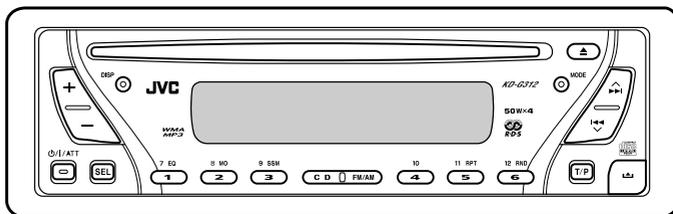
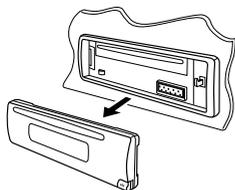


JVC



CD RECEIVER

KD-G312



WMA MP3



For canceling the display demonstration, see page 7.

INSTRUCTIONS

GET0260-015A
[B]

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.

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.
4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åpen eller interlocken fejler. Undgå direkte eksponering til stråling.	WARNING : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Beträkta ej strålen.	VARO : Avlåttaessa ja suoja-alkutus ohittatuna tai viäläisena ollet ahtina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteeseen kohdistumista suoraan itseesi. (f)
---	--	--	---

Warning:

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

How to reset your unit



- This will reset the microcomputer. Your preset adjustments will also be erased.
- If a disc is loaded, it will eject. Be careful not to drop the disc.

How to forcibly eject a disc

If a disc cannot be recognized by the unit or cannot be ejected, ejects the disc as follows.



- If this does not work, try to reset your unit.
- Be careful not to drop the disc when it ejects.

For security reasons, a numbered ID card is provided with this unit, and the same ID number is imprinted on the unit's chassis. Keep the card in a safe place, as it will help the authorities to identify your unit if stolen.

Contents

How to reset your unit	2	Disc operations	12
How to forcibly eject a disc	2	Playing a disc	12
How to read this manual	4	Changing the display information	13
How to use the MODE button	4	Selecting the playback modes.....	14
How to detach/attach the control panel.....	4	Sound adjustments	15
Control panel — KD-G312.....	5	Selecting preset sound modes	
Parts identification.....	5	(C-EQ: custom equalizer)	15
Getting started.....	6	Adjusting the sound.....	15
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Canceling the display demonstrations ...	7	Basic procedure	16
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Storing stations in memory.....	8	Maintenance	19
Listening to a preset station.....	9	More about this unit.....	20
FM RDS operations.....	10	Troubleshooting	22
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programme	10		
Storing your favorite programmes.....	10		
Using the standby receptions.....	11		
Tracking the same programme			
—Network-Tracking Reception	11		

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.

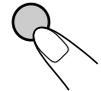
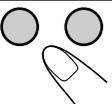
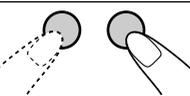
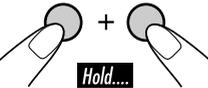
Temperature inside the car....

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.

How to read this manual

The following methods are used to make the explanations simple and easy-to-understand:

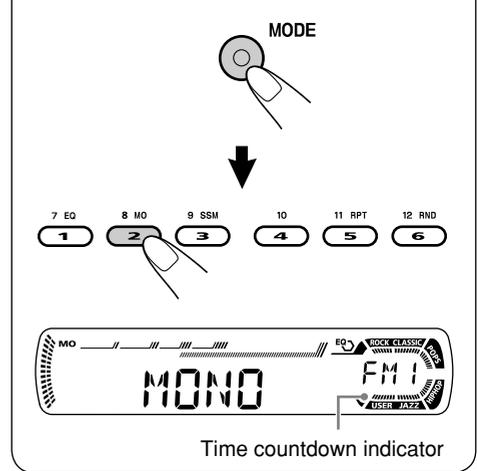
- Some related tips and notes are explained in “More about this unit” (see page 20).
- Button operations are mainly explained with the illustrations as follows:

	Press briefly.
	Press repeatedly.
	Press either one.
	
	Press and hold until your desired response begins.
	Press and hold both buttons at the same time.

How to use the MODE button

If you press MODE, the unit goes into functions mode, then the number buttons and \blacktriangleleft \blacktriangleright / \blacktriangleleft \blacktriangledown buttons work as different function buttons.

Ex.: When number button 2 works as MO (monaural) button.

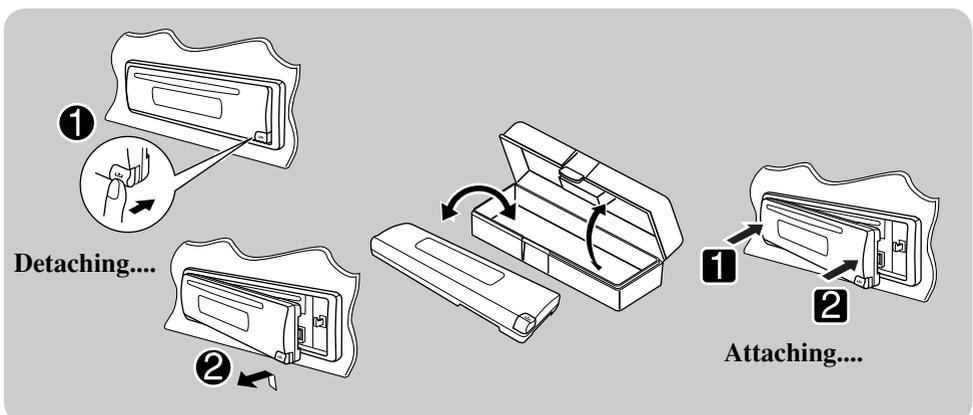


To use these buttons for original functions again after pressing MODE, wait for 5 seconds without pressing any of these buttons until the functions mode is cleared.

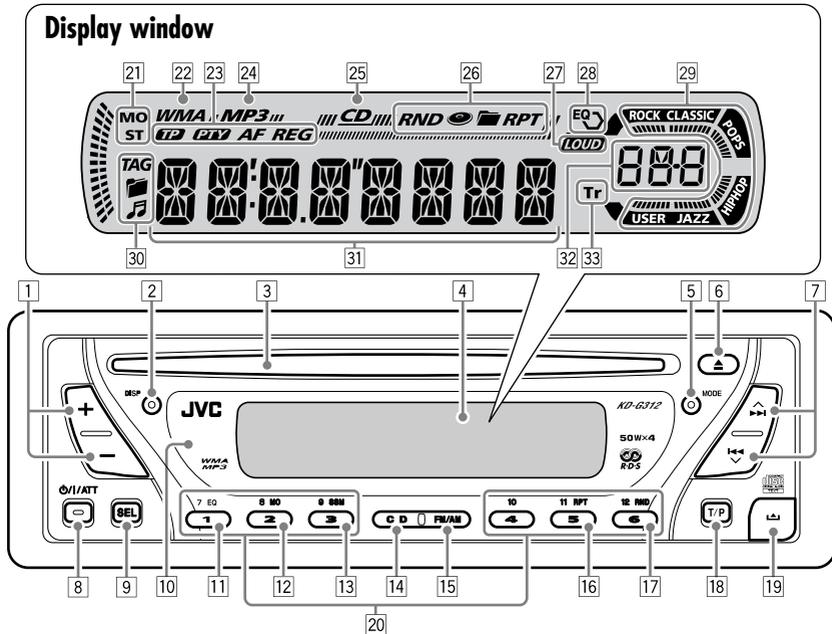
• Pressing MODE again also clears the functions mode.

- Pressing MODE again also clears the functions mode.

How to detach/attach the control panel



Parts identification



- 1 +/- buttons
- 2 DISP (display) button
- 3 Loading slot
- 4 Display window
- 5 MODE button
- 6 ▲ (eject) button
- 7 ▲▶▶/|◀◀▼ buttons
- 8 ⏻/I/ATT (standby/on/attenuator) button
- 9 SEL (select) button
- 10 Remote sensor
 - You can control this unit with an optionally purchased remote controller.
 - DO NOT expose the remote sensor to strong light (direct sunlight or artificial lighting).
- 11 EQ (equalizer) button
- 12 MO (monaural) button
- 13 SSM (Strong-station Sequential Memory) button
- 14 CD button
- 15 FM/AM button
- 16 RPT (repeat) button
- 17 RND (random) button
- 18 T/P (traffic programme/programme type) button

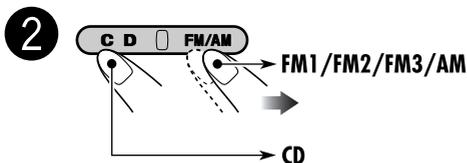
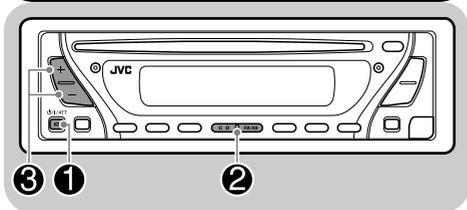
- 19 ▲ (control panel release) button
- 20 Number buttons

Display window

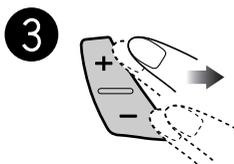
- 21 Tuner reception indicators—MO (monaural), ST (stereo)
- 22 WMA indicator
- 23 RDS indicators—TP, PTY, AF, REG
- 24 MP3 indicator
- 25 CD indicator
- 26 Playback mode / item indicators—RND (random), (disc), (folder), RPT (repeat)
- 27 LOUD (loudness) indicator
- 28 EQ (equalizer) indicator
- 29 Sound mode (C-EQ: custom equalizer) indicators—ROCK, CLASSIC, POPS, HIP HOP, JAZZ, USER
 - also works as the time countdown indicator.
- 30 Disc information indicators—TAG (ID3 Tag), (folder), (track/file)
- 31 Main display
- 32 Source display / Volume level indicator
- 33 Tr (track) indicator

Getting started

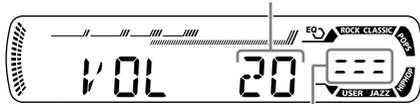
Basic operations



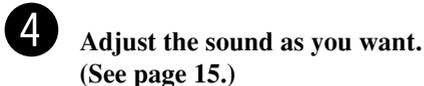
You cannot select “CD” as the playback source if there is no disc in the loading slot.



Volume level appears.



Volume level indicator



To drop the volume in a moment (ATT)

\odot /I/ATT



To restore the sound, press it again.

To turn off the power

\odot /I/ATT



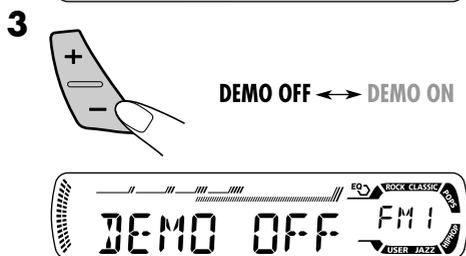
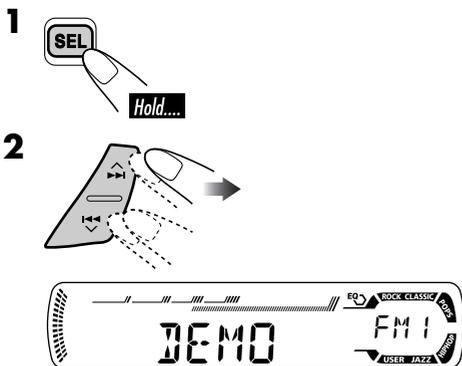
Caution on volume setting:

Discs produce very little noise compared with other sources. Lower the volume before playing a disc to avoid damaging the speakers by the sudden increase of the output level.

Canceling the display demonstrations

If no operations are done for about 20 seconds, display demonstration starts.

[Initial: DEMO ON]—see page 16.



4 Finish the procedure.



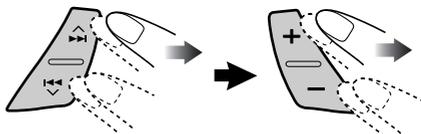
To activate the display demonstration

In step **3** above...



Setting the clock

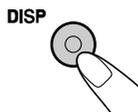
- 1**
- 
- 2** Set the hour, minute, and clock system.
- 1 Select “CLOCK H” (hour), then adjust the hour.
 - 2 Select “CLOCK M” (minute), then adjust the minute.
 - 3 Select “24H/12H,” then select “24H” (hour) or “12H” (hour).



3 Finish the procedure.

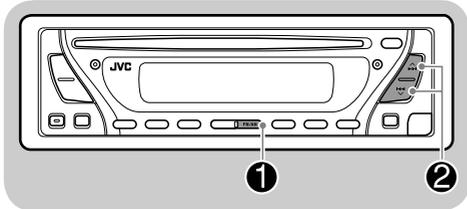


To check the current clock time when the power is turned off

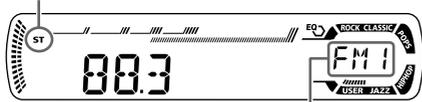


Radio operations

Listening to the radio

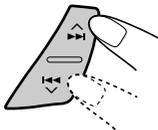


Lights up when receiving an FM stereo broadcast with sufficient signal strength.



Selected band appears.

2 Start searching for a station.

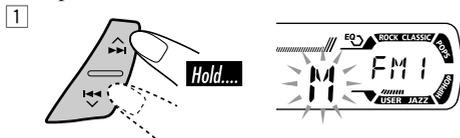


When a station is received, searching stops.

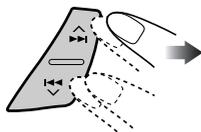
To stop searching, press the same button again.

To tune in to a station manually

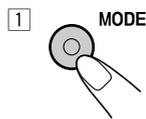
In step 2 above...



2 Select the desired station frequencies.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.



Reception improves, but stereo effect will be lost.

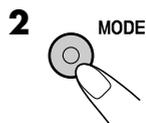
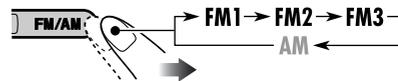
To restore the stereo effect, repeat the same procedure so that the MO indicator goes off.

Storing stations in memory

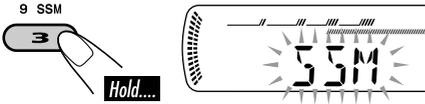
You can preset six stations for each band.

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

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



3

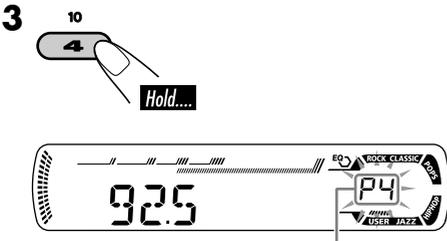
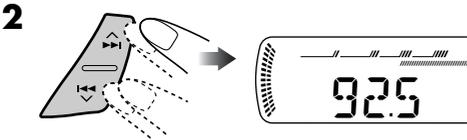
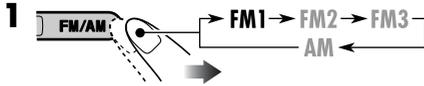


“SSM” flashes, then disappears when automatic presetting is over.

Local FM stations with the strongest signals are searched and stored automatically in the FM band.

Manual presetting

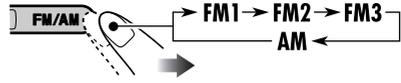
Ex.: Storing FM station of 92.5 MHz into the preset number 4 of the FM1 band.



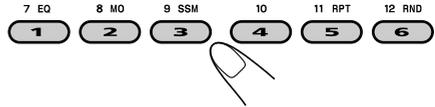
Preset number flashes for a while.

Listening to a preset station

1

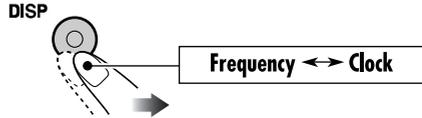


2 Select the preset station (1 – 6) you want.



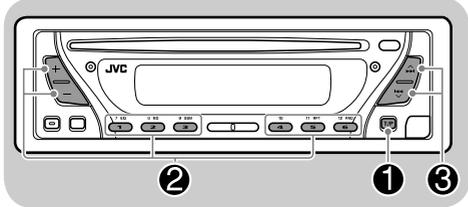
To check the current clock time while listening to an FM (non-RDS) or AM station

- For FM RDS stations, see page 11.



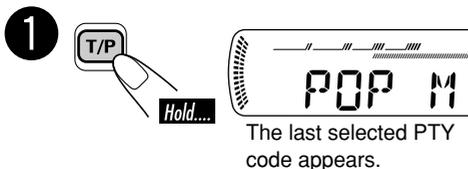
FM RDS operations

Searching for your favorite FM RDS programme

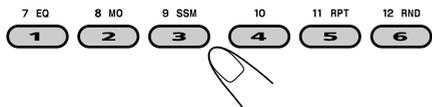


You can tune in to a station broadcasting your favorite programme by searching for a PTY code.

- To store your favourite programme, see the following.

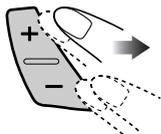


2 Select one of your favorite programme type.

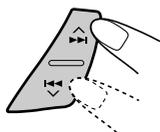


or

Select one of the twenty-nine PTY codes.



3 Start searching for your favorite programme.



If there is a station broadcasting a programme of the same PTY code as you have selected, that station is tuned in.

What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. By receiving the RDS data, this unit can do the following:

- Programme Type (PTY) Search (see left column)
- Temporarily switches to Traffic Announcement—TA Standby Reception (see page 11)
- Temporarily switches to your favorite programme—PTY Standby Reception (see pages 11 and 17)
- Tracing the same programme automatically—Network-Tracking Reception (see page 11)
- Programme Search (see page 17)

Storing your favorite programmes

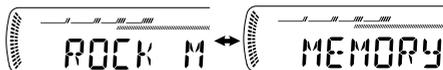
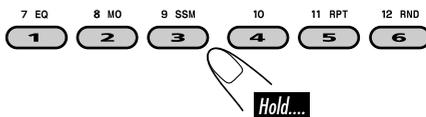
You can store six favorite programme types.

Preset programme types in the number buttons (1 to 6):

1	2	3	4	5	6
POP M	ROCK M	EASY M	CLASSICS	AFFAIRS	VARIED

1 Select a PTY code (see page 11).

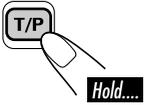
2 Select the preset number (1 – 6) you want to store into.



Ex.: When "ROCK M" is selected

3 Repeat steps 1 and 2 to store other PTY codes into other preset numbers.

4 Finish the procedure.



Using the standby receptions

TA Standby Reception

TA Standby Reception allows the unit to switch temporarily to Traffic Announcement (TA) from any source other than AM.

The volume changes to the preset TA volume level (see page 17).

To activate TA Standby Reception



The TP indicator either lights up or flashes.

- If the TP indicator lights up, TA Standby Reception is activated.
- If the TP indicator flashes, TA Standby Reception is not yet activated. (This occurs when you are listening to an FM station without the RDS signals required for TA Standby Reception.)

To activate TA Standby Reception, tune in to another station providing these signals. The TP indicator will stop flashing and remain lit.

To deactivate the TA Standby Reception



The TP indicator goes off.

PTY Standby Reception

PTY Standby Reception allows the unit to switch temporarily to your favorite PTY programme from any source other than AM.

To activate and select your favorite PTY code for PTY Standby Reception, see page 17.

The PTY indicator either lights up or flashes.

- If the PTY indicator lights up, PTY Standby Reception is activated.
- If the PTY indicator flashes, PTY Standby Reception is not yet activated.
To activate PTY Standby Reception, tune in to another station providing these signals. The PTY indicator will stop flashing and remain lit.

To deactivate the PTY Standby Reception, select “OFF” for the PTY code (see page 17). The PTY indicator goes off.

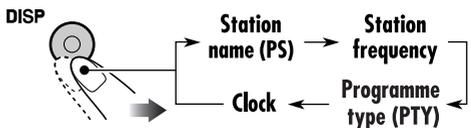
Tracking the same programme— Network-Tracking Reception

When driving in an area where FM reception is not sufficient enough, this unit automatically tunes in to another FM RDS station of the same network, possibly broadcasting the same programme with stronger signals.

When shipped from the factory, Network-Tracking Reception is activated.

To change the Network-Tracking Reception setting, see “AF-REG” on page 17.

To check the current clock time while listening to an FM RDS station

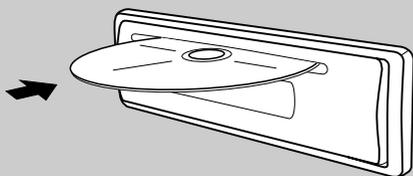


PTY codes

NEWS, AFFAIRS, INFO, SPORT, EDUCATE, DRAMA, CULTURE, SCIENCE, VARIED, POP M (music), ROCK M (music), EASY M (music), LIGHT M (music), CLASSICS, OTHER M (music), WEATHER, FINANCE, CHILDREN, SOCIAL, RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY, NATION M (music), OLDIES, FOLK M (music), DOCUMENT

Disc operations

Playing a disc

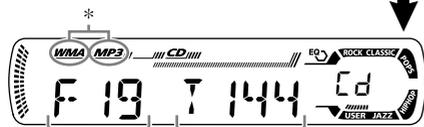


All tracks will be played repeatedly until you change the source or eject the disc.

About MP3 and WMA discs

MP3 and WMA (Windows Media® Audio) “tracks” (words “file” and “track” are used interchangeably) are recorded in “folders.”

- When inserting an MP3 or a WMA disc:



Total folder number Total file number

Disc information appears automatically (see page 13).

Selected folder number



Elapsed playing time Current track number

* Either the MP3 or WMA indicator lights up depending on the detected file.

- When inserting an audio CD or a CD Text disc:



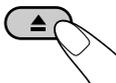
Total playing time of the inserted disc Total track number of the inserted disc

CD Text: Disc title/performer →
Track title appears automatically (see page 13).

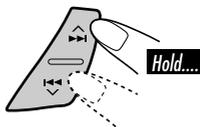


Elapsed playing time Current track number

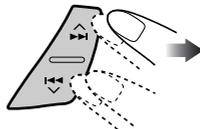
To stop play and eject the disc



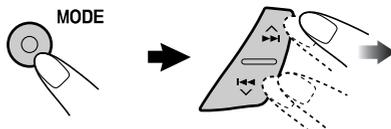
To fast-forward or reverse the track



To go to the next or previous tracks

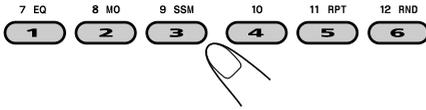


To go to the next or previous folders (only for MP3 or WMA discs)

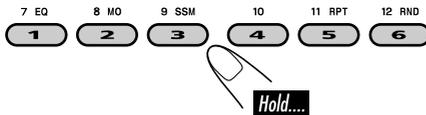


To locate a particular track (for CD) or folder (for MP3 or WMA discs) directly

To select a number from 01 – 06:

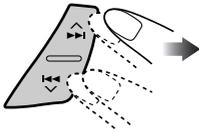


To select a number from 07 – 12:



- To use folder search on MP3/WMA discs, it is required that folders are assigned with 2-digit numbers at the beginning of their folder names—01, 02, 03, and so on.

- To select a particular track in a folder (for MP3 or WMA disc) after selecting a folder:



Prohibiting disc ejection

You can lock a disc in the loading slot.



To cancel the prohibition, repeat the same procedure.

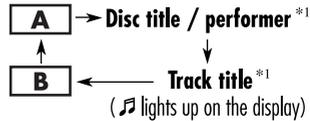


Changing the display information

DISP



While playing an audio CD or a CD Text

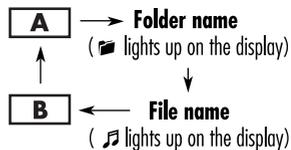


While playing an MP3 or WMA disc

- When “TAG DISP” is set to “TAG ON” (see page 17)



- When “TAG DISP” is set to “TAG OFF”



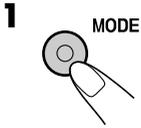
- A** : Clock and Current track/file number
- B** : Elapsed playing time and Current track/file number

*1 If the current disc is an audio CD, “NO NAME” appears.

*2 If an MP3/WMA file does not have ID3 tags, folder name and file name appear. In this case, the TAG indicator will not light up.

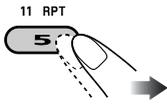
Selecting the playback modes

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



2 Select your desired playback mode.

Repeat play

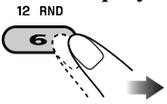


Ex.: When "TRK RPT" is selected while playing an MP3 disc

Mode	Plays repeatedly
------	------------------

- | | |
|------------------|--|
| TRK RPT | : The current track.
• RPT lights up. |
| FLDR RPT* | : All tracks of the current folder.
• [Folder icon] and RPT light up. |
| RPT OFF | : Cancels. |

Random play



Ex.: When "DISC RND" is selected while playing an MP3 disc

Mode	Plays at random
------	-----------------

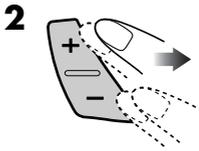
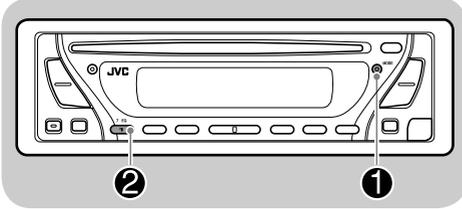
- | | |
|------------------|--|
| FLDR RND* | : All tracks of the current folder, then tracks of the next folder and so on.
• RND and [Folder icon] light up. |
| DISC RND | : All tracks of the current disc.
• RND and [Disc icon] light up. |
| RND OFF | : Cancels. |

* Only while playing an MP3 or WMA disc.

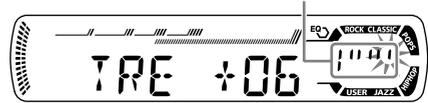
Sound adjustments

Selecting preset sound modes (C-EQ: custom equalizer)

(C-EQ: custom equalizer)

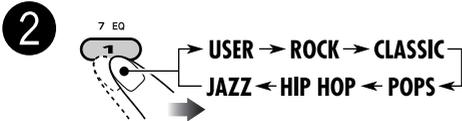
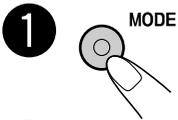


Indication pattern changes as you adjust the level.



Ex.: When "TRE" is selected

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



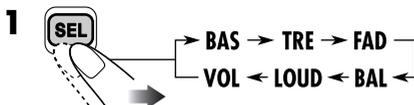
Indication	For:	Preset values		
		BAS* ¹	TRE* ²	LOUD* ³
USER	(Flat sound)	00	00	OFF
ROCK	Rock or disco music	+03	+01	ON
CLASSIC	Classical music	+01	-02	OFF
POPS	Light music	+04	+01	OFF
HIP HOP	Funk or rap music	+02	00	ON
JAZZ	Jazz music	+02	+03	OFF

*¹ BAS: Bass; *² TRE: Treble;

*³ LOUD: Loudness

Adjusting the sound

You can adjust the sound characteristics to your preference.



Indication	Range
BAS * ⁴ (bass) Adjust the bass.	-06 (min.) to +06 (max.)
TRE * ⁴ (treble) Adjust the treble.	-06 (min.) to +06 (max.)
FAD * ⁵ (fader) Adjust the front and rear speaker balance.	R06 (Rear only) to F06 (Front only)
BAL (balance) Adjust the left and right speaker balance.	L06 (Left only) to R06 (Right only)
LOUD * ⁴ (loudness) Boost low and high frequencies to produce a well-balanced sound at low volume level.	LOUD ON ↓ LOUD OFF
VOL * ⁶ (volume) Adjust the volume.	00 (min.) to 30 or 50 (max.)* ⁷

*⁴ When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."

*⁵ If you are using a two-speaker system, set the fader level to "00."

*⁶ Normally the +/- buttons work as the volume control. So you do not have to select "VOL" to adjust the volume level.

*⁷ Depending on the amplifier gain control setting. (See page 17 for details.)

General settings — PSM

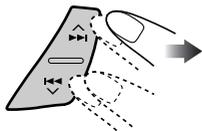
Basic procedure

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

1

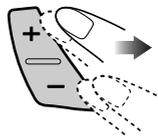


2 Select a PSM item.



Ex.: When you select "DIMMER"

3 Adjust the PSM item selected.



4 Repeat steps 2 and 3 to adjust the other PSM items if necessary.

5 Finish the procedure.



Indications

Selectable settings, [reference page]

DEMO

Display demonstration

DEMO ON : [Initial]; Display demonstration will be activated automatically if no operation is done for about 20 seconds, [7].

DEMO OFF : Cancels.

CLOCK H

Hour adjustment

0 – 23 (1 – 12), [7]

[Initial: 0 (0:00)]

CLOCK M

Minute adjustment

00 – 59, [7]

[Initial: 00 (0:00)]

24H/12H

24 hours or 12 hours time display

12H \rightleftharpoons 24H, [7]

[Initial: 24H]

CLK ADJ

Clock adjustment

AUTO : [Initial]; The built-in clock is automatically adjusted using the CT (clock time) data in the RDS signal.

OFF : Cancels.

Indications	Selectable settings, [reference page]
AF-REG Alternative frequency/ regionalization reception	When the received signals from the current station become weak... AF : [Initial]; Switches to another station (the programme may differ from the one currently received), [11]. • The AF indicator lights up. AF REG : Switches to another station broadcasting the same programme. • The AF and REG indicators light up. OFF : Cancels.
PTY-STBY PTY standby	Activates PTY Standby Reception with one of the 29 PTY codes, [11]. OFF [Initial] → 29 PTY codes, [11] → (back to the beginning)
TA VOL Traffic announcement volume	[Initial: VOL 20]; VOL 00 – VOL 30 or 50*1, [11].
P-SEARCH Programme search	ON : Using the AF data, the unit tunes in to another frequency broadcasting the same programme as the original preset RDS station is if the preset station signals are not sufficient. OFF : [Initial]; Cancels.
DIMMER Dimmer	ON : Activates dimmer. OFF : [Initial]; Cancels.
TEL Telephone muting	MUTING 1/MUTING 2 : Select either one which mutes the sounds while using the cellular phone. OFF : [Initial]; Cancels.
SCROLL *2 Scroll	ONCE : [Initial]; Scrolls the disc information once. AUTO : Repeats scrolling (5-second intervals in between). OFF : Cancels. • Pressing DISP for more than one second can scroll the display regardless of the setting.
TAG DISP Tag display	TAG ON : [Initial]; Shows the ID3 tag while playing MP3/WMA tracks, [13]. TAG OFF : Cancels.
AMP GAIN Amplifier gain control	You can change the maximum volume level of this unit. LOW PWR : VOL 00 – VOL 30 (Select this if the maximum power of the speaker is less than 50 W to prevent them from damaging the speaker.) HIGH PWR : [Initial]; VOL 00 – VOL 50

*1 Depends on the amplifier gain control.

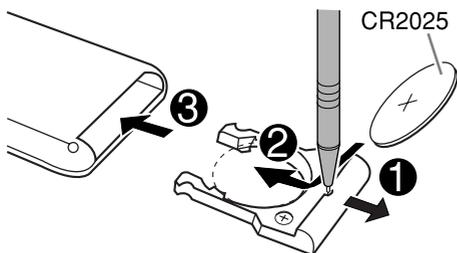
*2 Some characters or symbols will not be shown (and will be blanked) on the display.
(Ex. "ABC&!d#" ⇒ "ABCA D ".)

Using the remote controller — RM-RK60

This unit can be remotely controlled as instructed here (with an optionally purchased remote controller). We recommend that you use remote controller RM-RK60 with your unit.

- When operating, aim the remote controller directly at the remote sensor on the unit. Make sure there is no obstacle in between.

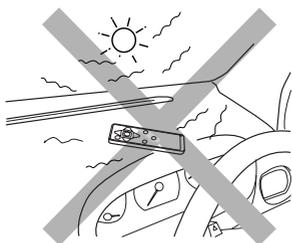
■ Installing the lithium coin battery (CR2025)



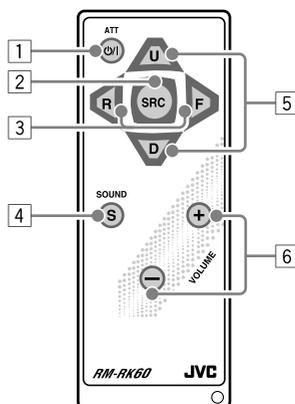
Warning:

- Do not install any battery other than CR2025 or its equivalent; otherwise, it may explode.
- Store the battery in a place where children cannot reach to avoid risk of accident.
- To prevent the battery from over-heating, cracking, or starting a fire:
 - Do not recharge, short, disassemble, or heat the battery or dispose of it in a fire.
 - Do not leave the battery with other metallic materials.
 - Do not poke the battery with tweezers or similar tools.
 - Wrap the battery with tape and insulate when throwing away or saving it.

Caution:



Main elements and features



- 1 **⏻/ATT** (standby/on attenuator) button
 - Turns on and off the power and also attenuates the sound.
- 2 **SRC** (source) button
 - Selects the source.
- 3 **R** (reverse) / **F** (forward) buttons
 - Searches for stations if pressed briefly.
 - Fast-forwards or reverses the track if pressed and held.
 - Changes the tracks of the disc.
- 4 **SOUND** button
 - Selects the sound mode (C-EQ: custom equalizer).
- 5 **U** (up) / **D** (down) buttons
 - U (up): Changes the FM/AM bands.
 - D (down): Changes the preset stations.
 - Changes the folder of the MP3/WMA discs.
- 6 **VOLUME +/-** buttons
 - Adjusts the volume level.

KD-G312 is equipped with the steering wheel remote control function.

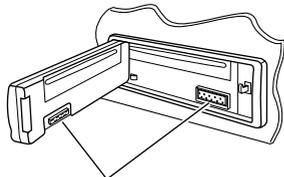
If your car is equipped with the steering remote controller, you can operate the unit using the controller.

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.



Connector

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.

Center holder



- 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, benzine, 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 unit

Basic operations

Turning on the power

- By pressing CD or FM/AM on the unit, you can also turn on the power.

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

- During SSM search...
 - All previously stored stations 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.
- When storing a station manually, a previously preset station is erased when a new station is stored in the same preset number.

FM RDS operations

- Network-Tracking Reception requires two types of RDS signals—PI (Programme Identification) and AF (Alternative Frequency) to work correctly. Without receiving these data correctly, Network-Tracking Reception will not operate.
- If a Traffic Announcement is received, the volume level (TA Volume) automatically changes to the preset level.

Disc operations

Caution for DualDisc playback

- The Non-DVD side of a “DualDisc” does not comply with the “Compact Disc Digital Audio” standard. Therefore, the use of Non-DVD side of a DualDisc on this product may not be recommended.

General

- This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/CD-RWs (Rewritable) in audio CD (CD-DA), MP3 and WMA format.
- When a disc has been loaded, selecting “CD” for the playback source starts disc play.

Inserting a disc

- When a disc is inserted upside down, the disc automatically ejects.
- Do not insert 8 cm discs (single CD) and unusual shape discs (heart, flower, etc.) into the loading slot.

Playing a disc

- While fast-forwarding or reversing on an MP3 or WMA disc, you can only hear intermittent sounds.

Playing a CD-R or CD-RW

- Use only “finalized” CD-Rs or CD-RWs.
- This unit can play back only the files of the same type which is first detected if a disc includes both audio CD (CD-DA) files and MP3/WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- 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 occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with “Packet Write” method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stain, scratch, warp, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.

- Do not use the 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 humidities may cause malfunctions or damages to discs.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and ID3 Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can handle only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps — 320 kbps
 - Sampling frequency:
 - 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 - 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 - Disc format: ISO 9660 Level 1/ Level 2, Romeo, Joliet, Windows long file name
- The maximum number of characters for file/folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (72) characters
 - Joliet*: up to 64 (36) characters
 - Windows long file name*: up to 128 (72) characters

* *The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 313 or more.*
- This unit can recognize the total of 512 files, of 200 folders, and of 8 hierarchies.

- This unit can play back the files recorded in VBR (variable bit rate).
The files recorded in VBR have a discrepancy in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.
- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an unappropriated format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATAC3, etc.
- The search function works but search speed is not constant.

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.

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.)

General settings—PSM

- If you change the “AMP GAIN” setting from “HIGH PWR” to “LOW PWR” while the volume level is set higher than “VOL 30,” the unit automatically changes the volume level to “VOL 30.”

Troubleshooting

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

	Symptoms	Remedies
General	<ul style="list-style-type: none"> • Sound cannot be heard from the speakers. 	<ul style="list-style-type: none"> • Adjust the volume to the optimum level. • Check the cords and connections.
	<ul style="list-style-type: none"> • The unit does not work at all. 	Reset the unit (see page 2).
FM/AM	<ul style="list-style-type: none"> • SSM automatic presetting does not work. 	Store stations manually.
	<ul style="list-style-type: none"> • Static noise while listening to the radio. 	Connect the aerial firmly.
Disc playback	<ul style="list-style-type: none"> • Disc automatically ejects. 	Insert the disc correctly.
	<ul style="list-style-type: none"> • CD-R/CD-RW cannot be played back. • Tracks on the CD-R/CD-RW cannot be skipped. 	<ul style="list-style-type: none"> • Insert a finalized CD-R/CD-RW. • Finalize the CD-R/CD-RW with the component which you used for recording.
	<ul style="list-style-type: none"> • Disc can be neither played back nor ejected. 	<ul style="list-style-type: none"> • Unlock the disc (see page 13). • Eject the disc forcibly (see page 2).
	<ul style="list-style-type: none"> • Disc sound is sometimes interrupted. 	<ul style="list-style-type: none"> • Stop playback while driving on rough roads. • Use an unscratched disc. • Check the cords and connections.
	<ul style="list-style-type: none"> • “NO DISC” appears on the display. 	<ul style="list-style-type: none"> • Insert a disc into the loading slot correctly.
MP3/WMA playback	<ul style="list-style-type: none"> • Disc cannot be played back. 	<ul style="list-style-type: none"> • Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. • Add the extension code <.mp3> or <.wma> to the file names.
	<ul style="list-style-type: none"> • Noise is generated. 	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)
	<ul style="list-style-type: none"> • A longer readout time is required (“CHECK” keeps flashing on the display). 	Do not use too many hierarchies and folders.
	<ul style="list-style-type: none"> • Tracks cannot be played back as you have intended them to play. 	⇒ <i>Playback order is determined when the files are recorded.</i>
	<ul style="list-style-type: none"> • Elapsed playing time is not correct. 	⇒ <i>This sometimes occurs during play. This is caused by how the tracks are recorded on the disc.</i>
	<ul style="list-style-type: none"> • “NO FILES” appears on the display. 	Insert a disc that contains MP3/WMA tracks.
	<ul style="list-style-type: none"> • Correct characters are not displayed (e.g. album name). 	⇒ <i>This unit can only display alphabets (capital: A – Z), numbers, and a limited number of symbols.</i>

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 Ω , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion.

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

Load Impedance: 4 Ω (4 Ω to 8 Ω allowance)

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.5 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

Other Terminal: Steering wheel remote input

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: (MW) 522 kHz to 1 620 kHz

(LW) 144 kHz to 279 kHz

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz): 65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 30 dB

Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50 μ V

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 Decoding Format:

MPEG1/2 Audio Layer 3

Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding Format:

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

Dimensions (W \times H \times D):

Installation Size (approx.):

182 mm \times 52 mm \times 150 mm

Panel Size (approx.):

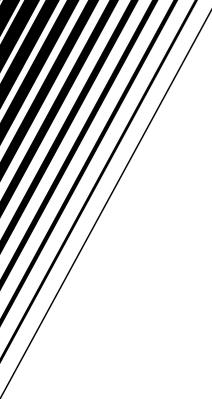
188 mm \times 58 mm \times 11 mm

Mass (approx.):

1.3 kg (excluding accessories)

Design and specifications are subject to change without notice.

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Having TROUBLE with operation?

Please reset your unit

Refer to page of How to reset your unit

JVC

