

# JVC



ENGLISH

CD RECEIVER

KD-S785

中  
文

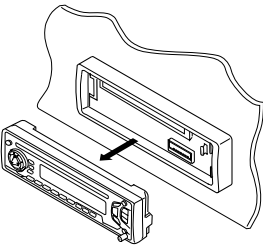
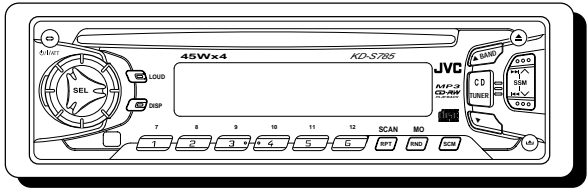
CD 收音組合機

KD-S785

ไทย

ถอดใส่ซึก

KD-S785



**MP3**  
**CD-RW**  
PLAYBACK

COMPACT  
**disc**  
DIGITAL AUDIO  
TEXT

For installation and connections, refer to the separate manual.

有關安裝和連接方法，分別參閱操作手冊。

กรุณาดูคู่มือที่แยกต่างหาก ในการติดตั้งและการเชื่อมต่อ

# INSTRUCTIONS

## 使用說明書

### คำแนะนำ


GET0060-001A  
[U]

## IMPORTANT FOR LASER PRODUCTS

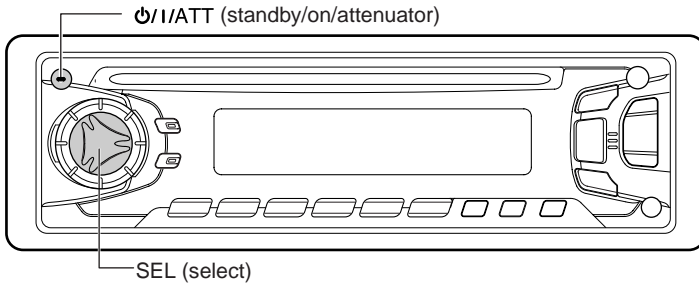
### Precautions:

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

### How to reset your unit

Press and hold both the SEL (select) and  I/ATT (standby/on/attenuator) buttons at the same time for several seconds.

This will reset the built-in microcomputer.



### Notes:

- Your preset adjustments – such as preset channels or sound adjustments – will also be erased.
- If a CD is in the unit, it will eject when you reset the unit. Be careful not to drop the CD.

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.

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## BEFORE USE

### \*For safety....

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

### \*Temperature inside the car....

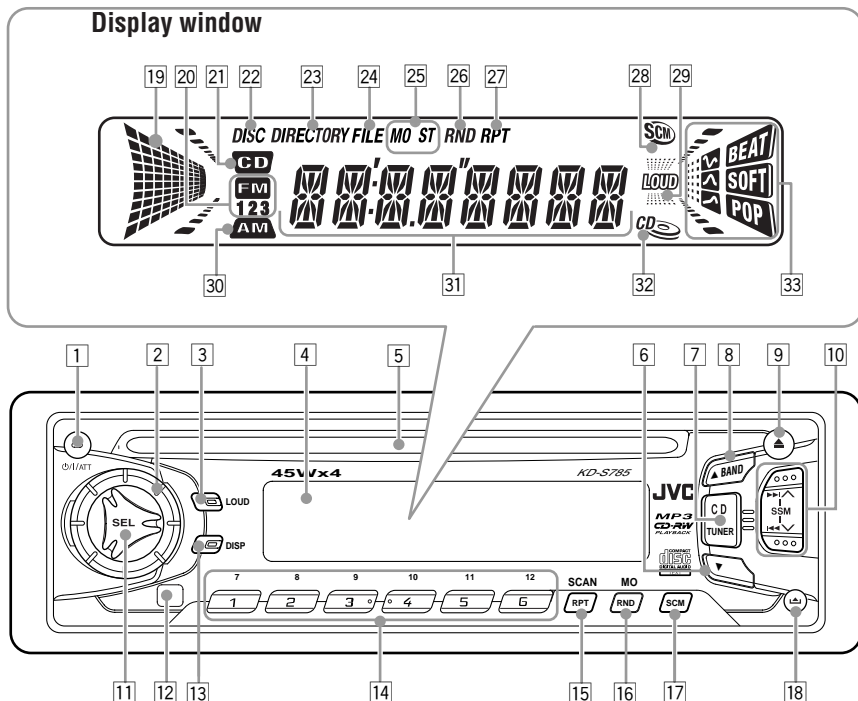
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.



# LOCATION OF THE BUTTONS

## Control panel

ENGLISH



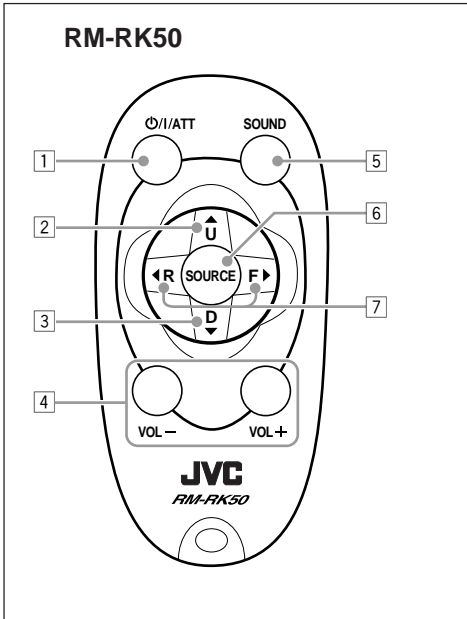
- 1  $\text{O}/\text{I}/\text{ATT}$  (standby/on/attenuator) button
- 2 Control dial
- 3 LOUD button
- 4 Display window
- 5 Loading slot
- 6  $\blacktriangledown$  (down) button
- 7 CD TUNER button
- 8  $\blacktriangle$  (up) BAND button
- 9  $\blacktriangle$  (eject) button
- 10  $\blacktriangleright \blacktriangleleft$  /  $\blacktriangleleft \blacktriangleright$  buttons
  - Also functions as SSM buttons when pressed together.
- 11 SEL (select) button
- 12 Remote sensor
- 13 DISP (display) button
- 14 Number buttons
- 15 SCAN
  - RPT (repeat) button
- 16 MO (monaural)
  - RND (random) button
- 17 SCM (sound control memory) button
- 18  $\blacktriangle$  (control panel release) button

## Display window

- 19 Volume (or audio) level indicator
  - Equalization pattern indicator
- 20 FM band indicator (FM1, FM2, FM3)
- 21 CD source indicator
- 22 DISC indicator
- 23 DIRECTORY indicator
- 24 FILE indicator
- 25 Tuner reception indicators
  - MO (monaural), ST (stereo) indicator
- 26 RND (random) indicator
- 27 RPT (repeat) indicator
- 28 SCM (sound control memory) indicator
- 29 LOUD (loudness) indicator
- 30 AM indicator
- 31 Main display
- 32 CD-in indicator
- 33 Sound mode indicators
  - BEAT, SOFT, POP



## Remote controller



- 1 • Turns on the unit if pressed when the unit is turned off.
  - Turns off the unit if pressed and held until “SEE YOU” appears on the display.
  - Drops the volume level in a moment if pressed briefly.  
Press again to resume the volume.
- 2 • Selects the band while listening to the radio. Each time you press the button, the band changes.
  - Skips to the first file of the next directory while listening to an MP3 disc.  
Each time you press the button, you can move to the next directory and start playing the first file.

- 3 • Selects the preset stations while listening to the radio.  
Each time you press the button, the preset station number increases, and the selected station is tuned in.
  - Skips to the first file of the previous directory while listening to an MP3 disc. Each time you press the button, you can move to the previous directory and start playing the first file.

- 4 Functions the same as the control dial on the main unit.

**NOTE:** These buttons cannot be used for the *CLOCK H*, *CLOCK M*, *SCM LINK*, *LEVEL*, *SCROLL* and *TAG DISP* adjustments. (See page 24 – 26).

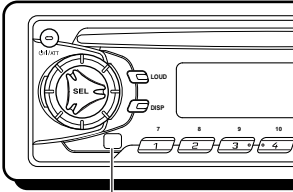
- 5 Selects the sound mode.  
Each time you press the button, the sound mode changes.
- 6 Selects the source.  
Each time you press the button, the source changes.
- 7 • Searches stations while listening to the radio.
  - Fast-forwards or reverses the track/file if pressed and held while listening to a disc.
  - Skips to the beginning of the next track/file or goes back to the beginning of the current (or previous) tracks/files if pressed briefly while listening to a disc.



## Preparing the remote controller

Before using the remote controller:

- Aim the remote controller directly at the remote sensor on the main unit. Make sure there is no obstacle in between.



Remote sensor

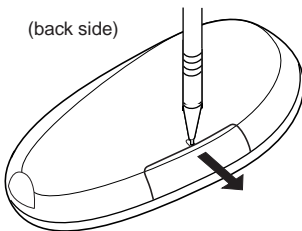
- Do not expose the remote sensor to strong light (direct sunlight or artificial lighting).

### Installing the battery

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

#### 1. Remove the battery holder.

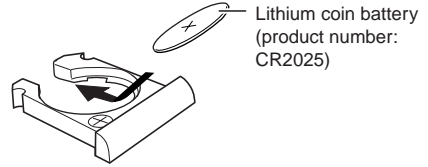
- 1) Push out the battery holder in the direction indicated by the arrow using a ball-point pen or a similar tool.
- 2) Remove the battery holder.



(back side)

#### 2. Place the battery.

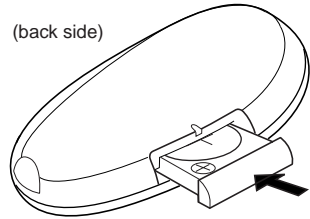
Slide the battery into the holder with the + side facing upwards so that the battery is fixed in the holder.



Lithium coin battery  
(product number:  
CR2025)

#### 3. Return the battery holder.

Insert again the battery holder pushing it until you hear a clicking sound.



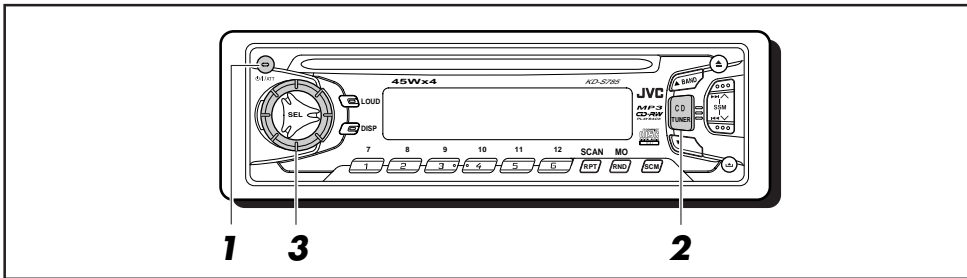
(back side)

#### WARNING:

- 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 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.



## Turning on the power

### 1 Turn on the power.



**Note on One-Touch Operation:**

When you select a source in step 2 below, the power automatically comes on. You do not have to press this button to turn on the power.

### 2 Select the source.

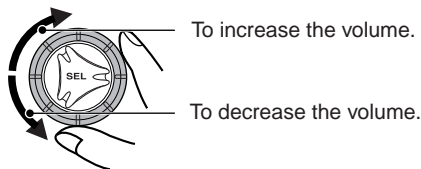


To operate the tuner (FM or AM), see pages 8 – 11.

To play a CD, see pages 12 – 14.

To play an MP3 disc, see pages 17 – 20.

### 3 Adjust the volume.



To increase the volume.

To decrease the volume.

Volume or audio level indicator (See page 25.)



Volume level appears.

### 4 Adjust the sound as you want. (See pages 21 – 23.)

#### To drop the volume in a moment

Press  $\phi/1/ATT$  briefly while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment.

To resume the previous volume level, press the button briefly again.

- If you turn the control dial clockwise, you can also restore the sound.

#### To turn off the power

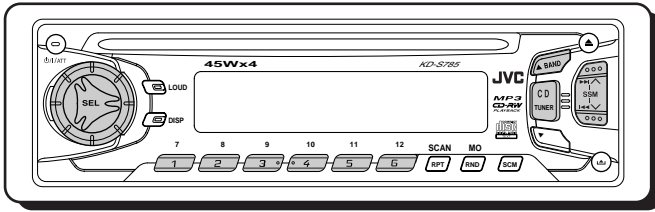
Press and hold  $\phi/1/ATT$  for more than one second.

**Note:**

When you use this unit for the first time, set the built-in clock correctly, see page 24.

**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.



## Listening to the radio

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

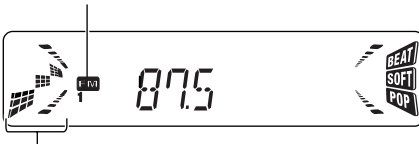
### Searching a station automatically: Auto search

#### 1 Select the tuner as the source.



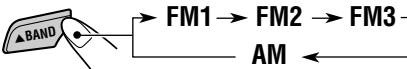
- The last selected station is tuned in.

The last selected band appears.



Audio (see page 25) or volume level indicator

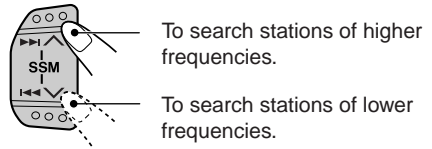
#### 2 Select the band (FM1 - 3, AM) if necessary.



**Note:**

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 a station.



When a station is received, searching stops.

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



## Searching a station manually: Manual search

### 1 Select the tuner as the source.



- The last selected station is tuned in.

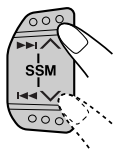
### 2 Select the band (FM1 – 3, AM) if necessary.



**Note:**

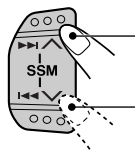
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

### 3 Press and hold **▶▶| ^ or |◀◀ v** until “M (manual)” starts flashing on the display.



Selected band appears.

### 4 Tune in to a station you want while “M” is flashing.



To tune in to stations of higher frequencies.

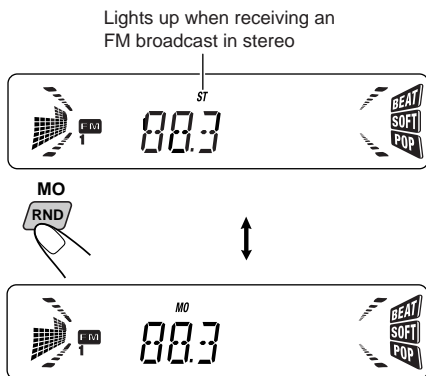
To tune in to stations of lower frequencies.

- If you release your finger from the button, the manual mode will automatically turn off after 5 seconds.
- If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz intervals for AM) until you release the button.

### When an FM stereo broadcast is hard to receive:

Press MO RND (monaural/random) while listening to an FM stereo broadcast.

- Each time you press the button, the MO indicator lights up and goes off alternately.



When the MO indicator is lit on the display, the sound you hear becomes monaural but the reception will be improved (the ST indicator goes off).

To restore the stereo effect, press the same button again.



## Storing stations in memory

You can use one of the following two methods to store broadcasting stations in memory.

- Automatic preset of FM stations: SSM (Strong-station Sequential Memory)
- Manual preset of both FM and AM stations

### FM station automatic preset: SSM

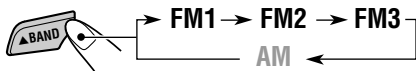
You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).

#### 1 Select the tuner as the source.

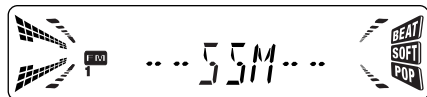


- The last selected station is tuned in.

#### 2 Select the FM band (FM1 - 3) you want to store FM stations into.



#### 3 Press and hold both buttons for more than 2 seconds.



"SSM" appears, then disappears when automatic preset is over.

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

### Manual preset

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

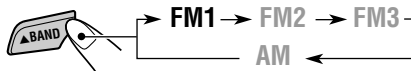
Ex.: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band

#### 1 Select the tuner as the source.

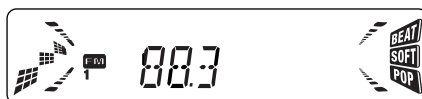
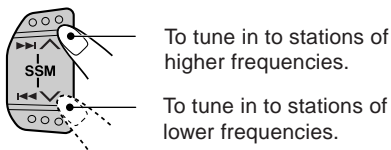


- The last selected station is tuned in.

#### 2 Select the band (FM1 - 3, AM) you want to store stations into (in this example, FM1).



#### 3 Tune in to a station (in this example, of 88.3 MHz).



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



"P1" flashes for a few seconds.

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

**Notes:**

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

## Tuning in to a preset station

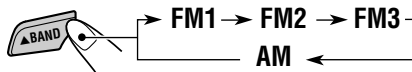
You can easily tune in to a preset station. Remember that you must store stations first. If you have not stored them yet, see "Storing stations in memory" on page 10 and 11.

**1** Select the tuner as the source.

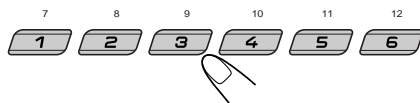


- The last selected station is tuned in.

**2** Select the band (FM1 – 3, AM) if necessary.



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



## Other convenient tuner functions

### Scanning broadcast stations

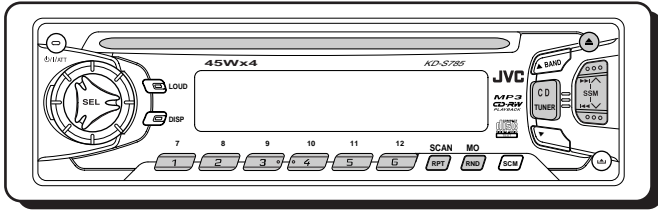


When you press SCAN RPT while listening to the radio, station scanning starts. Each time a broadcast is tuned in, scanning stops for about 5 seconds (tuned frequency number flashes on the display), and you can check what program is now being broadcast.

If you want to listen to that program, press the same button again to stop scanning.

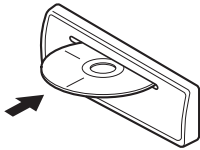


# CD OPERATIONS



## Playing a CD

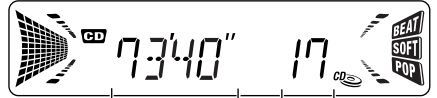
### 1 Insert a disc into the loading slot.



The unit turns on, draws the CD and starts playback automatically.

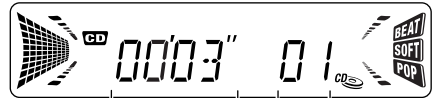
#### Note on One-Touch Operation:

When a CD is already in the loading slot, pressing the CD TUNER button turns on the unit and starts playback automatically.



Total playing time of the inserted disc

Total track number of the inserted disc



Elapsed playing time

Current track

#### Notes:

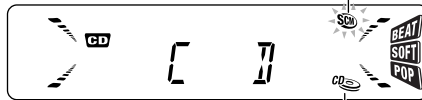
- When a CD is inserted upside down, the CD automatically ejects.
- When you play a CD text, the disc title and performer appear on the display. Then the current track and elapsed playing time appears on the display. See also "Playing a CD text" (page 14) and "Selecting the scroll mode—SCROLL" (page 26). If a CD Text includes much text information, some may not appear on the display.

SCM indicator flashes.



The CD-in indicator flashes.

SCM indicator flashes.



The CD-in indicator lights up.



The CD-in indicator lights up.

## To stop play and eject the CD

Press ▲.

CD play stops and the CD automatically ejects from the loading slot.

If you change the source to FM or AM, the CD play also stops (without ejecting the CD this time).

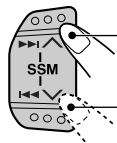
#### Notes:

- If the ejected disc is not removed for about 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (CD play will not start this time.)
- You can eject the CD even when the unit is turned off.



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

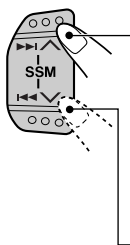
### To fast-forward or reverse the track



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

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

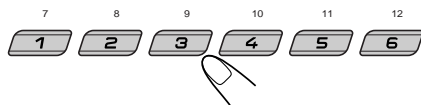
### To go to the next tracks or the previous tracks



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

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

### To go to a particular track directly



Press the number button corresponding to the track number to start its playback.

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

## Selecting CD playback modes

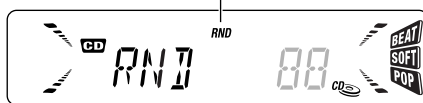
### To play back tracks at random (Random Play)

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



Each time you press **MO RND** (monaural/random) while playing a CD, CD random play mode turns on and off alternately.

The RND indicator



When the random mode is turned on, the RND indicator lights up on the display and a track randomly selected starts playing.

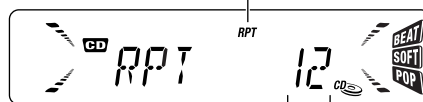
### To play back tracks repeatedly (Repeat Play)

You can play back the current track repeatedly.



Each time you press **SCAN RPT** (scan/repeat) while playing a CD, CD repeat play mode turns on and off alternately.

The RPT indicator



Track number of the currently playing track

When the repeat mode is turned on, the RPT indicator lights up on the display.



## Playing a CD Text

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

### Select text display mode while playing a CD Text.



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



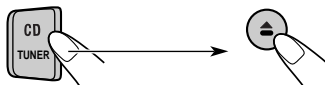
#### Notes:

- The display shows up to 8 characters at one time and scrolls if there are more than 8 characters. See also “Selecting the scroll mode—SCROLL” on page 26. Some characters or symbols will not be shown (and appear as blanks) on the display. (Ex. “ABC&!d#” ⇔ “ABCA D ”)
- When you press DISP (display) while playing a conventional CD, “NO NAME” appears for the disc title/performer and the track title.

## Prohibiting CD ejection

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

### While pressing CD TUNER, press and hold ▲ for more than 2 seconds.



“EJECT” flashes on the display for about 5 seconds, and the CD is locked and cannot be ejected.

To cancel the prohibition and unlock the CD, press ▲ again for more than 2 seconds, while pressing CD TUNER.

“EJECT” appears on the display, and the CD ejects from the loading slot.

## What is MP3?

MP3 is an abbreviation of Motion Picture Experts Group (or MPEG) Audio Layer 3\*. MP3 is simply a file format with a data compression ratio of 1:10 (128 Kbps\*\*). That means, by using MP3 format, one CD-R or CD-RW can contain 10 times as much data volume as a regular CD can.

\* This player is not compatible with the data encoded with Layer 1 and 2 formats.

\*\* Bit rate is the average number of bits that one second of audio data will consume. The unit used is Kbps (1000 bits/second). To get a better audio quality, choose a higher bit rate. The most popular bit rate for encoding is 128 Kbps.

This unit is incorporated with an MP3 decoder. You can play back MP3 files (tracks) recorded on CD-Rs, CD-RWs, and CD-ROMs.

## Compatible with ID3v1

Extra information data such as album title, performer name, song title, recording year, music genre and a brief comment can be stored within an MP3 file.

This unit can show ID3v1 tags (album name, performer name and song title) on the display.

- Some characters cannot be shown correctly.
- This unit is not compatible with ID3v2.

### Other Main Features in this unit:

- Maximum number of directories/files: 289 (Total)
- Available characters: A–Z, 0–9, \_ (underscore)
- Maximum number of characters for file name (ISO 9660 Level 1): 12 (inclusive of separation mark—“.” and extension code—“mp3”)
- (ISO 9660 Level 2): 31 (inclusive of separation mark—“.” and extension code—“mp3”)
- (Joliet): 64 (inclusive of separation mark—“.” and extension code—“mp3”)
- Maximum number of characters for directory name: 64

## Precautions when recording MP3 files on a CD-R or CD-RW

This unit can only read MP3 files that are recorded in the format that is compliant with ISO 9660 Level 1, Level 2 or Joliet.

## How are MP3 files recorded and played back?

MP3 “files (tracks)” can be recorded in “directories (folders)”—in PC terminology. During recording, the files and directories can be arranged in a way similar to arranging files and directories/folders of computer data.

“Root” is similar to the root of a tree. Every file and directory can be linked to and be accessed from the root.

Playback order, file search order, and directory search order of the MP3 files recorded on a disc are determined by the writing (or encoding) application; therefore, playback order may be different from the one you have intended while recording the directories and the files.

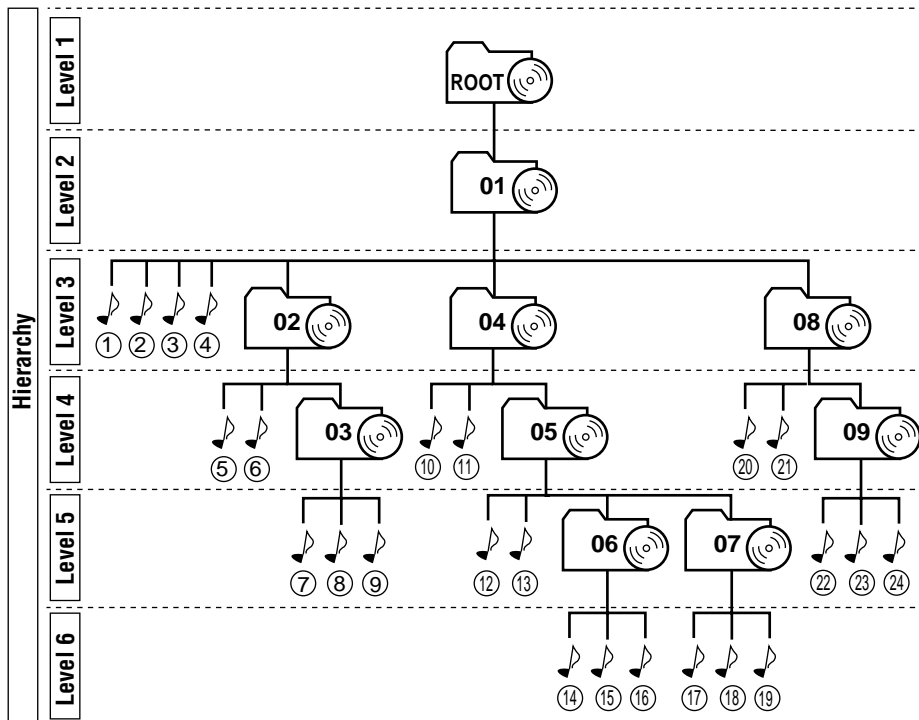
The illustration on the next page shows an example of how MP3 files are recorded on a CD-R or CD-RW, how they are played back, and how they are searched on this unit.




### Notes:

- The unit can read a CD-ROM containing MP3 files. However, if non-MP3 files are recorded together with MP3 files, this unit will take a longer time to scan the disc. It may also cause the unit to malfunction.
- The unit cannot read or play an MP3 file without the extension code—mp3.
- The unit is not compatible with Playlist\*.

\* A playlist is a simple text file, used on a PC, which enables users to make their own playback order without physically rearranging the files.

## MP3 directory/file configuration



	: Root
	: Directories
	: MP3 files

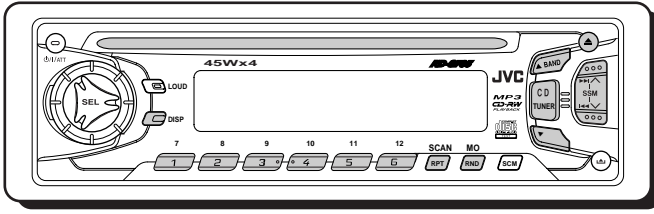
**Note:**

There is no limit on the number of the hierarchy levels (nested directories). However up to 8 hierarchy levels is recommended for stable operation.

### MP3 playback/search order (page 18)

- The numbers in circles below the MP3 files (🎵) indicate the playback order and search order of the MP3 files. Normally this unit plays back MP3 files in the recorded order.
- The numbers inside the directories indicate the playback order and search order of the directories on an MP3 disc. Normally this unit plays back MP3 files in the directories in the recorded order.

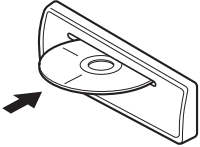




Refer also to “CD OPERATIONS” on pages 12 to 14.

## Playing an MP3 disc

### 1 Insert an MP3 disc into the loading slot.



The unit turns on, draws the MP3 disc and starts playback automatically.

#### Note on One-Touch Operation:

When a CD is already in the loading slot, pressing the CD TUNER button turns on the unit and starts playback automatically.

Playback starts automatically from the first file of the first directory once disc check is completed.

#### Notes:

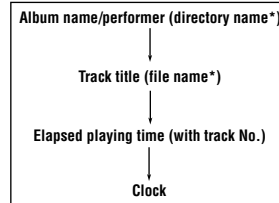
- All the files on the disc will be played repeatedly until you stop playback—All File Repeat Play.
- MP3 discs require a longer readout time. (It differs due to the complexity of the directory/file configuration.)

### To change the display information



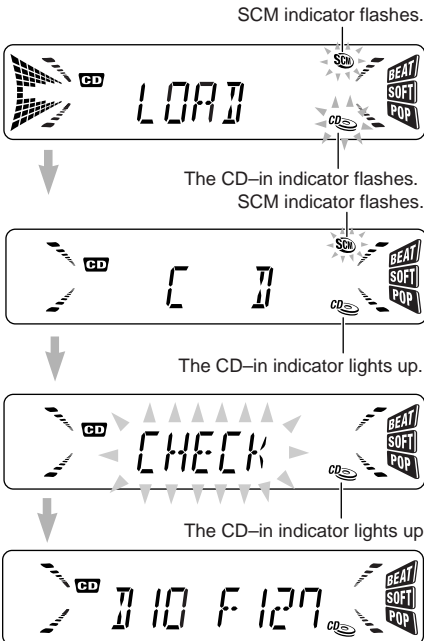
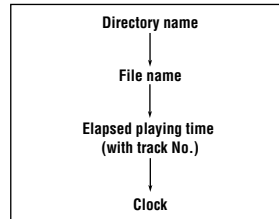
While playing back an MP3 file, you can change the file information shown on the display. Each time you press DISP (display), the display changes to show the following:

- When “TAG DISP” is set to “TAG ON” (initial setting: see page 26)



\* If an MP3 file does not have ID3 tags, directory name and file name appear.

- When “TAG DISP” is set to “TAG OFF”



Ex.: When the disc contains 10 directories and 127 MP3 files.

#### Note:

The display shows up to 8 characters at one time and scrolls if there are more than 8 characters. See also “Selecting the scroll mode – SCROLL” on page 26.

## To stop play and eject the disc

Press ▲.

Playback stops and the disc automatically ejects from the loading slot.

If you change the source to FM or AM, the playback also stops (without ejecting the disc this time).

## Locating a file or particular portion on an MP3 disc

### To fast-forward or reverse the file



Press and hold ►► ▲ while playing an MP3 disc, to fast-forward the file.

Press and hold ◀◀ ▼ while playing an MP3 disc, to reverse the file.

### To skip to the next file or the previous files



Press ►► ▲ briefly while playing, to skip ahead to the beginning of the next file. Each time you press the button consecutively, the beginning of the next file is located and played back. (See "MP3 playback/search order" on page 16.)

Press ◀◀ ▼ briefly, while playing, to skip back to the beginning of the current file. Each time you press the button consecutively, the beginning of the previous files is located and played back. (See "MP3 playback/search order" on page 16.)

## To go to a particular directory directly

### IMPORTANT:

To directly select the directories using the number button(s), it is required that directories are assigned 2 digit numbers at the beginning of their directory names. (This can only be done during the recording of CD-Rs or CD-RWs.)

Ex.: If directory name is "01 ABC"

→ press 1 to go to directory 01 ABC

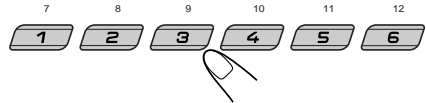
If directory name is "1 ABC,"

pressing 1 does not work

If directory name is "12 ABC"

→ press and hold 6 (12) to go to directory 12 ABC

Press the number button corresponding to the directory number to start playing the first file in the selected directory.



- To select a directory number from 01 – 06: Press 1 (7) – 6 (12) briefly.
- To select a directory number from 07 – 12: Press and hold 1 (7) – 6 (12) for more than 1 second.

### Notes:

- If CD source indicator flashes on the display after you have selected a directory, it means that the directory does not contain any MP3 files.
- You cannot directly select a directory with a number greater than 12.

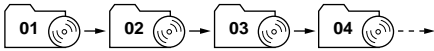
**To select a particular file in a directory,** press ►► ▲ or ◀◀ ▼ after selecting the directory.

## To skip to the next directory

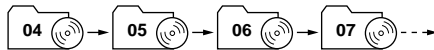


Press ▲ (up) briefly while playing an MP3 disc. Each time you press the button consecutively, the next directory is located (and the first file in the directory starts playing, if recorded).

Ex.1: While playing an MP3 file in Directory 01 (see the illustration on page 16)



Ex.2: While playing an MP3 file in Directory 04 (see the illustration on page 16)



**Note:**

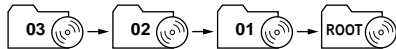
If the directory does not contain any MP3 files, it is skipped.

## To skip to the previous directory

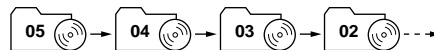


Press ▼ (down) briefly while playing an MP3 disc. Each time you press the button consecutively, the previous directory is located (and the first file in the directory starts playing, if recorded).

Ex.1: While playing an MP3 file in Directory 03 (see the illustration on page 16)



Ex.2: While playing an MP3 file in Directory 05 (see the illustration on page 16)



- If you reach the root, playback will not begin.

**Note:**

If the directory does not contain any MP3 files, it is skipped.

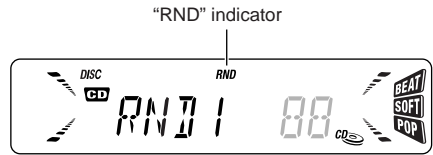
## Selecting MP3 playback modes

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

You can playback all tracks on MP3 disc at random.



Each time you press MO RND (monaural/random) while playing an MP3 disc, the random play mode changes as follows.



Ex.: When you select "RND1."

Mode	RND Indicator	Plays at random
RND1	Lights	All files of the current directory.
RND2	Flashes	All files on the disc.

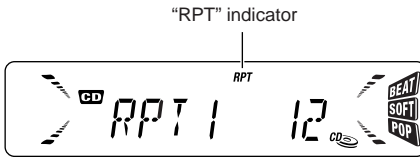
## To play back files repeatedly (Repeat Play)

You can play back the current file or all the files in the current directory repeatedly.

SCAN



Each time you press SCAN RPT (scan/repeat) while playing an MP3 disc, the repeat play mode changes as follows:



Ex.: When you select "RPT 1."

Mode	RPT Indicator	Plays repeatedly
RPT 1	Lights	The current file (or specified file).
RPT 2	Flashes	All files of the current directory (or specified directory).



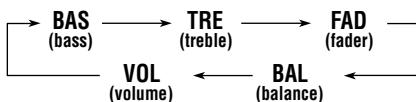
## Adjusting the sound

You can adjust the sound characteristics to your preference.

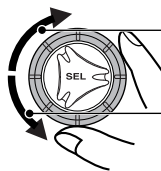
### 1 Select the item you want to adjust.



Each time you press the button, the adjustable items change as follows:



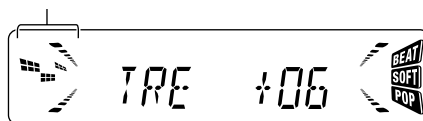
### 2 Adjust the level.



To increase the level.

To decrease the level.

Equalization pattern changes as you adjust the bass or treble.



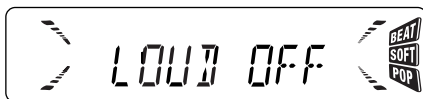
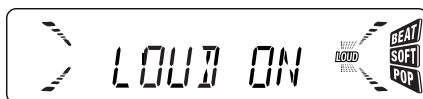
#### Note:

Normally, the control dial works as the volume control. So you do not have to select "VOL" to adjust the volume level.

## Turning on/off the loudness function

The human ear is less sensitive to low and high frequencies at low volumes. The loudness function can boost these frequencies to produce a well-balanced sound at low volume levels.

Each time you press LOUD (loudness), the loudness function turns on and off alternately.



Indication	To do:	Range
BAS	Adjust the bass.	-06 (min.)   +06 (max.)
TRE	Adjust the treble.	-06 (min.)   +06 (max.)
FAD*	Adjust the front and rear speaker balance.	R06 (Rear only)   F06 (Front only)
BAL	Adjust the left and right speaker balance.	L06 (Left only)   R06 (Right only)
VOL	Adjust the volume.	00 (min.)   50 (max.)

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



# Using the sound control memory (SCM)

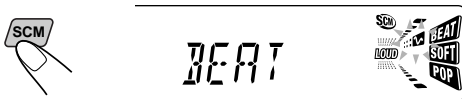
You can select and store a preset sound adjustment suitable for each playback source (Advanced SCM).

## Selecting and storing the sound modes

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

- If you do not want to store the sound mode separately for each playback source, but want to use the same sound mode for all the sources, see “Canceling Advanced SCM—SCM LINK” on page 25.

### Select the sound mode you want.



Ex.: When you select “BEAT.”

Each time you press the button, the sound mode changes as follows:



- When “SCM LINK” is set to “LINK ON,” the selected sound mode can be stored in memory for the current source and the effect applies only to the current source.
- When “SCM LINK” is set to “LINK OFF,” the selected sound mode effect applies to any source.

Indication	For:	Preset values		
		BAS	TRE	LOUD
SCM OFF	(Flat sound)	00	00	ON
BEAT	Rock or disco music	+02	00	ON
SOFT	Quiet background music	+01	-03	OFF
POP	Light music	+04	+01	OFF

## Recalling the sound modes

When “SCM LINK” is set to “LINK ON,” select the source.



Each time you change the playback source, the SCM indicator flashes on the display.

The sound mode stored in memory for the selected source is recalled.

### Notes:

- You can adjust each sound mode to your preference, and store it in memory. If you want to adjust and store your original sound mode, see “Storing your own sound adjustments” on page 23.
- To adjust the bass and treble reinforcement levels or to turn on/off the loudness function temporarily, see page 21. (Your adjustments will be canceled if another source is selected.)



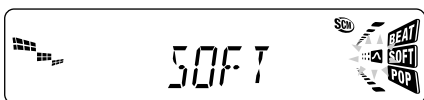
## Storing your own sound adjustments

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

- There is a time limit in doing the following procedure. If the setting is canceled before you finish, start from step 1 again.

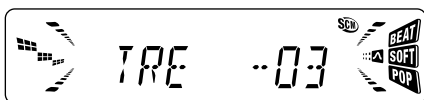
### 1 Call up the sound mode you want to adjust.

- See “Using the sound control memory (SCM)” on page 22 for details.



Ex.: When you select “SOFT.”

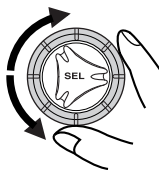
### 2 Select “BAS (Bass)” or “TRE (Treble)”.



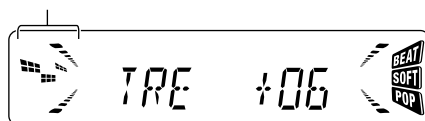
Ex.: When you adjust “TRE (treble).”

### 3 Adjust the bass or treble level.

- See page 21 for details.



Equalization pattern changes as you adjust the bass or treble.



### 4 To turn on or off the loudness function.

- See page 21 for details.



### 5 Press and hold SCM until the sound mode you have selected in step 1 flashes on the display.



Your adjustment made for the selected sound mode is stored in memory.

### 6 Repeat the same procedure to store other sound modes.

## To reset to the factory settings

Repeat the same procedure and reassign the preset values listed in the table on page 22.

## Setting the clock

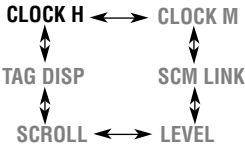
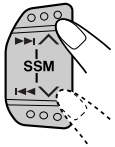
**1** Press and hold SEL (select) for more than 2 seconds.

“CLOCK H,” “CLOCK M,” “SCM LINK,” “LEVEL,” “SCROLL” or “TAG DISP” appears on the display.

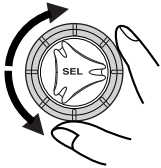


**2** Set the hour.

1 Select “CLOCK H (hour)” if not shown on the display.

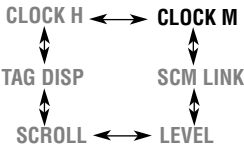
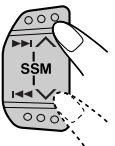


2 Adjust the hour.



**3** Set the minute.

1 Select “CLOCK M (minute).”



2 Adjust the minute.



**4** Finish the setting.



To check the current clock time or change the display mode

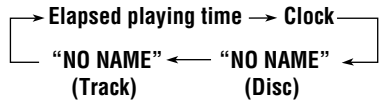


Press DISP (display) repeatedly. Each time you press the button, the display mode changes as follows:

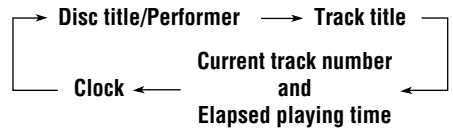
- During tuner operation:

Frequency ↔ Clock

- During (conventional) CD operation:



- During CD Text operation:



- During MP3 operation:



- During power off:

The power turns on and the clock time is shown for 5 seconds. Then, the power turns off.



# Canceling Advanced SCM —SCM LINK

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

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

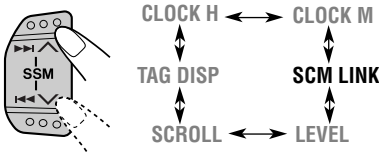
- LINK ON: Advanced SCM (different sound modes for different sources.)
- LINK OFF: Conventional SCM (one sound mode for all sources.)

## 1 Press and hold SEL (select) for more than 2 seconds.

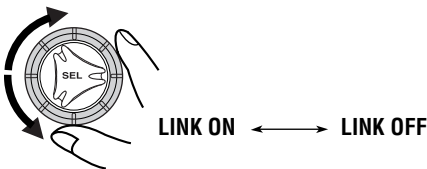
“CLOCK H,” “CLOCK M,” “SCM LINK,” “LEVEL,” “SCROLL” or “TAG DISP” appears on the display.



## 2 Select “SCM LINK” if not shown on the display.



## 3 Select the desired mode—“LINK ON” or “LINK OFF.”



## 4 Finish the setting.



# Selecting the level display —LEVEL

You can select the level display according to your preference.

When shipped from the factory, “AUDIO 2” is selected.

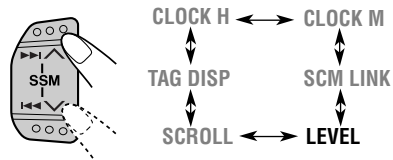
- AUDIO 1: Level meter illuminates from bottom to top.
- AUDIO 2: Alternates level meter (moves from bottom to top) and illumination display.
- OFF: Erases the audio level indicator.

## 1 Press and hold SEL (select) for more than 2 seconds.

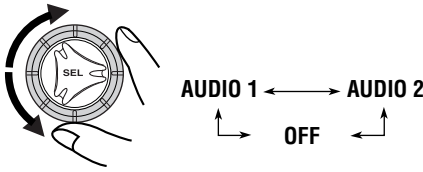
“CLOCK H,” “CLOCK M,” “SCM LINK,” “LEVEL,” “SCROLL” or “TAG DISP” appears on the display.



## 2 Select “LEVEL” if not shown on the display.



**3** Select the desired mode—"AUDIO 1," "AUDIO 2" or "OFF."



**4** Finish the setting.



## Selecting the scroll mode —SCROLL

You can select the scroll mode for the disc information if it consists of more than 8 characters. When shipped from the factory, Scroll mode is set to "ONCE."

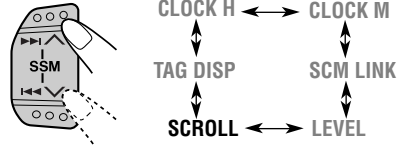
- ONCE: Scrolls only once.
- AUTO: Repeats the scroll (in 5-second intervals).
- OFF: Cancels Scroll mode.

**1** Press and hold SEL (select) for more than 2 seconds.

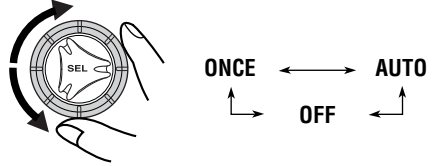
"CLOCK H," "CLOCK M," "SCM LINK," "LEVEL," "SCROLL" or "TAG DISP" appears on the display.



**2** Select "SCROLL" if not shown on the display.



**3** Select the desired mode—"ONCE," or "AUTO" or "OFF."



**4** Finish the setting.



## To turn the tag display on or off —TAG DISP

An MP3 file can contain file information called "ID3 Tag" where its album name, performer, track title, etc. are recorded.

There are two versions—ID3v1 (ID3 Tag version 1) and ID3v2 (ID3 Tag version 2). This unit is compatible only with ID3v1.

When shipped from the factory, "TAG ON" is selected.

- TAG ON: Turns on the ID3 tag display while playing MP3 files.  
\* If an MP3 file does not have ID3 tags, directory name and file name appear.

**Note:**

If you change the setting from "TAG OFF" to "TAG ON" while playing an MP3 file, the tag display will be activated when the next file starts playing.

- TAG OFF: Turns off the ID3 tag display while playing MP3 files. (Only the directory name and file name can be shown.)

## Detaching the control panel

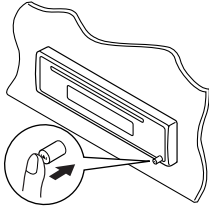
You can detach the control panel when leaving the car.

When detaching or attaching the control panel, be careful not to damage the connectors on the back of the control panel and on the panel holder.

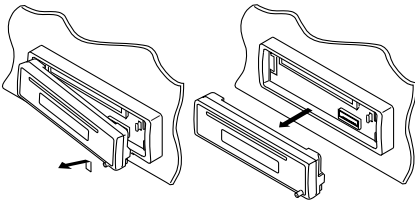
### Detaching the control panel

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

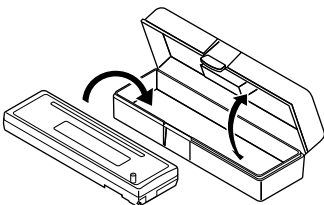
- 1** Unlock the control panel.



- 2** Lift and pull the control panel out of the unit.

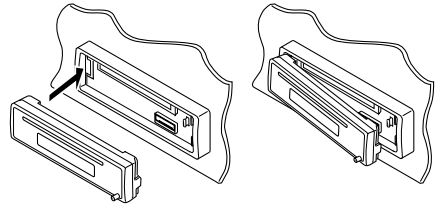


- 3** Put the detached control panel into the provided case.

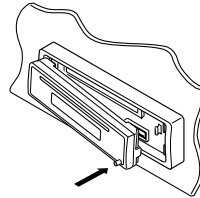


## Attaching the control panel

- 1** Insert the left side of the control panel into the groove on the panel holder.



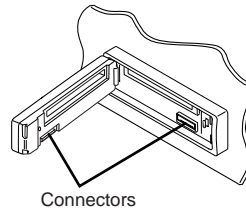
- 2** Press the right side of the control panel to fix it to the panel holder.



### **Note on cleaning the connectors:**

*If you frequently detach the control panel, the connectors will deteriorate.*

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





## Handling CDs

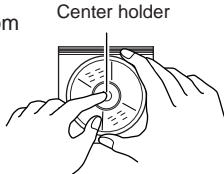
This unit has been designed to reproduce CDs and CD-Rs.

- You can also play back your original CD-Rs (Recordable) and CD-RWs (Rewritable) either in audio CD format or in MP3 format.

### 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.

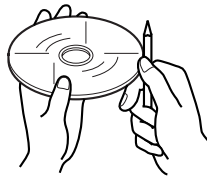
### To keep discs clean

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.



### 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.



#### **About mistracking:**

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

*We recommend that you stop disc playback while driving on such rough roads.*

### Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After starting the heater in the car.
- If it becomes very humid inside the car.

Should this occur, the unit may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

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

You can play back your original CD-Rs or CD-RWs recorded in audio CD format or in MP3 format. (However, they may not be played back depending on their characteristics or recording conditions.)

- User-edited CD-Rs (Recordable) and CD-RWs (Rewritable) can be played back only if they are already "finalized."
- Before playing back CD-Rs or CD-RWs, read their instructions or cautions carefully.
- Some CD-Rs or CD-RWs may not be played back on this unit because of their disc characteristics, damage or stain on them, or if the player's lens is dirty.
- CD-Rs or CD-RWs are susceptible to high temperatures or high humidity; so do not leave them inside your car.
- CD-RWs may require a longer readout time. (This is caused by the fact that the reflectance of CD-RWs is lower than for regular CDs.)

#### **CAUTIONS:**

- Do not insert 8 cm 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.
- Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean discs.

# TROUBLESHOOTING



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

	Symptoms	Causes	Remedies
General Playback	<ul style="list-style-type: none"> <li>Disc cannot be played back.</li> </ul>	Disc is inserted upside down.	Insert the disc correctly.
	<ul style="list-style-type: none"> <li>Sound is sometimes interrupted.</li> </ul>	You are driving on rough roads.	Stop playback while driving on rough roads.
		Disc is scratched.	Change the disc.
		Connections are incorrect.	Check the cords and connections.
	<ul style="list-style-type: none"> <li>CD-R/CD-RW cannot be played back.</li> <li>Tracks on the CD-R/CD-RW cannot be skipped.</li> </ul>	CD-R/CD-RW is not finalized.	<ul style="list-style-type: none"> <li>Insert a finalized CD-R/CD-RW.</li> <li>Finalized the CD-R/CD-RW with the component which you used for recording.</li> </ul>
	<ul style="list-style-type: none"> <li>Sound cannot be heard from the speakers.</li> </ul>	The volume level is set to the minimum level.	Adjust it to the optimum level.
		Connections are incorrect.	Check the cords and connections.
	<ul style="list-style-type: none"> <li>"NO DISC" appears on the display .</li> </ul>	No disc in the loading slot.	Insert a disc into the loading slot.
		Disc is inserted incorrectly.	Insert disc correctly.
	<ul style="list-style-type: none"> <li>Disc cannot be ejected.</li> </ul>	Disc is locked.	Unlock the disc (See page 14.)
<ul style="list-style-type: none"> <li>This unit does not work at all.</li> </ul>	The built-in microcomputer may function incorrectly due to noise, etc.	Press and hold both SEL and <b>⏏/ATT</b> at the same time for several seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.) (See page 2.)	
FM/AM	<ul style="list-style-type: none"> <li>SSM (Strong-station Sequential Memory) automatic preset does not work.</li> </ul>	Signals are too weak.	Store stations manually.
	<ul style="list-style-type: none"> <li>Static noise while listening to the radio.</li> </ul>	The antenna is not connected firmly.	Connect the antenna firmly.



Symptoms	Causes	Remedies
<ul style="list-style-type: none"> <li>Disc cannot be played back.</li> </ul>	No MP3 files are recorded on the disc.	Change the disc.
	MP3 files do not have the extension code—mp3 in their file names.	Add the extension code—mp3 to their file names.
	MP3 files are not recorded in the format compliant with ISO 9660 Level 1, 2 or Joliet.	Change the disc. (Record MP3 files using a compliant application.)
<ul style="list-style-type: none"> <li>Files skip, or "00'00" appears and the playback stops.</li> </ul>	Files are encoded in Layer 1 or Layer 2 format.	Insert a disc that contains files encoded in Layer 3 format.
<ul style="list-style-type: none"> <li>Noise is generated.</li> </ul>	The file played back is not an MP3 file (although it has the extension code—mp3).	Skip to another file or change the disc. (Do not add the extension code—mp3 to non-MP3 files.)
<ul style="list-style-type: none"> <li>A longer readout time is required ("CHECK" keeps flashing on the display).</li> </ul>	Readout time varies due to the complexity of the directory/file configuration.	Do not use too many hierarchies and directories. Also, do not record any other types of audio tracks together with MP3 files.
<ul style="list-style-type: none"> <li>Files cannot be played back as you have intended them to play.</li> </ul>	Playback order is determined when the files are recorded.	_____
<ul style="list-style-type: none"> <li>Elapsed playing time is not correct.</li> </ul>	This sometimes occurs during play. This is caused by how the files are recorded on the disc.	_____
<ul style="list-style-type: none"> <li>CD source indicator flashes on the display.</li> </ul>	The current directory does not contain any MP3 files.	Select another directory.
<ul style="list-style-type: none"> <li>"NO FILES" appears on the display for a while, then the disc ejects automatically.</li> </ul>	There are no MP3 files in this disc.	Insert a disc that contains MP3 files.
<ul style="list-style-type: none"> <li>Correct characters are not displayed. (Tag Display, e.g. album name)</li> </ul>	This unit can only display alphabets (capital: A–Z), numbers and a limited number of symbols.	_____

## AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 45 W per channel

Rear: 45 W per channel

Continuous Power Output (RMS):

Front: 17 W per channel into 4  $\Omega$ , 40 Hz  
to 20 000 Hz at no more than  
0.8% total harmonic distortion.

Rear: 17 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)

Tone Control Range:

Bass:  $\pm 10$  dB at 100 Hz

Treble:  $\pm 10$  dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.0 V/20 k $\Omega$  load (full scale)

Output Impedance: 1 k $\Omega$

## TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: 531 kHz to 1 602 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: 40 Hz to 15 000 Hz

Stereo Separation: 35 dB

Capture Ratio: 1.5 dB

### [AM Tuner]

Sensitivity: 20  $\mu$ V

Selectivity: 35 dB

## CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical  
pickup (semiconductor laser)

Number of channels: 2 channels (stereo)

Frequency Response: 5 Hz to 20 000 Hz

Dynamic Range: 96 dB

Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

MP3 recording format: MPEG 1/2 Audio Layer 3

Max. Bit rate: 320 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

Dimensions (W  $\times$  H  $\times$  D):

Installation Size: 182 mm  $\times$  52 mm  $\times$  150 mm

Panel Size: 188 mm  $\times$  58 mm  $\times$  14 mm

Mass: 1.3 kg (excluding accessories)

*Design and specifications subject to change without notice.*

**Having TROUBLE with operation?**

**Please reset your unit**

**Refer to page of How to reset your unit**