

# JVC



ENGLISH

ESPAÑOL

FRANÇAIS

**CD RECEIVER**

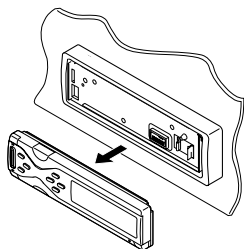
**KD-SHX900**

**RECEPTOR CON CD**

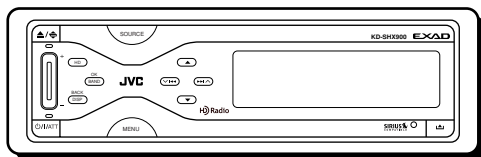
**KD-SHX900**

**RECEPTEUR CD**

**KD-SHX900**



**EXAD**



**HD Radio™**

**SIRIUS  
COMPATIBLE**

**PICT**

**BBE®  
DIGITAL**

**COMPACT  
disc  
DIGITAL AUDIO  
TEXT**

- This unit is equipped with the display demonstration. To cancel it, see page 9.
- Esta unidad está equipada con demostración en la pantalla. Para cancelarla, consulte la página 9.
- Cet appareil est équipé d'une fonction de démonstration des affichages. Pour l'annuler, référez-vous à la page 9.

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.

## **INSTRUCTIONS**

**MANUAL DE INSTRUCCIONES**  
**MANUEL D'INSTRUCTIONS**

**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. \_\_\_\_\_

LVT1249-001A

[J]

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.

### **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:

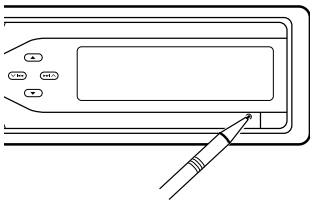
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### **Warning:**

If you need to operate the receiver while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

### **How to reset your unit**

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



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

### **IMPORTANT FOR LASER PRODUCTS**

1. CLASS 1 LASER PRODUCT
2. CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
3. CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

### **CAUTIONS:**

- Do not insert 8 cm (3-3/16") discs (single CDs) into the loading slot. (Such discs cannot be ejected.)
- Do not insert any disc of unusual shape—like a heart or flower; otherwise, it will cause a malfunction.
- Do not expose discs 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.

### **Notice:**

The display window built in this receiver has been produced with high precision, but it may have some ineffective dots. This is inevitable and is not malfunction.

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## 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....

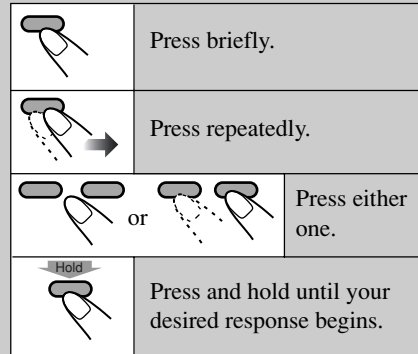
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.

**Important!****How to read this manual:**

To make the explanations as simple and easy-to-understand as possible, we have adapted the following methods:

- **Some related tips and notes are explained later in the sections “More about This Receiver” (see page 47), but not in the same section explaining the operations.** If you want to know more about the functions, or if you have a doubt about the function, go to the section and you will find the answers.

- Button operations are explained only with the illustrations as follows:



## Main Features

### HD Radio™ technology

HD Radio technology receives high-quality digital broadcasts. You can enjoy superior audio quality, clear reception, and wireless data services.

### Compression Compensative Converter—CCC

CC Converter eliminates jitter and ripples, achieving a drastic reduction in digital distortion by processing the digital music data in 24-bit quantization and by expanding the sampling frequency to 176.4 kHz (for fs 44.1 kHz signals). This processing can be applied to the analog sources as well as the digital sources.

### Digital Signal Processor (DSP) modes

The preset DSP modes can create a more acoustic sound field inside your car compartment, and give you a real “being there” feeling.

### BBE Digital

BBE Digital\* is a new digital processing method to restore the brilliance and clarity of the original live sound in recording, broadcasts, etc.

BBE Digital adjusts the phase relationship between the low, mid and high frequencies, so that all frequencies reach the listener's ears at the proper time.

### Color Graphic Display

The color display (256 × 64 pixels) built in this receiver can reproduce 256 colors.

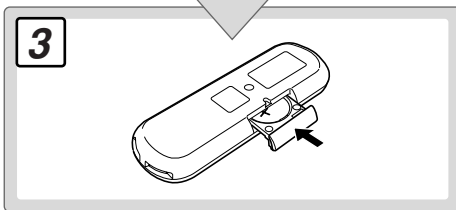
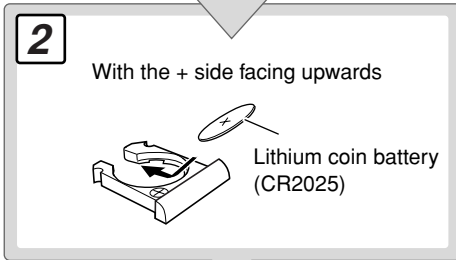
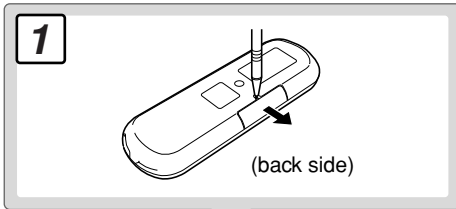
### Image Converter Color

With Image Converter Color included in the supplied CD-ROM, you can create your own images and animations, and can display them on the color graphic display.

\* **Manufactured under license from BBE Sound, Inc.**

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# Preparation (Remote Controller—RM-RK300)



## **WARNINGS on the battery:**

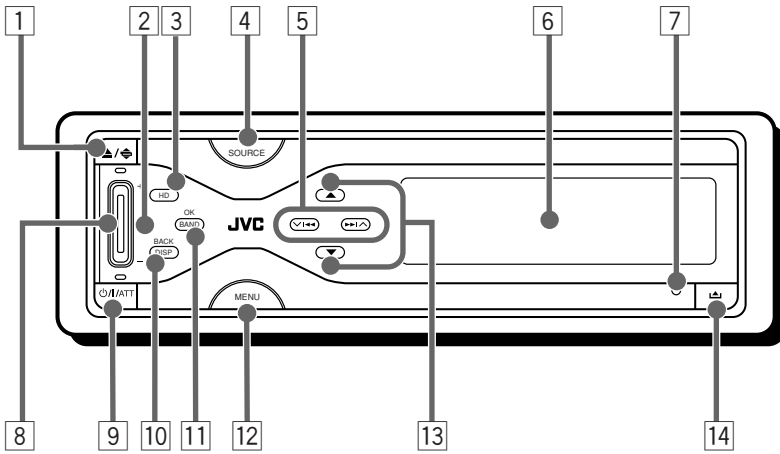
- Store the battery in a place where children cannot reach. If a child accidentally swallows the battery, consult a doctor immediately.
- Do not recharge, short, disassemble, or heat the battery or dispose of it in a fire. Doing any of these things may cause the battery to give off heat, crack, or start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

## **CAUTION:**

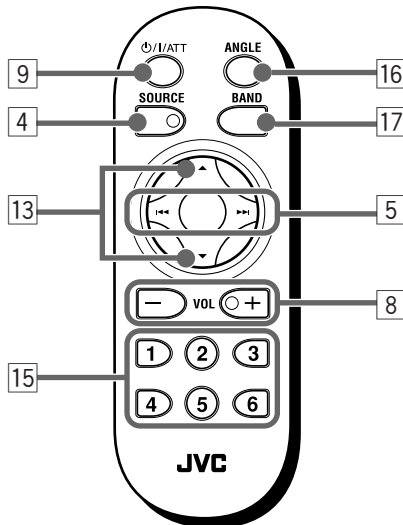
DO NOT leave the remote controller in a place (such as dashboards) exposed to direct sunlight for a long time. Otherwise, it may be damaged.

# Parts Identification

## Control panel



## Remote controller



**1 ▲ (eject) / ◀ (angle) button**

- Open/close the control panel (and eject the disc, if any, when opened).
- Adjust the control panel angle if held then pressed.

**2 Remote sensor**

DO NOT expose the remote sensor on the control panel to strong light (direct sunlight or artificial lighting).

**3 HD button**

Used to control HD Radio reception.

**4 SOURCE button**

Select the source.

**5 |◀◀/▶▶| (V / ^) buttons**

- Searches for stations (Auto Search) if pressed, or  
Skips frequencies after pressed and held (Manual Search).
- Change the tracks on the disc.
- On the control panel only: while operating the Menus, it works to select the Menu items/values.

**6 Color display window****7 Reset button**

Reset the built-in microcomputer.

**8 Volume (VOL) +/- button(s)**

Adjust the volume level.

**9 ⏻/ATT (Standby/On/Attenuator) button**

Turns on and off the power, and also attenuates the sounds.

**10 DISP (BACK) button**

- Change the information shown on the display.
- When operating the Menus, it works as the BACK button (to go back to the previous step).

**11 BAND (OK) button**

- Select the FM/AM band (FM1, FM2, FM3, and AM).
- When operating the Menus, it works as the OK button (to confirm your selection).

**12 MENU button**

Show the Main Menu (or erase it).

**13 ▲/▼ buttons**

- Change the preset stations.
- Change the folder on the MP3/WMA discs.
- On the control panel only: while operating the Menus, it works to select the Menu items/values.

**14 ◀ (control panel release) button**

Detach the control panel.

**15 Number buttons**

- Select the preset station if pressed, or Store a station if pressed and held.
- Select the tracks while playing CDs.
- Select the folders while playing MP3/WMA discs.
- Select the discs while operating the CD changer.

**16 ANGLE button**

Adjust the control panel angle.

**17 BAND button**

Select the FM/AM band (FM1, FM2, FM3, and AM).

# Basic Operations

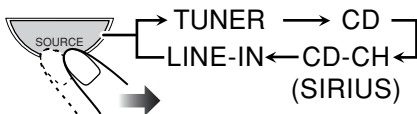
## 1 Turn on the power



The Operation screen for last selected source is recalled.

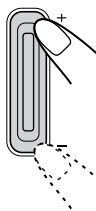


## 2 Select the source



- **CD:** If a disc is not in the loading slot, you cannot select CD as the source to play.
- **CD-CH:** Without connecting the CD changer and setting the “EXT Input” setting correctly, you cannot select CD-CH (CD changer).
- **SIRIUS:** When the “EXT Input” setting is not correctly done, you cannot select SIRIUS Radio (see page 37).
- **LINE-IN:** Select the external component (see page 45).

## 3 Adjust the volume



## 4 Select the DSP mode and sound mode as you want

- For details, see pages 23 to 28.

### To drop the volume in a moment (ATT):



To restore the sound, press it again.

### To turn off the power:



### CAUTION on Volume Setting:

Discs produce very little noise compared with other sources. If the volume level is adjusted for the tuner, for example, the speakers may be damaged by the sudden increase in the output level. Therefore, lower the volume before playing a disc and adjust it as required during playback.



### What information is shown on the display

The following information are shown commonly for all sources.

- If you press DISP on the control panel, the display will show the different information or different screens. (Details about this will be explained later separately for each source.)

Current source

Sound settings alternately appear (pages 23 to 26).

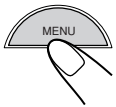
Current source information appears with its icon.  
• Ex.: Station name assigned/Frequency

### Canceling the display demonstration

When shipped from the factory, display demonstration has been activated, and starts automatically when no operations are done for about 20 seconds.

To cancel the display demonstration, follow the procedure below:

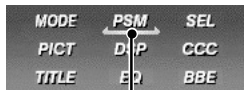
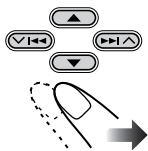
#### 1 While playing any source...



The Main Menu appears on the display.



#### 2 Move the cursor to “PSM” on the Main Menu.



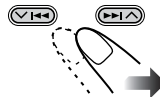
Cursor

#### 3 Enter the PSM Menu.



- If “Demo/Link” does not appear, press ▲ / ▼ repeatedly until it appears.

#### 4 Select “Off.”



To exit from the Menu operation, press MENU again.

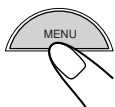
To activate the display demonstration, repeat the same procedure and select any one other than “Off” in step 4.

- For more details, see “To show the display demonstration—Demo/Link” on page 36.

## Setting the clock

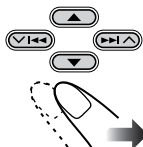
You can also set the clock system to 24 hours or 12 hours.

### 1 While playing any source...



The Main Menu appears on the display.

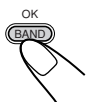
### 2 Move the cursor to "PSM" on the Main Menu.



MODE	PSM	SEL
PICT	DIP	CCC
TITLE	EQ	BBE

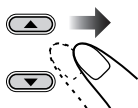
Cursor

### 3 Enter the PSM Menu.

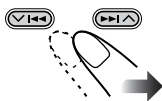


The last selected item appears (highlighted) with the current setting.

### 4 Select "Clock Hr."



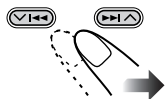
### 5 Adjust the hour.



### 6 Select "Clock Min."



### 7 Adjust the minute.



### 8 Select "24H/12H."



### 9 Select "24Hours" or "12Hours."



To exit from the Menu operation, press MENU again.

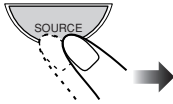
# Radio Operations

## Listening to the radio

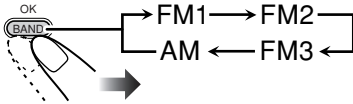
You can tune in to both conventional stations and HD Radio stations.

- If you want to search for HD Radio stations only, see page 13.

### 1 Select the Tuner

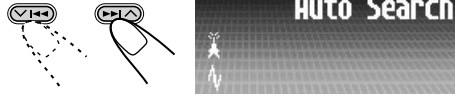


### 2 Select the band (FM/AM)



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

### 3 Start searching for a station



“Auto Search” begins.

When a station is received, searching stops.

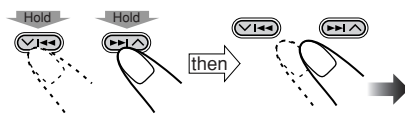
#### When an HD Radio station is tuned in...

Analog signals are always received first for a few seconds before digital signals are received.

To stop searching, press the same button.

#### To tune in to a station manually

In step 3 above...



Activate “Manual Search.”

Select station frequencies.

### What is HD Radio?

This unit is equipped with an HD Radio receiver.

HD Radio can deliver high-quality digital sound—AM digital will have FM-like sound quality (in stereo) and FM digital will have CD-like sound quality—with static-free and clear reception. Furthermore, it can carry text and data, such as artist names and song titles.

Today, HD Radio broadcasts are comprised of both analog and digital signals. In the future, some radio stations may choose to remove their analog signals and broadcast an All Digital HD Radio signal. KD-SHX900 is capable of receiving today’s HD radio signals, along with the all-digital broadcasts of the future.

- HD Radio receivers can also receive conventional analog broadcasts.

### What information is shown on the display

The following information are shown commonly for tuner operations.

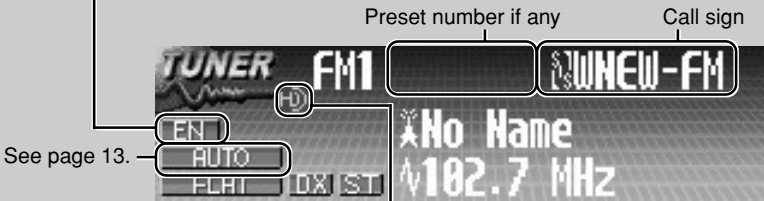
- If you press DISP on the control panel, the display will show the different information on different screens (see page 17).

#### ■ While receiving an HD Radio station

**EN** (Enhanced digital audio) lights up when receiving digital signals of the highest audio quality.

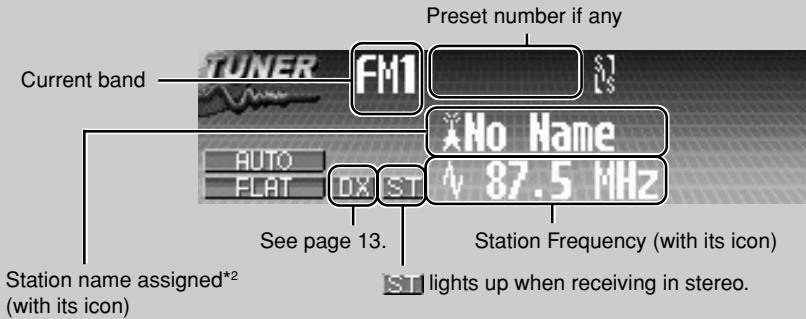
**CD** (Core digital audio) lights up when receiving digital signals with standard audio quality.

- When receiving analog signals, neither lights up.



This indicator lights up when digital signals are received, while it flashes when digital signals cannot be received.\*1

#### ■ While receiving a conventional station



\*1 This also flashes during HD-Search (see page 13) or HD-Memory operations (see page 15).

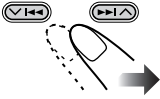
\*2 To assign names to the stations, see page 38.

**To search for HD Radio stations only—  
HD-Search**

**1** While listening to any FM/AM broadcast...



**2** Select either “UP” or “DOWN.”



**UP:** To search for the HD Radio stations from the lower to higher frequencies.

**DOWN:** To search for the HD Radio stations from the higher to lower frequencies.

**3** Start searching for a station.



“HD-Search” begins.  
When a station is received, searching stops.  
• It takes a long time for this unit to complete HD-Search.

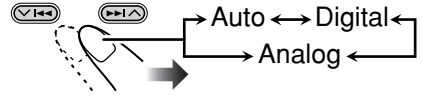
**When HD Radio sound quality changes frequently**

While receiving an HD Radio broadcast, received signals alternate automatically between digital and analog to obtain better reception. Because of this automatic reception, the sound quality also changes as received signals change.  
If you want to cancel this function, follow the procedure below.

**1** While listening to an HD Radio station...



**2** Select “Analog” or “Digital”.



**Auto:** Activate automatic reception.  
• **AUTO** lights up.

**Digital:** To receive digital signals.  
• **DIGITAL** lights up.

**Analog:** To receive analog signals.  
• **ANALOG** lights up.

- If no sound comes out with the current setting selected, change the setting to one of the others.

*Do not change the setting while receiving a conventional FM/AM station.*

**To return to the tuner operation screen...**



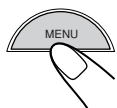
- The setting automatically returns to “Auto” in the following cases:
  - When you tune in to another station.
  - When you change to another source.
  - When you turn off the power.

**To tune in FM stations only with strong signals—LO/DX (Local/Distance-extreme)**

If received signals are weak, you may only hear noises. By setting LO/DX to “Local,” you can make this unit detects only stations with sufficient signal strength.  
• This works only for conventional FM broadcast and FM HD Radio broadcast.

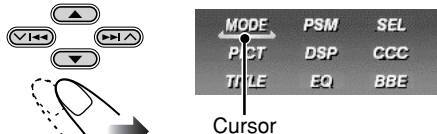
*To be continued...*

**1** While listening to a conventional FM broadcast or FM HD Radio broadcast...



The Main Menu appears on the display.

**2** Move the cursor to “MODE” on the Main Menu.



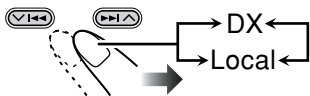
**3** Enter the FM MODE Menu.



**4** Select “LO/DX.”



**5** Select “Local.”



**DX:** To tune in to all receivable stations.

- **DX** lights up.

**Local:** To tune in to only stations with sufficient signal strength.

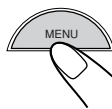
- **LO** lights up.

To exit from the Menu operation, press MENU again.

**When a conventional FM stereo broadcast is hard to receive**

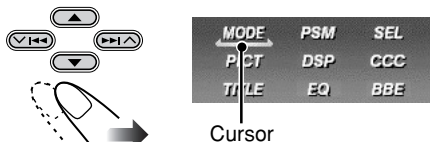
- This function is only valid for conventional FM stations.

**1** While listening to an FM broadcast...

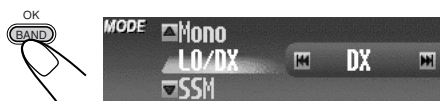


The Main Menu appears on the display.

**2** Move the cursor to “MODE” on the Main Menu.



**3** Enter the FM MODE Menu.

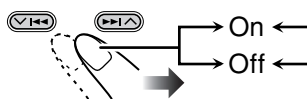


The last selected item appears (highlighted) with the current setting.

**4** Select “Mono.”



**5** Select “On.”



**On:** Reception improves, but stereo effect will be lost.

- **MO** lights up.

**Off:** Normally select this.

To exit from the Menu operation, press MENU again.

## Storing stations in memory

You can preset any 6 stations for each band.

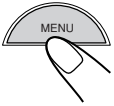
### FM station automatic presetting—SSM (Strong-station Sequential Memory)

You can automatically store 6 stations from both conventional FM stations and HD Radio FM stations.

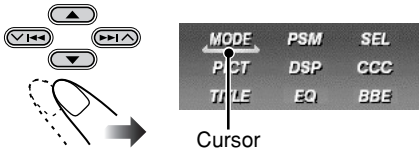
- 1 Select the FM band (FM1 – FM3) you want to store FM stations into.



- 2 While tuning in to an FM station... The Main Menu appears on the display.



- 3 Move the cursor to “MODE” on the Main Menu.



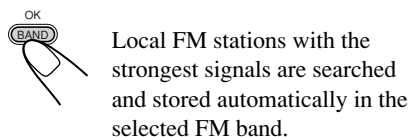
- 4 Enter the FM MODE Menu.



- 5 Select “SSM.”



- 6 Start SSM.



### HD Radio station automatic presetting—HD-Memory

You can automatically store 6 HD Radio stations.

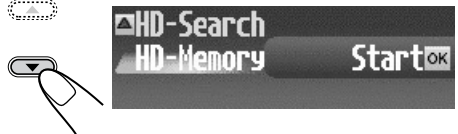
- 1 Select the band (FM1 – FM3, or AM) into which you want to store stations.



- 2



- 3 Select “HD-Memory.”



- 4 Start HD-Memory.

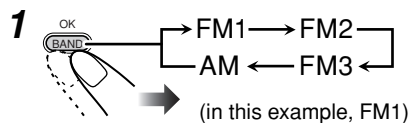


Local HD Radio stations with the strongest signals are searched and stored automatically in the selected band.

- It takes a long time for this unit to complete HD-Memory.

## Manual presetting

Ex. Storing an FM station of 92.5 MHz into the preset number 3 of the FM1 band.



### 2 Tune in to a station



(in this example, of 92.5 MHz)

### 3 Display the Preset Station List of the selected band.



- Station frequencies (or call signs for HD Radio stations) or assigned names (see page 38) of the preset stations are shown on the list.

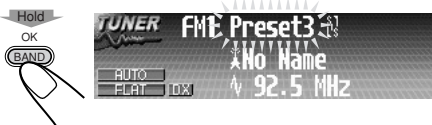
### 4 Select a preset number.



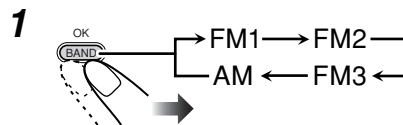
(Select "3" in this example).

- If the current band is FM, you can move to the lists of the other FM bands by pressing  $\leftarrow \blacktriangleleft / \blacktriangleright \rightarrow$  (V /  $\wedge$ ).

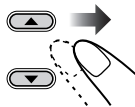
### 5 Store the station selected in step 2.



## Tuning in to a preset station



### 2 Select a preset number (1 – 6).



## To select a preset station using the Preset Station List

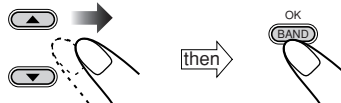
### 1 While listening to a station...



- Station frequencies (or call signs for HD Radio stations) or assigned names (see page 38) of the preset stations are shown on the list.

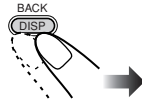
### 2 Select a preset number.

- If the current band is FM, you can move to the lists of the other FM bands by pressing  $\leftarrow \blacktriangleleft / \blacktriangleright \rightarrow$  (V /  $\wedge$ ).





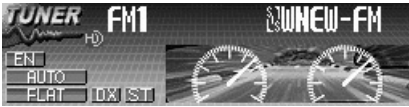
# Changing the display pattern



## While receiving an HD Radio station



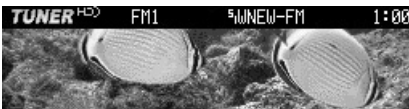
Information about the program is shown.



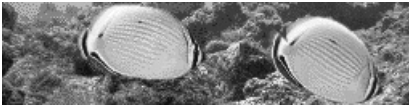
A window (see page 36) is displayed.



Clock time is displayed.



Semi-graphic screen\*2



Full graphic screen\*2

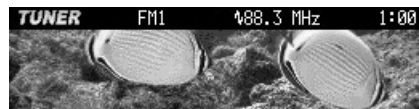
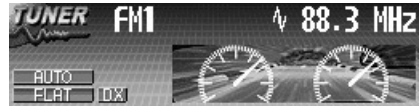
(Full graphic screen will be temporarily changed to the semi-graphic screen when you operate the unit.)

Goes back to the initial display pattern.

## While receiving a conventional station



For conventional FM/AM station, "No Text" is always shown.



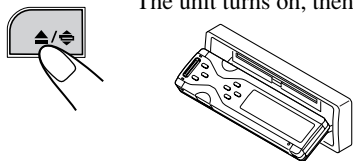
\*1 When the text includes more than 16 characters, the text will scroll to show it entirely (see page 36).

\*2 You can use your edited file for graphic screen (see pages 29 to 33).

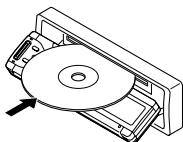
# Basic Disc Operations

## 1 Open the control panel

The unit turns on, then...

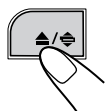


## 2 Insert a disc



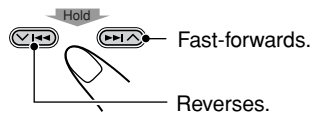
The unit draws the disc, the control panel closes then goes back to the previous position (see page 39), and playback starts automatically.

### To stop play and eject the disc:

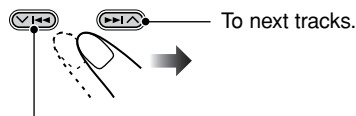


To return the control panel to its previous position, press it again.

### To fast-forward or reverse the track:



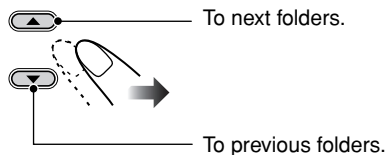
### To go to the next or previous tracks:



To the beginning of the current track, then the previous tracks.

### To go to the next or previous folders:

For MP3/WMA discs only:

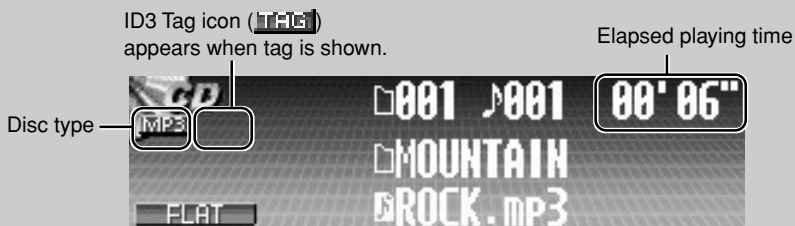


- For MP3/WMA disc configuration, see “About MP3 and WMA discs” on page 19.

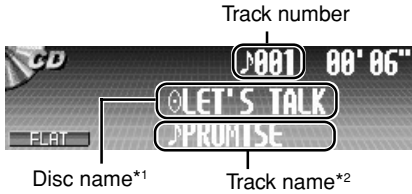
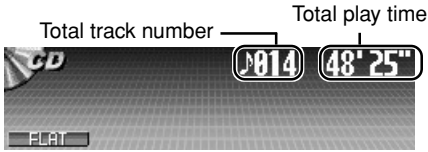
## What information is shown on the display

The following information are shown commonly for disc operations.

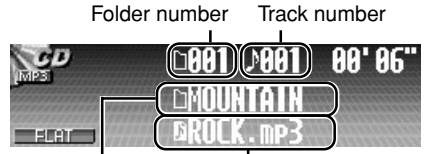
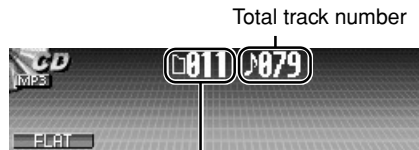
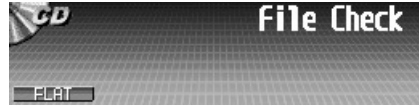
- If you press DISP on the control panel, the display will show the different information or different screens (see page 22).



- Display indications when inserting an audio CD or a CD Text:



- Display indications when inserting an MP3 or a WMA disc:



\*1 Appear for CD Texts and CDs if it has been assigned. ("No Name" appears if no name is recorded or assigned).

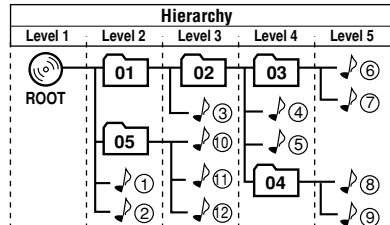
\*2 Appear only for CD Texts. ("No Name" appears if no name is recorded).

\*3 If "ID3 Tag" is set to "On" (see page 37), ID3 tag information will appear on the display. The album name/performer with (disc) indicator appears on the display instead of the folder name; while track title with (track) indicator appears instead of the track name. ("No Name" also appears if no tag is recorded).

### About MP3 and WMA discs

MP3 and WMA (Windows Media® Audio) "tracks" (words "file" and "track" are used interchangeably) are recorded in "folders." "Root" is similar to the root of a tree. Every track and folder can be linked to and be accessed from the root.

- When an MP3 or a WMA folder includes an image <jcl> file edited by Image Converter Color—supplied in the CD-ROM, you can show the image on the display while the tracks in the folder are played back. (See pages 36 and 48 for details.)



- 01 : Folder with its play order
- 01 : MP3/WMA track with its play order

# Advanced Disc Operations

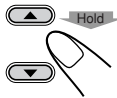
## Locating a folder/track

- This function is only for MP3/WMA discs.

### To locate a folder by displaying the folder list of the current disc

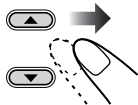
- This function is only possible using the buttons on the control panel.

#### 1 While playing a disc...



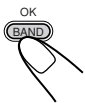
The current folder is highlighted.

#### 2 Select the folder you want.



- If the disc includes more than 6 folders, you can also display the other lists of folders by pressing  $\lll / \ggg$  (V /  $\wedge$ ).

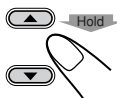
#### 3 Start playing the folder from the first track.



### To locate a track by displaying the track list of the current folder

- This function is only possible using the buttons on the control panel.

#### 1 While playing a disc...



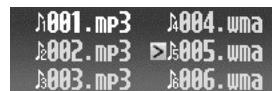
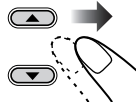
The current folder is highlighted.

#### 2 Display the track list of the current folder.



The current track is highlighted.

#### 3 Select the track you want.



- If the folder includes more than 6 tracks, you can also display the other lists of tracks by pressing  $\lll / \ggg$  (V /  $\wedge$ ).
- If you press BACK, you can go back to the folder list.

#### 4 Start playing the track.



### To locate a track (or folder) directly using the remote controller

- To select a track (or folder for MP3 and WMA discs) number from 1 – 6:



- To select a track (or folder for MP3 and WMA discs) number from 7 (1) – 12 (6):



To directly select the folders using the number button(s), it is required that folders be assigned 2 digit numbers at the beginning of their folder names—01, 02, 03, and so on.

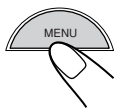
## Selecting playback modes—MODE

You can use only one of the following playback modes at a time.

- **Intro Scan:** You can play back the first 15 seconds of each track sequentially.
- **Repeat Play:** You can repeat playback.
- **Random Play:** You can play back tracks at random.

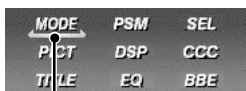
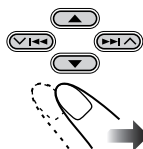
### To use the playback modes

#### 1 While playing a disc...



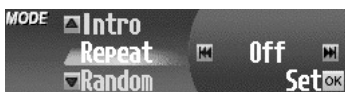
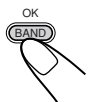
The Main Menu appears on the display.

#### 2 Move the cursor to “MODE” on the Main Menu.

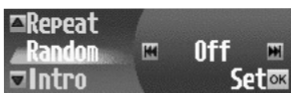
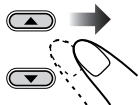


Cursor

#### 3 Enter the Disc MODE Menu.

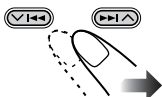


#### 4 Select one of the playback modes.



EX.: When “Random” (Random Play) is selected.

#### 5 Select the setting you want.



- For details, see the tables that follows.

#### 6 Finish the setting.



#### • Intro Scan modes

Mode	Plays the beginnings of
Track :	All tracks of the disc.
Folder* :	First tracks of all folders.
Off :	Cancels Intro Play.

- While playing, **INT** lights up.

- While playing, **INT** lights up.

#### • Repeat Play modes

Mode	Plays repeatedly
Track :	Current track.
Folder* :	All tracks of the current folder.
Off :	Cancels Repeat Play.

- While playing, **RPT** lights up.

- While playing, **RPT** lights up.

#### • Random Play modes

Mode	Plays randomly
Folder* :	All tracks of the current folder, then moves to the next folder and so on.
Disc :	All tracks on the disc.
Off :	Cancels Random Play.

- While playing, **RND** lights up.

- While playing, **RND** lights up.

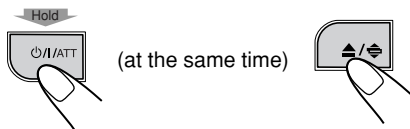
\* “Folder” can be selected for MP3 and WMA discs only.

## Prohibiting disc ejection

You can lock a disc in the loading slot.

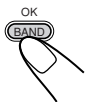
- The control panel will open, but the disc will not eject.

### 1 While playing any source...



No Eject?  
Emergency Eject?

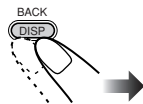
### 2 After making sure that “No Eject?” is selected (highlighted)...



“No Eject” flashes, and the disc cannot be ejected.

To cancel the prohibition, repeat the same procedure—press OK after “Eject OK?” is selected (highlighted) in step 2.  
“Eject OK” flashes.

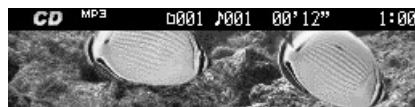
## Changing the display pattern



A window (see page 36) is displayed.



Clock time is displayed.



Semi-graphic screen\*



Full graphic screen\*

(Full graphic screen will be temporarily changed to the semi-graphic screen when you operate the unit.)

Goes back to the initial display pattern.

\* You can use your edited file for graphic screen (see pages 29 to 33).

# Sound Adjustments—Daily Use

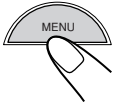
## Selecting the DSP modes—DSP

You can create a more acoustic sound field such as in a theater, hall, etc.

Available DSP modes:

- Theater / Hall / Club / Dome / Studio
- V.Cancel (Voice Cancel: Reduces the vocal sounds. Good for mastering your favorite songs—Karaoke.)
- Defeat (To cancel the DSP mode)

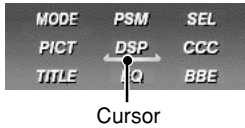
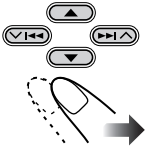
### 1 While playing any source...



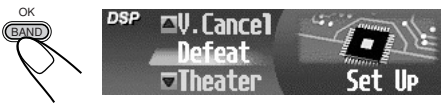
The Main Menu appears on the display.



### 2 Move the cursor to “DSP”



### 3 Enter the DSP Menu



The currently selected mode appears (highlighted).

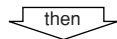
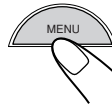
### 4 Select one of the DSP modes



EX.: When “Theater” is selected.



To finish

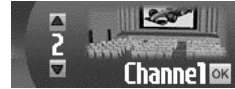
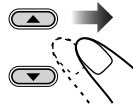


To adjust the effect level



➔ Go to step 5.

### 5 Adjust the effect level (1 – 3)

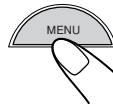


The selected DSP effect level is valid for all DSP modes except “V.Cancel.”

- As the number increases, the effect level becomes stronger.



To finish



To make further settings



➔ See page 24.

To cancel the DSP modes, select “Defeat” in step 3.

## To make further precise settings for the DSP modes

You can also make further precise settings to make the best sound field in your car compartment. These settings you make are valid for all DSP modes except "V.Cancel."

### Setting items:

#### The number of the built-in speakers:

Select the number of the speakers built in your car—"2ch" or "4ch."

- When you have four speakers (4ch) built in your car, select your car size (see step 4 that follows).

#### Listening seat position:

Select the listening seat position where you want to locate the sound image.

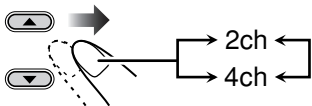
### 1 Repeat steps 1 to 4 on page 23 to select a DSP mode (except "V.Cancel").

- Press OK in step 4.

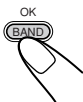


### 2 Select the number of the built-in speakers.

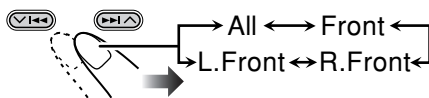
- Select "4ch" for the four speaker system, and "2ch" for the two speaker system.



then



### 3 Select your listening seat position.



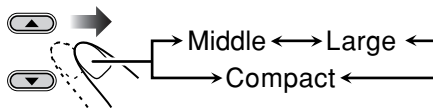
**All :** For all front and rear seats.

**Front :** For the both front seats.

**R. Front :** For the front right seat.

**L. Front :** For the front left seat.

### 4 If you select "4ch," select your car size.



**Middle :** Select when the distance from the rear speakers to the listening seat position is almost equal to that from the front speakers.

**Large :** Select when the distance from the rear speakers to the listening seat position is longer than that from the front speakers.

**Compact :** Select when the distance from the rear speakers to the listening seat position is shorter than that from the front speakers.

To exit from the Menu operation, press MENU again.



## Making sound natural

This unit is equipped with two features to make sound natural—CC Converter and BBE Digital.

### To activate Compression Compensative (CC) Converter

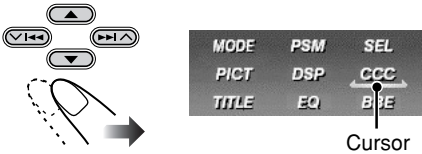
CC Converter eliminates jitter and ripples, achieving a drastic reduction in digital distortion. This processing can be applied to the analog sources as well as the digital sources; therefore, you can obtain a natural sound field from any source.

#### 1 While playing any source...



The Main Menu appears on the display.

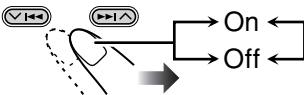
#### 2 Move the cursor to “CCC” on the Main Menu.



#### 3 Enter the CCC Menu.



#### 4 Select “On.”



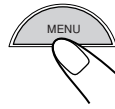
- When “CCC” is turned on, the CCC indicator is brightened in yellow on the display.
- **To cancel CC Converter,** select “Off.”

**To exit from the Menu operation,** press MENU again.

### To activate BBE Digital

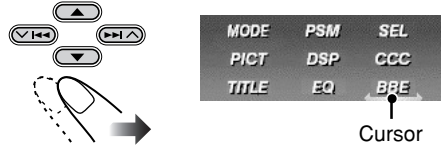
BBE Digital is a new digital processing method to restore the brilliance and clarity of the original live sound in recording, broadcasts, etc. When a speaker reproduces sound, it introduces frequency-dependent phase shifting, causing high-frequency sounds to take longer to reach the ear than low frequency sounds. BBE Digital 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.

#### 1 While playing any source...



The Main Menu appears on the display.

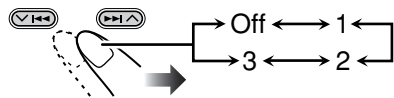
#### 2 Move the cursor to “BBE” on the Main Menu.



#### 3 Enter the BBE Menu.



#### 4 Select the effect level.



- As the number gets higher, the effect level becomes stronger. When “BBE” is turned on, the BBE indicator is brightened in green (with its current level) on the display.
- **To cancel BBE Digital,** select “Off.”

**To exit from the Menu operation,** press MENU again.

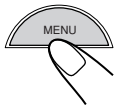
## Selecting preset sound modes—EQ

You can select a sound mode suitable to the music genre.

Available sound modes:

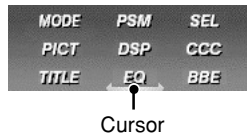
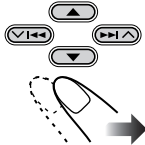
- Hard Rock / R&B / Pop / Jazz / Dance / Country / Reggae / Classic
- User 1 / User 2 / User 3
- Flat (To cancel the sound mode)

### 1 While playing any source...

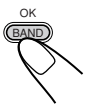


The Main Menu appears on the display.

### 2 Move the cursor to “EQ” on the Main Menu.

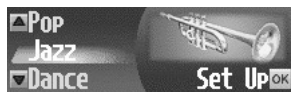
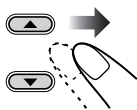


### 3 Enter the EQ (equalizer) Menu.



The currently selected mode appears (highlighted).

### 4 Select (highlight) one of the preset EQ modes.



EX.: When “Jazz” is selected.

To exit from the Menu operation, press MENU again.

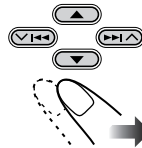
## Storing your own sound modes

You can adjust the sound modes and store your own adjustments in memory.

### 1 Repeat steps 1 to 4 on the left column to select a sound mode you want to adjust, then...



### 2 Make adjustments as you like.

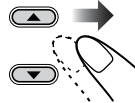


- 1) Press ◀◀ (V) or ▶▶ (Λ) to select the frequency band—60Hz, 150Hz, 400Hz, 1kHz, 2.4kHz, 6kHz, 12kHz.
- 2) Press ▲ (up) or ▼ (down) to adjust the level of the selected band within the range of -05 to +05.
- 3) Repeat steps 1) and 2) to adjust the other frequency bands.

### 3 Finish adjustment.



### 4 Select (highlight) one of the user sound modes (User 1, User 2, or User 3) you want to store into.



then



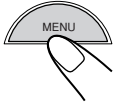
“Memory” appears for a while.

*For details about the preset settings of each sound mode, see page 50.*

# Sound Adjustments—Preference Settings

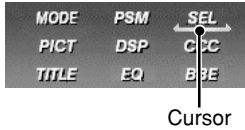
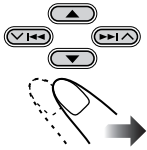
## Setting the basic sound selection menu—SEL

### 1 While playing any source...

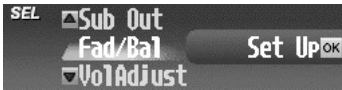


The Main Menu appears on the display.

### 2 Move the cursor to “SEL”

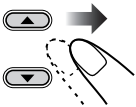


### 3 Enter the SEL Menu



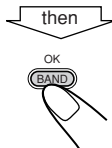
The last selected mode appears (highlighted).

### 4 Select a setting item

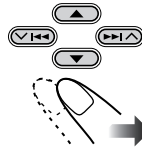


EX.: When “Sub Out” (subwoofer output) is selected.

When selecting “Sub Out” and “Fad/Bal,” press OK to enter submenu.



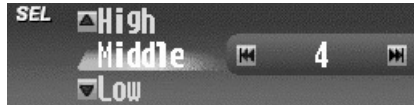
### 5 Adjust the item



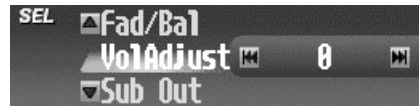
To adjust fader and balance:



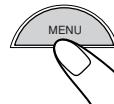
To select the cutoff frequency and adjust the subwoofer output level:



To adjust the input level of each source:

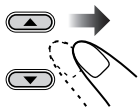


To exit from the Menu operation



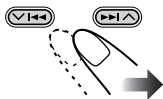
**To adjust fader and balance—Fad/Bal:**

Adjust fader—speaker output balance between the front and rear speakers.



- Upmost—front only
- Downmost—rear only

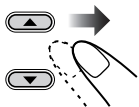
Adjust the balance—speaker output balance between the left and right speakers.



- Leftmost—left only
- Rightmost—right only

**To adjust subwoofer output—Sub Out:**

Select an appropriate cutoff frequency level according to the subwoofer connected.




---

**High:** Frequencies higher than 115 Hz are cut off to the subwoofer.

---

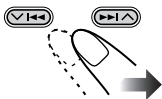
**Middle:** Frequencies higher than 85 Hz are cut off to the subwoofer.

---

**Low:** Frequencies higher than 55 Hz are cut off to the subwoofer.

---

Adjust the subwoofer output level.



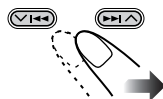
- 0 (min.) to 8 (max.)

**To adjust the input level of each source—VolAdjust:**

This setting is required for each source except FM. Before making an adjustment, select an appropriate source for which you want to make an adjustment.

Once you have made an adjustment, it is memorized, and the volume level will automatically increase or decrease by adjusted level whenever you change the source.

Adjust to match the input level to the FM sound level.



- -5 (min.) to +5 (max.)

## Basic procedure

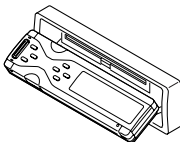
Before starting the following procedure, prepare a CD-R including still images (pictures) and animations (movies).

- With Image Converter Color included in the supplied CD-ROM, you can create your own images and animations. (The supplied CD-ROM also includes sample images and animations.)

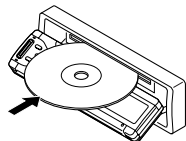
### 1 Open the control panel



The unit turns on, then...



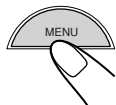
### 2 Insert the prepared CD-R



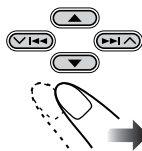
The unit draws the disc, the control panel closes, then goes back to the previous position (see page 39).

- If the disc includes playable audio files, playback starts.

### 3 Display the Main Menu



### 4 Move the cursor to "PICT"



MODE	PSM	SEL
PICT	DSP	CCC
TITLE	EQ	BBE

Cursor

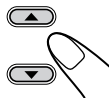
### 5 Enter the PICT Menu



PICT	Download	Delete	Picture	Select
				OK
		AllDelete		

The last selected item appears (highlighted).

### 6 Select the item



Download	Picture
Delete	FileCheck

EX.: When "Download" is selected.

- To download the file(s)  
➔ **Download** (see page 30):  
Only possible when the source is "CD."
- To delete the file(s)  
➔ **Delete** (see page 31)
- To delete all memorized files  
➔ **AllDelete** (see page 33)

**IMPORTANT:**

- Refer to Image Converter Operation Guide (or Manual) included in the supplied CD-ROM.
  - Still images (pictures) should have <jcl>, and animations (movies) should have <jca> as their extension code in their file names.
  - Before you download or delete the files, observe the following:
    - Do not download a file while driving.
    - Do not turn off the ignition key of the car while downloading or deleting a file.\*
    - Do not detach the control panel while downloading or deleting a file.\*
- \* If you do it, the file download or deletion will not be done correctly.

**Note:** The picture quality of the downloaded animation (movie) file may decrease when it is shown on the receiver's display (compared to its quality on the PC).

## Downloading the files

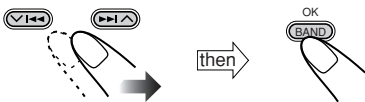
Download an animation (consisting of 55 frames maximum) or pictures (total of 18 still images: each one frame—see also page 49) which can be used for the graphic screen.

- It takes a long time to download an animation. For details, see page 49.
- To activate the downloaded files, see page 33.

### 1 Repeat steps 1 to 6 on page 29 (in step 6 select “Download”).

- Downloading is only possible when the source is “CD.” If any source other than “CD” is selected, “Download” will not be shown as a PICT Menu item.

### 2 Select the file type—either “Picture” <jcl> or “Movie” <jca>.

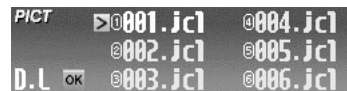
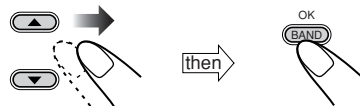


The folder list appears.

- Only the folders including the selected file type <jcl> or <jca> are shown.

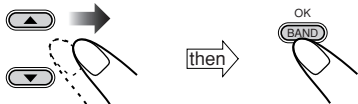
### 3 Select (highlight) a folder where the file you want is located.

- If a disc includes more than 6 folders, you can also display the other lists of folders by pressing ◀◀/▶▶ (V / Λ).



The file list appears.

- 4 Select (highlight) a file to download.**
- If the folder includes more than 6 files, you can also display the other lists of files by pressing **◀◀/▶▶** (**V / Λ**).



The confirmation screen appears.

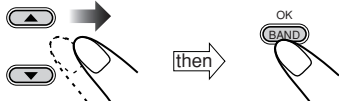
**5 Download the file.**



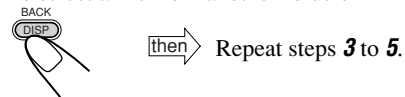
When download is complete, the file list appears again.

**6 Download more files if you want.**

- To select a file from the same folder:



- To select a file from another folder:



To change the file type—“Picture” <jcl> or “Movie” <jca> to download, exit from the Menu operation by pressing MENU, then repeat from the beginning.

To exit from the Menu operation, press MENU again.

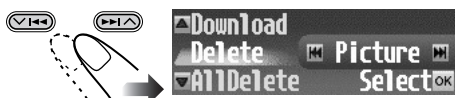
**Deleting the files**

You can delete the files while playing any source.

**To delete the stored pictures one by one**

- 1 Repeat steps 3 to 6 on page 29 (in step 6 select “Delete”).**

**2 Select “Picture.”**



then



**3 Select “Delete.”**



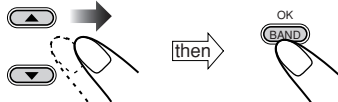
then



The file list appears.

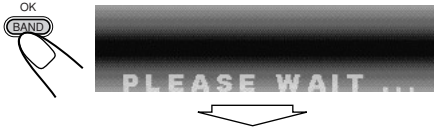
**4 Select (highlight) a file to delete.**

- If more than 6 files have been stored, you can also display the other lists of files by pressing **◀◀/▶▶** (**V / Λ**).



The confirmation screen appears.

To be continued...

**5 Delete the file.**

When deletion is complete, the file list appears again.

- If the PICT Menu appears, there are no files stored. ➔ Press MENU.

**6 Delete more files if you want.**

- Repeat steps **4** and **5**.

To exit from the Menu operation, press MENU again.

To delete all the stored pictures at a time

**1** Repeat steps **3** to **6** on page 29 (in step **6** select “Delete”).

**2** Select “Picture”.

- See step **2** of the previous procedure.

**3** Select “AllDelete.”



then



The confirmation screen appears.

**4 Delete all pictures.**

When all pictures are deleted, the PICT Menu appears again.

To exit from the Menu operation, press MENU again.

To delete the stored movie

**1** Repeat steps **3** to **6** on page 29 (in step **6** select “Delete”).

**2** Select “Movie”.



then



The confirmation screen appears.

**3** Delete the movie.



When the movie is deleted, the PICT Menu appears again.

To exit from the Menu operation, press MENU again.



## Deleting all files

You can delete all stored files (pictures and animation) at a time.

- 1 Repeat steps 3 to 6 on page 29 (in step 6 select “AllDelete”).

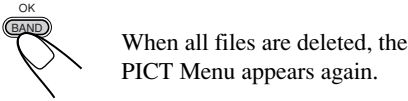


- 2 Confirm your selection.



The confirmation screen appears.

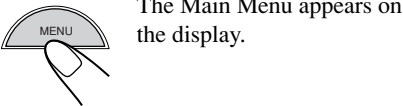
- 3 Delete all stored files.



To exit from the Menu operation, press MENU again.

## Activating the downloaded files

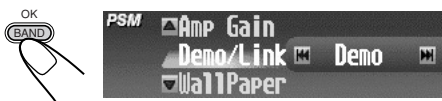
- 1 While playing any source...



- 2 Move the cursor to “PSM” on the Main PSM Menu.



- 3 Enter the PSM Menu.



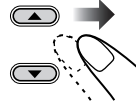
- 4 Select “Pict.”



then



- 5 Select the graphic screen type—“Picture,” “Movie,” or “Slideshow.”

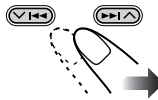


**Picture:** One of the stored pictures is activated for your graphic screen. → Go to step 6.

**Movie:** Your stored animation is activated for your graphic screen. → Go to step 6.

**Slideshow:** All stored pictures are activated and shown in sequence for your graphic screen (UserSlide). → Go to step 7.

- 6 If you have selected “Picture” or “Movie” in the previous step, select the file you want.



• Select “Default” to activate the preinstalled file.

- 7 Finish the setting.



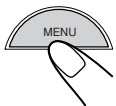
# General Settings—PSM

## Basic procedure

You can change the Preferred Setting Mode (PSM) items listed on the table that follows.

- When changing the “Pict” setting, see “Activating the downloaded files” on page 33.

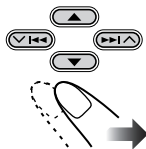
### 1 While playing any source...



The Main Menu appears on the display.

MENU	MODE	PSM	SEL
◀ ▶	PICT	DSP	CCC
▼	TITLE	EQ	BBE

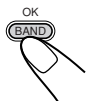
### 2 Move the cursor to “PSM”



MODE	PSM	SEL
PICT	DSP	CCC
TITLE	EQ	BBE

Cursor

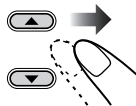
### 3 Enter the PSM Menu



PSM	Amp Gain	Demo/Link	Demo
▼	WallPaper		

The last selected item appears (highlighted) with the current setting.

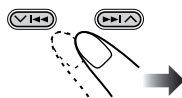
### 4 Select a PSM item



PSM	24H/12H	Scroll	Once
▼	Dimmer		

EX.: When “Scroll” is selected.

### 5 Change or adjust the setting

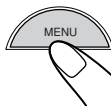


PSM	24H/12H	Scroll	Auto
▼	Dimmer		

### 6 Change or adjust other PSM items

If necessary, repeat steps 4 and 5 to change other PSM item settings.

To exit from the Menu operation



PSM items		Selectable settings		Initial	Pages
<b>Demo/Link</b>	Demo/ImageLink	<input type="checkbox"/> Demo $\longleftrightarrow$ ImageLink <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Off <math>\leftarrow</math></span>		Demo	9, 36
<b>WallPaper</b>	Wall Paper	<input type="checkbox"/> Standard1 $\longleftrightarrow$ Standard2 <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Standard3 <math>\leftarrow</math></span>		Standard1	36
<b>Window</b>	Window	<input type="checkbox"/> Window1 $\longleftrightarrow$ Window2 <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Window4 <math>\leftarrow</math> Window3 <math>\leftarrow</math></span>		Window1	36
<b>Pict</b>	Picture	<input type="checkbox"/> Picture $\longleftrightarrow$ Slideshow <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Movie <math>\leftarrow</math></span>		Picture	33
<b>Clock Hr</b>	Clock hour	1 — 12 (0 — 23)		1 (1:00AM)	10
<b>Clock Min</b>	Clock minute	00 — 59		00(1:00AM)	10
<b>24H/12H</b>	Clock system	12Hours	24Hours	12Hours	10
<b>Scroll</b>	Scroll mode	<input type="checkbox"/> Once $\longleftrightarrow$ Auto <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Off <math>\leftarrow</math></span>		Once	36
<b>Dimmer</b>	Dimmer	<input type="checkbox"/> Auto $\longleftrightarrow$ Off <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> On <math>\leftarrow</math></span>		Auto	37
<b>Bright</b>	Brightness	1 — 8		8	37
<b>ID3 Tag</b>	Tag display	Off	On	On	37
<b>IF Filter</b>	Intermediate frequency filter	Wide	Auto	Auto	37
<b>EXT Input</b> <sup>*1</sup>	External Input	Changer	Sirius	Changer	37
<b>Beep</b>	Beep	Off	On	On	37
<b>Amp Gain</b>	Amp gain control	<input type="checkbox"/> HighPower $\longleftrightarrow$ Low Power <input type="checkbox"/> <span style="margin-left: 100px;"><math>\rightarrow</math> Off <math>\leftarrow</math></span>		HighPower	37

<sup>\*1</sup> Displayed only when the source is not an external component.

## To show the display demonstration— Demo/Link

If no operation is done for about 20 seconds, display demonstration starts.

- **Demo:** Display demonstration (animation) appears.
- **ImageLink:** A still image included in an MP3/WMA folder appears while playing back the tracks in the folder (see page 19).
- **Off:** Cancels the display demonstration.

### *When “ImageLink” is selected*

*No sounds come out (“PLEASE WAIT” is shown on the display) while reading an image included in an MP3/WMA folder.*

## To select the background screen— WallPaper

You can select the background screen of the display window from the following.

- Examples below are of disc playback.

### • Standard1:



### • Standard2:



### • Standard3:



## To show the small window on the display—Window

You can show the level meters or scenery pictures in the window.

- To show the window, press DISP repeatedly.
- Examples below are of disc playback.

### • Window1:



### • Window2:



### • Window3:



### • Window4:



## To select the scroll mode—Scroll

The entire text information is shown by scrolling if it cannot be shown at a time.

- **Once:** Scrolls only once.
- **Auto:** Repeats the scroll (in 5-second intervals).
- **Off:** Cancels scroll mode.

*Even if the scroll mode is set to “Off,” you can scroll the display by pressing DISP for more than one second.*

**To select the dimmer mode—Dimmer**

When you turn on the car headlights, the display and button illumination automatically dims (Auto Dimmer).

- **Auto:** Activates Auto Dimmer.
- **Off:** Cancels Auto Dimmer.
- **On:** Always activates Dimmer.

**To adjust the display brightness—Bright**

You can adjust the brightness to make the display clear and legible.

**To turn the tag display on or off—ID3 Tag**

An MP3 and WMA track can contain track information called “Tag” where its album name, performer, track title, etc. are recorded.

- **On:** Shows the Tag display while playing MP3 or WMA tracks.
- **Off:** Cancels the Tag display. Only the folder name and track name appear.

*For MP3 tracks only: There are two versions—ID3v1 (ID3 Tag version 1) and ID3v2 (ID3 Tag version 2). When both ID3v1 and ID3v2 are recorded, ID3v2 will be shown.*

**To change the FM tuner selectivity—IF Filter**

In some areas, adjacent stations may interfere with each other. If this interference occurs, noise may be heard.

- **Auto:** When this type of interference occurs, this unit automatically increases the tuner selectivity so that interference noise will be reduced. (But the stereo effect will also be lost.)
- **Wide:** Subject to the interference from adjacent stations, but sound quality will not be degraded and the stereo effect will not be lost.

**To select the external component to use—EXT Input**

To use the external component connected to the CD changer jack as the playback source through this unit, you need to select which component to use.

- **Changer:** To use a JVC CD changer.
- **Sirius:** To use a JVC SIRIUS Radio.

**To turn on/off the key-touch tone—Beep**

You can deactivate the key-touch tone if you do not want it to beep each time you press a button.

- **On:** Activates the key-touch tone.
- **Off:** Deactivates the key-touch tone.

**To select the amplifier gain control—Amp Gain**

You can change the maximum volume level of this unit. When the maximum power of the speakers is less than 50 W, select “Low Power” to prevent them from being damaged.

- **HighPower:** You can adjust the volume level from “0” to “50.”
- **Low Power:** You can adjust the volume level from “0” to “30.”
- **Off:** Deactivates the built-in amplifier. (Sounds come out only from external amplifiers connected to LINE OUT/SUBWOOFER OUT plugs.)

# Other Main Functions

## Assigning titles to the sources

You can assign titles to 30 station frequencies, 40 CDs (both in this unit and in the CD changer), and the external component.

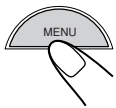
Source	Maximum number
Station frequencies:	16 characters
CDs:	32 characters
External component:	16 characters

- You cannot assign a title to CD Text, MP3, and WMA discs.
- For available characters, see page 50.

### 1 Prepare the source.

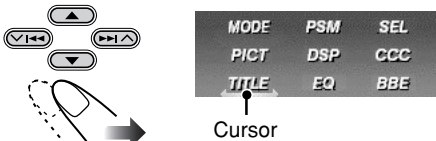
- For FM/AM station frequencies:** Change “FM” or “AM,” then select a station frequency.
- For a CD in this unit:** Insert a CD.
- For CDs in the CD changer:** Select “CD-CH,” then select a disc number.

### 2 After playback starts...



The Main Menu appears on the display.

### 3 Move the cursor to “TITLE” on the Main Menu.



### 4 Enter the TITLE Menu.



Ex. When you have selected “CD” and assign a title to the loaded disc

## 5 Assign a title.

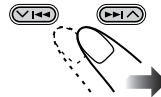
### 1) Select a character set.



### 2) Enter a character.



### 3) Move to the next character position.



### 4) Repeat steps 1) to 3) until you finish entering the title.

### To erase the characters...



The entire title (all entered characters) are erased at a time.

## 6 After the title entry is finished...



- To cancel the title entry without registration, press MENU.

## Changing the control panel angle

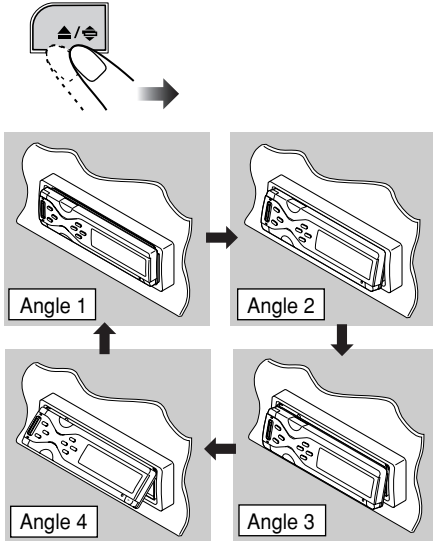
You can change the angle of the control panel.

1

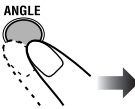


The current angle level is shown.

2



You can use the ANGLE button on the remote controller for changing the panel angle.



On the remote controller

### CAUTION:

NEVER insert your finger in between the control panel and the unit, as it may get caught or hurt.

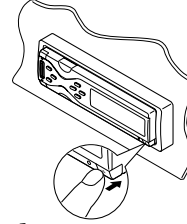
## Detaching the control panel

- When detaching and attaching the control panel, be careful not to damage the connectors.

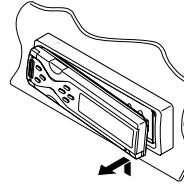
### Detaching the control panel

Before detaching the control panel, be sure to turn off the power.

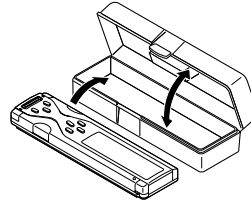
1



2

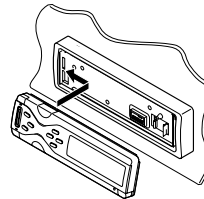


3

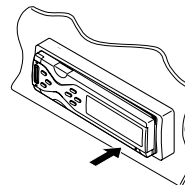


### Attaching the control panel

1



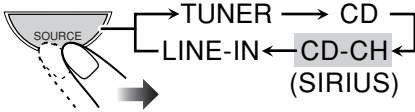
2



# Basic CD Changer Operations

With JVC MP3-compatible CD changer connected, you can play back your original CD-Rs and CD-RWs recorded either in audio CD format or in MP3 format.

## 1 Select CD changer



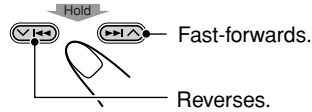
- If you have changed the “EXT Input” setting to “Sirius” (see page 37), you cannot select “CD-CH.”



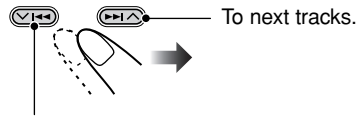
### To select a disc:

See “Locating a disc” on page 42.

### To fast-forward or reverse the track:



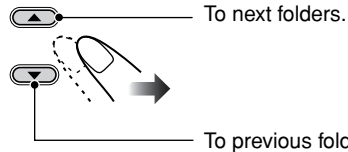
### To go to the next or previous tracks:



To the beginning of the current track, then the previous tracks.

### To go to the next or previous folders:

For MP3 discs only:

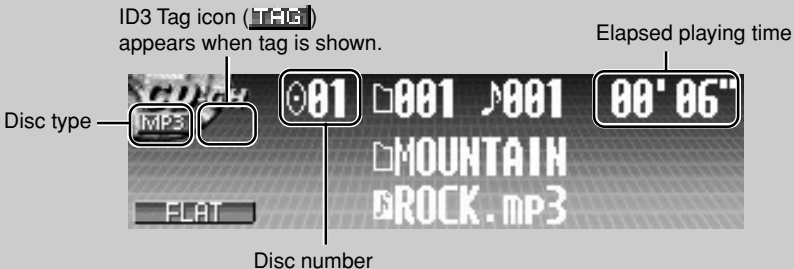


- For MP3 disc configuration, see “About MP3 and WMA discs” on page 19.

## What information is shown on the display

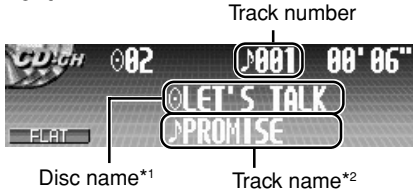
The following information are shown commonly for CD changer operations.

- If you press DISP on the control panel, the display will show the different information or different screens (see page 44).





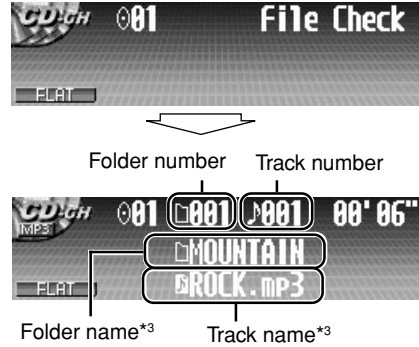
- Display indications when the current disc is an audio CD or a CD Text:





\*1 Appear for CD Texts and CDs if it has been assigned. ("No Name" appears if no name is recorded or assigned).

\*2 Appear only for CD Texts. ("No Name" appears if no name is recorded).

- Display indications when the current disc is an MP3 disc:



\*3 If "ID3 Tag" is set to "On" (see page 37), ID3 tag information will appear on the display. The album name/performer with  (disc) indicator appears on the display instead of the folder name; while track title with  (track) indicator appears instead of the track name. ("No Name" also appears if no tag is recorded).

### It is recommended to use the JVC MP3-compatible CD changer with your unit.

- You can also connect the CH-X series CD changers (except CH-X99 and CH-X100). However, they are not compatible with MP3 discs, so you cannot play back MP3 discs.
- You cannot use the KD-MK series CD changers with this unit.

### Before operating your CD changer:

- Refer also to the Instructions supplied with your CD changer.
- You cannot control and play any WMA disc in the CD changer.
- If no discs are in the magazine of the CD changer or the discs are inserted upside down, "No Disc" will appear. If this happens, remove the magazine and set the discs correctly.
- If no magazine is loaded in the CD changer, "No Magazine" appears. If this happens, insert the magazine in the CD changer.

# Advanced CD Changer Operations

## Locating a disc

To locate a disc by displaying the disc lists

- This function is only possible using the buttons on the control panel.

### 1 While playing a disc...



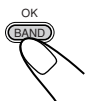
The current disc is highlighted.

- The display show the six disc number (or assigned names if any) including the currently playing disc (highlighted).
- You can also display the other disc list by pressing  $\lll / \ggg$  ( $\vee / \wedge$ ).

### 2 Select the disc you want to play.

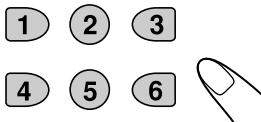


### 3 Start playing the disc.

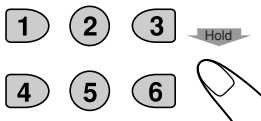


To locate a disc directly using the remote controller

- To select a disc number from 1 – 6:



- To select a disc number from 7 (1) – 12 (6):



## Locating a folder/track

- This function is only for MP3 discs.

To locate a folder by displaying the folder list of the current disc

- This function is only possible using the buttons on the control panel.

### 1 While playing a disc...



The current disc is highlighted.

### 2 Display the folder list of the current disc.



The current folder is highlighted.

### 3 Select the folder you want.



- If the disc includes more than 6 folders, you can also display the other lists of folders by pressing  $\lll / \ggg$  ( $\vee / \wedge$ ).

### 4 Start playing the folder from the first track.



## To locate a track by displaying the track list of the current folder

- This function is only possible using the buttons on the control panel.

### 1 While playing a disc...



The current disc is highlighted.

### 2 Display the folder list of the current disc.



The current folder is highlighted.

### 3 Display the track list of the current folder.



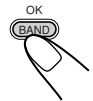
The current track is highlighted.

### 4 Select the track you want.



- If the folder includes more than 6 tracks, you can also display the other lists of tracks by pressing  $\leftarrow \ll \ll \ll \ll \ll \ll \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$  (V / ^).
- To go back to the folder list and disc list, press **BACK** once or twice.

### 5 Start playing the track.



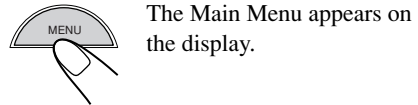
## Selecting playback modes—MODE

You can use only one of the following playback modes at a time.

- **Intro Scan:** You can play back the first 15 seconds of each track sequentially.
- **Repeat Play:** You can repeat playback.
- **Random Play:** You can play back tracks at random.

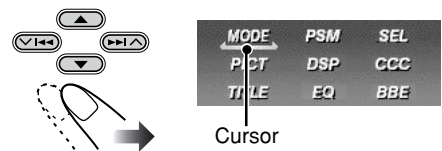
### To use the playback modes

#### 1 While playing a disc...



The Main Menu appears on the display.

#### 2 Move the cursor to “MODE” on the Main Menu.



#### 3 Enter the Disc MODE Menu.

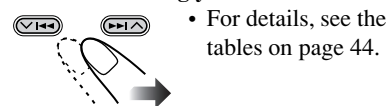


#### 4 Select one of the playback modes.



EX.: When “Random” (Random Play) is selected.

#### 5 Select the setting you want.



- For details, see the tables on page 44.

#### 6 Finish the setting.



• **Intro Scan modes**

- Mode** Plays the beginnings of
- 
- Track :** All tracks of the current disc.  
 • While playing, **[INT]** lights up.
- 
- Folder\*:** First tracks of all folders of the current disc.  
 • While playing, **[INT]** lights up.
- 
- Disc :** First tracks of all discs in the magazine.  
 • While playing, **[INT]** lights up.
- 
- Off :** Cancels Intro Play.

• **Repeat Play modes**

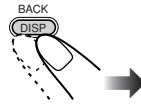
- Mode** Plays repeatedly
- 
- Track :** Current track.  
 • While playing, **[RPT]** lights up.
- 
- Folder\*:** All tracks of the current folder.  
 • While playing, **[RPT]** lights up.
- 
- Disc :** All tracks of the current disc.  
 • While playing, **[RPT]** lights up.
- 
- Off :** Cancels Repeat Play.

• **Random Play modes**

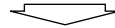
- Mode** Plays randomly
- 
- Folder\*:** All tracks of the current folder, then moves to the next folder and so on.  
 • While playing, **[RND]** lights up.
- 
- Disc :** All tracks on the current disc.  
 • While playing, **[RND]** lights up.
- 
- All :** All tracks of all discs in the magazine.  
 • While playing, **[RND]** lights up.
- 
- Off :** Cancels Random Play.

\* "Folder" can be selected for MP3 discs only.

**Changing the display pattern**



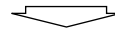
A window (see page 36) is displayed.



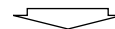
Clock time is displayed.



Semi-graphic screen\*



Full graphic screen\*  
 (Full graphic screen will be temporarily changed to the semi-graphic screen when you operate the unit.)



Goes back to the initial display pattern.

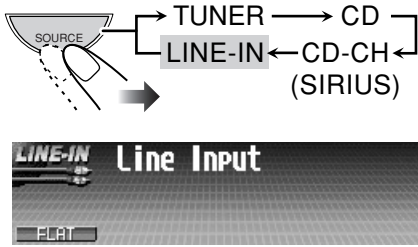
\* You can use your edited file for graphic screen (see pages 29 to 33).

# External Component Operations

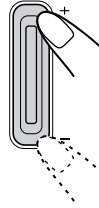
You can connect an external component to the LINE IN plugs on the rear.

- Refer to the Installation/Connection Manual (separate volume) for connection.

## 1 Select the source



## 2 Adjust the volume

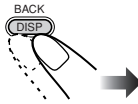


## 3 Select the DSP mode and sound mode as you want

- For details, see pages 23 to 28.

To use JVC SIRIUS Radio, refer to the SIRIUS Radio Setup Manual (separate volume).

## Changing the display pattern



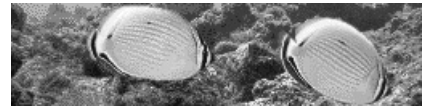
A window (see page 36) is displayed.



Clock time is displayed.



Semi-graphic screen\*



Full graphic screen\*

(Full graphic screen will be temporarily changed to the semi-graphic screen when you operate the unit.)

Goes back to the initial display pattern.

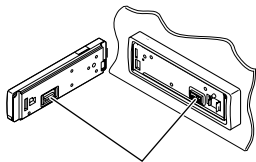
\* You can use your edited file for graphic screen (see pages 29 to 33).

# Maintenance

## How to clean the connectors

Frequent detachment will deteriorate the connectors.

To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connectors

## 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 disc and leave the unit turned on for a few hours until the moisture evaporates.

## How to handle discs

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



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

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

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

## To keep discs clean

A dirty disc may not play correctly.

If a disc does become dirty, wipe it with a soft cloth in a straight line from center to edge.

- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzene, etc.) to clean discs.



## To play new discs

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

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



Do not use the following discs:

Warped disc



Sticker



Sticker residue

Disc



Stick-on label

# More about This Receiver

## Basic Operations

### Turning off the power

- If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

## Tuner Operations

### Storing stations in memory

- When SSM is carried out for a band...
  - All stations including HD Radio stations are searched and stored for the selected band.
  - All stations previously stored for the band are erased and stations are stored newly.
  - Received stations are preset in No.1 (lowest frequency) to No.6 (highest frequency). When SSM is over, the station stored in No.1 will be automatically tuned in.
  - All Digital HD Radio stations (if started in the future) are not stored.
- When HD-Memory is carried out for a band, only HD Radio stations with sufficient signals are stored.
- When storing a station manually, 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.

## Basic Disc Operations

### General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in both audio and MP3/WMA formats.
- The unit cannot read or play an MP3 track without the extension code <mp3>, and a WMA track without the extension code <wma>.
- When a disc has been already loaded, selecting “CD” for the playback source starts disc play.

### Inserting a disc

- When a disc is inserted upside down, the disc automatically ejects.
- If you keep the control panel open for about 1 minute, the control panel returns to its previous position.

### Playing a disc

- While playing an audio CD: If a title has been assigned to the audio CD (see page 38), it will be shown on the display.
- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds. (The elapsed playing time also changes intermittently on the display.)

### About mistracking:

Mistracking may result from driving on extremely rough roads. This does not damage the unit and the disc, but will be annoying.

It is recommended to stop disc play while driving on such rough roads.

### When playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, and for the following causes:
  - Discs are dirty or scratched.
  - Moisture condensation on the lens inside the unit.
  - The pickup lens inside the unit is dirty.
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use following CD-Rs or CD-RWs:
  - Discs with stickers, labels, or protective seal stuck to the surface.
  - Discs on which labels can be directly printed by an ink jet printer.

Using these discs under high temperatures or high humidity may cause malfunctions or damage to discs. For example,

- Stickers or labels may shrink and warp a disc.
  - Stickers or labels may peel off so discs cannot be ejected.
  - Print on discs may get sticky.
- Read instructions or cautions about labels and printable discs carefully.

### Changing the source

- If you change the source, playback also stops (without ejecting the disc).  
Next time you select “CD” for the playback source, disc play starts from where it has been stopped previously.

### ImageLink

- ImageLink will not work in the following cases:
  - If no <jcl> file is included in an MP3/WMA folder.
  - If Intro Scan is activated.
  - If the source is changed to another from “CD.”
- If more than one <jcl> file are included in a folder, a file with the youngest file number is used for the graphic screen.

### Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to prevent it from dust. (Disc will not play this time.)

## **Sound Adjustment—Daily Use**

### Selecting the DSP modes—DSP

- Effectiveness of “V.Cancel” depends on the recording condition of the sources. Especially, if you play back the following sources you cannot get the satisfactory results.
  - Monaural sources such as AM and monaural FM broadcasting programs,
  - Multiplex sound sources, and
  - Sources recorded with duets, strong echo, a chorus, or only a few instruments.
- If “V.Cancel” is selected, CCC, BBE, and preset sound modes (EQ) will not be adjusted (“Fix” appears on the display.)
- When “4ch” is selected, rear speakers are used only to reproduce reflections and reverberations in order to create a being-there feeling in your car compartment.
- If fader or balance has been set close to its extreme, appropriate effect may not be obtained.



## Storing your own sound modes

- If you do not want to store your current adjustment, but only to apply the adjustment to the current playback source, press MENU to go back to the operation screen of the current source. Adjustment you made remains effective until you select a sound mode.

## Sound Adjustment—Preference Settings

- If you are using a two-speaker system, set the fader level to “00.”
- Subwoofer out setting takes effect only when a subwoofer is connected.
- You cannot adjust the input level—Volume Adjustment—of the FM stations. If the source is FM, “VolAdjust” will not be adjusted (“Fix” appears).

## Graphic Displays

### Downloading (or deleting) files

- You can download a file only while selecting “CD” for the playback source; on the other hand, you can delete a file while selecting any source.
- If you have already downloaded an animation, downloading a new animation deletes the previously stored animation.
- It takes a long time to download an animation.
  - About 10 seconds for a still image (one frame).
  - About 1 minute for an animation of 55 frames.
- If a disc inserted does not include any <jcl> and <jca> files, beeps sound when you try to operate the downloading procedure.
- If you try to store a 19th image for picture screen, “Picture Full” appears and you cannot start downloading. Delete unwanted files before downloading.

## General Settings—PSM

- To set the “PICT” setting as you like, download the required files before setting. If “Default” (for “Picture” and “Movie”) and “No Slide” (for “Slideshow”) cannot be changed to other options, required files have not been downloaded.
- “Auto Dimmer” may not work correctly on some vehicles, particularly on those having a control dial for dimming. In this case, change the “Dimmer” setting to any one other than “Auto.”
- If you change the “Amp Gain” setting from “HighPower” to “Low Power” while the volume level is set higher than “30,” the unit automatically changes the volume level to “30.”

## Other Main Functions

### Assigning titles to the sources

- When you try to assign a title to a 41st disc or to a 31st station frequency, “Name Full” appears and you cannot enter the text entry mode. Delete unwanted titles before assignment.
- When the CD changer is connected, you can assign titles to CDs in the CD changer. These titles can also be shown on the display if you insert the CDs in this unit.

# Additional Information

## Preset EQ mode

The table below shows the preset frequency level settings for each EQ mode.

Sound Mode	Preset equalizing values						
	60 Hz	150 Hz	400 Hz	1 kHz	2.4 kHz	6 kHz	12 kHz
Flat	00	00	00	00	00	00	00
Hard Rock	+03	+03	+01	00	00	+02	+01
R & B	+03	+02	+02	00	+01	+01	+03
Pop	00	+02	00	00	+01	+01	+02
Jazz	+03	+02	+01	+01	+01	+03	+02
Dance	+04	+02	00	-02	-01	+01	+01
Country	+02	+01	00	00	00	+01	+02
Reggae	+03	00	00	+01	+02	+02	+03
Classic	+02	+03	+01	00	00	+02	00
User 1	00	00	00	00	00	00	00
User 2	00	00	00	00	00	00	00
User 3	00	00	00	00	00	00	00

## Characters shown on the display

In addition to the Roman alphabets (A – Z, a – z), the following characters will be used to show the various information on the display.

- You can also use the following characters to assign titles (see page 38).

### Accented letters

#### Upper case

Á	À	Â	Ä	Å
Ä	Æ	Œ	Č	Ć
Ç	É	È	Ê	Ë
Ĝ	Í	Ì	Î	Ï
Ñ	Ó	Ô	Õ	Ö
Õ	Ø	Ř	Ŕ	Š
Š	Ş	Ú	Û	Ü
Ü	Ý	Ž	Ž	ß
P	Ŋ	Đ	Ʀ	Ł
İ	ı	ø	space	

#### Lower case

á	à	â	ä	å
â	æ	œ	č	ć
ç	é	è	ê	ë
ě	ĝ	í	ì	ï
ï	ñ	ň	ń	ó
ò	ô	õ	õ	ø
ó	ř	ŕ	š	ś
ş	ú	û	ü	ü
ü	w	y	ÿ	ž
ž	ÿ	þ	ŋ	đ
ı	ı	ı	ij	space

### Numbers and symbols

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

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

## General

- **Main menu screen or other screens suddenly go off.**
  - ⇒ There is a time limit for some operations. In this case, if no operation is done for a certain period, the current source operation screen resumes.
- **Sound is sometimes interrupted.**
  - ⇒ You are driving on rough roads. Stop playback while driving on rough roads.
  - ⇒ Disc is scratched.
- **Sound cannot be heard from the speakers.**
  - ⇒ Connections are incorrect.
- **“Connect Error” appears on the display.**
  - ⇒ The control panel is not attached correctly. Remove the control panel, wipe the connector (see page 46), then attach it again.
- **“Reset P00” — “Reset P44” appears on the display.**
  - ⇒ Something is blocking the control panel movement. Press the reset button (see page 2). If it does not work, check the installation (ex. whether screws longer than specified are used or not).

## FM/AM broadcast

- **SSM or HD-Memory presetting does not work.**
  - ⇒ Signals are too weak. Store stations manually.
- **Static noise is generated while listening to the radio.**
  - ⇒ The antenna is not connected firmly.

- **Sound quality changes when receiving an HD Radio station.**

⇒ Fix the reception status by selecting “Digital” or “Analog” (see page 13).

- **No sound comes out while listening to the radio.**

⇒ “Analog” is selected when receiving All Digital broadcast of HD Radio station. Select “Digital” or “Auto” to solve this inconvenience (see page 13).

⇒ “Digital” is selected when receiving weak digital signals or receiving conventional radio broadcast. Select “Analog” or “Auto” to solve this inconvenience.

## Disc playback—CD/CD-R/CD-RW

- **Sounds are skipped or playback stops suddenly.**

⇒ Disc is warped or sticker on the disc comes off. Do not play such a disc.

- **Disc cannot be played back.**

⇒ Disc is inserted upside down.

- **Disc cannot be recognized (“No Disc,” “Loading Error,” or “Eject Error” flashes).**

⇒ The CD player may function incorrectly. Press **⏏/||/ATT** and **▲** at the same time for more than 2 seconds to display the following screen. Press **▼** to select “Emergency Eject?” then press OK.



No Eject?  
Emergency Eject?

- **Tracks on the CD-R/CD-RW cannot be skipped.**

⇒ CD-R/CD-RW is not finalized.

- **Disc cannot be ejected.**

⇒ Disc is locked. Unlock the disc (see page 22).

## Disc playback—MP3/WMA

- **Disc cannot be played back.**
  - ⇒ MP3/WMA tracks do not have the extension code—<mp3> or <wma> in their file names.
  - ⇒ MP3/WMA tracks are not recorded in the format compliant with ISO 9660 Level 1, ISO 9660 Level 2, Romeo, or Joliet.
- **Noise is generated.**
  - ⇒ The current track is not an MP3/WMA file (although it has the extension code—<mp3> or <wma>).
- **Elapsed playing time is not correct.**
  - ⇒ This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.
- **“Not Support” appears and tracks skip.**
  - ⇒ Tracks are not encoded in an appropriate format.
  - ⇒ Copy-protected WMA tracks cannot be played back.
- **“No Files” appears for a while, then the disc ejects.**
  - ⇒ The current MP3/WMA disc does not contain any MP3/WMA tracks.
- **“No Music” appears.**
  - ⇒ No MP3/WMA tracks are included in the folder. Skip the folder.
  - ⇒ Only <jcl> and/or <jca> files are recorded on the disc.
- **Correct characters are not displayed (ex. album name).**
  - ⇒ This unit can only display a limited number of special characters (see the tables on page 50).

## Sound adjustments

- **CCC, BBE, and preset sound modes (EQ) cannot be used.**
  - ⇒ These sound adjustments cannot be adjusted when “V.Cancel” is selected for the DSP mode.

## Graphics

- **Download does not seem to finish.**
  - ⇒ If you are trying to download an animation of many frames, it takes a quite long time (see page 49).
- **Animation does not move.**
  - ⇒ Temperature in the car compartment is very low. Wait until the operating temperature resumes.

## Preferred Setting Modes—PSM

- **You cannot select an image for “Picture” and an animation for “Movie.”**
  - ⇒ You can select an image only after downloading the appropriate files in memory.

## External component operations

- **The external component you want is not selected for the playback source.**
  - ⇒ Select the appropriate source for the “EXT Input” setting.

## CD changer operations

- **“No Magazine” flashes.**
  - ⇒ Magazine is not loaded in the CD changer.
- **“No Disc” flashes.**
  - ⇒ No discs are in the magazine or the discs are inserted upside down.
- **“Reset 01” — “Reset 07” flashes.**
  - ⇒ The built-in microcomputer in the CD changer is malfunctioning. Press the reset button of the CD changer.
- **“Reset 08” flashes.**
  - ⇒ 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.

# Specifications

## AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel

Rear: 50 W per channel

Continuous Power Output (RMS):

Front: 19 W per channel into 4  $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Rear: 19 W per channel into 4  $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

Load Impedance: 4  $\Omega$  (4  $\Omega$  to 8  $\Omega$  allowance)

Equalizer Control Range:

Frequencies: 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 12 kHz

Level:  $\pm 10$  dB

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-In Level/Impedance :

LINE IN: 1.5 V/20 k $\Omega$  load

Line-Out Level/Impedance:

LINE OUT: 5.0 V/20 k $\Omega$  load (full scale)

Output Impedance: 1 k $\Omega$

Other Terminals:

SUBWOOFER OUT

Changer control

## TUNER SECTION

HD Radio system compatible

Frequency Range:

FM: 87.5 MHz to 107.9 MHz

AM: 530 kHz to 1 710 kHz

## [FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0  $\mu$ V/75  $\Omega$ )

50 dB Quieting Sensitivity: 16.3 dBf (1.8  $\mu$ V/75  $\Omega$ )

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response:

HD Radio broadcast: 30 Hz to 15 000 Hz

Conventional broadcast: 40 Hz to 15 000 Hz

Stereo Separation:

HD Radio broadcast: 85 dB

Conventional broadcast: 35 dB

Capture Ratio: 1.5 dB

## [AM Tuner]

Sensitivity: 20  $\mu$ V

Selectivity: 65 dB

Frequency Response: 30 Hz to 15 000 Hz

(HD Radio broadcast)

Stereo Separation: 85 dB (HD Radio broadcast)

## 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: 98 dB

Signal-to-Noise Ratio: 102 dB

Wow and Flutter: Less than measurable limit

MP3 (MPEG Audio Layer 3)

Max. Bit rate: 320 Kbps

WMA (Windows Media<sup>®</sup> Audio)

Max. Bit rate: 192 Kbps

## 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  $\times$  H  $\times$  D):

Installation Size:

182 mm  $\times$  52 mm  $\times$  157 mm

(7-3/16"  $\times$  2-1/16"  $\times$  6-3/16")

Panel Size: 188 mm  $\times$  58 mm  $\times$  13 mm

(7-7/16"  $\times$  2-5/16"  $\times$  9/16")

Mass: 1.7 kg (3.8 lbs) (excluding accessories)

Design and specifications are subject to change without notice.

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

- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.



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**Having TROUBLE with operation?  
Please reset your unit**

**Refer to page of How to Reset  
Still having trouble??**

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**We can help you!**

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0604MNMDWJEIN

# JVC KD-SHX900/KD-SHX700 KD-AR7000

## Installation/Connection Manual Manual de instalación/conexión Manuel d'installation/raccordement

LVT1158-002B  
[J]

0604MNMMDWJEIN  
EN, SP, FR

### ENGLISH

### ESPAÑOL

### FRANÇAIS

This unit is designed to operate on **12 V 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.

Esta unidad está diseñada para funcionar con **12 V 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.

Cet appareil est conçu pour fonctionner sur des sources de courant continu de **12 V 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.

#### Parts list for installation and connection

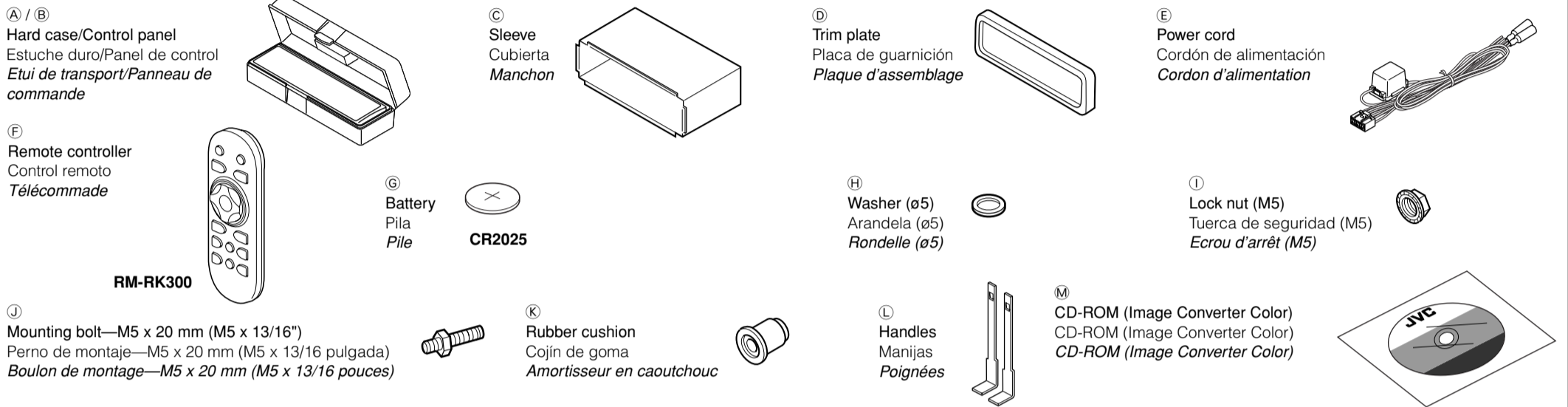
The following parts are provided with this unit.  
After checking them, please set them correctly.

#### 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.



## INSTALLATION (IN-DASH MOUNTING)

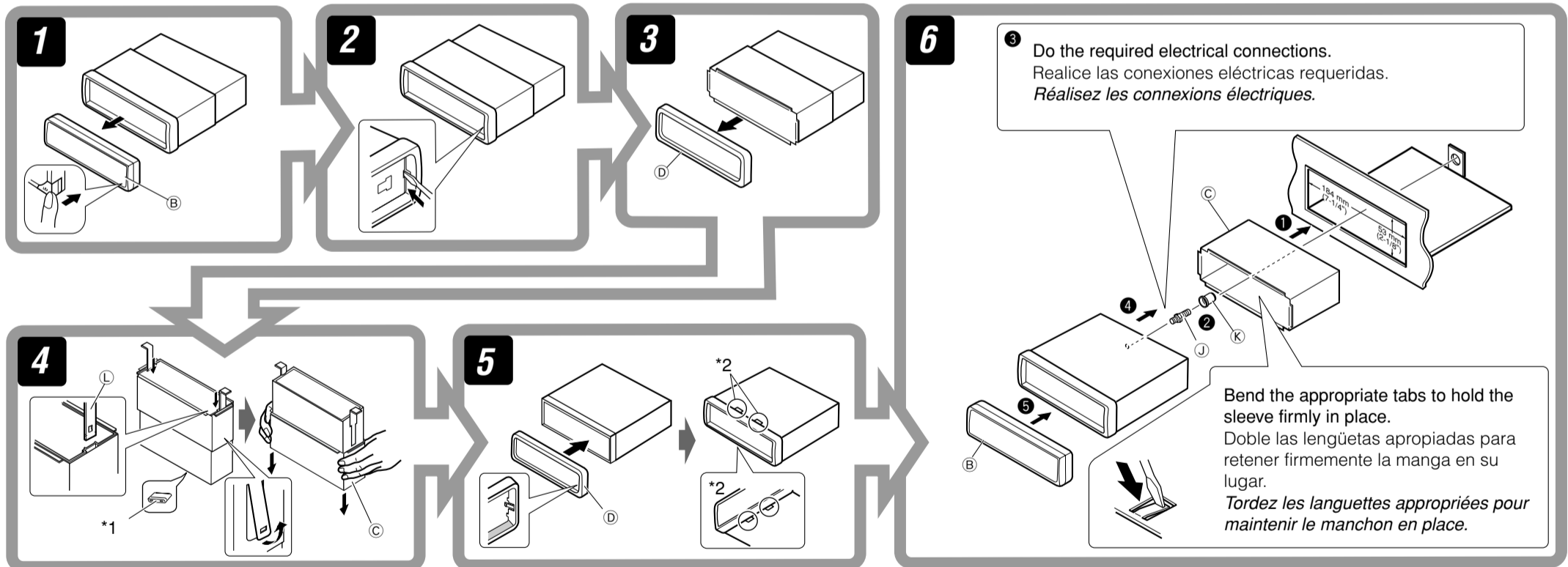
The following illustration shows a typical installation. If you have any questions or require information regarding installation kits, consult your JVC car audio dealer or a company supplying kits.  
• If you are not sure how to install this unit correctly, have it installed by a qualified technician.

## INSTALACION (MONTAJE EN EL TABLERO DE INSTRUMENTOS)

La siguiente ilustración muestra una instalación típica. 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.  
• Si usted no está seguro de cómo instalar correctamente la unidad, hágala instalar por un técnico cualificado.

## INSTALLATION (MONTAGE DANS LE TABLEAU DE BORD)

L'illustration suivante est un exemple d'installation typique. Si vous avez des questions ou avez besoin d'information sur des kits d'installation, consulter votre revendeur d'autoradios JVC ou une compagnie d'approvisionnement.  
• Si l'on n'est pas sûr de pouvoir installer correctement cet appareil, le faire installer par un technicien qualifié.



\*1 When you stand the unit, be careful not to damage the fuse on the rear.  
\*1 Al poner la unidad vertical, tenga cuidado de no dañar el fusible provisto en la parte posterior.  
\*1 Lorsque vous mettez l'appareil à la verticale, faire attention de ne pas endommager le fusible situé sur l'arrière.

\*2 Fit the protrusions outside the unit.  
\*2 Haga encajar los salientes del exterior de la unidad.  
\*2 Fixez les protubérances à l'extérieur de l'appareil.

## Removing the unit

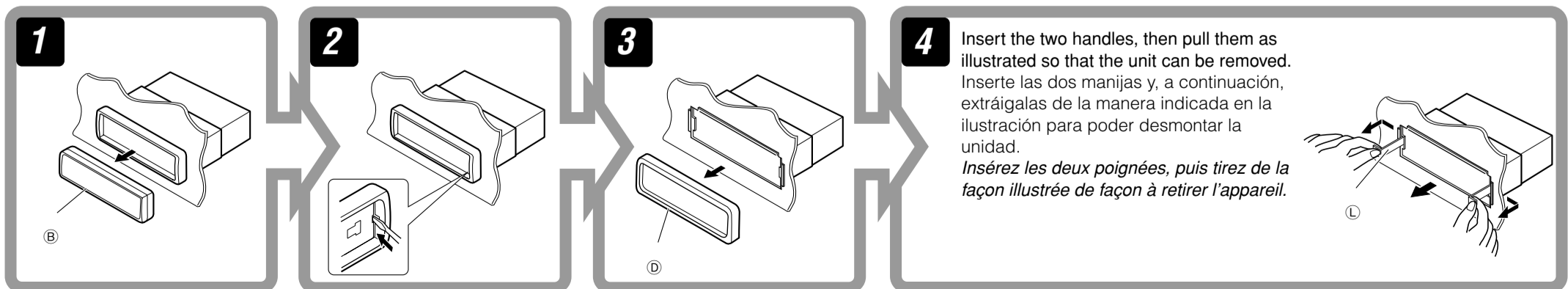
Before removing the unit, release the rear section.

## Extracción de la unidad

Antes de extraer la unidad, libere la sección trasera.

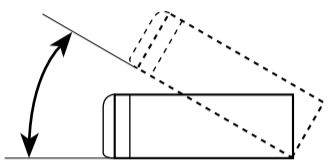
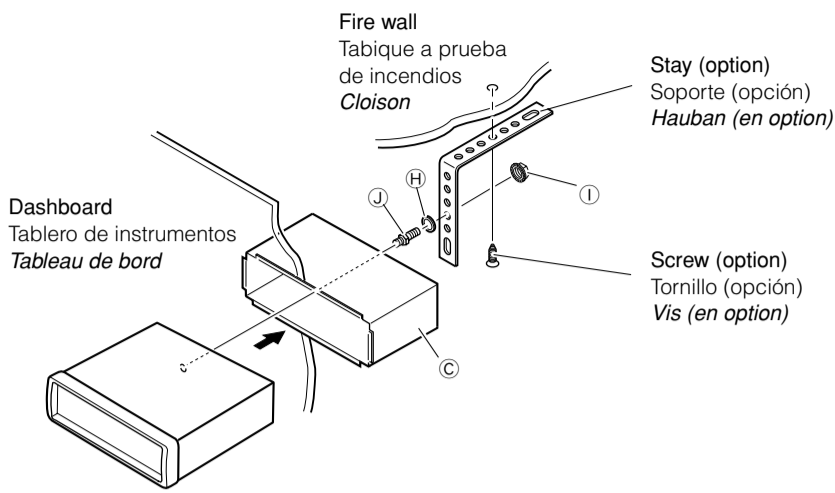
## Retrait de l'appareil

Avant de retirer l'appareil, libérer la section arrière.





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



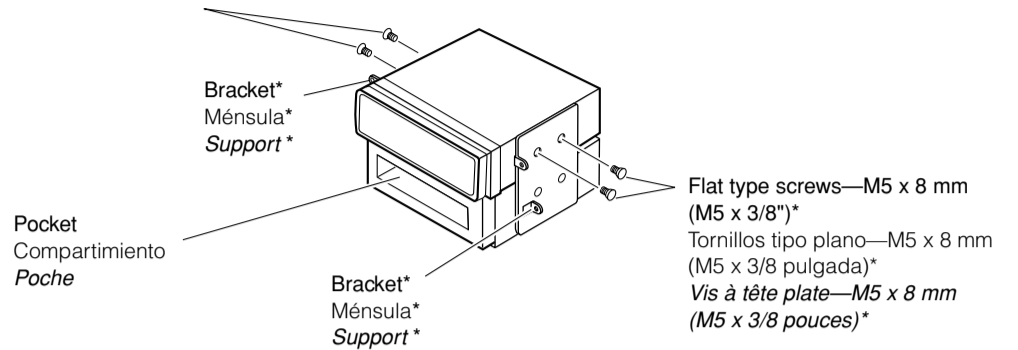
Install the unit at an angle of less than 30°. Instale la unidad a un ángulo de menos de 30°. Installez l'appareil avec un angle de moins de 30°.

**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 retire 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 8 mm (M5 x 3/8")\*  
Tornillos tipo plano—M5 x 8 mm (M5 x 3/8 pulgada)\*  
Vis à tête plate—M5 x 8 mm (M5 x 3/8 pouces)\*

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



- Note** : When installing the unit on the mounting bracket, make sure to use the 8 mm (3/8") -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 8 mm (3/8 pulgada) 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 8 mm (3/8 pouces). Si des vis plus longues sont utilisées, elles peuvent endommager l'appareil.

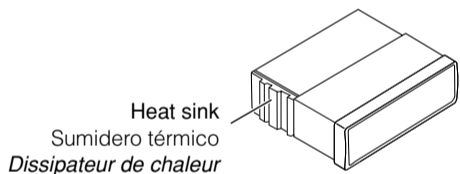
**ELECTRICAL CONNECTIONS**

To prevent short circuits, we recommend that you disconnect the battery's negative terminal and make all electrical connections before installing the unit.

- Be sure to ground this unit to the car's chassis again after installation.

**Notes:**

- Replace the fuse with one of the specified rating. If the fuse blows frequently, consult your JVC car audio dealer.
- It is recommended to connect to the speakers with maximum power of more than 50 W (both at the rear and at the front, with an impedance of 4 Ω to 8 Ω). If the maximum power is less than 50 W, change "Amp Gain" setting to prevent the speakers from being damaged (refer to the INSTRUCTIONS).
- To prevent short-circuit, cover the terminals of the UNUSED leads with insulating tape.
- The heat sink becomes very hot after use. Be careful not to touch it when removing this unit.



**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.

- Asegúrese de volver a conectar a masa esta unidad al chasis del automóvil después de la instalación.

**Notas:**

- 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.
- Se recomienda conectar los altavoces con una potencia máxima de más de 50 W (tanto atrás como adelante, con una impedancia de 4 Ω a 8 Ω). Si la potencia máxima es de menos de 50 W, cambie "Amp Gain" para evitar daños en los altavoces (refiérase al MANUAL DE INSTRUCCIONES).
- Para evitar cortocircuitos, cubra los cables NO UTILIZADOS con cinta aislante.
- El sumidero térmico estará muy caliente después del uso. Asegúrese de no tocarlo al desmontar esta unidad.

**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.

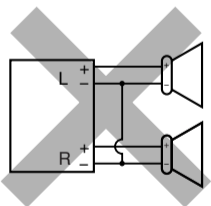
- Assurez-vous de raccorder de nouveau la mise à la masse de cet appareil au châssis de la voiture après l'installation.

**Remarques:**

- Remplacer le fusible par un de la valeur précisée. Si le fusible saute souvent, consulter votre revendeur d'autoradios JVC.
- Il est recommandé de connecter des enceintes avec une puissance de plus de 50 W (les enceintes arrière et les enceintes avant, avec une impédance comprise entre 4 Ω et 8 Ω). Si la puissance maximum est inférieure à 50 W, changez "Amp Gain" pour éviter d'endommager vos enceintes (référez-vous au MANUEL D'INSTRUCTIONS).
- Pour éviter les court-circuits, couvrir les bornes des fils qui ne sont PAS UTILISÉS avec de la bande isolante.
- Le dissipateur de chaleur devient très chaud après usage. Faire attention de ne pas le toucher en retirant cet appareil.

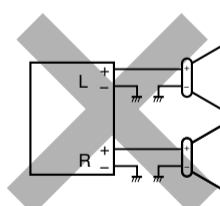
**PRECAUTIONS on power supply and speaker connections:**

- DO NOT connect the speaker leads of the power cord to the car battery; otherwise, the unit will be seriously damaged.
- BEFORE connecting the speaker leads of the power cord to the speakers, check the speaker wiring in your car.



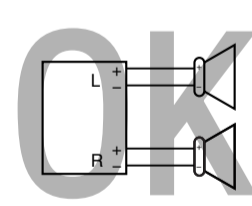
**PRECAUCIONES sobre las conexiones de la fuente de alimentación y de los altavoces:**

- NO conecte los conductores de altavoz del cable de alimentación a la batería de automóvil, pues podrían producirse graves daños en la unidad.
- ANTES de conectar a los altavoces los conductores de altavoz del cable de alimentación, verifique el conexionado de altavoz de su automóvil.



**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.
- AVANT de connecter les fils d'enceintes du cordon d'alimentation aux enceintes, vérifiez le câblage des enceintes de votre voiture.



**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?
- **Noise interfere with sounds.**
  - \* Is the rear ground terminal connected to the car's chassis using shorter and thicker cords?
- **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?
- **Perturbación de ruido.**
  - \* ¿El terminal de tierra trasero está conectado al chasis del automóvil utilizando los cordones más corto y más grueso?
- **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 DIFFICULTES**

- **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 enceintes.**
  - \* Le fil de sortie d'enceinte est-il court-circuité?
- **Le son est déformé.**
  - \* Le fil de sortie d'enceinte est-il à la masse?
  - \* Les bornes "-" des enceintes gauche et droit sont-elles mises ensemble à la masse?
- **Interférence avec les sons.**
  - \* La prise arrière de mise à la terre est-elle connectée au châssis de la voiture avec un cordon court et épais?
- **L'appareil devient chaud.**
  - \* Le fil de sortie d'enceinte est-il à la masse?
  - \* Les bornes "-" des enceintes gauche et droit sont-elles mises ensemble à la masse?



**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. The leads of the power cord and those of the connector from the car body may be different in color.

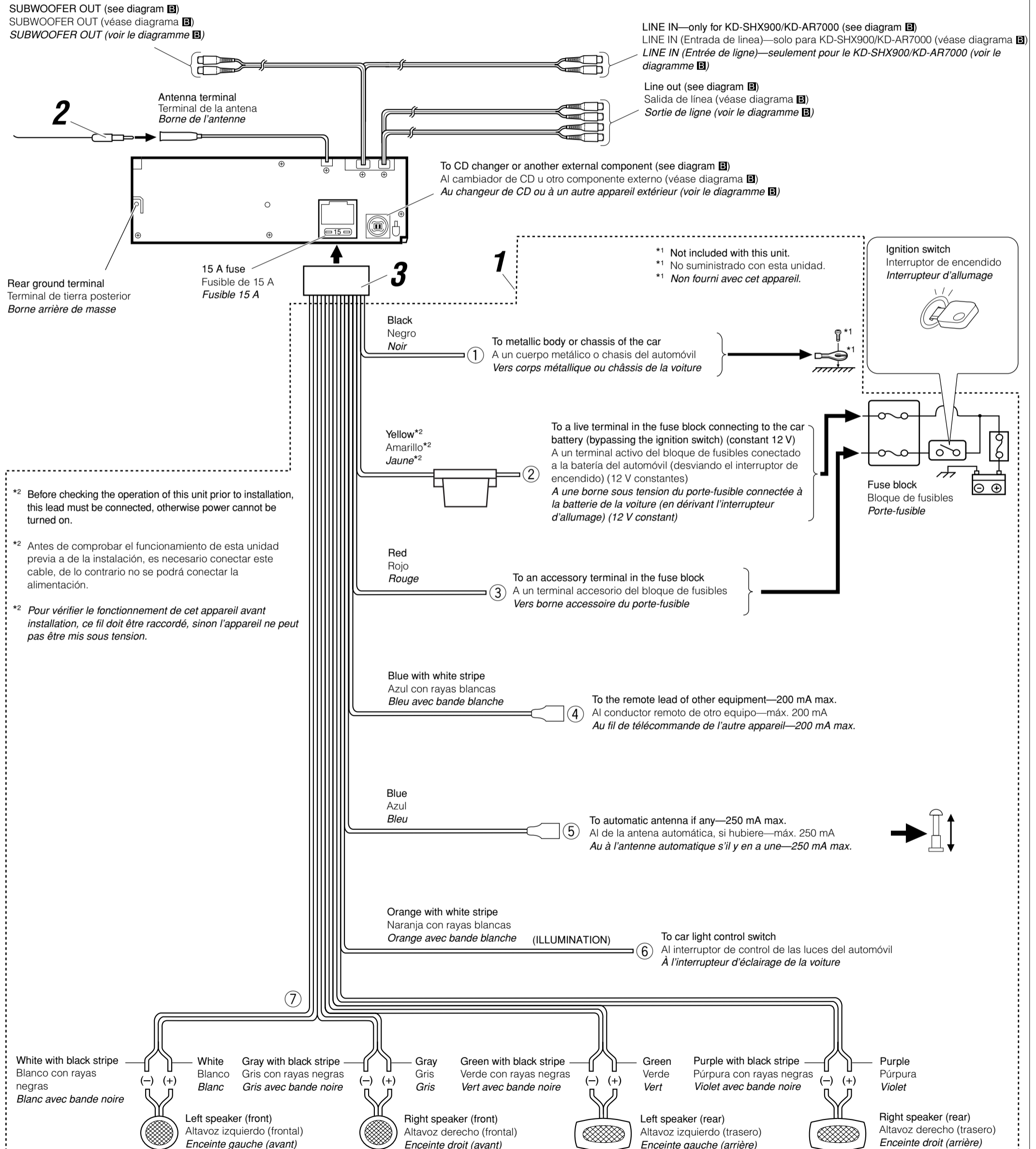
- 1 Connect the colored leads of the power cord in the order specified in the illustration below.
- 2 Connect the antenna cord.
- 3 Finally connect the wiring harness to the unit.

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

- Los cordones del cable de alimentación y los del conector procedentes de la carrocería del automóvil podrían ser de diferentes en color.
- 1 Conecte los conductores de color del cable de alimentación en el orden especificado en la ilustración de abajo.
  - 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.

- Le fil du cordon d'alimentation et ceux des connecteurs du châssis de la voiture peuvent être différents en couleur.
- 1 Connectez les fils colorés du cordon d'alimentation dans l'ordre spécifié sur l'illustration ci-dessous.
  - 2 Connectez le cordon d'antenne.
  - 3 Finalement, connectez le faisceau de fils à l'appareil.



**Amplifier / Amplificador / Amplificateur**

You can connect an amplifier and other equipment to upgrade your car stereo system.

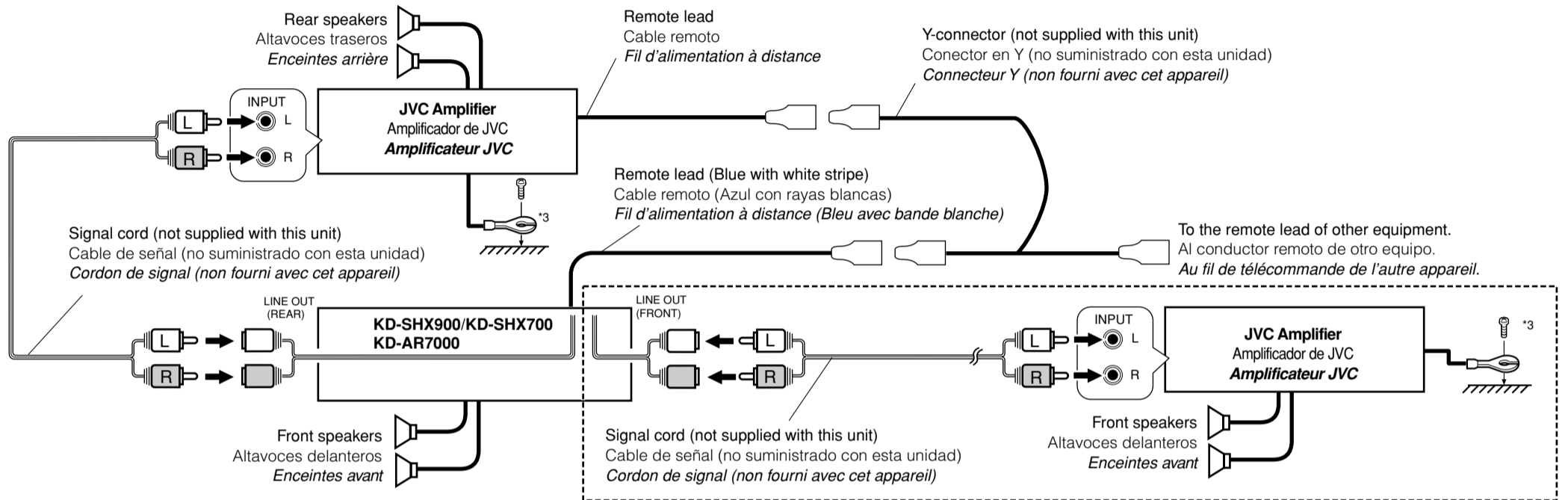
- Connect the remote lead (blue with white stripe) to the remote lead of the other equipment so that it can be controlled through this unit.
  - **For amplifier only:**
    - **Disconnect the speakers from this unit, connect them to the amplifier. Leave the speaker leads of this unit unused.**
    - You can switch off the built-in amplifier and send the audio signals only to the external amplifier(s) to get clear sounds and to prevent internal heat built-up inside the unit. Refer to the INSTRUCTIONS (separate volume).
    - 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.

Usted podrá conectar un amplificador y otros equipos para mejorar el sistema estéreo de su automóvil.

- Conecte el conductor remoto (azul con rayas blancas) al conductor remoto del otro equipo para poderlo controlar a través de esta unidad.
  - **Sólo para el amplificador:**
    - **Desconecte los altavoces de esta unidad y conéctelos al amplificador. Los cables de los altavoces de esta unidad quedan sin usar.**
    - Podrá desconectar el amplificador incorporado y enviar las señales de audio solamente al(los) amplificador(es) externo(s) para obtener sonidos nítidos y evitar que se caliente el interior de la unidad. Refiérase al MANUAL DE INSTRUCCIONES (volumen separado).
    - El nivel de salida de línea de esta unidad permanece alto para que corresponda con los sonidos de alta fidelidad reproducidos por esta unidad.
- Cuando conecte un amplificador externo a esta unidad, disminuya el control de ganancia del amplificador externo para obtener un óptimo rendimiento de esta unidad.

Vous pouvez connecter un amplificateur ou autre appareil pour améliorer votre système autoradio.

- 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:**
    - **Déconnectez les enceintes de cet appareil et connectez-les à l'amplificateur. Laissez les fils d'enceintes de cet appareil inutilisés.**
    - Vous pouvez désactiver l'amplificateur intégré et envoyer les signaux audio uniquement à un ou plusieurs amplificateurs extérieurs afin d'obtenir un son clair et pour éviter un échauffement interne de l'appareil. Référez-vous au MANUEL D'INSTRUCTIONS (volume séparé).
    - 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.



\*3 Firmly attach the ground wire to the metallic body or to the chasis of the car—to the place not coated with paint (if coated with paint, remove the paint before attaching the wire). Failure to do so may cause damage to the unit.

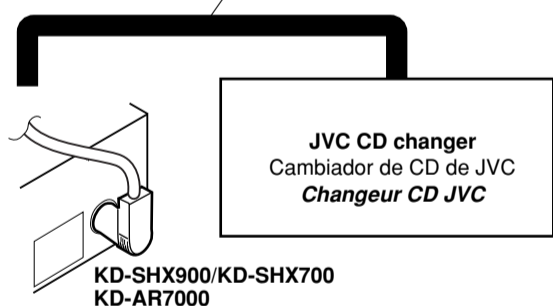
\*3 Fije firmemente el cable de tierra a la carrocería metálica o al chasis—a un lugar no cubierto con pintura (si está cubierto con pintura, quítela antes de fijar el cable). De lo contrario, se podrían producir daños en la unidad.

\*3 Attachez solidement le fil de mise à la masse au châssis métallique de la voiture—à un endroit qui n'est pas recouvert de peinture (s'il est recouvert de peinture, enlevez d'abord la peinture avant d'attacher le fil). L'appareil peut être endommagé si cela n'est pas fait correctement.

**CD Changer / Cambiador de CD / Changeur CD**

Refer also to the INSTRUCTIONS. Refiérase también al MANUAL DE INSTRUCCIONES. Référez-vous aussi au MANUEL D'INSTRUCTIONS.

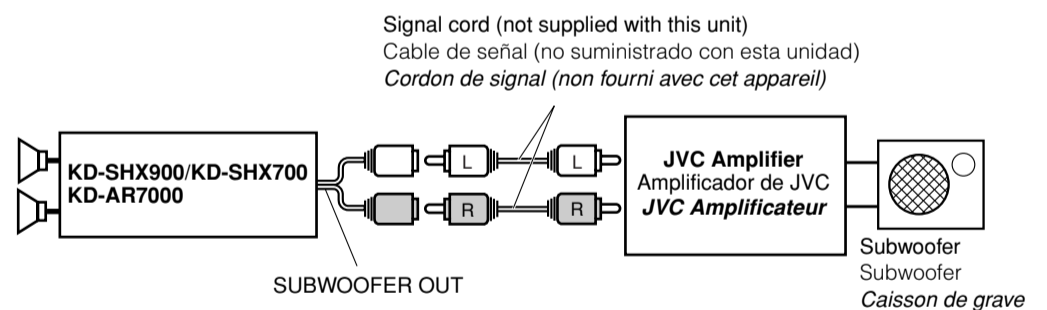
Connecting cord supplied for your CD changer  
Cable de conexión suministrado con su cambiador de CD  
Cordon de connexion fourni avec votre changeur CD



- CAUTION / PRECAUCION / PRECAUTION**
- Before connecting the CD changer, make sure that the unit is turned off.
  - Antes de conectar el cambiador de CD, asegúrese de que la unidad esté apagada.
  - Avant de connecter le changeur CD, s'assurer que l'unité est éteinte.

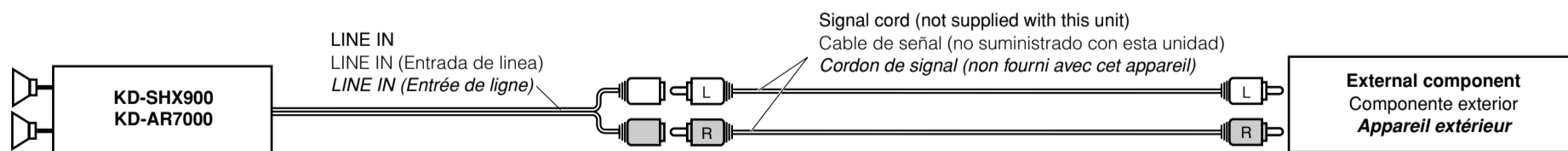
**Subwoofer / Subwoofer / Caisson de grave**

You can connect a subwoofer through an amplifier to reinforce the bass. For their connections, refer to the instructions supplied with your subwoofer. Usted podrá conectar un subwoofer a través de un amplificador para reforzar los graves. Con respecto a sus conexiones, refiérase a las instrucciones suministradas con sus subwoofer. Vous pouvez connecter un caisson de grave par un amplificateur pour renforcer les graves. Pour la connexion, référez-vous aux instructions fournies avec le caisson de grave.

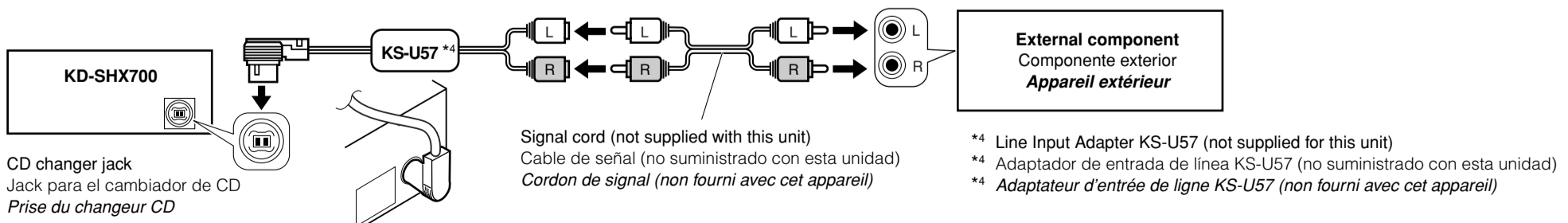


**External Component / Componente exterior / Appareil extérieur**

Only for KD-SHX900/KD-AR7000 / Solo para KD-SHX900/KD-AR7000 / Seulement pour le KD-SHX900/KD-AR7000



Only for KD-SHX700 / Solo para KD-SHX700 / Seulement pour le KD-SHX700



For connecting the JVC SIRIUS Radio, refer to the SIRIUS Radio Setup Manual (separate volume). Para la conexión de la radio JVC SIRIUS, consulte el Manual de configuración de la radio SIRIUS (volumen separado). Pour brancher la radio JVC SIRIUS, référez-vous au Manuel d'installation de la radio SIRIUS (volume séparé).