

# JVC

# SERVICE MANUAL

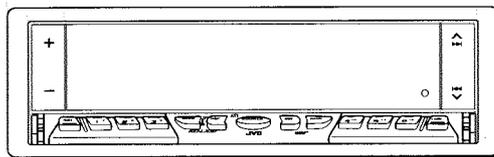
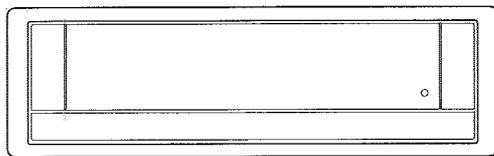
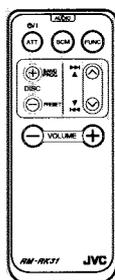
CD RECEIVER

## KD-LX10

## KD-LX30

Area Suffix

J ---- Northern America



## Contents

Safety precaution .....	1-2	Functions of the mechanism under the service mode .....	2-18
Instructions .....	1-3~18	Flow of functional until TOC read ....	2-20
Disassembly method .....	2-1	Description of major ICs .....	2-22
Adjustment method .....	2-13	Block diagrams .....	2-39
Maintenance of laser pickup .....	2-14	Standard schematic diagrams .....	2-41
Replacement of laser pickup .....	2-14	Printed circuit board .....	2-45,46
Extension code connecting method ..	2-15	Parts list .....	3-1~15

## Safety precaution

 **CAUTION** Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

 **CAUTION** Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

# Instructions

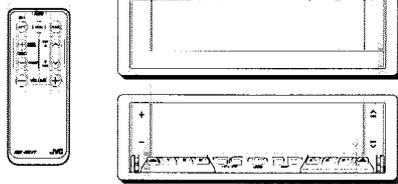


**CD RECEIVER** **KD-LX30**

**RECEPTOR CON CD** **KD-LX30**

**RECEPTEUR CD** **KD-LX30**

ENGLISH  
ESPAÑOL  
FRANÇAIS



For installation and connections, refer to the separate manual.  
Para la instalación y las conexiones, refiérase al manual separado.  
Pour l'installation et les raccordements, se référer au manuel séparé.

**For customer Use:**  
Enter below the Model No. and Serial No. which are located on the top or bottom of the cabinet. Retain this information for future reference.

Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_

LVT0408-001A  
[J]

## INSTRUCTIONS MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS

**INFORMATION (For U.S.A.)**  
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:  
- Reorient or relocate the receiving antenna.  
- Increase the separation between the equipment and receiver.  
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.  
- Consult the dealer or an experienced radio/TV technician for help.

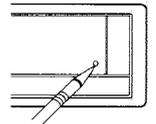
### IMPORTANT FOR LASER PRODUCTS

- Precautions:**
1. CLASS 1 LASER PRODUCT
  2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
  3. **CAUTION:** Do not open the top cover. There are no user-serviceable parts inside. Leave all servicing to qualified service personnel.
  4. **CAUTION:** This CD player uses invisible laser radiation, however, is equipped with safety switches to prevent radiation emission when unloading CDs. It is dangerous to defeat the safety switches.
  5. **CAUTION:** Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### How to reset your unit

Press the reset button on the front panel using a ball-point pen or a similar tool.  
This will reset the built-in microcomputer.

**NOTE:**  
Your preset adjustments — such as preset channels or sound adjustments — will also be erased.



### BEFORE USE

- \* For safety...  
• Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

\* Temperature inside the car...  
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

Thank you for purchasing a JVC product. Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

## CONTENTS

How to reset your unit .....	2	
<b>BASIC OPERATIONS</b> .....	<b>5</b>	
<b>RADIO OPERATIONS</b> .....	<b>6</b>	
Listening to the radio .....	6	
Searching a station automatically: Auto search .....	6	
Searching a station manually: Manual search .....	7	
Storing stations in memory .....	8	
FM station automatic preset: SSM .....	8	
Manual preset .....	9	
Tuning into a preset station .....	10	
<b>CD OPERATIONS</b> .....	<b>11</b>	
Playing a CD .....	11	
Playing a CD Text .....	12	
Locating a track or a particular portion on a CD .....	13	
Selecting CD playback modes .....	14	
Prohibiting CD ejection .....	15	
<b>SOUND ADJUSTMENTS</b> .....	<b>16</b>	
Adjusting the sound .....	16	
Turning on/off the BBE <sup>®</sup> function .....	17	
Using the Sound Control Memory .....	18	
Selecting and storing the sound modes .....	18	
Recalling the sound modes .....	19	
Storing your own sound adjustments .....	20	
<b>OTHER MAIN FUNCTIONS</b> .....	<b>21</b>	
Setting the clock .....	21	
Controlling the volume automatically (Audio Cruise) .....	22	
Changing the general settings (PSM) .....	24	
Assigning names to the sources .....	29	
<b>REMOTE OPERATIONS</b> .....	<b>32</b>	
Installing the battery .....	32	
Using the remote controller .....	33	
<b>CD CHANGER OPERATIONS</b> .....	<b>34</b>	
Playing CDs .....	34	
Selecting CD playback modes .....	36	

To be continued on the next page

<b>EXTERNAL COMPONENT OPERATIONS</b> .....	<b>38</b>	
Playing an external component .....	38	
Using a subwoofer .....	38	
<b>MAINTENANCE</b> .....	<b>39</b>	
Handling CDs .....	39	
<b>TROUBLESHOOTING</b> .....	<b>40</b>	
<b>SPECIFICATIONS</b> .....	<b>41</b>	

### To activate the display demonstration

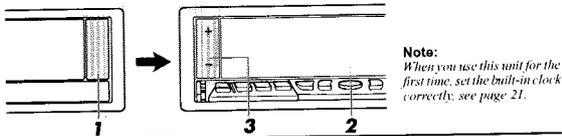
- While holding DISP, press until "DEMO" appears on the lower part of the display.  
Various functions and display illumination modes equipped for this unit will be demonstrated repeatedly in sequence.  
During the display demonstration, "DEMO" flashes on the lower part of the display.  
To turn off the display demonstration, press again for a few seconds again while holding DISP  
• The display demonstration will turn off automatically after 1 hour.

### How to use the number buttons:

- After pressing MODE, the number buttons work as different function buttons (while "MODE" remains on the display).  
**To use these buttons as number buttons after pressing MODE,** wait for 5 seconds without pressing any number button so that "MODE" disappears from the display.  
• Pressing MODE again also erases "MODE" from the display.



## BASIC OPERATIONS



**Note:**  
When you use this unit for the first time, set the built-in clock correctly, see page 21.

**1** Turn on the power.  
The display illuminates and the control panel comes out.

**2** Select the source.  
Each time you press the button, the source changes as follows:  
→ Tuner (FM or AM) → CD\* → CD changer\*\* → External component → (back to the beginning)  
To operate the tuner, see pages 6 – 10.  
To operate the CD player, see pages 11 – 15.  
To operate the CD changer, see pages 34 – 37.  
To operate the external component connected to the LINE IN plugs, see page 38.

**Notes:**  
\* If a CD is not in the loading slot, you cannot select CD as the source to play.  
\*\* Without connecting the CD changer, you cannot select it as the source to play.

**3** Adjust the volume. Volume level meter

**4** Adjust the sound as you want (see pages 16 – 20).

**To drop the volume in a moment**  
Press SOURCE (ATT) for more than 1 second while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment.  
To resume the previous volume level, press the button for more than 1 second again.

**To turn off the power**  
Press and hold OFF/▲ until "SEE YOU" appears on the display.

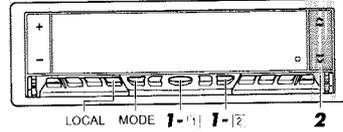
ENGLISH  
ENGLISH

## RADIO OPERATIONS

### Listening to the radio

You can use either automatic searching or manual searching to tune into a particular station.

#### Searching a station automatically: Auto search



**1** Select the band.  
① Press SOURCE (ATT) to select the tuner as the source.  
② Press BAND to select the band (FM1, FM2, FM3 or AM).  
Each time you press the button, the band changes as follows:  
→ FM1 → FM2 → FM3 → AM



Selected band appears.

**Note:**  
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

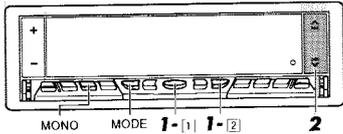
**2** Start searching a station.  
When a station is received, searching stops.

**To stop searching before a station is received,** press the same button you have pressed for searching.

**To tune in FM stations only with strong signals**  
This function works only while searching FM stations, including SSM preset (see page 8).  
1 Press MODE.  
"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.  
2 Press LOCAL, while "MODE" is still on the display, so that the LOCAL indicator lights up on the display.  
Each time you press the button, the LOCAL indicator lights up and goes off alternately.

5 6

### Searching a station manually: Manual search



**1** Select the band.  
① Press SOURCE (ATT) to select the tuner as the source.  
② Press BAND to select the band (FM1, FM2, FM3 or AM).

**Note:**  
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

**2** Press and hold ▲▶▶ or ◀◀▼ until "M" (Manual) starts flashing on the display.



**3** Tune into a station you want while "M" is flashing.  
• If you release your finger from the button, the manual mode will automatically turn off after 5 seconds.

**When an FM stereo broadcast is hard to receive:**  
1 Press MODE while listening to an FM stereo broadcast (the ST indicator lights up while receiving an FM stereo broadcast).  
"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.  
2 Press MONO (monaural), while "MODE" is still on the display, so that the MO indicator lights up on the display.  
The sound you hear becomes monaural but reception will be improved (the ST indicator goes off).  
Each time you press the button, the MO indicator lights up and goes off alternately.

ENGLISH  
ENGLISH

### Storing stations in memory

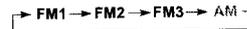
You can use one of the following two methods to store broadcasting stations in memory.  
• Automatic preset of FM stations: SSM (Strong-station Sequential Memory)  
• Manual preset of both FM and AM stations

#### FM station automatic preset: SSM

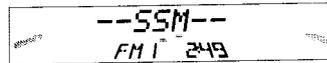
You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).



**1** Select the FM band number (FM1, FM2 or FM3) you want to store FM stations into.  
① Press SOURCE (ATT) to select the tuner as the source.  
② Press BAND to select the band (FM1, FM2, or FM3).



**2** Press and hold both buttons for more than 2 seconds.



\*SSM\* appears, then disappears when automatic preset is over.

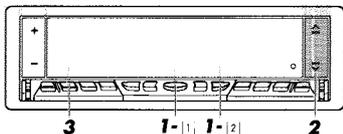
Local FM stations with the strongest signals are searched and stored automatically in the band number you have selected (FM1, FM2 or FM3). These stations are preset in the number buttons — No. 1 (lowest frequency) to No. 6 (highest frequency).  
When automatic preset is over, the station stored in number button 1 will be automatically tuned in.

7 8

### Manual preset

You can preset up to 6 stations in each band (FM1, FM2, FM3 and AM) manually.

EXAMPLE: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band

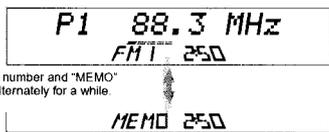


**1** Select the band.  
 [1] Press SOURCE (ATT) to select the tuner as the source.  
 [2] Press BAND to select the FM1 band.

**2** Tune into a station of 88.3 MHz.  
 See page 6 to tune into a station.



**3** Press and hold the number button (in this example, 1) for more than 2 seconds.

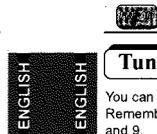


FM band number and "MEMO" appear alternately for a while.

**4** Repeat the above procedure to store other stations into other preset numbers.

**Notes:**

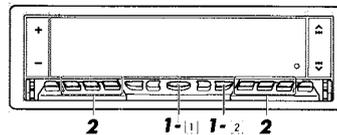
- A previously preset station is erased when a new station is stored in the same preset number.
- Preset stations are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the stations again.



### Tuning into a preset station

You can easily tune into a preset station.

Remember that you must store stations first. If you have not stored them yet, see pages 8 and 9.



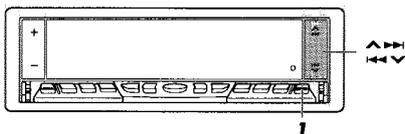
**1** Select the band.  
 [1] Press SOURCE (ATT) to select the tuner as the source.  
 [2] Press BAND to select the band (FM1, FM2, FM3 or AM).

**2** Select the number (1 – 6) for the preset station you want.

**When using this unit in an area other than North or South America:**  
 You need to change the AM/FM channel intervals. See "To change the AM/FM channel intervals" on page 27.

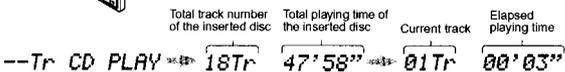
## CD OPERATIONS

### Playing a CD



**1** Open the loading slot.  
 The display panel moves down, and the loading slot appears.

**2** Insert a disc into the loading slot.  
 The unit draws a CD, the display panel moves up, and CD play starts automatically.



**Notes:**

- When a CD is in the loading slot, selecting "CD" as the source by pressing SOURCE (ATT) starts CD play.
- When a CD is inserted upside down, "DISC EJECT" appears on the display and the CD automatically ejects.
- When you play a CD Text, the disc title and performer appear on the display. Then the current track and elapsed playing time appear on the display. See also "Playing a CD Text" (page 12) and "To select the scroll mode" (page 27).
- If a CD Text includes much text information, some may not appear on the display.
- If you change the source, the CD play also stops (without ejecting the CD).

### To stop play and eject the CD

Press OFF/▲ briefly.  
 CD play stops, the display panel moves down, then the CD automatically ejects from the loading slot.

To move up the display panel, press ▲▶▶ or ◀◀▼.

**CAUTION:** NEVER insert your finger between the display panel and the unit, as it may get caught in the unit.

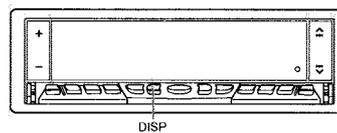


**Note:**

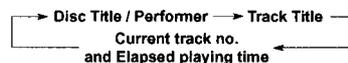
If the ejected disc is not removed for about 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (CD play will not start this time.)

### Playing a CD Text

In a CD Text, some information about the disc (its disc title, performer and track title) is recorded. You can show these disc information on the display.



Select text display mode while playing a CD Text.  
 Each time you press the button, the display changes as follows:

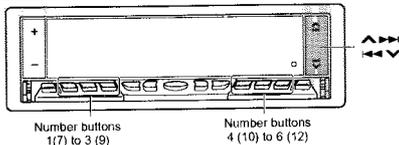


**Notes:**

- The display shows up to 12 characters at one time and scrolls if there are more than 12 characters. See also "To select the scroll mode" on page 27.
- When you press DISP while playing a conventional CD, "NO NAME" appears for the disc title/performer and the track title.



**Locating a track or a particular portion on a CD**



**To fast-forward or reverse the track**

- Press and hold **▶▶▶**, while playing a CD, to fast-forward the track.
- Press and hold **◀◀◀**, while playing a CD, to reverse the track.

**To go to the next tracks or the previous tracks**

- Press **▶▶▶** briefly, while playing a CD, to go ahead to the beginning of the next track. Each time you press the button consecutively, the beginning of the next tracks is located and played back.
- Press **◀◀◀** briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

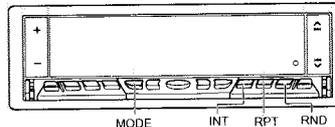
**To go to a particular track directly**



- Press the number button corresponding to the track number to start its playback.
- To select a track number from 1 – 6:  
Press 1 (7) – 6 (12) briefly.
  - To select a track number from 7 – 12:  
Press and hold 1 (7) – 6 (12) for more than 1 second.

ENGLISH  
ENGLISH

**Selecting CD playback modes**

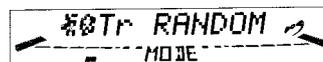


**To play back tracks at random (Random Play)**

You can play back all tracks on the CD at random.



- Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- Press RND (Random), while "MODE" is still on the display, so that the RND indicator lights up on the display. Each time you press the button, CD random play mode turns on and off alternately. When the random mode is turned on, the RND indicator lights up on the display and a track randomly selected starts playing.

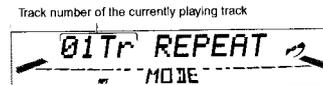


**To play back tracks repeatedly (Repeat Play)**

You can play back the current track repeatedly.



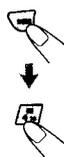
- Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- Press RPT (Repeat), while "MODE" is still on the display, so that the RPT indicator lights up on the display. Each time you press the button, CD repeat play mode turns on and off alternately. When the repeat mode is turned on, the RPT indicator lights up on the display.



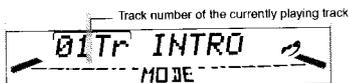
13 14

**To play back only intros (Intro Scan)**

You can play back the first 15 seconds of each track sequentially.



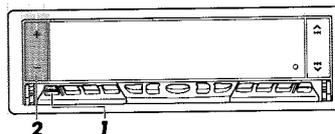
- Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- Press INT (Intro), while "MODE" is still on the display. Each time you press the button, CD intro scan mode turns on and off alternately. When the intro scan mode is turned on, "INTRO" appears on the display for 5 seconds and the track number flashes.



**SOUND ADJUSTMENTS**

**Adjusting the sound**

You can adjust the sound characteristics to your preference.

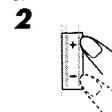


- Select the item you want to adjust. Each time you press the button, the adjustable items change as follows:

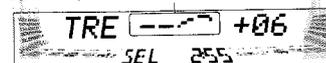


Indication	To do:	Range
BAS	Adjust the bass.	-06 (min.) — +06 (max.)
TRE	Adjust the treble.	-06 (min.) — +06 (max.)
FADER*	Adjust the front and rear speaker balance.	R06 (Rear only) — F06 (Front only)
BALANCE	Adjust the left and right speaker balance.	L06 (Left only) — R06 (Right only)
WOOFER	Adjust the subwoofer output level.	00 (min.) — 08 (max.)
VOLUME	Adjust the volume.	00 (min.) — 50 (max.)

**Note:**  
\* If you are using a two-speaker system, set the fader level to "00."

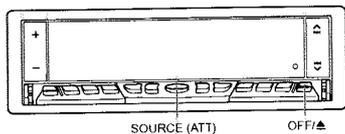


- Adjust the level. Equalization pattern changes as you adjust the bass or treble.



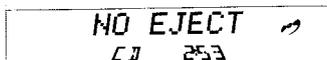
**Note:**  
Normally **SEL** button works as the volume control. So you do not have to select "VOLUME" to adjust the volume level.

**Prohibiting CD ejection**



You can prohibit CD ejection and can lock a CD in the loading slot.

While pressing SOURCE (ATT), press and hold OFF/▲ for more than 2 seconds. "NO EJECT" flashes on the display for about 5 seconds, and the CD is locked and cannot be ejected.



**Note:**  
If you press OFF/▲ while CD ejection is prohibited, the control panel moves down, but the CD cannot be ejected. ("NO EJECT" appears on the display.) To move up the display panel, press **▶▶▶** or **◀◀◀**.

To cancel the prohibition and unlock the CD, press and hold OFF/▲ for more than 2 seconds again, while pressing SOURCE (ATT). "EJECT OK" flashes on the display for about 5 seconds, and the CD is unlocked.

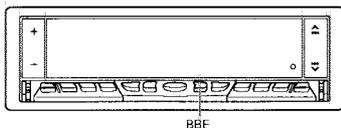
15 16

### Turning on/off the BBE<sup>II</sup> function

The BBE<sup>II</sup> function restores the brilliance and clarity of the original live sound in recording, broadcasts, etc.

When a speaker reproduces sound, it introduces frequency-dependent phase shifting, causing high-frequency sounds to take longer to reach the ear than low frequency sounds. The BBE<sup>II</sup> function adjusts the phase relationship between the low, mid and high frequencies by adding a progressively longer delay time to the low and mid frequencies, so that all frequencies reach the listener's ears at the proper time.

In addition, the BBE<sup>II</sup> function boosts low and high frequencies, which loudspeakers tend to be less efficient in reproducing, through dynamic, program-driven augmentation. When combined with the phase compensation feature, the resulting sound has a clearer, more finely detailed "live" presence.



Each time you press BBE, the BBE<sup>II</sup> function changes as follows:



As the number gets higher, the BBE<sup>II</sup> function becomes stronger. When shipped from the factory, the BBE<sup>II</sup> function is set to "BBE 2."

To cancel the BBE<sup>II</sup> function, select "BBE OFF."

\* Under license from BBE Sound, Inc.  
**BBE<sup>II</sup>** is a trademark of BBE Sound, Inc.

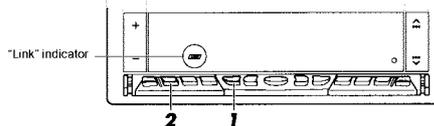
### Using the Sound Control Memory

You can select and store a preset sound adjustment suitable for each playback source. (Advanced SCM)

#### Selecting and storing the sound modes

Once you select a sound mode, it is stored in memory, and will be recalled every time you select the same source. A sound mode can be stored for each of the following sources — FM1, FM2, FM3, AM, CD and external components.

\* If you do not want to store the sound mode separately for each playback source, but want to use the same sound mode for all the sources, see "To cancel Advanced SCM" on page 26.



**1** Light "MODE" on the lower part of the display. The number buttons can work as different function buttons.

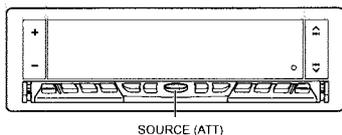
**2** Select the sound mode you want. Each time you press the button, the sound mode changes as follows:



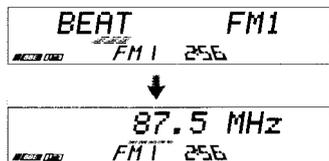
- If the "Link" indicator is lit on the display (with "SCM LINK" set to "SCM LINK ON" — see page 26), the selected sound mode can be stored in memory for the current source, and the effect applies to the current source.
- If the "Link" indicator is NOT lit on the display (with "SCM LINK" set to "SCM LINK OFF"), the selected sound mode effect applies to any source.

Indication	For:	Preset values		
		Bass	Treble	BBE <sup>II</sup>
OFF	(Flat sound)	00	00	BBE 2
BEAT	Rock or disco music	+02	00	BBE 2
SOFT	Quiet background music	+01	-03	Off
POP	Light music	+04	+01	Off

### Recalling the sound modes



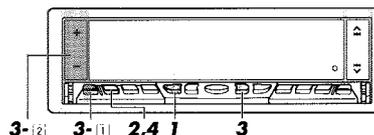
Select the source while the "Link" indicator is lit on the display. The "Link" indicator starts flashing, and the sound mode stored in memory for the selected source is recalled (and appears on the display for a while).



- Notes:**
- You can adjust each sound mode to your preference, and store it in memory. If you want to adjust and store your original sound mode, see "Storing your own sound adjustments" on page 20.
  - To adjust the bass and treble reinforcement levels or to turn on/off the BBE<sup>II</sup> function temporarily, see pages 16 and 17. (Your adjustments will be canceled if another source is selected.)
  - By setting "CLOCK DISP" to "CLK DISP OFF" (see page 26), you can always show the current sound mode setting when the unit is turned on.

### Storing your own sound adjustments

You can adjust the sound modes (BEAT, SOFT, POP, see page 18) to your preference and store your own adjustments in memory.



**1** Light "MODE" on the lower part of the display. The number buttons can work as different function buttons.

**REMEMBER** you must finish the following steps while "MODE" is still on the display. Otherwise, the setting will be canceled.

**2** Select the sound mode you want. For details, see page 18.

**3** To adjust the bass or treble level:  
 1) Select "BAS" or "TRE."  
 2) Adjust the bass or treble level.

To turn on or off the BBE<sup>II</sup> function  
 See page 17.

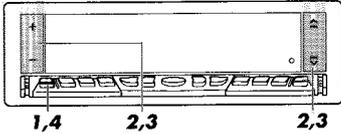
**4** Press and hold SCM until the sound mode you have selected flashes on the display. Your adjustment made for the selected sound mode is stored in memory.

**5** Repeat the same procedure to adjust other sound modes.

**To reset to the factory settings**  
 Repeat the same procedure and reassign the preset values listed in the table on page 18.

**OTHER MAIN FUNCTIONS**

**Setting the clock**



**1** Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.

**2** Set the hour.  
 1 | Select "CLOCK HOUR" if not shown on the display.  
 2 | Adjust the hour.

**3** Set the minute.  
 1 | Select "CLOCK MINUTE."  
 2 | Adjust the minute.

**4** Finish the setting.

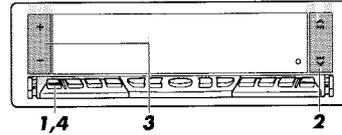
To check the current clock time while the unit is turned off, press + or -. The power turns on, the clock time is shown for 5 seconds, then the power turns off.

ENGLISH  
ENGLISH

**Controlling the volume automatically (Audio Cruise)**

You can select the proper cruise mode for your car. This unit changes the volume level automatically (at 3 possible levels) based on the driving speed of your car by detecting the alternator's generating frequency (Audio Cruise). If you want to use this mode, follow the procedure below. When shipped from the factory, this mode is set to "CRUISE OFF."

- CRUISE 1: Select this if your car is relatively quiet.
- CRUISE 2: Select this if your car is relatively loud. The volume increase rate is twice as much as that of the CRUISE 1 setting.
- CRUISE OFF: Cancels Audio Cruise.



**1** Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.

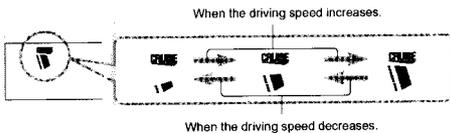
**2** Select "CRUISE MODE."

**3** Select the desired setting. Each time you press the button, the Audio Cruise mode changes as follows:  
 → CRUISE 1 ↔ CRUISE 2 ↔ CRUISE OFF →

**4** Finish the setting.

21 22

When this function is turned on (the CRUISE indicator lights up on the display), the proper volume level is automatically selected among the 3 possible levels according to the driving speed, and the selected level is shown on the display.



To adjust the volume increase rate  
 If you find Audio Cruise increases (or decreases) the volume either too much or too little as the driving speed changes, you can adjust the increase rate by changing the boost level. To change it, follow the procedure below.

- 1 Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ▲▶▶ or ◀◀▼ repeatedly until "CRUISE MODE" appears on the display.
- 3 Press + or - to select either "CRUISE 1" or "CRUISE 2."
- 4 Press ▲▶▶ (or ◀◀▼) to select "BOOST."
- 5 The current boost level also appears on the display.
- 6 Press + or - to select the desired boost level (among 01 to 15).
- 7 Press SEL again to finish the setting.

If Audio Cruise does not function correctly  
 You may need to store the idling speed into memory to make Audio Cruise function correctly.

NOTICE that a number of factors, such as electric power steering, wipers, power windows, air conditioner, etc. do generate noises and, as a result, may cause Audio Cruise not to function correctly. If this is the main cause of malfunction, connect the memory backup lead (yellow lead) directly to the car battery to prevent these noises from affecting Audio Cruise.

- 1 Start the engine and let it warm up.
- 2 Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.
- 3 Press ▲▶▶ or ◀◀▼ repeatedly until "CRUISE MODE" appears on the display.
- 4 Press + or - to select either "CRUISE 1" or "CRUISE 2."
- 5 Press ▲▶▶ (or ◀◀▼) to select "+OR- RPM SET."
- 6 Press + or - to select the desired idling speed.
- 7 Press SEL again to finish the setting.

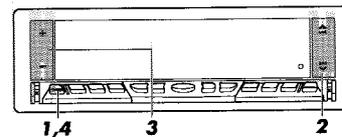
When the setting is complete, the unit automatically checks to see if Audio Cruise functions correctly with this new idling setting. If it does not function correctly, Audio Cruise is canceled automatically and the idling setting becomes invalid.  
 • If this happens, see the NOTICE above.

ENGLISH  
ENGLISH

**Changing the general settings (PSM)**

You can change the items listed on the next page by using the PSM (Preferred Setting Mode) control.

**Basic Procedure**



**1** Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.

**2** Select the PSM item you want to adjust. (See page 25.)

**3** Adjust the PSM item selected above.

**4** Finish the setting.

23 24

	1	2	3	Factory-preset settings	See page
<b>CLOCK HOUR</b>		Select			
<b>CLOCK MINUTE</b>		Hour adjustment			
<b>SCM LINK</b>		Minute adjustment		1:00	21
		Sound control memory linkage	SCM LINK OFF   SCM LINK ON	SCM LINK ON	26
<b>CLOCK DISP</b>		Clock display	CLK DISP OFF   CLK DISP ON	CLK DISP ON	26
<b>LEVEL METER</b>		Level display	6 types (See page 26.)	NORMAL	26
<b>DIMMER MODE</b>		Dimmer mode	DIMMER AUTO ↔ DIMMER OFF ↕ DIMMER ON ↕	DIMMER AUTO	26
<b>CRUISE MODE</b>		Audio cruise	CRUISE 1 ↔ CRUISE 2 ↕ CRUISE OFF ↕	CRUISE OFF	22
<b>+OR- RPM SET*</b>		Idling speed	—	800 rpm	23
<b>BOOST*</b>		Boost	BOOST 01 –15	BOOST 05	23
<b>BEEP SWITCH</b>		Key-touch tone	BEEP OFF   BEEP ON	BEEP ON	26
<b>CONTRAST</b>		Display contrast	CONTRAST 01 –10	CONTRAST 05	27
<b>SCROLL MODE</b>		Scroll mode	SCROLL ONCE ↔ SCROLL AUTO ↕ SCROLL OFF ↕	SCROLL ONCE	27
<b>WOOFER FREQ</b>		Subwoofer cutoff frequency	FREQ LOW ↔ FREQ MID ↕ FREQ HIGH ↕	FREQ MID	27
<b>AREA CHANGE</b>		Channel interval	AREA US   AREA EU	AREA US	27
<b>LINE ADJ</b>		Line input level adjustment	LINE ADJ 00 –05	LINE ADJ 00	28
<b>FLAT PANEL</b>		Flat panel	FLAT OFF   FLAT ON	FLAT OFF	28

\* When you select "CRUISE 1" or "CRUISE 2" for Audio Cruise Mode, you can adjust these items.

4 Press SEL to finish the setting.

ENGLISH

### To cancel Advanced SCM

You can cancel the Advanced SCM (Sound Control Memory), and unlink the sound modes and the playback sources.

When shipped from the factory, a different sound mode can be stored in memory for each source so that you can change the sound modes simply by changing the sources.

- SCM LINK ON: Advanced SCM (different sound modes for different sources)
- SCM LINK OFF: Conventional SCM (one sound mode for all sources)

### To set the clock display

You can set the clock to be shown on the lower part of the display when the unit is turned on. When shipped from the factory, the clock is set to be shown on the display.

- CLK DISP ON: Clock display is turned on.
- CLK DISP OFF: Clock display is turned off. When "CLK DISP OFF" is selected, the current sound mode setting (see page 19) is shown on the upper part of the display.

### To select the level meter

You can select the level meter display according to your preference. When shipped from the factory, "NORMAL" is selected.

- NORMAL: Normal audio level meter (illuminates from bottom to top)
- REVERSE: Level meter illuminates from top to bottom.
- WIDE: Level meter illuminates from center to outside.
- RACE: Level meter illuminates as if cars are racing.
- LEVEL OFF: Level meter stays lit and does not change its illumination.
- ALL OFF: Level meter turns off.

### To select the dimmer mode

When you turn on the car head lights, the display automatically dims (Auto Dimmer).

When shipped from the factory, Auto Dimmer mode is activated.

- DIMMER AUTO: Activates Auto Dimmer.
- DIMMER OFF: Cancels Auto Dimmer.
- DIMMER ON: Always dims the display.

#### Note on Auto Dimmer:

Auto Dimmer equipped with this unit may not work correctly on some vehicles, particularly on those having a control dial for dimming. In this case, set the dimmer mode to "DIMMER ON" or "DIMMER OFF."

### To turn on/off the key-touch tone

You can deactivate the key-touch tone if you do not want it to beep each time you press a button. When shipped from the factory, the key-touch tone is activated.

- BEEP ON: Activates the key-touch tone.
- BEEP OFF: Deactivates the key-touch tone.

25 26

### To adjust the display contrast level

You can adjust the display contrast level among 01 (dark) to 10 (bright). When shipped from the factory, the display contrast level is set at level 05.

### To select the scroll mode

You can select the scroll mode for the disc information if it consists of more than 12 characters. When shipped from the factory, Auto Scroll mode is set to "SCROLL ONCE."

- SCROLL ONCE: Scrolls only once.
- SCROLL AUTO: Repeats the scroll (in 5-second intervals).
- SCROLL OFF: Cancels Auto Scroll.

#### Note:

Even if the scroll mode is set to "SCROLL OFF," you can scroll the display by pressing DISP for more than 1 second.

### To select the subwoofer cutoff frequency

When a subwoofer is connected to this unit, select an appropriate cutoff frequency level for your subwoofer. When shipped from the factory, the subwoofer cutoff frequency is set to "MID."

- FREQ LOW: Frequencies higher than 50 Hz are cut off to the subwoofer.
- FREQ MID: Frequencies higher than 80 Hz are cut off to the subwoofer.
- FREQ HIGH: Frequencies higher than 120 Hz are cut off to the subwoofer.

### To change the AM/FM channel intervals

When this unit is shipped from the factory, the channel intervals are set to 10 kHz for AM and 200 kHz for FM (AREA US settings).

You will have to change the channel intervals when using this unit in an area other than North America and South America.

- AREA EU: Select this when using this unit in an area other than North and South America. (9 kHz for AM and 50 kHz (for manual tuning) / 100 kHz (for searching) for FM)
- AREA US: Select this when using this unit in North or South America. (10 kHz for AM and 200 kHz for FM)

#### Note:

If the channel intervals settings are changed, the names assigned to the stations will be erased from memory. To reassign the names, see "Assigning names to the sources" on pages 29 - 31.

27 28

ENGLISH

### To adjust the line input level

Adjust the line input level properly when an external component is connected to the LINE IN plugs. When shipped from the factory, the line input level is set at level 00.

If the input level of the connected component is not high enough, increase the input level properly. Without adjusting the line input level, you may be surprised at a loud sound when you change from the external component to another source.

### To make the front panel look flat (hiding the control panel)

When operating the receiver using the remote control, you can hide the control panel to make the front panel look flat. When shipped from the factory, "FLAT OFF" is selected.

- FLAT ON: The control panel will not come out when you turn on the unit. To use the control panel, press so that the control panel comes out. If no operation is done for about 10 seconds, it automatically goes back into the receiver.
- FLAT OFF: You can use the control panel normally.

#### Note:

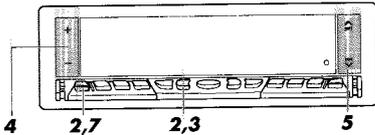
When "FLAT ON" is selected, you can eject a CD by holding .

**Assigning names to the sources**

You can assign names to station frequencies, CDs and the external component connected to the LINE IN plugs. After assigning a name, it will appear on the display when you select the source.

Sources	Maximum number of the characters
Station frequencies	up to 12 characters (up to 30 station frequencies including both FM and AM)
CDs *	up to 32 characters (up to 40 discs)
External component	up to 12 characters

\* You cannot assign a name to a CD Text.



- Select a source you want to assign a name to.
- Press and hold SEL (Select) for more than 2 seconds while pressing DISP.
  - When you select a station frequency as the source:
  - When you select the CD as the source:
  - When you select the external component connected to LINE IN as the source:

Continued to the next page

ENGLISH  
ENGLISH

- Select the character set you want while " " is flashing. Each time you press the button, the character set changes as follows:
  - Capital letter (A) → Small letter (a)
  - Numbers and symbols (0-9)
- Select a character. About the available characters, see page 31.
- Move the cursor to the next (or previous) character position.
- Repeat steps 3 to 5 until you finish inputting the name.
- Press the button while the last selected character is flashing. The input name is stored in memory.

**To erase the input characters**  
Insert spaces using the same procedure described above.

**Available characters**

**Capital letters**

A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	space			

**Small letters**

a	b	c	d	e	f	g	h	i	j
k	l	m	n	o	p	q	r	s	t
u	v	w	x	y	z	space			

**Numbers and symbols**

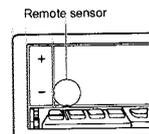
0	1	2	3	4	5	6	7	8	9
!	"	#	\$	%	&	'	(	)	*
+	,	-	.	/	:	;	<	=	>
?	@	_	`	space					

**Notes:**

- When you try to assign a name to the 41st disc, "NAME FULL" appears on the display. (In this case, delete unwanted names before assignment.)
- When the CD changer is connected, you can assign names to CDs in the CD changer. These names can also be shown on the display if you insert the CDs in this unit.

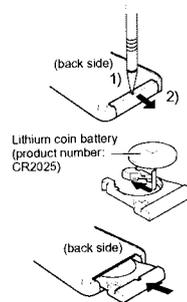
**REMOTE OPERATIONS**

- Before using the remote controller:
- Aim the remote controller directly at the remote sensor on the main unit. Make sure there is no obstacle in between.
  - Do not expose the remote sensor to strong light (direct sunlight or artificial lighting).



**Installing the battery**

When the controllable range or effectiveness of the remote controller decreases, replace the battery.

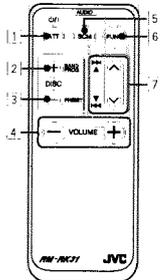


- Remove the battery holder.**
  - Push out in the direction indicated by the arrow using a ball point pen or a similar tool.
  - Remove the battery holder.
- Place the battery.** Slide the battery into the holder with the + side facing upwards so that the battery is fixed in the holder.
- Return the battery holder.** Insert again the battery holder pushing it until you hear a clicking sound.

**WARNING:**

- Store the batteries in a place which children cannot reach.
- If a child accidentally swallows the battery, immediately consult a doctor.
- Do not recharge, short, disassemble or heat the batteries or dispose of in a fire. Doing any of these things may cause the batteries to give off heat, crack or start a fire.
- Do not leave the batteries with other metallic materials. Doing this may cause the batteries to give off heat, crack or start a fire.
- When throwing away or saving the batteries, wrap in tape and insulate; otherwise, it may cause the batteries to give off heat, crack or start a fire.
- Do not poke the batteries with tweezers or similar tools. Doing this may cause the batteries to give off heat, crack or start a fire.

### Using the remote controller



1. Turns on the unit if pressed briefly.
  2. Turns off the unit if pressed and held until "SEE YOU" appears on the display.
  3. Drops the volume level for a moment if pressed briefly. Press again to resume the volume.
  4. Functions as the BAND button while listening to the radio. Each time you press the button, the band changes.
  5. Functions as the DISC + button while listening to the CD changer. Each time you press the button, the disc number increases, and the selected disc starts playing.
  6. Does not function as the PROG button.
  7. Functions as the PRESET button while listening to the radio. Each time you press the button, the preset station number increases, and the selected station is tuned in.
  8. Functions as the DISC - button while listening to the CD changer. Each time you press the button, the disc number decreases, and the selected disc starts playing.
  9. Functions the same as the control dial on the main unit.
- Note:** This button does not function for the preferred setting mode adjustment.
10. Select the sound mode. Each time you press SCM (Sound Control Memory), the mode changes.
  11. Select the source. Each time you press FUNC (function), the source changes.
  12. Searches stations while listening to the radio.
  13. Fast forwards or reverses the track if pressed and held while listening to a CD.
  14. Skips to the beginning of the next tracks or goes back to the beginning of the current (or previous tracks) if pressed briefly while listening to a CD.

ENGLISH ENGLISH

### CD CHANGER OPERATIONS

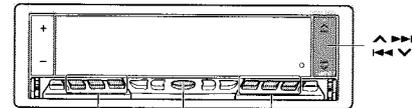
We recommend that you use one of the CH-X series (ex: CH-X1200) with your unit. If you have another CD automatic changer, consult your JVC car audio dealer for connections.

- For example, if your CD automatic changer is one of the KD-MK series, you need a cord (KS-U15K) for connecting it to this unit.

Before operating your CD automatic changer:

- Refer also to the instructions supplied with your CD changer.
- If no discs are in the magazine of the CD changer or the discs are inserted upside down, "NO DISC" will appear on the display. If this happens, remove the magazine and set the discs correctly.
- If "RESET 1 - RESET 8" appears on the display, something is wrong with the connection between this unit and the CD changer. If this happens, check the connection, connect the connecting cord(s) firmly if necessary, then press the reset button of the CD changer.

### Playing CDs

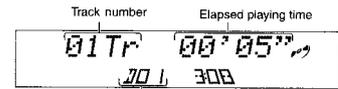


Number buttons 1 (7) to 3 (9) SOURCE (ATT) Number buttons 4 (10) to 6 (12)

#### Select the CD automatic changer.

Each time you press the button, the source changes as described on page 5.

Playback starts from the first track of the first disc. All tracks of all discs are played back.



Disc number appears.

**Note:**

When a CD is in the CD changer, selecting CD changer as the source by pressing SOURCE (ATT) starts CD play.

33 34

### To fast-forward or reverse the track



Press and hold **FF**, while playing a CD, to fast-forward the track.

Press and hold **REW**, while playing a CD, to reverse the track.

### To go to the next tracks or the previous tracks



Press **▶** briefly, while playing a CD, to go ahead to the beginning of the next track. Each time you press the button consecutively, the beginning of the next tracks is located and played back.

Press **◀** briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

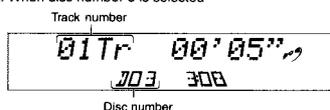
### To go to a particular disc directly



Press the number button corresponding to the disc number to start its playback (while the CD changer is playing).

- To select a disc number from 1 - 6: Press 1 (7) - 6 (12) briefly.
- To select a disc number from 7 - 12: Press and hold 1 (7) - 6 (12) for more than 1 second.

Ex. When disc number 3 is selected



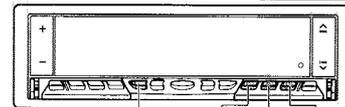
### To show the CD Text information

This is possible only when connecting a JVC CD automatic changer equipped with CD Text reading capability. See "Playing a CD Text" on page 12.

35 36

ENGLISH ENGLISH

### Selecting CD playback modes

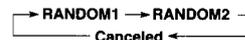


MODE INT RPT RND

#### To play back tracks at random (Random Play)



- Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- Press RND (Random), while "MODE" is still on the display, so that the RND indicator lights up on the display. Each time you press the button, CD random play mode changes as follows:

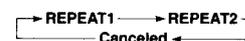


Mode	RND indicator	Plays at random
RANDOM1	Lights	All tracks of the current disc, then the tracks of the next disc, and so on.
RANDOM2	Flashes	All tracks of all discs inserted in the magazine.

#### To play back tracks repeatedly (Repeat Play)



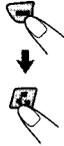
- Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- Press RPT (Repeat), while "MODE" is still on the display, so that the RPT indicator lights up on the display. Each time you press the button, CD repeat play mode changes as follows:



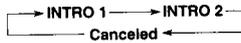
Mode	RPT Indicator	Plays repeatedly
REPEAT1	Lights	The current track (or specified track).
REPEAT2	Flashes	All tracks of the current disc (or specified disc).



**To play back only intros (Intro Scan)**



- 1 Press MODE while playing a CD. "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- 2 Press INT (Intro), while "MODE" is still on the display. Each time you press the button, CD intro scan mode changes as follows:



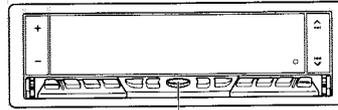
Mode	Indication	Plays the beginnings (15 seconds)
INTRO 1	Track number flashes	Of all tracks on all inserted discs.
INTRO 2	Disc number flashes (when it is shown on the display)	Of the first track on each inserted disc.

ENGLISH  
ENGLISH

**EXTERNAL COMPONENT OPERATIONS**

**Playing an external component**

When connecting an external component to the LINE IN plugs on the rear, you can select the component as the sound source.



**1** Select the external component. Each time you press the button, the source changes as described on page 5.

**2**

Operate the external component.

**Notes:**

- For the external component connection, see the Installation/Connection Manual (separate volume).
- See also "Assigning names to the sources" on page 29 if you want to match the name shown on the display with the name of the connected component.

**Using a subwoofer**

By connecting a subwoofer to the SUBWOOFER OUT plugs on the rear, you can enjoy enhanced bass sounds and a more realistic theater atmosphere in your car.

- Refer also to the instructions supplied with your subwoofer.

To set the subwoofer cutoff frequency, see "To select the subwoofer cutoff frequency" on page 27.

To adjust the subwoofer output volume, see "Adjusting the sound" on page 16.

**MAINTENANCE ?!**

**Handling CDs**

This unit has been designed only to reproduce the CDs bearing the and marks. Other discs cannot be played back.

**How to handle CDs**

**When removing a CD from its case**, press down the center holder of the case and lift the CD out, holding it by the edges.

- Always hold the CD by the edges. Do not touch its recording surface.



**When storing a CD into its case**, gently insert the CD around the center holder (with the printed surface facing up).

- Make sure to store CDs into the cases after use.

**To keep CDs clean**

A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.



**To play new CDs**

New CDs may have some rough spots around the inner and outer edges. If such a CD is used, this unit may reject the CD.

To remove these rough spots, rub the edges with a pencil or ball-point pen, etc.



**Moisture condensation**

Moisture may condense on the lens inside the CD player in the following cases:

- After starting the heater in the car.
  - If it becomes very humid inside the car.
- Should this occur, the CD player may malfunction. In this case, eject the CD and leave the unit turned on for a few hours until the moisture evaporates.

**CAUTIONS:**

- Do not insert 8cm (3 1/16") CDs (single CDs) into the loading slot. (Such CDs cannot be ejected.)
- Do not insert any CD of unusual shape - like a heart or flower; otherwise, it will cause a malfunction.
- Do not expose CDs to direct sunlight or any heat source or place them in a place subject to high temperature and humidity. Do not leave them in a car.
- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean CDs.

**When playing a CD-R (Recordable)**

You can play back your original CD-Rs on this receiver.

- Before playing back CD-Rs, read their instructions or cautions carefully.
- Some CD-Rs recorded on CD recorders may not be played back on this receiver because of their disc characteristics, and of the following reasons:
  - Discs are dirty or scratched.
  - Moisture condensation occurs on the lens inside the unit.
  - The pickup lens inside the CD player is dirty.
- Use only "finalized" CD-Rs.
- CD-RWs (Rewritable) cannot be played back on this receiver.
- Do not use the CD-Rs with stickers or sticking labels on the surface. They may cause malfunctions.

**About mistracking:**

Mistracking may result from driving on extremely rough roads. This does not damage the unit and the CD, but will be annoying. We recommend that you stop CD play while driving on such rough roads.

ENGLISH  
ENGLISH

**! ? TROUBLESHOOTING**

What appears to be trouble is not always serious. Check the following points before calling a service centre.

Symptoms	Causes	Remedies
• CD cannot be played back.	CD is inserted upside down.	Insert the CD correctly.
	You are driving on rough roads.	Stop CD play while driving on rough roads.
	CD is scratched.	Change the CD.
• CD sound is sometimes interrupted.	Connections are incorrect.	Check the cords and connections.
	The volume level is set to the minimum level.	Adjust it to the optimum level.
• Sound cannot be heard from the speakers.	Connections are incorrect.	Check the cords and connections.
	Signals are too weak.	Store stations manually.
• Static noise while listening to the radio.	The antenna is not connected firmly.	Connect the antenna firmly.
• "NO DISC" appears on the display.	No CD is in the magazine.	Insert CD.
• "RESET 8" appears on the display.	This unit is not connected to a CD changer correctly.	Connect this unit and the CD changer correctly and press the reset button of the CD changer.
• "RESET 1-RESET 7" appears on the display.		Press the reset button of the CD changer.
• "EJECT ERROR" appears on the display and CD cannot be ejected.	The CD player may function incorrectly.	Press and hold - of the +/- button for more than 5 seconds.
• No message appears on the display but CD cannot be ejected.		While holding , press the reset button. Release the reset button, then release . (Be careful not to drop the CD when ejecting.)
• This unit does not work at all. The CD changer does not work at all.	The built-in microcomputer may function incorrectly due to noise, etc.	Press the reset button on the front panel. (See page 2)

## SPECIFICATIONS

### AUDIO AMPLIFIER SECTION

Maximum Power Output:  
 Front: 45 W per channel  
 Rear: 45 W per channel  
 Continuous Power Output (RMS):  
 Front: 17 W per channel into 4 Ω, 40 Hz to 20,000 Hz at no more than 0.8 % total harmonic distortion.  
 Rear: 17 W per channel into 4 Ω, 40 Hz to 20,000 Hz at no more than 0.8 % total harmonic distortion.  
 Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:  
 Bass: ±10 dB at 100 Hz  
 Treble: ±10 dB at 10 kHz  
 Frequency Response: 40 Hz to 20,000 Hz  
 Signal-to-Noise Ratio: 70 dB  
 Line-In Level/Impedance:  
 1.5 V/20 kΩ load  
 Line-Out Level/Impedance:  
 4.0 V/20 kΩ load (full scale)  
 Output Impedance: 1 kΩ

### TUNER SECTION

Frequency Range:  
 FM: 87.5 MHz to 107.9 MHz  
 (with channel interval set to 200 kHz)  
 87.5 MHz to 108.0 MHz  
 (with channel interval set to 50 kHz)  
 AM: 530 kHz to 1,710 kHz  
 (with channel interval set to 10 kHz)  
 531 kHz to 1,602 kHz  
 (with channel interval set to 9 kHz)

#### [FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μV/75 Ω)  
 50 dB Quieting Sensitivity:  
 16.3 dBf (1.8 μV/75 Ω)  
 Alternate Channel Selectivity (400 kHz):  
 65 dB  
 Frequency Response: 40 Hz to 15,000 Hz  
 Stereo Separation: 35 dB  
 Capture Ratio: 1.5 dB

#### [AM Tuner]

Sensitivity: 20 μV  
 Selectivity: 35 dB

### CD PLAYER SECTION

Type: Compact disc player  
 Signal Detection System: Non-contact optical pickup (semiconductor laser)  
 Number of channels: 2 channels (stereo)  
 Frequency Response: 5 Hz to 20,000 Hz  
 Dynamic Range: 96 dB  
 Signal-to-Noise Ratio: 98 dB  
 Wow and Flutter: Less than measurable limit

### GENERAL

Power Requirement:  
 Operating Voltage: DC 14.4 V (11 V to 16 V allowance)  
 Grounding System: Negative ground  
 Allowable Operating Temperature:  
 0°C to +40°C (32°F to 104°F)  
 Dimensions (W x H x D):  
 Installation Size:  
 182 mm x 52 mm x 160 mm  
 (7-3/16" x 2-1/16" x 6-5/16")  
 Panel Size: 188 mm x 58 mm x 8 mm  
 (7-7/16" x 2-5/16" x 3/8")  
 Mass: 1.7 kg (3.8 lbs) (excluding accessories)

*Design and specifications subject to change without notice.*

If a kit is necessary for your car, consult your telephone directory for the nearest car audio speciality shop.



**Having TROUBLE with operation?**  
**Please reset your unit**  
 Refer to page of How to Reset  
**Still having trouble??**  
 USA ONLY  
**Call 1-800-252-5722**  
<http://www.jvcservice.com>  
**We can help you!**



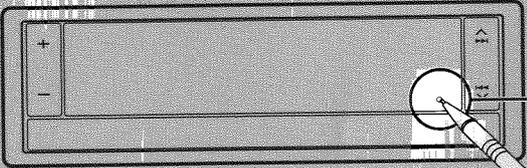
# JVC

## IMPORTANT

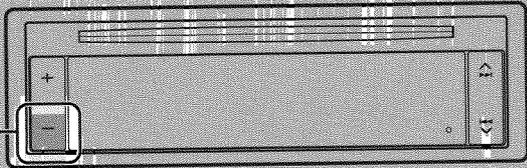
Notice the following information will help you solve the problems.  
Keep this IMPORTANT sheet together with the INSTRUCTIONS book.

- **After installing the unit**
  - Follow the procedure [A] described below.
- **If the unit does not operate**
  - Follow the procedure [A] described below.
- **If a CD is not ejected from the loading slot**
  - ① **“EJECT ERR” or “EJECT ERROR” appears on the display**
    - Follow the procedure [B] described below. (If the procedure [B] does not work, try the procedure [A].)
  - ② **No message appears on the display**
    - Follow the procedure [C] described below.
- **If a CD is not recognized (the source does not change to the CD) even though there is a CD in the loading slot**
  - Follow the procedure [C] described below. (If the procedure [C] does not work, try the procedure [A].)

**[A] To reset the microcomputer**  
Press the reset button on the front panel using a ball-point pen or a similar tool. This will reset the built-in microcomputer.  
**NOTE:** Your preset adjustments — such as preset channels or sound adjustments — will also be erased.



**[B] To eject a CD by force**  
Press and hold - of the + / - button until CD ejects.

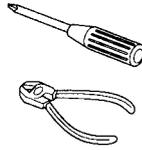


**[C] To eject a CD by force**  
While holding ^▶▶, press the reset button. Release the reset button, then release ^▶▶. (Be careful not to drop the CD when ejecting.)



LVT0436-001A

**JVC** KD-LX30  
KD-LX10  
**Installation/Connection Manual**  
**Manual de instalación/conexión**  
**Manuel d'installation/raccordement**  
LVT0394-001A  
[J]



010CMNMDWJEIN  
EN, SP, FR

**ENGLISH**

• This unit is designed to operate on 12 volts DC, NEGATIVE ground electrical systems.

**INSTALLATION  
(IN-DASH MOUNTING)**

• The following illustration shows a typical installation. However, you should make adjustments corresponding to your specific car. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.

**ESPAÑOL**

• Esta unidad está diseñada para funcionar con 12 voltios de CC, con sistemas eléctricos de masa NEGATIVA.

**INSTALACION (MONTAJE EN EL  
TABLERO DE INSTRUMENTOS)**

• La siguiente ilustración muestra una instalación típica. Sin embargo usted deberá efectuar los ajustes correspondientes a su automóvil. Si tiene alguna pregunta o necesita información acerca de las herramientas para instalación, consulte con su concesionario de JVC de equipos de audio para automóviles o a una compañía que suministra tales herramientas.

**FRANÇAIS**

• Cet appareil est conçu pour fonctionner sur des sources de courant continu de 12 volts à masse NEGATIVE.

**INSTALLATION  
(MONTAGE DANS LE TABLEAU DE BORD)**

• L'illustration suivante est un exemple d'installation typique. Cependant, vous devez faire les ajustements correspondant à votre voiture particulière. Si vous avez des questions ou avez besoin d'information sur des kits d'installation, consultez votre revendeur d'autoradios JVC ou une compagnie d'approvisionnement.

<p><b>1</b> Remove the trim plate.</p> <p><b>2</b> Remove the sleeve after disengaging the sleeve locks.</p> <p>1: Stand the unit.</p> <p><b>Note:</b> When you stand the unit, be careful not to damage the fuse on the rear.</p> <p>2: Insert the 2 handles between the unit and the sleeve, as illustrated, to disengage the sleeve locks.</p> <p>3: Remove the sleeve.</p> <p><b>Note:</b> Be sure to keep the handles for future use after installing the unit.</p> <p><b>3</b> Attach the trim plate.</p> <p><b>4</b> Install the sleeve into the dashboard.</p> <p>* After the sleeve is correctly installed into the dashboard, bend the appropriate tabs to hold the sleeve firmly in place, as illustrated.</p> <p><b>5</b> Fix the mounting bolt to the rear of the unit's body and place the rubber cushion over the end of the bolt.</p> <p><b>6</b> Do the required electrical connections.</p> <p><b>7</b> Slide the unit into the sleeve until it is locked by pressing the four corners of the trim plate.</p> <p><b>Note:</b> Do not press the panel (shaded in the illustration); otherwise the panel may become unable to open or close.</p>	<p><b>1</b> Retire la placa de garnición.</p> <p><b>2</b> Retire la cubierta después de desenganchar los retenes de la cubierta.</p> <p>1: Ponga la unidad vertical.</p> <p><b>Nota:</b> Al poner la unidad vertical, tenga cuidado de no dañar el fusible provisto en la parte posterior.</p> <p>2: Inserte las dos asas entre la unidad y la cubierta tal como en la ilustración y desenganche los retenes de la cubierta.</p> <p>3: Retire la cubierta.</p> <p><b>Nota:</b> Después de instalar la unidad, asegúrese de guardar las asas para uso futuro.</p> <p><b>3</b> Instale la placa de garnición.</p> <p><b>4</b> Instale la cubierta en el tablero de instrumentos.</p> <p>* Después de que la cubierta esté correctamente instalada en el tablero de instrumentos, doble las lengüetas correspondientes para sostener la cubierta firmemente en su lugar, tal como se muestra.</p> <p><b>5</b> Fije el perno de montaje en la parte trasera del cuerpo de la unidad y coloque el cojín de goma sobre el extremo del perno.</p> <p><b>6</b> Realice las conexiones eléctricas requeridas.</p> <p><b>7</b> Deslice la unidad dentro de la cubierta hasta que quede bloqueada al presionar contra las cuatro esquinas de la placa de garnición.</p> <p><b>Nota:</b> No presione el panel (sombreado en la ilustración); de lo contrario, podría suceder que no se pueda realizar su apertura o cierre.</p>	<p><b>1</b> Retirer la plaque d'assemblage.</p> <p><b>2</b> Libérer les verrous du manchon et retirer le manchon.</p> <p>1: Poser l'appareil à la verticale.</p> <p><b>Remarque:</b> Lorsque vous mettez l'appareil à la verticale, faire attention de ne pas endommager le fusible situé sur le fond.</p> <p>2: Insérer les 2 poignées entre l'appareil et le manchon comme indiqué pour désengager les verrous de manchon.</p> <p>3: Retirer le manchon.</p> <p><b>Remarque:</b> S'assurer de garder les poignées pour une utilisation ultérieure, après l'installation de l'appareil.</p> <p><b>3</b> Fixez la plaque d'assemblage.</p> <p><b>4</b> Installer le manchon dans le tableau de bord.</p> <p>* Après installation correcte du manchon dans le tableau de bord, plier les bonnes pattes pour maintenir fermement le manchon en place, comme montré.</p> <p><b>5</b> Monter le boulon de montage sur l'arrière du corps de l'appareil puis passer l'amortisseur en caoutchouc sur l'extrémité du boulon.</p> <p><b>6</b> Réaliser les connexions électriques.</p> <p><b>7</b> Faites glisser l'appareil dans le manchon jusqu'à ce qu'il soit verrouillé en appuyant sur les quatre coins de la plaque d'assemblage.</p> <p><b>Remarque:</b> N'appuyez pas sur le panneau (ombré sur l'illustration); sinon le panneau risquerait de ne pas pouvoir s'ouvrir ou se fermer.</p>
--	---	---

**TROUBLESHOOTING**

- **The fuse blows.**
  - \* Are the red and black leads connected correctly?
- **Power cannot be turned on.**
  - \* Is the yellow lead connected?
- **No sound from the speakers.**
  - \* Is the speaker output lead short-circuited?
- **Sound is distorted.**
  - \* Is the speaker output lead grounded?
  - \* Are the "-" terminals of L and R speakers grounded in common?
- **The unit becomes hot.**
  - \* Is the speaker output lead grounded?
  - \* Are the "-" terminals of L and R speakers grounded in common?

**LOCALIZACION DE AVERIAS**

- **El fusible se quema.**
  - \* ¿Están los conductores rojo y negro correctamente conectados?
- **No es posible conectar la alimentación.**
  - \* ¿Está el cable amarillo conectado?
- **No sale sonido de los altavoces.**
  - \* ¿Está el cable de salida del altavoz cortocircuitado?
- **El sonido presenta distorsión.**
  - \* ¿Está el cable de salida del altavoz conectado a masa?
  - \* ¿Están los terminales "-" de los altavoces L y R conectados a una masa común?
- **La unidad se calienta.**
  - \* ¿Está el cable de salida del altavoz conectado a masa?
  - \* ¿Están los terminales "-" de los altavoces L y R conectados a una masa común?

**EN CAS DE DIFFICULTÉS**

- **Le fusible saute.**
  - \* Les fils rouge et noir sont-ils raccordés correctement?
- **L'appareil ne peut pas être mise sous tension.**
  - \* Le fil jaune est-elle raccordée?
- **Pas de son des haut-parleurs.**
  - \* Le fil de sortie de haut-parleur est-il court-circuité?
- **Le son est déformé.**
  - \* Le fil de sortie de haut-parleur est-il à la masse?
  - \* Les bornes "-" des haut-parleurs gauche et droit sont-elles mises ensemble à la masse?
- **L'appareil devient chaud.**
  - \* Le fil de sortie de haut-parleur est-il à la masse?
  - \* Les bornes "-" des haut-parleurs gauche et droit sont-elles mises ensemble à la masse?

**• When using the optional stay**  
**• Cuando emplea un soporte opcional**  
**• Lors de l'utilisation du hauban en option**

**• When installing the unit without using the sleeve**  
**• Instalación de la unidad sin utilizar la cubierta**  
**• Lors de l'installation de l'appareil sans utiliser de manchon**

In a Toyota for example, first remove the car radio and install the unit in its place.  
 En un Toyota por ejemplo, primero extraiga la radio del automóvil y luego instale la unidad en su lugar.  
*Par exemple dans une Toyota, retirer d'abord l'autoradio et installer l'appareil à la place.*

Flat type screws (M5 x 6 mm)\*  
 Tornillos tipo plano (M5 x 6 mm)\*  
 Vis à tête plate (M5 x 6 mm)\*

\* Not included with this unit.  
 \* No suministrado con esta unidad.  
 \* Non fourni avec cet appareil.

Flat type screws (M5 x 6 mm)\*  
 Tornillos tipo plano (M5 x 6 mm)\*  
 Vis à tête plate (M5 x 6 mm)\*

**Note:** When installing the unit on the mounting bracket, make sure to use the 6 mm-long screws. If longer screws are used, they could damage the unit.  
**Nota:** Cuando instala la unidad en la ménsula de montaje, asegúrese de utilizar los tornillos de 6 mm de longitud. Si se utilizan tornillos más largos, éstos pueden dañar la unidad.  
**Remarque:** Lors de l'installation de l'appareil sur le support de montage, s'assurer d'utiliser des vis d'une longueur de 6 mm. Si des vis plus longues sont utilisées, elles peuvent endommager l'appareil.

**Removing the unit**

- Before removing the unit, release the rear section.
- 1 Remove the trim plate.
- 2 Insert the 2 handles into the slots, as shown. Then, while gently pulling the handles away from each other, slide out the unit. (Be sure to keep the handles after installing it.)

**Extracción de la unidad**

- Antes de extraer la unidad, libere la sección trasera.
- 1 Retire la placa de guarnición.
- 2 Inserte las 2 manijas entre las ranuras, como se muestra. Luego, separe gentilmente las manijas y extraiga la unidad. (Asegúrese de conservar las manijas después de instalarlo.)

**Retrait de l'appareil**

- Avant de retirer l'appareil, libérer la section arrière.
- 1 Retirer la plaque d'assemblage.
- 2 Introduire les deux poignées dans les fentes, comme montré. Puis, tout en tirant doucement les poignées écartées, faire glisser l'appareil pour le sortir. (S'assurer de conserver les poignées après l'installation de l'appareil.)

**Parts list for installation and connection**

The following parts are provided with this unit. After checking them, please set them correctly.

**Lista de piezas para instalación y conexión**

Con esta unidad se suministran las siguientes piezas. Después de inspeccionarlas, colóquelas correctamente.

**Liste des pièces pour l'installation et raccordement**

Les pièces suivantes sont fournies avec cet appareil. Après vérification, veuillez les placer correctement.

**ENGLISH**

**ELECTRICAL CONNECTIONS**

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit. If you are not sure how to install this unit correctly, have it installed by a qualified technician.

**Note:**  
 This unit is designed to operate on 12 volts DC, **NEGATIVE ground electrical systems**. If your vehicle does not have this system, a voltage inverter is required, which can be purchased at JVC car audio dealers.

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- If noise is a problem...  
 This unit incorporates a noise filter in the power circuit. However, with some vehicles, clicking or other unwanted noise may occur. If this happens, connect the unit's **rear ground terminal** (See connection diagram.) to the car's chassis using shorter and thicker cords, such as copper braiding or gauge wire. If noise still persists, consult your JVC car audio dealer.
- Maximum input of the speakers should be more than 45 watts at the rear and 45 watts at the front, with an impedance of 4 to 8 ohms.
- **Be sure to ground this unit to the car's chassis.**
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.

**ESPAÑOL**

**CONEXIONES ELECTRICAS**

Para evitar cortocircuitos, recomendamos que desconecte el terminal negativo de la batería y que efectúe todas las conexiones eléctricas antes de instalar la unidad. Si usted no está seguro de cómo instalar correctamente la unidad, hágala instalar por un técnico cualificado.

**Nota:**  
 Esta unidad está diseñada para funcionar con **12 voltios de CC, con sistemas eléctricos de masa NEGATIVA**. Si su vehículo no posee este sistema, será necesario un inversor de tensión, que puede ser adquirido en los concesionarios de JVC de equipos de audio para automóviles.

- Reemplace el fusible por uno con la corriente especificada. Si el fusible se quemase frecuentemente consulte con su concesionario de JVC de equipos de audio para automóviles.
- Si el ruido fuese un problema...  
 Este unidad tiene un filtro de ruido en el circuito de alimentación. Sin embargo, en algunos vehículos, pueden producirse chasquidos u otros ruidos indeseados. En tal caso conecte el **terminal de tierra posterior** (Ver diagrama de conexión.) del receptor al chasis del automóvil, utilizando cordones más gruesos y cortos tales como alambre de cobre trenzado o de grueso calibre. Si el ruido persiste, consulte a su concesionario de JVC de equipos de audio para automóvil.
- La entrada máxima de los altavoces traseros debe ser mayor de 45 vatios y la de los delanteros de 45 vatios, con una impedancia de 4 a 8 ohmios.
- **Asegúrese de conectar esta unidad a tierra en el chasis del automóvil.**
- El sumidero térmico estará muy caliente después del uso. Asegúrese de no tocarlo al desmontar esta unidad.

**FRANÇAIS**

**RACCORDEMENTS ELECTRIQUES**

Pour éviter tout court-circuit, nous vous recommandons de débrancher la borne négative de la batterie et d'effectuer tous les raccordements électriques avant d'installer l'appareil. Si l'on n'est pas sûr de pouvoir installer correctement cet appareil, le faire installer par un technicien qualifié.

**Remarque:**  
 Cet appareil est conçu pour fonctionner sur des sources de courant continu de 12 volts à masse **NEGATIVE**. Si votre véhicule n'offre pas ce type d'alimentation, il vous faut un convertisseur de tension, que vous pouvez acheter chez un revendeur d'autoradios JVC.

- Remplacer le fusible par un de la valeur précisée. Si le fusible saute souvent, consulter votre revendeur d'autoradios JVC.
- Si le bruit est un problème...  
 Cet appareil incorpore un filtre de bruit dans le circuit d'alimentation. Cependant, avec certains véhicules, quelques claquements ou autres bruits non désirés risquent de se produire. Si cela arrive, raccorder la borne de masse arrière de l'appareil au châssis de la voiture (voir le schéma de raccordement) en utilisant des cordons les plus gros et les plus courts possibles telle qu'une barre de cuivre ou une tresse. Si le bruit persiste, consulter votre revendeur d'autoradios JVC.
- La puissance admissible des haut-parleurs doit être supérieure à 45 watts à l'arrière et à 45 watts l'avant, avec une impédance de 4 à 8 ohms.
- **S'assurer de raccorder la mise à la masse de cet appareil au châssis de la voiture.**
- Le radiateur devient très chaud après usage. Faire attention de ne pas le toucher en retirant cet appareil.

**A Typical Connections / Conexiones típicas / Raccordements typiques**

**Before connecting:** Check the wiring in the vehicle carefully. Incorrect connection may cause serious damage to this unit.

**1** Connect the colored leads of the power cord to the car battery, speakers and power antenna (if any) in the following sequence.

- 1: Black: ground
- 2: Yellow: to car battery (constant 12V)
- 3: Red: to an accessory terminal
- 4: Others: to speakers
- 5: Blue with white stripe: to power antenna (200mA max.)
- 6: Orange with white stripe: to car light control switch

**2** Connect the antenna cord.

**3** Finally connect the wiring harness to the unit.

**Antes de la conexión:** Verifique atentamente el conexionado del vehículo. Una conexión incorrecta podría producir daños graves en la unidad.

**1** Conecte los conductores de color del cable de alimentación a la batería del automóvil, altavoces y antena motriz (si la hubiere) en la secuencia siguiente.

- 1: Negro: a tierra
- 2: Amarillo: a la batería del automóvil (12V constantes)
- 3: Rojo: a un terminal de accesorio
- 4: Otros: a los altavoces
- 5: Azul con rayas blancas: a la antena motriz (máx. 200mA)
- 6: Naranja con rayas blancas: al interruptor de control de las luces del automóvil

**2** Conecte el cable de antena.

**3** Por último, conecte el cable de alimentación a la unidad.

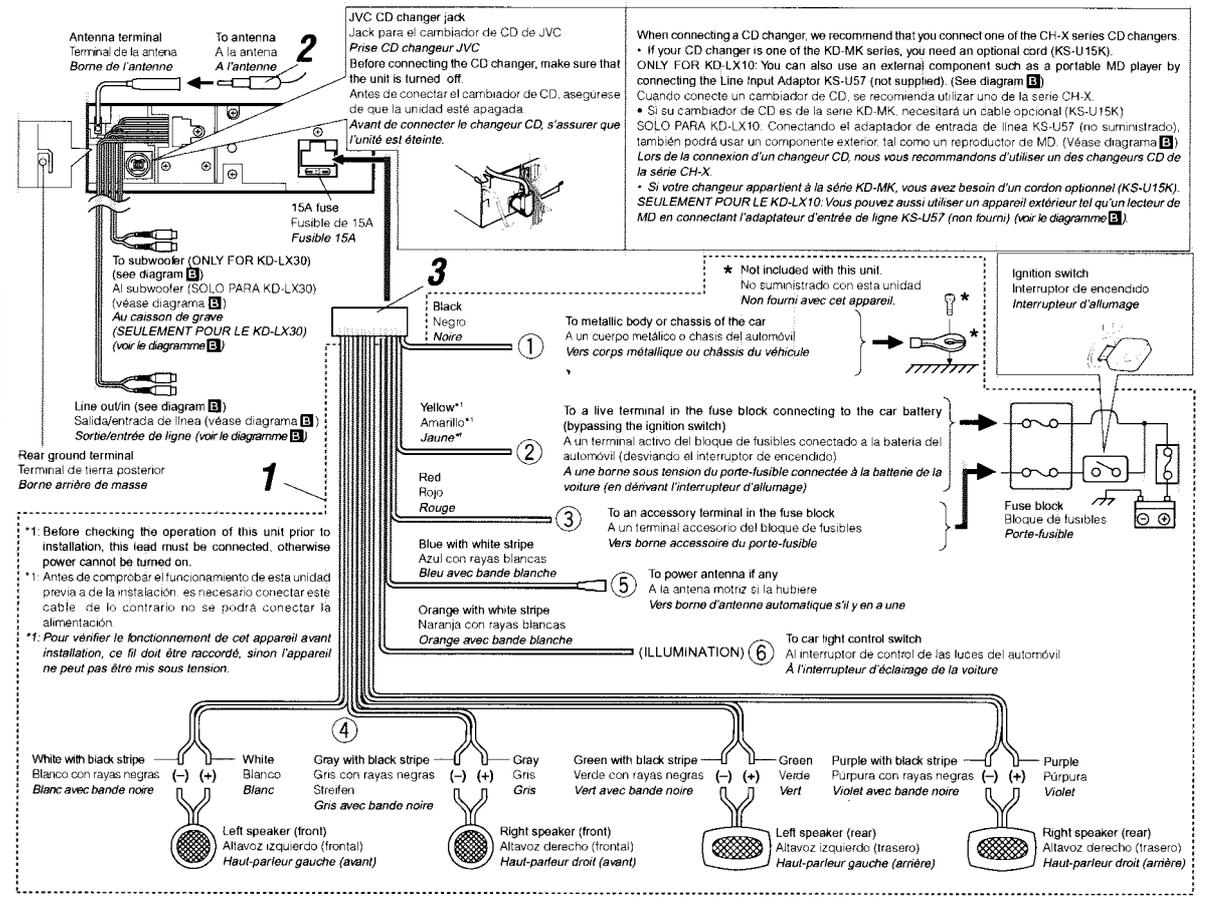
**Avant de commencer la connexion:** vérifiez attentivement le câblage du véhicule. Une connexion incorrecte peut endommager sérieusement l'appareil.

**1** Connectez les fils de couleur du cordon d'alimentation à la batterie de la voiture, aux enceintes et à l'antenne automatique (s'il y en a une) dans l'ordre suivant.

- 1: Noir: à la masse
- 2: Jaune: à la batterie de la voiture (12V constant)
- 3: Rouge: à la prise accessoire
- Autres: aux enceintes
- 5: Bleu à bandes blanches: à l'antenne automatique (200 mA max.)
- 6: Orange à bandes blanches: à l'interrupteur d'éclairage de la voiture

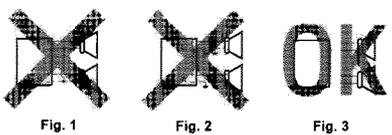
**2** Connectez le cordon d'antenne.

**3** Finalement, connectez le faisceau de fils à l'appareil.



**PRECAUTIONS on power supply and speaker connections:**

- DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.
- Connect the black lead (ground), yellow lead (to car battery, constant 12V), and red lead (to an accessory terminal) correctly.
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.
  - If the speaker wiring in your car is as illustrated in Fig. 1 and Fig. 2 below, DO NOT connect the unit using that original speaker wiring. If you do, the unit will be seriously damaged. Redo the speaker wiring so that you can connect the unit to the speakers as illustrated in Fig. 3.
  - If the speaker wiring in your car is as illustrated in Fig. 3, you can connect the unit using the original speaker wiring in your car.
  - If you are not sure of the speaker wiring of your car, consult your car dealer.



**PRECAUCIONES sobre las conexiones de la fuente de alimentación y de los altavoces:**

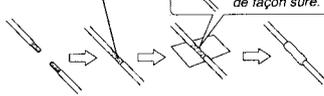
- NO conecte los conductores de altavoz del cable de alimentación a la batería de automóvil, pues podrían producirse graves daños en la unidad.
- Conecte correctamente el conductor negro (a tierra), el conductor amarillo (a la batería del automóvil, 12V constantes), y el conductor rojo (a un terminal de accesorio).
- ANTES de conectar a los altavoces los conductores de altavoz del cable de alimentación, verifique el conexionado de altavoz de su automóvil.
  - Si el conexionado de altavoz de su automóvil es como se indica en las Fig. 1 y 2 de abajo, NO conecte la unidad utilizando ese conexionado de altavoz original. Si lo hace, se producirán daños graves en la unidad. Vuelva a efectuar el conexionado de altavoz de manera que pueda conectar la unidad a los altavoces de la manera indicada en la Fig. 3.
  - Si el conexionado de altavoz de su automóvil es como se indica en la Fig. 3, podrá conectar la unidad utilizando el conexionado de altavoz original de su automóvil.
  - Si tiene dudas sobre el conexionado de altavoz de su automóvil, consulte con su concesionario.

**PRECAUTIONS sur l'alimentation et la connexion des enceintes:**

- NE CONNECTEZ PAS les fils d'enceintes du cordon d'alimentation à la batterie; sinon, l'appareil serait sérieusement endommagé.
- Connectez correctement le fil noir (à la masse), le fil jaune (à la batterie de la voiture, 12V constant) et le fil rouge (à la prise accessoire).
- AVANT de connecter les fils d'enceintes du cordon d'alimentation aux enceintes, vérifiez le câblage des enceintes de votre voiture.
  - Si le câblage des enceintes de votre voiture est réalisé comme montré sur la Fig. 1 ou Fig. 2 ci-dessous, NE CONNECTEZ PAS l'appareil en utilisant ce câblage original d'enceintes. Si vous le faites, l'appareil sera sérieusement endommagé. Recommencez le câblage des enceintes de façon que vous puissiez connecter l'appareil aux enceintes comme montré sur la Fig. 3.
  - Si le câblage des enceintes de votre voiture est comme montré sur la Fig. 3, vous pouvez connecter l'appareil en utilisant ce câblage original d'enceintes pour votre voiture.
  - Si vous n'êtes pas sûrs du câblage d'enceintes de votre voiture, consultez le concessionnaire de votre voiture.

**Connecting the leads / Conexión de los conductores / Raccordement des fils**

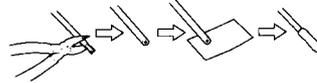
Twist the core wires when connecting.  
Retuerce los alambres de alma para conectarlos.  
*Torsader les âmes des fils en les raccordant.*



Solder the core wires to connect them securely.  
Suelde los alambres de alma para conectarlos con firmeza.  
*Souder les âmes des fils pour les raccorder entre eux de façon sûre.*

**CAUTION / PRECAUCION / PRECAUTION:**

- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- Para evitar cortocircuitos, cubra los cables NO UTILIZADOS con cinta aislante.
- Pour éviter les court-circuits, couvrir les bornes des fils qui ne sont PAS utilisés avec de la bande isolante



**Connections Adding Other Equipment / Conexiones para añadir otros equipos / Raccordement pour ajouter d'autres appareils**

You can connect an amplifier and other equipment to upgrade your car stereo system. For their connections, refer to the instructions supplied with each component.

- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
- For amplifier only:
  - Connect this unit's line-out terminals to the amplifier's line-in terminals
  - Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused. (Cover the terminals of the these unused leads with insulating tape, as illustrated above.)
  - ONLY FOR KD-LX30: The line output level of this unit is kept high to maintain the hi-fi sounds reproduced from this unit.
- When connecting an external amplifier to this unit, turn down the gain control on the external amplifier to obtain the best performance from this unit.
- For subwoofer only (ONLY FOR KD-LX30): Connect this unit's SUBWOOFER OUT plugs to the amplifier's line-in jacks.

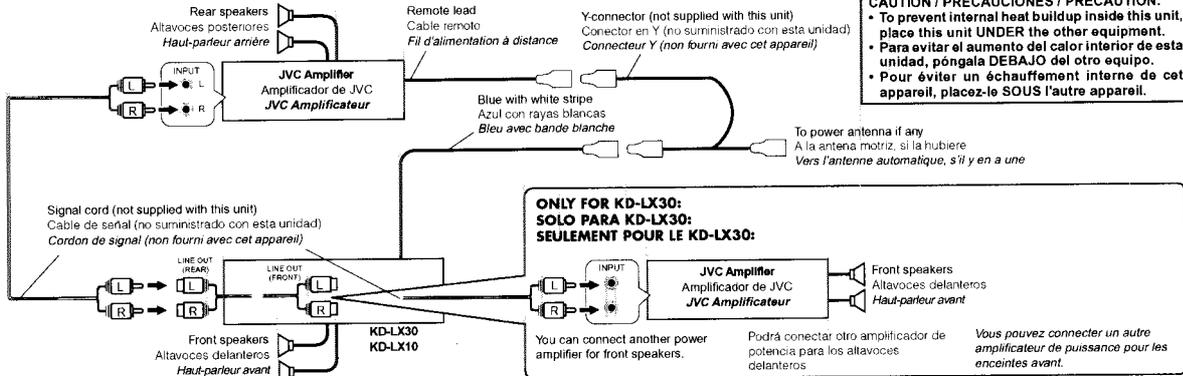
Usted podrá conectar un amplificador y otros equipos para mejorar el sistema estéreo de su automóvil. Para las conexiones, refiérase a las instrucciones suministradas con cada componente.

- Conecte el conductor remoto (azul con rayas blancas) al conductor remoto del otro equipo para poderlo controlar a través de esta unidad.
- Solo para el amplificador:
  - Conecte los terminales de salida de línea de esta unidad con los terminales de entrada de línea del amplificador
  - Desconecte los altavoces de esta unidad y conéctelos al amplificador. Los cables de los altavoces de esta unidad quedan sin usar. (Cubra los terminales de estos cables sin usar con cinta aislante, tal comose indica en la figura de arriba.)
  - SOLO PARA KD-LX30: El nivel de salida de línea de esta unidad permanece alto para que corresponda con los sonidos de alta fidelidad reproducidos por esta unidad.
- Quando conecte un amplificador externo a esta unidad, disminuya el control de ganancia del amplificador externo para obtener un óptimo rendimiento de esta unidad.
- Solo para el subwoofer (SOLO PARA KD-LX30): Conecte las clavijas SUBWOOFER OUT de esta unidad a los jacks de entrada de línea del amplificador.

Vous pouvez connecter un amplificateur ou autre appareil pour améliorer votre système autoradio. Pour leur connexion, référez-vous aux instructions fournies avec chaque appareil.

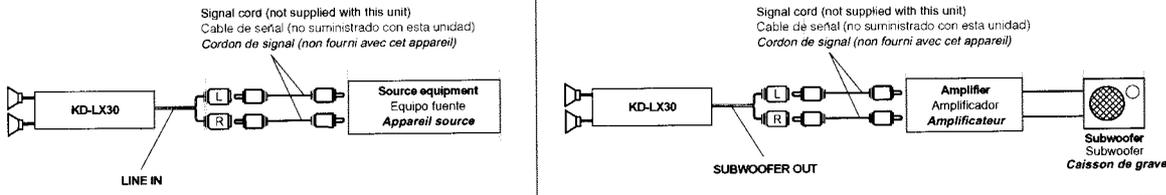
- Connectez le fil de commande à distance (bleu avec bande blanche) au fil de commande à distance de l'autre appareil de façon qu'il puisse être commandé via cet appareil.
- Pour l'amplificateur seulement:
  - Raccorder les bornes de sortie ligne de cet appareil aux bornes d'entrée ligne de l'amplificateur.
  - Déconnectez les enceintes de cet appareil et connectez-les à l'amplificateur. Laissez les fils d'enceintes de cet appareil inutilisés. (Recouvrir les extrémités de ces fils inutilisés avec de la bande isolante comme montré ci-dessus.)
  - SEULEMENT POUR LE KD-LX30: Le niveau de sortie de ligne de cet appareil est maintenu à un niveau élevé pour maintenir une qualité Hi-Fi pour les sons reproduits par cet appareil.
- Lors de la connexion d'un amplificateur extérieur à cet appareil, diminuez le réglage du gain sur l'amplificateur extérieur pour obtenir les meilleures performances de cet appareil.
- Pour le caisson de grave seulement (SEULEMENT POUR LE KD-LX30): Connectez les fiches SUBWOOFER OUT de cet appareil aux prises d'entrée de ligne de l'amplificateur.

**Amplifier / Amplificador / Amplificateur**



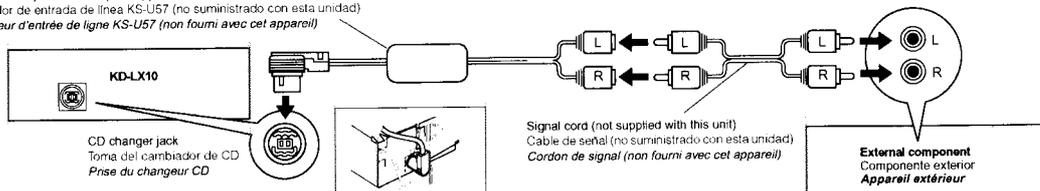
**External component / Componente exterior / Appareil extérieur**

**FOR KD-LX30/PARA KD-LX30/POUR LE KD-LX30**



**FOR KD-LX10/PARA KD-LX10/POUR LE KD-LX10**

Line Input Adaptor KS-U57 (not supplied with this unit)  
Adaptador de entrada de línea KS-U57 (no suministrado con esta unidad)  
*Adaptateur d'entrée de ligne KS-U57 (non fourni avec cet appareil)*



# Disassembly method

## ■ Removing the top chassis

(See Fig.1 to 5)

1. Remove the two screws A attaching the bottom cover to the top chassis on the bottom of the body.
2. Remove the two screws B attaching the top chassis on both sides of the body.
3. Remove the two screws C and the two screw D attaching the heat sink on the left side of the body.
4. Remove the two screws E and the screw F on the back of the body.
5. Remove the two screws G on the upper side of the body.
6. Move the top chassis upward and disconnect the CD mechanism connector from the main board connector by pulling it. Remove the top chassis from the body.

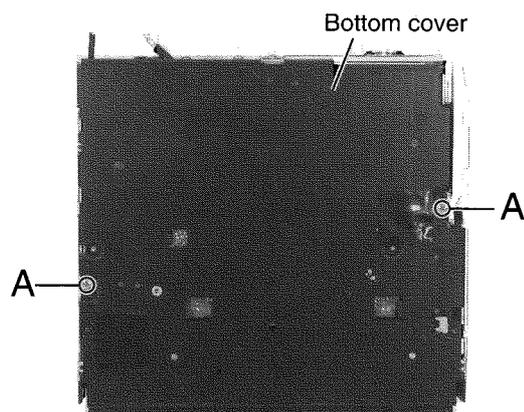


Fig.1

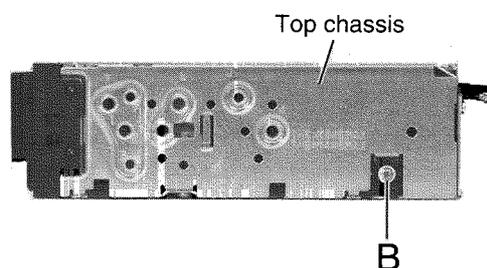


Fig.2

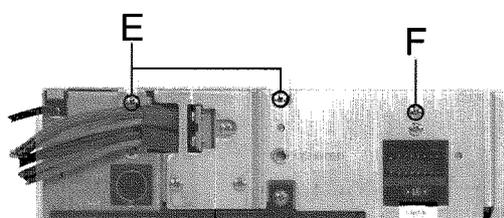


Fig.4-1 (KD-LX30)

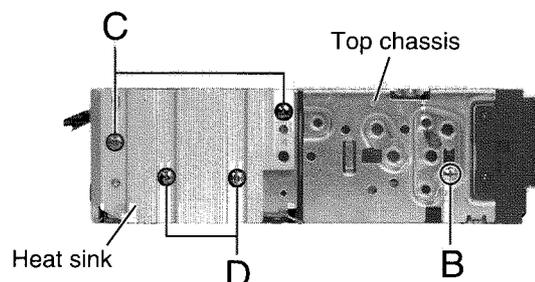


Fig.3

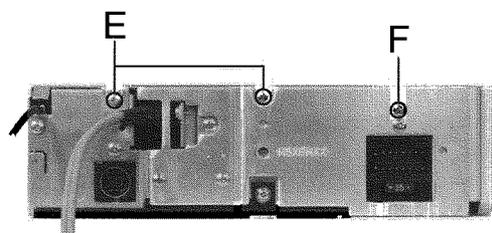


Fig.4-2 (KD-LX10)

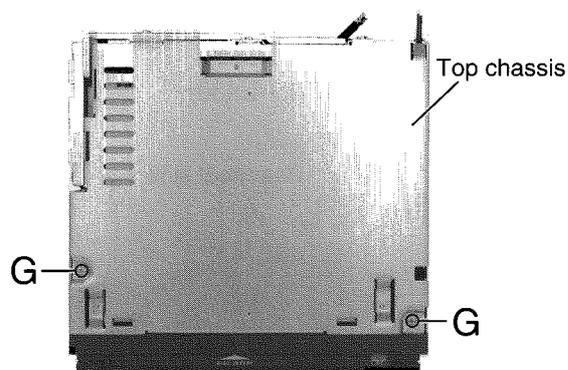


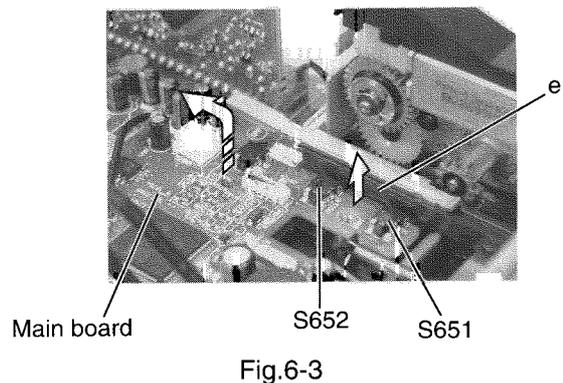
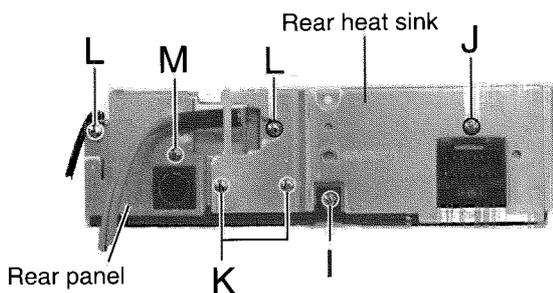
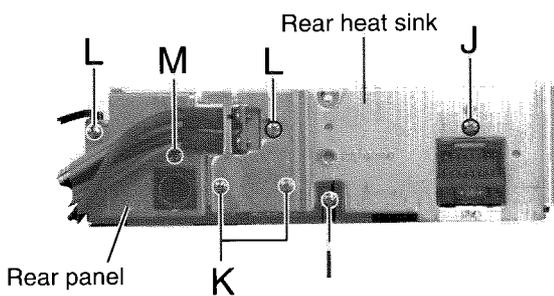
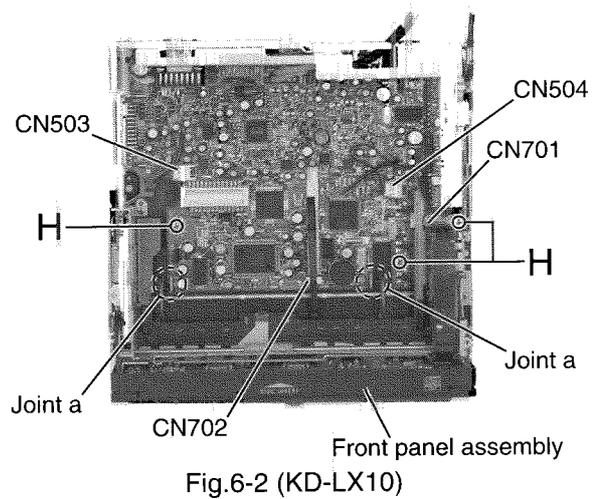
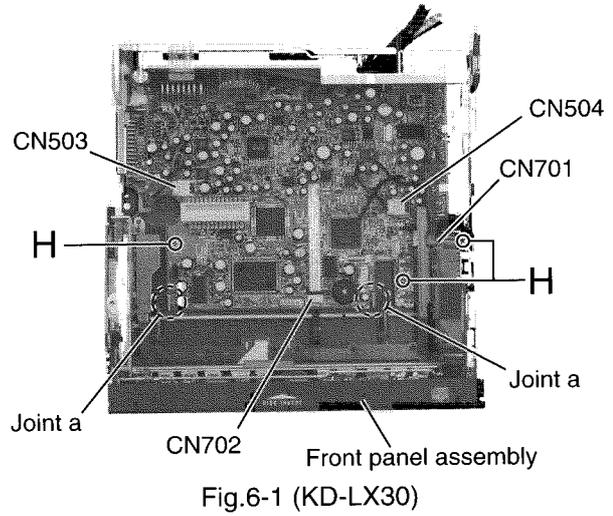
Fig.5

**■ Removing the main board assembly  
(See Fig.6 and 7)**

· Prior to performing the following procedure, remove the top chassis.

1. Disconnect the flexible harness from connector CN701, the card wire from CN702 on the main board and the harness from CN503 and CN504 respectively.
2. Remove the three screws H attaching the main board assembly to the bottom cover on the upper side of the body.
3. Remove the screw I attaching the rear panel and the bottom cover on the back of the body. Move the main board in the direction of the arrow and release the two joints a. (At this point, the main board can be removed with the rear panel and the rear heat sink.)
4. Remove the screw J and the two screws K attaching the rear heat sink on the back of the body.
5. Remove the two screws L and the screw M attaching the rear panel. Now, the main board assembly will be removed.

**ATTENTION:** when reassembling, correctly engage the switch S561 and S562 on the main board with the part e of the operation assembly (Refer to Fig.6-3).



**■ Removing the front panel assembly  
(See Fig.6,8 and 9)**

- Prior to performing the following procedure, remove the top chassis assembly.
- 1. Disconnect the flexible harness from connector CN701 on the main board assembly.
- 2. Remove the four screws N attaching the front panel assembly on both sides of the body. Remove the front panel toward the front.

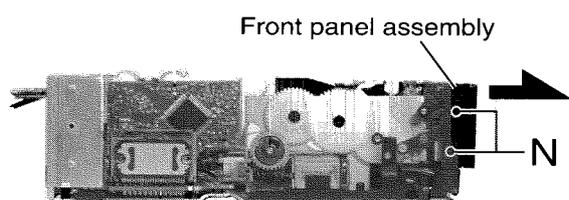
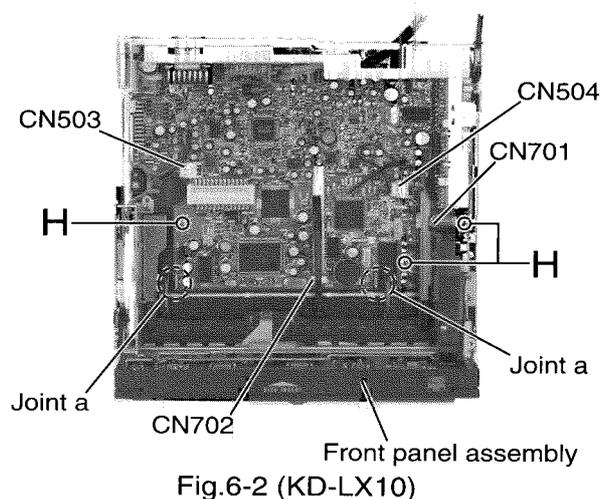
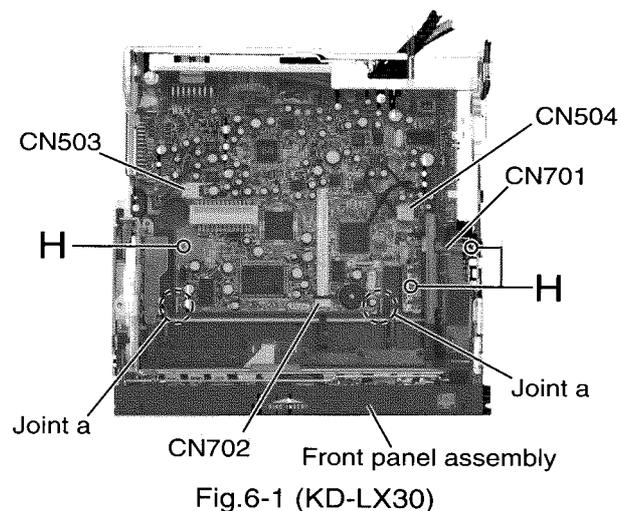


Fig.9

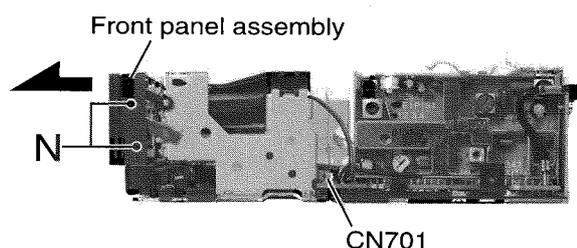


Fig.8

**■ Removing the Front Board (See Fig.10)**

- Prior to performing the following procedure, remove the top chassis assembly and the front panel assembly.
- 1. Remove the four screws O attaching the front board on the back of the front panel assembly and release the eight joints b.

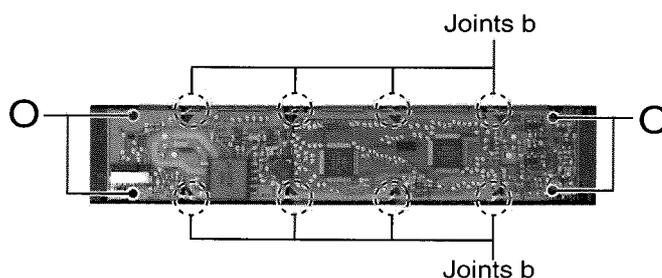


Fig.10

**■ Removing the lifter unit (See Fig.11)**

· Prior to performing the following procedure, remove the top chassis assembly and the front panel assembly.

1. Disconnect the harness from connector CN503 and CN504 on the main board.
2. Remove the four screws P and detach the lifter unit from the bottom cover.

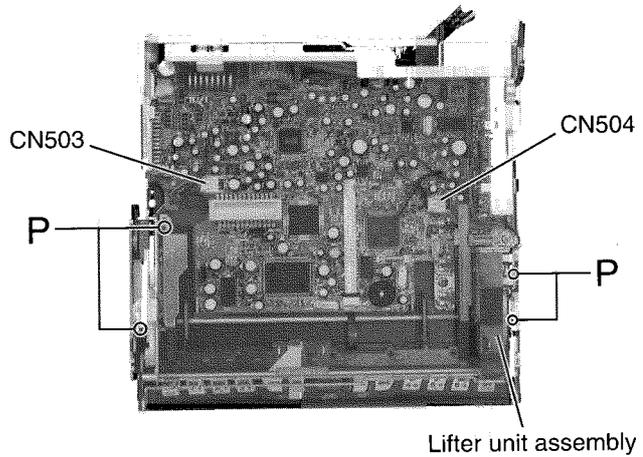


Fig.11-1 (KD-LX30)

**■ Removing the feed motor (L) (See Fig.12)**

· Prior to performing the following procedure, remove the lifter unit.

1. Remove the washer attaching the clutch assembly and detach the clutch assembly from the shaft of the lifter unit.
2. Remove the two screws Q attaching the feed motor (L).

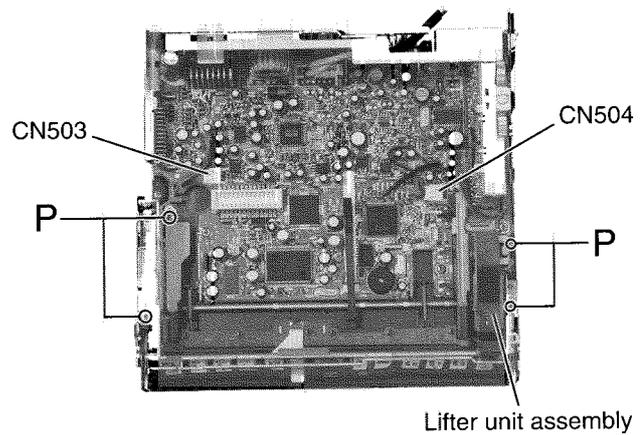


Fig.11-2 (KD-LX10)

**■ Removing the feed motor (R) (See Fig.13)**

· Prior to performing the following procedure, remove the lifter unit.

1. Remove the washer attaching the clutch assembly and detach the clutch assembly from the shaft of the lifter unit.
2. Remove the two screws R attaching the feed motor (R).

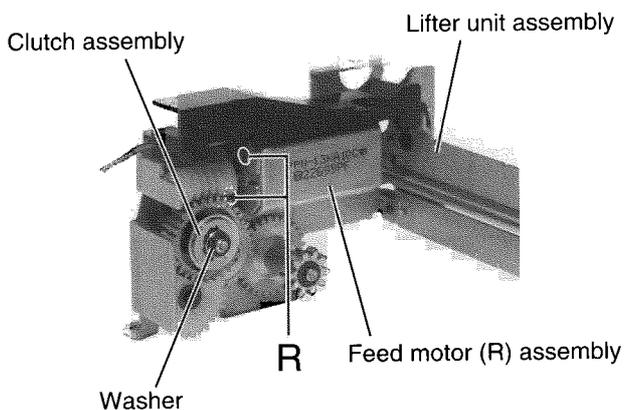


Fig.13

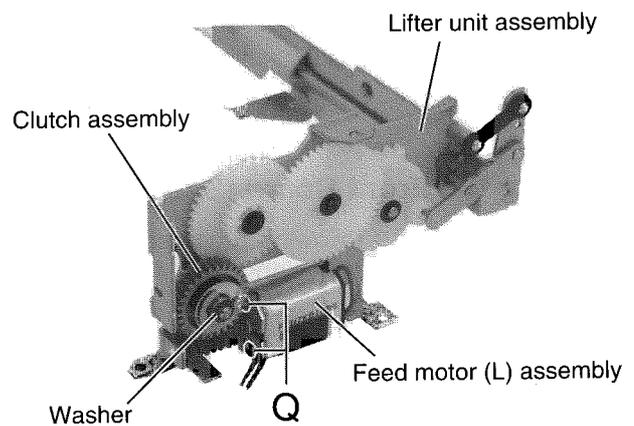


Fig.12

**■ Removing the operation assembly**  
**(See Fig.14 to 17)**

· Prior to performing the following procedure, remove the top chassis assembly, the front panel assembly and the lifer unit.

1. Remove the screws S attaching the right and left brackets which fix gears on both sides of the operation assembly.
2. Remove the springs 5 and 6 from the operation assembly.
3. Disconnect the card wire from connector CN702 on the main board and remove the operation assembly.

**ATTENTION:** when reassembling, correctly engage the switch S561 and S562 on the main board and the right gear with the part e of the operation assembly.

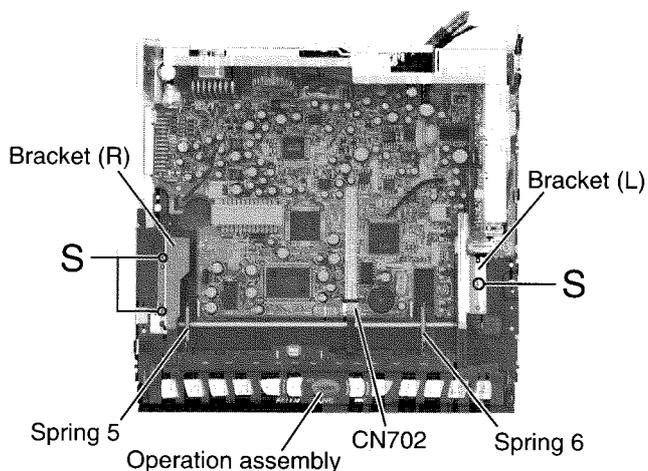


Fig.14

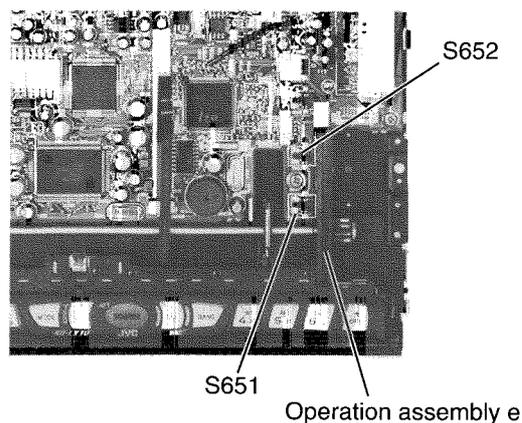


Fig.15

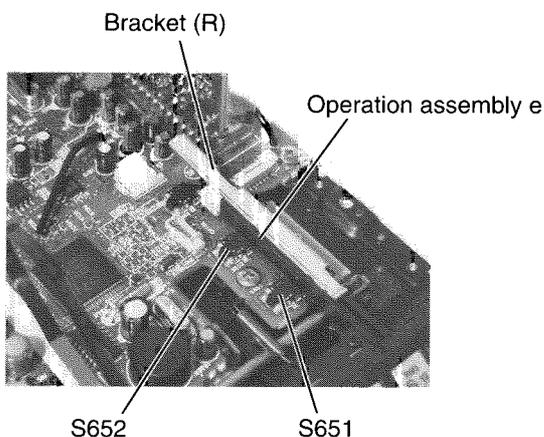


Fig.17

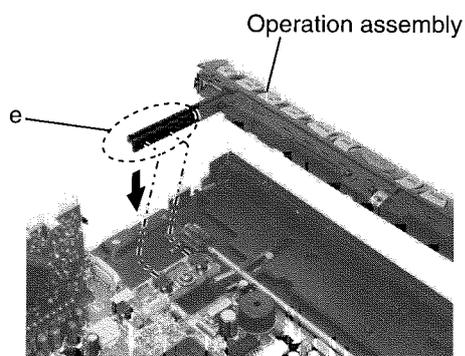


Fig.16

■ **Removing the operation switch board**  
(See Fig.18 and 19)

- Prior to performing the following procedure, remove the operation assembly.
1. Remove the six screws T attaching the button panel on the operation assembly.
  2. Pull out the operation switch board from inside of the button panel.

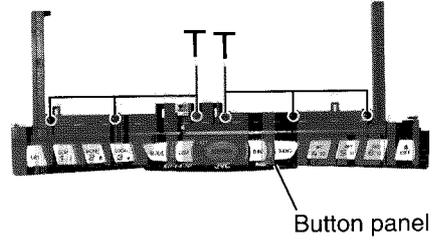


Fig.18

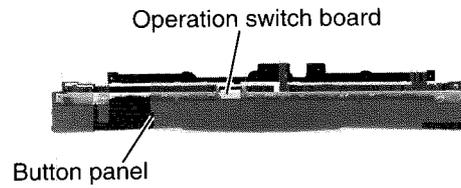
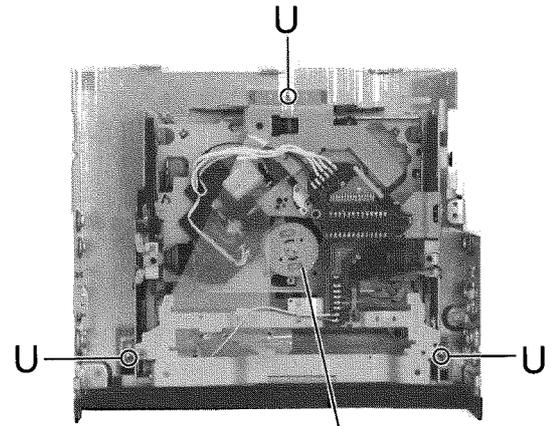


Fig.19

■ **Removing the CD mechanism assembly**  
(See Fig.20)

- Prior to performing the following procedure, remove the top chassis.
1. Remove the three screws U and the CD mechanism assembly from the top chassis.



CD mechanism assembly  
Fig.20

### ■ Removing the CD mechanism control board (See Fig.1 and 2)

1. Remove the screw N and the pickup cover attached to the front bracket with the two double-sided tapes.
2. Unsolder the part f and g on the CD mechanism control board.
3. Remove the stator fixing the CD mechanism control board and the damper bracket (To remove the stator smoothly, pick up the center part).
4. Remove the screw F attaching the CD mechanism control board.
5. Remove the CD mechanism control board in the direction of the arrow while releasing it from the two damper bracket slots i and the front bracket slot j.
6. Disconnect the flexible wire from connector on the pickup unit.

**ATTENTION:** Turn the FD gear in the direction of the arrow to move the entire pickup unit to the appropriate position where the flexible wire of the CD mechanism unit can be disconnected easily (Refer to Fig.2).

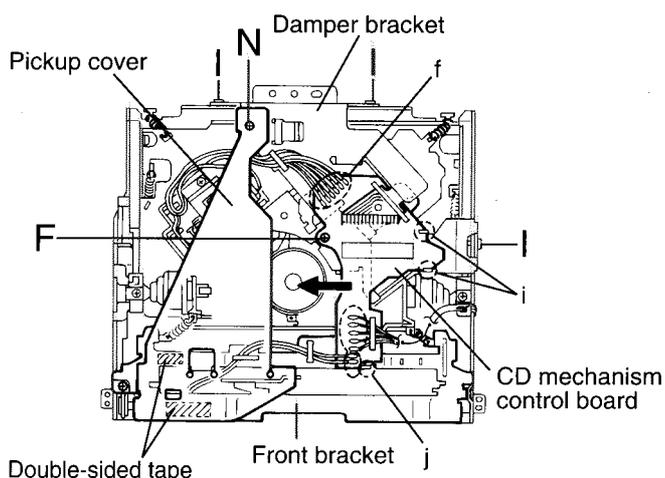


Fig.1

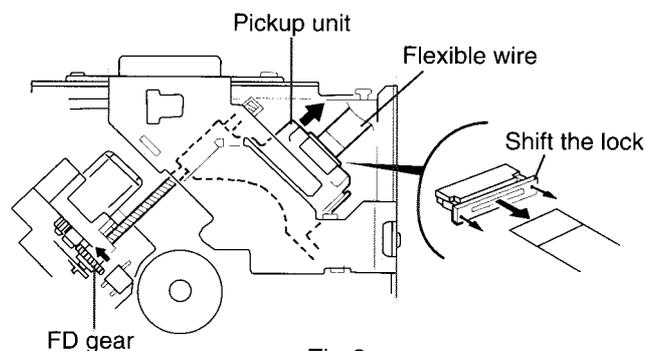


Fig.2

### ■ Removing the loading motor (See Fig.3 to 5)

- Prior to performing the following procedure, remove the CD mechanism control board and the pickup cover.
1. Remove the two springs k attaching the CD mechanism ass'y and the front bracket.
  2. Remove the two screws G and the front bracket while pulling the flame outward.
  3. Remove the belt and the screw H from the loading motor.

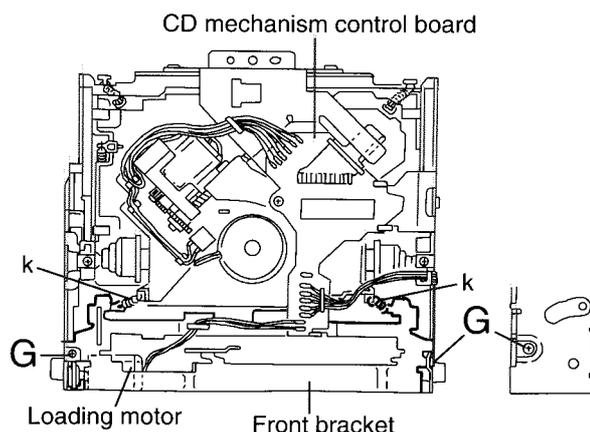


Fig.3

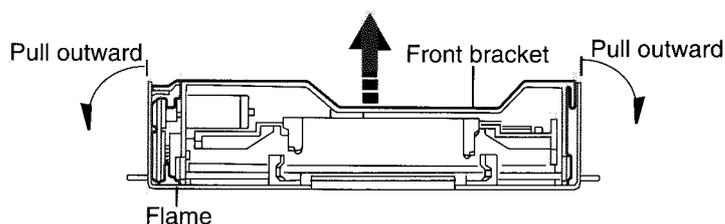


Fig.4

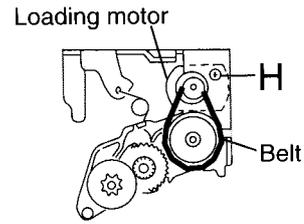


Fig.5

**■ Removing the CD mechanism ass'y**  
**(See Fig.1, 6 to 9)**

• Prior to performing the following procedure, remove the CD mechanism control board and the front bracket (loading motor).

1. Remove the three screws I and the damper bracket.
2. Raise the both sides fix arms and move the fix plates in the direction of the arrow to place the four shafts I as shown in Fig.8 and 9.
3. Remove the CD mechanism ass'y and the two springs m attaching the flame.
4. Remove the two screws J and both sides rear damper brackets from the dampers. Detach the CD mechanism ass'y from the left side to the right side.

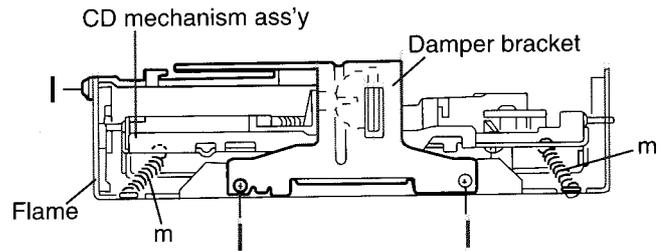


Fig.6

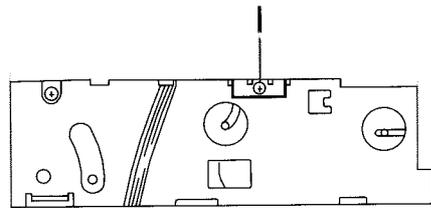


Fig.7

**ATTENTION:** The CD mechanism ass'y can be removed if only the rear damper bracket on the left side is removed.

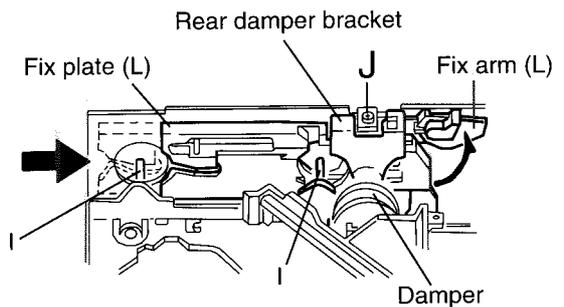


Fig.8

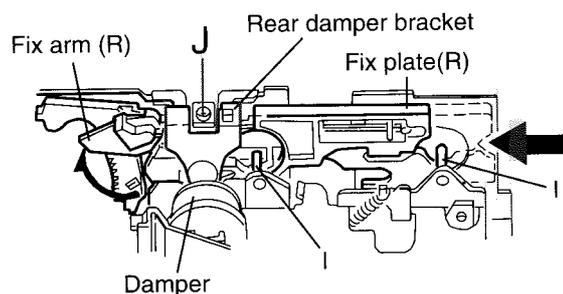


Fig.9

**■ Removing the feed motor ass'y**  
(See Fig.10)

• Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor) and the CD mechanism ass'y.

1. Remove the two screws K and the feed motor ass'y.

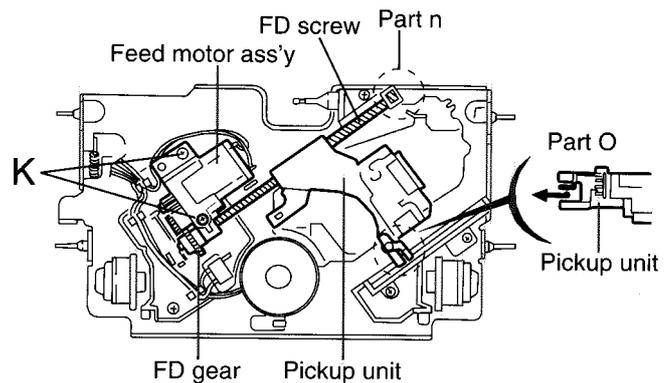


Fig.10

**■ Removing the pickup unit**  
(See Fig.10 and 11)

• Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism ass'y and the feed motor ass'y.

1. Detach the FD gear part of the pickup unit upward. Then remove the pickup unit while pulling out the part n of the FD screw.

ATTENTION: When reattaching the pickup unit, reattach the part o of the pickup unit, then the part n of the FD screw.

2. Remove the screw L attaching the nut push spring plate and the pickup mount nut from the pickup unit. Pull out the FD screw.

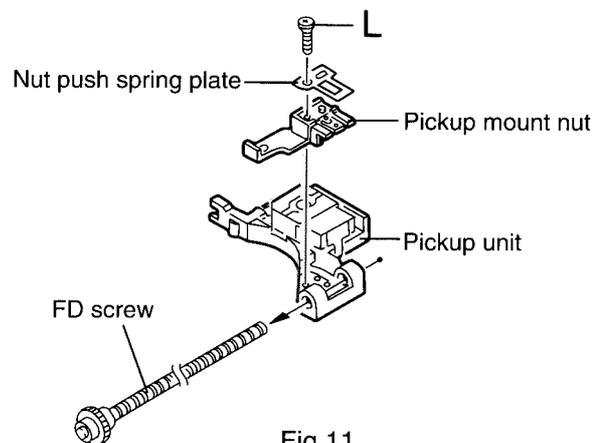


Fig.11

**■ Removing the spindle motor**  
(See Fig.12 and 13)

• Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism ass'y and the feed motor ass'y.

1. Turn up the CD mechanism ass'y and remove the two springs p on both sides of the clamber arms. Open the clamber arm upward.
2. Turn the turn table and remove the two screws M and the spindle motor.

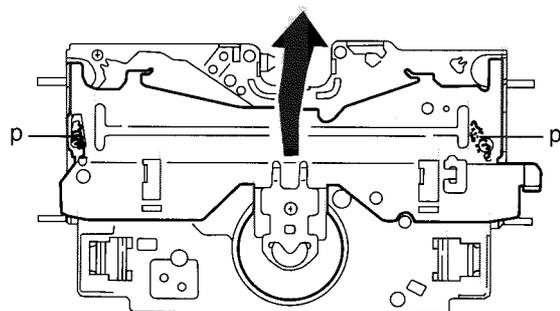


Fig.12

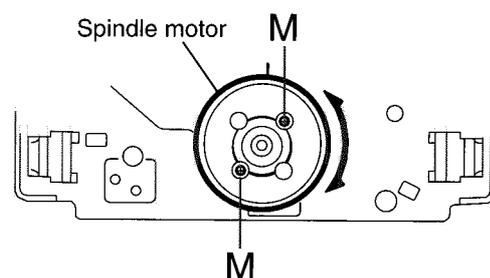


Fig.13

■ **Removing the CD mechanism control board(See Fig.1 and 2)**

Unsolder the part a and b on the CD mechanism control board.

Remove the stator c fixing the CD mechanism control board and the damper bracket (To remove the stator smoothly, pick up the center part).

Remove the screw A attaching the CD mechanism control board.

Remove the CD mechanism control board in the direction of the arrow while releasing it from the two damper bracket slots d and the front bracket slot e.

Disconnect the flexible wire from connector on the pickup unit.

**ATTENTION:** Turn the FD gear in the direction of the arrow to move the entire pickup unit to the appropriate position where the flexible wire of the CD mechanism unit can be disconnected easily (Refer to Fig.2).

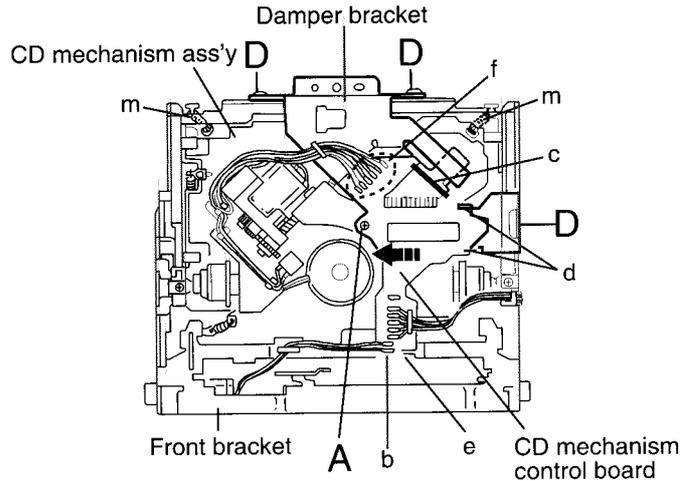


Fig.1

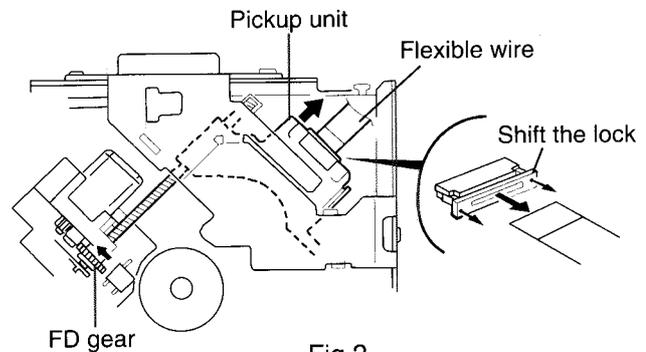


Fig.2

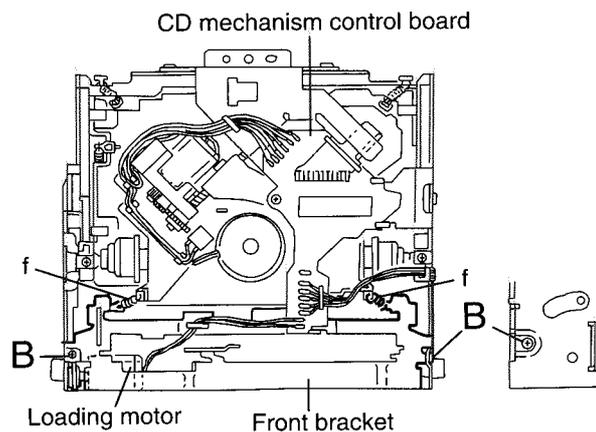


Fig.3

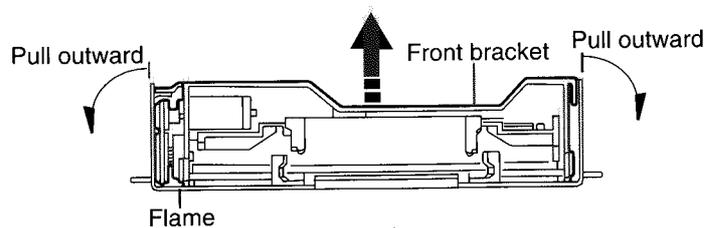


Fig.4

**■ Removing the loading motor**  
(See Fig.3 to 5)

- Prior to performing the following procedure, remove the CD mechanism control board.
1. Remove the two springs f attaching the CD mechanism ass'y and the front bracket.
  2. Remove the two screws B and the front bracket while pulling the flame outward.
  3. Remove the belt and the screw C from the loading motor.

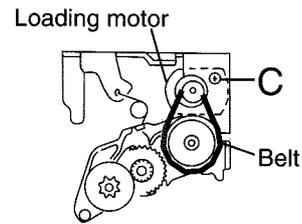


Fig.5

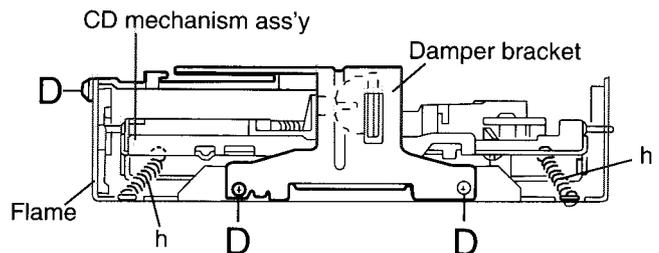


Fig.6

**■ Removing the CD mechanism ass'y**  
(See Fig.1, 6 to 9)

- Prior to performing the following procedure, remove the CD mechanism control PWB and the front bracket (loading motor).
1. Remove the three screws D and the damper bracket.
  2. Raise the both sides fix arms and move the fix plates in the direction of the arrow to place the four shafts g as shown in Fig.8 and 9.
  3. Remove the CD mechanism ass'y and the two springs h attaching the flame.
  4. Remove the two screws E and both sides rear damper brackets from the dampers. Detach the CD mechanism ass'y from the left side to the right side.

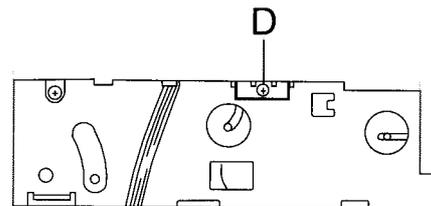


Fig.7

**ATTENTION:** The CD mechanism ass'y can be removed if only the rear damper bracket on the left side is removed.

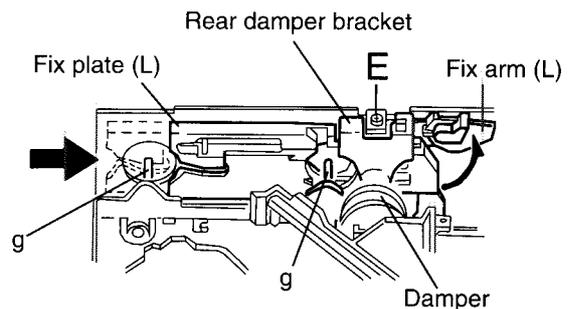


Fig.8

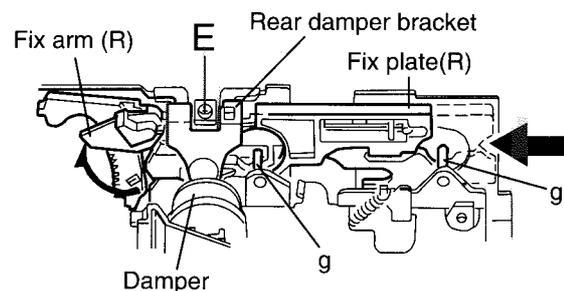


Fig.9

**■ Removing the feed motor ass'y**  
(See Fig.10)

• Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor) and the CD mechanism ass'y.

1. Remove the two screws F and the feed motor ass'y.

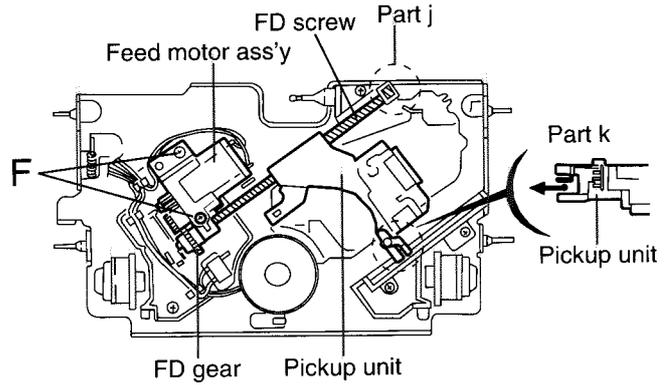


Fig.10

**■ Removing the pickup unit**  
(See Fig.10 and 11)

• \*Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism ass'y and the feed motor ass'y.

1. Detach the FD gear part of the pickup unit upward. Then remove the pickup unit while pulling out the part j of the FD screw.

ATTENTION: When reattaching the pickup unit, reattach the part k of the pickup unit, then the part j of the FD screw.

2. Remove the screw G attaching the nut push spring plate and the pickup mount nut from the pickup unit. Pull out the FD screw.

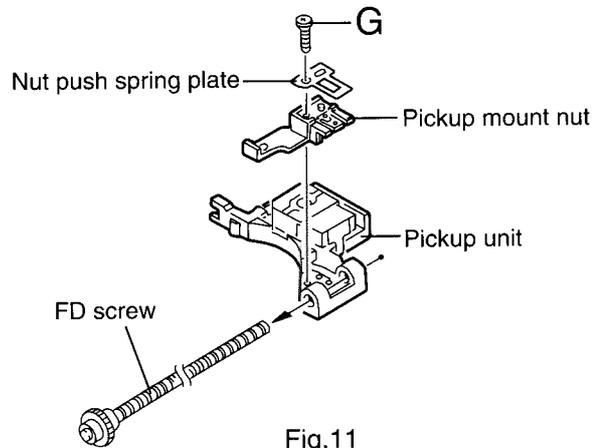


Fig.11

**■ Removing the spindle motor**  
(See Fig.12 and 13)

• Prior to performing the following procedure, remove the CD mechanism control board, the front bracket (loading motor), the CD mechanism ass'y and the feed motor ass'y.

1. Turn up the CD mechanism ass'y and remove the two springs m on both sides of the clamber arms. Open the clamber arm upward.
2. Turn the turn table, and remove the two screws H and the spindle motor.

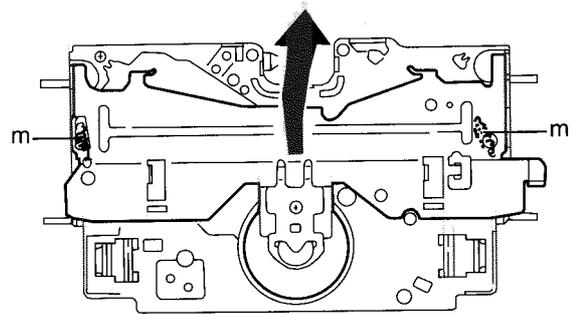


Fig.12

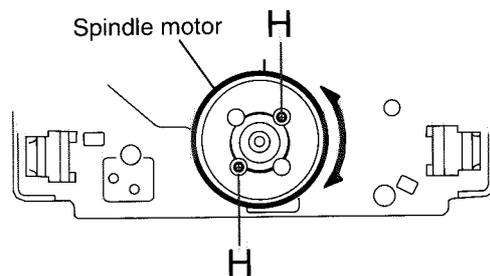


Fig.13

## Adjustment method

### Caution : Replacing the pickup

To prevent damage to the laser diode static electricity destroys the laser diode. Always take countermeasure to performing repairs around the laser pickup.

1. Do not touch the area around the laser diode or the actuator.
2. Do not check the laser diode with a tester or other device (the laser diode can be broken quite easily).
3. Short-circuit the laser pickup  
Solder the land in the center of the flexible cable of the laser diode and help prevent damage from static electricity.

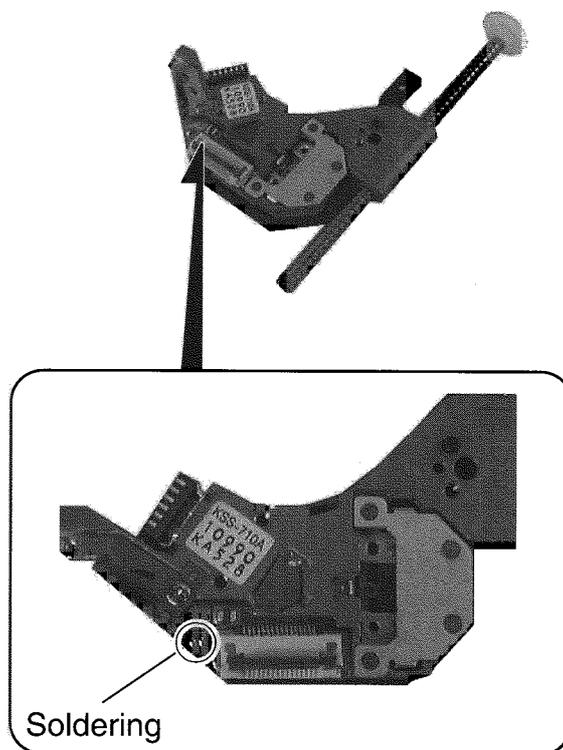
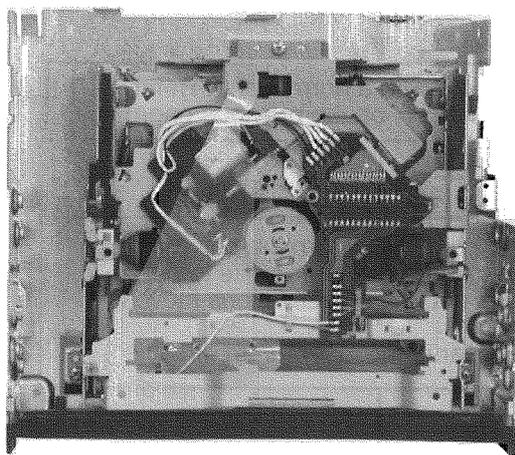
Caution :  
Solder rejection or cuts a pattern with nipper at shortstop point after short circuiting with clip with terminal face of flexible cable in the static electricity countermeasure soldering iron application that is not done.

And the rejection back inserts it in connector immediately and do not touch terminal side of connector either.

#### Recommendation

Soldering iron

HAKKO ESD countermeasures product



#### Caution :

Do not forget to remove the soldered laser diode short-circuit after finishing repair, and leave the circuit open.

## Maintenance of laser pickup

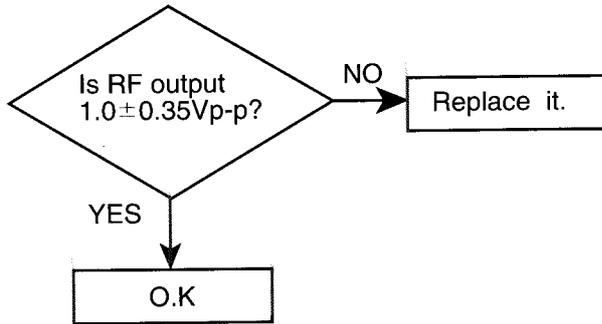
(1) Cleaning the pick up lens

Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

- (1) The level of RF output (EFM output:amplitude of eye pattern) will be low.



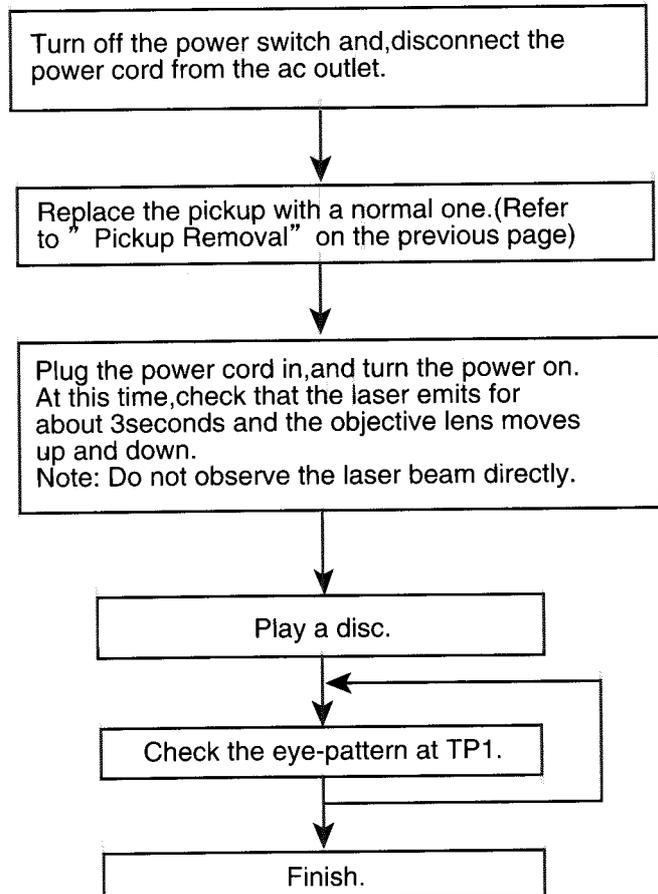
(3) Semi-fixed resistor on the APC PC board

The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.

If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

## Replacement of laser pickup

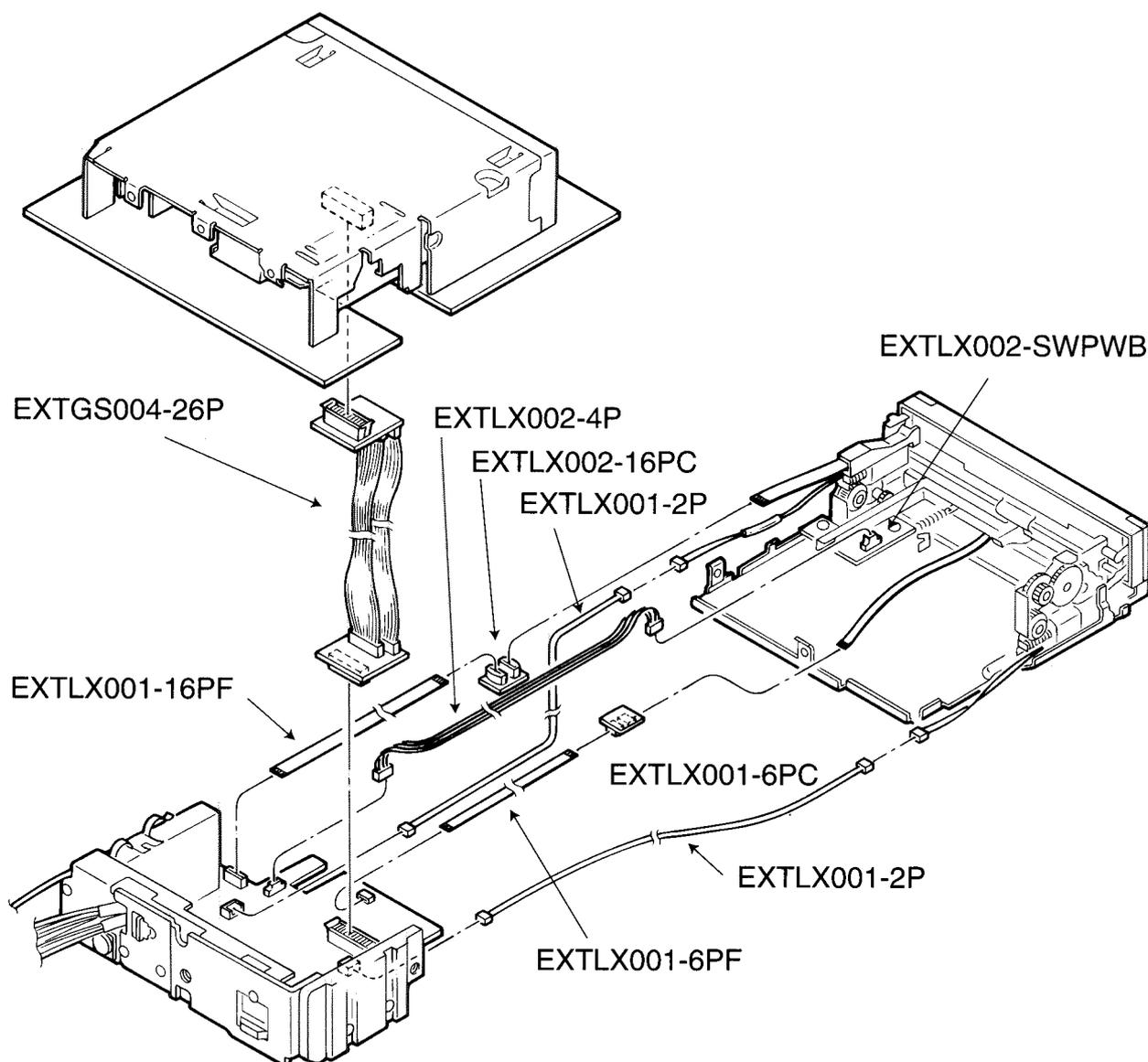


## Extension code connecting method

### ■ Using the extension cords to connect the front panel with the main board

Remove the main board following the disassembly method. Then reattach the heat sink to main board.

1. Using the 2pin extension cord (EXTLX001-2p), connect the harness of the feed motor (L) assembly with the connector CN503 on the main board.
2. Using the 2pin extension cord (EXTLX001-2p), connect the harness of the feed motor (R) assembly with the connector CN504 on the main board.
3. Using the jig board (EXTLX002-SWPWB), its installing to the chassis, then using 4pin extension cord (EXTLX002-4P) connect the harness of the lifter detecting board with the connector CN704 on the board.
4. Connect the connector (EXTLX001-6PC) and extension wire (EXTLX001-6PF), connect the 6pin connector CN702 on the main board.
5. Connect the connector (EXTLX002-16PC) and extension wire (EXTLX002-16PF), connect the 16pin connector CN701 on the main board.

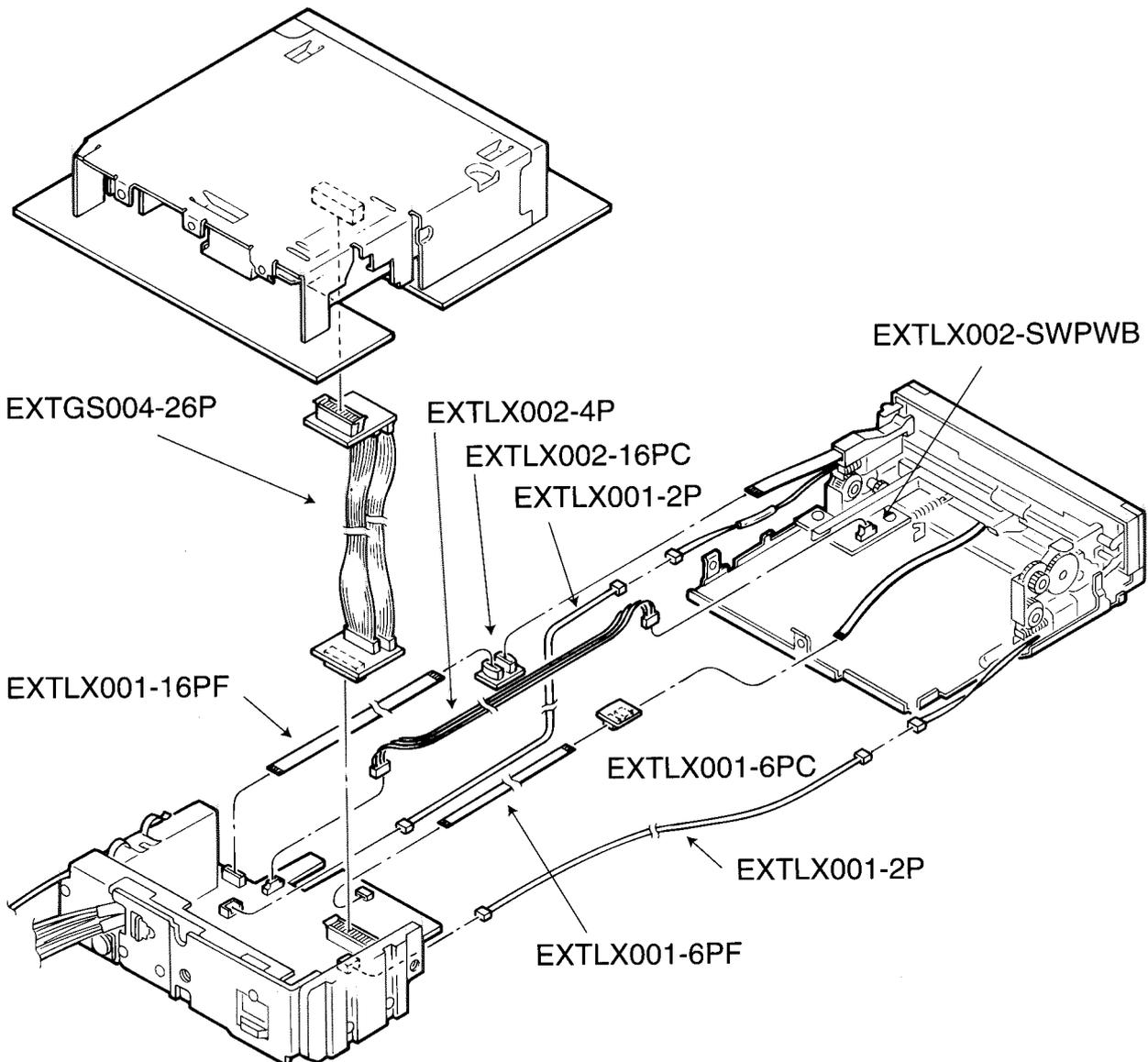


■ Extension cord list for KD-LX10/KD-LX30

EXTLX002-JIG : Kit including the following 8 extension parts.

No.	Parts number	Quantity	Description
1	EXTLX001-2P	2	2Pin, 30cm extension cord
2	EXTLX001-6PF	1	6Pin, 30cm flat wire
3	EXTLX001-6PC	1	6Pin x 2, interlocking connector
4	EXTLX002-16PF	1	16Pin flat wire
5	EXTLX002-16PC	1	16Pin, interlocking connector
6	EXTLX002-SWPWB	1	3 switch PWB
7	EXTLX002-4P	1	4Pin, 30cm extension cord

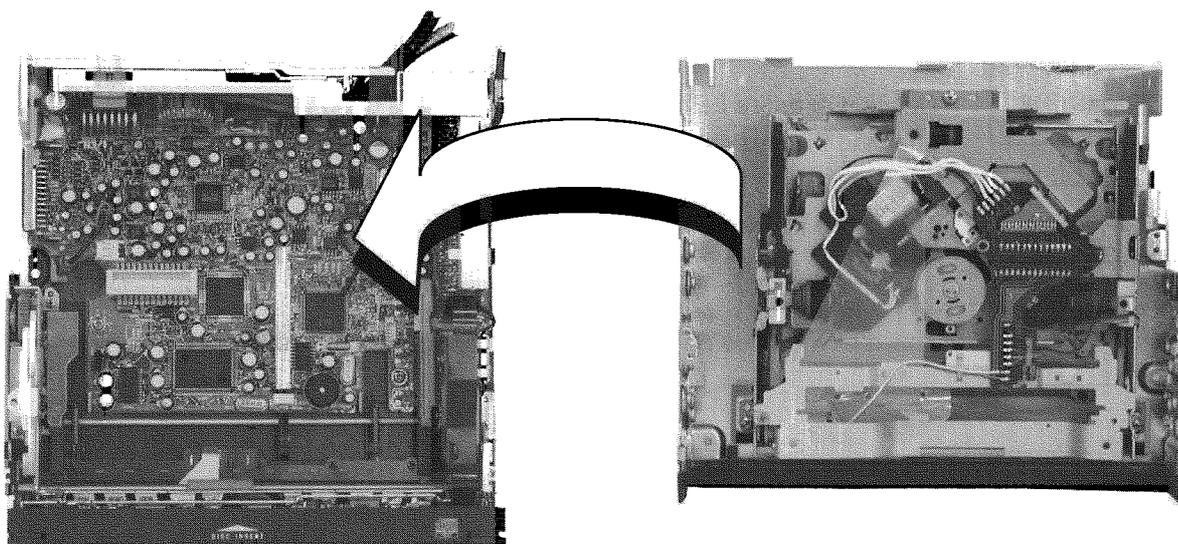
Besides the above kit, we offer the conventional extension cord for CD mechanism which are not essential to operation check or service. The mechanism should be directly connected to the board using the extension wire. EXTGS004-26P



## ■ Reassembly

1. Perform reassembly by reversing the removing process of "removal of main parts".

CAUTION 1: Prior to reattaching the heat sink, make sure to reattach the top chassis.

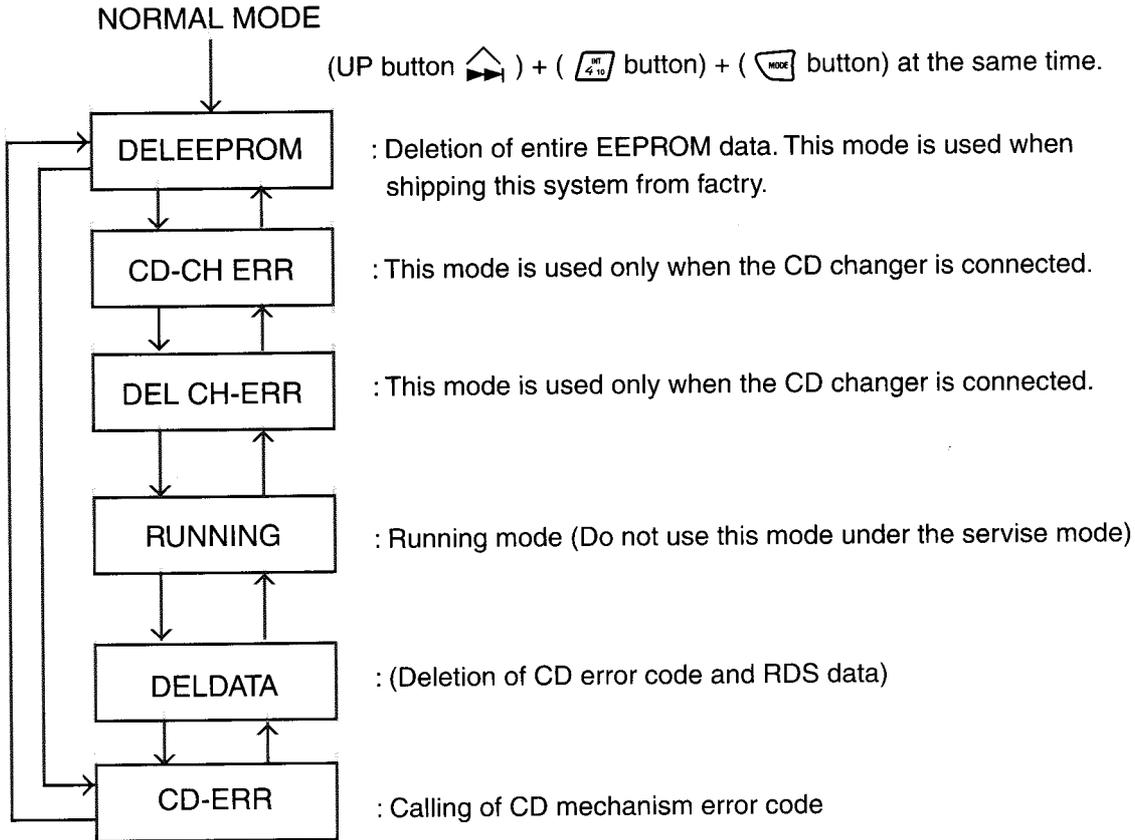


## Functions of the mechanism under the service mode

With the three error modes stored in maximum in the internal memory of the mechanism in the body of this system, it is possible under the service mode to call the contents of error according to the following steps when any error has occurred.

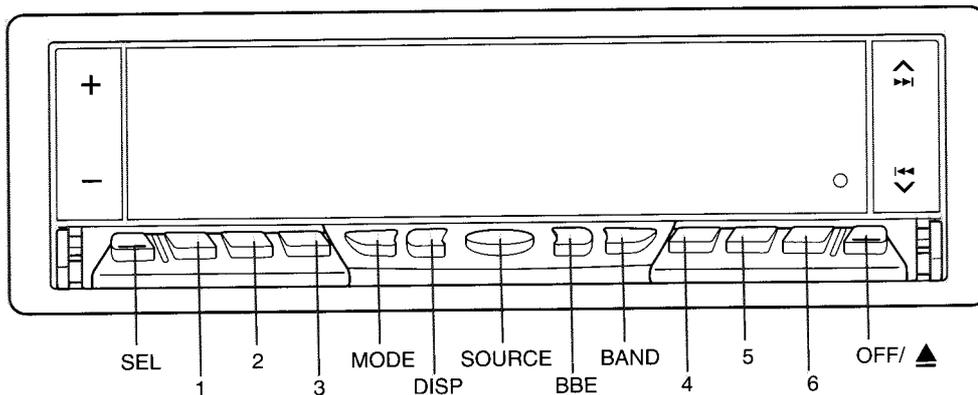
Press the three buttons (UP button ) + (  button) + (Func button  ). Then it is possible to select the following service modes. After changing over to the service mode, press the UP button  and DOWN button  to change the mode. For executing the respective service modes, press the SEL button.

With the service mode 2 , it is possible to call the error codes of the mechanism.



### Data stored in EEPROM

1. RDS data
  2. CD mechanism error cord
  3. Station name (to be input by user)
  4. DISC name (to be input by user)
  5. AUX input name (application only to KD-LX30)
- \*Any data 3 to 5 above should not be deleted.



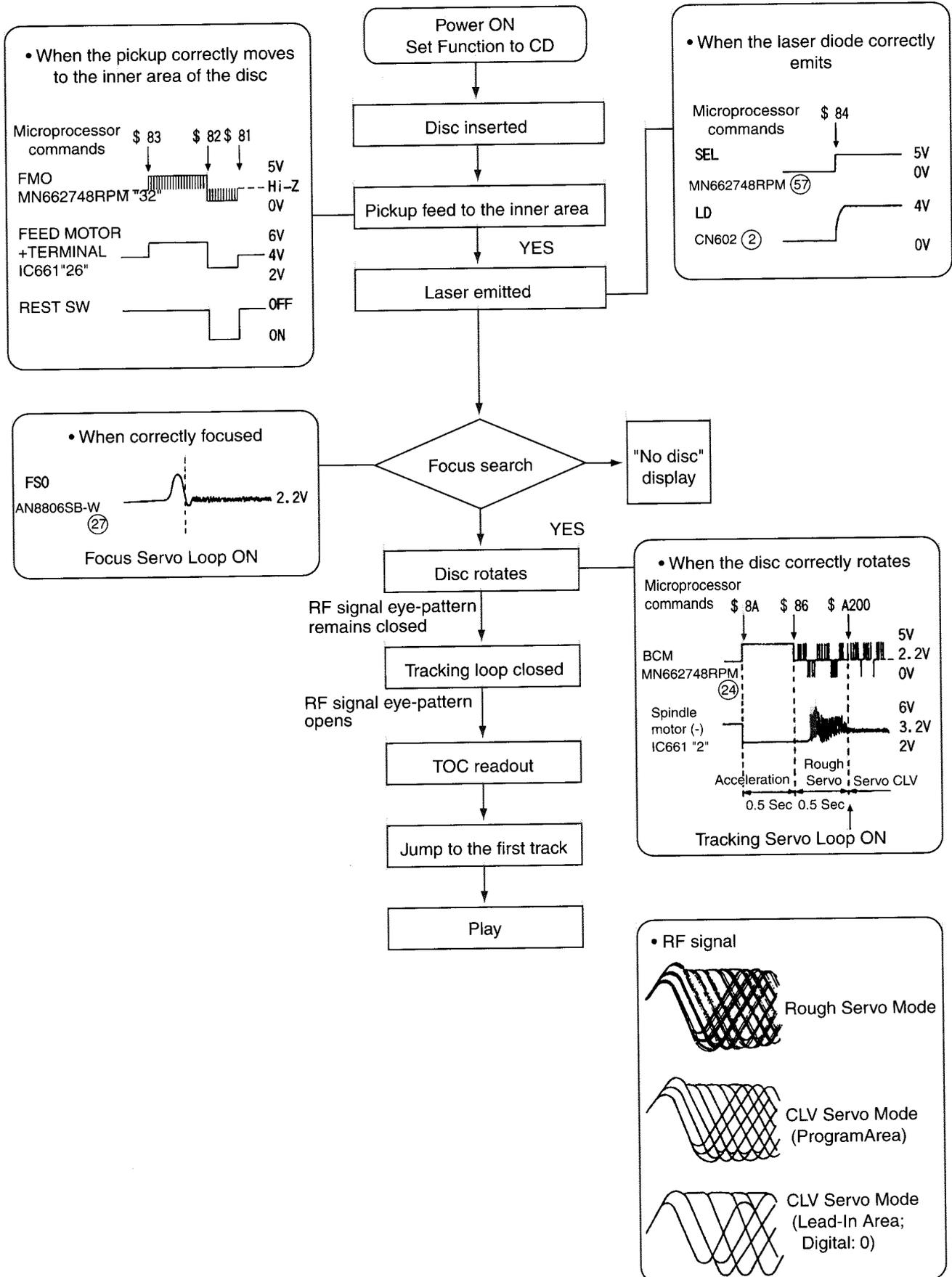
**1. Display of mechanism error**

Occurrence condition	Description	Error codes
Disc loading error	1. SW4 is not turned off. 2. SW3 is not turned on.	09 0011 09 0013
Eject error	1. SW# is not turned off.	01 0021
Error during standby for loading	1. In case SW2 has been positioned to "L" before starting loading during waiting for 15sec.	80 0031

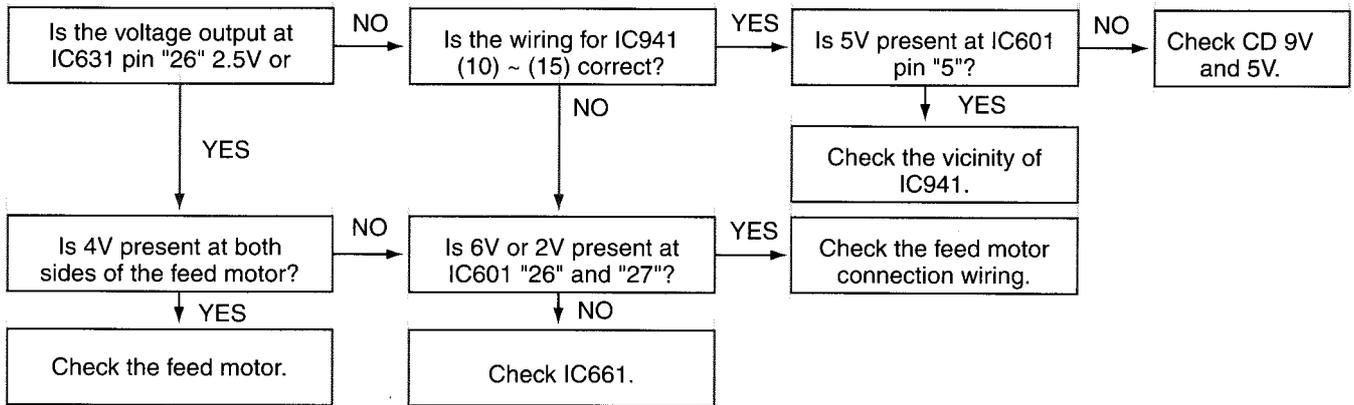
**2. Display of CD error**

Occurrence condition	Description	Error codes
Pickup feeding error 1. Inner peripheral feeding error (10sec.) 2. Outer peripheral feeding error (10sec.)	The pickup cannot returned to the inner peripheral, and the REST switch is not turned off. The pickup cannot be returned to the outer peripheral, and the REST switch is not turned off.	04 0051 04 0052
Focus search error In the case of focusing error after 3-way focus searching	In case the focus cannot be searched by one set of focus searching (3-way focus searching) after disc change and focus shock, judge that the focus searching system is in error.	81 0053
Tracking balance adjusting error In the case of time-over (1sec.) of timer	In case tracking balance cannot be adjusted even after elapse of 1sec. following execution of the adjusting command (TBA).	82 0054
TOC area searching error In the case of time-over (10sec.) of timer	In case TOC area searching is not ended even after elapse of 10sec.	82 0055
Reading error IN the case of time-over (30sec.) of timer	In case reading is not ended even after elapse of 30 sec. during TOC reading action.	84 0059
1st tracking access error In the case of time-over (10sec.) of timer	In case the first tracking access is not ended even after elapse of 10sec. following completion of TOC reading.	80 0060
Last tracking access error In the case of time-over (10sec.) of timer	In case the last tracking access is not ended even after elapse of 10sec. following completion of first tracking under the RUNNING mode.	80 0061
Q code reading error In the case of time-over (0.6sec.) of timer	In case the Q code cannot be read for 0.6sec. during playing TOC program area.	80 0062
TEXT data reading error	In case all TEXT data cannot be read.	80 0063

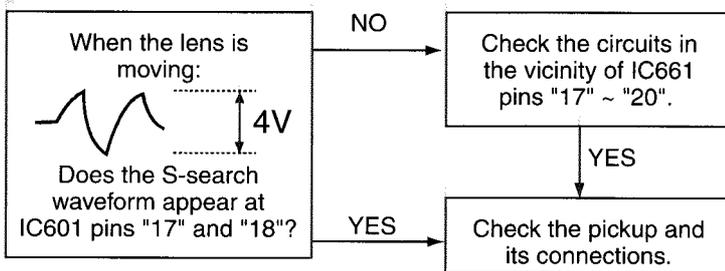
# Flow of functional operation until TOC read



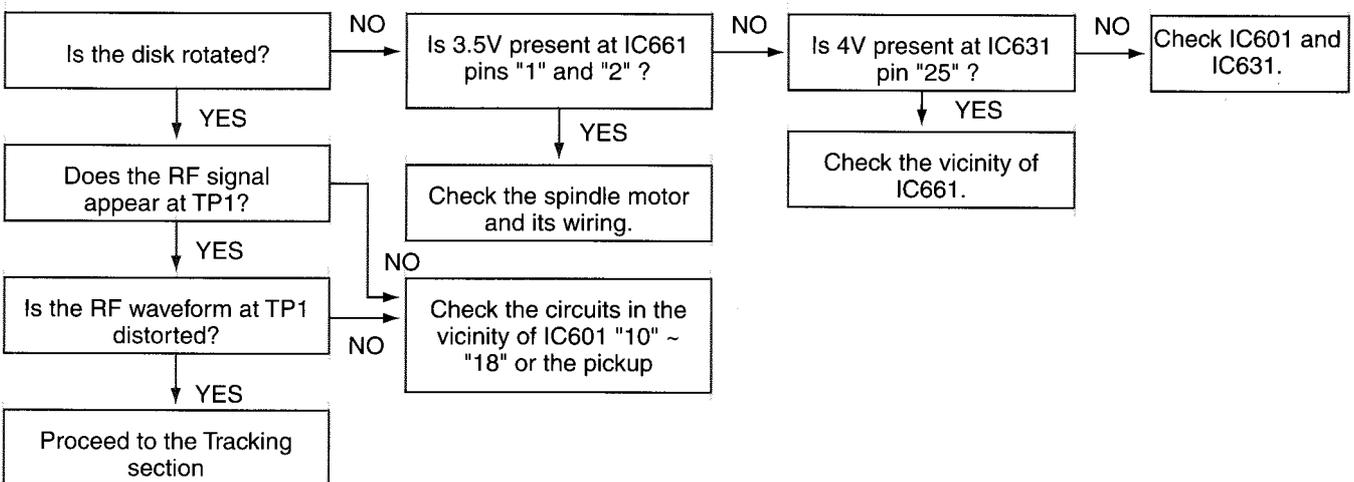
**Feed Section**



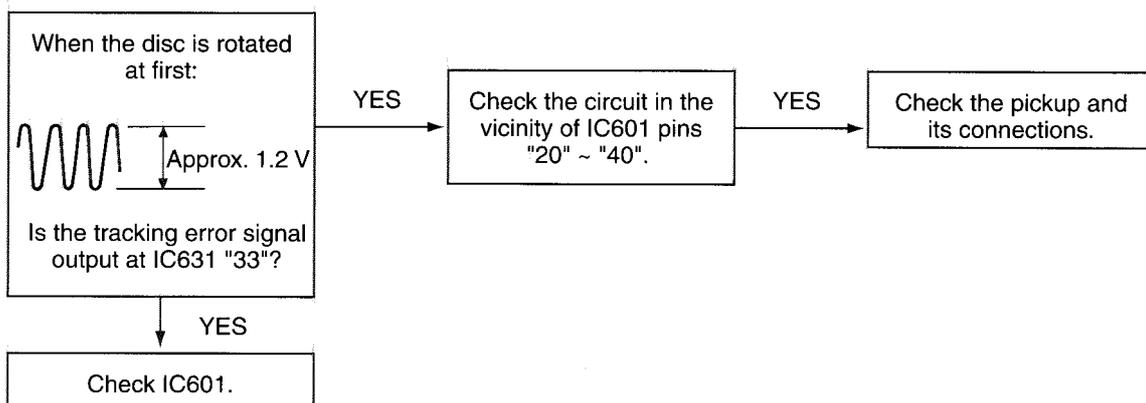
**Focus Section**



**Spindle Section**



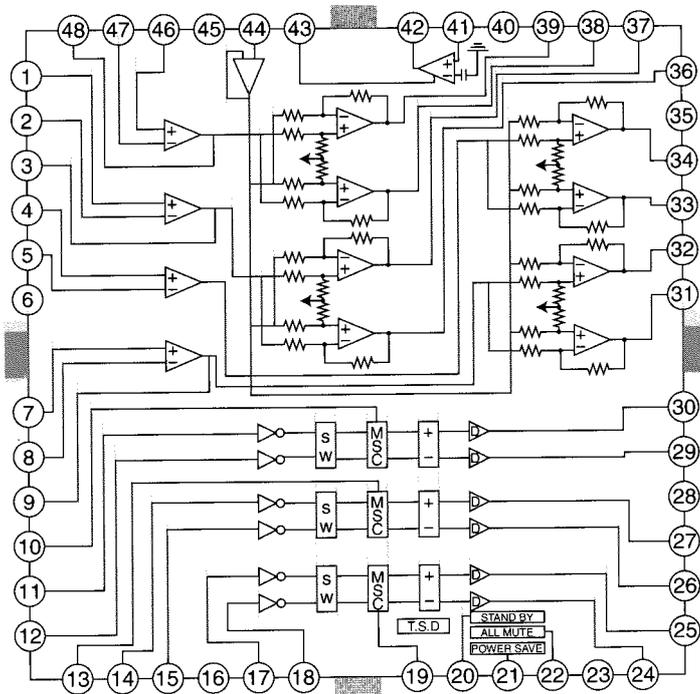
**Tracking Section**



# Description of major ICs

## ■ FAN8037 (IC581) : CD driver

### 1. Pin layout & Block diagram

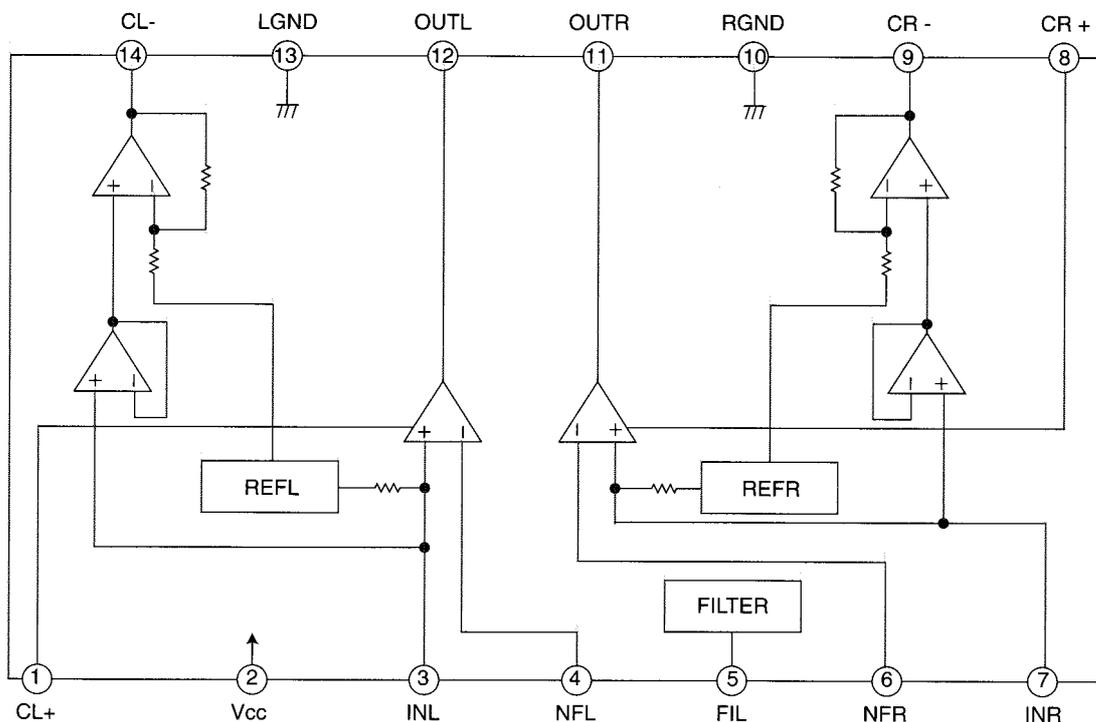


### 2. Pin function

Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	IN2+	I	CH2 op-amp input(+)	25	DO7+	O	CH7 drive output(+)
2	IN2-	I	CH2 op-amp input(-)	26	DO6-	O	CH6 drive output(-)
3	OUT2	O	CH2 op-amp output	27	DO6+	O	CH6 drive output(+)
4	IN3+	I	CH3 op-amp input(+)	28	PGND2	-	Power ground2
5	IN3-	I	Ch3 op-amp input(-)	29	DO5-	O	CH5 drive output(-)
6	OUT3	O	CH3 op-amp output	30	DO5+	O	CH5 drive output(+)
7	IN4+	I	CH4 op-amp input(+)	31	DO4-	O	CH4 drive output(-)
8	IN4-	I	CH4 op-amp input(-)	32	DO4+	O	CH4 drive output(+)
9	OUT4	O	CH4 op-amp output(+)	33	DO3-	O	CH3 drive output(-)
10	CTL1	I	CH5 motor speed control	34	DO3+	O	CH3 drive output(+)
11	FWD1	I	CH5 forward input	35	PGND1	-	Power ground1
12	REV1	I	CH5 reverse input	36	DO2-	O	CH2 drive output(-)
13	CTL2	I	CH6 motor speed control	37	DO2+	O	CH2 drive output(+)
14	FWD2	I	CH6 forward input	38	DO1-	O	CH1 drive output(-)
15	REV2	I	CH6 reverse input	39	DO1+	O	CH1 drive output(+)
16	SGND	-	Signal ground	40	PVCC1	-	Power supply voltage
17	FWD3	I	CH7 forward input	41	REGOX	I	Regulator feedback input
18	REV3	I	CH7 reverse input	42	REGX	O	Regulator output
19	CTL3	I	CH7 motor speed control	43	RESX	I	Regulator reset input
20	SB	I	Stand by	44	VREF	I	Bias voltage input
21	PS	I	Power save	45	SVCC	-	Signal supply voltage
22	MUTE	I	All mute	46	IN1+	I	CH1 op-amp input(+)
23	PVCC2	-	Power supply voltage	47	IN1-	I	CH1 op-amp input(-)
24	DO7-	O	CH7 drive output(-)	48	OUT1	O	CH1 op-amp output

■ BA3220FV-X (IC341) : Driver

1. Pin layout & Block diagram

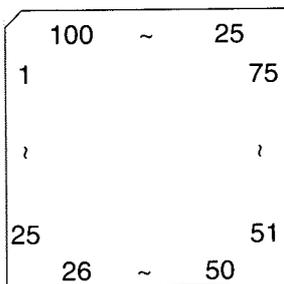


2. Pin functions

Pin No.	Symbol	Function
1	CL+	Power supply terminal for amp.
2	Vcc	power supply terminal.
3	INL	input terminal.
4	NFL	Negative feedback terminal.
5	FIL	Filter terminal.
6	NFR	Negative feedback terminal.
7	INR	Input terminal
8	CR+	Power supply terminal for amp.
9	CR-	Output terminal of internal amp.
10	RGND	Rch GND terminal.
11	OUTR	Rch output terminal.
12	OUTL	Lch output terminal.
13	LGND	Lch GND terminal.
14	CL-	Output terminal of internal amp.

■ UPD784215GC-165 (IC701) : CPU

1. Pin layout



2. Pin function (1/2)

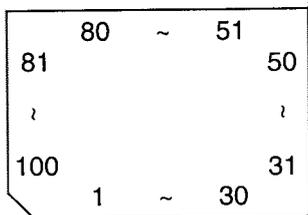
Pin No.	Symbol	I/O	Function
1	SW2	I	CD mechanism detect switch
2	SW3	I	CD mechanism detect switch
3	SW4	I	CD mechanism detect switch
4	REST-SW	I	Reset signal input terminal from CD mechanism
5	LM0	O	Loading motor control signal input terminal
6	LM1	O	Loading motor control signal input terminal
7	DIMMER-OUT	O	DIMMER signal output terminal
8	LCD-PWR	-	Non connect
9	VDD	-	Power supply terminal
10	X2	O	Connect to system main clock X'tal osc
11	X1	I	Connect to system main clock X'tal osc
12	VSS	-	Connect to ground
13	XT2	O	Connect to system sub clock X'tal osc
14	XT1	I	Connect to system sub clock X'tal osc
15	RESET	I	System reset signal input terminal
16	SW1	I	CD mechanism detect switch
17	BUS-INT	I	J-BUS signal cut in input terminal
18	PS2	I	Power save 2
19	CRUISE	I	CRUISE signal input terminal
20	NC	-	Non connect
21	NC	-	Non connect
22	REMOCON-IN	I	Remote control signal input terminal
23	AVDD	-	Power supply terminal
24	AVREF0	-	Power supply terminal
25	SBAD IN	-	Connect to ground
26	NC	-	Connect to ground
27	KEY0	I	Key control 0 input terminal
28	KEY1	I	Key control 1 input terminal
29	KEY2	I	Key control 2 input terminal
30	LEVEL	I	Level meter signal input terminal
31	NC	-	Non connect
32	S.METER	I	S. meter level input terminal
33	AVSS	-	Connect to ground
34	W-VOL	O	Woofers volume signal output terminal(only KD-LX30)
35	DOT CONT	O	Dot contrast signal output terminal
36	AVREF	-	Power supply terminal
37	BUS-SI/SO	I/O	J-BUS data I/O terminal
38	BUS-SO	O	J-BUS data out put terminal
39	BUS-SCK	I/O	J-BUS serial clock signal I/O terminal
40	STAGE 2	I	Initial setting (L)

## 2. Pin function (2/2)

Pin No.	Symbol	I/O	Function
41	LCD-DA	O	Data output terminal for LCD driver
42	LCD-CL	O	Clock output terminal for LCD driver
43	LCD-CE1	O	Chip enable 1 output terminal for LCD driver
44	BUZZER	O	BUZZER control signal output terminal
45	E2PR-DA-I	I	Data input terminal from EEPROM
46	E2PR-DA-O	O	Data output terminal for EEPROM
47	E2PR-CLK	I/O	Clock signal I/O terminal with EEPROM
48	BUS-I/O	I/O	J-BUS I/O signal terminal
49	TM0	O	Tray motor negative signal output terminal
50	TM1	O	Tray motor positive signal output terminal
51	DM0	O	Door motor negative signal output terminal
52	DM1	O	Door motor positive signal output terminal
53	SD/ST	I	Station detect/Stereo signal input terminal
54	LOCAL	O	Local ON/OFF select signal output terminal
55	MONO	O	Monaural ON/OFF select signal output terminal
56	CA-SW1	I	DOOR/TRAY open close detect switch signal input terminal
57	CA-SW2	I	DOOR/TRAY open close detect switch signal input terminal
58	CA-SW3	I	DOOR/TRAY open close detect switch signal input terminal
59	CA-SW4	I	DOOR/TRAY open close detect switch signal input terminal
60	CA-SW5	I	DOOR/TRAY open close detect switch signal input terminal
61	NC	-	Non connect
62	NC	-	Non connect
63	SEEK/STOP	O	AUTO SEEK/STOP select signal output terminal
64	NC	-	Non connect
65	FM/AM	O	FM/AM select signal output terminal
66	PLL-CE	O	Chip enable signal output terminal
67	PLL-DA	O	Data output terminal
68	PLL-CK	O	Clock signal output terminal
69	PLL-DI	I	Data input terminal
70	NC	-	Non connect
71	AMP KILL	O	Amp. cut off signal output terminal
72	VSS	-	Connect to ground
73	DIMMER-IN	I	DIMMER signal input terminal
74	PS1	I	Power save 1
75	POWER	O	Power ON/OFF select signal output terminal
76	CD-ON	O	Power supply control terminal for CD
77	MUTE	O	Mute signal output terminal
78	W-LPF1	-	Non connect
79	W-LPF2	-	Non connect
80	W-MUTE	-	Non connect
81	VDD	-	Power supply terminal
82	VOL-DATA	O	Data output terminal
83	VOL-CLK	O	Clock signal output terminal
84	NC	-	Non connect
85	NC	-	Non connect
86	LCD RST	O	LCD reset signal output terminal
87	LCD-CE2	O	Chip enable 2 output terminal for LCD driver
88	DMK	O	Motor speed control signal output terminal
89	TMK	O	Tray motor control signal output terminal
90	STAGE1	I	Initial setting H:KD-LX30J L:KD-LX10J
91	BUCK	O	Micro computer interface clock signal output terminal
92	CCE	O	Chip enable signal output terminal for micro computer interface
93	RST	O	Reset signal input terminal
94	TEST	-	Test terminal
95	BUS0	I/O	Micro computer interface data I/O terminal
96	BUS1	I/O	Micro computer interface data I/O terminal
97	BUS2	I/O	Micro computer interface data I/O terminal
98	BUS3	I/O	Micro computer interface data I/O terminal
99	DISC SEL(8cmCD)	I	Initial setting (H:8cm disc uncorrespondence)
100	VOICE IN	I	Initial setting (H:Non corespondence)

■ TC9462F (IC521) : DSP & DAC

1.Pin Layout



2.Pin Function (1/2)

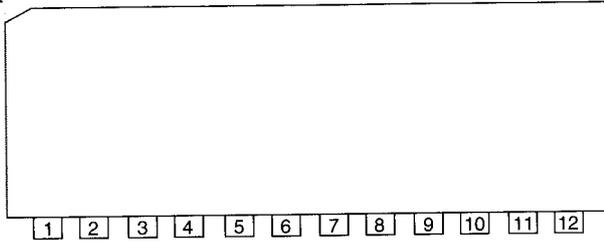
Pin No.	Symbol	I/O	Function
1	TEST0	I	Test mode terminal. Normally, keep at open
2	HSO	O	Playback speed mode flag output terminal
3	UHSO	O	Playback speed mode flag output terminal
4	EMPH	O	Sub code Q data emphasis flag output terminal. "H"=ON "L"=OFF
5	LRCK	O	Channel clock output terminal.(44.1kHz) "H"=Rch "L"=Lch
6	Vss	-	Digital GND terminal
7	BCK	O	Bit clock output terminal. (1.4122MHz)
8	AOUT	O	Audio data output terminal
9	DOUT	O	Digital data output terminal
10	MBOV	O	Buffer memory over signal output terminal.
11	IPF	O	Correction flag output terminal
12	SBOK	O	Sub code Q data CRCC check adjusting result output terminal. "H"=result OK
13	CLCK	I/O	Sub code P~W data readout input/output terminal
14	Vdd	-	Digital power supply voltage terminal
15	Vss	-	Digital GND terminal
16	DATA	O	Sub code P~W data output terminal
17	SFSY	O	Play-back frame sync signal output terminal
18	SBSY	O	Sub code block sync signal output terminal
19	SPCK	O	Processor status signal readout clock output terminal
20	SPDA	O	Processor status signal output terminal
21	COFS	O	Correction frame clock output terminal (7.35kHz)
22	MONIT	O	Internal signal (DSP internal flag and PLL clock) output terminal
23	Vdd	-	Digital power supply voltage terminal
24	TESIO0	I	Test input/output terminal. Normally, keep at "L" level
25	P2VREF	-	PLL double reference voltage supply terminal
26	HSSW	O	2/4 times speed at "Vref" voltage
27	ZDET	O	1bit DA converter zero detect flag output terminal
28	PDO	O	Phase difference signal output terminal of EFM signal and PLCK signal
29	TMAXS	O	TMAX detection result output terminal. Selected by command bit (TMPS)
30	TMAX	O	TMAX detection result output terminal. Selected by command bit (TMPS)
31	LPFN	I	LPF amplifier inverting input terminal for PLL
32	LPFO	O	LPF amplifier output terminal for PLL
33	PVREF	-	PLL reference voltage supply terminal
34	VCOREF	I	VCO center frequency reference level terminal
35	VCOF	O	VCO filter terminal
36	AVss	-	Analog GND terminal
37	SLCO	O	Data slice level output terminal
38	RFI	I	RF signal input terminal
39	AVDD	-	Analog power supply voltage terminal

## 2.Pin Function (2/2)

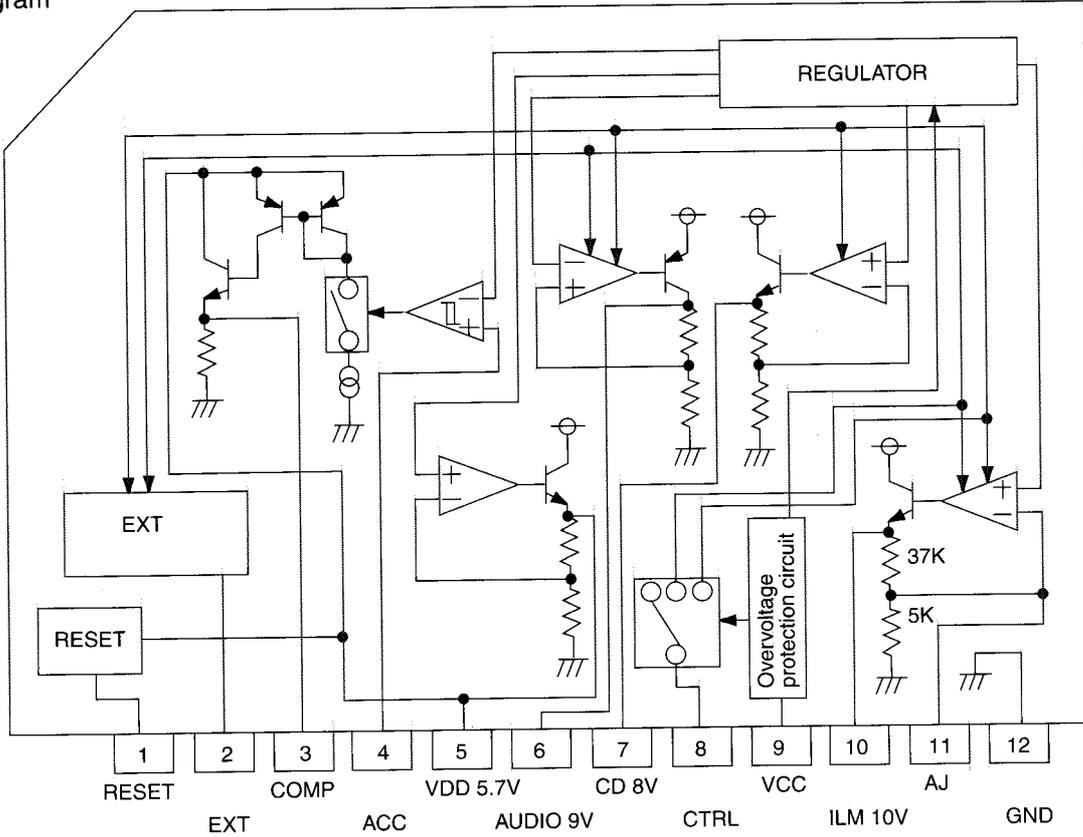
Pin No.	Symbol	I/O	Function
40	RFCT	I	RFRP signal center level input terminal
41	RFZI	I	RFRP zero cross input terminal
42	RFRP	I	RF ripple signal input terminal
43	FEI	I	Focus error signal input terminal
44	SBAD	I	Sub-beam adder signal input terminal
45	TSIN	I	Test input terminal Normally, keep at "vref" level
46	TEI	I	Tracking error signal input terminal. Take in at tracking servo ON.
47	TEZI	I	Tracking error zero cross input terminal
48	FOO	O	Focus servo equalizer output terminal
49	TRO	O	Tracking servo equalizer output terminal
50	VREF	-	Analog reference voltage supply terminal
51	RFGC	O	RF amplitude adjustment control signal output terminal
52	TEBC	O	Tracking balance control signal output terminal
53	FMO	O	Feed equalizer output terminal
54	FVO	O	Speed error signal or feed search equalizer output terminal
55	DMO	O	Disk equalizer output terminal (PWM carrier=88.2kHz for DSP, Synchronize to PXO)
56	2VREF	-	Analog double reference voltage supply terminal
57	SEL	O	APC circuit ON/OFF indication signal output terminal
58~61	FLGA~D	O	External flag output terminal for internal signal
62	VDD	-	Digital power supply voltage terminal
63	VSS	-	Digital GND terminal
64~67	IO0~3	I/O	General I/O terminal
68	DMOUT	I	This terminal control IO0~IO3 terminal
69	CKSE	I	Normally, keep at open
70	DACT	I	DAC test mode terminal. Normally, keep at open
71	TESIN	I	Test input terminal, Normally, keep at "L" level
72	TESIO1	I	Test input/output terminal. Normally, keep at "L" level
73	VSS	-	Digital GND terminal
74	PXI	I	Crystal oscillator connecting input terminal for DSP
75	PXO	O	Crystal oscillator connecting output terminal for DSP
76	VDD	-	Digital power supply voltage terminal
77	XVSS	-	Oscillator GND terminal for system clock
78	XI	I	Crystal oscillator connecting input terminal for system clock
79	XO	O	Crystal oscillator connecting output terminal for system clock
80	XVDD	-	Oscillator power supply voltage terminal for system clock
81	DVSR	-	Analog GND terminal for DA converter (Rch)
82	RO	O	R channel data forward output terminal
83	DVDD	-	Analog supply voltage terminal for DA converter
84	DVR	-	Reference voltage terminal for DA converter
85	LO	O	L channel data forward output terminal
86	DVSL	-	Analog GND terminal for DA converter (Lch)
87~89	TEST1~3	I	Test mode terminal . Normal keep at open
90~93	BUS0~3	I/O	Micon interface data input/output terminal
94	VDD	-	Digital power supply voltage terminal
95	VSS	-	Digital GND terminal
96	BUCK	I	Micon interface clock input terminal
97	CCE	I	Command and data sending/receiving chip enable signal input terminal
98	TEST4	I	Test mode terminal. Normal, keep at open
99	TSMOD	I	Local test mode selection terminal
100	RST	I	Reset signal input terminal. Reset at "L" level

■ BA4905-V3 (IC961) : Regulator

1. Terminal layout



2. Block diagram

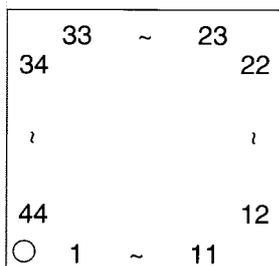


3. Pin function

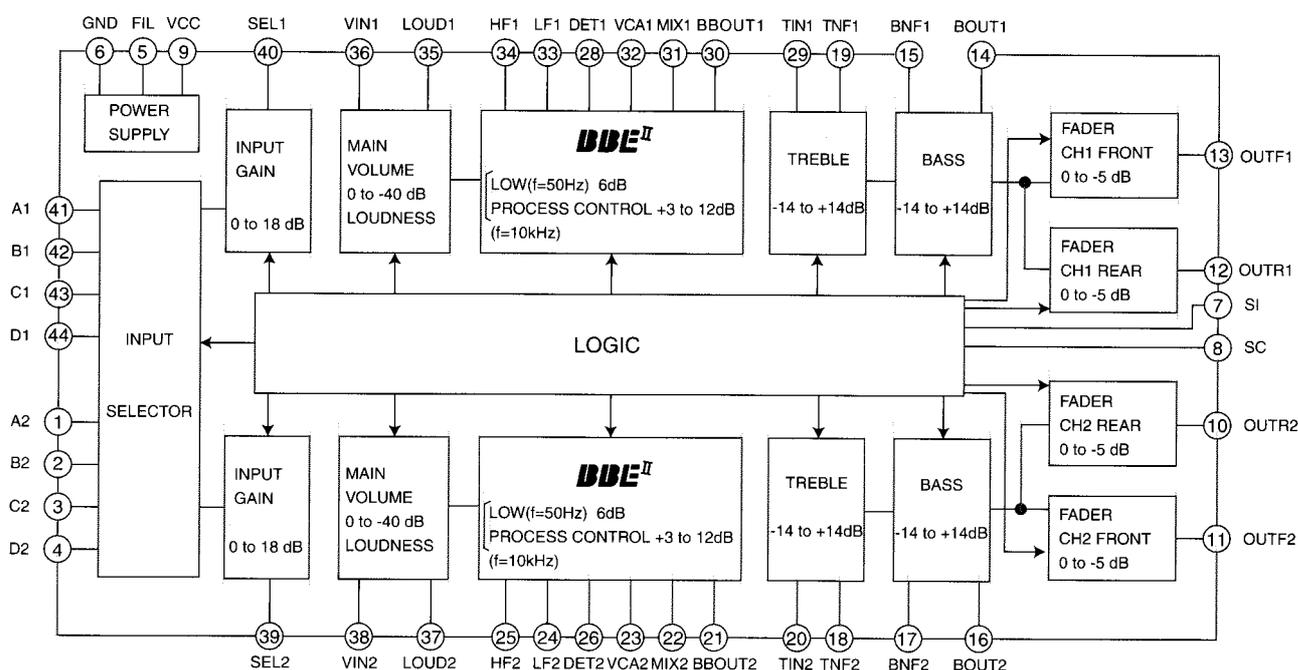
Pin no.	Symbol	Function
1	RESET	If VDD voltage becomes 4V or less, RESET output becomes low level.
2	EXT output	This output voltage is approximately 0.5V lower than VCC, and max output current is 300mA.
3	COMP output	A voltage supply for ACC block. This output voltage is approximately 0.7V lower than VDD'S. The max output current is 100mA.
4	ACC	Control of the COMP output by inputting voltage.
5	VDD output	This output voltage is 5.7V, and max output current is 100mA. This voltage supply is for microcomputer. Whenever back up voltage supply is connected, the output keeps on running.
6	AUDIO output	This output voltage is 9.0V, and max output current is 500mA. This voltage supply for AUDIO.
7	CD output	This output voltage is 8.0V, and max output current is 1A. This voltage supply for CD.
8	CTRL	Output selector of CD, AUDIO, ILM and EXT.
9	VCC	To be connected with the BACK UP of car.
10	ILM output	This output voltage is 10V, and max output current is 500mA. Output voltage is adjustable.
11	AJ	Putting a resistance between ILM and AJ or between AJ and GND makes ILM output voltage adjustable.
12	GND	Ground.

■ **BD3860K (IC911) : E. volume**

1. Pin layout



2. Block diagram

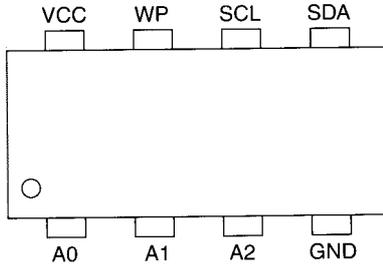


3. Pin function

Pin No.	Symbol	Function	Pin No.	Symbol	Function
1	A2	CH2 input terminal A	23	VCA2	CH2 high frequency VCA output terminal
2	B2	CH2 input terminal B	24	LF2	CH2 low frequency filter setting terminal
3	C2	CH2 input terminal C	25	HF2	CH2 high frequency filter setting terminal
4	D2	CH2 input terminal D	26	DET2	CH2 high frequency attack release time setting
5	FIL	1/2 VCC terminal	27	NC	Non connect
6	GND	Ground terminal	28	DET1	CH1 high frequency attack release time setting
7	SI	Serial data input terminal	29	TIN1	CH1 treble input terminal
8	SC	Serial clock input terminal	30	BBOUT1	CH1 BBE II signal output terminal
9	VCC	Power supply	31	MIX1	CH1 output mix amp. negative input terminal
10	OUTR2	CH2 rear output terminal	32	VCA1	CH1 high frequency VCA output terminal
11	OUTF2	CH2 front output terminal	33	LF1	CH1 low frequency filter setting terminal
12	OUTR1	CH1 rear output terminal	34	HF1	CH1 high frequency filter setting terminal
13	OUTF1	CH1 front output terminal	35	LOUD1	CH1 loudness filter setting terminal
14	BOUT1	CH1 bus filter setting terminal	36	VIN1	CH1 main volume input terminal
15	BNF1	CH1 bus filter setting terminal	37	LOUD2	CH2 loudness filter setting terminal
16	BOUT2	CH2 bus filter setting terminal	38	VIN2	CH2 main volume input terminal
17	BNF2	CH2 bus filter setting terminal	39	SEL2	CH2 input gain output terminal
18	TNF2	CH2 treble filter setting terminal	40	SEL1	CH1 input gain output terminal
19	TNF1	CH1 treble setting terminal	41	A1	CH1 input terminal A
20	TIN2	CH2 treble input terminal	42	B1	CH1 input terminal B
21	BBOUT2	CH2 BBE II signal output terminal	43	C1	CH1 input terminal C
22	MIX2	CH2 output mix amp negative input terminal	44	D1	CH1 input terminal D

■ BR24C16F-X (IC703) : EEPROM

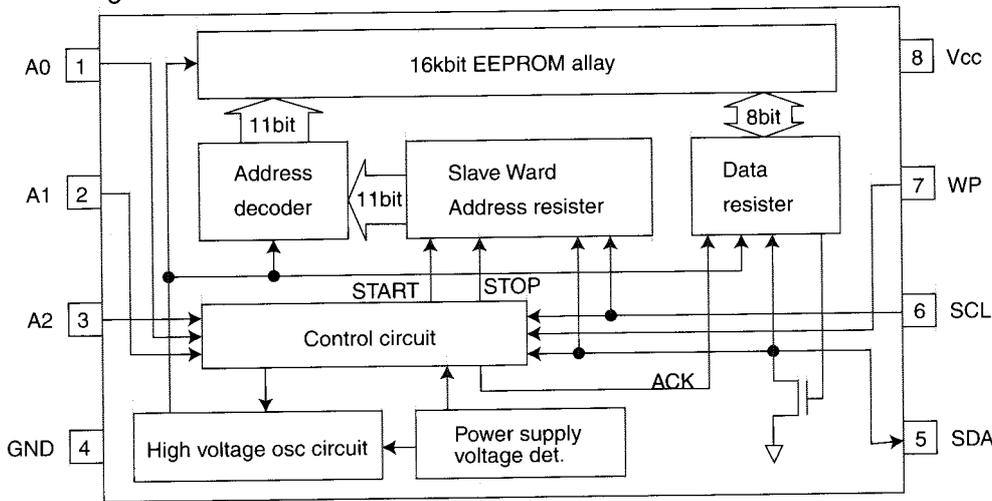
1. Pin layout



2. Pin function

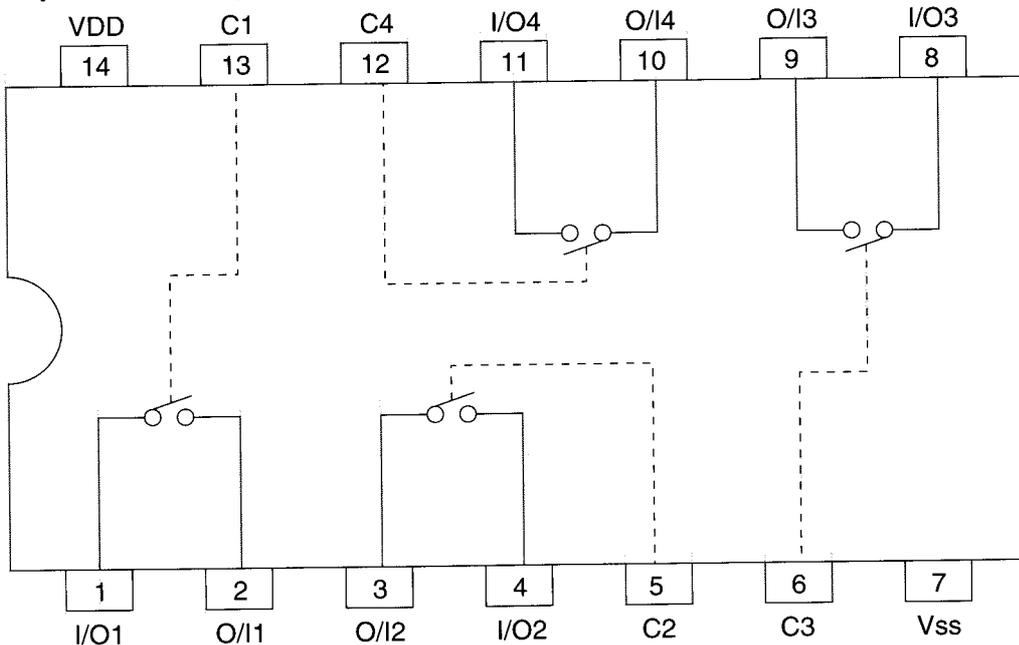
Symbol	I/O	Function
VCC	-	Power supply.
GND	-	GND
A0,A1,A2	I	No use connect to GND.
SCL	I	Serial clock input.
SDA	I/O	Serial data I/O of slave and ward address.
WP	I	Write protect terminal.

3. Block diagram



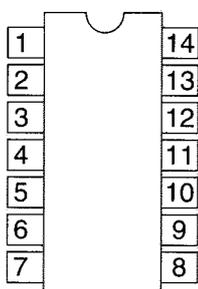
■ BU4066BCFV-X (IC322) : Quad analog switch

1. Pin layout & Block diagram



■ HD74HC126FP-X (IC771) : Buffer

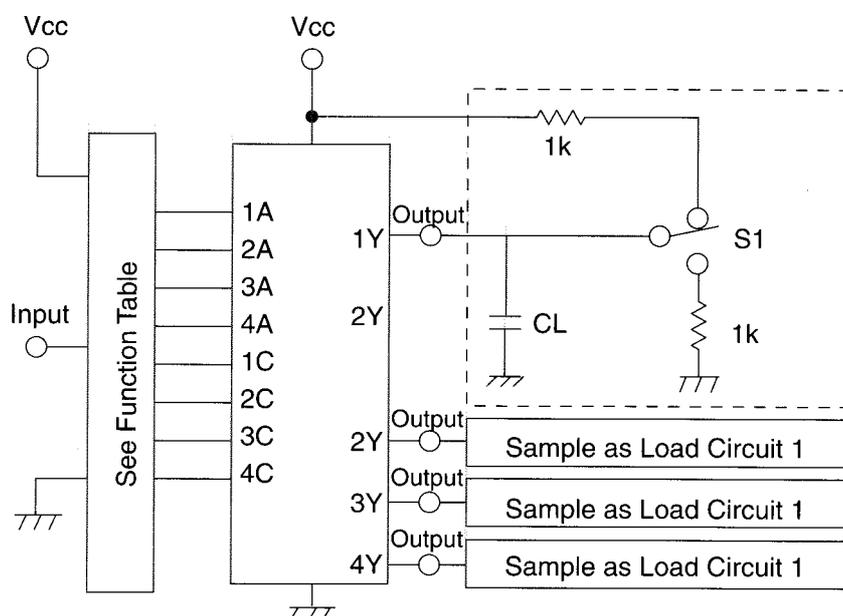
1. Pin layout



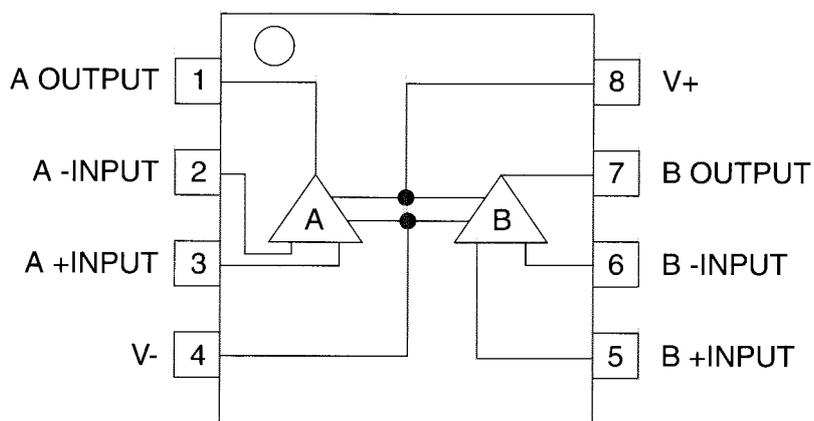
2. Function

Inputs		Outputs
C	A	Y
L	X	Z
H	L	H
H	H	L

3. Block diagram

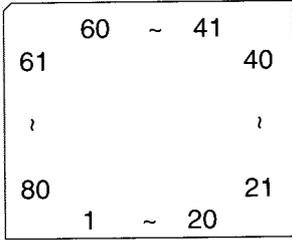


■ NJM4565M-W (IC151,IC171,IC323,IC361,IC461) : Ope amp.

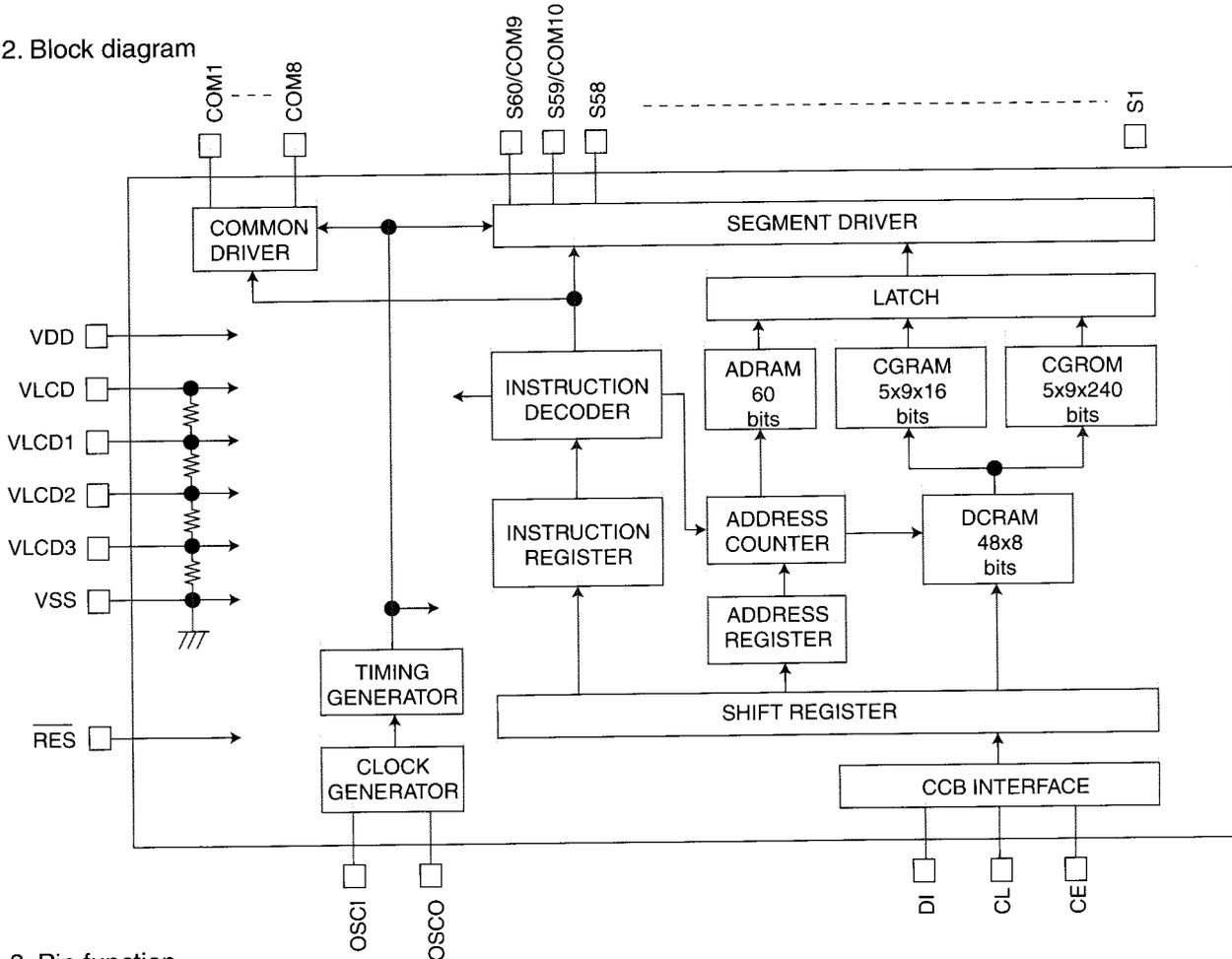


■ LC75811W (IC602) : LCD driver

1. Pin layout



2. Block diagram

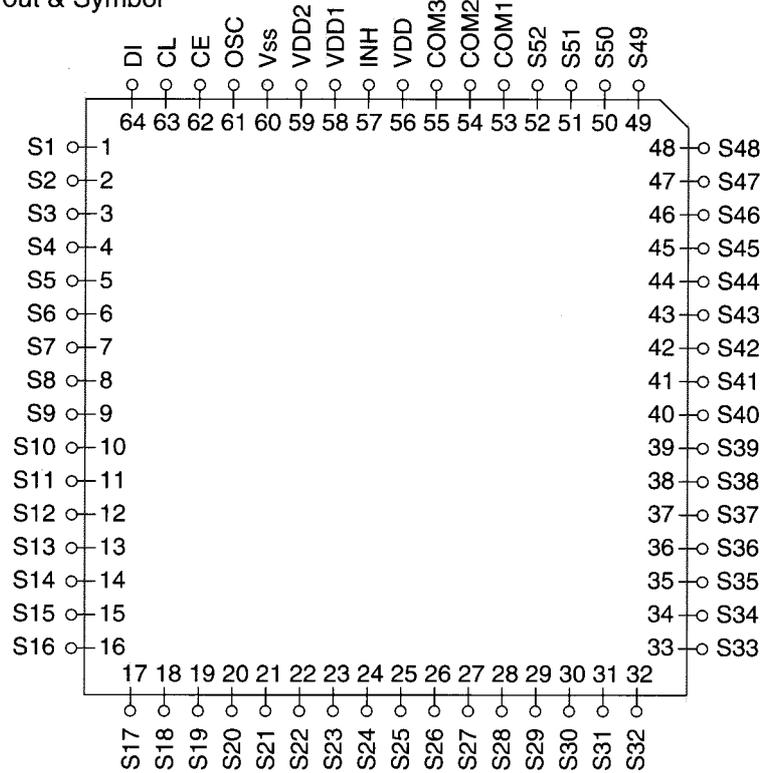


3. Pin function

Pin No.	Symbol	I/O	Function
1~58	S3~S60	O	Segment driver output terminal
59	COM0	O	Common driver output terminal
60~65	COM3~COM8	O	Common driver output terminal
66	COM1	O	Common driver output terminal
67	VDD	-	Power supply for logic section
68	VLCD	-	Power supply for LCD driver section
69~71	VLCD1~VLCD3	I	LCD voltage input terminal
72	VSS	-	Connect to ground
73	OSCO	O	Oscillation output terminal
74	OSCI	I	Oscillation input terminal
75	RES	I	Reset signal input terminal
76	CE	I	Chip enable input terminal
77	CL	I	Clock signal input terminal
78	DI	I	Serial data input terminal
79~80	S1~S2	O	Segment driver output terminal

■ LC75823W (IC601,IC602) : LCD Driver

1. Pin Layout & Symbol

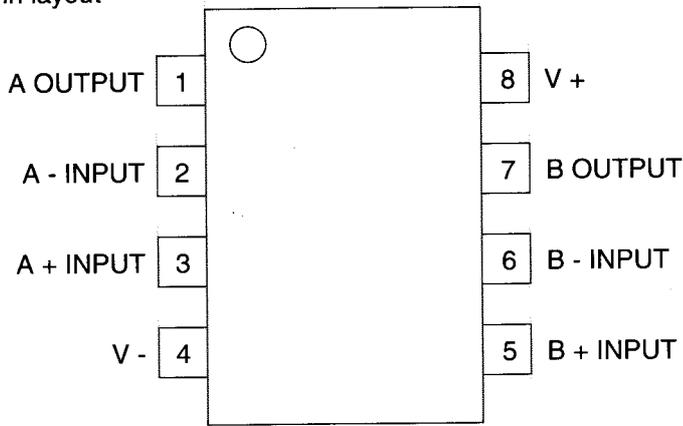


2. Pin Function

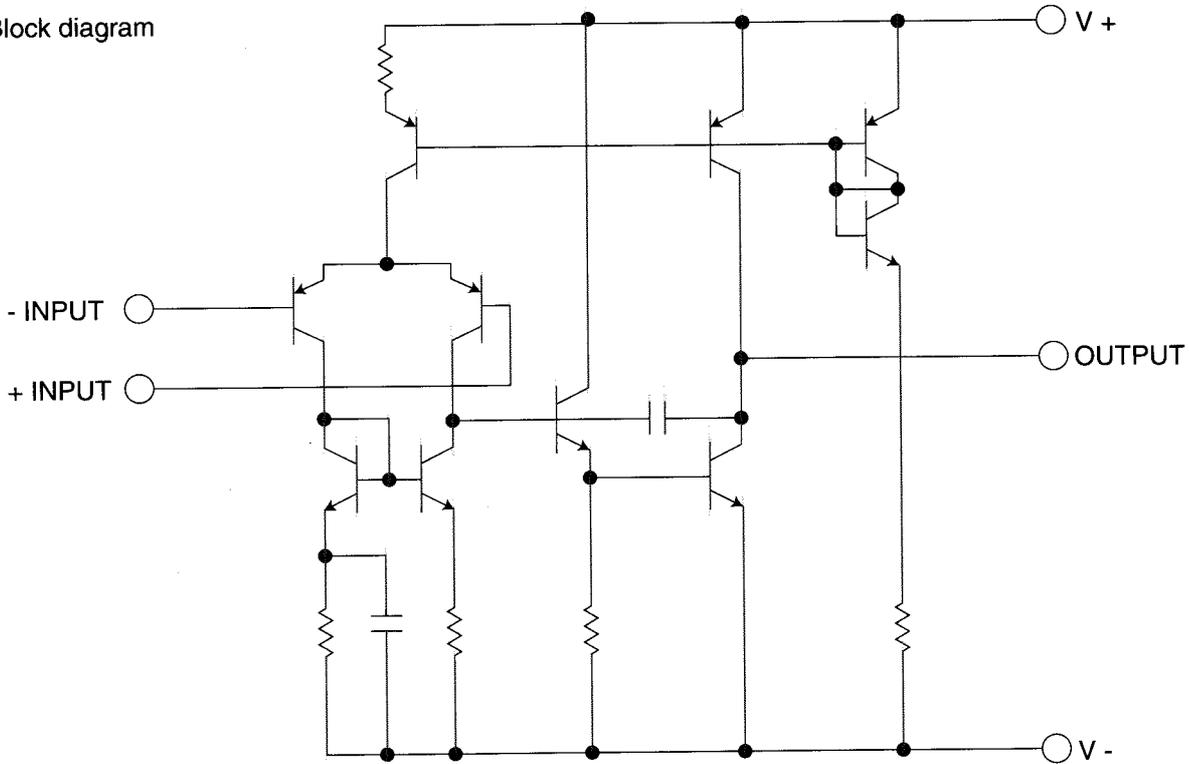
Pin No.	Symbol	I/O	Function
1 to 52	S1 to S52	O	Segment output pins used to display data transferred by serial data input.
53 to 55	COM1 to COM3	O	Common driver output pins. The frame frequency is given by : $t_0 = (f_{osc}/384) \text{Hz}$ .
56	VDD	--	Power supply connection. Provide a voltage of between 4.5 and 6.0V.
57	$\overline{\text{INH}}$	I	Display turning off input pin. $\overline{\text{INT}} = \text{"L"} (V_{ss})$ ----- off (S1 to S52, COM1 to COM3 = "L") $\overline{\text{INT}} = \text{"H"} (V_{DD})$ ----- on Serial data can be transferred in display off mode.
58	VDD1	I	Used for applying the LCD drive 2/3 bias voltage externally. Must be connected to VDD2 when a 1/2 bias drive scheme is used.
59	VDD2	I	Used for applying the LCD drive 1/3 bias voltage externally. Must be connected to VDD1 when a 1/2 bias drive scheme is used.
60	Vss	--	Power supply connection. Connect to GND.
61	OSC	I/O	Oscillator connection. An oscillator circuit is formed by connecting an external resistor and capacitor at this pin.
62	CE		Serial data interface connection CE : Chip enable
63	CL	I	Serial data interface connection to the controller. CL : Sync clock
64	DI		DI : Transfer data

■ NJM2100M-W (IC821) : Dual operation amplifier

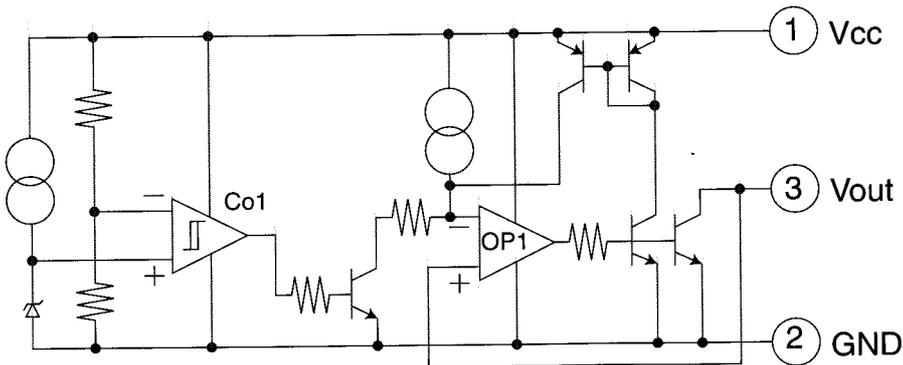
1. Pin layout



2. Block diagram

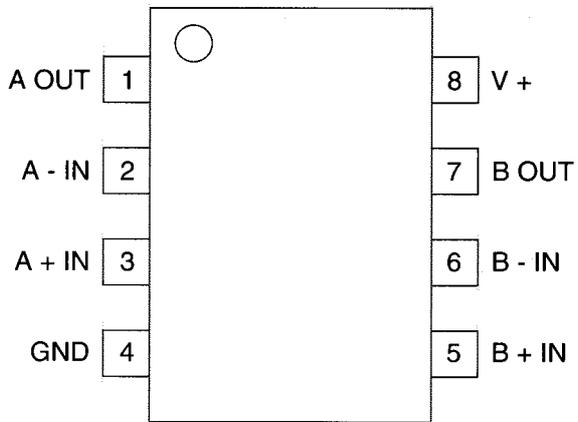


■ IC-PST600M/G/-W (IC702) : System reset

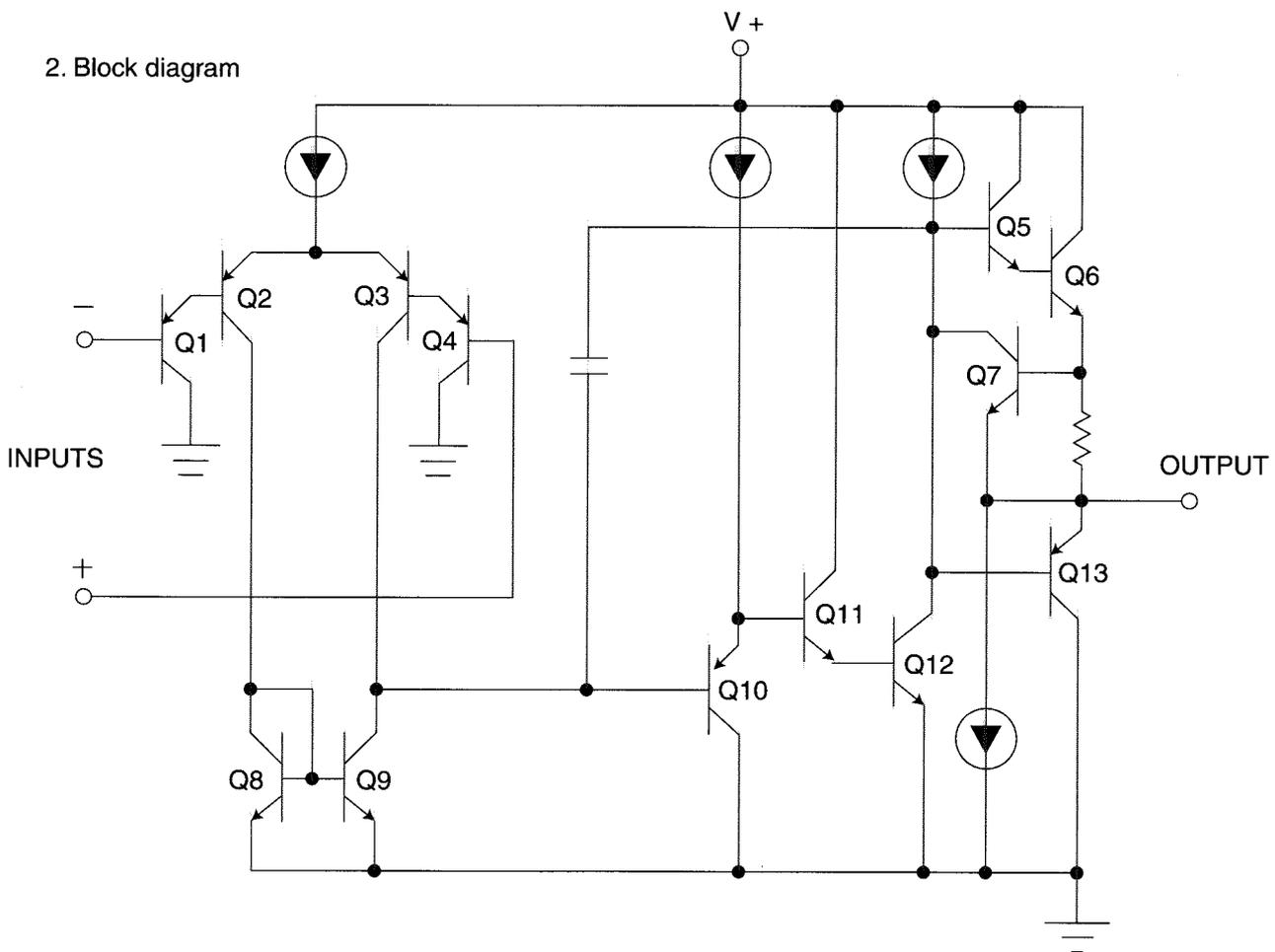


■ NJM2904M-W (IC951) : Dual operation amplifier

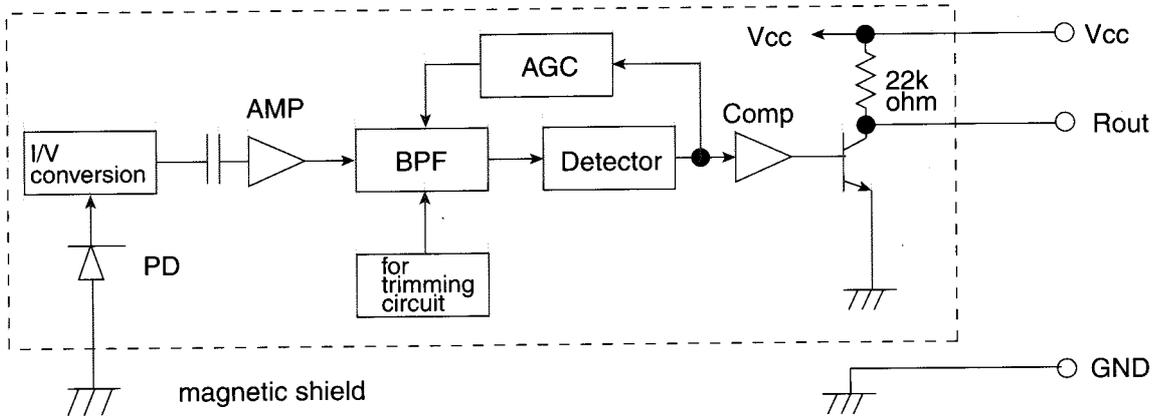
1. Pin layout



2. Block diagram

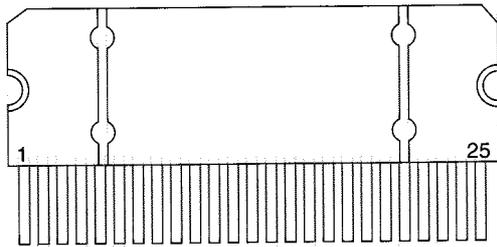


■ RPM6938-SV4 (IC603) : Remote control receiver

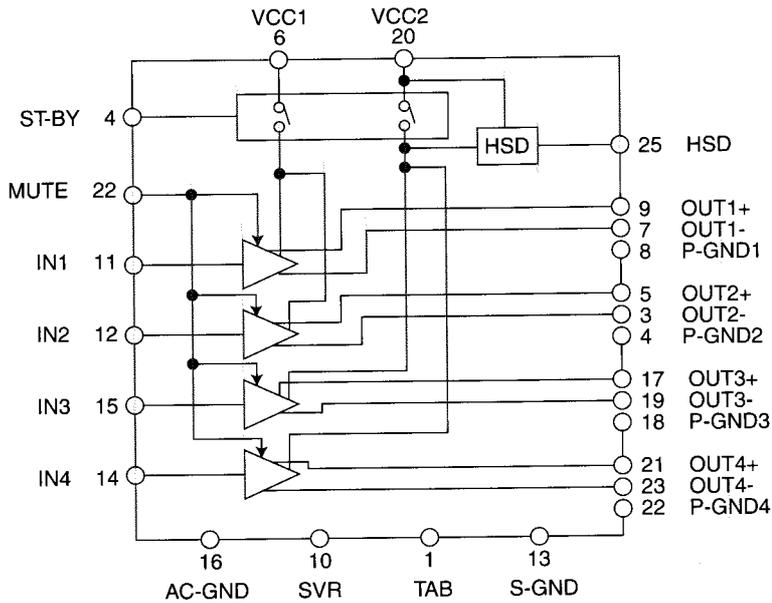


■ TDA7560 (IC941) : 4ch bridge amplifier

1. Pin layout

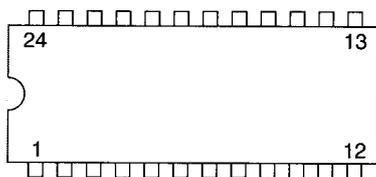


2. Block diagram

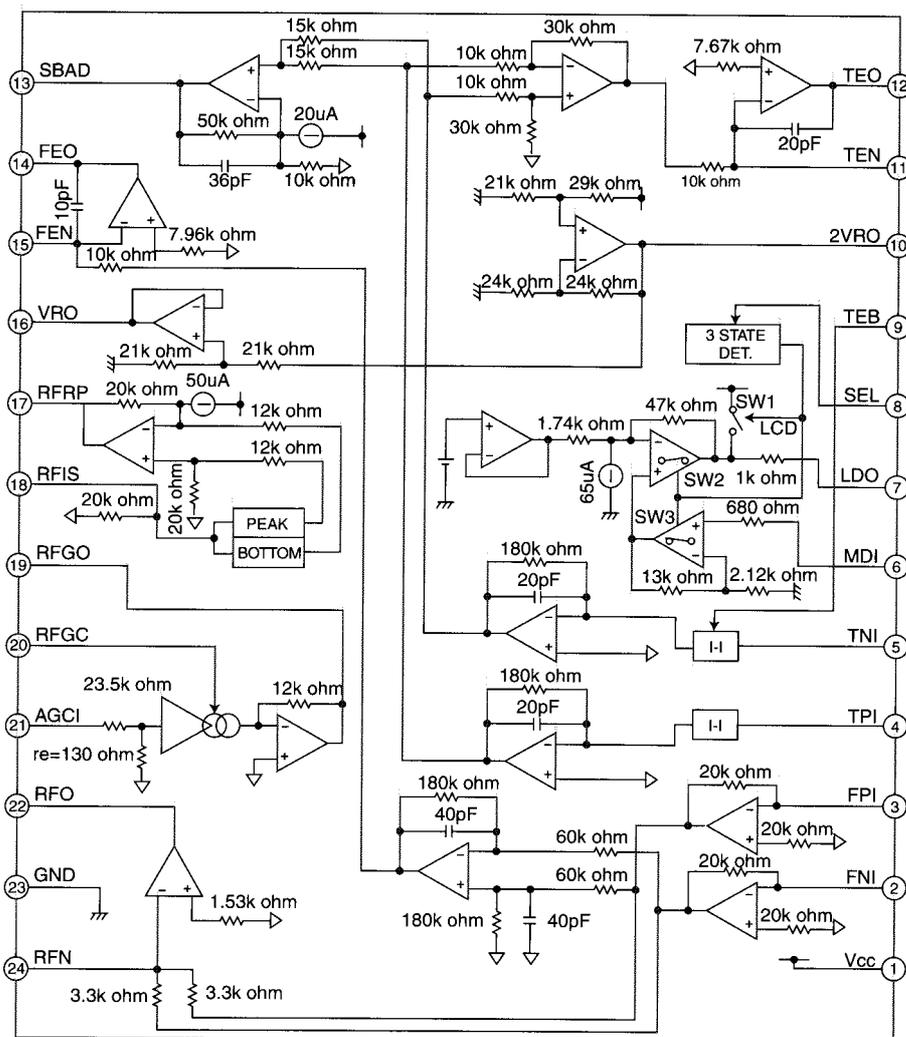


■ TA2109F-X (IC501) : RF amp.

1. Pin layout



2. Block diagram

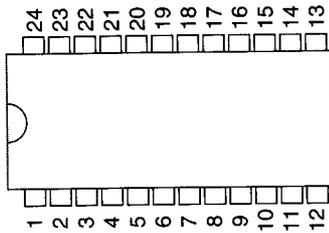


3. Pin function

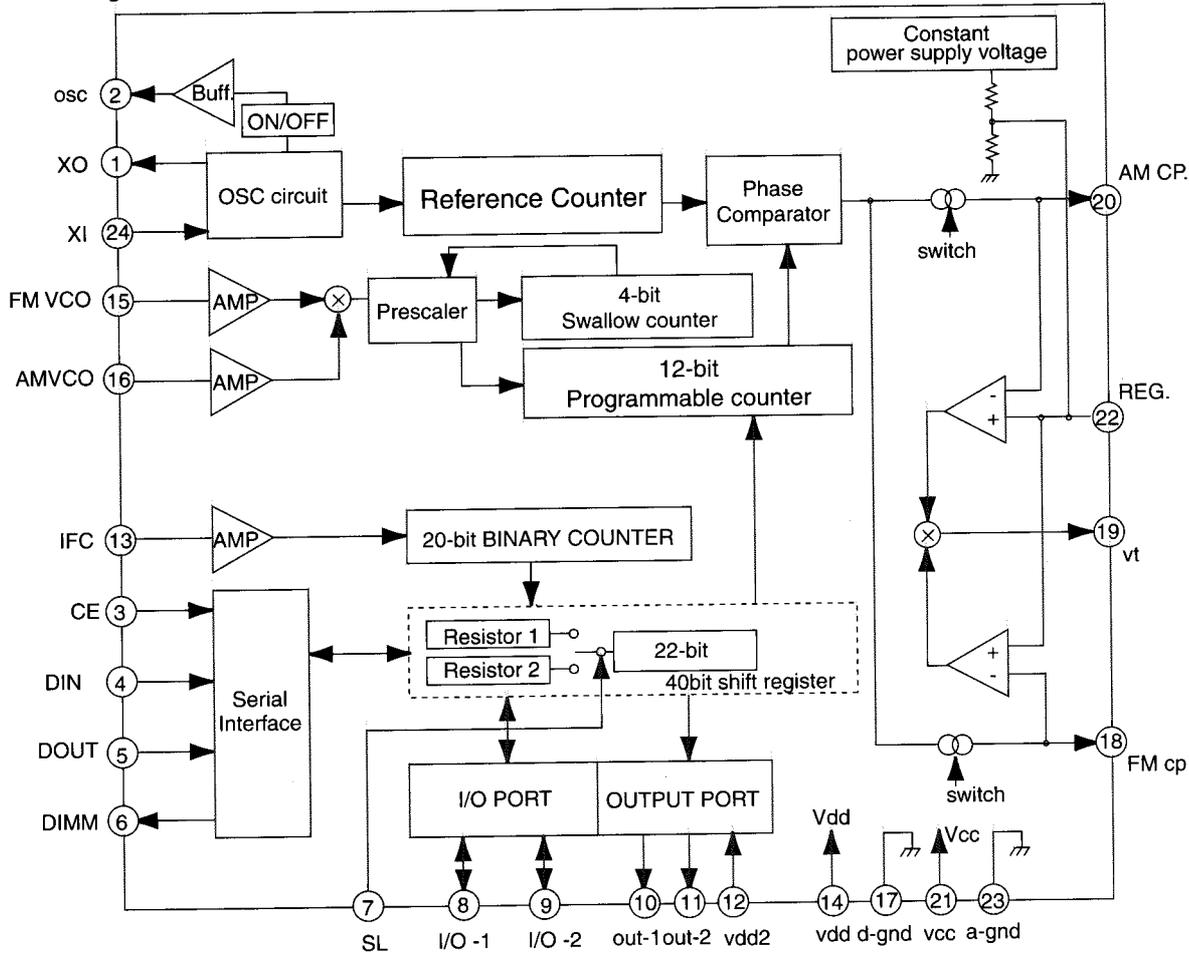
Pin No.	Symbol	I/O	Pin function	Pin No.	Symbol	I/O	Pin function
1	Vcc	-	Power supply input terminal	13	SBAD	O	Sub beam adder signal output terminal
2	FNI	I	Main beam I-V amp input terminal	14	FEO	O	Focus error signal output terminal
3	FPI	I	Main beam I-V amp input terminal	15	FEN	I	FE amp negative input terminal
4	TPI	I	Sub beam I-v input terminal	16	VRO	O	Reference voltage (VREF) output terminal
5	TNI	I	Sub beam I-V input terminal	17	RFRP	O	Track count signal output terminal
6	MDI	I	Monitor photo diode amp input terminal	18	RFIS	I	RFRP detect circuit input terminal
7	LDO	O	Laser diode amp output terminal	19	RFGO	O	RF gain signal output terminal
8	SEL	I	Laser diode control signal input terminal	20	RFGC	I	RF amplitude adj. control signal input terminal
9	TEB	I	T. error balance adj. signal input terminal	21	AGCI	I	RF signal amplitude adj. amp input terminal
10	2VRO	O	Reference voltage output terminal	22	RFO	O	RF signal output terminal
11	TEN	I	TE amp negative input terminal	23	GND	-	Ground terminal
12	TEO	O	TE error signal output terminal	24	RFN	I	RF amp negative input terminal

■TB2118F-X (IC21) : PLL

1. Terminal Layout



2. Block diagram



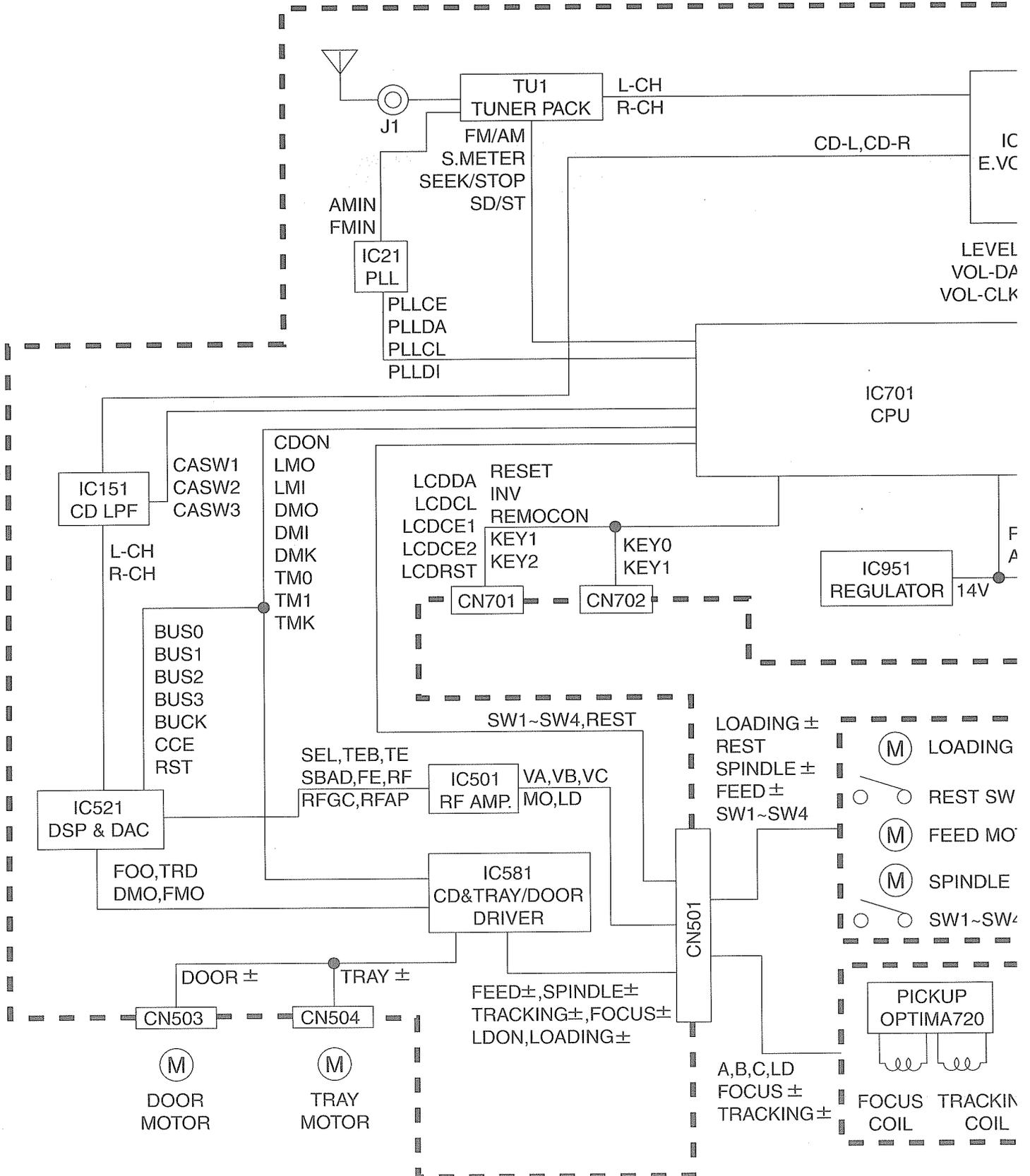
3. Pin Function

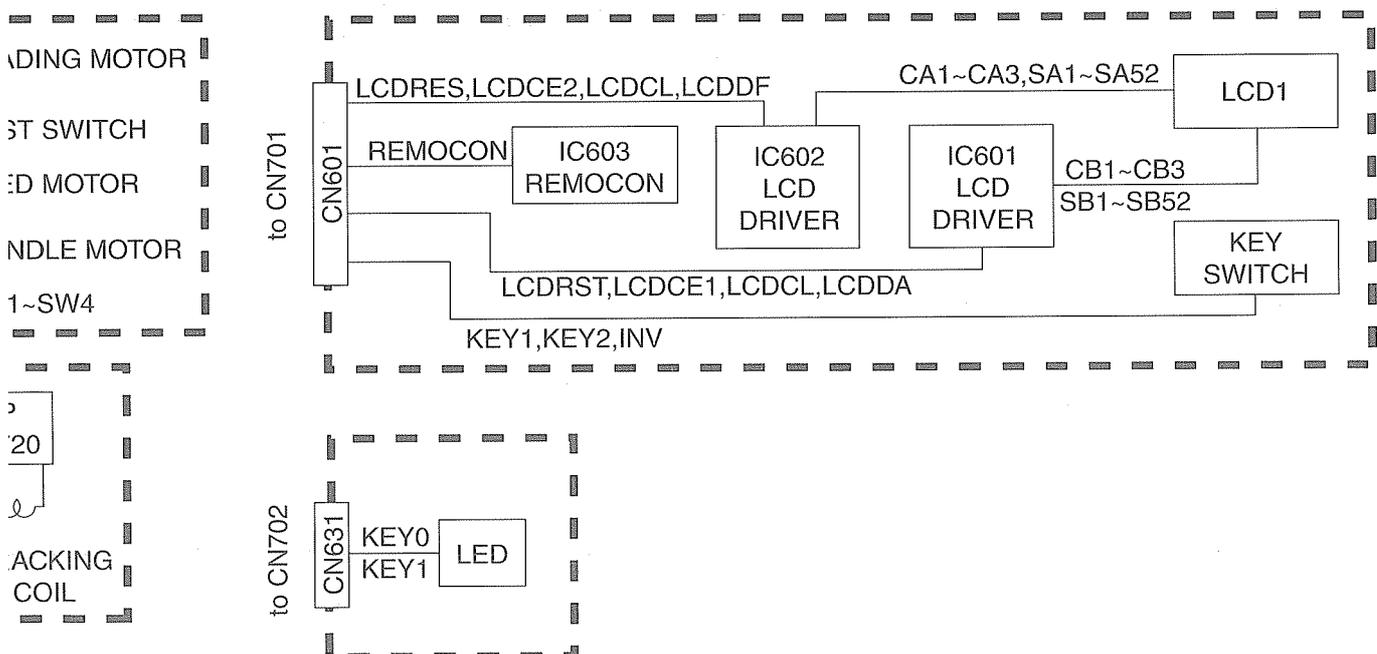
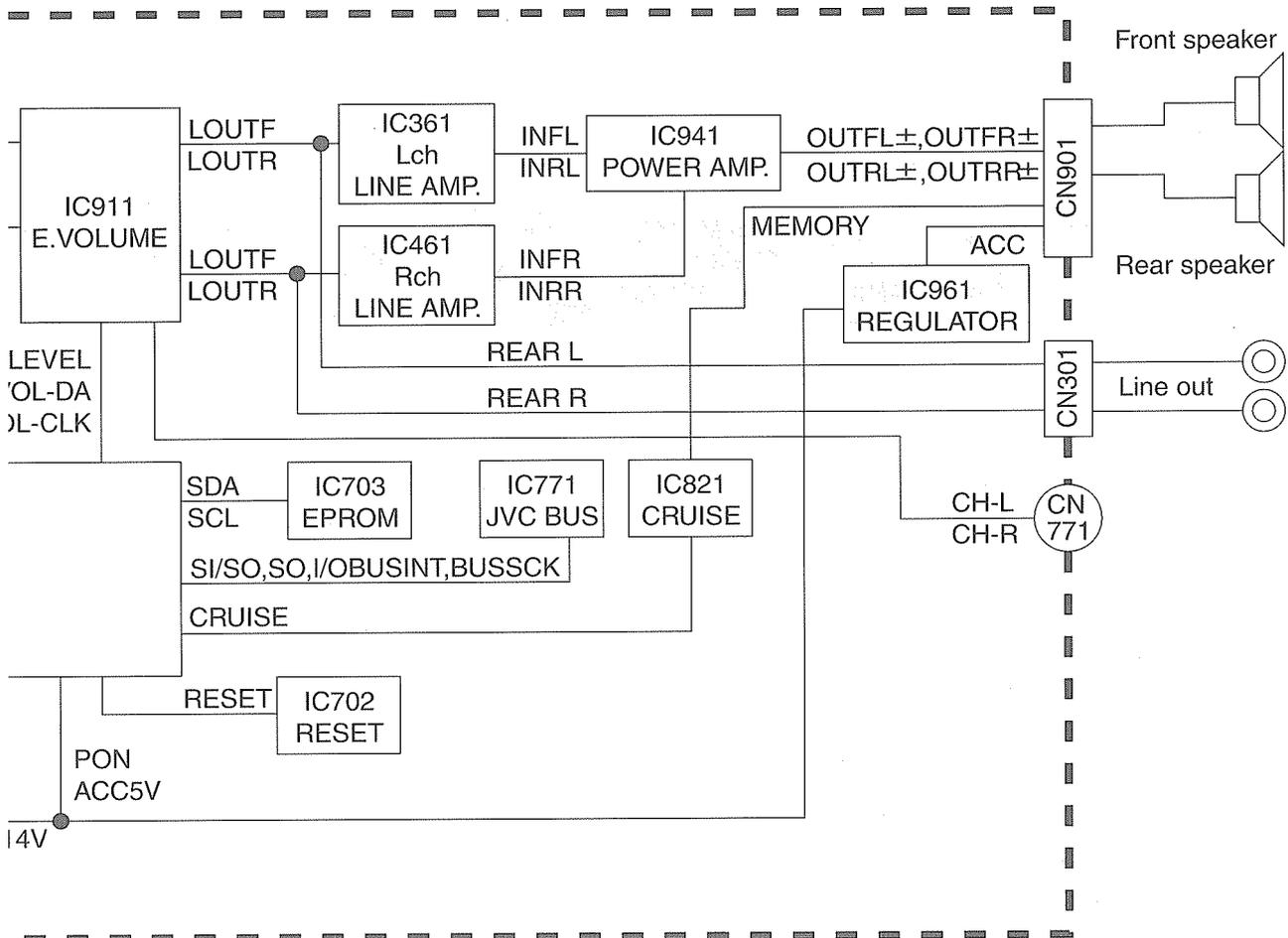
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XOUT	O	Crystal oscillator pin	13	IFC	I	IF signal input
2	OSC	-	Non connect	14	VDD	-	Power pins for digital block
3	CE	I	Chip enable input	15	FMIN	I	FM band local signal input
4	DI	I	Serial data input	16	AMIN	I	AM band local signal input
5	CK	I	Clock input	17	DGND	-	Connect to GND (for digital circuit)
6	DOUT	O	Serial data output	18	FMCP	O	Charge pump output for FM
7	SR	O	Register control pin	19	VT	-	Tuning voltage biased to 2.5V.
8	I/O1	I/O	I/O ports	20	AMCP	O	Charge pump output for AM
9	I/O2	I/O	I/O ports	21	VCC	-	Power pins for analog block
10	OUT1	-	Non connect	22	RF	I	Ripple filter connecting pin
11	OUT2	-	Non connect	23	AGND	-	Connect to GND (for analog circuit)
12	VDD2	-	Single power supply for REF. frequency block	24	XIN	I	Crystal oscillator pin



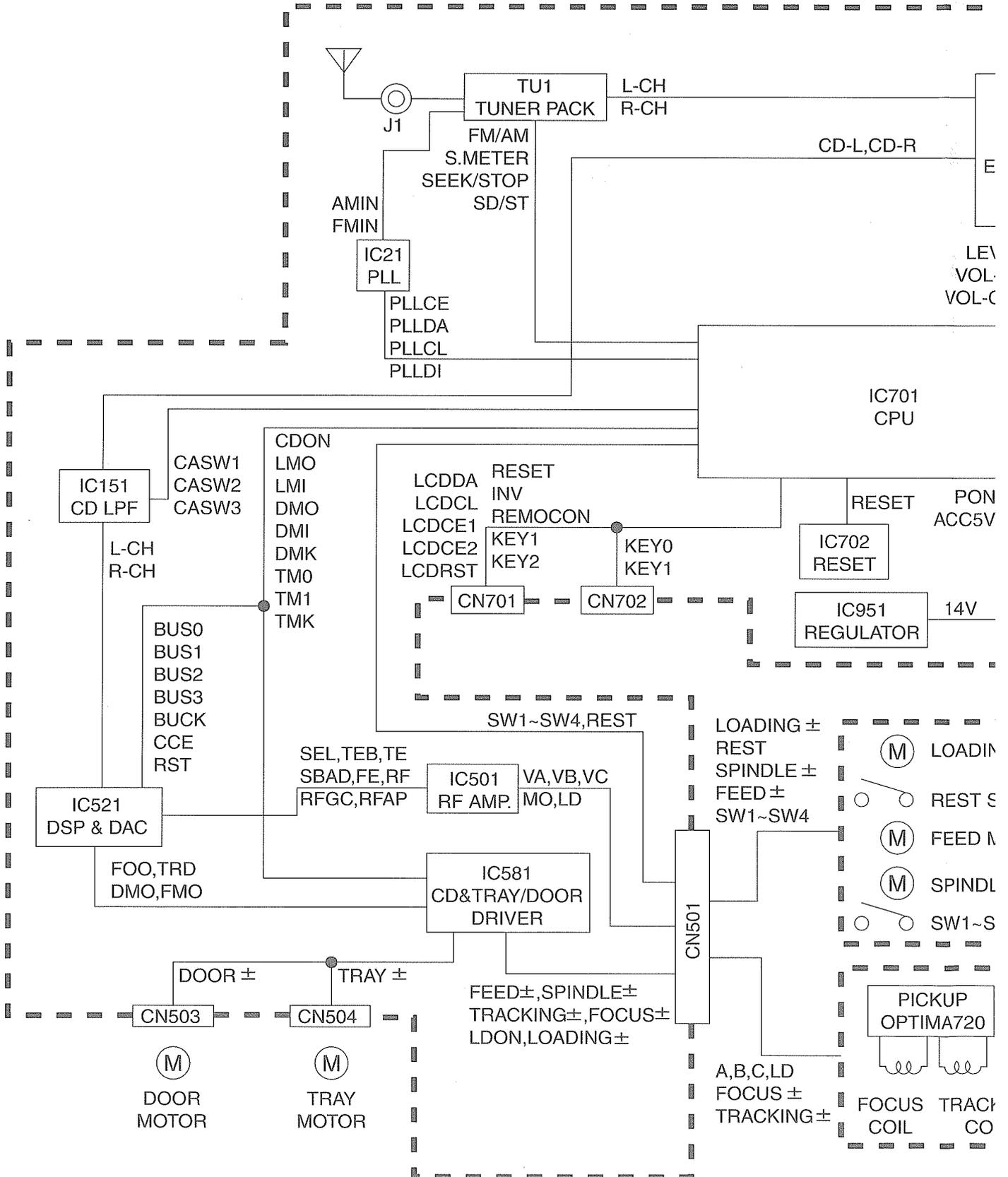
# Block diagrams

## ■KD-LX10

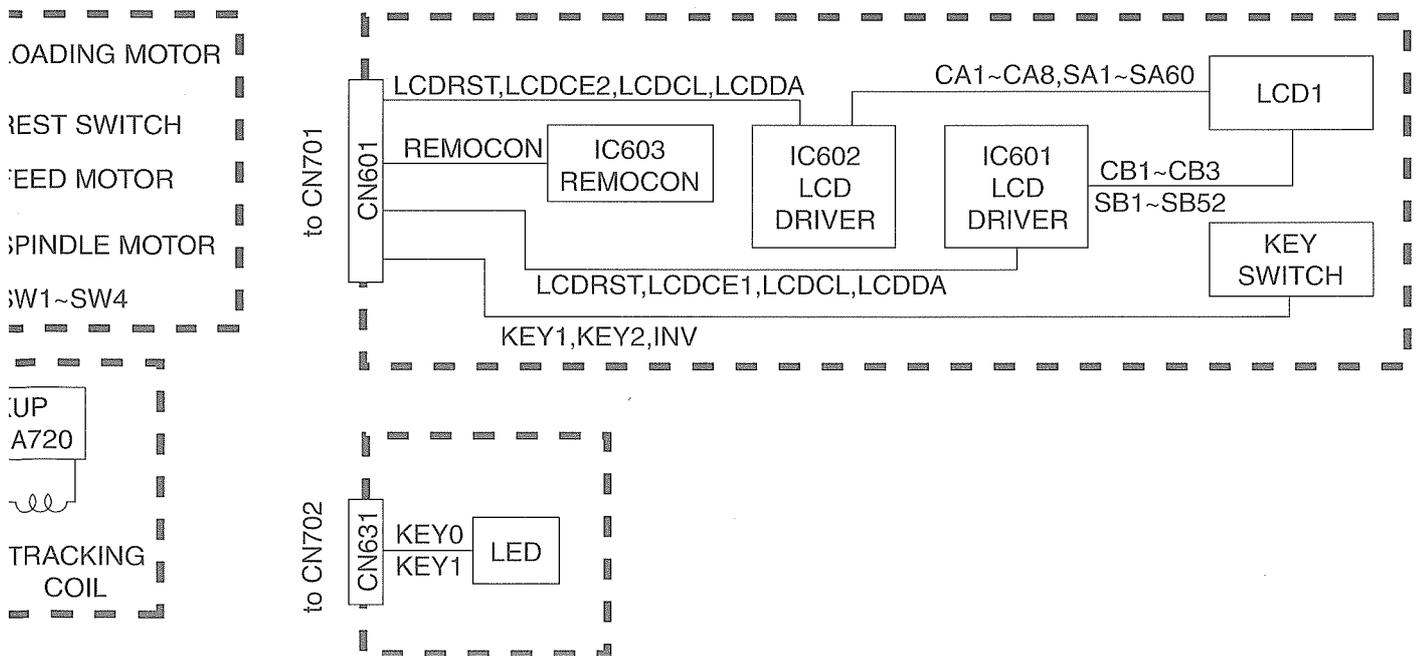
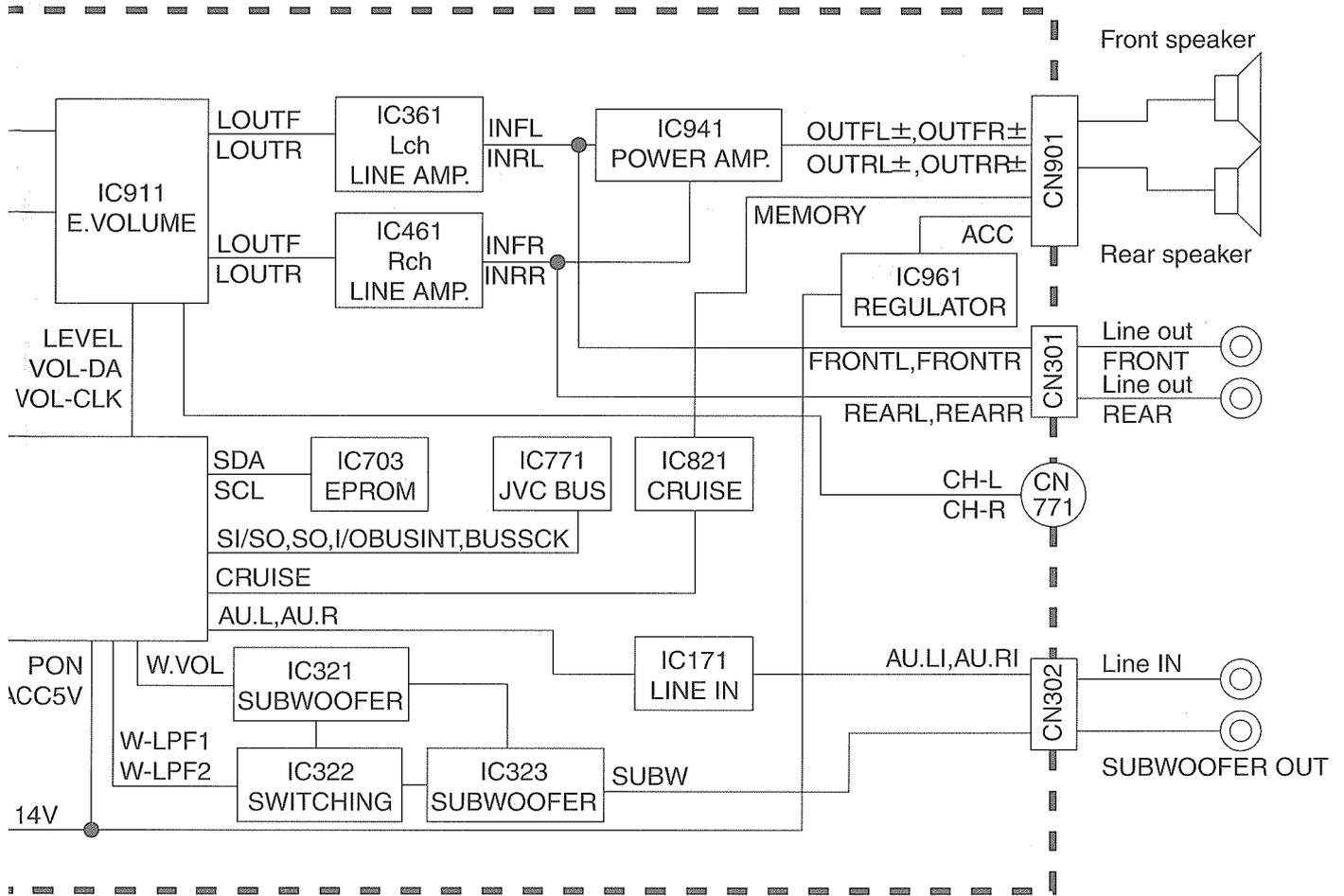




■ KD-LX30



KD-LX10/KD-LX30

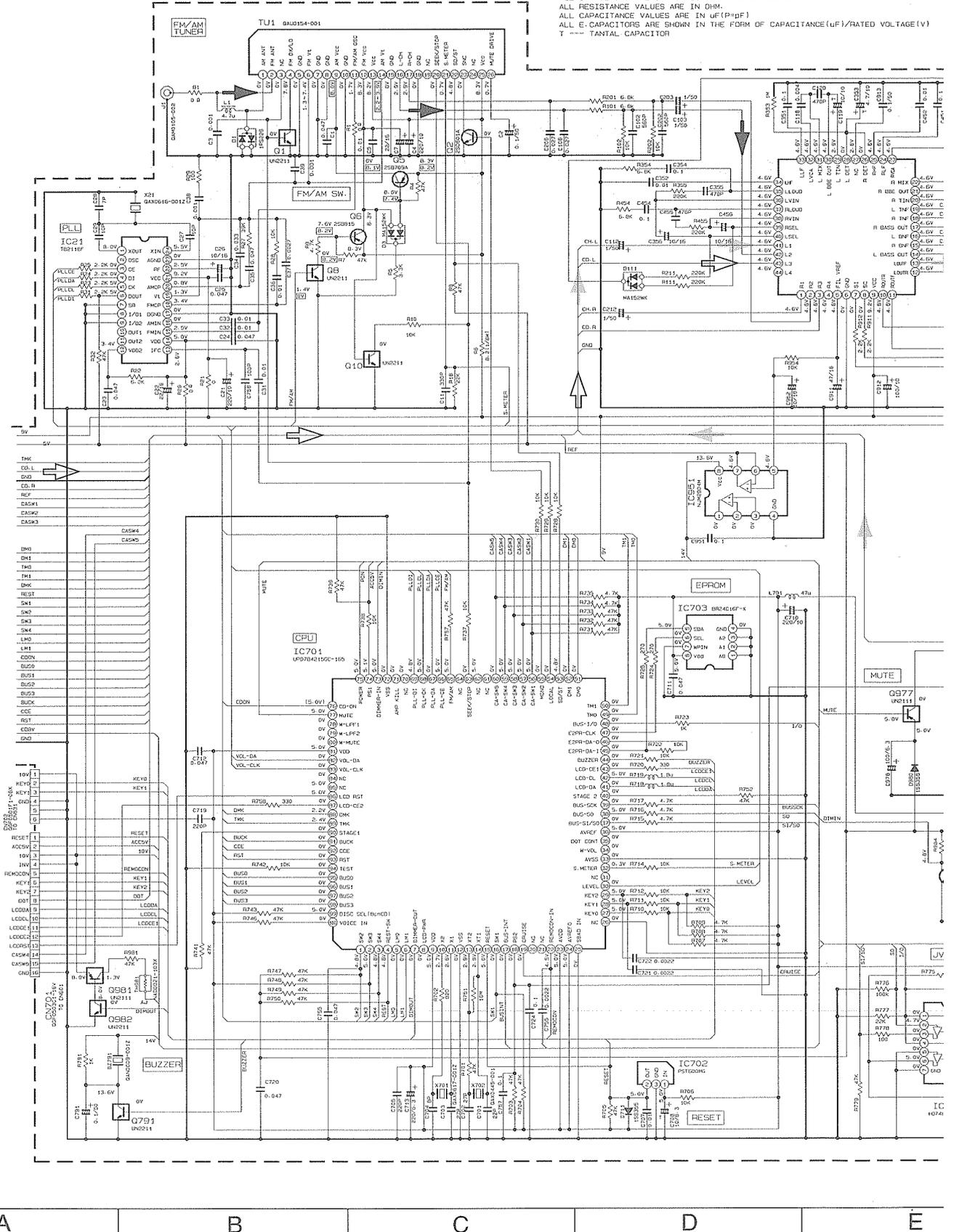


# Standard schematic diagrams

## ■ KD-LX10J Main amp section

### NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION—FM MODE. □ AM MODE. ( ) GND MODE.
2. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN μF(PDF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V). T --- TANTALUM CAPACITOR.



A B C D E

6

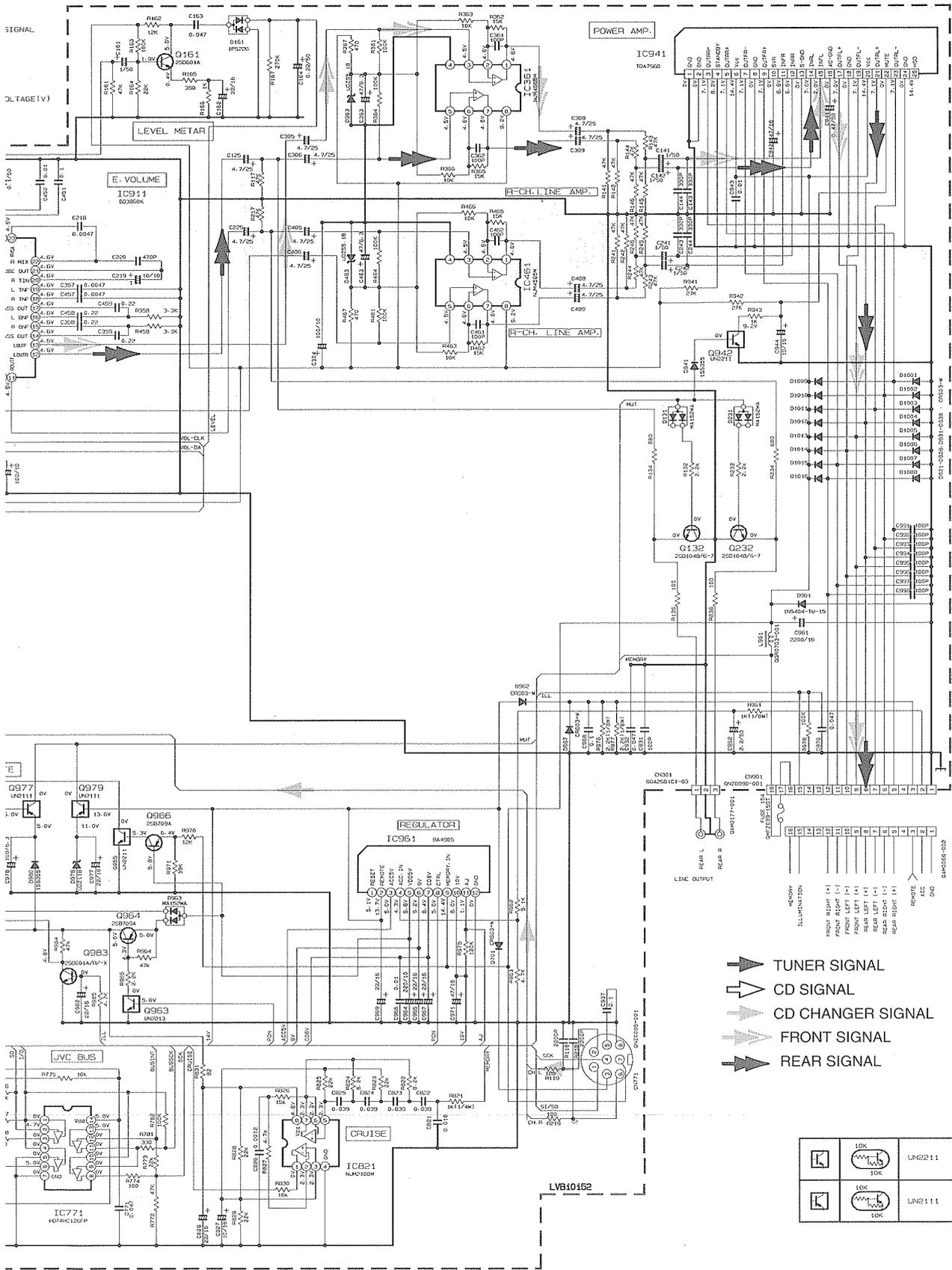
5

4

3

2

1



E F G H I

■ KD-LX10J  
CD servo & LCD control section

6

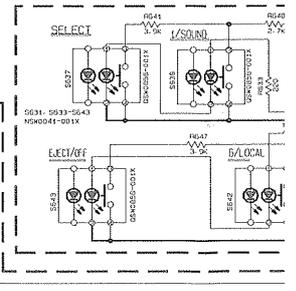
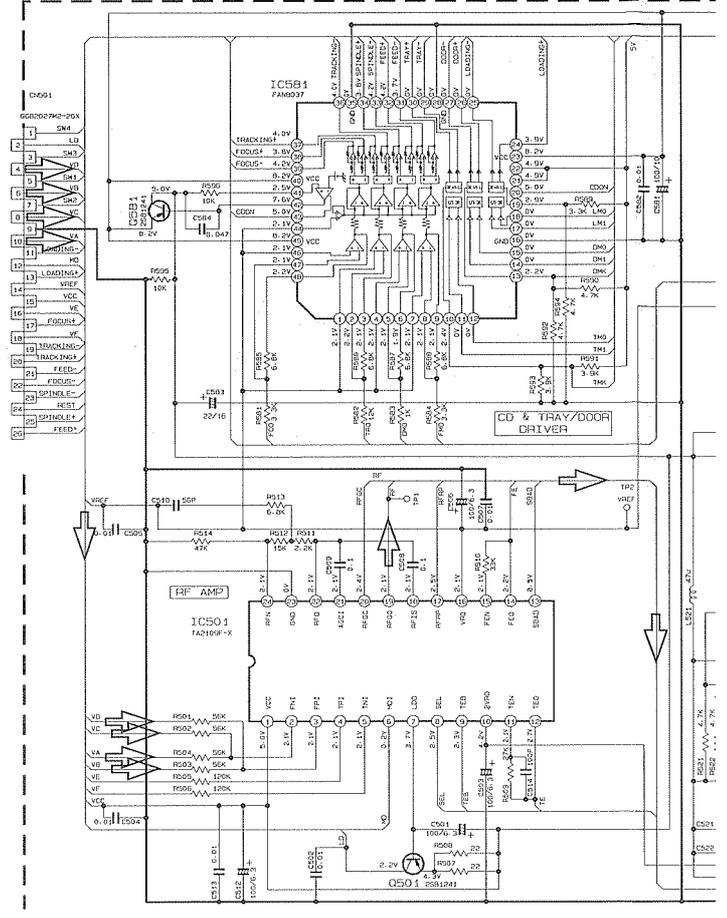
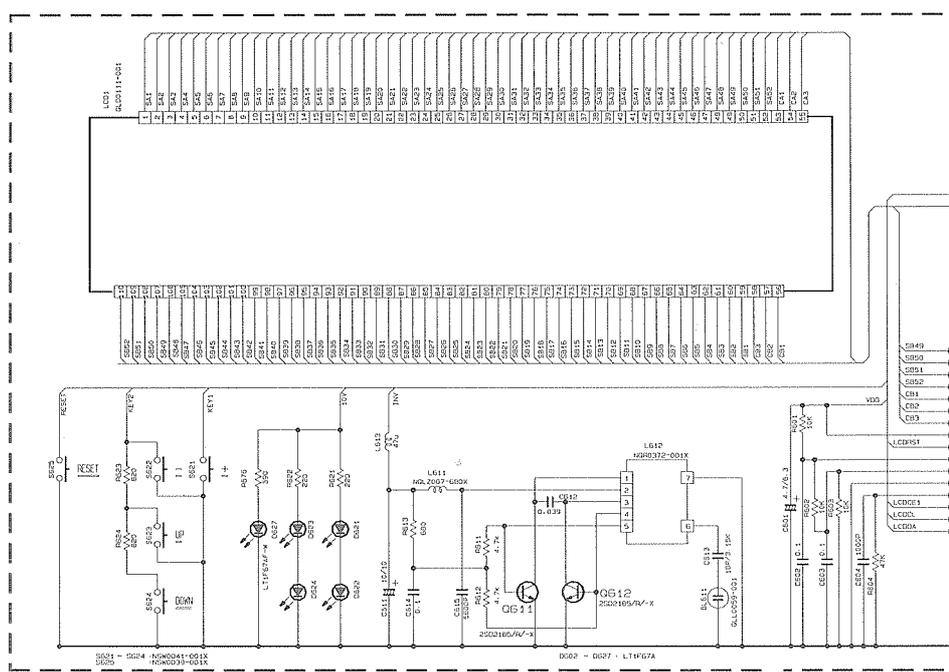
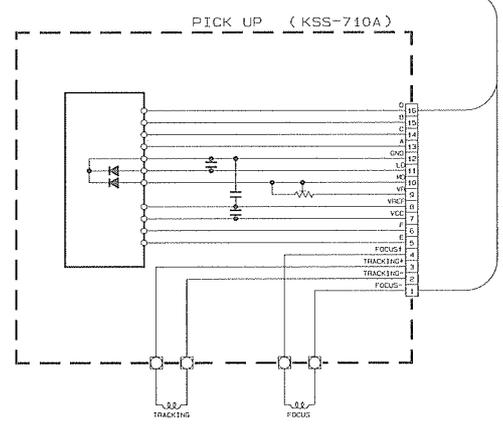
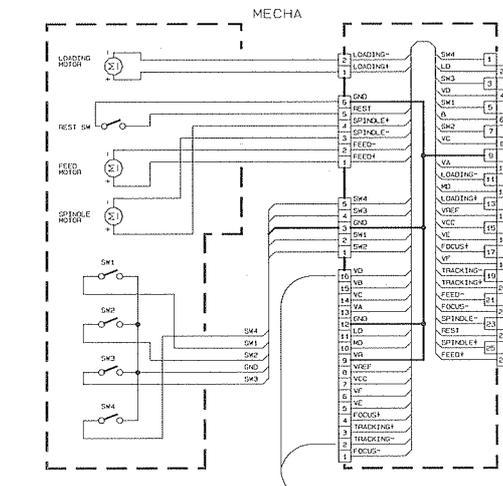
5

4

3

2

1



A

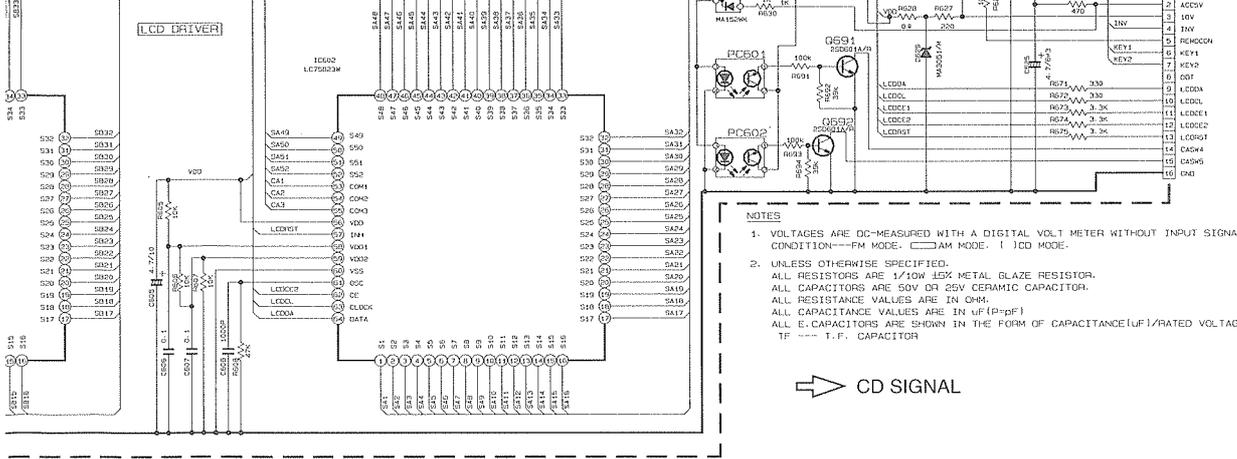
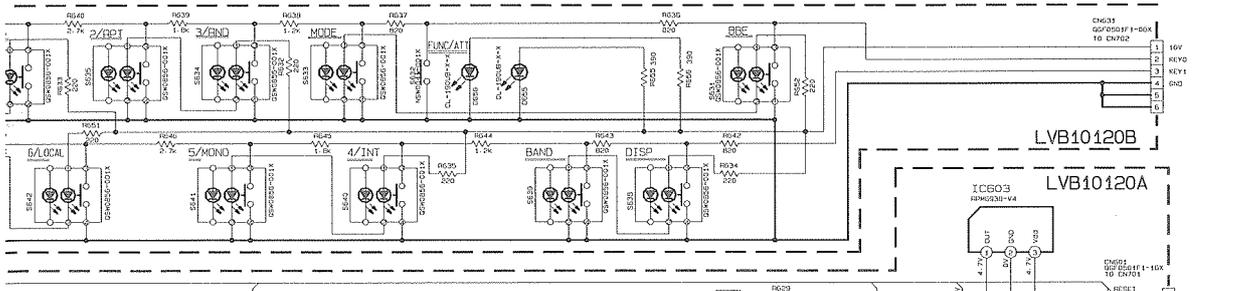
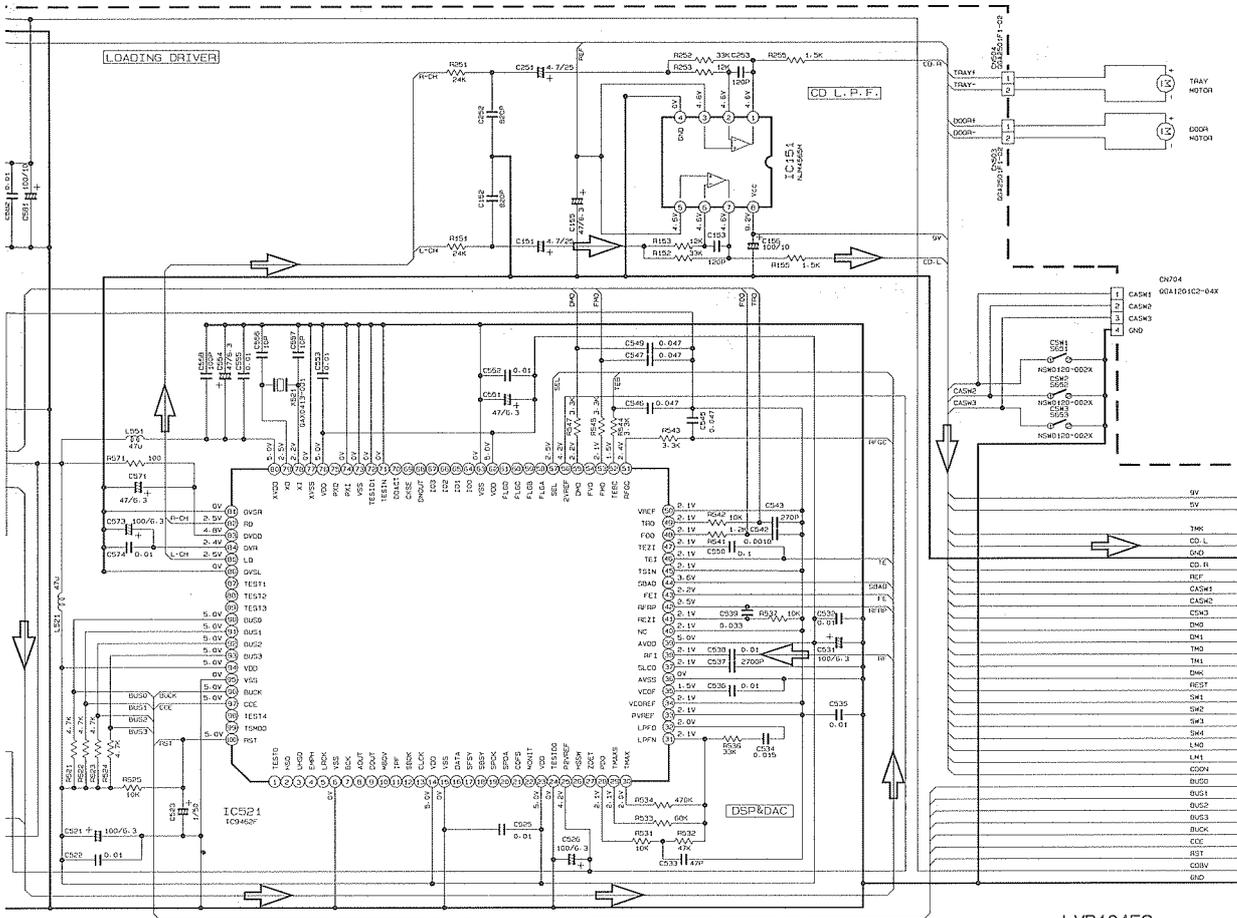
B

C

D

E

# KD-LX10/KD-LX30



- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL. CONDITION—FM MODE. □ AM MODE. | CD MODE.
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W 15K METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V DR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF (pF)
- ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (uF)/RATED VOLTAGE (V)
- TF --- T.F. CAPACITOR



E

F

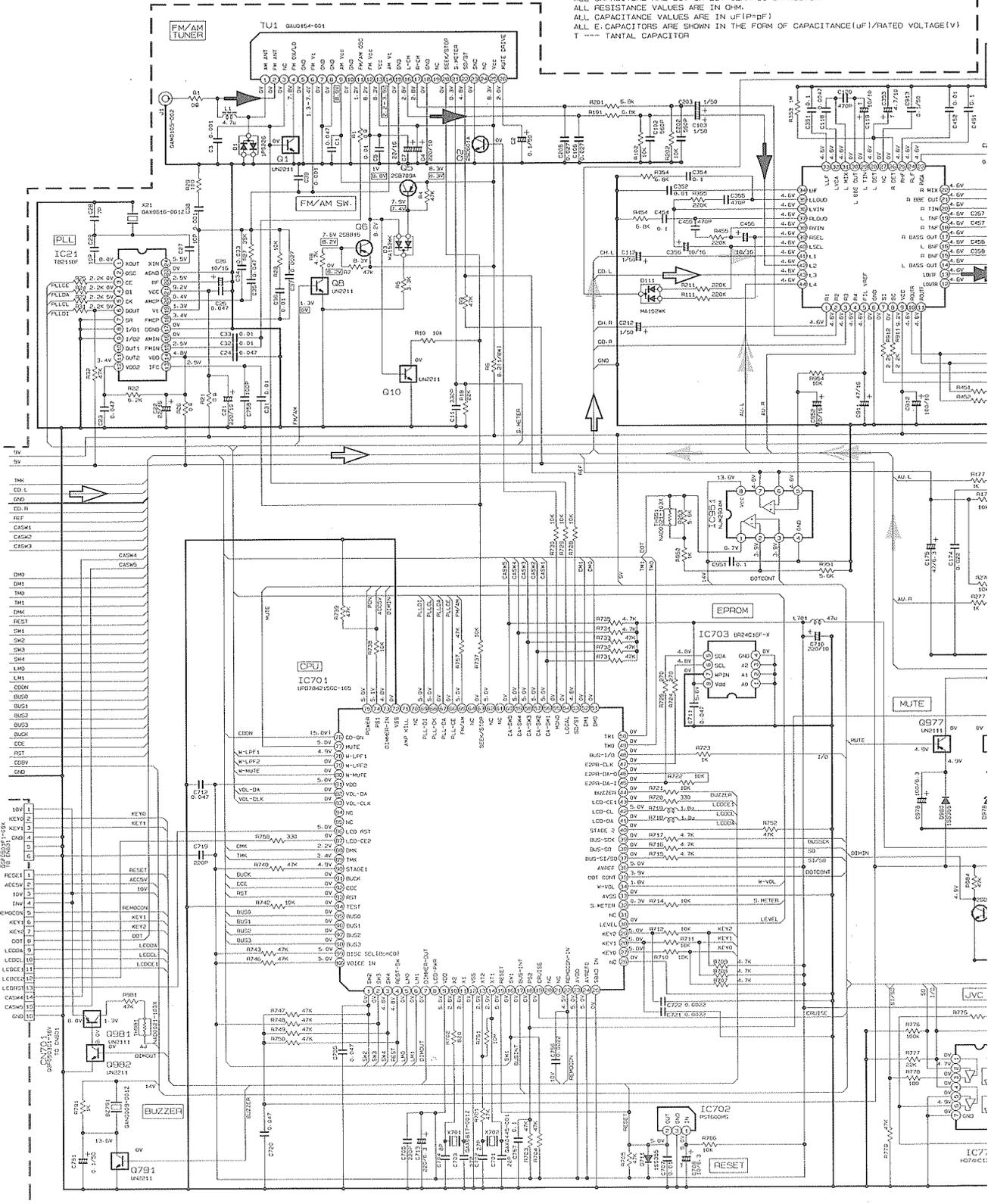
G

H

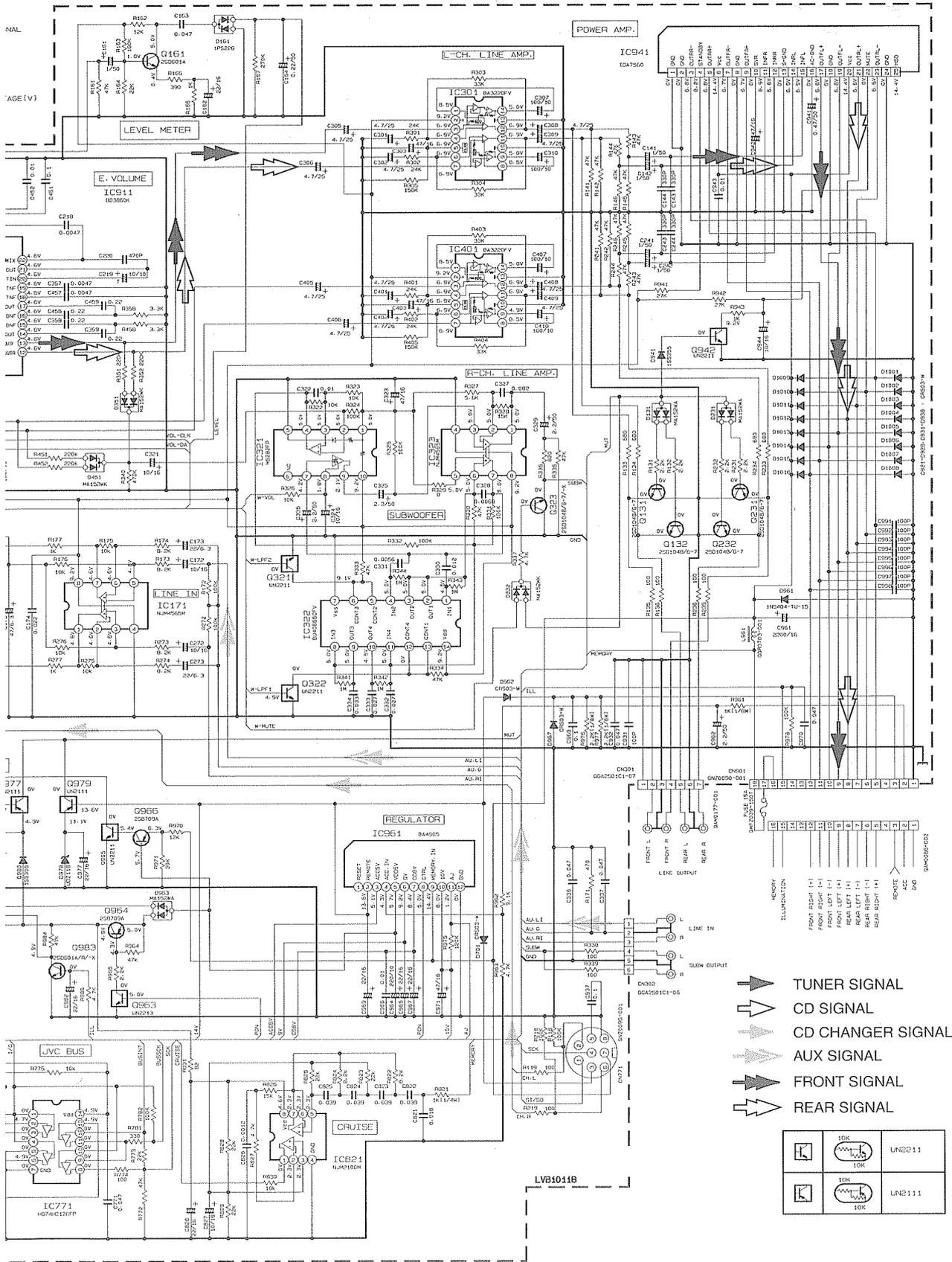
I

# KD-LX30J Main amp section

- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITHOUT INPUT SIGNAL CONDITION---FM MODE. □ AM MODE. ( ) LCD MODE.
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN UF (P=PF). ALL CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE(UF)/RATED VOLTAGE(V). T --- TANTALUM CAPACITOR



6  
5  
4  
3  
2  
1



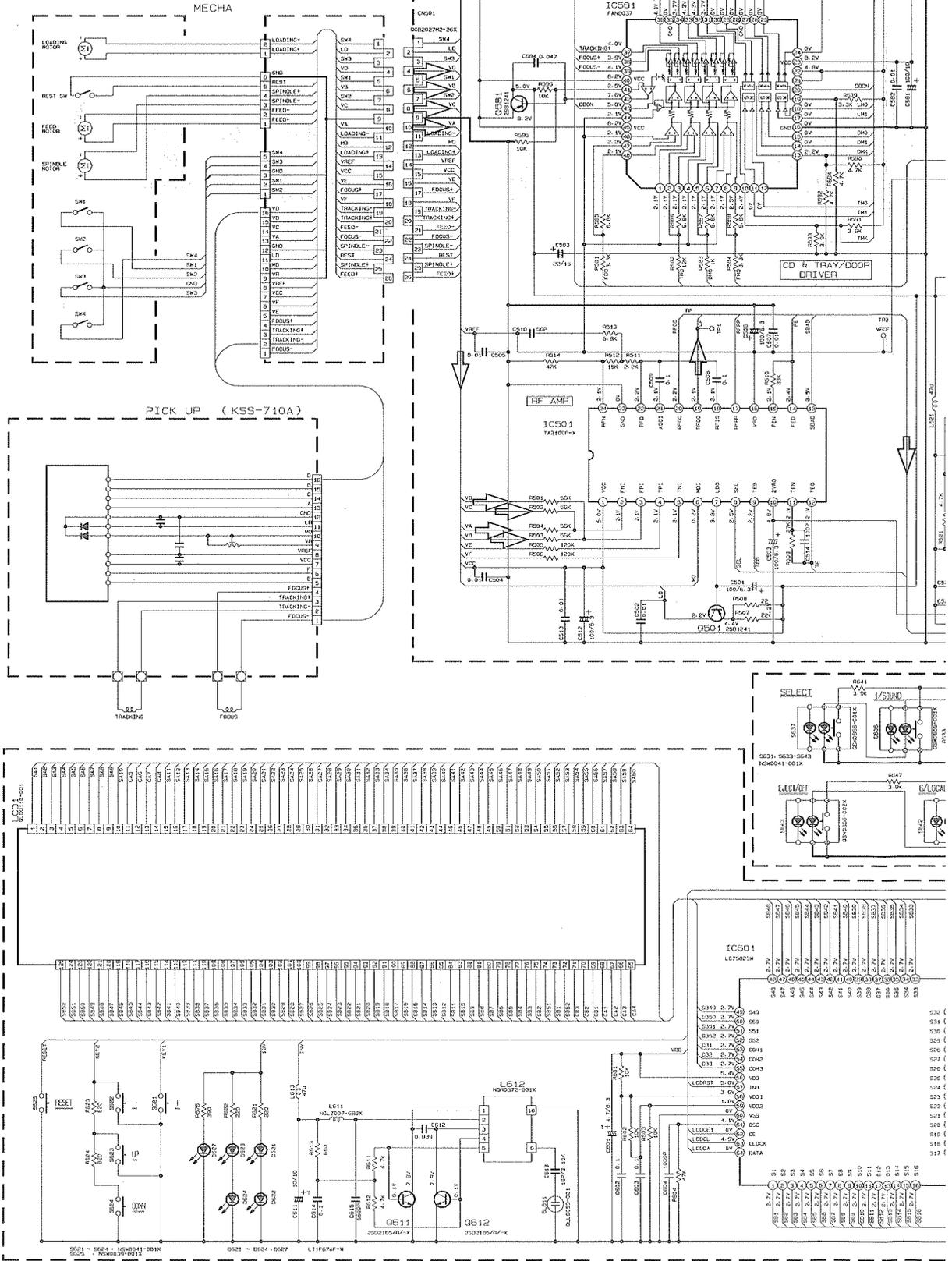
- TUNER SIGNAL
- CD SIGNAL
- CD CHANGER SIGNAL
- AUX SIGNAL
- FRONT SIGNAL
- REAR SIGNAL

	10K		UN2211
	10K		UN2111

E F G H I

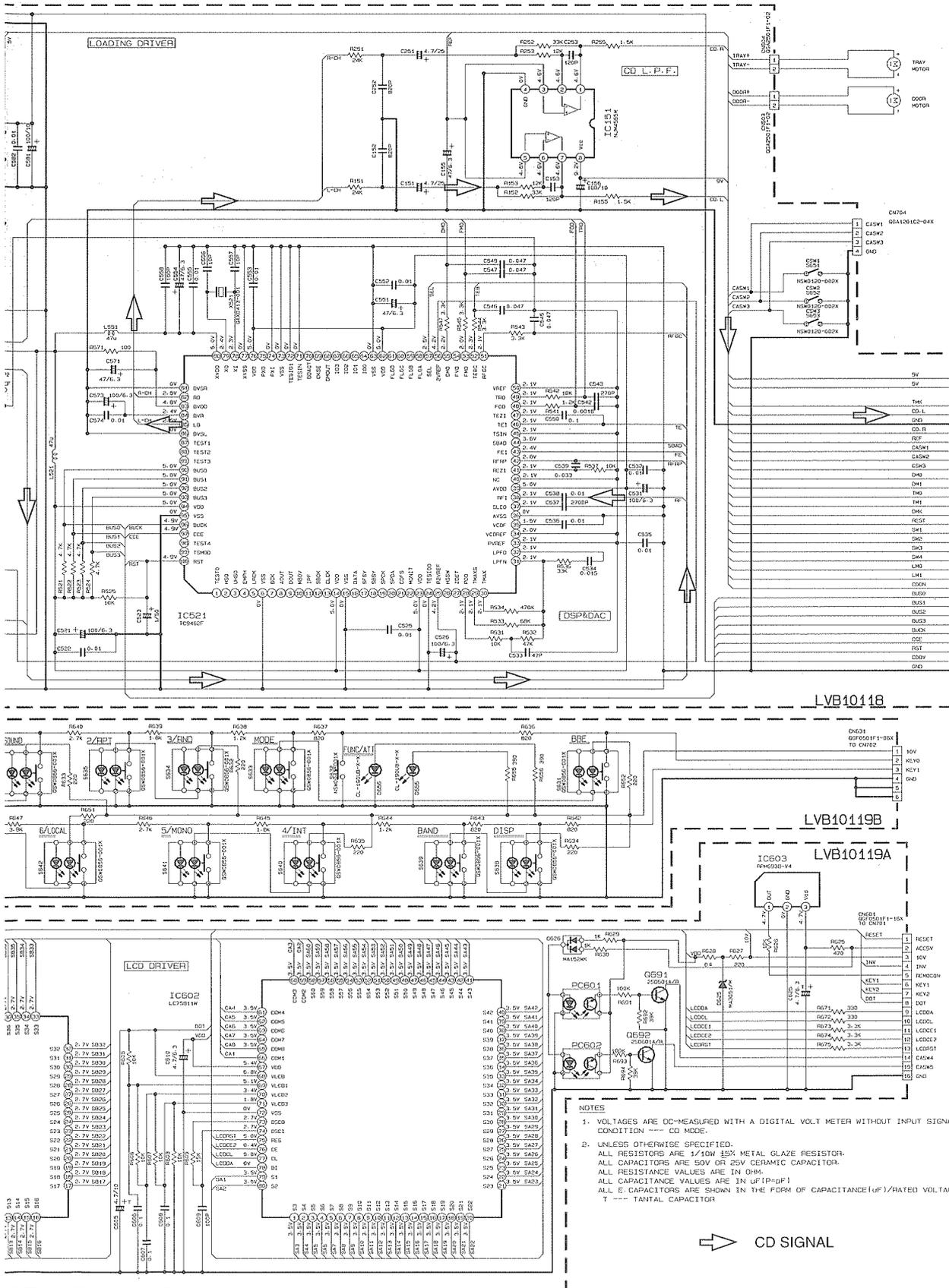
KD-LX30J  
CD servo & LCD control section

6  
5  
4  
3  
2  
1



A B C D E

# KD-LX10/KD-LX30



LVB1011B

LVB10119B

LVB10119A

- NOTES**
- VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOL.T METER WITHOUT INPUT SIGNAL CONDITION --- CD MODE.
  - UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE 1/10W 5% METAL GLAZE RESISTOR. ALL CAPACITORS ARE 50V OR 25V CERAMIC CAPACITOR. ALL RESISTANCE VALUES ARE IN OHM. ALL CAPACITANCE VALUES ARE IN uF(p+pF). ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (uF)/RATED VOLTAGE (V) T --- TANTALUM CAPACITOR

➔ CD SIGNAL

E

F

G

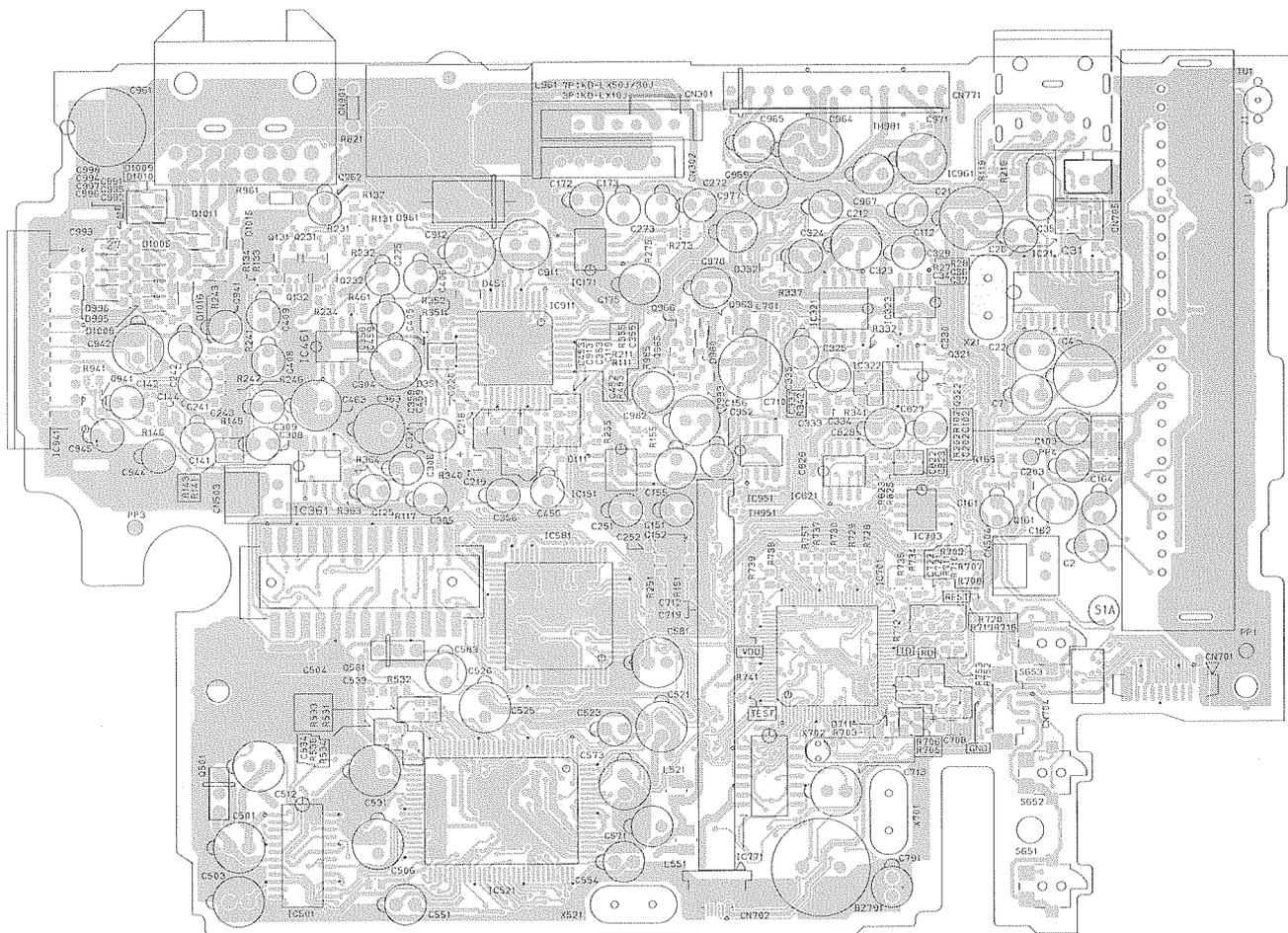
H

I

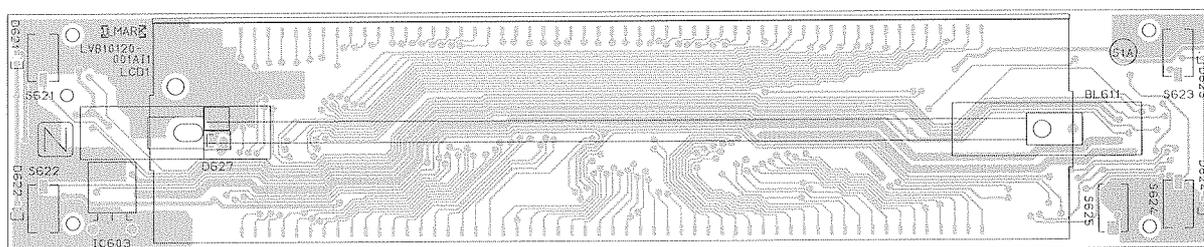
# Printed circuit boards

■KD-LX10J

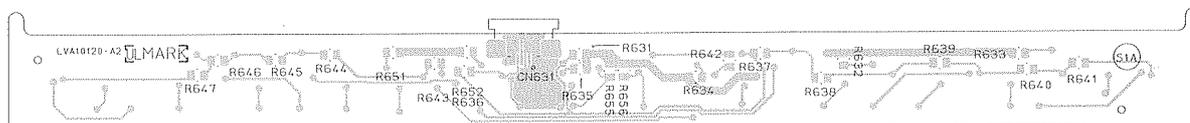
## Main board (Forward side)



## LCD board (Forward side)



## Switch board (Forward side)



A

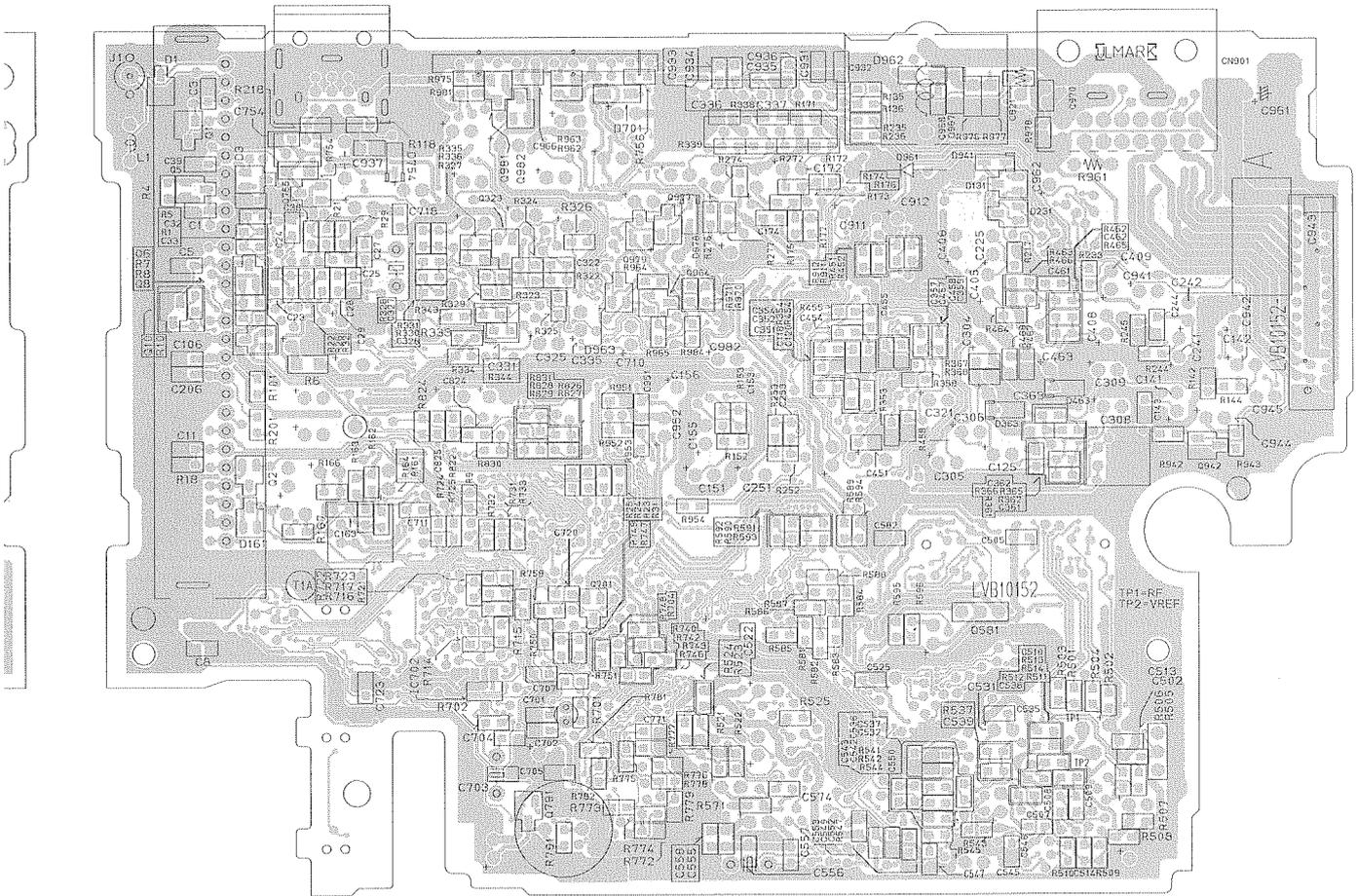
B

C

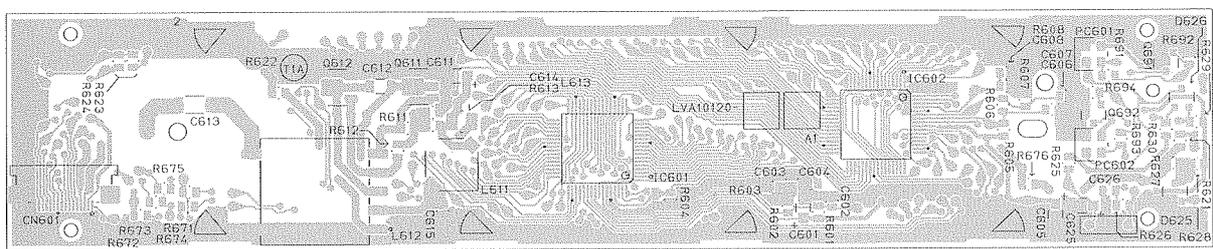
D

E

Main board (Reverse side)



LCD board (Reverse side)



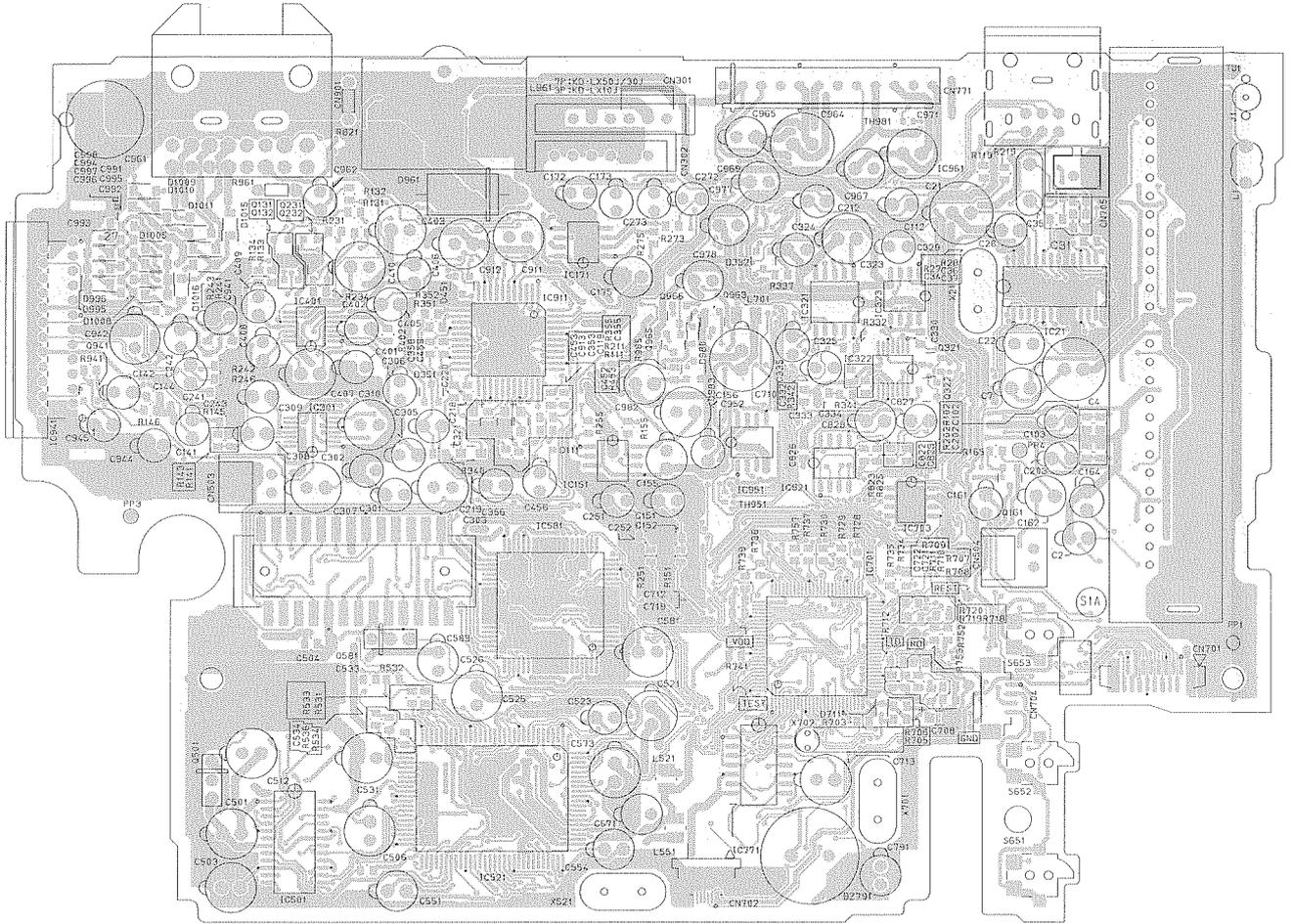
Switch board (Reverse side)



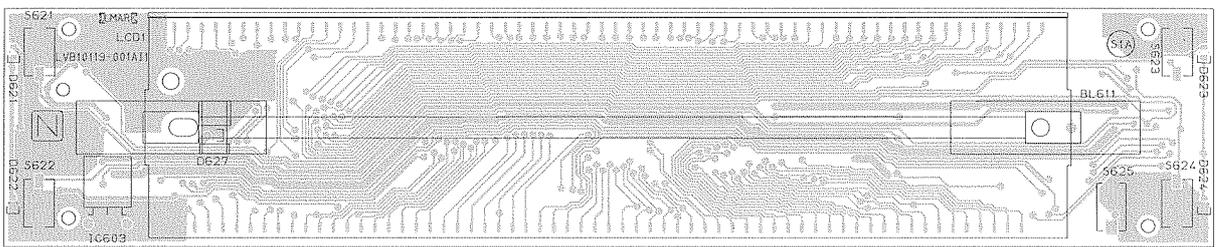
E | F | G | H | I

■KD-LX30J

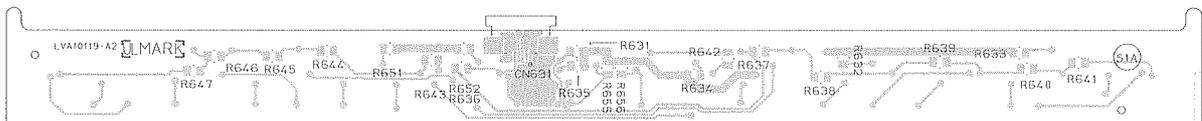
Main board (Forward side)



LCD board (Forward side)



Switch board (Forward side)







**PARTS LIST**

[ KD-LX10 ]

[ KD-LX30 ]

\* All printed circuit boards and its assemblies are not available as service parts.

Areas suffix  
J ----- Northern America

- Contents -

Exploded view of general assembly and parts list .....	3-3
CD mechanism assembly and parts list .....	3-5
Electrical parts list .....	3-8
Packing materials and accessories parts list .....	3-14

**[CAUTION]**

Two kinds of POWER IC (IC941) are used for these models.

When you change the POWER IC (IC941), you should confirm the printed parts number of IC.

Please change other parts listed below at the same time.

The set will break down when the undermentioned parts are mixed.

**Electrical parts**

<b>IC941</b>	<b>LA4743B</b>	<b>TDA7560</b>	<b>Parts name</b>
R143	NRSA02J-823X	NRSA02J-473X	MG RESISTOR
R243	NRSA02J-823X	NRSA02J-473X	MG RESISTOR
R144	NRSA02J-823X	NRSA02J-473X	MG RESISTOR
R244	NRSA02J-823X	NRSA02J-473X	MG RESISTOR
C941	QERF1CM-106Z	QEKJ1HM-474Z	E CAPACITOR

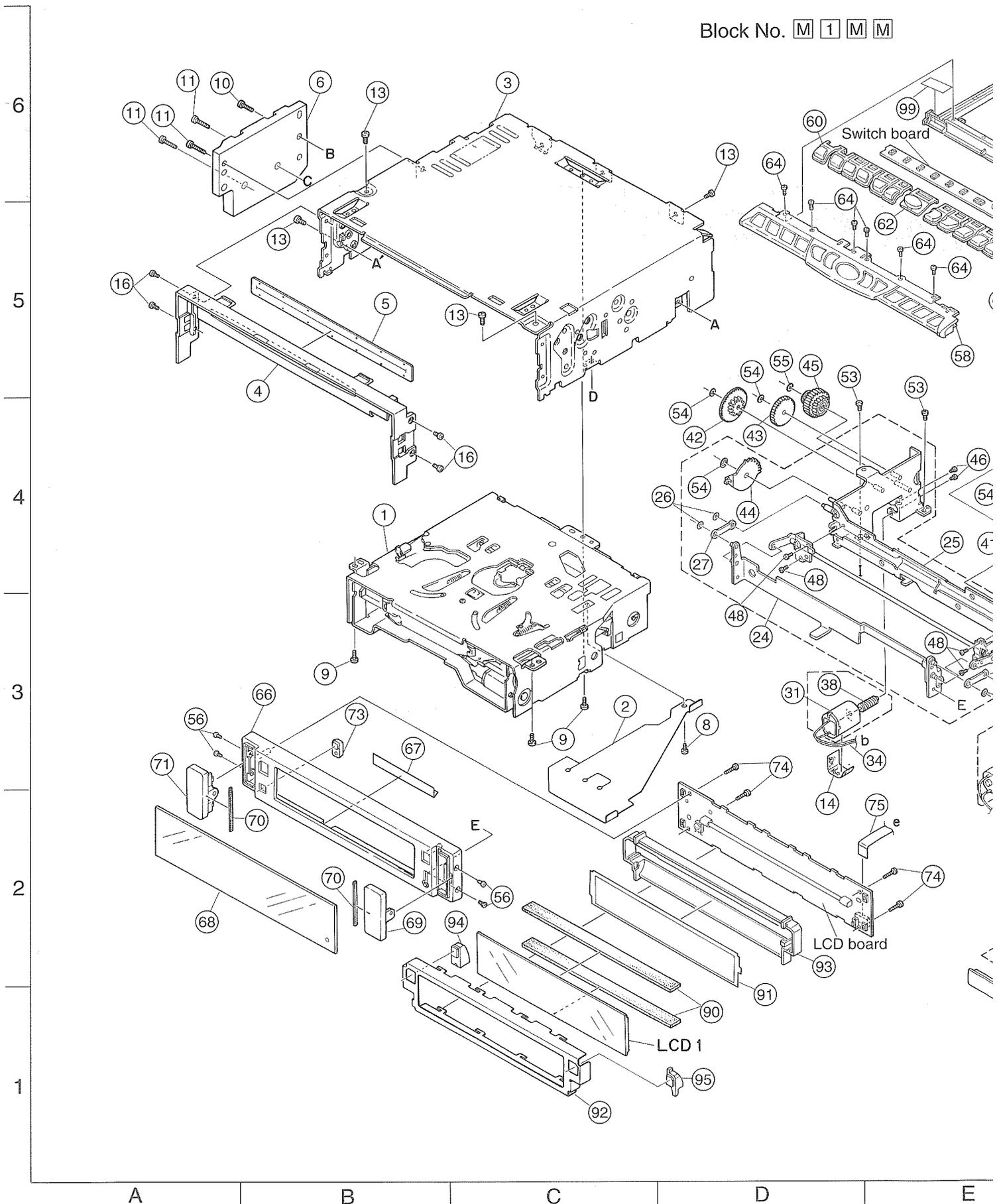
**General assembly parts**

<b>IC941</b>	<b>LA4743B</b>	<b>TDA7560</b>	<b>Parts name</b>
6	LV31602-003A	LV31602-001A	SIDE HEAT SINK
11	LV41200-003A	QYSDST2612Z	SCREW FOR IC
12	LV41200-003A	QYSDST2610Z	SCREW
81	LV30946-005A	LV30946-003A	REAR HEAT SINK
104	LV41863-001A	LV41572-001A	POWER IC BKT



# Exploded view of general assembly and parts list

Block No. M 1 M M





## ■ Parts list ( General assembly )

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	-----	CD MECHA	1		
	2	LV41606-001A	FFC P.MECHA	1		
	3	LV10189-001A	CHASSIS TOP	1		
	4	LV10188-002A	FRONT COVER	1		
	5	LV40828-002A	BLIND	1		
	6	LV31602-001A	SIDE HEAT SINK	1		
	7	LV31603-001A	INSULATOR	1		
	8	QYSPST2004M	SCREW	1		
	9	QYSDST2604Z	SCREW	3	T. CHAS+CD MECH	
	10	QYSDSF2610Z	TAPPING SCREW	1	T. CHAS+S HEAT	
	11	QYSDST2612Z	SCREW	3	T. CHAS+S HEAT	
	12	QYSDST2610Z	SCREW	1	T.CHASS+REAR	
	13	QYSDST2604Z	SCREW	8		
	14	LV40847-002A	SPACER	1	MOTOR L	
	15	LV41200-001A	SPECIAL SCREW	1	BOTTOM CHA.+REA	
	16	QYSPSP2003M	SCREW	4	T. CHAS+F. COVE	
	17	LV41200-001A	SPECIAL SCREW	3	MAIN PWB+BOTTOM	
	18	LV31605-001A	DOOR BASE ASS'Y	1		
	19	LV41452-001A	TENS SPRING BTM	2		
	20	LV31607-001A	PANEL COVER	1		
	21	LV31965-001A	BUTTON BASE BKT	1		
	22	LV41500-001A	BUTTON B.SUPPORT	1		
	23	LV41545-001A	BUTTON B.GUIDE	1		
	24	LV31609-001A	FRONT BKT ASS'Y	1		
	25	LV20614-001A	LOADING BKT ASS	1		
	26	WDM215025	WASHER	4		
	27	LV41503-001A	ARM 3	2		
	28	LV31777-001A	FFC GUIDE	1		
	29	LV31610-001A	ROD GEAR	1		
	30	LV31604-001A	BOTTOM ASS'Y	1		
	31	QAR0029-001	FEED MOTOR	1	FOR BKT MOTOR L	
	32	PPN-13KA10C	MOTOR	1	FOR BKT MOTOR R	
	33	LV40847-002A	SPACER	1	MOTOR R	
	34	WJM0137-001A	E-SI C WIRE C-F	1	FOR MOTOR L	
	35	WJM0136-001A	E-SI C WIRE C-F	1	FOR MOTOR R	
	36	QWTA20H-030	UL VINYL TUBE	1		
	37	LV40783-001A	GEAR-A(WORM)	1	FOR FEED MOTER	
	38	LV40864-001A	GEAR-J(WORM)	1	FOR FEED MOTER	
	39	LV41463-001A	GEAR 1	1	R SIDE	
	40	LV41464-001A	GEAR 2	1	R SIDE	
	41	LV31611-001A	GEAR 3	1	R SIDE	
	42	LV41466-001A	GEAR 4	1	L SIDE	
	43	LV41467-001A	GEAR 5	1	L SIDE	
	44	LV31612-001A	GEAR 6	1	L SIDE	
	45	LV30981-004A	CLUTCH ASS'Y	1		
	46	QYSPSPT2020Z	MINI SCREW	4	F.MOTOR+B.M. L	
	48	LV40865-001A	MINI SCREW	4	ROD BKT(L)+LO.B	
	50	LV40865-001A	MINI SCREW	3	B.BASE BKT+BO.C	

## KD-LX10/KD-LX30

## ■ Parts list ( General assembly )

Block No. M1MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	52	LV40865-001A	MINI SCREW	1	B.B.GUIDE+BOT.C	
	53	LV40865-001A	MINI SCREW	4	BKT.M.L&R+C.BOT	
	54	WDM215025	WASHER	6	FOR GEAR 1-6	
	55	WDM214540	WASHER	2	FOR CLUTCH ASS'	
	56	QYSPSPU1725M	SCREW	4	LO.UNIT A+DIS.P	
	57	LV30981-004A	CLUTCH ASS'Y	1		
	58	LV10317-001A	BUTTON PANEL	1	KD-LX10	
		LV10317-002A	BUTTON PANEL	1	KD-LX30	
	59	LV10318-001A	BUTTON BASE	1		
	60	LV20615-001A	PRESET BUTTON 1	1		
	61	LV20616-001A	PRESET BUTTON 2	1		
	62	LV31613-001A	FUNCTION BUTTON	1		
	63	LV41468-001A	PLATE SPRING	1		
	64	VKZ4777-004	MINI SCREW	6		
	65	WJT0030-001A	E-CARD WIRE	1		
	66	LV20617-001A	DISPLAY PANEL	1		
	67	LV32035-001A	D.P. PLATE	1		
	68	LV31614-002A	FINDER	1		
	69	LV41469-001A	UP DOWN B.ASS'Y	1		
	70	VYSH1R5-007	SPACER	2		
	71	LV41471-001A	+ - BUTTON ASSY	1		
	73	LV41505-001A	REMOTE LENS	1		
	74	VKZ4777-001	MINI SCREW	4	D.PANEL+SW.PWB	
	75	WJT0031-001A	E-CARD WIRE	1		
	76	LV31617-001A	NAME PLATE	1	KD-LX10	
		LV31660-001A	NAME PLATE	1	KD-LX30	
	77	LV41143-001A	SHEET	2		
	79	GE40101-001A	PIN CAP	2	KD-LX10	
		GE40101-001A	PIN CAP	8	KD-LX30	
	80	LV30943-005A-S	REAR BRACKET	1		
	81	LV30946-003A	REAR HEAT SINK	1		
	82	LV40790-001A	PIN CORD BRKT	1		
	83	QYSDST2604Z	SCREW	2		
	84	QYSDST2612Z	SCREW	2		
	85	QYSDSP2606Z	SCREW	2		
	87	QYSDST2604Z	SCREW	2	KD-LX30	
		QYSDST2604Z	SCREW	1	KD-LX10	
	90	QNZ0392-001	RUBBER CONNECTO	2		
	91	LV41450-001A	LCD FILTER	1		
	92	LV31601-001A	LCD CASE	1		
	93	LV31600-001A	LIGHTING CASE	1		
	94	LV41447-001A	LIGHTING LENS(L	1		
	95	LV41448-001A	LIGHTING LENS(R	1		
	96	QAM0178-001	PIN PLUG CORD	1	KD-LX30	
		QAM0177-001	PIN PLUG CORD	1	KD-LX10	
	97	QAM0179-001	CAR CABLE	1	KD-LX30	
	99	LV40848-007A	SPACER(P)	2		
	103	VMA4652-001SS	EARTH PLATE	1		
	104	LV41572-001A	POEWR IC BKT	1		
	105	LV40792-001A	REG.IC BRACKET	1		
	106	QMFZ039-150-T	FUSE	1		
	107	QAM0105-002	CAR PLUG CORD	1	J 1	
	LCD 1	QLD0111-001	L.C.DISPL.PANEL	1	KD-LX10	
		QLD0110-001	L.C.DISPL.PANEL	1	KD-LX30	



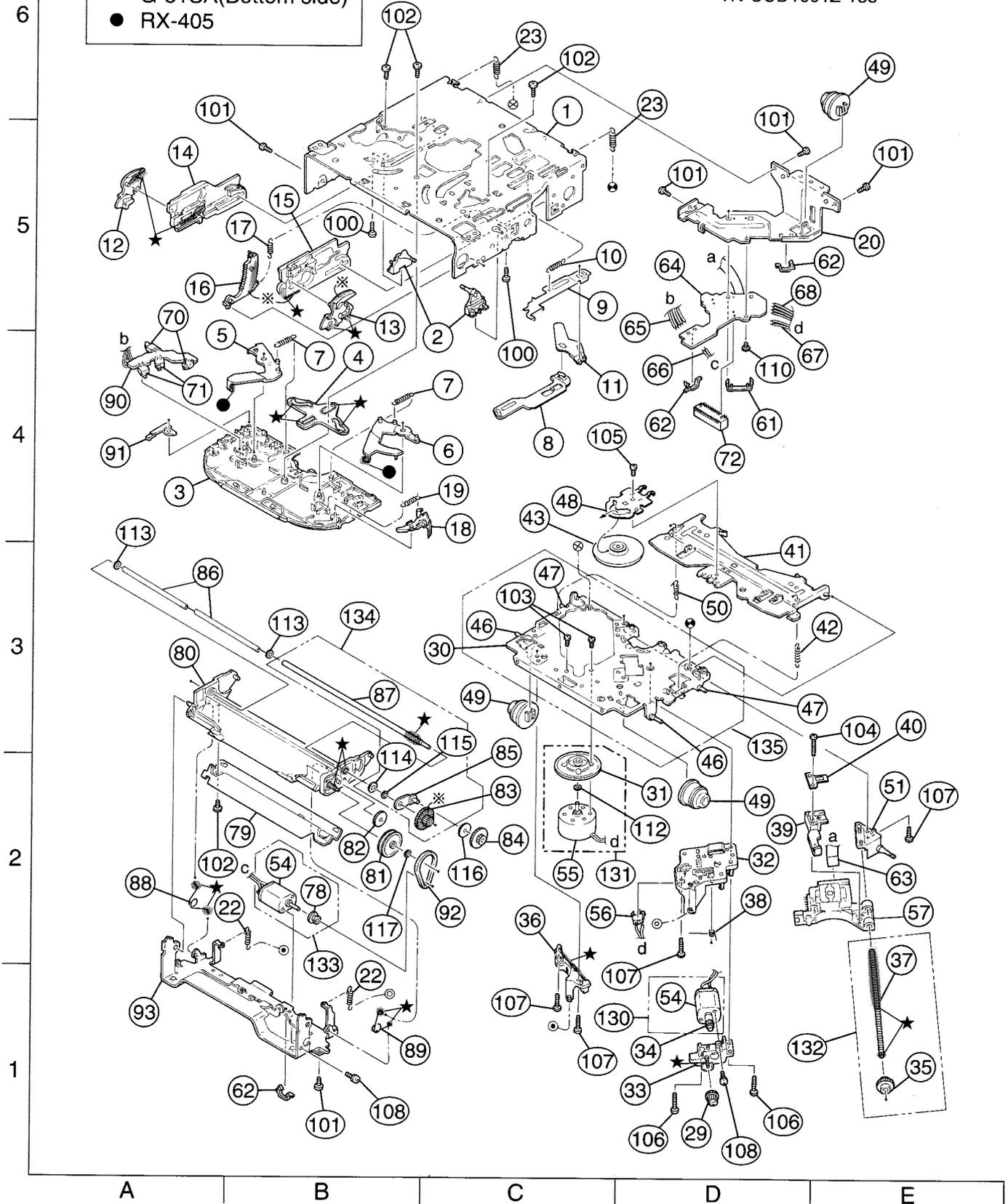
# CD mechanism assembly and parts list

**Grease**

- ★ G-31SA
- ※ G-31SA(Bottom side)
- RX-405

Block No. M 2 M M

TN-CCD1001Z-138



■ Parts list ( CD mechanism )

Block No. M2MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	1	30310101T	FRAME	1		
	2	30310103T	DANPER PIN	2		
	3	30310107T	UPPER PLATE	1		
	4	30310108T	SEL STOP PLATE	1		
	5	30310142T	SEL ARM (L)L	1		
	6	30310143T	SEL ARM (R)L	1		
	7	30310145T	S ARM SPRING(L)	2		
	8	30310112T	TRIG LEVER	1		
	9	30310155T	TRIG PL(Z)	1		
	10	30310115T	TRIG PL SPRING	1		
	11	30310116T	TRIG ARM	1		
	12	30310134T	FIX ARM (L)B	1		
	13	30310159T	FIX ARM (R)Z	1		
	14	30310150T	FIX PL (L)Z	1		
	15	30310156T	FIX PL (R) Z	1		
	16	30310138T	LDG GR (6)B	1		
	17	30310122T	LDG GEAR (6)SP	1		
	18	30310148T	S.L ARM(N)	1		
	19	30310125T	S.L ARM SPRING	1		
	20	30310149T	REAR DAM BKT(Z)	1		
	22	30310151T	HUNG UP SP (FZ)	2		
	23	30310129T	HUNG UP SP (R)	2		
	29	30300510T	PU GEAR(B)	1		
	30	-----	T.T.BASE(Z)	1		
	31	-----	TURN TABLE(Z)	1		
	32	30310544T	F.M.BASE(Z)	1		
	33	30310547T	FD GR BLK(Z)	1		
	34	-----	FD GR AZ	1		
	35	-----	FD GR CZ	1		
	36	30310546T	PU GUIDE(Z)	1		
	37	-----	FD SCREW(Z)	1		
	38	30310533T	THRUST SPR(M)	1		
	39	30310548T	PU M NUT(Z)	1		
	40	30310512T	NUT PUSH SPR PL	1		
	41	30310558T	CLP ARM(Z)	1		
	42	30310514T	CLP ARM SPRING	1		
	43	30310552T	CLAMPER(Z)	1		
	46	-----	LOCK PIN(FZ)	2		
	47	-----	LOCK PIN(RZ)	2		
	48	30310557T	CLAMPER PLATE(Z)	1		
	49	30310524T	DAMPER (J)	3		
	50	30310525T	CLP ARM SPR (L)	1		
	51	30310545T	F SCREW GUIDE(Z)	1		
	54	-----	FEED MOTOR	1	FF030PK-09210	
	55	-----	SPINDLE MOTOR	1	RF300CA-11440D	
	56	64180405T	DET SW	1	ESE11SF4	
	57	QAL0230-001	C.D PICK (SONY)	1		
	61	30311035T	FPC HOLDER(Z)	1		

## ■ Parts list ( CD mechanism )

Block No. M2MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	62	19501403T	WIRE CLAMPER	3		
	63	30311037T	PICK UP FPC(Z)	1		
	64	30311036T	CONNECT.PCB(Z-J)	1		
	65	30311038T	WIRE (5P-Z)	1		
	66	30311039T	WIRE (LD-Z)	1		
	67	30311040T	WIRE (FD-Z)	1		
	68	30311041T	WIRE (RS-Z)	1		
	70	64180402T	DET SWITCH	2	ESE22MH1	
	71	64180403T	DET SWITCH	2	ESE22MH3	
	72	68150232T	CONNECTOR	1	TKC-W26X-C1	
	78	-----	LDG PULLEY	1		
	79	30311105T	SOPPORT PLATE	1		
	80	30311138T	GR MT BLK(N)	1		
	81	30311109T	LDG GEAR (2)	1		
	82	30311110T	LDG GEAR (3)	1		
	83	-----	LDG GEAR (4)	1		
	84	30311112T	LDG GEAR (5)	1		
	85	-----	LDG GR ARM	1		
	86	30311136T	LDG ROLLER	2		
	87	-----	LDG RLR SHAFT	1		
	88	30311118T	L.P SPRING (L)	1		
	89	30311119T	L.P SPRING (R)	1		
	90	30311123T	SW PCB	1		
	91	30311124T	SW ACTUATOR	1		
	92	30311129T	LDG BELT	1		
	93	30311140T	FRONT BRKT (J)	1		
	100	9C0620503T	C B TAP SCREW	2	M2X5	
	101	9C2020401T	C SCREW TS.G	5	M2X4	
	102	9C4320403T	C B TAP SCREW	4	M2X4	
	103	9C0117223T	SCREW	2	M1.7X2.2	
	104	9C4217703T	C TAP SCREW S3	1	M1.7X7	
	105	9C0320201T	C TAP SCREW S3	1	M2X2	
	106	9C4920013T	C TAP SCREW S3	2	M2X10	
	107	9C4920603T	C TAP SCREW B3	4	M2X6	
	108	9P0220031T	TAMS SCREW	2	M2X3	
	110	9C0420253	C TAP SCREW	1	M2X2.5	
	112	-----	POLY WASHER	1	2.1X3.5X0.3	
	113	9W0330276	NW BLUE	2	2.9X5X0.3	
	114	-----	WAVE WASHER	1		
	115	-----	LUMILAR WASHER	1	2.5X6X0.1	
	116	9W0735080T	LUMILAR W	1	2.3X9.8X0.35	
	117	9W0640030T	WASHER	1	1.4X3.2X0.4	
	130	303105310T	FEED MO ASSY	1		
	131	303105311T	SPINDLE MO ASSY	1	NO.31 55 112	
	132	303105312T	FEED SCREW ASSY	1		
	133	303111301T	LDG MOTOR ASSY	1	NO.54 78	
	134	303111302T	RDG RLR SFT ASY	1	NO.83 85 87	
		303111302T	RDG RLR SFT ASY	1	NO.114 115	
	135	303105502T	T.T.BASE ASSY	1	NO.30 46 47	

# KD-LX10/KD-LX30

## Electrical parts list ( Main board )

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21EK-473X	C CAPACITOR		
	C 2	QERF1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 3	NCB21HK-102X	C CAPACITOR		
	C 4	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 5	NCB21HK-103X	C CAPACITOR		
	C 7	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 11	NCS21HJ-331X	C CAPACITOR		
	C 21	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 22	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 23	NCB21EK-473X	C CAPACITOR		
	C 24	NCB21EK-473X	C CAPACITOR		
	C 25	NCB21EK-473X	C CAPACITOR		
	C 26	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 27	NDC21HJ-100X	C CAPACITOR		
	C 28	NDC21HJ-7R0X	C CAPACITOR		
	C 29	NDC21HJ-100X	C CAPACITOR		
	C 31	NCB21HK-103X	C CAPACITOR		
	C 32	NCB21HK-103X	C CAPACITOR		
	C 33	NCB21HK-103X	C CAPACITOR		
	C 34	NCB21HK-333X	C CAPACITOR		
	C 35	QFV41HJ-473	TF CAPACITOR	.047MF 5% 50V	
	C 36	NCB21HK-103X	C CAPACITOR		
	C 37	NCB21HK-272X	C CAPACITOR		
	C 38	NCB21HK-102X	C CAPACITOR		
	C 39	NCB21HK-102X	C CAPACITOR		
	C 102	NCB21HK-561X	C CAPACITOR		
	C 103	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 106	NCB21HK-273X	C CAPACITOR		
	C 112	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 118	NCB21HK-472X	C CAPACITOR		
	C 119	NBE21AM-106X	E CAPACITOR		
	C 120	NCB21HK-471X	C CAPACITOR		
	C 125	QEKJ1EM-475Z	E CAPACITOR	KD-LX10	
	C 141	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 142	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 143	NCS21HJ-331X	C CAPACITOR		
	C 144	NCS21HJ-331X	C CAPACITOR		
	C 151	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 152	NCS21HJ-821X	C CAPACITOR		
	C 153	NCS21HJ-121X	C CAPACITOR		
	C 155	QEKJ0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
	C 156	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 161	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 162	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 163	NCB21HK-473X	C CAPACITOR		
	C 164	QERF1HM-224Z	E CAPACITOR	.22MF 20% 50V	
	C 172	QEK41CM-106	E CAPACITOR	KD-LX30	
	C 173	QERF0JM-226Z	E CAPACITOR	KD-LX30	
	C 174	NCB21EK-223X	C CAPACITOR	KD-LX30	
	C 175	QEKJ0JM-476Z	E CAPACITOR	KD-LX30	
	C 202	NCB21HK-561X	C CAPACITOR		
	C 203	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 206	NCB21HK-273X	C CAPACITOR		
	C 212	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 218	NCB21HK-472X	C CAPACITOR		
	C 219	NBE21AM-106X	E CAPACITOR		
	C 220	NCB21HK-471X	C CAPACITOR		
	C 225	QEKJ1EM-475Z	E CAPACITOR	KD-LX10	
	C 241	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 242	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 243	NCS21HJ-331X	C CAPACITOR		
	C 244	NCS21HJ-331X	C CAPACITOR		
	C 251	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 252	NCS21HJ-821X	C CAPACITOR		
	C 253	NCS21HJ-121X	C CAPACITOR		
	C 272	QEK41CM-106	E CAPACITOR	KD-LX30	
	C 273	QERF0JM-226Z	E CAPACITOR	KD-LX30	

△	Item	Parts number	Parts name	Remarks	Area
	C 301	QEK41EM-475	E CAPACITOR	KD-LX30	
	C 302	QEK41EM-475	E CAPACITOR	KD-LX30	
	C 303	QEK41CM-476	E CAPACITOR	KD-LX30	
	C 304	QEKJ1AM-107Z	E CAPACITOR	KD-LX10	
	C 305	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 306	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 307	QEKJ1AM-107Z	E CAPACITOR	KD-LX30	
	C 308	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 309	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 310	QEKJ1AM-107Z	E CAPACITOR	KD-LX30	
	C 321	QEK41CM-106	E CAPACITOR	KD-LX30	
	C 322	NCB21HK-103X	C CAPACITOR	KD-LX30	
	C 323	QER41CM-476	E CAPACITOR	KD-LX30	
	C 324	QEK41CM-106	E CAPACITOR	KD-LX30	
	C 325	QEKJ1HM-225Z	E CAPACITOR	KD-LX30	
	C 327	NCB21EK-823X	C CAPACITOR	KD-LX30	
	C 328	NCB21HK-682X	C CAPACITOR	KD-LX30	
	C 329	QEKJ1HM-225Z	E CAPACITOR	KD-LX30	
	C 330	NCB21HK-123X	C CAPACITOR	KD-LX30	
	C 331	NCB21HK-562X	C CAPACITOR	KD-LX30	
	C 332	NCB21HK-273X	C CAPACITOR	KD-LX30	
	C 333	NCB21HK-273X	C CAPACITOR	KD-LX30	
	C 334	NCB21HK-333X	C CAPACITOR	KD-LX30	
	C 335	QEKJ1HM-225Z	E CAPACITOR	KD-LX30	
	C 336	NCB21HK-473X	C CAPACITOR	KD-LX30	
	C 337	NCB21HK-473X	C CAPACITOR		
	C 351	NCB21HK-104X	C CAPACITOR		
	C 352	NCB21HK-103X	C CAPACITOR		
	C 353	NBE21AM-475X	TS E CAPACITOR		
	C 354	NCB21HK-104X	C CAPACITOR		
	C 355	NCB21HK-471X	C CAPACITOR		
	C 356	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 357	NCB21HK-472X	C CAPACITOR		
	C 358	NCB21CK-224X	C CAPACITOR		
	C 359	NCB21CK-224X	C CAPACITOR		
	C 361	NCS21HJ-101X	C CAPACITOR	KD-LX10	
	C 362	NCS21HJ-101X	C CAPACITOR	KD-LX10	
	C 363	QEKJ0JM-476Z	AL E.CAPACITOR	KD-LX10	
	C 401	QEK41EM-475	E CAPACITOR	KD-LX30	
	C 402	QEK41EM-475	E CAPACITOR	KD-LX30	
	C 403	QEK41CM-476	E CAPACITOR	KD-LX30	
	C 405	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 406	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 407	QEKJ1AM-107Z	E CAPACITOR	KD-LX30	
	C 408	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 409	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 410	QEKJ1AM-107Z	E CAPACITOR	KD-LX30	
	C 451	NCB21HK-104X	C CAPACITOR		
	C 452	NCB21HK-103X	C CAPACITOR		
	C 454	NCB21HK-104X	C CAPACITOR		
	C 455	NCB21HK-471X	C CAPACITOR		
	C 456	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 457	NCB21HK-472X	C CAPACITOR		
	C 458	NCB21CK-224X	C CAPACITOR		
	C 459	NCB21CK-224X	C CAPACITOR		
	C 461	NCS21HJ-101X	C CAPACITOR	KD-LX10	
	C 462	NCS21HJ-101X	C CAPACITOR	KD-LX10	
	C 463	QEKJ0JM-476Z	AL E.CAPACITOR	KD-LX10	
	C 501	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 502	NCB21HK-103X	C CAPACITOR		
	C 503	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 504	NCB21HK-103X	C CAPACITOR		
	C 505	NCB21HK-103X	C CAPACITOR		
	C 506	QEKJ0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 507	NCB21HK-103X	C CAPACITOR		
	C 508	NCB21EK-104X	C CAPACITOR		
	C 509	NCB21EK-104X	C CAPACITOR		

■ Electrical parts list ( Main board )

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	C 510	NDC21HJ-560X	C CAPACITOR		
	C 512	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 513	NCB21HK-103X	C CAPACITOR		
	C 514	NCS21HJ-101X	C CAPACITOR		
	C 521	QEKJ0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 522	NCB21HK-103X	C CAPACITOR		
	C 523	QEKJ1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 525	NCB21HK-103X	C CAPACITOR		
	C 526	QEKJ0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 531	QEKJ0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 532	NCB21HK-103X	C CAPACITOR		
	C 533	NCS21HJ-470X	C CAPACITOR		
	C 534	NCB21HK-153X	C CAPACITOR		
	C 535	NCB21HK-103X	C CAPACITOR		
	C 536	NCB21HK-103X	C CAPACITOR		
	C 537	NCB21HK-272X	C CAPACITOR		
	C 538	NCB21HK-103X	C CAPACITOR		
	C 539	NCB21HK-333X	C CAPACITOR		
	C 542	NCB21HK-182X	C CAPACITOR		
	C 543	NCS21HJ-271X	C CAPACITOR		
	C 545	NCB21EK-473X	C CAPACITOR		
	C 546	NCB21EK-473X	C CAPACITOR		
	C 547	NCB21EK-473X	C CAPACITOR		
	C 549	NCB21EK-473X	C CAPACITOR		
	C 550	NCB21EK-104X	C CAPACITOR		
	C 551	QERF0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
	C 552	NCB21HK-103X	C CAPACITOR		
	C 553	NCB21HK-103X	C CAPACITOR		
	C 554	QERF0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
	C 555	NCB21HK-103X	C CAPACITOR		
	C 556	NDC21HJ-100X	C CAPACITOR		
	C 557	NDC21HJ-100X	C CAPACITOR		
	C 558	NCS21HJ-101X	C CAPACITOR		
	C 571	QERF0JM-476Z	E CAPACITOR	47MF 20% 6.3V	
	C 573	QERF0JM-107Z	E CAPACITOR	100MF 20% 6.3V	
	C 574	NCB21HK-103X	C CAPACITOR		
	C 581	QER41AM-107	E CAPACITOR	100MF 20% 10V	
	C 582	NCB21HK-103X	C CAPACITOR		
	C 583	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 584	NCB21HK-473X	C CAPACITOR		
	C 701	NDC21HJ-220X	C CAPACITOR		
	C 702	NDC21HJ-270X	C CAPACITOR		
	C 703	NDC21HJ-270X	C CAPACITOR		
	C 704	NDC21HJ-8R0X	C CAPACITOR		
	C 705	NCS21HJ-221X	C CAPACITOR		
	C 707	NCB21EK-103X	C CAPACITOR		
	C 708	NBE20JM-106X	TS E CAP SVB20J		
	C 710	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 711	NCB21HK-473X	C CAPACITOR		
	C 712	NCB21HK-473X	C CAPACITOR		
	C 713	QEKJ0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 719	NCS21HJ-221X	C CAPACITOR		
	C 720	NCB21HK-473X	C CAPACITOR		
	C 721	NCB21HK-222X	C CAPACITOR		
	C 722	NCB21HK-222X	C CAPACITOR		
	C 755	QCFB1HZ-473Y	C CAPACITOR	.047MF +80:-20%	
	C 756	QDXB1CM-222Y	C CAPACITOR		
	C 757	QCFB1HZ-104Y	C CAPACITOR	.10MF +80:-20%	
	C 758	QCB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C 771	NCB21EK-473X	C CAPACITOR		
	C 791	QEKJ1HM-104Z	E CAPACITOR	.10MF 20% 50V	
	C 821	NCB21HK-183X	C CAPACITOR		
	C 822	NCB21EK-393X	C CAPACITOR		
	C 823	NCB21EK-393X	C CAPACITOR		
	C 824	NCB21EK-393X	C CAPACITOR		
	C 825	NCB21EK-393X	C CAPACITOR		
	C 826	NCB21HK-122X	C CAPACITOR		

△	Item	Parts number	Parts name	Remarks	Area
	C 827	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 828	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 911	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 912	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 913	NCB21HK-104X	C CAPACITOR		
	C 931	NDC21HJ-101X	C CAPACITOR		
	C 932	NCB21EK-473X	C CAPACITOR		
	C 937	NCB21HK-104X	C CAPACITOR		
	C 941	QEK41HM-474	E CAPACITOR	.47MF 20% 50V	
	C 942	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C 943	NCB21HK-103X	C CAPACITOR		
	C 944	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 951	NCB21HK-104X	C CAPACITOR		
	C 952	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 961	QEZ0337-228	E CAPACITOR	2200MF	
	C 962	QEKJ1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 964	QER41AM-227	E CAPACITOR	220MF 20% 10V	
	C 965	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 966	NCB21HK-103X	C CAPACITOR		
	C 967	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 968	NCB21EK-104X	C CAPACITOR		
	C 969	QERF1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 970	NCB21HK-473X	C CAPACITOR		
	C 971	QER41CM-476	E CAPACITOR	47MF 20% 16V	
	C 977	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 978	QEKJ0JM-107Z	E CAPACITOR	47MF 20% 6.3V	
	C 982	QEKJ1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 991	NCS21HJ-101X	C CAPACITOR		
	C 992	NCS21HJ-101X	C CAPACITOR		
	C 993	NCS21HJ-101X	C CAPACITOR		
	C 994	NCS21HJ-101X	C CAPACITOR		
	C 995	NCS21HJ-101X	C CAPACITOR		
	C 996	NCS21HJ-101X	C CAPACITOR		
	C 997	NCS21HJ-101X	C CAPACITOR		
	C 998	NCS21HJ-101X	C CAPACITOR		
	CN301	QGA2501C1-07	7P CONNECTOR	KD-LX30	
	CN301	QGA2501C1-03	3P CONNECTOR	KD-LX10	
	CN302	QGA2501C1-06	6P CONNECTOR	KD-LX30	
	CN501	QGB2027M2-26X	CONNECTOR		
	CN503	QGA2501F1-02	CONNECTOR		
	CN504	QGA2501F1-02	CONNECTOR		
	CN701	QGF0503C1-16V	FPC CONNE		
	CN702	QGF0501F1-06X	CONNECTOR C.M		
	CN704	QGA1201C2-04X	CONNECTOR		
	CN771	QNZ0095-001	CONNECTOR		
	CN901	QNZ0090-001	CAR CONNECTOR		
	D 1	1PS226-X	CHIP DIODE C.M		
	D 3	MA152WK-X	SI DIODE		
	D 111	MA152WK-X	SI DIODE		
	D 131	MA152WA-X	DIODE		
	D 161	1PS226-X	CHIP DIODE C.M		
	D 231	MA152WA-X	DIODE		
	D 332	MA152WK-X	SI DIODE	KD-LX30	
	D 351	MA152WK-X	SI DIODE	KD-LX30	
	D 363	UDZS5.1B-X	ZENER DIODE	KD-LX30	
	D 451	MA152WK-X	SI DIODE	KD-LX30	
	D 463	UDZS5.1B-X	ZENER DIODE	KD-LX30	
	D 701	CRS03-W	SB DIODE		
	D 711	1SS355-X	DIODE C.M		
	D 941	1SS355-X	DIODE C.M		
	D 961	1N5404-TU-15	DIODE		
	D 962	CRS03-W	SB DIODE		
	D 963	MA152WA-X	DIODE		
	D 967	CRS03-W	SB DIODE		
	D 978	UDZ11B-X	Z.DIODE		
	D 980	1SS355-X	DIODE C.M		
	D1001	CRS03-W	SB DIODE		

# KD-LX10/KD-LX30

## Electrical parts list ( Main board )

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	D1002	CRS03-W	SB DIODE		
	D1003	CRS03-W	SB DIODE		
	D1004	CRS03-W	SB DIODE		
	D1005	CRS03-W	SB DIODE		
	D1006	CRS03-W	SB DIODE		
	D1007	CRS03-W	SB DIODE		
	D1008	CRS03-W	SB DIODE		
	D1009	CRS03-W	SB DIODE		
	D1010	CRS03-W	SB DIODE		
	D1011	CRS03-W	SB DIODE		
	D1012	CRS03-W	SB DIODE		
	D1013	CRS03-W	SB DIODE		
	D1014	CRS03-W	SB DIODE		
	D1015	CRS03-W	SB DIODE		
	D1016	CRS03-W	SB DIODE		
	IC 21	TB2118F-X	IC		
	IC151	NJM4565M-W	IC		
	IC171	NJM4565M-W	IC	KD-LX30	
	IC301	BA3220FV-X	IC	KD-LX30	
	IC321	M5282FP-XE	IC	KD-LX30	
	IC322	BU4066BCFV-X	IC	KD-LX30	
	IC323	NJM4565M-W	IC	KD-LX30	
	IC361	NJM4565M-W	I.C(MONO-ANA)	KD-LX10	
	IC401	BA3220FV-X	IC	KD-LX30	
	IC461	NJM4565M-W	I.C(MONO-ANA)	KD-LX10	
	IC501	TA2109F-X	IC		
	IC521	TC9462F	IC		
	IC581	FAN8037	IC		
	IC701	UPD784215GC-165	IC		
	IC702	IC-PST600M/G/W	IC		
	IC703	BR24C16F-X	IC		
	IC771	HD74HC126FP-X	IC		
	IC821	NJM2100M-W	IC		
	IC911	BD3860K	IC		
	IC941	TDA7560	IC		
	IC951	NJM2904M-W	IC		
	IC961	BA4905-V3	IC		
	L 1	QQL244K-4R7Z	INDUCTOR		
	L 521	NQL114K-470X	INDUCTOR		
	L 551	NQL114K-470X	INDUCTOR		
	L 701	NQL114K-470X	INDUCTOR		
	L 961	QQR0703-001	CHOKE COIL		
	PP 1	QZW0010-001	STYLE PIN		
	PP 3	QZW0010-001	STYLE PIN		
	PP 4	QZW0010-001	STYLE PIN		
	Q 1	UN2211-X	TRANSISTOR		
	Q 2	2SD601A/R/-X	TRANSISTOR		
	Q 5	2SB709A/R/-X	TRANSISTOR		
	Q 6	2SB815/7/-X	TRANSISTOR		
	Q 8	UN2211-X	TRANSISTOR		
	Q 10	UN2211-X	TRANSISTOR		
	Q 131	2SD1048/6-7/-X	TRANSISTOR	KD-LX30	
	Q 132	2SD1048/6-7/-X	TRANSISTOR		
	Q 161	2SD601A/R/-X	TRANSISTOR		
	Q 231	2SD1048/6-7/-X	TRANSISTOR	KD-LX30	
	Q 232	2SD1048/6-7/-X	TRANSISTOR		
	Q 321	UN2211-X	TRANSISTOR	KD-LX30	
	Q 322	UN2211-X	TRANSISTOR	KD-LX30	
	Q 323	2SD1048/6-7/-X	TRANSISTOR	KD-LX30	
	Q 501	2SB1241/QR/-T	TRANSISTOR		
	Q 581	2SB1241/QR/-T	TRANSISTOR		
	Q 791	UN2211-X	TRANSISTOR		
	Q 942	UN2211-X	TRANSISTOR		
	Q 963	UN2213-X	TRANSISTOR		
	Q 964	2SB709A/R/-X	TRANSISTOR		
	Q 965	UN2211-X	TRANSISTOR		
	Q 966	2SB709A/R/-X	TRANSISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	Q 977	UN2111-X	TRANSISTOR		
	Q 979	UN2111-X	TRANSISTOR		
	Q 981	UN2111-X	TRANSISTOR		
	Q 982	UN2211-X	TRANSISTOR		
	Q 983	2SD601A/R/-X	TRANSISTOR		
	R 1	NRSA02J-0R0X	MG RESISTOR		
	R 4	NRSA02J-473X	MG RESISTOR		
	R 5	NRSA02J-332X	MG RESISTOR		
	R 6	NRS181J-8R2X	MG RESISTOR		
	R 7	NRSA02J-473X	MG RESISTOR		
	R 8	NRSA02J-472X	MG RESISTOR		
	R 9	NRSA02J-473X	MG RESISTOR		
	R 10	NRSA02J-103X	MG RESISTOR		
	R 18	NRSA02J-223X	MG RESISTOR		
	R 21	NRSA02J-0R0X	MG RESISTOR		
	R 22	NRSA02J-622X	MG RESISTOR		
	R 23	NRSA02J-222X	MG RESISTOR		
	R 24	NRSA02J-222X	MG RESISTOR		
	R 25	NRSA02J-222X	MG RESISTOR		
	R 26	NRSA02J-0R0X	MG RESISTOR		
	R 27	NRSA02J-393X	MG RESISTOR		
	R 28	NRSA02J-103X	MG RESISTOR		
	R 29	NRSA02J-101X	MG RESISTOR		
	R 31	NRSA02J-222X	MG RESISTOR		
	R 32	NRSA02J-473X	MG RESISTOR		
	R 101	NRSA02J-682X	MG RESISTOR		
	R 102	NRSA02J-103X	MG RESISTOR		
	R 111	NRSA02J-224X	MG RESISTOR		
	R 117	NRSA02J-473X	MG RESISTOR	KD-LX10	
	R 118	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 118	NCB21HK-222X	MG RESISTOR	KD-LX10	
	R 119	NRSA02J-101X	MG RESISTOR		
	R 131	NRSA02J-222X	MG RESISTOR	KD-LX30	
	R 132	NRSA02J-222X	MG RESISTOR	KD-LX30	
	R 133	NRSA02J-681X	MG RESISTOR	KD-LX30	
	R 134	NRSA02J-681X	MG RESISTOR		
	R 135	NRSA02J-101X	MG RESISTOR	KD-LX30	
	R 136	NRSA02J-101X	MG RESISTOR		
	R 141	NRSA02J-473X	MG RESISTOR		
	R 142	NRSA02J-473X	MG RESISTOR		
	R 143	NRSA02J-473X	MG RESISTOR		
	R 144	NRSA02J-473X	MG RESISTOR		
	R 145	NRSA02J-473X	MG RESISTOR		
	R 146	NRSA02J-473X	MG RESISTOR		
	R 151	NRSA02J-243X	MG RESISTOR		
	R 152	NRSA02J-333X	MG RESISTOR		
	R 153	NRSA02J-123X	MG RESISTOR		
	R 155	NRSA02J-152X	MG RESISTOR		
	R 161	NRSA02J-473X	MG RESISTOR		
	R 162	NRSA02J-123X	MG RESISTOR		
	R 163	NRSA02J-184X	MG RESISTOR		
	R 164	NRSA02J-223X	MG RESISTOR		
	R 165	NRSA02J-391X	MG RESISTOR		
	R 166	NRSA02J-102X	MG RESISTOR		
	R 167	NRSA02J-274X	MG RESISTOR		
	R 171	NRSA02J-471X	MG RESISTOR	KD-LX30	
	R 172	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 173	NRSA02J-822X	MG RESISTOR	KD-LX30	
	R 174	NRSA02J-822X	MG RESISTOR	KD-LX30	
	R 175	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 176	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 177	NRSA02J-102X	MG RESISTOR	KD-LX30	
	R 201	NRSA02J-682X	MG RESISTOR		
	R 202	NRSA02J-103X	MG RESISTOR		
	R 211	NRSA02J-224X	MG RESISTOR		
	R 217	NRSA02J-473X	MG RESISTOR	KD-LX10	
	R 218	NRSA02J-104X	MG RESISTOR	KD-LX30	

■ Electrical parts list ( Main board )

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	R 218	NCB21HK-222X	MG RESISTOR	KD-LX10	
	R 219	NRSA02J-101X	MG RESISTOR		
	R 231	NRSA02J-222X	MG RESISTOR	KD-LX30	
	R 232	NRSA02J-222X	MG RESISTOR	KD-LX30	
	R 233	NRSA02J-681X	MG RESISTOR	KD-LX30	
	R 234	NRSA02J-681X	MG RESISTOR		
	R 235	NRSA02J-101X	MG RESISTOR	KD-LX30	
	R 236	NRSA02J-101X	MG RESISTOR		
	R 241	NRSA02J-473X	MG RESISTOR		
	R 242	NRSA02J-473X	MG RESISTOR		
	R 243	NRSA02J-473X	MG RESISTOR		
	R 244	NRSA02J-473X	MG RESISTOR		
	R 245	NRSA02J-473X	MG RESISTOR		
	R 246	NRSA02J-473X	MG RESISTOR		
	R 251	NRSA02J-243X	MG RESISTOR		
	R 252	NRSA02J-333X	MG RESISTOR		
	R 253	NRSA02J-123X	MG RESISTOR		
	R 255	NRSA02J-152X	MG RESISTOR		
	R 272	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 273	NRSA02J-822X	MG RESISTOR	KD-LX30	
	R 274	NRSA02J-822X	MG RESISTOR	KD-LX30	
	R 275	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 276	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 277	NRSA02J-102X	MG RESISTOR	KD-LX30	
	R 301	NRSA02J-223X	MG RESISTOR	KD-LX30	
	R 302	NRSA02J-223X	MG RESISTOR	KD-LX30	
	R 303	NRSA02J-333X	MG RESISTOR	KD-LX30	
	R 304	NRSA02J-333X	MG RESISTOR	KD-LX30	
	R 305	NRSA02J-154X	MG RESISTOR	KD-LX30	
	R 322	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 323	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 324	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 325	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 326	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 327	NRSA02J-562X	MG RESISTOR	KD-LX30	
	R 328	NRSA02J-153X	MG RESISTOR	KD-LX30	
	R 329	NRSA02J-0R0X	MG RESISTOR	KD-LX30	
	R 330	NRSA02J-473X	MG RESISTOR	KD-LX30	
	R 331	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 332	NRSA02J-104X	MG RESISTOR	KD-LX30	
	R 333	NRSA02J-473X	MG RESISTOR	KD-LX30	
	R 334	NRSA02J-473X	MG RESISTOR	KD-LX30	
	R 335	NRSA02J-821X	MG RESISTOR	KD-LX30	
	R 336	NRSA02J-473X	MG RESISTOR	KD-LX30	
	R 337	NRSA02J-472X	MG RESISTOR	KD-LX30	
	R 338	NRSA02J-101X	MG RESISTOR	KD-LX30	
	R 339	NRSA02J-101X	MG RESISTOR	KD-LX30	
	R 340	NRSA02J-474X	MG RESISTOR	KD-LX30	
	R 341	NRSA02J-105X	MG RESISTOR	KD-LX30	
	R 342	NRSA02J-105X	MG RESISTOR	KD-LX30	
	R 343	NRSA02J-105X	MG RESISTOR	KD-LX30	
	R 344	NRSA02J-105X	MG RESISTOR	KD-LX30	
	R 351	NRSA02J-224X	MG RESISTOR	KD-LX30	
	R 352	NRSA02J-224X	MG RESISTOR	KD-LX30	
	R 353	NRSA02J-105X	MG RESISTOR		
	R 354	NRSA02J-682X	MG RESISTOR		
	R 355	NRSA02J-224X	MG RESISTOR		
	R 358	NRSA02J-332X	MG RESISTOR		
	R 361	NRSA02J-104X	MG RESISTOR	KD-LX10	
	R 362	NRSA02J-153X	MG RESISTOR	KD-LX10	
	R 363	NRSA02J-103X	MG RESISTOR	KD-LX10	
	R 364	NRSA02J-104X	MG RESISTOR	KD-LX10	
	R 365	NRSA02J-153X	MG RESISTOR	KD-LX10	
	R 366	NRSA02J-103X	MG RESISTOR	KD-LX10	
	R 367	NRSA02J-471X	MG RESISTOR	KD-LX10	
	R 401	NRSA02J-223X	MG RESISTOR	KD-LX30	
	R 402	NRSA02J-223X	MG RESISTOR	KD-LX30	

△	Item	Parts number	Parts name	Remarks	Area
	R 403	NRSA02J-333X	MG RESISTOR	KD-LX30	
	R 404	NRSA02J-333X	MG RESISTOR	KD-LX30	
	R 405	NRSA02J-154X	MG RESISTOR	KD-LX30	
	R 451	NRSA02J-224X	MG RESISTOR	KD-LX30	
	R 452	NRSA02J-224X	MG RESISTOR	KD-LX30	
	R 454	NRSA02J-682X	MG RESISTOR		
	R 455	NRSA02J-224X	MG RESISTOR		
	R 458	NRSA02J-332X	MG RESISTOR		
	R 461	NRSA02J-104X	MG RESISTOR	KD-LX10	
	R 462	NRSA02J-153X	MG RESISTOR	KD-LX10	
	R 463	NRSA02J-103X	MG RESISTOR	KD-LX10	
	R 464	NRSA02J-104X	MG RESISTOR	KD-LX10	
	R 465	NRSA02J-153X	MG RESISTOR	KD-LX10	
	R 466	NRSA02J-103X	MG RESISTOR	KD-LX10	
	R 467	NRSA02J-471X	MG RESISTOR	KD-LX10	
	R 501	NRSA02J-563X	MG RESISTOR		
	R 502	NRSA02J-563X	MG RESISTOR		
	R 503	NRSA02J-563X	MG RESISTOR		
	R 504	NRSA02J-563X	MG RESISTOR		
	R 505	NRSA02J-124X	MG RESISTOR		
	R 506	NRSA02J-124X	MG RESISTOR		
	R 507	NRSA02J-220X	MG RESISTOR		
	R 508	NRSA02J-220X	MG RESISTOR		
	R 509	NRSA02J-273X	MG RESISTOR		
	R 510	NRSA02J-333X	MG RESISTOR		
	R 511	NRSA02J-222X	MG RESISTOR		
	R 512	NRSA02J-153X	MG RESISTOR		
	R 513	NRSA02J-682X	MG RESISTOR		
	R 514	NRSA02J-473X	MG RESISTOR		
	R 521	NRSA02J-472X	MG RESISTOR		
	R 522	NRSA02J-472X	MG RESISTOR		
	R 523	NRSA02J-472X	MG RESISTOR		
	R 524	NRSA02J-472X	MG RESISTOR		
	R 525	NRSA02J-103X	MG RESISTOR		
	R 531	NRSA02J-103X	MG RESISTOR		
	R 532	NRSA02J-473X	MG RESISTOR		
	R 533	NRSA02J-683X	MG RESISTOR		
	R 534	NRSA02J-474X	MG RESISTOR		
	R 536	NRSA02J-333X	MG RESISTOR		
	R 537	NRSA02J-103X	MG RESISTOR		
	R 541	NRSA02J-122X	MG RESISTOR		
	R 542	NRSA02J-103X	MG RESISTOR		
	R 543	NRSA02J-332X	MG RESISTOR		
	R 544	NRSA02J-332X	MG RESISTOR		
	R 545	NRSA02J-332X	MG RESISTOR		
	R 547	NRSA02J-332X	MG RESISTOR		
	R 571	NRSA02J-101X	MG RESISTOR		
	R 581	NRSA02J-332X	MG RESISTOR		
	R 582	NRSA02J-123X	MG RESISTOR		
	R 583	NRSA02J-102X	MG RESISTOR		
	R 584	NRSA02J-332X	MG RESISTOR		
	R 585	NRSA02J-682X	MG RESISTOR		
	R 586	NRSA02J-682X	MG RESISTOR		
	R 587	NRSA02J-682X	MG RESISTOR		
	R 588	NRSA02J-682X	MG RESISTOR		
	R 589	NRSA02J-332X	MG RESISTOR		
	R 590	NRSA02J-472X	MG RESISTOR		
	R 591	NRSA02J-392X	MG RESISTOR		
	R 592	NRSA02J-472X	MG RESISTOR		
	R 593	NRSA02J-392X	MG RESISTOR		
	R 594	NRSA02J-472X	MG RESISTOR		
	R 595	NRSA02J-103X	MG RESISTOR		
	R 596	NRSA02J-103X	MG RESISTOR		
	R 701	NRSA02J-473X	MG RESISTOR		
	R 702	NRSA02J-821X	MG RESISTOR		
	R 703	NRSA02J-473X	MG RESISTOR		
	R 704	NRSA02J-473X	MG RESISTOR		

# KD-LX10/KD-LX30

## ■ Electrical parts list ( Main board )

Block No. 01

△	Item	Parts number	Parts name	Remarks	Area
	R 705	NRSA02J-473X	MG RESISTOR		
	R 706	NRSA02J-103X	MG RESISTOR		
	R 707	NRSA02J-472X	MG RESISTOR		
	R 708	NRSA02J-472X	MG RESISTOR		
	R 709	NRSA02J-472X	MG RESISTOR		
	R 710	NRSA02J-103X	MG RESISTOR		
	R 711	NRSA02J-103X	MG RESISTOR		
	R 712	NRSA02J-103X	MG RESISTOR		
	R 714	NRSA02J-103X	MG RESISTOR		
	R 715	NRSA02J-472X	MG RESISTOR		
	R 716	NRSA02J-472X	MG RESISTOR		
	R 717	NRSA02J-472X	MG RESISTOR		
	R 718	NQL012K-1R8X	INDUCTOR		
	R 719	NQL012K-1R8X	INDUCTOR		
	R 720	NRSA02J-331X	MG RESISTOR		
	R 721	NRSA02J-103X	MG RESISTOR		
	R 722	NRSA02J-103X	MG RESISTOR		
	R 723	NRSA02J-102X	MG RESISTOR		
	R 724	NRSA02J-271X	MG RESISTOR		
	R 725	NRSA02J-271X	MG RESISTOR		
	R 728	NRSA02J-103X	MG RESISTOR		
	R 729	NRSA02J-103X	MG RESISTOR		
	R 730	NRSA02J-103X	MG RESISTOR		
	R 731	NRSA02J-473X	MG RESISTOR		
	R 732	NRSA02J-473X	MG RESISTOR		
	R 733	NRSA02J-473X	MG RESISTOR		
	R 734	NRSA02J-472X	MG RESISTOR		
	R 735	NRSA02J-472X	MG RESISTOR		
	R 737	NRSA02J-103X	MG RESISTOR		
	R 738	NRSA02J-103X	MG RESISTOR		
	R 739	NRSA02J-473X	MG RESISTOR		
	R 740	NRSA02J-473X	MG RESISTOR	KD-LX30	
	R 741	NRSA02J-473X	MG RESISTOR	KD-LX10	
	R 742	NRSA02J-103X	MG RESISTOR		
	R 743	NRSA02J-473X	MG RESISTOR		
	R 746	NRSA02J-473X	MG RESISTOR		
	R 747	NRSA02J-473X	MG RESISTOR		
	R 748	NRSA02J-473X	MG RESISTOR		
	R 749	NRSA02J-473X	MG RESISTOR		
	R 750	NRSA02J-473X	MG RESISTOR		
	R 751	NRSA02J-106X	MG RESISTOR		
	R 752	NRSA02J-473X	MG RESISTOR		
	R 757	NRSA02J-473X	MG RESISTOR		
	R 758	NRSA02J-331X	MG RESISTOR		
	R 772	NRSA02J-473X	MG RESISTOR		
	R 773	NRSA02J-223X	MG RESISTOR		
	R 774	NRSA02J-101X	MG RESISTOR		
	R 775	NRSA02J-103X	MG RESISTOR		
	R 776	NRSA02J-104X	MG RESISTOR		
	R 777	NRSA02J-223X	MG RESISTOR		
	R 778	NRSA02J-101X	MG RESISTOR		
	R 779	NRSA02J-473X	MG RESISTOR		
	R 781	NRSA02J-331X	MG RESISTOR		
	R 782	NRSA02J-104X	MG RESISTOR		
	R 791	NRSA02J-102X	MG RESISTOR		
	R 821	QRE142J-102X	C RESISTOR	1.0K 5% 1/4W	
	R 822	NRSA02J-822X	MG RESISTOR		
	R 823	NRSA02J-223X	MG RESISTOR		
	R 824	NRSA02J-822X	MG RESISTOR		
	R 825	NRSA02J-223X	MG RESISTOR		
	R 826	NRSA02J-153X	MG RESISTOR		
	R 827	NRSA02J-472X	MG RESISTOR		
	R 828	NRSA02J-223X	MG RESISTOR		
	R 829	NRSA02J-223X	MG RESISTOR		
	R 830	NRSA02J-103X	MG RESISTOR		
	R 831	NRSA02J-820X	MG RESISTOR		
	R 911	NRSA02J-222X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 912	NRSA02J-222X	MG RESISTOR		
	R 941	NRSA02J-273X	MG RESISTOR		
	R 942	NRSA02J-273X	MG RESISTOR		
	R 943	NRSA02J-102X	MG RESISTOR		
	R 951	NRSA02J-562X	MG RESISTOR	KD-LX30	
	R 952	NRSA02J-102X	MG RESISTOR	KD-LX30	
	R 953	NRSA02J-562X	MG RESISTOR	KD-LX30	
	R 954	NRSA02J-103X	MG RESISTOR		
	R 961	QRE142J-102X	C RESISTOR	1.0K 5% 1/4W	
	R 962	NRSA02J-912X	MG RESISTOR		
	R 963	NRSA02J-472X	MG RESISTOR		
	R 964	NRSA02J-473X	MG RESISTOR		
	R 965	NRSA02J-222X	MG RESISTOR		
	R 970	NRSA02J-123X	MG RESISTOR		
	R 971	NRSA02J-393X	MG RESISTOR		
	R 975	NRSA02J-124X	MG RESISTOR		
	R 976	NRS181J-222X	MG RESISTOR		
	R 977	NRS181J-222X	MG RESISTOR		
	R 978	NRSA02J-104X	MG RESISTOR		
	R 981	NRSA02J-473X	MG RESISTOR		
	R 984	NRSA02J-473X	MG RESISTOR		
	R 985	NRSA02J-472X	MG RESISTOR		
	S 651	NSW0120-002X	PUSH SWITCH		
	S 652	NSW0120-002X	PUSH SWITCH		
	S 653	NSW0120-002X	PUSH SWITCH		
	TH951	NAD0021-103X	THERMISTOR	KD-LX30	
	TH981	NAD0021-103X	THERMISTOR		
	TU 1	QAU0154-001	TUNER		
	X 21	QAX0616-001Z	CRYSTAL		
	X 521	QAX0413-001Z	CRYSTAL		
	X 701	QAX0617-001Z	CRYSTAL		
	X 702	QAX0445-001	CRYSTAL		

■ Electrical parts list ( LCD & Switch board )

Block No. 02

△	Item	Parts number	Parts name	Remarks	Area
	C 601	NBE20JM-475X	TS E CAPACITOR		
	C 602	NCB21HK-104X	C CAPACITOR		
	C 603	NCB21HK-104X	C CAPACITOR		
	C 604	NCB21HK-102X	C CAPACITOR		
	C 605	NBE21AM-475X	TS E CAPACITOR		
	C 606	NCB21HK-104X	C CAPACITOR		
	C 607	NCB21HK-104X	C CAPACITOR		
	C 608	NCB21HK-104X	C CAPACITOR	KD-LX30	
	C 608	NCB21HK-102X	C CAPACITOR	KD-LX10	
	C 609	NDC21HJ-101X	C CAPACITOR	KD-LX30	
	C 610	NBE20JM-475X	TS E CAPACITOR	KD-LX30	
	C 611	NBE21AM-106X	E CAPACITOR		
	C 612	NFV41CG-393X	MPPS CAPACITOR		
	C 613	NCZ1011-180X	C CAPACITOR		
	C 614	NCB21EK-104X	C CAPACITOR		
	C 615	NCB21HK-562X	C CAPACITOR		
	C 625	NBE20JM-475X	TS E CAPACITOR		
	CN601	QGF0501F1-16X	FPC CONNECTOR		
	CN631	QGF0501F1-06X	CONNECTOR C.M		
	D 621	LT1F67AF-W	LED		
	D 622	LT1F67AF-W	LED		
	D 623	LT1F67AF-W	LED		
	D 624	LT1F67AF-W	LED		
	D 625	MA3051M-X	ZENER DIODE		
	D 626	MA152WK-X	SI DIODE		
	D 627	LT1F67AF-W	LED		
	D 655	CL-190UB-X-X	LED		
	D 656	CL-190UB-X-X	LED		
	IC601	LC75823W	IC		
	IC602	LC75823W	IC	KD-LX10	
	IC602	LC75811W	IC	KD-LX30	
	IC603	RPM6938-SV4	IC		
	L 611	NQLZ007-680X	INDUCTOR		
	L 612	NQR0372-001X	C FL TRANSF		
	L 613	NQL114K-470X	INDUCTOR		
	PC601	PR-20-W	PHOTO REF.		
	PC602	PR-20-W	PHOTO REF.		
	Q 611	2SD2185/R/-X	TRANSISTOR		
	Q 612	2SD2185/R/-X	TRANSISTOR		
	Q 691	2SD601A/R/-X	TRANSISTOR		
	Q 692	2SD601A/R/-X	TRANSISTOR		
	R 601	NRSA02J-103X	MG RESISTOR		
	R 602	NRSA02J-103X	MG RESISTOR		
	R 603	NRSA02J-103X	MG RESISTOR		
	R 604	NRSA02J-473X	MG RESISTOR		
	R 605	NRSA02J-103X	MG RESISTOR		
	R 606	NRSA02J-103X	MG RESISTOR		
	R 607	NRSA02J-103X	MG RESISTOR		
	R 608	NRSA02J-103X	MG RESISTOR	KD-LX30	
	R 608	NRSA02J-473X	MG RESISTOR	KD-LX10	
	R 609	NRSA02J-153X	MG RESISTOR		
	R 611	NRSA02J-472X	MG RESISTOR		
	R 612	NRSA02J-472X	MG RESISTOR		
	R 613	NRSA02J-681X	MG RESISTOR		
	R 621	NRSA02J-221X	MG RESISTOR		
	R 622	NRSA02J-221X	MG RESISTOR		
	R 623	NRSA02J-821X	MG RESISTOR		
	R 624	NRSA02J-821X	MG RESISTOR		
	R 625	NRSA02J-471X	MG RESISTOR		
	R 626	NRSA02J-103X	MG RESISTOR		
	R 627	NRSA02J-221X	MG RESISTOR		
	R 628	NRSA02J-0R0X	MG RESISTOR		
	R 629	NRSA02J-102X	MG RESISTOR		
	R 630	NRSA02J-102X	MG RESISTOR		
	R 632	NRSA02J-221X	MG RESISTOR		
	R 633	NRSA02J-221X	MG RESISTOR		
	R 634	NRSA02J-221X	MG RESISTOR		

△	Item	Parts number	Parts name	Remarks	Area
	R 635	NRSA02J-221X	MG RESISTOR		
	R 636	NRSA02J-821X	MG RESISTOR		
	R 637	NRSA02J-821X	MG RESISTOR		
	R 638	NRSA02J-122X	MG RESISTOR		
	R 639	NRSA02J-182X	MG RESISTOR		
	R 640	NRSA02J-272X	MG RESISTOR		
	R 641	NRSA02J-392X	MG RESISTOR		
	R 642	NRSA02J-821X	MG RESISTOR		
	R 643	NRSA02J-821X	MG RESISTOR		
	R 644	NRSA02J-122X	MG RESISTOR		
	R 645	NRSA02J-182X	MG RESISTOR		
	R 646	NRSA02J-272X	MG RESISTOR		
	R 647	NRSA02J-392X	MG RESISTOR		
	R 651	NRSA02J-221X	MG RESISTOR		
	R 652	NRSA02J-221X	MG RESISTOR		
	R 655	NRSA02J-391X	MG RESISTOR		
	R 656	NRSA02J-391X	MG RESISTOR		
	R 671	NRSA02J-331X	MG RESISTOR		
	R 672	NRSA02J-331X	MG RESISTOR		
	R 673	NRSA02J-332X	MG RESISTOR		
	R 674	NRSA02J-332X	MG RESISTOR		
	R 675	NRSA02J-332X	MG RESISTOR		
	R 676	NRSA02J-391X	MG RESISTOR		
	R 691	NRSA02J-104X	MG RESISTOR		
	R 692	NRSA02J-393X	MG RESISTOR		
	R 693	NRSA02J-104X	MG RESISTOR		
	R 694	NRSA02J-393X	MG RESISTOR		
	S 621	NSW0041-001X	TACT SW		
	S 622	NSW0041-001X	TACT SW		
	S 623	NSW0041-001X	TACT SW		
	S 624	NSW0041-001X	TACT SW		
	S 625	NSW0039-001X	TACT SW		
	S 631	QSW0856-001X	TACT SWITCH		
	S 632	NSW0041-001X	TACT SW		
	S 633	QSW0856-001X	TACT SWITCH		
	S 634	QSW0856-001X	TACT SWITCH		
	S 635	QSW0856-001X	TACT SWITCH		
	S 636	QSW0856-001X	TACT SWITCH		
	S 637	QSW0856-001X	TACT SWITCH		
	S 638	QSW0856-001X	TACT SWITCH		
	S 639	QSW0856-001X	TACT SWITCH		
	S 640	QSW0856-001X	TACT SWITCH		
	S 641	QSW0856-001X	TACT SWITCH		
	S 642	QSW0856-001X	TACT SWITCH		
	S 643	QSW0856-002X	TACT SWITCH		

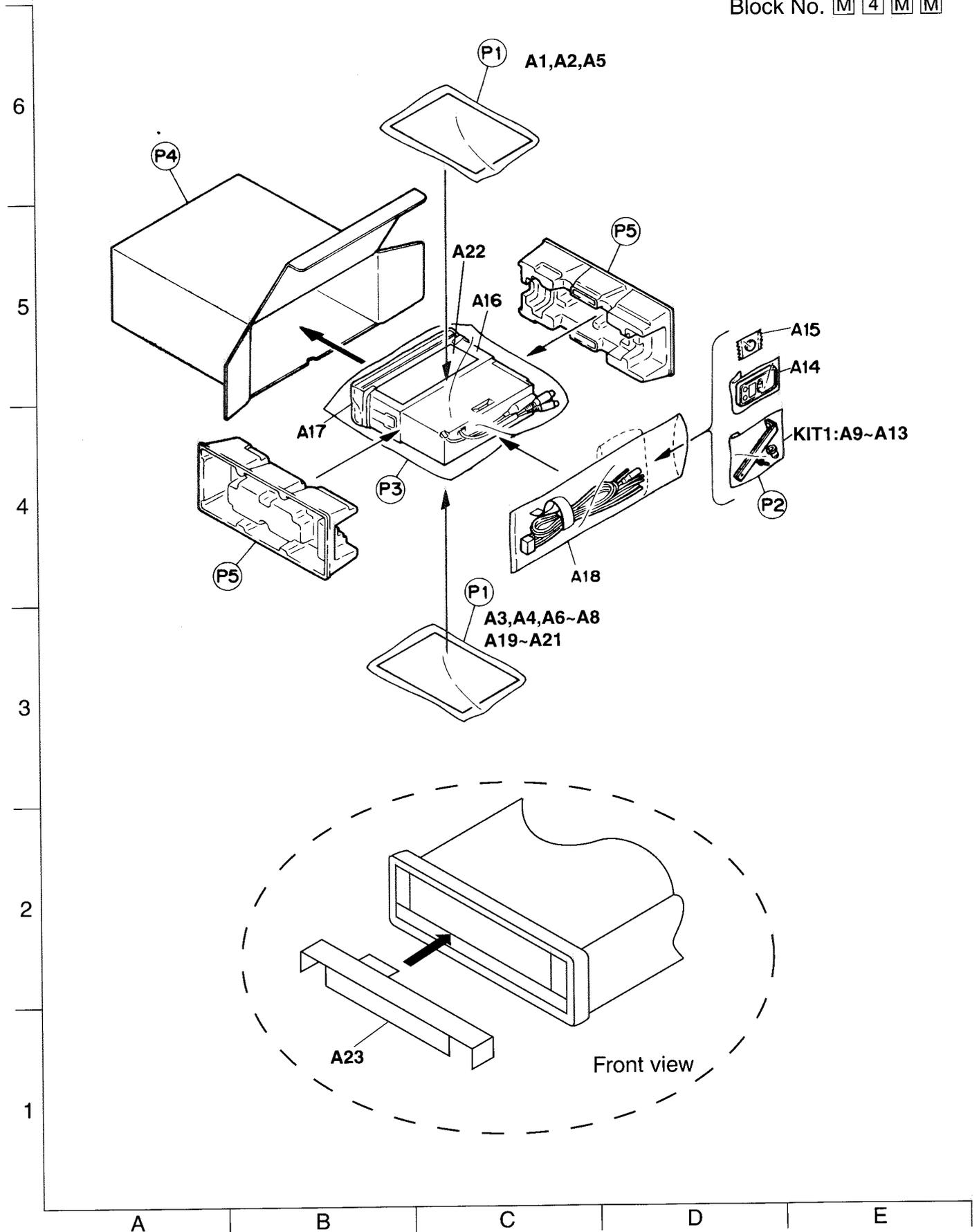
# Packing materials and accessories parts list

Block No. 

M	3	M	M
---	---	---	---

Block No. 

M	4	M	M
---	---	---	---



### ■ Packing parts list

Block No. M3MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	QPA01703505P	POLY BAG	2		
	P 2	QPA00801205	POLY BAG	1		
	P 3	QPC03004315P	POLY BAG	1	SET	
	P 4	LV31661-001A	PACKING CASE	1	KD-LX30	
		LV31619-001A	PACKING CASE	1	KD-LX10	
	P 5	LV10193-201A	PAPER CUSHION	2		

### ■ Accessories parts list

Block No. M4MM

△	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	LVT0408-001A	I.BOOK(KD-LX30)	1	(ENG SPA FRE)	
		LVT0393-001A	I.BOOK(KD-LX10)	1	(ENG SPA FRE)	
	A 2	LVT0394-001A	INST MANUAL	1		
	A 3	BT-20071B	SERVICE NETWORK	1	KD-LX10	
		BT-20071B	SERVICE NETWORK	1	KD-LX30	
	A 4	LVT0326-001C	TROUBLE SHOOTIN	1		
	A 5	LVT0436-001A	CAUTION SHEET	1		
	A 6	LVT0334-001A	CAUTION SHEET	1		
	A 7	BT-51018-2	WARRANTY CARD	1		
	A 8	BT-51020-2	J=REGIST CARD	1		
	A 9	VKZ4027-202	PLUG NUT	1		
	A 10	VKH4871-001	MOUNT BOLT	1		
	A 11	VKZ4328-001	LOCK NUT	1		
	A 12	WNS5000Z	WASHER	1		
	A 13	FSKL4010-002	HOOK	2		
	A 14	RM-RK31	REMOCON	1		
	A 15	QAB0014-001	BATTERY	1		
	A 16	FSKM2004-202	MOUNTING SLEEVE	1		
	A 17	LV10187-001A-S	TRIM PLATE	1		
	A 18	QAM0224-001	CAR CABLE	1		
	A 19	BT-52004-1	WARRANTY CARD	1		
	A 20	LV41155-001A	INFO. SHEET	1		
	A 21	LV41679-001A	INFO. SHEET	1		
	A 22	LV41417-001A	CAUTION SHEET	1		
	A 23	LV41820-001A	TRANSPORT SHEET	1		
	KIT 1	KDGS717K-SCREW1	SCREW PARTS KIT	1	A9-A13	

KD-LX10/KD-LX30

**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
MOBILE ELECTRONICS DIVISION, 10-1, 1Chome, Ohwatari-machi, Maebashi-city, Japan

(No.49537)

 Printed in Japan  
200002(O)