****									
< RESISTOR >									
R830	1-216-821-11	METAL CHIP	1K	5%	1/10W				
R831	1-216-821-11	METAL CHIP	1K	5%	1/10W				
< ROTARY ENCODER >									
S812	1-480-223-11	ENCODER, ROTARY (TUNE/SELECT)							
*****									
A-1257-298-A VOL BOARD, COMPLETE									
*****									
< RESISTOR >									
R832	1-216-821-11	METAL CHIP	1K	5%	1/10W				
R833	1-216-821-11	METAL CHIP	1K	5%	1/10W				

## **REVISION HISTORY**

Clicking the version allows you to jump to the revised page.

Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.