

# Service Manual

AUTOMOTIVE CONSUMER ELECTRONICS

## CQ-RD115/110/105/100LEN

High-Power Cassette Player/RDS Receiver with Changer Control



< CQ-RD115LEN >

### Specifications\*

#### General

Power Supply : DC 12V(11V - 16V),  
Test Voltage 14.4V  
Negative Ground

#### Tone Controls

: Bass; ± 12dB at 100Hz  
Treble; ± 12dB at 10kHz

Current Consumption : Less than 2.0A (Tape mode, 0.5W 4-Speaker)

Maximum Power Output : 35W × 4 (at 4Ω)

Power Output : 14W × 4 (DIN45 324, at 4Ω)

Speaker Impedance : 4 - 8Ω

#### FM Stereo Radio

Frequency Range : 87.5 - 108MHz  
Usable Sensitivity : 6dBμV (S/N 30dB)

#### MW Radio

Frequency Range : 531 - 1,602kHz  
Usable Sensitivity : 28dB/μV (S/N 20dB)

#### LW Radio

Frequency Range : 153 - 279kHz  
Usable Sensitivity : 32dB/μV (S/N 20dB)

#### Cassette Player

Reproduction System : 4-track, 2-program stereo  
Tape Speed : 4.76cm/sec.

Frequency Response : 35 - 14,000Hz (Nomal)

35 - 17,000Hz (Metal)

Wow and Flutter : 0.12% (WRMS)

**Dimensions\*\*** : 178(W) × 50(H) × 150(D)mm

**Weight\*\*** : 1.5kg

\* Specifications and the design are subject to possible modification without notice due to improvements .

\*\* Dimensions and Weight shown are approximate.

### WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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Panasonic

(Recycled Paper)

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**DIMENSIONS****FEATURES**

- 20-Stations Preset (15-FM, 5-AM).
- Radio Data System (PS, AF, CT, PI).
- Electronic Control of Volume, Bass, Treble, Balance and Fader.
- Detachable Face Plate Security.

**FUSE**

Be sure to use a fuse of the specified rating (10A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

**MAINTENANCE**

To clean the exterior of this unit, use a soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvents.

**RADIO ALIGNMENT**

Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

**Note:**

This operating instruction manual is for four models CQ-RD115LEN, CQ-RD110LEN, CQ-RD105LEN and CQ-RD100LEN.

The differences between these models' are mentioned below. All illustrations throughout this manual represent model CQ-RD115LEN unless otherwise specified.

Items	MODEL	CQ-RD115LEN	CQ-RD110LEN	CQ-RD105LEN	CQ-RD100LEN
CD Changer Control	Yes	None	Yes	None	
LCD Color	Amber	Amber	Green	Green	
PRE OUT	Yes	None	Yes	None	

**Precautions (ISO Connector)**

- Wiring for the power connector conforms to the arrangement of standard ISO connectors.
- In case of some car types, the arrangement of connector may differ from the standard ISO as shown in Table 1, even though ISO connectors are adapted.

Table 1

Fig. 1 Pin No.	A4	A7
Car for standard ISO	Battery (permanent 12 V supply)	"IGN" or "ACC" (switched 12 V supply)

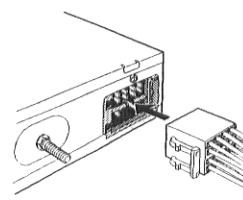
ISO-Standard

Fig.1

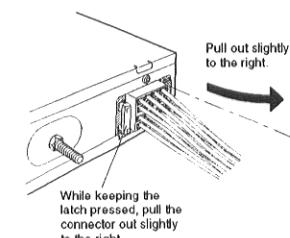
• Make sure that your car's ISO connector arrangement is the same as that of the ISO standard. (Table 1, Fig. 1) In this case (that is, your ISO connector arrangement is the same as that of the ISO standard), use your car's connector as it is.

• If it is different from that of the ISO standard, correct wire using the supplied power and speaker connector ③. (See pages 40 and 41.)

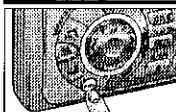
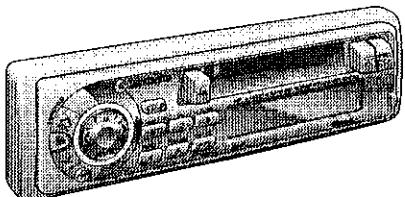
How to mount power and speaker connector ③



How to remove power and speaker connector ③



## Power and Sound Controls

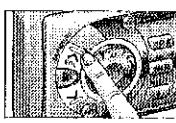


### Power

Turn the key in the ignition until the accessory indicator lights. Press PWR to switch on the power.

Press PWR again to switch off the power.

**Note:** When the PWR is switched on for the first time, a demonstration message appears on the display. To cancel this display, press PTY(DISP/CT).

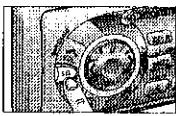


### Volume

Press VOL $\wedge$  or VOL $\vee$  to increase or decrease the volume.

 Volume Level  
0 to 40

Press VOL $\wedge$  or VOL $\vee$  for more than 0.5 second to sequentially change numeric levels on the display.



### Changing Audio Modes

Press SEL to change the audio mode as follows.

#### For CQ-RD115/RD105LEN

Regular Mode  $\rightarrow$  VOL  $\rightarrow$  BAS  $\rightarrow$  TRE  $\rightarrow$  BAL  $\rightarrow$  FAD  $\rightarrow$  LOUD

#### For CQ-RD110/RD100LEN

Regular Mode  $\rightarrow$  VOL  $\rightarrow$  BAS  $\rightarrow$  TRE  $\rightarrow$  BAL  $\rightarrow$  FAD

**Note:** This unit is equipped with anti-volume-hast circuit which serves as an automatic volume level adjuster so that you will not be deafened with sudden loud volume level.  
This system operates as follows. When PWR is first pressed to switch on, the volume level is low. After that, the volume level gradually returns to the level as the same as the one before turning off.  
Anti-volume-hast circuit is not effective when volume level is lower than position 20 at the display.

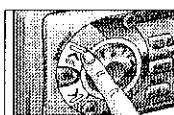


### Bass and Treble

Press SEL to change to the BASS (TREBLE) mode. Press VOL $\wedge$  or VOL $\vee$  to increase or decrease the bass/treble response.

 BAS+ 3dB  
-12 to +12

 TRE+ 3dB  
-12 to +12



### Balance

Press SEL to change to the BALANCE mode. Press VOL $\wedge$  or VOL $\vee$  to shift the sound volume to the right or left speakers.

 BAL L 2  
1 to 15

 BAL ENT

 BAL R 2  
1 to 15

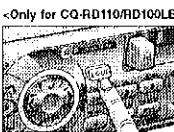
### Fader

Press SEL to change to the FADER mode. Press VOL $\wedge$  or VOL $\vee$  to shift the sound volume to the front or rear speakers.

 FAD F 3  
1 to 15

 FAD ENT

 FAD R 3  
1 to 15



### Tone Enhancement

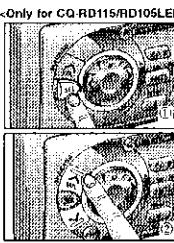
(Only for CQ-RD110/RD100LEN)

- Press SEL to enhance bass and treble tones when listening at low or medium volume.

 LOUD ON

- Press LOUD again to cancel.

 LOUD OFF



### (Only for CQ-RD115/RD105LEN)

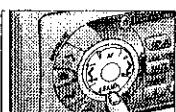
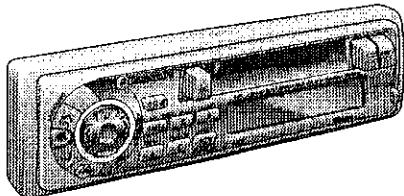
- ① Press SEL to change to the LOUD mode.

- ② Press VOL $\wedge$  or VOL $\vee$  to switch the tone enhancement on or off.

 LOUD ON

 LOUD OFF

## Radio Basics



### To change Tuner Mode

Tuner mode is selected if BAND is pressed.



**Caution:** In tape mode, eject the tape to select the previous mode (Tuner or CD+C mode). When CD+C mode is selected, press BAND.



### Selecting a Band

Press BAND to select the bands as follows.

\*ST\* indicator lights when the station is broadcasting in stereo.

FM1  $\rightarrow$  FM2  $\rightarrow$  FM3  $\rightarrow$  AM(LW/MW)



### Manual Tuning

Press TUNE $<$  or TUNE $>$  to move to a lower or higher frequency.





### Seek Tuning

Press and hold TUNE $<$  or TUNE $>$  for more than 0.5 second, then release. The radio automatically stops at the next station.

### Preset Station Setting

FM1, FM2, FM3 and AM (LW/MW) can save maximum 5 stations each in their preset station memories.



### Manual Station Preset

- ① Press BAND to select a desired band.

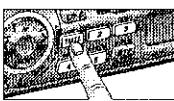
- ② Use manual or seek tuning to find a station that you want to save into the memory.

- ③ Press and hold one of the preset buttons 1 to 5 for more than 2 seconds until the display blinks.

Repeat the process to set other stations from the FM to AM bands.

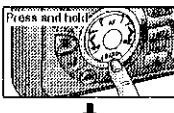
 FM1 8750 -Preset Channel Indicator

**Note:** You can change the memory setting by repeating the above procedure.



### Tuning in a Preset Station

Press any of the buttons 1 to 5 to tune in the station preset.



### Auto Station Preset

Select a band, press and hold BAND(AUTO+P) for more than 2 seconds.

- The five strongest available stations will be automatically save in the memory on preset buttons 1 to 5.

- Once saved, the preset stations are sequentially scanned for 5 seconds.

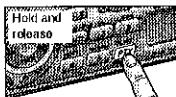
- Press the appropriate preset button for the station you want to listen to.

**Caution:** For safety reasons, do not attempt to program while driving.

## Radio Basics continued

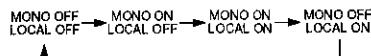
### MONO/LOCAL Selection

- Much interference is reduced during a weak FM stereo broadcast when MONO is on. (Only for FM mode)
- Searching stops automatically at a strong wave station only when LOCAL is on.



#### ① During FM broadcasts

Press and hold PTY(MONO/LOC) to change the mode as follows. Release your finger at the desired mode.



#### ② During AM broadcasts

Press PTY(MONO/LOC) for more than 2 seconds to switch on or off the LOCAL mode as follows:



## RDS (Radio Data System) Reception

EON-CT and PTY may not be available in some areas. (Future function)

### AF (Alternative Frequency)

When receiving condition becomes poor, a station broadcasting with the same program will be automatically selected.

### EON (Enhanced Other Networks)

When receiving RDS station with Enhanced Other Networks (EON) service available, this unit operates to renew the built-in frequency lists of the RDS station you are listening to, and those of the preset RDS stations, thus enhancing the AF function.

### PS (Program Service Name)

When RDS broadcast station is tuned in, the name of the station will be shown.

### PI (Program Identification)

If the RDS broadcast station is preset and its reception is poor when it is called, automatic seek (PI Seek) will start to tune in to the same program.

### PTY (Program Type)

Program type identification signal.

Example : News, rock, classical music, etc.

### REG(Region)

When REG is on, the selection of alternative frequency changeover is exclusively limited to the reception of broadcasting stations which transmit the same program and the same program identification. This should be used mainly in the city where you drive frequently. (See page 26 about REG)

When REG is off, stations that broadcast the same program can be received. If possible, if those stations are in poor receiving condition, another station broadcasting with a different program can be automatically received. This should be used mainly in areas away from your area where you usually drive.

### TP Indicator

Illuminates when the traffic information broadcast station is tuned in.

### EON Indicator

Illuminates when the Enhanced-Other-Network-information broadcast station is tuned in.

### RDS Indicator

Illuminates when the RDS broadcast station is tuned in.

### TA ON Indicator

Lights in TA ON mode.

### TA OFF Indicator

Lights in TA OFF mode.

### PTY Indicator

Lights in PTY Mode.

### AF Indicator

Lights in AF mode.



Band and Frequency or PS Indicator

Preset Channel Indicator

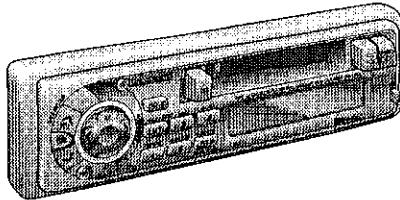
Indicates a preset channel number.

Note: When you're in "AF ON" mode, auto preset memory only works for RDS station. When in "TA ON" mode, it only works for TP stations. To make auto preset for ordinary stations, cancel AF mode and switch to TA off in advance.

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## RDS (Radio Data System) Reception continued



### A. Basic Operation in RDS Reception (PS, AF, CT, PI)



#### RDS Reception

While receiving the band FM1, FM2 or FM3, press AF.

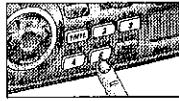
- The mode changes to AF ON or AF OFF.

BBC R4 1

- Select AF ON to use the AF network of an RDS station. Best station research is activated at the same time.
- Select AF OFF if the AF network of an RDS station is not necessary.

#### What is best station research?: For reference

If the called frequency is not in good receiving condition, this function selects the frequency of the best receiving condition from the AF list of called stations. It also checks the present condition of reception of each station on the AF list, learns it, and stores it in the memory. (No sound during this process)



#### Memorized RDS seek tuning

When you recall the preset RDS station from the memory, and if its reception is poor, PI seek function is available.

#### PI seek:

PI SEEK

- Press the same preset button once again which you are listening to. Then, Best Station Research function is activated to select the optimum available frequency, however if it fails to do this because of its poor reception, PI seek function operates to automatically tune in the same preset program. Display shows "PI SEEK".
- To cancel PI seek, switch AF off or press the same preset button again.

The operating condition of PI seek function depends on the ON and OFF position of the REG switch.

ON : Searches for a station broadcasting the same program.

OFF : Searches for a generically linked network which may be airing a different program.



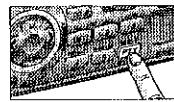
### Region (REG) Switching

- Press and hold AF for more than 2 seconds in AF mode to alternately select REG ON and REG OFF.
- If AF/REG is pressed for more than 2 seconds in AF OFF mode, AF goes ON and so does REG at the same time.

REG ON      REG OFF

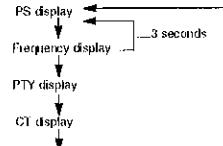
- If there is no station that broadcasts the same program while REG is OFF, the alternative frequency of a station that may broadcast a different program will be picked up.

Note: To receive the same program at all times, keep REG ON. If you keep REG OFF, there is a higher possibility of returning to an AF station in better receiving condition.



### Changing Display

The display changes as follows when PTY(DISPLAY/CT) is pressed. (Frequency display continues for only 3 seconds, returning to PS display after that.) (while RDS station receiving)



### Clock Time (CT) System

The CT (24-hour) system may not properly operate in areas where HDS CT service is not available. Once CT service is received, the CT system keeps operating. "NO CT" is displayed in areas where no CT service is available.

CT 1259

#### Note:

If CT display is kept on, it remains on even if PWR and ACC are turned off and back on again.

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## RDS (Radio Data System) Reception continued

### B. TP Reception



#### Select traffic information (TA ON) mode

Press TA to switch on and keep it there to listen to traffic information. Press TA again to switch off when no traffic information is needed. Each time press TA, either TA ON or TA OFF indicator lights alternately.

When receiving the traffic information broadcast station (TP station): Wall for another station that broadcast traffic information.

<TA OFF> → <TA ON>  
BBC R4 → BBC R4

When receiving a station other than TP stations (including the EON station):

A traffic information station is automatically searched for. And the radio automatically stops at the next available TP station.

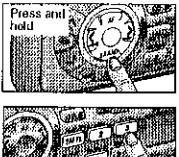
<TA OFF> → <Search stops at TA ON>  
FM 100.0 → BBC R4



#### TP Seek Tuning

Press and hold TUNE<-> or TUNE<→> for more than 0.5 second, then release. The radio automatically stops at the next available TP station.

<TP SEEK MODE> → BBC R4 → BBC R1



#### Auto TP Station Preset

- Press and hold BAND/AUTO-P for more than 2 seconds when TA is on. The 5 strongest available TP stations are automatically saved in the memory on the preset buttons 1 to 5. Once saved, the preset stations are sequentially scanned for 5 seconds.

- To recall memorized TP stations, press any of the preset buttons 1 to 5 you want to listen to. Then Best Station Research function is activated to automatically select the strongest available frequency for the TP station through the built-in frequency lists.

<TP PRESET> → BBC RENT



#### Receiving TA (Traffic Announcement) only (Muting TA on)

For Muting TA ON, select mode FM1, FM2, or FM3, then take the following steps.

Press and hold TA for more than 2 seconds. Then Traffic Announcement (TA) function is activated to operate, allowing you to listen to only Traffic Program whenever it is available. Other program will be cut off. "RDS", "TP" and "TA ON" indicators light. Display shows the PS. For details of the display, refer to page 26.

##### Muting TA ON canceling (Muting TA on → TA on)

Select either one of the following steps.

- Press TA again.

- Press VOL↑ to increase the volume level.

#### TP Auto Search

If receiving condition is poor when TA is on during muting and if there is no other alternative frequency in the same network, a traffic announcement station in good receiving condition is automatically searched for.

#### Tape/CD+C TA on

[Listening to traffic information in tape or CD+C (Only for CQ-RD115/RD105LEN mode)]

Press TA during tape or CD changer mode.

- TA ON mode is selected. While listening to the source in that mode, wait for traffic announcement to begin.

- In tape IA mode, PS (frequency) is displayed, and TA ON, RDS, etc. etc. light.

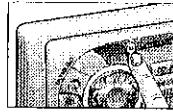
- In CD changer IA mode, TA ON, RDS, TP light.

<TAPE>

BBC R4 ↑  
Information ↑ Information  
start ↓ end ↓

<CD CHANGER>

BBC R4 ↑



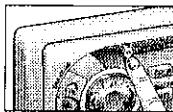
#### Switching from TA ON Mode to TA OFF Mode

Select either one of the following steps.

- Press TA when TA is on.

- Press TA for more than 2 seconds when Muting TA is on.

- Press TA when tape/CD+C (Only for CQ-RD115/RD105LEN) TA is on.



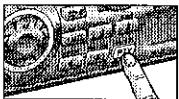
#### WHAT PROVIDES EON CAPABILITIES

EON lets the radio take advantage of much more RDS information than before. It constantly updates the AF lists for all of the presets, not just the one currently tuned in. So even if you switch presets far from home, you will receive an alternative frequency for the same station, or another station carrying the same program, when such exists. EON also keeps track of locally available TP stations for quick.

## RDS (Radio Data System) Reception continued

### C. PTY Reception

(There are some areas where PTY service may not be available because the service is a local function.)



#### Switching to PTY Mode

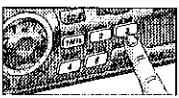
Press PTY while receiving the band FM1, FM2 or FM3.

- PTY display mode is selected, and the PTY of the broadcast now received is displayed. At this time "PTY" lights. If a program type is not available for the RDS station you received, "NO PTY" is displayed.

CLASSICS

- "NO PTY" is displayed if there is no corresponding program type.

NO PTY



#### Searching for PTY

- Call the desired station from among those presets in the preset number buttons 1 to 5. Then, the preset PTY and that preset number are displayed for 5 seconds. ("MUSIC" has not been preset.)

POP M → NEWS 1

- While the desired type from 5 presets is displayed, take either of the following two steps.

- A) Press the same preset button again.

- B) Press TUNE<-> or TUNE<→>.

- If the desired PTY station is available, it is directly received. If it is not, "NO PTY" blinks and the radio returns to the station that was received before the search.

- To cancel, press the same button again.

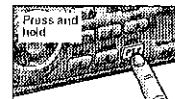
NEWS 1 → NEWS 1

Note: If "MUSIC" is displayed, only above step (B) can be taken for PTY search.

#### Preset No. PROGRAM TYPE

#### Display Example

1	NEWS	NEWS 1
2	SPEECH (except NEWS and SPORTS)	SPEECH 2
3	SPORTS	SPORT 3
4	POP MUSIC	POP M 4
5	CLASSICS	CLASSICS 5



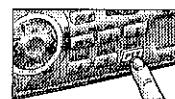
#### Changing PTY Display Language

Press and hold PTY for more than 2 seconds during PTY mode.

The language changes from English to Swedish and vice versa each time the button is pressed.

Press and hold PTY for more than 2 seconds.

NEWS 1 → NYMETR 1  
<English>                    <Swedish>



#### Canceling of PTY Mode

Press the PTY.

- The set returns to the state existing before PTY mode while the receiving frequency remains unchanged.

- PTY display disappears and CT is displayed (Refer to page 25).

CT 12:19

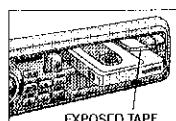
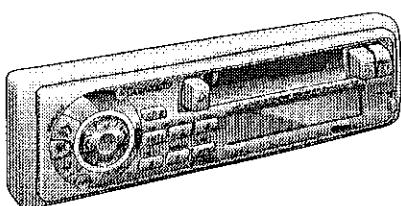
#### Emergency Announcement Reception

(Some areas are not covered by emergency announcement service.)

If an emergency announcement is broadcast during tape/CD+C, the radio is automatically selected to receive the emergency announcement. "ALARM" blinks.



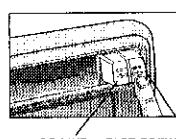
## Cassette Tape Player Basics



### Loading a Cassette

Gently insert a cassette with the exposed tape facing to the right until the mechanism captures it, and playback starts.

**TAPE** ▲ PROGRAM INDICATOR



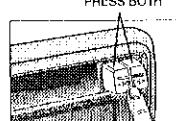
### Rewind and Fast Forward

Press and engage either ▲ (REW) to rewind or ▼ (FF) to fast forward the tape.

**TAPE** ▲

To stop rewind or fast forward, gently press the button that is not in use. The tape will resume playing from that position.

PRESS BOTH



### Changing Sides

Simultaneously press ▲ (REW) and ▼ (FF) at the same time to switch to the program on the other side of the tape.

The display changes to indicate which program is playing.

**TAPE** ▲

**TAPE** ▼

TOP SIDE PLAYING

BOTTOM SIDE PLAYING

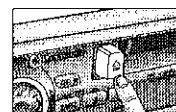


### Metal Tape Mode

Press ▲ (MTL) when playing metal or chromium dioxide (CrO<sub>2</sub>) tapes. To turn it off, press ▲ (MTL) again.

**TAPE** ▲

Note: Playing non-metal tapes in MTL mode causes high frequency imbalance, which affects tone quality.



### Stopping and Ejecting the Tape

When the ▲ button is pressed in, the tape is ejected, and resume the previous mode.

Note: Always remove the cassette when you are done using the cassette player. This will prolong the life of your tape.

**Caution:** To maintain your cassette player in top condition, avoid using tapes that are longer than 90 minutes (C-90).

90

30

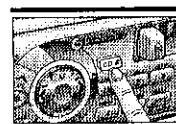
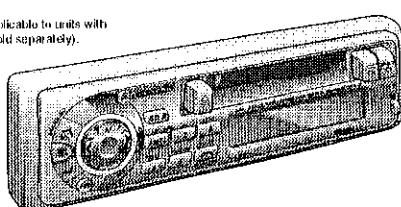
31

## CD Changer Basics

<Only for CQ-RD115/RD105LEN>

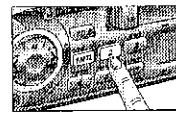
**Note:**

CD changer controls are applicable to units with optional CD changer unit (sold separately).



### To start the CD Changer

While CD changer is connected, press CD/C to change into the CD changer mode and playback starts automatically.

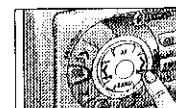


### Selecting a Disc

Press V/DISC or DISC^ to select discs in descending or ascending order.

**DISC** ▲ 2-01

Then, the selected disc will start to play from the first track.



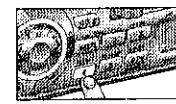
### Selecting a Track

- Press TRACK ▶ once to go to the next track.
- Press ▲ TRACK once to play from the beginning of the current track.
- Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.



### Searching a Track

- Press and hold TRACK ▶ or ▲ TRACK for more than 0.5 second to activate fast forward or reverse through a track.
- Release TRACK ▶ or ▲ TRACK to resume the regular CD play.

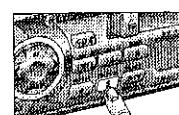


### Repeating a Track

- Press 4 (REPLAY) to repeat the current selection.



- Press 4 (REP/FA) again to cancel.

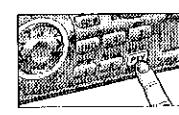
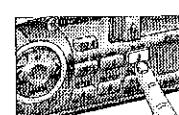


### Random Selection

- Press 5 (RANDOM). A random selection of music is played from all available CDs.

**RANDOM**

- Press 5 (RANDOM) again to cancel.

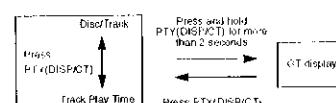


### Scanning Tracks

- Press 3 (SCAN). The display blinks and the first 10 seconds of each track on the discs play in sequence.
- Press 3 (SCAN) again to cancel.

### Changing the Display

Press PTY(DISP/CT) to change the display in sequence as follows.



### Error Display Messages

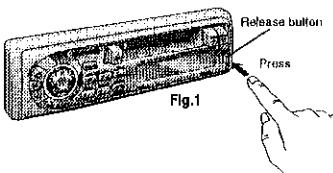
	Displays when the compact disc is dirty or upside down. Selects the next available compact disc.
	Displays when compact disc is scratched. Selects next available compact disc.
	Displays when the unit stops operating for some reason. Press RESET on the CD Changer (optional).
	Displays when there is no disc in the magazine.

## Anti-Theft System

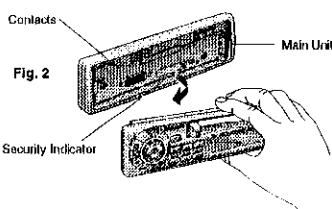
This unit is equipped with a removable face plate. By removing this face plate, the radio becomes totally inoperable. The security indicator will blink.

### To Remove the Removable Face Plate

- ① Switch off the power.
- ② Press the release button (). The removable face plate will be released.



- ③ Remove the removable face plate by pulling on the right side of the unit. Place the removable face plate in a supplied case.



### Security Indicator

The security indicator blinks when the removable face plate is removed from the unit.

#### Activate and Security Indicator

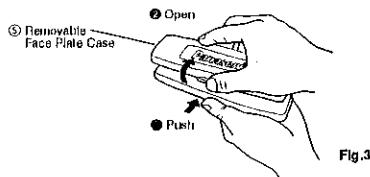
1. Press and hold SEL for more than 2 seconds when the power is on. "LED ON" is displayed, and the security indicator turns on.

(Default: The security indicator is on.)

2. To check whether the unit is set in the LED ON mode, make sure that the security indicator blinks when the removable face plate is removed.

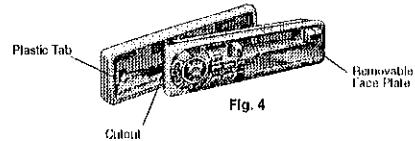
Display	Security Indicator
LED ON	Blinks
↓	(Press SEL for more than 2 seconds.)
LED OFF	OFF

- ④ As shown in Fig.3, gently push the lower side of the case and open its cover. Keep the removable face plate in the case. Then, you can bring the plate safely.

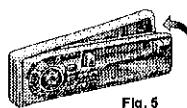


### To install the Removable Face Plate

- ① Slide the left side of the removable face plate in place.



- ② Press the right end of the removable face plate until it locks in place.



#### Caution:

1. Before removing the removable face plate, make sure the power is off.
2. This removable face plate is not water-proof. Do not expose it to water or excessive moisture.
3. Do not remove the removable face plate while driving your car.
4. Do not place the removable face plate on the dashboard or nearby areas where the temperature rises to high levels.
5. Do not touch the contacts on the removable face plate or on the main unit, because this may result in poor electrical contacts.
6. If dirt or other foreign substances get on the contacts, wipe them with clean, dry cloth.

## Installation

### Preparation

- Before installation, check the radio operation with an antenna and speakers.
- Disconnect the cable from the negative (-) battery terminal (see caution below).

#### Caution:

For installation to a car with a trip or navigational computer, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. For this type of car, battery could not be disconnected. Therefore, extra care should be taken to prevent short circuiting.

### In-dash Installation

#### Installation Opening

In-dash installation can be done if the car's dashboard has an opening for this unit as shown in Fig. 1. The car's dashboard should have a thickness of 4.5mm - 6mm to install the unit.

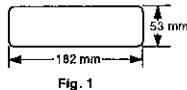


Fig. 1

### Installation Precautions

This equipment, if possible, should be installed by a professional engineer.

In case of difficulty, please consult your nearest authorized Panasonic Service Center.

1. This system is to be used only in a 12-volt, DC battery system (car) with negative ground.
2. Follow the electrical connection on pages 40, 41 carefully. Failure to do so may result in damage to the unit.
3. Connect the power lead after other connections are made.
4. Be sure to connect the YELLOW lead to the positive terminal (+) of the battery or fuse block (BAT) terminal.
5. Insulate all excess wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

### Supplied Hardwares

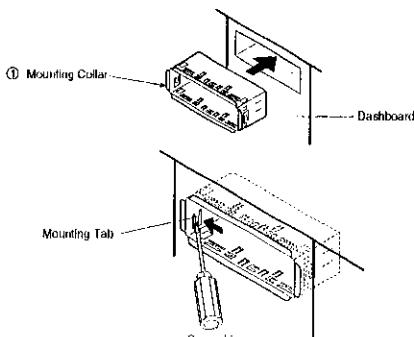
No.	Item	Diagram	Qty
①	Mounting Collar		1
②	Mounting Bolt (5 mm)		1
③	Power and Speaker Connector		1
④	Dismounting Plate		1
⑤	Removable Face Plate Case		1

### Installation Procedures

Note: Disconnect the cable from the negative (-) battery terminal.

1. Secure the Mounting Collar ①.

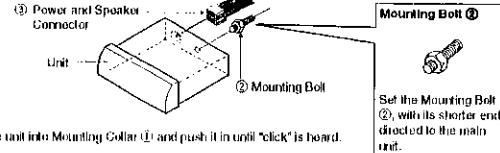
Insert Mounting Collar ① into the car's dashboard, and bend mounting tabs outward with a screwdriver.



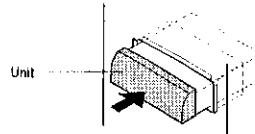
2. Secure the rear of the unit.

- a) Check the electrical connection by referring to this operating instructions.
- b) Connect the Mounting Bolt ②, using a suitable wrench.

- c) Insert a standard ISO connector or Power and Speaker Connector ③ to the unit. (See page 4)



- d) Insert the unit into Mounting Collar ① and push it in until "click" is heard.

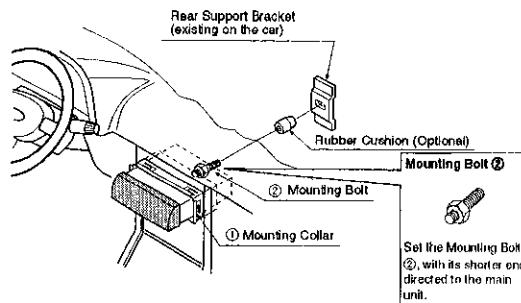


- e) Secure the rear of the unit to the car by either of the two recommended methods on the next page.

## Installation continued

### Using the Rubber Cushion (Optional)

If there is an existing Rear Support Bracket on the Fire Wall of Car, Cover Mounting Bolt ② on the rear of the unit with Rubber Cushion (Optional), and mount it into the existing Rear Support Bracket.

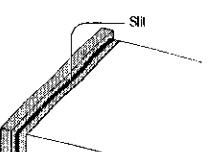


3. After installation reconnect the negative (-) battery terminal.

### To remove the trim plate (for Japanese Cars)

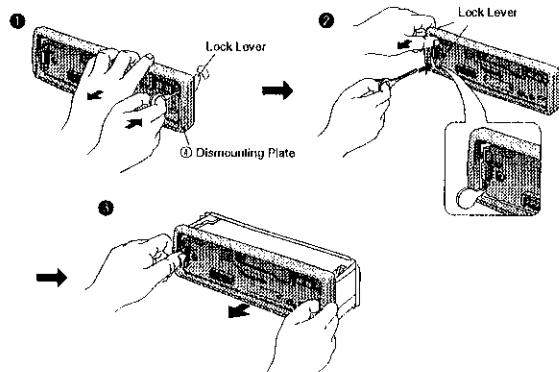
You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your dealer.

To mount this unit on a Japanese car, first cut the 9 slits in back of the trim plate with side-cut pliers, remove the trim plate, then mount this unit.



### To Remove the Unit

- Remove the removable face plate. (See page 34.)
- Pull out the right side of the unit while pushing the lock lever using Dismounting Plate ④. (Fig. ①)
- Pull out the left side of the unit while pushing the lock lever using Dismounting Plate ④. (Fig. ②)
- Remove the unit pulling with both hands. (Fig. ③)



Note: Do not lose the Dismounting Plate. It will be needed to remove the unit from the car's dashboard.

## Electrical Connection

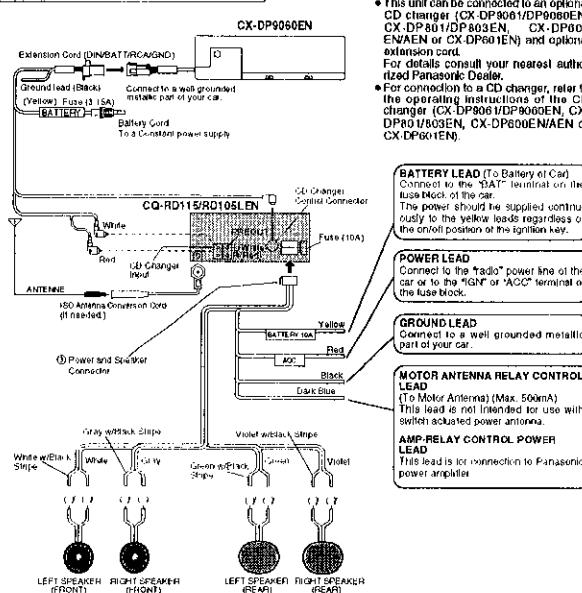
### <CQ-RD115/RD105LEN>

- This unit can be connected to an optional CD Changer (CX-DP9060EN). For details consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP9060EN).

#### Caution:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from the car chassis to prevent a possible short circuit. Bundle all cables and keep cable terminals free from touching any metal parts.

**Example:**  
In case of using the supplied power and speaker connector



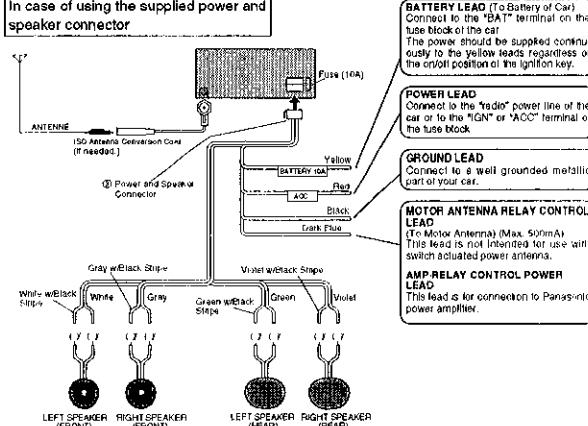
### <CQ-RD110/RD100LEN>

#### Caution:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove the covering of the leads about 5 mm long from their end before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from the car chassis to prevent a possible short circuit. Bundle all cables and keep cable terminals free from touching any metal parts.

#### Example:

In case of using the supplied power and speaker connector

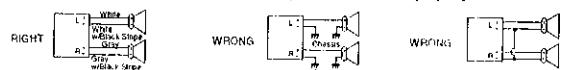


## Speaker Connections

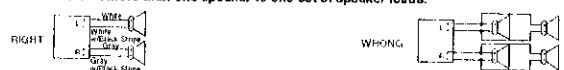
**Caution:**

1. The connections for the speakers should be exclusive as follows:
  - Grounding should be exclusive. Do not share the grounding with other speakers.
  - Do not connect the ground lead of the speakers with the chassis. Otherwise, the unit may be damaged.
2. The speakers for this unit should be able to handle more than 35W audio power. With an optional amplifier, the speakers need the maximum output power of the amplifier. Small input ratings may cause the speakers damaged.
3. The speaker impedance should be 4 - 8 ohms. If the impedance is too large or too small, it affects the output and may cause damage to the speakers or this unit.
4. Do not use 3-way type speaker system having a common earth lead. Never connect the speaker cord in the body of the car. This unit uses the BTCL circuit, so each speaker should be connected separately using parallel vinyl insulated cords.
5. The speaker cords and the power amplifier unit should be kept away (about 30cm apart) from the antenna and antenna extension cord.
6. Follow the connection diagram below carefully. Failure to do so may cause damage to both unit and speakers.

- Unit will be damaged if speakers (Front, Rear) are not connected properly.



- Do not connect more than one speaker to one set of speaker leads.



## TERMINALS DESCRIPTION

&lt; Main Block &gt;

## ■ IC401 : YESAM118

Pin No.	Port	Description	I/O	Vol.(V)
1	INTC	Specification setup	I	4.8
2	SD FM	B/S detection	I	0.5
3	SD AM	B/S detection	I	0.5
4	AVSS	Ground	—	0
5	AF MUTE	AF mute output	O	5.0
6	MUTE	Mute output	O	0
7	AVREF	+5V power supply	—	5.0
8	LCD DATA I	LCD data input	I	4.7
9	LCD DATA O	LCD data output	O	0
10	LCD CLK	LCD clock	O	0
11	CD.C.DATA	CD changer data (Note2)	I	0
12	NC	No connection	—	—
13	CD.C.CLK	CD changer clock (Note2)	I	0
14	REMOTE	CD changer remote cont. (Note2)	O	5.0
15	PLL CE	PLL chip enable	O	0
16	PLL DATA I	PLL data	I	5.2
17	PLL DATA O	PLL data	O	0
18	PLL CLK	PLL clock	O	5.0
19	LCD CE	LCD chip enable	O	0
20	NC	No connection	—	—
21	PW CNT	System power control	O	5.0
22~26	—	Not used	—	—
27	F/R	Tape forward/reverse detection	I	4.8
28	NC	No connection	—	—
29	ST	FM stereo detection	I	0
30~32	—	Not used	—	—
33	VSS	Ground	—	0
34	MOB	Not used	—	—
35	LED	Security LED	O	0

Pin No.	Port	Description	I/O	Vol.(V)
36	CLK	Electronic volume clock	O	5.3
37	DATA	Electronic volume data	O	5.3
38,39	NC	No connection	—	—
40	TEL MUTE	(+5V pull up)	—	5.1
41	DOLBY	Not used	—	—
42	MTL	Metal tape mode setting	O	0
43,44	—	Not used	—	—
45	A/B	Tape side detection	I	5.1
46	LOAD	Tape loading detection	I	4.9
47~58	—	No connection	—	—
59	RDS DATA	RDS data input	I	0
60	RESET	Reset input	I	4.6
61	BATT	Battery level detection	I	5.3
62	BZIN	(+5V pull-up)	—	4.8
63	RDS CLK	RDS clock input	I	2.6
64	CHG STB	CD changer strobe (Note2)	I	0
65	ACC	ACC level detection	I	5.0
66	MOD	(Connecting to ground)	—	0
67	NC	(Connecting to ground)	—	0
68	VDD	+5V power supply	—	5.0
69	X2	Crystal oscillator	—	2.3
70	X1	Crystal oscillator	—	1.7
71	VSS	Ground	—	0
72	NC	No connection	—	—
73	VSS	Ground	—	0
74,75	AVDD	+5V power supply	—	5.0
76~78	—	(Connecting to ground)	—	0
79	INTA	Specification setup	I	(#1)
80	INTB	Specification setup	I	4.8

**Note 1 :** Voltage measurements are with respect to ground, with a voltmeter (Internal resistance : 10M ohms).

**Note 2 :** CQ-RD115/105LEN only.

**Note 3 :** (#1)

0 V : CQ-RD115/105LEN

5.0 V : CQ-RD110/100LEN

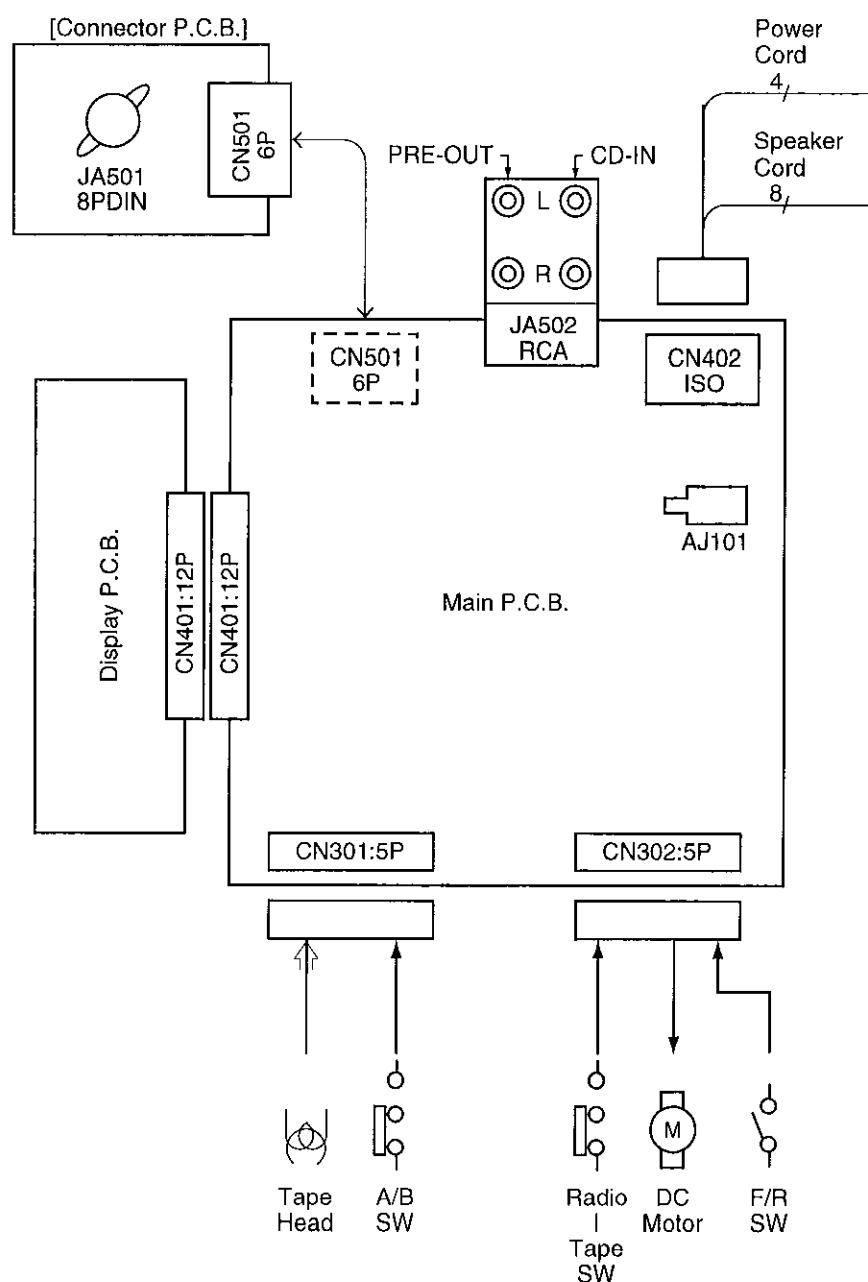
&lt; Display Block &gt;

## ■ IC601 : YEAMLC75854T

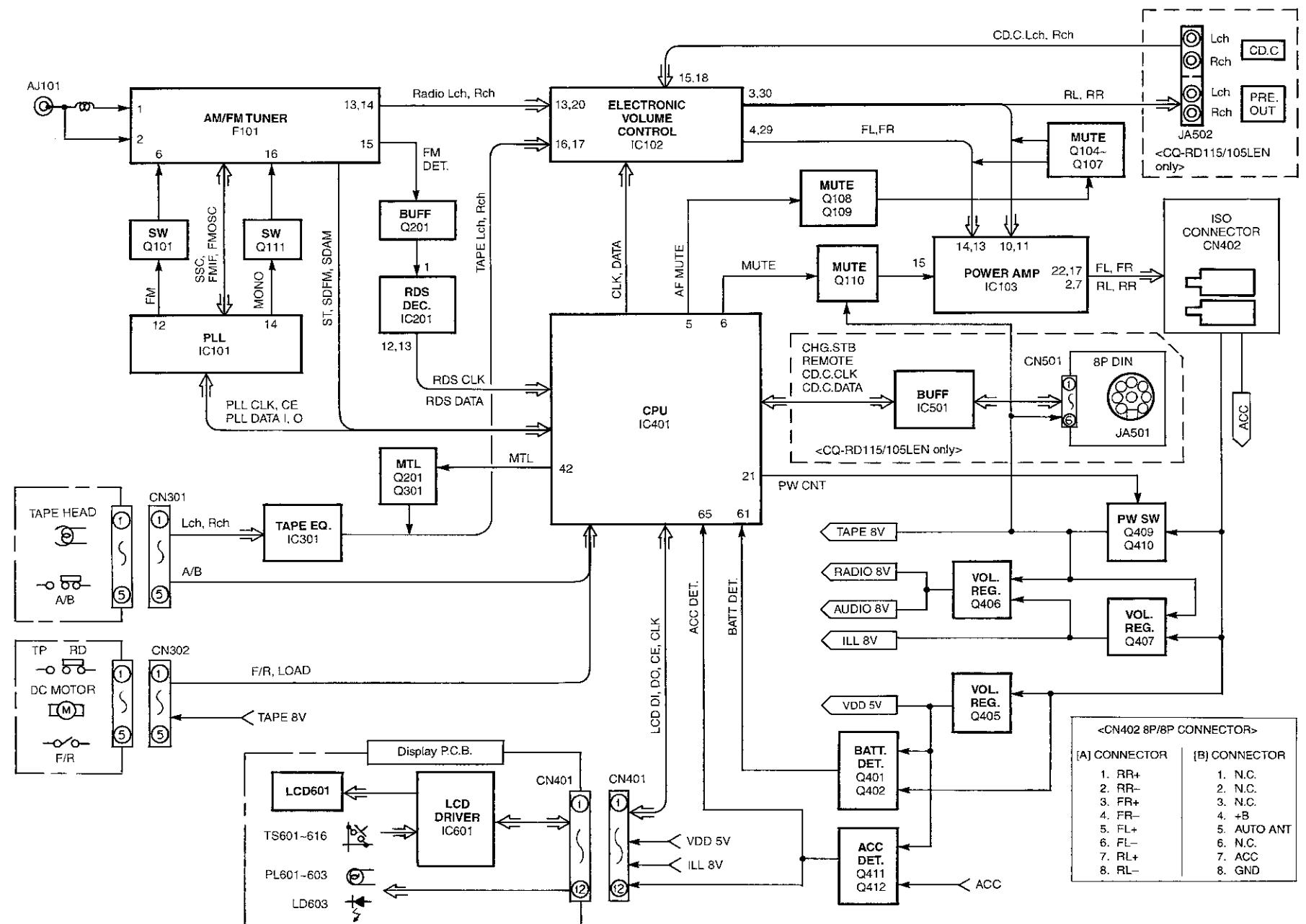
Pin No.	Port	Description	I/O	Vol.(V)
1~4	—	No connection	—	—
5~39	S5~39	LCD segment data	O	2.5
40~43	COM1~4	LCD common	O	2.5
44~49	KS1~6	Key data output	O	0.9
50~54	KI1~5	Key data input	I	0
55	TEST	(Connecting to ground)	—	0
56	VDD	+5V power supply	—	5.1
57	VDD1	Ground through capacitor	—	3.3

Pin No.	Port	Description	I/O	Vol.(V)
58	VDD2	Ground through capacitor	—	1.7
59	VSS	Ground	—	0
60	OSC	CR oscillator	—	3.9
61	DO	Key data output	O	4.4
62	CE	Chip enable	I	0
63	CLK	LCD clock	I	0
64	DI	LCD data input	I	0

## WIRING DIAGRAM

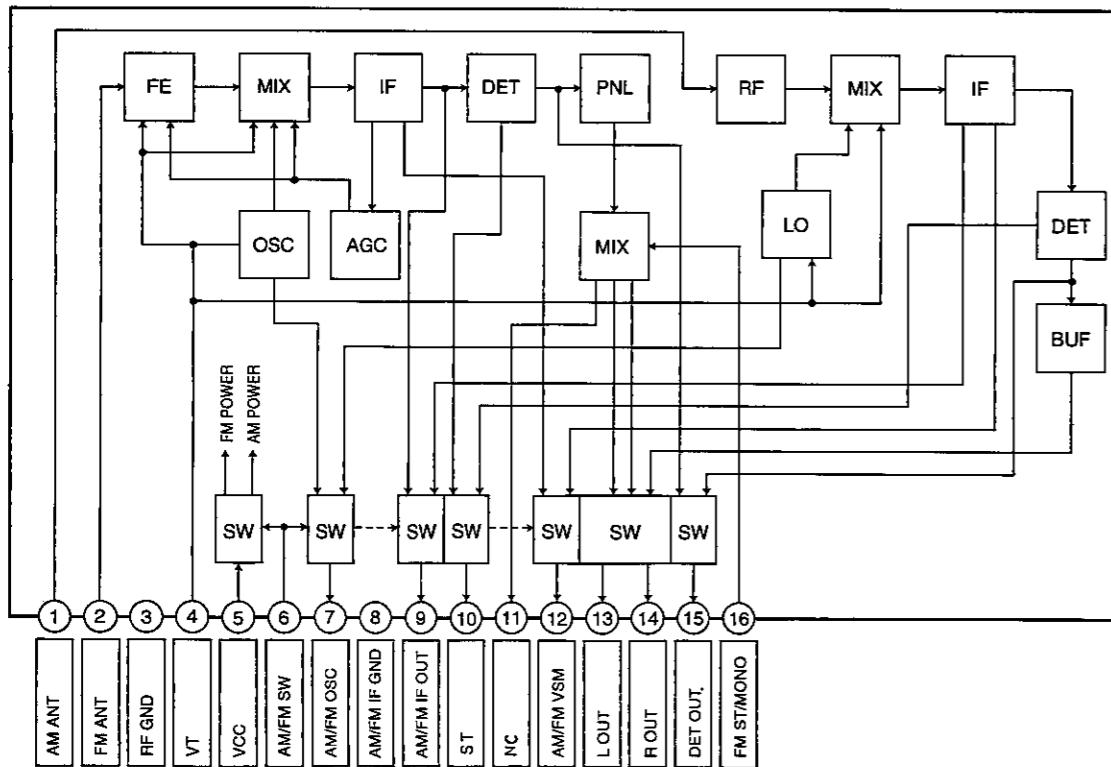


## BLOCK DIAGRAM MODELS CQ-RD115/110/105/100LEN

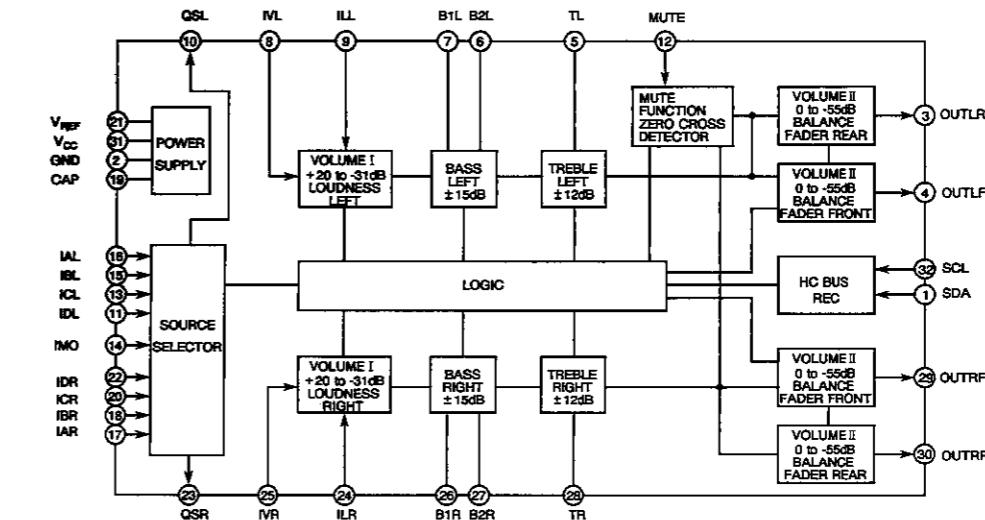


## PACKAGE AND IC BLOCK DIAGRAM

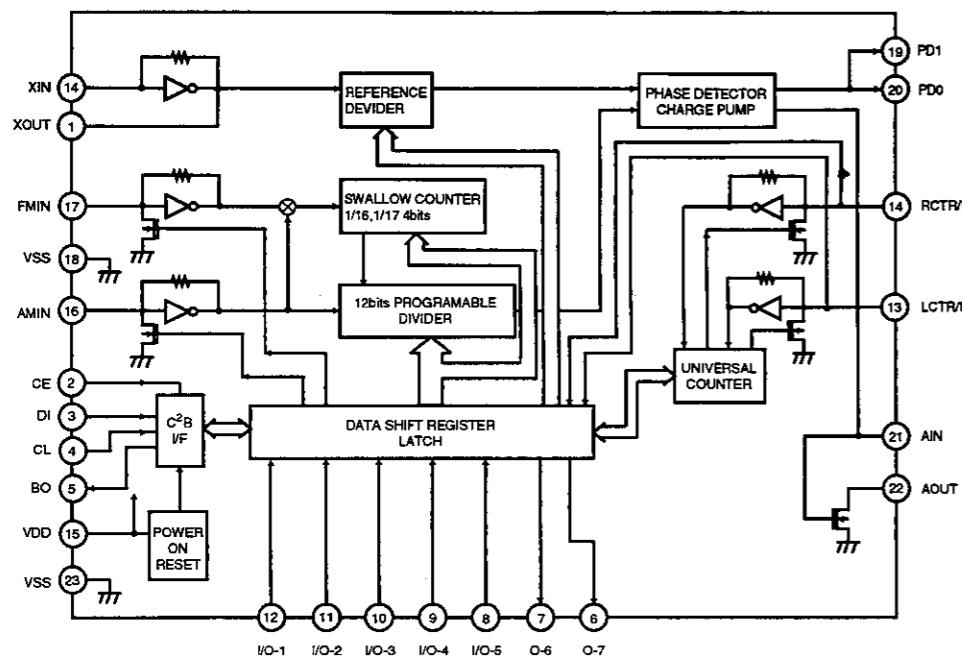
### ● F101 YEAU03E052R



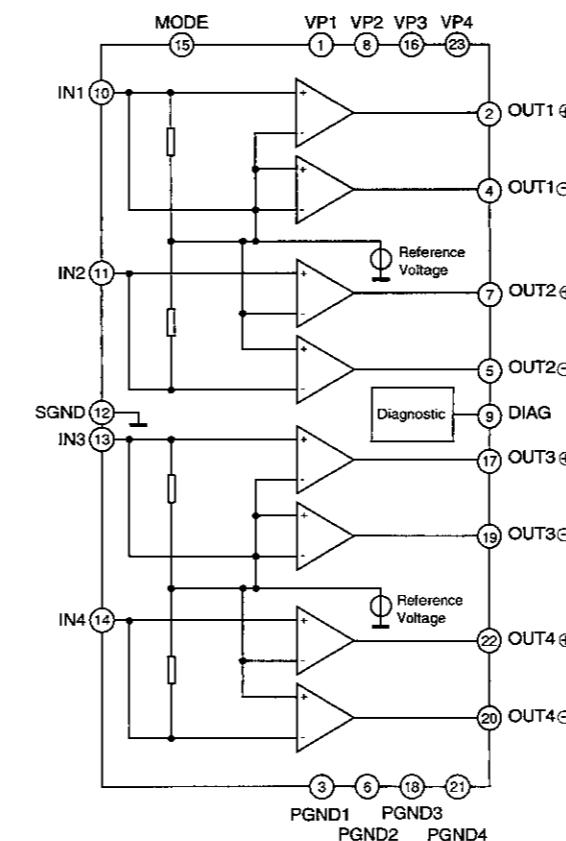
### ● IC102 YEAMEA63220TT



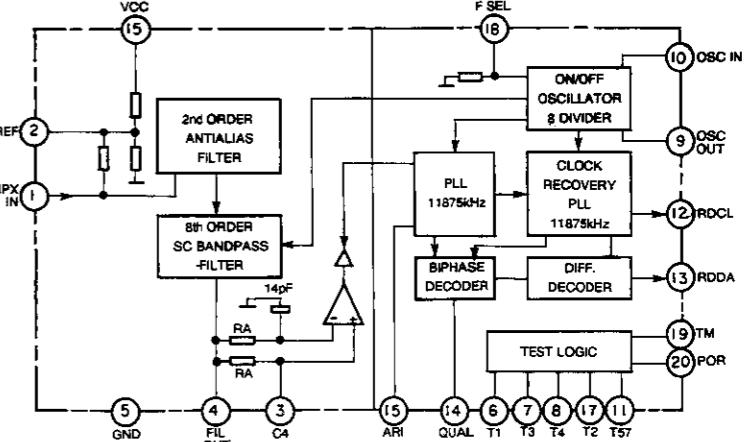
### ● IC101 YEAMLC72146T



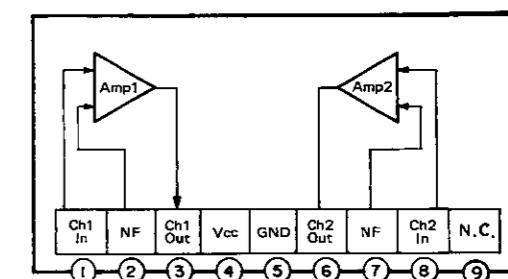
### ● IC103 YEAMTD8568Q



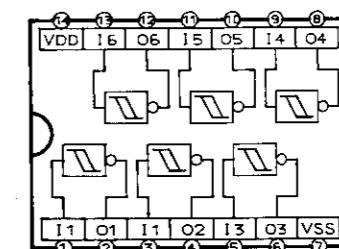
### ● IC201 YEAMDA7331D



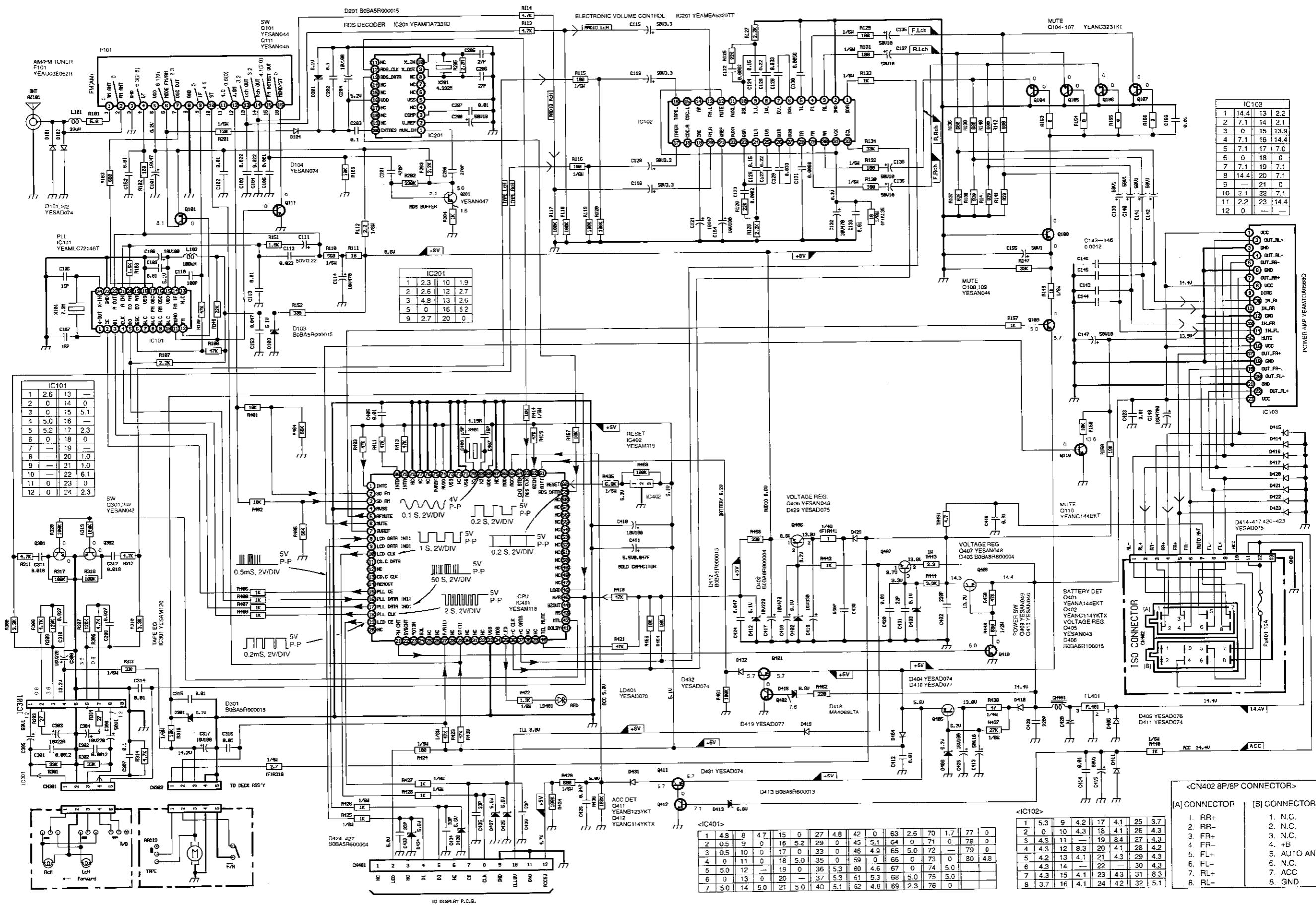
### ● IC301 YESAM120



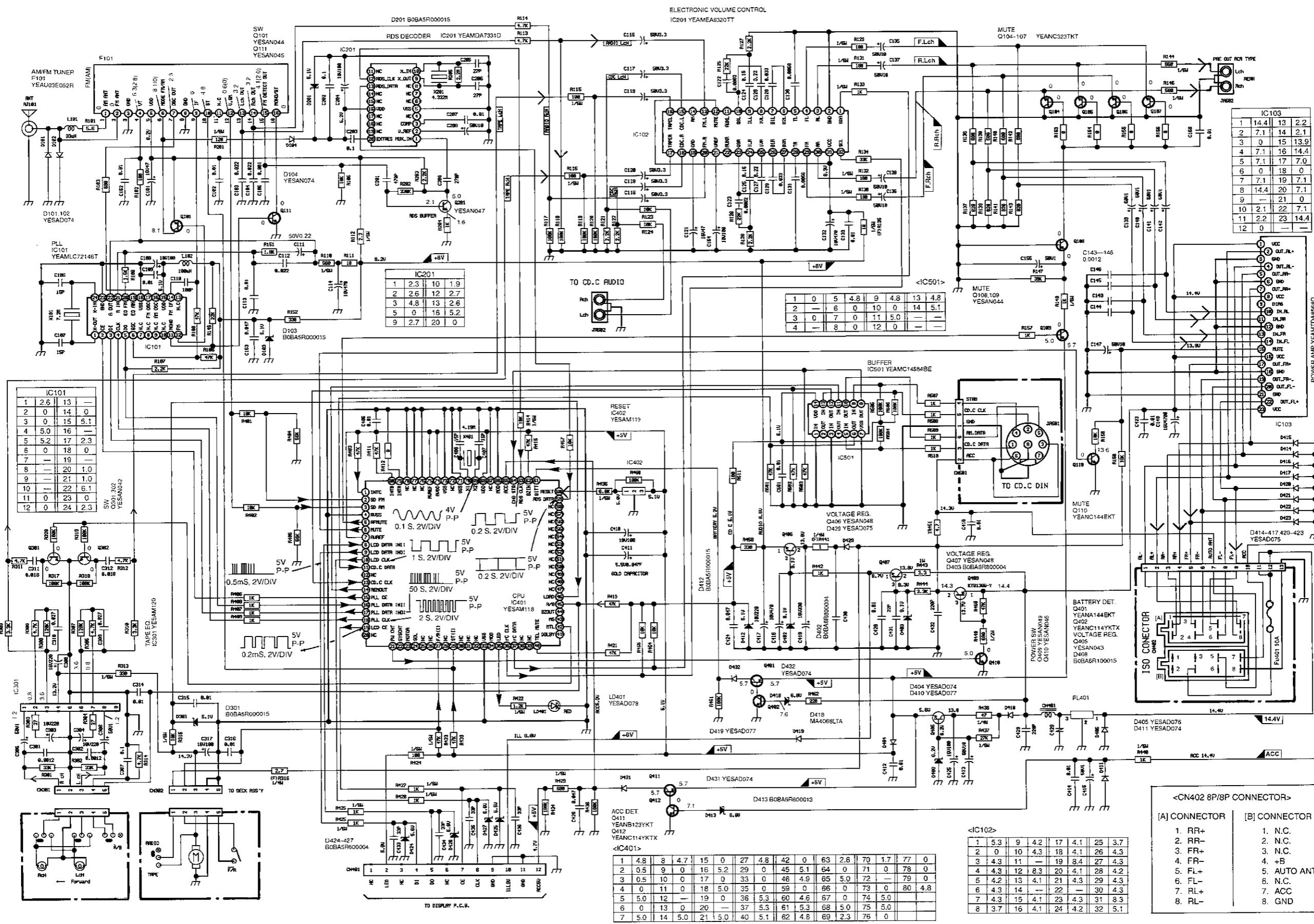
### ● IC402 YESAM119



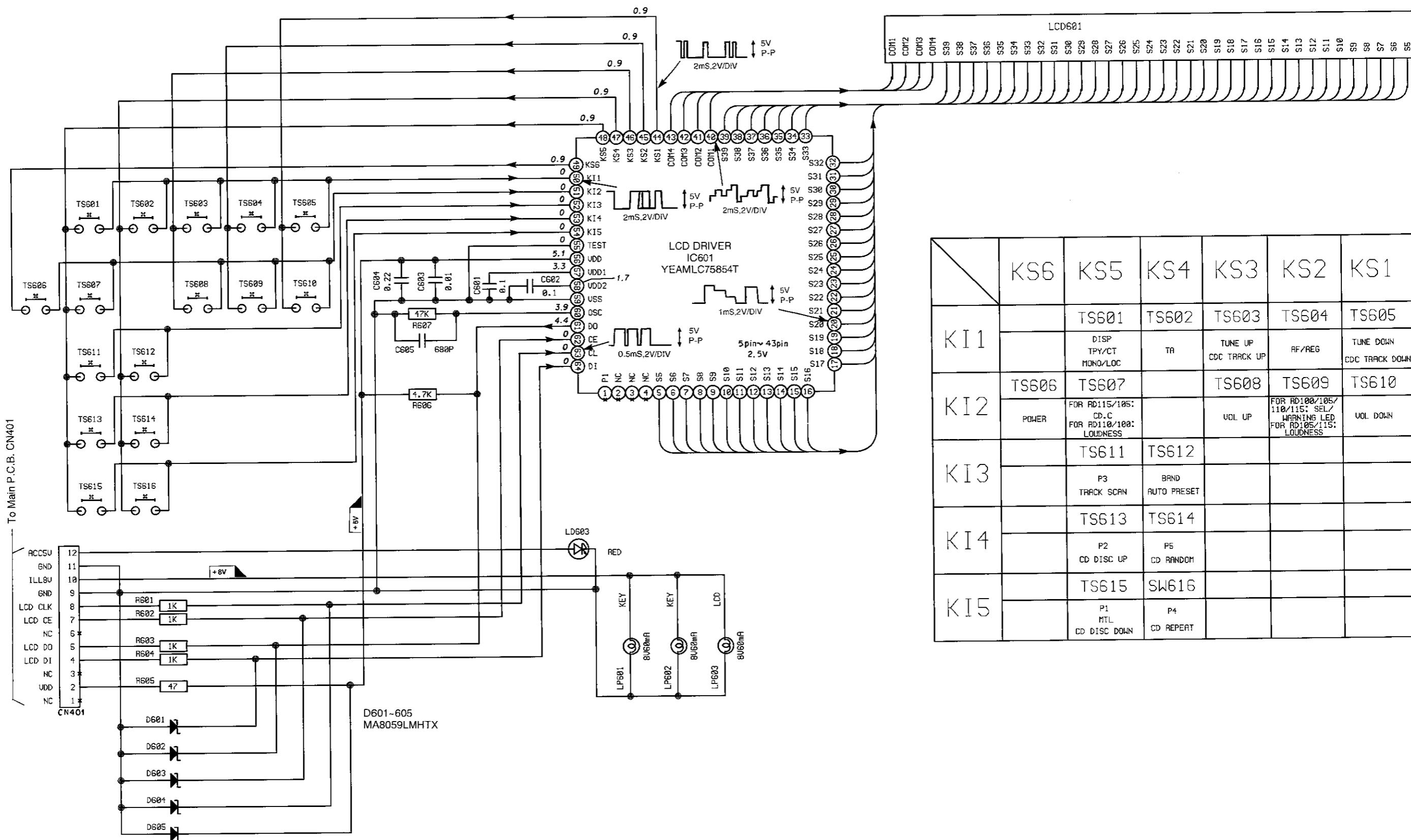
SCHEMATIC DIAGRAM (Main Block) MODELS CQ-RD110/100LEN



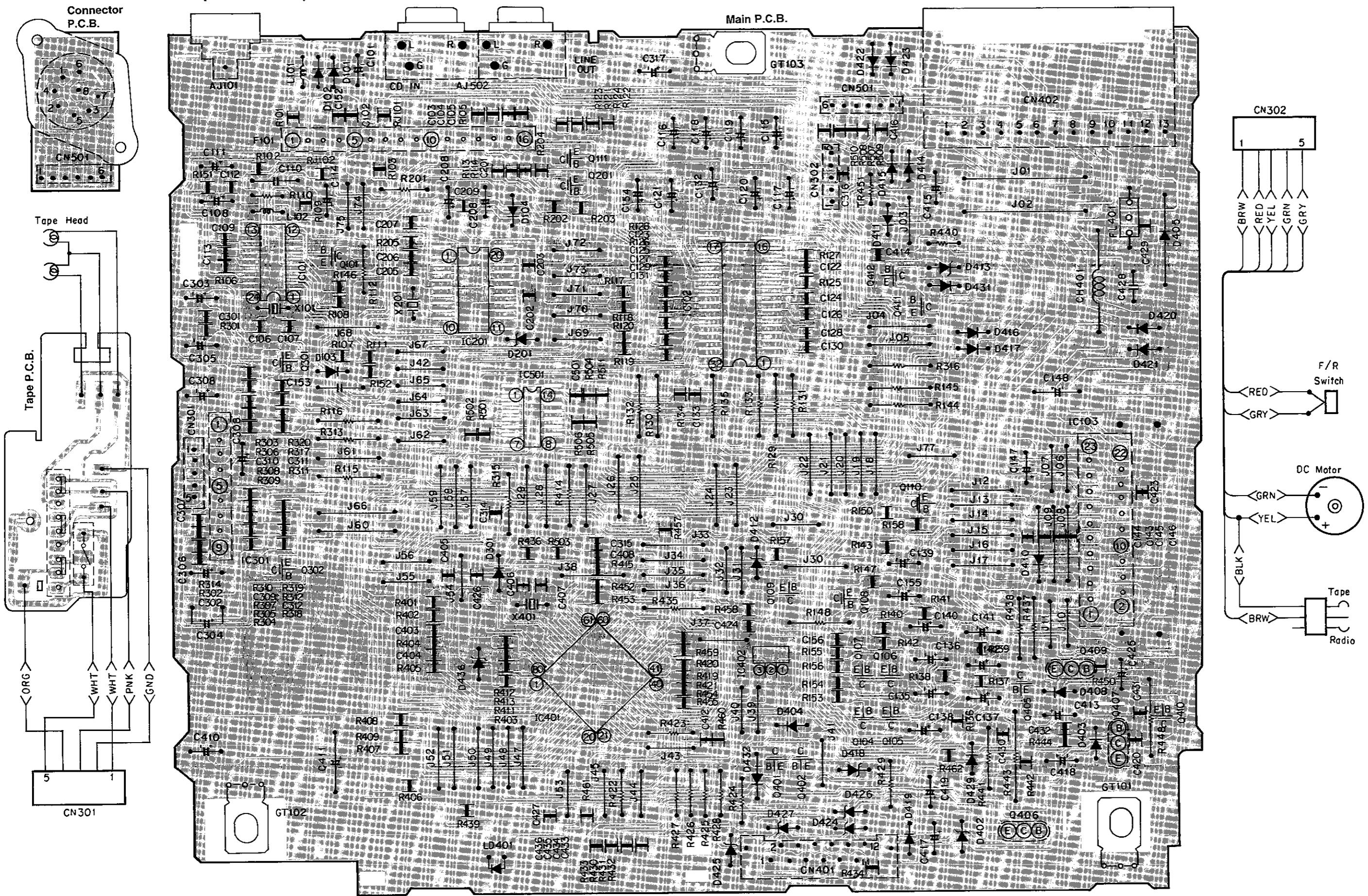
## SCHEMATIC DIAGRAM (Main Block) MODELS CQ-RD115/105LEN



SCHEMATIC DIAGRAM (Display Block) MODELS CQ-RD115/110/105/100LEN

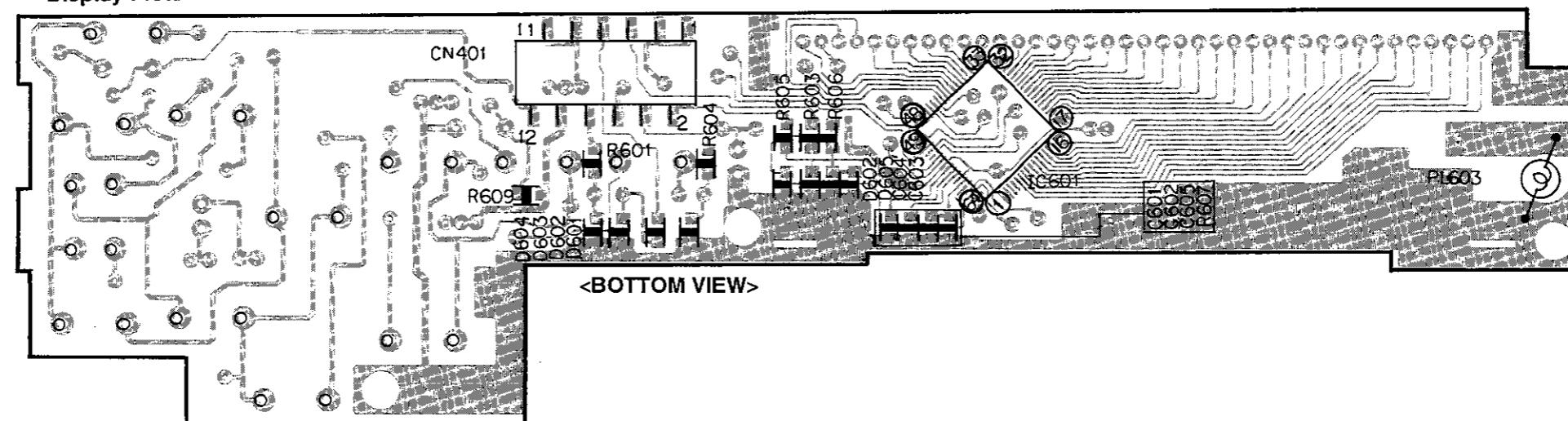


## WIRING DIAGRAM (Main Block) MODELS CQ-RD115/110/105/100LEN



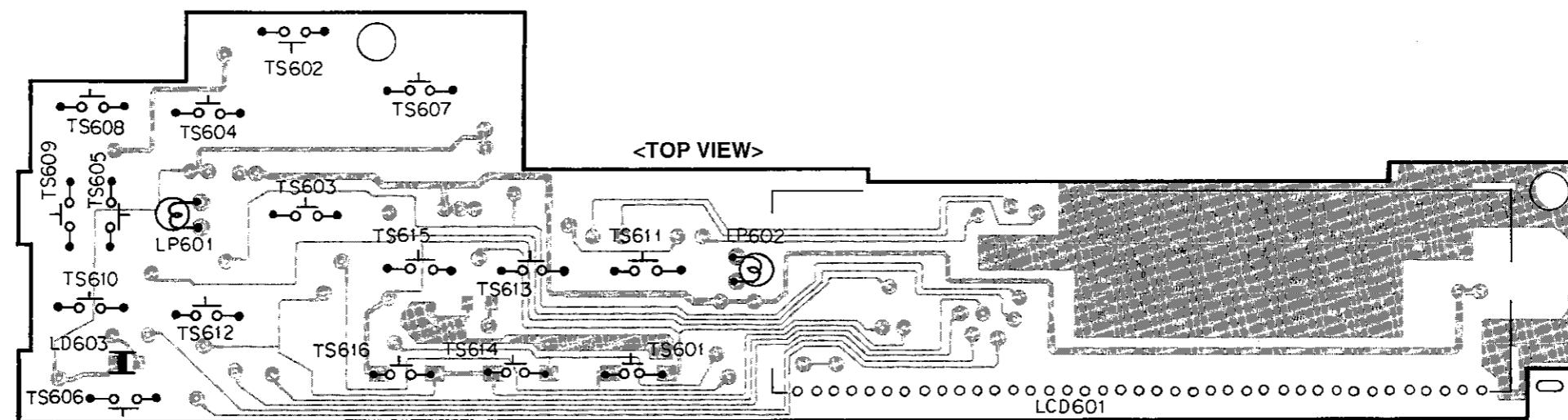
## WIRING DIAGRAM (Display Block) MODELS CQ-RD115/110/105/100LEN

Display P.C.B.



<BOTTOM VIEW>

<TOP VIEW>



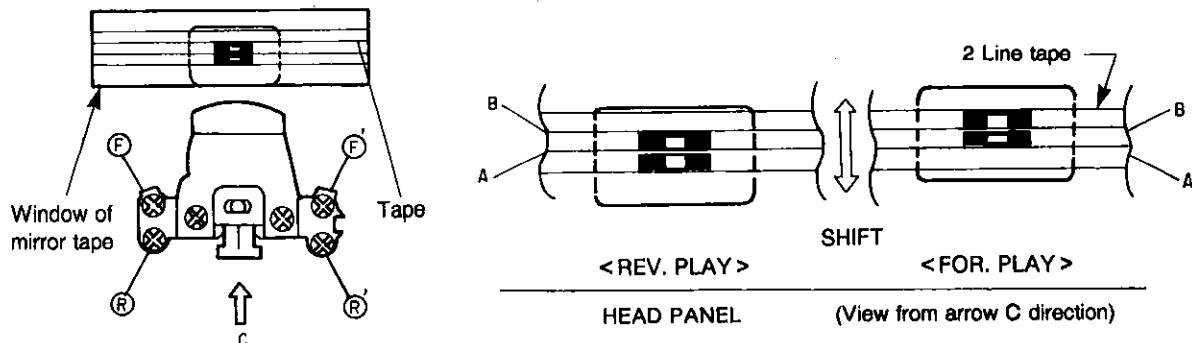
## ALIGNMENT INSTRUCTIONS

- |                          |          |                             |        |
|--------------------------|----------|-----------------------------|--------|
| ● Power Supply Voltage : | DC 14.4V | ● Balance, Fader Control :  | Center |
| ● Output Impedance :     | 4Ω       | ● Tone Control (Bass/Tre) : | Center |
| ● Output Power :         | 0.5W     |                             |        |

**NOTE :** Do not align the AM and FM package blocks. When the package block is necessary, it will be supplied already aligned at the factory.

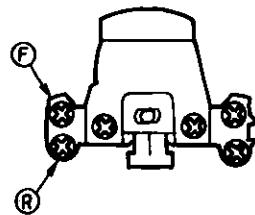
### 1. HEAD HEIGHT ALIGNMENT

- 2-Line Tape (Mirror tape) → A-BEX SCC-1659
- At forward play mode, adjust  $\textcircled{F}$  and  $\textcircled{F}'$  screws so that A-line on the mirror tape runs on the center of head shield plate.
- At reverse play mode, adjust  $\textcircled{R}$  and  $\textcircled{R}'$  screws so that B-line runs on the center of head shield plate.
- Then, again at forward play mode, check if or not A-line runs on the center. If not, re-adjust  $\textcircled{F}$  and  $\textcircled{F}'$  screws under the same way as the above.



### 2. HEAD AZIMUTH ALIGNMENT

- Test tape is TCC-153.
- If you do not have a test tape, use a tape whose recording level is than 6 kHz for head adjustment. After the above adjustment apply bonding agent to the adjustment screw.
- At forward play mode, adjust  $\textcircled{F}$  screw only so that speaker terminal level shows max value.
- At reverse play mode, adjust  $\textcircled{R}$  screw only so that speaker terminal level shows max value.
- Then, again at forward play mode, check if or not speaker terminal level still shows max value.



# 1 REPLACEMENT PARTS LIST <CQ-RD115/105LEN>

Notes :

- Be sure to make your orders of replacement parts according to this list.
- Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
- Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
- The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

## 1.1. IC's and Transistors

### MAIN B.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
IC102	YEAMEA6320TT	IC	
IC103	YEAMTDA8568Q	IC	
IC201	YEAMDA7331D	IC	
IC301	YESAM120	IC	
IC401	YESAM118	IC	
IC402	YESAM119	IC	
IC501	YEAMC14584BE	IC	
F101	YEAU03E052R	Tuner Pack	
Q101	YESAN044	Transistor	
Q104	YEANC323TKT	Transistor	
Q105	YEANC323TKT	Transistor	
Q106	YEANC323TKT	Transistor	
Q107	YEANC323TKT	Transistor	
Q108	YESAN044	Transistor	
Q109	YESAN044	Transistor	
Q110	YEANC144EKT	Transistor	
Q111	YESAN045	Transistor	
Q201	YESAN047	Transistor	
Q301	YESAN042	Transistor	
Q302	YESAN042	Transistor	
Q401	YEANA144EKT	Transistor	
Q402	YEANC114YKTX	Transistor	
Q405	YESAN043	Transistor	
Q406	YESAN048	Transistor	
Q407	YESAN048	Transistor	
Q409	YESAN049	Transistor	
Q410	YESAN046	Transistor	
Q411	YEANB123YKT	Transistor	
Q412	YEANC114YKTX	Transistor	

### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
IC601	YEAMLC75854T	IC	

## 1.2. Diodes

### MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
D101	YESAD074	Diode	
D102	YESAD074	Diode	
D103	YEADRD51JS2T	Diode	
D104	YESAD074	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
D201	YEADRD51JS2T	Diode	
D301	YEADRD51JS2T	Diode	
D402	YEADRD91EB2	Diode	
D403	YEADRD91EB2	Diode	
D404	YESAD074	Diode	
D405	YESAD076	Diode	
D408	YEADRD62JS2T	Diode	
D410	YESAD077	Diode	
D411	YESAD074	Diode	
D412	YEADRD51JS2T	Diode	
D413	YEADRD68EB2T	Diode	
D414	YESAD075	Diode	
D415	YESAD075	Diode	
D416	YESAD075	Diode	
D417	YESAD075	Diode	
D418	MA4068LTA	Diode	
D419	YESAD077	Diode	
D420	YESAD075	Diode	
D421	YESAD075	Diode	
D422	YESAD075	Diode	
D423	YESAD075	Diode	
D424	YEADRD56JB3T	Diode	
D425	YEADRD56JB3T	Diode	
D426	YEADRD56JB3T	Diode	
D427	YEADRD56JB3T	Diode	
D429	YESAD075	Diode	
D431	YESAD074	Diode	
D432	YESAD074	Diode	
LD401	YESAD078	LED	

### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
D601	MA8056LMHTX	Diode	
D602	MA8056LMHTX	Diode	
D603	MA8056LMHTX	Diode	
D604	MA8056LMHTX	Diode	
D605	MA8056LMHTX	Diode	
LD603	YESAD079	LED	

## 1.3. Capacitors

### MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
C101	ECA1CM470B	Electrolytic, 47 $\mu$ F 16WV	
C102	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C103	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C104	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C105	YECUS1H102KX	Ceramic, 0.001 $\mu$ F 50WV	
C106	YECUS1H150JM	Ceramic, 15PF 50WV	
C107	YECUS1H150JM	Ceramic, 15PF 50WV	
C108	ECA1AM101B	Electrolytic, 100 $\mu$ F 10WV	
C109	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C110	YEU05B101K	Ceramic, 100PF 50WV	
C112	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C113	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C114	ECA1AM471B	Electrolytic, 470 $\mu$ F 10WV	
C115	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C116	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C117	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C118	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C119	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C120	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C121	ECA1CM470B	Electrolytic, 47 $\mu$ F 16WV	
C122	YECUS1H822KX	Ceramic, 0.0082 $\mu$ F 50WV	
C123	YECUS1H822KX	Ceramic, 0.0082 $\mu$ F 50WV	
C124	YECUS1C154KX	Ceramic, 0.15 $\mu$ F 16WV	
C125	YECUS1C154KX	Ceramic, 0.15 $\mu$ F 16WV	
C126	YECUS1C224KX	Ceramic, 0.22 $\mu$ F 16WV	
C127	YECUS1C224KX	Ceramic, 0.22 $\mu$ F 16WV	
C128	YECUS1H333ZF	Ceramic, 0.033 $\mu$ F 50WV	
C129	YECUS1H333ZF	Ceramic, 0.033 $\mu$ F 50WV	
C130	YECUS1H562KX	Ceramic, 0.0056 $\mu$ F 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C131	YECUS1H562KX	Ceramic, 0.0056μF 50WV	
C132	ECA1AM471B	Electrolytic, 470μF 10WV	
C133	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C135	ECA1CM100B	Electrolytic, 10μF 50WV	
C136	ECA1CM100B	Electrolytic, 10μF 50WV	
C137	ECA1CM100B	Electrolytic, 10μF 50WV	
C138	ECA1CM100B	Electrolytic, 10μF 50WV	
C139	ECA1HM010B	Electrolytic, 1μF 50WV	
C140	ECA1HM010B	Electrolytic, 1μF 50WV	
C141	ECA1HM010B	Electrolytic, 1μF 50WV	
C142	ECA1HM010B	Electrolytic, 1μF 50WV	
C143	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C144	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C145	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C146	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C147	ECA1CM100B	Electrolytic, 10μF 50WV	
C148	ECA1CM472	Electrolytic, 4700μF 16WV	
C152	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C153	YESCC173	Ceramic, 0.047μF	
C154	ECA1AM101B	Electrolytic, 100μF 10WV	
C155	ECA1HM010B	Electrolytic, 1μF 50WV	
C156	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C201	YECUS1H471JM	Ceramic, 470PF 50WV	
C202	YECUS1H104ZF	Ceramic, 0.1μF 50WV	
C203	YECUS1E104ZF	Ceramic, 0.1μF 50WV	
C204	ECA1AM101B	Electrolytic, 100μF 10WV	
C205	YECUS1H270JM	Ceramic, 27PF 50WV	
C206	YECUS1H270JM	Ceramic, 27PF 50WV	
C207	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C208	ECA1CM100B	Electrolytic, 10μF 50WV	
C209	YECUS1H271JM	Ceramic, 270PF 50WV	
C301	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C302	YECUS1H122KX	Ceramic, 0.0012μF 50WV	
C303	ECA1AM221B	Electrolytic, 220μF 10WV	
C304	ECA1AM221B	Electrolytic, 220μF 10WV	
C305	ECA1HM010B	Electrolytic, 1μF 50WV	
C306	ECA1HM010B	Electrolytic, 1μF 50WV	
C307	YECUS1E104ZF	Ceramic, 0.1μF 50WV	
C308	ECA1CM221B	Electrolytic, 220μF 16WV	
C309	YECUS1H273KX	Ceramic, 0.027μF 50WV	
C310	YECUS1H273KX	Ceramic, 0.027μF 50WV	
C311	YECUS1H183KX	Ceramic, 0.018μF 50WV	
C312	YECUS1H183KX	Ceramic, 0.018μF 50WV	
C314	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C315	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C316	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C317	ECA1CM101B	Electrolytic, 100μF 16WV	
C405	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C406	YECUS1H150JM	Ceramic, 15PF 50WV	
C407	YECUS1H150JM	Ceramic, 15PF 50WV	
C410	ECA1AM101B	Electrolytic, 100μF 10WV	
C411	EECS5RSH473	Electrolytic, 0.047F 5.5WV	
C412	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C413	ECA1CM100B	Electrolytic, 10μF 50WV	
C414	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C415	ECA1HM010B	Electrolytic, 1μF 50WV	
C416	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C417	ECA1AM221B	Electrolytic, 220μF 10WV	
C418	ECA1AM471B	Electrolytic, 470μF 10WV	
C419	ECA1CM331B	Electrolytic, 330μF 16WV	
C420	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C423	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C424	YECUS1H473ZF	Ceramic, 0.047μF 50WV	
C425	ECA1CM101B	Electrolytic, 100μF 16WV	
C426	YECUS1H473ZF	Ceramic, 0.047μF 50WV	
C429	YECUS1H221JM	Ceramic, 220PF 50WV	
C430	YECUS1H561JM	Ceramic, 560PF 50WV	
C431	YECUS1H220JM	Ceramic, 22PF 50WV	
C432	YECUS1H221JM	Ceramic, 220PF 50WV	
C433	YECUS1H330JM	Ceramic, 33PF 50WV	
C434	YECUS1H330JM	Ceramic, 33PF 50WV	
C435	YECUS1H330JM	Ceramic, 33PF 50WV	
C436	YECUS1H330JM	Ceramic, 33PF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C501	YECUS1H103KX	Ceramic, 0.01μF 50WV	
DISPLAY P.C.B.			
Ref. No.	Part No.	Part Name & Description	Remarks
C601	YECUS1E104ZF	Ceramic, 0.1μF 25WV	
C602	YECUS1E104ZF	Ceramic, 0.1μF 25WV	
C603	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C604	YECUSIC224ZF	Ceramic, 0.22μF 16WV	
C605	YECUS1H681JM	Ceramic, 680PF 50WV	

## 1.4. Resistors

### MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
R101	ERJ6GEYJ5R6	Chip, 5.6Ω 1/10W	
R102	ERJ6GEYJ101	Chip, 100Ω 1/10W	
R103	ERJ6GEYJ681	Chip, 680Ω 1/10W	
R105	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R106	ERJ6GEYJ152	Chip, 1.5KΩ 1/10W	
R107	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R108	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R109	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R110	ERDS2TJ561	Carbon, 560Ω 1/6W	
R111	ERJ6GEYJ100	Chip, 10Ω 1/10W	
R112	ERDS2TJ2R2	Carbon, 2.2Ω 1/6W	
R113	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R114	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R115	ERDS2TJ101	Carbon, 100Ω 1/6W	
R116	ERDS2TJ101	Carbon, 100Ω 1/6W	
R117	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R118	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R119	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R120	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R121	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R122	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R123	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R124	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R125	ERJ6GEYJ223	Chip, 22KΩ 1/10W	
R126	ERJ6GEYJ223	Chip, 22KΩ 1/10W	
R127	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R128	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R129	ERDS2TJ181	Carbon, 180Ω 1/6W	
R130	ERDS2TJ181	Carbon, 180Ω 1/6W	
R131	ERDS2TJ181	Carbon, 180Ω 1/6W	
R132	ERDS2TJ181	Carbon, 180Ω 1/6W	
R133	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R134	ERJ6GEYJ333	Chip, 33KΩ 1/10W	
R135	ERDS2FJ4R7	Carbon, 4.7Ω 1/6W	
R136	ERJ6GEYJ681	Chip, 680Ω 1/10W	
R137	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R138	ERJ6GEYJ681	Chip, 680Ω 1/10W	
R139	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R140	ERJ6GEYJ681	Chip, 680Ω 1/10W	
R141	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R142	ERJ6GEYJ681	Chip, 680Ω 1/10W	
R143	ERJ6GEYJ821	Chip, 820Ω 1/10W	
R144	ERDS2TJ561	Carbon, 560Ω 1/6W	
R145	ERDS2TJ561	Carbon, 560Ω 1/6W	
R146	ERJ6GEYJ223	Chip, 22KΩ 1/10W	
R147	ERJ6GEYJ393	Chip, 39KΩ 1/10W	
R148	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R150	ERJ6GEYJ183	Chip, 18KΩ 1/10W	
R151	ERJ6GEYJ182	Chip, 1.8KΩ 1/10W	
R152	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R153	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R154	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R155	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R156	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R157	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R158	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R201	ERDS2TJ121	Carbon, 120Ω 1/6W	
R202	ERJ6GBYJ334	Chip, 330KΩ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R203	ERJ6GEYJ222	Chip, 2.2KΩ 1/10W	
R204	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R205	ERJ6GEYJ225V	Chip, 2.2MΩ 1/10W	
R301	ERJ6GEYJ333	Chip, 33KΩ 1/10W	
R302	ERJ6GEYJ333	Chip, 33KΩ 1/10W	
R303	ERJ6GEYJ270	Chip, 27Ω 1/10W	
R304	ERJ6GEYJ270	Chip, 27Ω 1/10W	
R305	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R306	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R307	ERJ6GEYJ124	Chip, 120KΩ 1/10W	
R308	ERJ6GEYJ124	Chip, 120KΩ 1/10W	
R309	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R310	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R311	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R312	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R313	ERDS2TJ331	Carbon, 330Ω 1/6W	
R314	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R315	ERDS2TJ103	Carbon, 10KΩ 1/6W	
R316	ERDS2FJ2R7	Carbon, 2.7Ω 1/6W	
R317	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R318	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R319	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R320	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R401	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R402	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R403	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R404	ERJ6GEYJ563	Chip, 56KΩ 1/10W	
R405	ERJ6GEYJ563	Chip, 56KΩ 1/10W	
R406	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R407	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R408	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R409	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R411	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R412	ERJ6GEYJR00V	Chip, 0Ω 1/10W	
R414	ERDS2TJ103	Carbon, 10KΩ 1/6W	
R415	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R419	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R421	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R422	ERDS2TJ122	Carbon, 1.2KΩ 1/6W	
R423	ERDS2TJ473	Carbon, 47KΩ 1/6W	
R424	ERDS2TJ101	Carbon, 100Ω 1/6W	
R425	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R426	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R427	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R428	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R429	ERDS2TJ681	Carbon, 680Ω 1/6W	
R434	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R435	ERDS2TJ682	Carbon, 6.8KΩ 1/6W	
R436	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R437	ERDS2TJ273	Carbon, 27KΩ 1/6W	
R438	ERD25TJ470	Carbon, 47Ω 1/6W	
R439	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R440	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R441	ERDS2FJ2R2	Carbon, 2.2Ω 1/6W	
R442	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R443	ERX1S1J3R3	Carbon, 3.3Ω 1/6W	
R444	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R448	ERDS1FJ681	Carbon, 680Ω 1/6W	
R450	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R454	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R455	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R457	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R458	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R460	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R461	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R462	ERJ6GEYJ221	Chip, 220Ω 1/10W	
R501	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R502	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R503	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R504	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R506	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R507	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R508	ERJ6GEYJ102	Chip, 1Ω 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R509	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R510	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R511	ERJ6GEYJ101	Chip, 100Ω 1/10W	
RJ101	ERJ6GEYOR00V	Chip, 0Ω 1/10W	
RJ102	ERJ6GEYOR00V	Chip, 0Ω 1/10W	

#### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
R601	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R602	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R603	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R604	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R605	ERJ6GEYJ470	Chip, 47Ω 1/10W	
R606	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R607	ERJ6GEYJ473	Chip, 47KΩ 1/10W	

## 1.5. Connectors

#### MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
CN301	YESAE303	Connector, 5P	
CN302	YESAE303	Connector, 5P	
CN401	YESAE302	Connector, 12P	
CN402	YESAE307	Power Connector	

#### CONNECTOR P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
CN501	YESAE305	Connector, 6P	
JA501	YESAE304	8P DIN	
JA502	YESAE306	RCA, 4P	

#### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
CN401	YESAE309	Connector, 12P	

## 1.6. Electric Parts

#### SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
TS601	YESAS110	Switch	
TS602	YESAS111	Switch	
TS603	YESAS111	Switch	
TS604	YESAS111	Switch	
TS605	YESAS111	Switch	
TS606	YESAS111	Switch	
TS607	YESAS111	Switch	
TS608	YESAS111	Switch	
TS609	YESAS111	Switch	
TS610	YESAS111	Switch	
TS611	YESAS111	Switch	
TS612	YESAS111	Switch	
TS613	YESAS111	Switch	
TS614	YESAS110	Switch	
TS615	YESAS111	Switch	
TS616	YESAS110	Switch	

#### LCD

Ref. No.	Part No.	Part Name & Description	Remarks
LCD601	YESXDCM006	LCD	

#### CRYSTALS

Ref. No.	Part No.	Part Name & Description	Remarks
X101	YEXL49U07200	Crystal	
X201	YEXL49U04332	Crystal	
X401	YEXL49U0419T	Crystal	

#### COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L101	YELT02C330KT	Coil	

Ref. No.	Part No.	Part Name & Description	Remarks
L102	YELET02C101KT	Coil	
CH401	YESTQ017	Choke Coil	

**LAMPS**

Ref. No.	Part No.	Part Name & Description	Remarks
LP601	YEAL01222	LAMP	
LP602	YEAL01222	LAMP	
LP603	YEAL01222	LAMP	

**THERMISTOR**

Ref. No.	Part No.	Part Name & Description	Remarks
TR451	YERT7AR4R7MT	Thermistor	

**FILTER**

Ref. No.	Part No.	Part Name & Description	Remarks
FL401	YECCL55S222T	EMI Filter	

**VARISTOR**

Ref. No.	Part No.	Part Name & Description	Remarks
C428	YESRTD002	Varistor	

**1.7. Accessories****PRINTING**

Ref. No.	Part No.	Part Name & Description	Remarks
	YEFM283347	Operating Instructions	

**INSTALLATION PARTS**

Ref. No.	Part No.	Part Name & Description	Remarks
	YEFA131441	Front Panel Case Ass'y	
	YESAJ01221	Power Connector	
	YEFX0214790	Mounting Collar	
	YEJV01108	Mounting Bolt	
	YEFX9992108	Dismounting Key	

**1.8. Mechanical Parts****MISCELLANEOUS**

Ref. No.	Part No.	Part Name & Description	Remarks
F1	YEAF02005	Fuse, 10A	
AJ101	YESAJ08001	ISO ANT Sochet	
GT101	YESAT01026	Ground terminal	
GT102	YESAT01026	Ground Terminal	
GT103	YESAT01026	Ground Terminal	
1	YEFA031675	Top Cover	(4-B)
2	YEFA05758	Bottom Cover	(1-B)
3	YEFA07489	Front Plate	(3-C)
4	YEFA08496AK	Back Panel	(3-C)
5	YEFA09650	Right Panel A'ssy	(2-C)
6	YEFC026454	Trimplate	(2-B)
7	YEFF01987	Heat Sink	(3-B)
8		Escutcheon Ass'y, Detachable	(2-A)
	YEFC026461	(CQ-RD105LEN)	
	YEFC026457	(CQ-RD115LEN)	
9	YEFA131440	Back Cover	(2-B)
10	YEFE135765	PWR Button	(2-A)
11	YEFE135764	SEL Button	(2-A)
12	YEFE135763	TA Button	(2-A)
13	YEFE135761	VOL. Up Button	(2-A)
14	YEFE135762	VOL. Down Button	(2-A)
15	YEFE135760	4-Way Locker	(2-A)
16	YEFE135759	Preset Button	(2-A)
17	YEFE135755	FF Button	(1-A)
18	YEFE135756	FR Buton	(1-A)
19	YEFE135757	Eject Button	(1-A)
20	YEFE135754	Release Button	(1-A)
21	YEFX0011971	Light Guide	(2-A)
22	YEFX0214796	LCD Holder	(1-B)

Ref. No.	Part No.	Part Name & Description	Remarks
23	YEFX0011972	LCD Illuminator	(1-B)
24	YEFK06871	Illuminator Holder	(2-B)
25	YEFX0052422	Spring, Release Button A'ssy	(1-A)
26	YEFX0052423	Spring (Eject Knob / FF, FR Button)	(1-A)
28	YEFE135753	Push Lever	(2-C)
29	YEFX9992105	Release Locker	(2-C)
30	YEFX0021275	Cassette Door	(3-B)
31	YEFX0052419	Spring (Push Lever)	(2-C)
32	YEFX0052420	Spring (Release Locker)	(2-C)
33	YEFX0052421	Spring (Cassette Door)	(3-B)
34	YEFV011975	Insulator	(1-B)
35	YEFX0214791	Deck Bracket	(3-A)
36	YEFX0214794	Power I.C. Bracket	(1-B)
37	YEFX0462088	Eject Extension Lever	(4-A)
38	YEFX9992106	Spacers	(3-A)
39	YEFX0052422	Tension Spring	(2-C)
40	YESAE310	Tape Head Connector	(3-B)
41	YESAE311	Tape Switch Connector	(4-A)
42	YESFX007021	Cable Tie	(4-A) (3-B)
43		Illumi. Cap, (PL601, 602)	(2-A) (2-B)
	YEFR04619	Amber (CQ-RD115LEN)	
	YEFR04219	Green (CQ-RD105LEN)	
44		Illumi. Cap, (PL603)	(2-B)
	YEFR04618	Amber (CQ-RD115LEN)	
	YEFR04190	Green (CQ-RD105LEN)	
45	YEFX0214793	RCA Jack Bracket	(3-C)
46	YESAE308	Connector Bracket (CN403)	(3-B)
47	YEFX0214795	Bracket, Q406, 407	
50	XTB3+6FFX	Screw, M3x6	
51	XTB3+8FFX	Screw, M3x8	
52	XSN26+26FX	Metric Screw, M2.5x2.5	
53	XTN3+10FX	Metric Screw, M3x10	
54	XTN3+4FFX	Metric Screw, M3x4	
55	XTN3+6FFX	Metric Screw, M3x6	
56	XTW3+8FFZ	Taptite Washer Screw, M3x8	
57	YEJT03009	Screw, M3x6	
58	XTN2+8GFZ	Screw, M2x8	

## 2 REPLACEMENT PARTS LIST <CQ-RD110/100LEN>

Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

### 2.1. IC's and Transistors

## MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
IC102	YEAMEA6320TT	IC	
IC103	YEAMTDA8568Q	IC	
IC201	YEAMDA7331D	IC	
IC301	YESAM120	IC	
IC401	YESAM118	IC	
IC402	YESAM119	IC	
F101	YEAU03E052R	Tuner Pack	
Q101	YESAN044	Transistor	
Q104	YEANC323TKT	Transistor	
Q105	YEANC323TKT	Transistor	
Q106	YEANC323TKT	Transistor	
Q107	YEANC323TKT	Transistor	
Q108	YESAN044	Transistor	
Q109	YESAN044	Transistor	
Q110	YEANC144EKT	Transistor	
Q111	YESAN045	Transistor	
Q201	YESAN047	Transistor	
Q301	YESAN042	Transistor	
Q302	YESAN042	Transistor	
Q401	YEANA144EKT	Transistor	
Q402	YEANC114YKTX	Transistor	
Q405	YESAN043	Transistor	
Q406	YESAN048	Transistor	
Q407	YESAN048	Transistor	
Q409	YESAN049	Transistor	
Q410	YESAN046	Transistor	
Q411	YEANB123YKT	Transistor	
Q412	YEANC114YKTX	Transistor	

## DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
IC601	YEAMLC75854T	IC	

### 2.2. Diodes

## MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
D101	YESAD074	Diode	
D102	YESAD074	Diode	
D103	YEARD51JS2T	Diode	
D104	YESAD074	Diode	
D201	YEARD51JS2T	Diode	

Ref. No.	Part No.	Part Name & Description	Remarks
D301	YEARD51JS2T	Diode	
D402	YEARD91EB2	Diode	
D403	YEARD91EB2	Diode	
D404	YESAD074	Diode	
D405	YESAD076	Diode	
D408	YEARD62JS2T	Diode	
D410	YESAD077	Diode	
D411	YESAD074	Diode	
D412	YEARD51JS2T	Diode	
D413	YEARD68EB2T	Diode	
D414	YESAD075	Diode	
D415	YESAD075	Diode	
D416	YESAD075	Diode	
D417	YESAD075	Diode	
D418	MA4068ILTA	Diode	
D419	YESAD077	Diode	
D420	YESAD075	Diode	
D421	YESAD075	Diode	
D422	YESAD075	Diode	
D423	YESAD075	Diode	
D424	YEARD56JB3T	Diode	
D425	YEARD56JB3T	Diode	
D426	YEARD56JB3T	Diode	
D427	YEARD56JB3T	Diode	
D429	YESAD075	Diode	
D431	YESAD074	Diode	
D432	YESAD074	Diode	
LD401	YESAD078	LED	

Ref. No.	Part No.	Part Name & Description	Remarks
D601	MA8056LMHTX	Diode	
D602	MA8056LMHTX	Diode	
D603	MA8056LMHTX	Diode	
D604	MA8056LMHTX	Diode	
D605	MA8056LMHTX	Diode	
LD603	YESAD079	LED	

### 2.3. Capacitors

## MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
C101	ECA1CM470B	Electrolytic, 47 $\mu$ F 16WV	
C102	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C103	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C104	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C105	YECUS1H102KX	Ceramic, 0.001 $\mu$ F 50WV	
C106	YECUS1H150JM	Ceramic, 15PF 50WV	
C107	YECUS1H150JM	Ceramic, 15PF 50WV	
C108	ECA1AM101B	Electrolytic, 100 $\mu$ F 10WV	
C109	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C110	YEU05B101K	Ceramic, 100PF 50WV	
C112	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 50WV	
C113	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C114	ECA1AM471B	Electrolytic, 470 $\mu$ F 10WV	
C115	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C116	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C119	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C120	ECA1HM3R3B	Electrolytic, 3.3 $\mu$ F 50WV	
C121	ECA1CM470B	Electrolytic, 47 $\mu$ F 16WV	
C122	YECUS1H822KX	Ceramic, 0.0082 $\mu$ F 50WV	
C123	YECUS1H822KX	Ceramic, 0.0082 $\mu$ F 50WV	
C124	YECUS1C154KX	Ceramic, 0.15 $\mu$ F 16WV	
C125	YECUS1C154KX	Ceramic, 0.15 $\mu$ F 16WV	
C126	YECUS1C224KX	Ceramic, 0.22 $\mu$ F 16WV	
C127	YECUS1C224KX	Ceramic, 0.22 $\mu$ F 16WV	
C128	YECUS1H333ZF	Ceramic, 0.033 $\mu$ F 50WV	
C129	YECUS1H333ZF	Ceramic, 0.033 $\mu$ F 50WV	
C130	YECUS1H562KX	Ceramic, 0.0056 $\mu$ F 50WV	
C131	YECUS1H562KX	Ceramic, 0.0056 $\mu$ F 50WV	
C132	ECA1AM471B	Electrolytic, 470 $\mu$ F 10WV	
C133	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C135	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C136	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C137	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C138	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C139	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C140	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C141	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C142	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C143	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C144	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C145	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C146	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C147	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C148	ECA1CM472	Electrolytic, 4700 $\mu$ F 16WV	
C152	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C153	YESCC173	Ceramic, 0.047 $\mu$ F	
C154	ECA1AM101B	Electrolytic, 100 $\mu$ F 10WV	
C155	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C156	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C201	YECU81H471JM	Ceramic, 470PF 50WV	
C202	YECUS1E104ZF	Ceramic, 0.1 $\mu$ F 50WV	
C203	YECUS1E104ZF	Ceramic, 0.1 $\mu$ F 50WV	
C204	ECA1AM101B	Electrolytic, 100 $\mu$ F 10WV	
C205	YECUS1H270JM	Ceramic, 27PF 50WV	
C206	YECUS1H270JM	Ceramic, 27PF 50WV	
C207	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C208	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C209	YECUS1H271JM	Ceramic, 270PF 50WV	
C301	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C302	YECUS1H122KX	Ceramic, 0.0012 $\mu$ F 50WV	
C303	ECA1AM221B	Electrolytic, 220 $\mu$ F 10WV	
C304	ECA1AM221B	Electrolytic, 220 $\mu$ F 10WV	
C305	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C306	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C307	YECUS1E104ZF	Ceramic, 0.1 $\mu$ F 50WV	
C308	ECA1CM221B	Electrolytic, 220 $\mu$ F 16WV	
C309	YECUS1H273KX	Ceramic, 0.027 $\mu$ F 50WV	
C310	YECUS1H273KX	Ceramic, 0.027 $\mu$ F 50WV	
C311	YECUS1H183KX	Ceramic, 0.018 $\mu$ F 50WV	
C312	YECUS1H183KX	Ceramic, 0.018 $\mu$ F 50WV	
C314	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C315	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C316	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C317	ECA1CM101B	Electrolytic, 100 $\mu$ F 16WV	
C405	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C406	YECUS1H150JM	Ceramic, 15PF 50WV	
C407	YECUS1H150JM	Ceramic, 15PF 50WV	
C410	ECA1AM101B	Electrolytic, 100 $\mu$ F 10WV	
C411	EECS5R5H473	Electrolytic, 0.047 $\mu$ F 5.5WV	
C412	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C413	ECA1CM100B	Electrolytic, 10 $\mu$ F 50WV	
C414	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C415	ECA1HM010B	Electrolytic, 1 $\mu$ F 50WV	
C416	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C417	ECA1AM221B	Electrolytic, 220 $\mu$ F 10WV	
C418	ECA1AM471B	Electrolytic, 470 $\mu$ F 10WV	
C419	ECA1CM331B	Electrolytic, 330 $\mu$ F 16WV	
C420	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C423	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C424	YECUS1H473ZF	Ceramic, 0.047 $\mu$ F 50WV	
C425	ECA1CM101B	Electrolytic, 100 $\mu$ F 16WV	
C426	YECUS1H473ZF	Ceramic, 0.047 $\mu$ F 50WV	
C429	YECUS1H221JM	Ceramic, 220PF 50WV	
C430	YECU81H561JM	Ceramic, 560PF 50WV	
C431	YECUS1H220JM	Ceramic, 22PF 50WV	
C432	YECUS1H221JM	Ceramic, 220PF 50WV	
C433	YECUS1H330JM	Ceramic, 33PF 50WV	
C434	YECUS1H330JM	Ceramic, 33PF 50WV	
C435	YECUS1H330JM	Ceramic, 33PF 50WV	
C436	YECUS1H330JM	Ceramic, 33PF 50WV	

## DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
C601	YECUS1E104ZF	Ceramic, 0.1 $\mu$ F 25WV	
C602	YECUS1E104ZF	Ceramic, 0.1 $\mu$ F 25WV	
C603	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C604	YECUS1C224ZF	Ceramic, 0.22 $\mu$ F 16WV	
C605	YECUS1H681JM	Ceramic, 680PF 50WV	

## 2.4. Resistors

## MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
R101	ERJ6GEYJ5R6	Chip, 5.6 $\Omega$ 1/10W	
R102	ERJ6GEYJ101	Chip, 100 $\Omega$ 1/10W	
R103	ERJ6GEYJ681	Chip, 680 $\Omega$ 1/10W	
R105	ERJ6GEYJ103	Chip, 10K $\Omega$ 1/10W	
R106	ERJ6GEYJ152	Chip, 1.5K $\Omega$ 1/10W	
R107	ERJ6GEYJ222	Chip, 2.2K $\Omega$ 1/10W	
R108	ERJ6GEYJ473	Chip, 47K $\Omega$ 1/10W	
R109	ERJ6GEYJ473	Chip, 47K $\Omega$ 1/10W	
R110	ERDS2TJ561	Carbon, 560 $\Omega$ 1/6W	
R111	ERJ6GEYJ100	Chip, 10 $\Omega$ 1/10W	
R112	ERDS2TJ2R2	Carbon, 2.2 $\Omega$ 1/6W	
R113	ERJ6GEYJ472	Chip, 4.7K $\Omega$ 1/10W	
R114	ERJ6GEYJ472	Chip, 4.7K $\Omega$ 1/10W	
R115	ERDS2TJ101	Carbon, 100 $\Omega$ 1/6W	
R116	ERDS2TJ101	Carbon, 100 $\Omega$ 1/6W	
R117	ERJ6GEYJ104	Chip, 100K $\Omega$ 1/10W	
R118	ERJ6GEYJ104	Chip, 100K $\Omega$ 1/10W	
R119	ERJ6GEYJ104	Chip, 100K $\Omega$ 1/10W	
R120	ERJ6GEYJ104	Chip, 100K $\Omega$ 1/10W	
R125	ERJ6GEYJ223	Chip, 22K $\Omega$ 1/10W	
R126	ERJ6GEYJ223	Chip, 22K $\Omega$ 1/10W	
R127	ERJ6GEYJ222	Chip, 2.2K $\Omega$ 1/10W	
R128	ERJ6GEYJ222	Chip, 2.2K $\Omega$ 1/10W	
R129	ERDS2TJ181	Carbon, 180 $\Omega$ 1/6W	
R130	ERDS2TJ181	Carbon, 180 $\Omega$ 1/6W	
R131	ERDS2TJ181	Carbon, 180 $\Omega$ 1/6W	
R132	ERDS2TJ181	Carbon, 180 $\Omega$ 1/6W	
R133	ERDS2TJ102	Carbon, 1K $\Omega$ 1/6W	
R134	ERJ6GEYJ333	Chip, 33K $\Omega$ 1/10W	
R135	ERDS2FJ14R7	Carbon, 4.7 $\Omega$ 1/6W	
R136	ERJ6GEYJ681	Chip, 680 $\Omega$ 1/10W	
R137	ERJ6GEYJ821	Chip, 820 $\Omega$ 1/10W	
R138	ERJ6GEYJ681	Chip, 680 $\Omega$ 1/10W	
R139	ERJ6GEYJ821	Chip, 820 $\Omega$ 1/10W	
R140	ERJ6GEYJ681	Chip, 680 $\Omega$ 1/10W	
R141	ERJ6GEYJ821	Chip, 820 $\Omega$ 1/10W	
R142	ERJ6GEYJ681	Chip, 680 $\Omega$ 1/10W	
R143	ERJ6GEYJ821	Chip, 820 $\Omega$ 1/10W	
R146	ERJ6GEYJ223	Chip, 22K $\Omega$ 1/10W	
R147	ERJ6GEYJ393	Chip, 39K $\Omega$ 1/10W	
R148	ERDS2TJ102	Carbon, 1K $\Omega$ 1/6W	
R150	ERJ6GEYJ183	Chip, 18K $\Omega$ 1/10W	
R151	ERJ6GEYJ182	Chip, 1.8K $\Omega$ 1/10W	
R152	ERJ6GEYJ331	Chip, 330 $\Omega$ 1/10W	
R153	ERJ6GEYOR00V	Chip, 0 $\Omega$ 1/10W	
R154	ERJ6GEYOR00V	Chip, 0 $\Omega$ 1/10W	
R155	ERJ6GEYOR00V	Chip, 0 $\Omega$ 1/10W	
R156	ERJ6GEYOR00V	Chip, 0 $\Omega$ 1/10W	
R157	ERJ6GEYJ102	Chip, 1 $\Omega$ 1/10W	
R158	ERJ6GEYJ103	Chip, 10K $\Omega$ 1/10W	
R201	ERDS2TJ121	Carbon, 120 $\Omega$ 1/6W	
R202	ERJ6GEYJ334	Chip, 330K $\Omega$ 1/10W	
R203	ERJ6GEYJ222	Chip, 2.2K $\Omega$ 1/10W	
R204	ERJ6GEYJ102	Chip, 1 $\Omega$ 1/10W	
R205	ERJ6GEYJ225V	Chip, 2.2M $\Omega$ 1/10W	
R301	ERJ6GEYJ333	Chip, 33K $\Omega$ 1/10W	
R302	ERJ6GEYJ333	Chip, 33K $\Omega$ 1/10W	
R303	ERJ6GEYJ270	Chip, 27 $\Omega$ 1/10W	
R304	ERJ6GEYJ270	Chip, 27 $\Omega$ 1/10W	
R305	ERJ6GEYJ472	Chip, 4.7K $\Omega$ 1/10W	
R306	ERJ6GEYJ472	Chip, 4.7K $\Omega$ 1/10W	
R307	ERJ6GEYJ124	Chip, 120K $\Omega$ 1/10W	

Ref. No.	Part No.	Part Name & Description	Remarks
R308	ERJ6GEYJ124	Chip, 120KΩ 1/10W	
R309	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R310	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R311	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R312	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R313	ERDS2TJ331	Carbon, 330Ω 1/6W	
R314	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R315	ERDS2TJ103	Carbon, 10KΩ 1/6W	
R316	ERDS2FJ2R7	Carbon, 2.7Ω 1/6W	
R317	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R318	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R319	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R320	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R401	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R402	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R403	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R404	ERJ6GEYJ563	Chip, 56KΩ 1/10W	
R405	ERJ6GEYJ563	Chip, 56KΩ 1/10W	
R406	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R407	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R408	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R409	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R411	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R413	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R414	ERDS2TJ103	Carbon, 10KΩ 1/6W	
R415	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R419	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R421	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R422	ERDS2TJ122	Carbon, 1.2KΩ 1/6W	
R423	ERDS2TJ473	Carbon, 47KΩ 1/6W	
R424	ERDS2TJ101	Carbon, 100Ω 1/6W	
R425	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R426	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R427	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R428	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R429	ERDS2TJ681	Carbon, 680Ω 1/6W	
R434	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R435	ERDS2TJ682	Carbon, 6.8KΩ 1/6W	
R436	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R437	ERDS2TJ273	Carbon, 27KΩ 1/6W	
R438	ERD25TJ470	Carbon, 47Ω 1/6W	
R439	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R440	ERDS2TJ102	Carbon, 1KΩ 1/6W	
R441	ERDS2FJ2R2	Carbon, 2.2Ω 1/6W	
R442	ERJ6GEYJ102	Chip, 1Ω 1/10W	
R443	ERX1S1J3R3	Carbon, 3.3Ω 1/6W	
R444	ERJ6GEYJ332	Chip, 3.3KΩ 1/10W	
R448	ERDS1FJ681	Carbon, 680Ω 1/6W	
R450	ERJ6GEYJ473	Chip, 47KΩ 1/10W	
R454	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R455	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R457	ERJ6GEYJ103	Chip, 10KΩ 1/10W	
R458	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R460	ERJ6GEYJ104	Chip, 100KΩ 1/10W	
R461	ERJ6GEYJ184	Chip, 180KΩ 1/10W	
R462	ERJ6GEYJ221	Chip, 220Ω 1/10W	
RJ101	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
RJ102	ERJ6GEY0R00V	Chip, 0Ω 1/10W	

#### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
R601	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R602	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R603	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R604	ERJ6GEYJ102	Chip, 1KΩ 1/10W	
R605	ERJ6GEYJ470	Chip, 47Ω 1/10W	
R606	ERJ6GEYJ472	Chip, 4.7KΩ 1/10W	
R607	ERJ6GEYJ473	Chip, 47KΩ 1/10W	

## 2.5. Connectors

### MAIN P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
CN301	YESAE303	Connector, 5P	
CN302	YESAE303	Connector, 5P	
CN401	YESAE302	Connector, 12P	
CN402	YESAE307	Power Connector	

### DISPLAY P.C.B.

Ref. No.	Part No.	Part Name & Description	Remarks
CN401	YESAE309	Connector, 12P	

## 2.6. Electric Parts

### SWITCHES

Ref. No.	Part No.	Part Name & Description	Remarks
TS601	YESAS110	Switch	
TS602	YESAS111	Switch	
TS603	YESAS111	Switch	
TS604	YESAS111	Switch	
TS605	YESAS111	Switch	
TS606	YESAS111	Switch	
TS607	YESAS111	Switch	
TS608	YESAS111	Switch	
TS609	YESAS111	Switch	
TS610	YESAS111	Switch	
TS611	YESAS111	Switch	
TS612	YESAS111	Switch	
TS613	YESAS111	Switch	
TS614	YESAS110	Switch	
TS615	YESAS111	Switch	
TS616	YESAS110	Switch	

### LCD

Ref. No.	Part No.	Part Name & Description	Remarks
LCD601	YESXDCM006	LCD	

### CRYSTALS

Ref. No.	Part No.	Part Name & Description	Remarks
X101	YEXL49U07200	Crystal	
X201	YEXL49U04332	Crystal	
X401	YEXL49U0419T	Crystal	

### COILS

Ref. No.	Part No.	Part Name & Description	Remarks
L101	YELT02C330KT	Coil	
L102	YELT02C101KT	Coil	
CH401	YESTQ017	Choke Coil	

### LAMPS

Ref. No.	Part No.	Part Name & Description	Remarks
LP601	YEAL01222	LAMP	
LP602	YEAL01222	LAMP	
LP603	YEAL01222	LAMP	

### THERMISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
TR451	YERT7AR4R7MT	Thermistor	

### FILTER

Ref. No.	Part No.	Part Name & Description	Remarks
FL401	YECL55S222T	EMI Filter	

### VARISTOR

Ref. No.	Part No.	Part Name & Description	Remarks
C428	YESRTD002	Varistor	

## 2.7. Accessories

### PRINTING

Ref. No.	Part No.	Part Name & Description	Remarks
	YEFM283347	Operating Instructions	

### INSTALLATION PARTS

Ref. No.	Part No.	Part Name & Description	Remarks
	YEFA131441	Front Panel Caes Ass'y	
	YESAJ01221	Power Connector	
	YEFX0214790	Mounting Collar	
	YEJV01108	Mounting Bolt	
	YEFX9992108	Dismounting Key	

## 2.8. Mechanical Parts

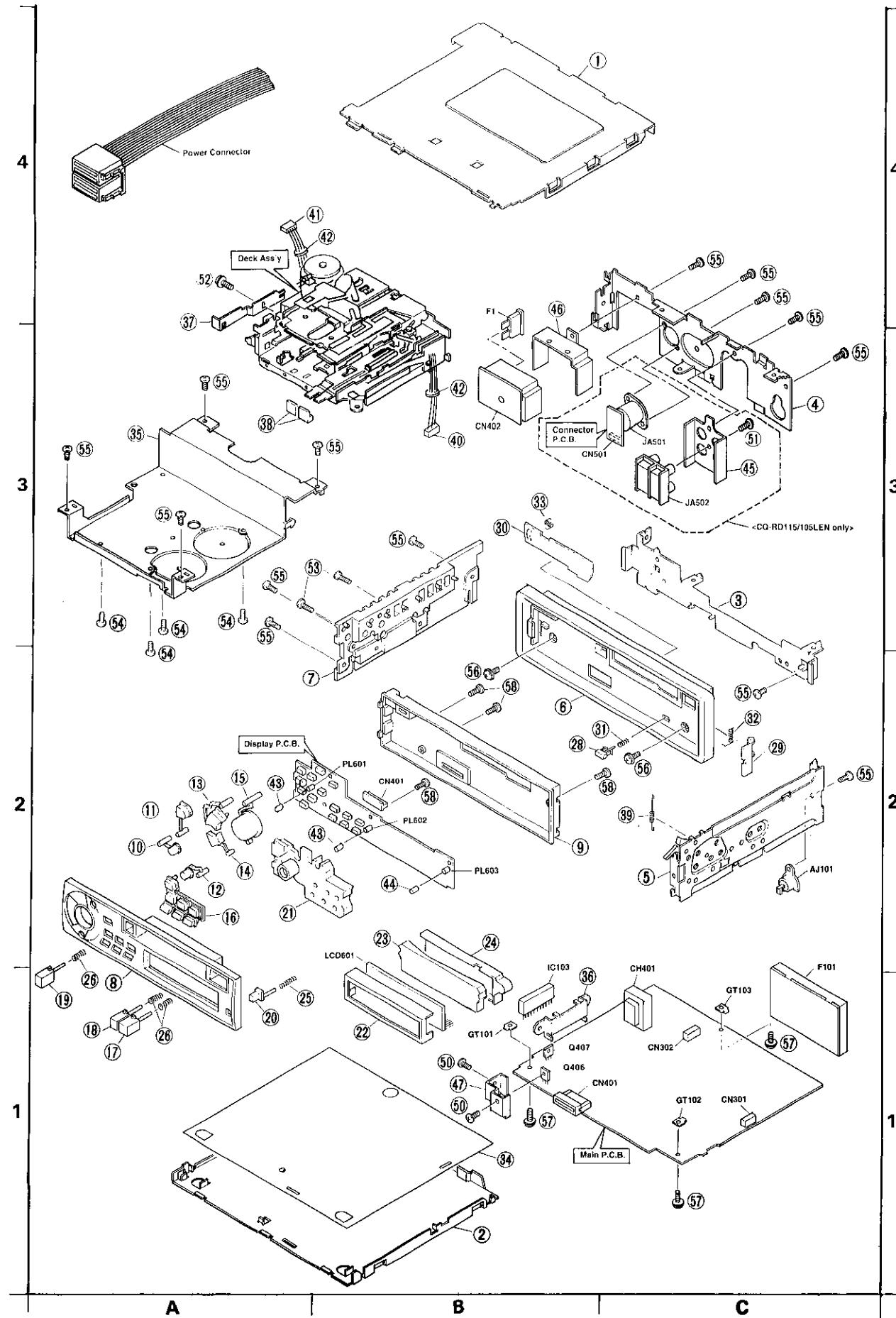
### MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
F1	YEAF02005	Fuse, 10A	
△			
AJ101	YESAJ08001	ISO ANT Sochet	
GT101	YESAT01026	Ground terminal	
GT102	YESAT01026	Ground Terminal	
GT103	YESAT01026	Ground Terminal	
1	YEFA031675	Top Cover	(4-B)
2	YEFA05758	Bottom Cover	(1-B)
3	YEFA07489	Front Plate	(3-C)
4	YEFA08496AK	Back Panel	(3-C)
5	YEFA09650	Right Panel A'ssy	(2-C)
6	YEFC026454	Trimplate	(2-B)
7	YEFF01987	Heat Sink	(3-B)
8		Escutcheon Ass'y, Detachable	(2-A)
	YEFC026463	(CQ-RD100LEN)	
	YEFC026459	(CQ-RD110LEN)	
9	YEFA131440	Back Cover	(2-B)
10	YEFE135765	PWR Button	(2-A)
11	YEFE135764	SEL Button	(2-A)
12	YEFE135763	TA Button	(2-A)
13	YEFE135761	VOL. Up Button	(2-A)
14	YEFE135762	VOL. Down Button	(2-A)
15	YEFE135760	4-Way Locker	(2-A)
16	YEFE135759	Preset Button	(2-A)
17	YEFE135755	FF Button	(1-A)
18	YEFE135756	FR Buton	(1-A)
19	YEFE135757	Eject Button	(1-A)
20	YEFE135754	Release Button	(1-A)
21	YEFX0011971	Light Guide	(2-A)
22	YEFX0214796	LCD Holder	(1-B)
23	YEFX0011972	LCD Illuminator	(1-B)
24	YEFK06871	Illuminator Holder	(2-B)
25	YEFX0052422	Spring, Release Button A'ssy	(1-A)
26	YEFX0052423	Spring (Eject Knob / FF, FR Button)	(1-A)
28	YEFE135753	Push Lever	(2-C)
29	YEFX9992105	Release Locker	(2-C)
30	YEFX0021275	Cassette Door	(3-B)
31	YEFX0052419	Spring (Push Lever)	(2-C)
32	YEFX0052420	Spring (Release Locker)	(2-C)
33	YEFX0052421	Spring (Cassette Door)	(3-B)
34	YEJV011975	Insulator	(1-B)
35	YEFX0214791	Deck Bracket	(3-A)
36	YEFX0214794	Power I.C. Bracket	(1-B)
37	YEFX0462088	Eject Extension Lever	(4-A)
38	YEFX9992106	Spacers	(3-A)
39	YEFX0052422	Tension Spring	(2-C)
40	YESAE310	Tape Head Connector	(3-B)
41	YESAE311	Tape Switch Connector	(4-A)
42	YESFX007021	Cable Tie	(4-A) (3-B)
43		Illumi. Cap, (PL601, 602)	(2-A) (2-B)
	YEFR04619	Amber (CQ-RD110LEN)	
	YEFR04219	Green (CQ-RD100LEN)	

Ref. No.	Part No.	Part Name & Description	Remarks
44		Illumi. Cap, (PL603)	(2-B)
	YEFR04618	Amber (CQ-RD110LEN)	
	YEFR04190	Green (CQ-RD100LEN)	
46	YESAE308	Connector Bracket (CN403)	(3-B)
47	YEFX0214795	Bracket, Q406, 407	
50	XTB3+6FFX	Screw, M3x6	
52	XSN26+26FX	Metric Screw, M2.5x2.5	
53	XTN3+10FX	Metric Screw, M3x10	
54	XTN3+4FFX	Metric Screw, M3x4	
55	XTN3+6FFX	Metric Screw, M3x6	
56	XTW3+8PFZ	Taptite Washer Screw, M3x8	
57	YEJT03009	Screw, M3x6	
58	XTN2+8GFZ	Screw, M2x8	

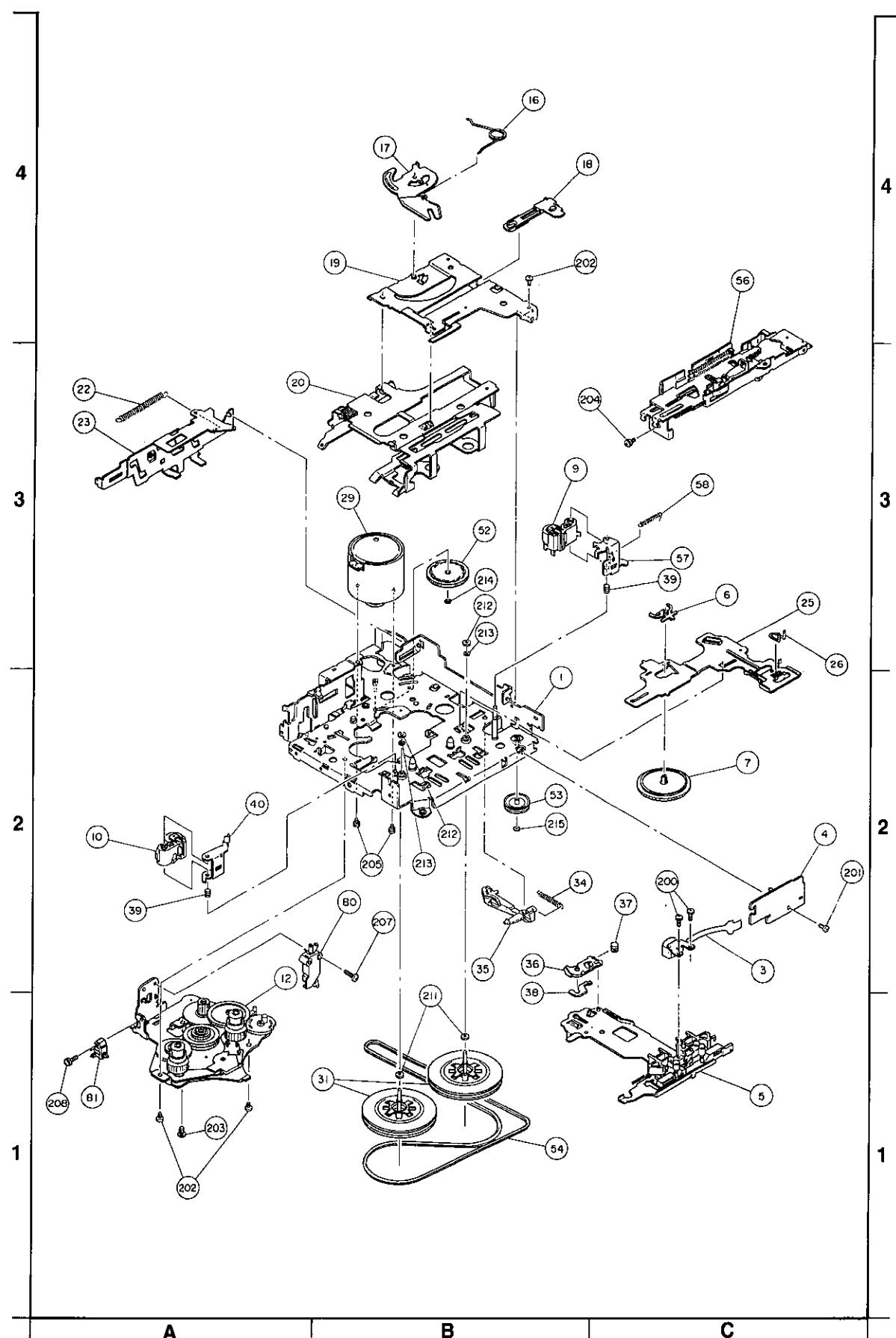
## EXPLODED VIEW (Unit)

■ Numbers in ○ are indicated REF.NO. in the REPLACEMENT PARTS LIST



## EXPLODED VIEW (Tape Deck)

■ Numbers in ○ are indicated REF.NO. in the REPLACEMENT PARTS LIST



### 3 TAPE PLAYER PARTS

#### MISCELLANEOUS

Ref. No.	Part No.	Part Name & Description	Remarks
1	YEFA011605	Cassis Rivet Ass'y	(2-B)
3	YESAH008	P Head	(2-C)
4	YESAS098	Head SW Ass'y (D)	(2-C)
5	YEP0FX2802	Head Panel Ass'y (D)	(1-C)
6	YEFX030095	P. Gear Metal	(3-C)
7	YEFX003778	P. Gear	(2-C)
9	YEFX249414	Pinchi Roller Arm (F) Ass'y	(3-B)
10	YEFX249415	Pinchi Roller Arm (R) Ass'y	(2-A)
12	YESFX209010	MG Plate Ass'y	(1-A)
16	YEFX0052093	Reverse Sprig	(4-B)
17	YEFX0461773	P.S. Actuator Plate B	(4-B)
18	YEFX030096	Pack Sliddeer B	(4-B)
19	YEFX233484	Case Lifter B	(4-B)
20	YEP0FX2804	Cassette Case Ass'y	(3-B)
22	YEFK0052094	Push Lever Spring	(3-A)
23	YESFX215024	Push Lever B Rivet Ass'y	(3-A)
25	YEFX0461776	Main Plate	(3-C)
26	YEFX0052099	H.S. spring	(3-C)
29	YESAK01027	Motor Ass'y	(3-B)
31	YEFX213212	FL Capstan Ass'y	(1-B)
34	YEFX0052096	TA. Spring	(2-B)
35	YEFX249416	Trigger Arm	(2-B)
36	YEFX249417	H.P. Push Arm B	(2-B)
37	YEFX218289	H.P. Roller	(2-C)
38	YEFX249418	H.P. Push Plate	(2-B)
39	YEFX0052098	P.P. Spring	(2-A) (2-C)
40	YEFX0461774	H.P. Return Arm	(2-A)
52	YEFX003510	Main Gear V	(3-B)
53	YEFX026120	Middle Pulley	(2-C)
54	YESFR03004	Main Belt	(1-B)
56	YESFX215025	FR Lever Ass'y	(3-C)
57	YEFX0461775	Lock Plate	(3-C)
58	YEFX0052095	Lock Plate Spring	(3-C)
60	YESAS113	Push Switch	(2-B)
61	YESAS112	Switch	(1-A)
200	YEJS06132	Fix Screw	
201	YEJS06174	Tams Screw (Tapping) S2.0x5	
202	YEJT03118	Camera Screw (Tapping) S2.0x3	
203	YEJS06190	Camera Screw (Tapping) S3.2x3	
204	YEJS06191	Camera Screw (Tams) 2.6x4.5	
205	YEJS06130	Tams Screw 2.0x3	
207	YESJT03057	TS.S Tams Screw 2.0x8.5	
208	YESJT03058	Tams Tapping Screw S2.0x7.0	
211	YESJW01020	Himelon Washer 1.55x3.8x0.13	
212	YEJW05136	Lumilax Washer (Cut) 1.25x3.2x0.5	
213	YESJW01021	Himelon Washer 1.55x3x0.2	
214	YEFX014053	Himelon Washer (Cut) 1.2x3x0.25	
215	YEJW05130	P. Washer (Cut) 0.85x2.8x0.25	