

CD RECEIVER

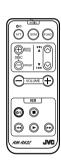
KD-LX50

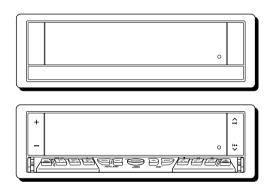
RECEPTOR CON CD

KD-LX50

RECEPTEUR CD

KD-LX50









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

INSTRUCTIONS MANUAL DE INSTRUCCIONES MANUEL D'INSTRUCTIONS

For customer Use:

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

Model No.

Serial No.

INFORMATION (For U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

IMPORTANT FOR LASER PRODUCTS

Precautions:

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

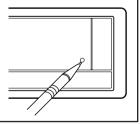
How to reset your unit

Press the reset button on the front panel using a ball-point pen or a similar tool.

This will reset the built-in microcomputer.

NOTE:

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



BEFORE USE

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

* Temperature inside the car....

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

WARNINGS

- DO NOT install any unit in locations where:
 - it may obstruct the steering wheel and gearshift lever operations, as this may result in a traffic accident.
 - it may obstruct the operation of safety devices such as air bags, as this may result in a fatal accident.
 - it may obstruct visibility.
- DO NOT operate any unit while manipulating the steering wheel, as this may result in a traffic accident.
- DO NOT register or record the voice commands while driving, as this may result in a traffic accident.
- If you need to operate the receiver while driving, be sure to look ahead carefully or you may be involved in a traffic accident.

CAUTION on Volume Setting

CDs 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.

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

CONTENTS

How to reset your unit2	
BASIC OPERATIONS6	
RADIO OPERATIONS Listening to the radio 7 Searching a station automatically: Auto search 7 Searching a station manually: Manual search 8 Storing stations in memory 9 FM station automatic preset: SSM 9 Manual preset 10 Tuning into a preset station 11 CD OPERATIONS Playing a CD 12 Locating a track or a particular portion on a CD 13 Selecting CD playback modes 14 Prohibiting CD ejection 15 Playing a CD Text 16	FM/AM
SOUND ADJUSTMENTS	A NE
What is Voice Recognition System?	STOP 47
OTHER MAIN FUNCTIONS	[☆] 0:00 _€
REMOTE OPERATIONS	

EXTERNAL COMPONENT OPERATIONS	
CD CHANGER OPERATIONS 54 Playing CDs 54 Selecting CD playback modes 56	
MAINTENANCE 58 Handling CDs 58 TROUBLESHOOTING 59	
SDECIFICATIONS 61	

To activate the display demonstration



While holding DISP, press ▲ ►►I until "DEMO" appears on the lower part of the display.

Various functions and display illumination modes equipped for this unit will be demonstrated repeatedly in sequence.

During the display demonstration, "DEMO" flashes on the lower part of the display.

To turn off the display demonstration, press ▲ ►►I again for a few seconds again while holding DISP.

• The display demonstration will turn off automatically after 1 hour.

How to use the number buttons:

After pressing MODE, the number buttons work as different function buttons (while "MODE" remains on the display).

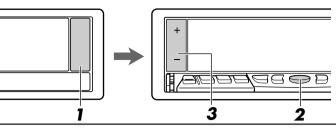
To use these buttons as number buttons after pressing MODE, wait for 5 seconds without pressing any number button so that "MODE" disappears from the display.

• Pressing MODE again also erases "MODE" from the display.





BASIC OPERATIONS



Notes:

- When you use this unit for the first time, set the built-in clock correctly, see page 40.
- To operate the voice recognition system, see pages 22 to 39.

7



Turn on the power.

The display illuminates and the control panel comes out.

2



Select the source.

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

- → Tuner (FM or AM) \rightarrow CD* \rightarrow CD changer** \rightarrow External component
- → (back to the beginning)

To operate the tuner, see pages 7 - 11.

To operate the CD player, see pages 12 – 16.

To operate the external component connected to the LINE IN plugs, see page 53.

To operate the CD changer, see pages 54 - 57.

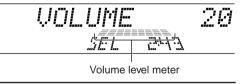
Notes:

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

3



Adjust the volume.



4

Adjust the sound as you want (see pages 17 – 21).

To drop the volume in a moment

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

To resume the previous volume level, press the button for more than 1 second again.

To turn off the power

Press and hold OFF/ ▲ until "SEE YOU" appears on the display.

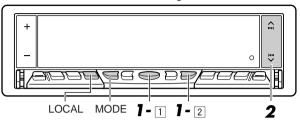
RADIO OPERATIONS

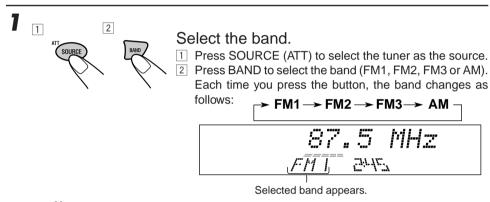


Listening to the radio

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

Searching a station automatically: Auto search





Note:

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



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

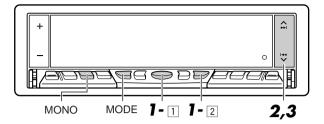
To tune in FM stations only with strong signals

This function works only while searching FM stations, including SSM preset (see page 9).

- 1 Press MODE.
 - "MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.
- **2** Press LOCAL, while "MODE" is still on the display, so that the LOCAL indicator lights up on the display.
 - Each time you press the button, the LOCAL indicator lights up and goes off alternately.



Searching a station manually: Manual search



1 1



Select the band.

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

Note:

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

2



Press and hold ▲ ▶▶I or I◄◄ ➤ until "M" (Manual) starts flashing on the display.



3



To tune into stations of higher frequencies

To tune into stations of lower frequencies

Tune into a station you want while "M" is flashing.

 If you release your finger from the button, the manual mode will automatically turn off after 5 seconds.

When an FM stereo broadcast is hard to receive:

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



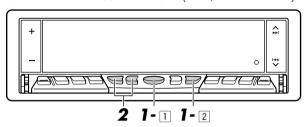
Storing stations in memory

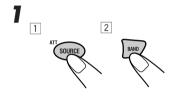
You can use one of the following two methods to store broadcasting stations in memory.

- 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).





Select the FM band number (FM1, FM2 or FM3) you want to store FM stations into.

- Press SOURCE (ATT) to select the tuner as the source.
- Press BAND to select the band (FM1, FM2, or FM3).



2



Press and hold both buttons for more than 2 seconds.



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

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

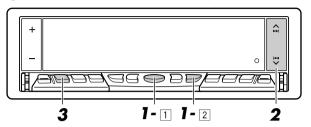
When automatic preset is over, the station stored in number button 1 will be automatically tuned in.



Manual preset

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

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



1 1



Select the band.

- Press SOURCE (ATT) to select the tuner as the source.
- 2 Press BAND to select the FM1 band.

2



Tune into a station of 88.3 MHz.

See page 7 to tune into a station.

M- 88.3 MHz

3



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

P1 88.3 MHz

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



4

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

Notes:

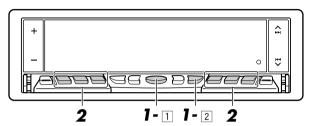
- A previously preset station is erased when a new station is stored in the same preset number.
- Preset stations are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the stations again.

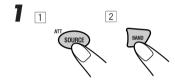


Tuning into a preset station

You can easily tune into a preset station.

Remember that you must store stations first. If you have not stored them yet, see pages 9 and 10.





Select the band.

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

2



Select the number (1-6) for the preset station you want.

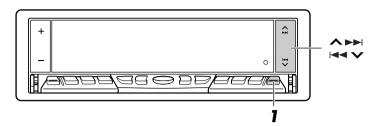
When using this unit in an area other than North or South America:

You need to change the AM/FM channel intervals. See "To change the AM/FM channel intervals" on page 47.



CD OPERATIONS

Playing a CD

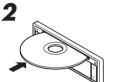






Open the loading slot.

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



Insert a disc into the loading slot.

The unit draws a CD, the display panel moves up, and CD play starts automatically.

Total track number

Total playing time of of the inserted disc the inserted disc

Elapsed playing time Current track

--Tr CD PLAY - 18Tr

Notes:

- When a CD is in the loading slot, selecting "CD" as the source by pressing SOURCE (ATT) starts
- When a CD is inserted upside down, "DISC EJECT" appears on the display and the CD automatically
- When you play a CD Text, the disc title and performer appear on the display. Then the current track and elapsed playing time appear on the display. See also "Playing a CD Text" (page 16) and "To select the scroll mode" (page 46).

If a CD Text includes much text information, some may not appear on the display.

• If you change the source, the CD play also stops (without ejecting the CD).

To stop play and eject the CD

Press OFF/≜ briefly.

CD play stops, the display panel moves down, then the CD automatically ejects from the loading slot.

To move up the display panel, press ∧ ▶▶I or I◄◄ ∨.

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

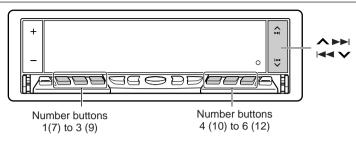


Note:

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



Locating a track or a particular portion on a CD



To fast-forward or reverse the track



Press and hold $\wedge \triangleright \!\!\! \triangleright$ I, 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 A I 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

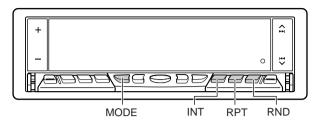


Press the number button corresponding to the track number to start its playback.

- 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)

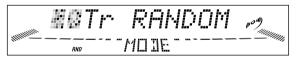
You can play back all tracks on the CD at random.



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



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

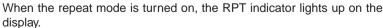


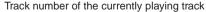
To play back tracks repeatedly (Repeat Play)

You can play back the current track repeatedly.



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











To play back only intros (Intro Scan)

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





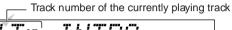
"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.



Each time you press the button, CD intro scan mode turns on and off alternately.

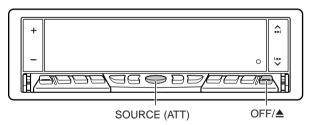
When the intro scan mode is turned on, "INTRO" appears on the display for 5 seconds and the track number flashes.







Prohibiting CD ejection



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

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



Note:

If you press OFF/\triangleq while CD ejection is prohibited, the control panel moves down, but the CD cannot be ejected. ("NO EJECT" appears on the display.)

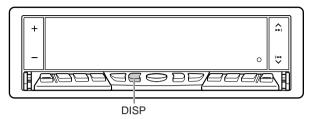
To move up the display panel, press $\wedge \triangleright \mid$ or $\mid \blacktriangleleft \triangleleft \vee$.

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



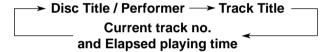
Playing a CD Text

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





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



Notes:

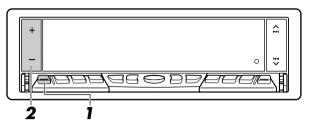
- The display shows up to 12 characters at one time and scrolls if there are more than 12 characters. See also "To select the scroll mode" on page 46.
- When you press DISP while playing a conventional CD, "NO NAME" appears for the disc title/ performer and the track title.

SOUND ADJUSTMENTS



Adjusting the sound

You can adjust the sound characteristics to your preference.

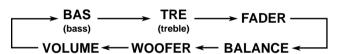


7



Select the item you want to adjust.

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



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

Note:

2



Adjust the level.

Equalization pattern changes as you adjust the bass or treble.



Note:

Normally + / – button works as the volume control. So you do not have to select "VOLUME" to adjust the volume level.

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

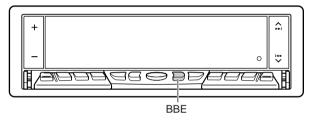


Turning on/off the BBE^{II} function

The BBE^{II*} function restores the brilliance and clarity of the original live sound in recording, broadcasts, etc.

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

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



Each time you press BBE, the BBE^{II} function changes as follows.



As the number gets higher, the BBE $^{\rm II}$ function becomes stronger. When shipped from the factory, the BBE $^{\rm II}$ function is set to "BBE 2."

To cancel the BBE" function, select "BBE OFF."

* Under license from BBE Sound, Inc. **BBE**¹⁷ is a trademark of BBE Sound, Inc.



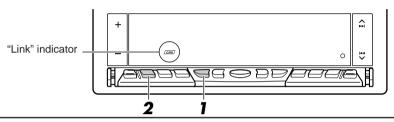
Using the Sound Control Memory

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

Selecting and storing the sound modes

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

If you do not want to store the sound mode separately for each playback source, but want to
use the same sound mode for all the sources, see "To cancel Advanced SCM" on page 45.

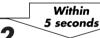






Light "MODE" on the lower part of the display.

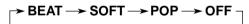
The number buttons can work as different function buttons



Select the sound mode you want.

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



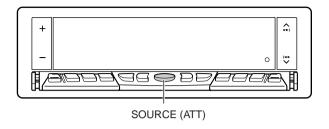


- If the "Link" indicator is lit on the display (with "SCM LINK" set to "SCM LINK ON" — see page 45), the selected sound mode can be stored in memory for the current source, and the effect applies to the current source.
- If the "Link" indicator is NOT lit on the display (with "SCM LINK" set to "SCM LINK OFF"), the selected sound mode effect applies to any source.

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



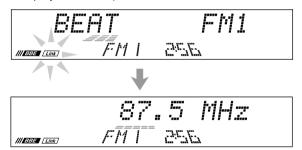
Recalling the sound modes





Select the source while the "Link" indicator is lit on the display.

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



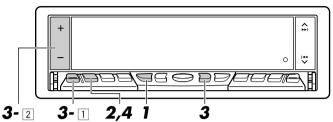
Notes:

- You can adjust each sound mode to your preference, and store it in memory.
 If you want to adjust and store your original sound mode, see "Storing your own sound adjustments" on page 21.
- To adjust the bass and treble reinforcement levels or to turn on/off the BBE¹¹ function temporarily, see pages 17 and 18. (Your adjustments will be canceled if another source is selected.)
- By setting "CLOCK DISP" to "CLK DISP OFF" (see page 45), you can always show the current sound mode setting when the unit is turned on.



Storing your own sound adjustments

You can adjust the sound modes (BEAT, SOFT, POP: see page 19) to your preference and store your own adjustments in memory.



7



Light "MODE" on the lower part of the display.

The number buttons can work as different function buttons.

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

2



Select the sound mode you want.

For details, see page 19.

3





To adjust the bass or treble level

- 1 Select "BAS" or "TRE."
- 2 Adjust the bass or treble level.



To turn on or off the BBE II function See page 18.

4



Press and hold SCM until the sound mode you have selected flashes on the display.

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

5

Repeat the same procedure to adjust other sound modes.

To reset to the factory settings

Repeat the same procedure and reassign the preset values listed in the table on page 19.



VOICE COMMAND OPERATIONS

What is Voice Recognition System?

The Voice Recognition System enables the voice command operations — "Speak a word. It will be done."

This System allows you to operate the receiver by your spoken words with ease and safety. It has ended the risk of searching for push-buttons while you are on the road.

JVC Voice Recognition System provides you two modes; **Standard Word** mode and **User Word** mode.

In the **Standard Word** mode, this System allows you to use only 13 **Operation Commands**, preset by the factory, and covering basic operations such as "turning off the power" and "Ejecting the CD" (see the Preset Operation Command list on page 24).

The Operation Commands are speaker-independent in the Standard Word mode, so the System recognizes and responds to an Operation Command spoken by anyone in English.

In the **UserWord** mode, then, you can use two types of commands — **Operation Commands** and **Access Commands**.

The Operation Commands are exactly the same as you can use in the Standard Word mode, except the fact that you have to register the commands using your own voice before use.

On the other hand, the Access Commands must be preset by yourself, and be registered by CD your own voice. For example, you can preset an Access Command to choose a disc in the CD changer when you say "Pop music." The Voice Recognition System responds to your command, giving you direct access to the disc . You need to preset what to do and what to speak for the Access Commands.

In the User Word mode, both the Operation Commands and the Access Commands are speaker-dependent. So, they may be any phrase in any language (English, Spanish, even Japanese) as long as they are registered using your voice.

This fact ensures that only you can operate this receiver by your voice.

JVC Voice Recognition System	
Standard Word mode	User Word mode
Features: No registration of commands required before use. Only 13 Operation Commands available. Anyone's voice can be recognized. Only English can be recognized.	Features: Registration of your voice required before use. More commands available (13 Operation Commands and 12 Access Commands). Only your voice can be recognized. Any language can be recognized.



Before using the voice commands

Read carefully the following precautions.

Before you start...

- Make sure that the voice control unit, voice remote, and microphone are correctly connected. (Refer to the Installation/Connection Manual separately supplied.)
- Set "VOICE/BEEP" to "VOICE," and "VOICE LANG" to the language you understand (see page 39). This may make the voice command operations easy for you to follow.

Precautions for registering your voice:

- · Words you should not use:
 - Similarly-pronounced words: If you register words similarly pronounced for different commands, the Voice Recognition System cannot distinguish the differences and cannot recognize your voice.
 - <u>Too short or too long words</u>: Too short or too long words may be difficult to register.
 Use the words of adequate length (within 3 seconds).
- Where to register: Command registration should be performed in as quite a condition as possible with car windows all closed.
- Timing to speak your voice: Your voice will not be accepted unless the voice navigation "Please speak now", "Please repeat" or "Please speak again" is finished completely.
 - Speak word(s) only while "SPEAK" or "REPEAT" is shown on the display.
 - Pronounce your words in a large, clear voice.
- Keep the ignition turned on during registration:Do not turn on or off the ignition.

Precautions when speaking your commands:

- Your voice commands may not be recognized or executed correctly in the following cases:
 - When road conditions are not good. (for example, you are driving on rough roads.)
 - When car windows are open and surrounding noise is high.
- In the Standard Word mode: Due to the characteristics of your voice, the Voice Recognition System may fail to recognize your Operation Commands you speak and they cannot be executed correctly. If this happens, use the User Word mode.
- In the User Word mode: If an operation different from one you have commanded is executed, or if your command is ignored so frequently, try to change and register different words again.



Operating the receiver in the Standard Word mode

In the System, 13 preset Operation Commands have been preset when shipped from the factory.

When you speak these 13 preset words (in English), the receiver operates as you command the receiver to do so.

To use the preset voice commands without recording your own voice, make sure that "VOICE WORD" is set to "STANDARD" (initial setting).

If not, set it correctly by following the steps described on pages 38 and 39.

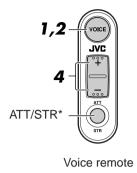
Preset Operation Command list

Command No.	Voice Commands (Words you speak)	What to do	
1	POWER OFF (Power off)	Turn off the receiver.	
2	►►I SEEK ^ (Up)	 While playing a CD, change the track number in the increasing order. While listening to the radio, change the frequencies in the increasing order. 	
3	I ⊲⊲ SEEK ∨ (Down)	 While playing a CD, change the track number in the decreasing order. While listening to the radio, change the frequencies in the decreasing order. 	
4	EJECT (Eject)	Eject the CD from the receiver if any.	
5	NEXT (Next)	 While playing the CD changer (not supplied), change the CD number in the increasing order. While listening to the radio, change the preset channel numbers in the increasing order. 	
6	BACK (Back)	 While playing the CD changer (not supplied), change the CD number in the decreasing order. While listening to the radio, change the preset channel numbers in the decreasing order. 	
7	CD (CD)	Change the source to CD.	
8	CHANGER (Changer)	Change the source to the CD changer if connected.	
9	LINE-IN (Line in)	Change the source to the external component.	
10	FM (FM)	Change the source to FM.	
11	AM (AM)	Change the source to AM.	
12	VCR PLAY (Play)*	Start playback on the VCR (KZ-V10) if connected.	
13	VCR STOP (Stop)*	Stop playback on the VCR (KZ-V10) if connected.	

^{*} Used only when the external component is selected as the source.



Basic Procedure



* ATT stands for "attenuator," and STR stands for "store."

7



Turn on the power.

The display illuminates and the control panel comes out.

2



Activate the Voice Recognition System.

"SPEAK" starts flashing on the display after the voice navigation "Please speak now" (or a beep).



3

Speak one of the Operation Commands (listed on page 24) to the microphone while "SPEAK" is flashing on the display.

The receiver performs what you command it to do. (Ex. when you speak "FM.")

If your voice cannot be recognized

The unit will ask you to speak again (and more) until "V.COMMAND" disappears from the display.

If your voice command cannot be carried out and "V.COMMAND" disappears, repeat from step 2.

TO BE CONTINUED ON THE NEXT PAGE





Adjust the volume.

To drop the volume in a moment

Press ATT (STR) 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 again.

Operating the receiver in the User Word mode

In the User Word mode, you can use 13 preset Operation Commands and 12 Access Commands.

To use these voice commands in the User Word mode, you have to do the following:

To use the Operation Commands;

- ① Select the User Word mode (Follow steps 1 to 4 on page 27.)
- ② Register your voice into each Operation Command (Follow steps 5 to 11 on pages 27 to 29.)

To use the Access Commands:

- ① Select the User Word mode (Follow step 1 on page 30.)
- ② Select an operation to preset into an Access Command (For operations you can store into the Access Commands, see page 30.)
- 3 Register your voice into the Access Command (See pages 31 to 34.)

Registering your own voice for the Operation Commands

When shipped from the factory, the System recognizes and accepts the Operation Commands anyone speaks (in the Standard Word mode).

If you do not like this and want to make the System accept only your own voice as an Operation Command, you need to record your own voice (within 3 seconds long).

Before you start...

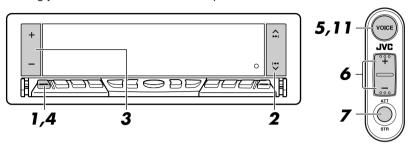
- Set "VOICE WORD" to "USER."
 - Without setting it to "USER," you cannot record your own voice.
- Notice the following:
 - You can only use the Operation Command for which you have registered your voice.
 - You can register any word you want; however, if it is too short (ex. "Pops"), the System may not recognize it correctly.



Registering procedure

EXAMPLE:

Storing your own voice "Turn off" into Operation Command number 01



Voice remote

7



Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 44.)

2



Select "VOICE WORD."

3



Set it to "USER."

• For more details, see page 39.

4



Finish the setting.

5



Press and hold VOICE until Access Command (VOICE 14) appears on the display.

USER 01



6



Select the preset voice command number (VOICE 01).

POWER OFF

7



Press STR (ATT) to make the System ready to record your voice.

"SPEAK" starts flashing on the display after the voice navigation "Please speak now."

8

Speak the word(s) you want to record while "SPEAK" is flashing on the display. (In this example, speak "Turn off.")

POWER OFF

• If the System recognizes your word(s), "REPEAT" starts flashing on the display after the voice navigation "Please repeat."



If the System does not recognize your word(s), it will ask you to speak again. In this
case, speak the word(s) again.



9

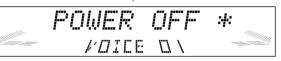
Speak the same word(s) again while "REPEAT" is flashing on the display. (In this example, speak "Turn off.")



"CHECK" appears on the display while recording your voice.



"OK" appears when recording is complete.



"*" on the display means that your own voice is recorded for this voice command.

If the recording fails

A beep sound comes out and the display goes back to the one shown in step 6.

10

Repeat steps 6 to 9 to record your own voice for other preset Operation Commands (VOICE 02 to VOICE 13).

11



Press and hold VOICE again to finish the recording.

To make the system recognize and accept the preset voice commands anyone speaks

Set "VOICE WORD" to "STANDARD" by following steps 1 to 4 on page 27. (In step 3, press + to select "STANDARD.")

To erase your own voice from the Operation Commands

See "To erase the voice commands" on page 37.



Presetting the Access Commands

You can store the frequently-used operations into the Access Commands and register your voice to make the System execute the Access Commands.

- You can store the following operations into the Access Commands;
 - Selecting the source (CD and External component).
 - Selecting the frequencies (FM and AM).
 - Selecting the CDs in the CD changer.

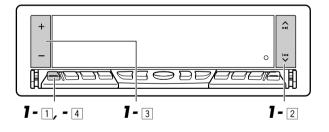
Before you start...

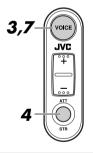
- Set "VOICE WORD" to "USER."
 - Without setting it to "USER," you cannot preset the Access Commands.
- Notice the following;
 - You can store up to 12 Access Commands (12 operations and voice commands into memory).
 - Each voice command must be within 3 seconds long.
 - You can register any word you want; however, if it is too short (ex: "Pops"), the System may not recognize it correctly.

Registering procedure (for the first Access Command)

EXAMPLE:

Storing an operation of "selecting the FM station of 89.5 MHz," and registering words "Jazz 89" as your Access Command to that operation into Access Command number 14.





Voice remote

7

Select the User Word mode by following steps 1 to 4 on page 27.

- 1 Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press ▲ ▶►I or I◄◄ ➤ repeatedly until "VOICE WORD" appears on the display.
- Press to select "USER WORD."
- 4 Press SEL again to finish the setting.



2

Select the operation you want to store into the Access Command. (In this case, select "FM 89.5 MHz.")

29.5 MHz

If you want to memorize the sound mode at the same time Select the sound mode you want. (See page 19.)

Note:

Preset number cannot be stored but only its station frequency is stored in the user voice command.

3



Press and hold VOICE until Access Command (VOICE 14) appears on the display.

USER 01 YOICE NA

4



Press STR (ATT) to make the System ready to record your voice.

"SPEAK" starts flashing on the display after the voice navigation "Please speak now."

5

Speak the word(s) you want to record while "SPEAK" is flashing on the display. (In this example, speak "Jazz 89.")

USER 01 SPERK

• If the System recognizes your word(s), "REPEAT" starts flashing on the display after the voice navigation "Please repeat."

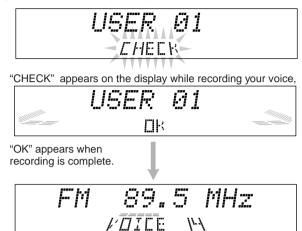
USER 01 PEPERT

• If the System does not recognize your word(s), it will ask you to speak again. In this case, speak the word(s) again.



6

Speak the same word(s) again while "REPEAT" is flashing on the display. (In this example, speak "Jazz 89.")



7



Press and hold VOICE again to finish the recording.

Note:

If you want to show "JAZZ 89" on the display when you recall this station using the voice command, assign the name "JAZZ 89" to this station. See "Assigning names to the sources" on page 48.

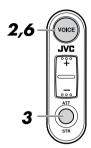
TO BE CONTINUED ON THE NEXT PAGE



Registering procedure (Continued for the second Access Command by following the previous one)

EXAMPLE:

Storing an operation of "selecting disc number 01 in the CD changer," and registering word "Classics" as your Access Command to that operation into Access Command number 15.



Voice remote

1

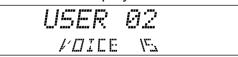
Select the operation you want to store into the Access Command. (In this case, select "disc number 01 in the CD changer.")



2



Press and hold VOICE until Access Command (VOICE 15) appears on the display.



3



Press STR (ATT) to make the System ready to record your voice.

"SPEAK" starts flashing on the display after the voice navigation "Please speak now."

TO BE CONTINUED ON THE NEXT PAGE



4

Speak the word(s) you want to record while "SPEAK" is flashing on the display. (In this example, speak "Classics.")

USER 02 SPERK

• If the System recognizes your word(s), "REPEAT" starts flashing on the display after the voice navigation "Please repeat."



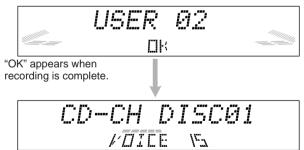
If the System does not recognize your word(s), it will ask you to speak again. In this
case, speak the word(s) again.

5

Speak the same word(s) again while "REPEAT" is flashing on the display. (In this example, speak "Classics.")



"CHECK" appears on the display while recording your voice,



6



Press and hold VOICE again to finish the recording.

7

Repeat the above procedure to store other Access Commands.



To operate the system in the User Word mode

Make sure to set "VOICE WORD" to "USER" by following steps 1 to 4 on page 27. Then follow the procedure below.

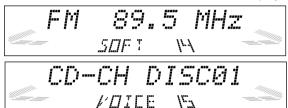
- 1 Press VOICE to turn on the receiver.
- 2 Press VOICE again to activate the Voice Recognition System.
- **3** Speak one of the Operation Commands or of the Access Commands you have stored to the microphone while "SPEAK" is flashing on the display.
 - For example, to use Access Command number 14, speak "Jazz 89" (which you have registered previously.)
- 4 Press + or to adjust the volume.

To check the registered voice and stored operations

Follow the procedure below.

- 1 Press and hold VOICE until one of the Access Commands appears on the display.
- 2 Press + or to confirm the command contents.
 - Each time you press + or -, the commands appear on the display in sequence.

You can check the command contents on the display.



EXAMPLE: A station of 89.5 MHz is stored in the Access Command 14 (with sound mode — "SOFT")

EXAMPLE: Disc no. 01 of the CD changer is stored in the Access Command 15 (without any sound mode)

The recorded voice is also reproduced.

If you want to check the recorded voice again

Press VOICE while the voice command number you want to confirm is selected.

3 Press and hold VOICE again to finish the checking.



To change the Access Command contents

You can change the following command contents:

- Registered word(s) (ex: disc name, frequency name)
- Registered word(s) and operation (ex: disc number 01 of the CD changer → disc number 03 of the CD changer, CD changer → FM 89.5 MHz)

If you want to change an Access Command contents, follow the procedure below. Be sure to select the source you want to store newly before you start.

EXAMPLE: When you replace the CD named "Classical music" (disc number 01 in the CD changer) to another CD named "Popular music."

In this case, you may want to change the voice Access Command "Classics" to "Pop music" for Access Command 15.

1 Select the source you want to store newly. (In this example, select disc number 01 in the CD changer.)

251 | 1 DE

- 2 Press and hold VOICE until one of the Access Commands appears on the display.
- 3 Press + or to select the Access Command number whose voice command you want to change. (In this example, select Access Command number 15.)



- 4 Press STR (ATT) to make the System ready to record your voice. "SPEAK" starts flashing on the display after the voice navigation "Please speak now."
- 5 Speak the word(s) you want to register while "SPEAK" is flashing on the display. (In this example, speak "Pop music.")
 - "REPEAT" starts flashing on the display after the voice navigation "Please repeat."
- **6** Speak the same word(s) again while "REPEAT" is flashing on the display. (In this example, speak "Pop music").
 - "CHECK," then "OK" appears when recording is complete.
- 7 Press and hold VOICE again to finish the recording.



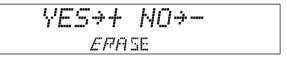
To erase the voice commands

If you want to erase the Access Commands (VOICE 14 to VOICE 25) already stored, or if you want to erase the registered voice for the Operation Commands (VOICE 01 to VOICE 13), follow the procedure below.

- An Operation Command cannot be erased but only the registered voice for it is erased.
- 1 Press and hold VOICE until one of the Access Commands appears on the display.
- 2 Press + or until the voice command you want to delete appears on the display. (In this example, select Access Command number 15.)



3 Press and hold STR (ATT) until the following message appears on the display.



4 Press + to erase the voice command.

If you want to cancel the erasing, press -.

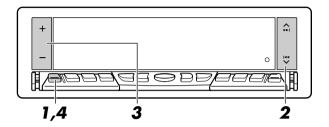
5 Press and hold VOICE again to finish the erasing.



Other convenient functions for the Voice Recognition System

You can use the functions described on the next page for the Voice Recognition System.

Basic Procedure



7



Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 44.)

2



Select the function you want to set or adjust — VOICE LANG, VOICE/BEEP, VOICE WORD, or VOICE VOL.

3



Set or adjust the selected function.

4



Finish the setting.



To select the voice navigation language — VOICE LANG

When the voice control unit is connected to the receiver, you can select the language for the voice navigation in the voice command registration process. When this unit is shipped from the factory, "English" is selected.

- English: English navigation will be heard while registering your voice commands into the system.
- French: French navigation will be heard while registering your voice commands into the
- French: French navigation will be neard while registering your voice commands into the system.
- Spanish: Spanish navigation will be heard while registering your voice commands into the system.

Note:

If "VOICE/BEEP" is set to "BEEP," you cannot hear the voice navigation. (See below.)

To select the voice navigation or beep sound — VOICE/BEEP

When the voice control unit is connected to the receiver, you can select either the voice navigation (see above) or the confirmation beep, which is heard in response to the given commands. When this unit is shipped from the factory, "VOICE" is selected.

- VOICE: English, French, or Spanish navigation will be heard in response to the given commands.
- BEEP: Confirmation beep sound will be heard in response to the given commands.

To change the Voice Recognition System operation mode — VOICE WORD

When the voice control unit is connected to the receiver, you can only use the Operation Commands (in the Standard Word mode).

If you want to use the other Access Commands or to make the Voice Recognition System accept only your own voice as a command, change the Voice Recognition System operation mode.

- STANDARD: The System recognizes and accepts the Operation Commands anyone speaks (in English).
- USER: The System only recognizes and accepts your voice both for the Operation Commands and the Access Commands.

Note:

When you register your voice for the Operation Commands or preset the Access Commands, you have to select "USER" before you start.

To adjust the voice navigation volume — VOICE VOL

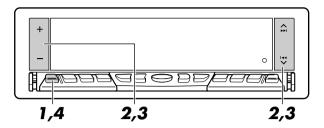
When the voice control unit is connected to the receiver, you can adjust the voice navigation volume level (00 - 50).

When shipped from the factory, the voice navigation volume level is set at level 15.



🖦 OTHER MAIN FUNCTIONS

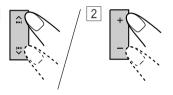
Setting the clock





Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 44.)

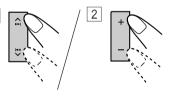
2 1



Set the hour.

- 1 Select "CLOCK HOUR" if not shown on the display.
- 2 Adjust the hour.

3 1



Set the minute.

- Select "CLOCK MINUTE."
- Adjust the minute.



Finish the setting.

To check the current clock time while the unit is turned off, press + or -.

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



Controlling the volume automatically (Audio Cruise)

You can select the proper cruise mode for your car.

This unit changes the volume level automatically (at 3 possible levels) based on the driving speed of your car by detecting the alternator's generating frequency (Audio Cruise).

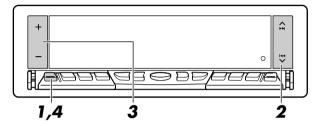
If you want to use this mode, follow the procedure below. When shipped from the factory, this mode is set to "CRUISE OFF."

- CRUISE 1: Select this if your car is relatively quiet.
- CRUISE 2: Select this if your car is relatively loud.

The volume increase rate is twice as much as that of the CRUISE 1

setting.

· CRUISE OFF: Cancels Audio Cruise.



1



Press and hold SEL (Select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 44.)

2



Select "CRUISE MODE."

3



Select the desired setting.

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

> CRUISE 1 ← → CRUISE 2 ← → CRUISE OFF ←

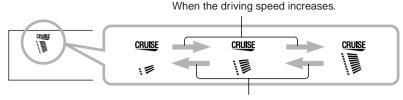
4



Finish the setting.



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



When the driving speed decreases.

To adjust the volume increase rate

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

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

If Audio Cruise does not function correctly

You may need to store the idling speed into memory to make Audio Cruise function correctly.

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

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

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

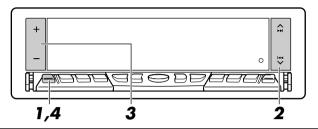
• If this happens, see the NOTICE above.



Changing the general settings (PSM)

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

Basic Procedure



7



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

2



Select the PSM item you want to adjust. (See page 44.)

3



Adjust the PSM item selected above.

4



Finish the setting.

1	2 Select.	3	Set.	Factory-preset settings	See page
CLOCK HOUR	Hour adjustment	Back	Advance		
CLOCK MINUTE	Minute adjustment	Back	Advance	1:00	40
SCM LINK	Sound control memory linkage	SCM LINK OFF	SCM LINK ON	SCM LINK ON	45
CLOCK DISP	Clock display	CLK DISP OFF	CLK DISP ON	CLK DISP ON	45
LEVEL METER	Level display	6 types (\$	See page 45.)	NORMAL	45
DIMMER MODE	Dimmer mode	DIMMER AUTO DIMME		DIMMER AUTO	45
CRUISE MODE	Audio cruise	CRUISE 1 ↔ CRUISE 2 → CRUISE OFF ←		CRUISE OFF	41
+OR- RPM SET*	Idling speed	_		800 rpm	42
BOOST*	Boost	BOOST	BOOST 01 - 15		42
BEEP SWITCH	Key-touch tone	BEEP OFF	BEEP ON	BEEP ON	45
P. AMP SWITCH	Power amplifier switch	P. AMP OFF	P. AMP ON	P. AMP ON	46
CONTRAST	Display contrast	CONTRAS	ST 01 –10	CONTRAST 05	46
SCROLL MODE	Scroll mode	SCROLL ONCE ← \$\hat{\(\) \} SCROL	→ SCROLL AUTO	SCROLL ONCE	46
WOOFER FREQ	Subwoofer cutoff frequency	FREQ LOW ← ↑ FREQ	→ FREQ MID HIGH ←	FREQ MID	46
AREA CHANGE	Channel interval	AREA US	AREA EU	AREA US	47
LINE ADJ	Line input level adjustment	LINE ADJ 00 – 05		LINE ADJ 00	47
VOICE LANG**	Voice language	English ↔ French		English	39
VOICE/BEEP**	Voice/beep	VOICE	BEEP	VOICE	39
VOICE WORD**	Voice word	USER	STANDARD	STANDARD	39
VOICE VOL**	Voice volume	VOICE VOL 00 – 50		VOICE VOL 15	39
FLAT PANEL	Flat panel	FLAT OFF	FLAT ON	FLAT OFF	47

^{*} When you select "CRUISE 1" or "CRUISE 2" for Audio Cruise Mode, you can adjust these items

^{**} These items are shown only when the voice control unit is connected to the receiver.





To cancel 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.

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

To set the clock display — CLOCK DISP

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

- CLK DISP ON: Clock display is turned on.
- CLK DISP OFF: Clock display is turned off. When "CLK DISP OFF" is selected, the
 current sound mode setting (see page 20) is shown on the upper part of
 the display.

To select the level meter — LEVEL METER

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

NORMAL: Normal audio level meter (illuminates from bottom to top)

REVERSE: Level meter illuminates from top to bottom.
 WIDE: Level meter illuminates from center to outside.
 RACE: Level meter illuminates as if cars are racing.

LEVEL OFF: Level meter stays lit and does not change its illumination.

ALL OFF: Level meter turns off.

To select the dimmer mode — DIMMER MODE

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

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

• DIMMER AUTO: Activates Auto Dimmer.

• DIMMER OFF: Cancels Auto Dimmer.

• DIMMER ON: Always dims the display.

Note on Auto Dimmer:

Auto Dimmer equipped with this unit may not work correctly on some vehicles, particularly on those having a control dial for dimming.

In this case, set the dimmer mode to "DIMMER ON" or "DIMMER OFF."

To turn on/off the key-touch tone — BEEP SWITCH

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

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



To turn on/off the power amplifier switch — P. AMP SWITCH

You can switch off the built-in amplifier and send the audio signals only to the external amplifier(s) to get clear sounds and to prevent internal heat buildup inside this unit. When shipped from the factory, the power amplifier switch is turned on so that the built-in amplifier works.

P. AMP ON: Select this mode when not using external amplifier(s).
 P. AMP OFF: Select this mode when using external amplifier(s).

To adjust the display contrast level — CONTRAST

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

To select the scroll mode — SCROLL MODE

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

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

Note:

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

To select the subwoofer cutoff frequency — WOOFER FREQ

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

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



To change the AM/FM channel intervals — AREA CHANGE

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

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

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

Note:

If the channel intervals settings are changed, the following will occur.

- The names assigned to the stations will be erased from memory. To reassign the names, see "Assigning names to the sources" on pages 48 50.
- The frequencies stored in the Access Commands will be changed. If this happens, store the Access Commands again. See "Presetting the Access Commands" on pages 30 34.

To adjust the line input level — LINE ADJ

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

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

To make the front panel look flat (hiding the control panel) — FLAT PANEL

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

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

Note:

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

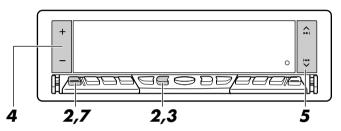


Assigning names to the sources

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

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

^{*} You cannot assign a name to a CD Text.



Select a source you want to assign a name to.

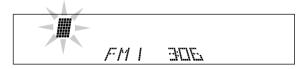
2



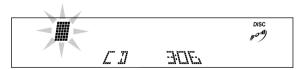


Press and hold SEL (Select) for more than 2 seconds while pressing DISP.

When you select a station frequency as the source:



When you select the CD as the source:



When you select the external component connected to LINE IN as the source:

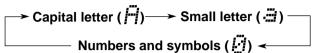




3



Select the character set you want while "" is flashing. Each time you press the button, the character set changes as follows:



4



Select a character.

About the available characters, see page 50.

5



Move the cursor to the next (or previous) character position.

6

Repeat steps 3 to 5 until you finish inputting the name.

7



Press the button while the last selected character is flashing.

The input name is stored in memory.

To erase the input characters

Insert spaces using the same procedure described above.

Available characters

Capital letters

Α	В	C	D	Ш	F	G	Ι	I	J
K	Ш	М	Ζ	0	Р	Q	R	S	Т
U	V	W	Х	Υ	Z	space			

Small letters

а	b	С	d	е	f	g	h	i	j
k	ı	m	n	0	р	q	r	S	t
u	V	W	Х	у	Z	space			

Numbers and symbols

0	1	2	3	4	5	6	7	8	9
!	"	#	\$	%	&	,	()	*
+	,	_		/	• •	•	٧	=	^
?	@		`	space					

Notes:

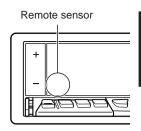
- When you try to assign a name to the 41st disc, "NAME FULL" appears on the display. (In this case, delete unwanted names before assignment.)
- When the CD changer is connected, you can assign names to CDs in the CD changer. These names can also be shown on the display if you insert the CDs in this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

REMOTE OPERATIONS



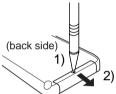
Before using the remote controller:

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

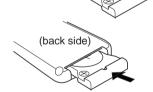


Installing the battery

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







1. Remove the battery holder.

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

2. Place the battery.

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

3. Return the battery holder.

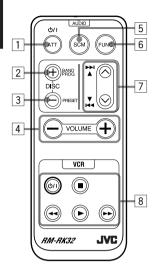
Insert again the battery holder pushing it until you hear a clicking sound.

WARNING:

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



Using the remote controller



- 1 Turns on the unit if pressed briefly.
 - Turns off the unit if pressed and held until "SEE YOU" appears on the display.
 - Drops the volume level for a moment if pressed briefly.
 Press again to resume the volume.
- Functions as the BAND button while listening to the radio.
 Each time you press the button, the band changes.
 - Functions as the DISC + button while listening to the CD changer.

Each time you press the button, the disc number increases, and the selected disc starts playing.

- Does not function as the PROG button.
- Functions as the PRESET button while listening to the radio.

Each time you press the button, the preset station number increases, and the selected station is tuned in.

Functions as the DISC – button while listening to the CD changer.

Each time you press the button, the disc number decreases, and the selected disc starts playing.

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

Note: This button does not function for the preferred setting mode adjustment.

5 Select the sound mode.

Each time you press SCM (Sound Control Memory), the mode changes.

- 6 Select the source.
 - Each time you press FUNC (function), the source changes.
- 7 Searches stations while listening to the radio.
 - Fast forwards or reverses the track if pressed and held while listening to a CD.
 - Skips to the beginning of the next tracks or goes back to the beginning of the current (or previous tracks) if pressed briefly while listening to a CD.
- 8 VCR (KZ-V10) operating buttons
 - (')/|: Turns on or off the VCR.
 - ■: Stops playback.
 - Rewinds the tape if pressed and held while watching a video tape.
 - ►: Starts playback.
 - Fast-forwards the tape if pressed and held while watching a video tape.

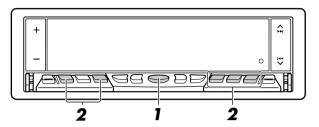
EXTERNAL COMPONENT OPERATIONS



Playing an external component

When connecting an external component such as a VCR (KZ-V10) to the LINE IN plugs on the rear, you can select the component as the sound source.

You can also connect the TV to this unit.



1



Select the external component.

Each time you press the button, the source changes as described on page 6.

2

Operate the external component.

If the VCR KZ-V10 is the external source to play, you can perform the following operations using the buttons on the unit or on the remote control.

SCM 7



ל'או: Turns on or off the VCR.

■: Stops playback.

Rewinds the tape if pressed and held while watching a video tape.

➤ : Starts playback.

►►: Fast-forwards the tape if pressed and held

while watching a video tape.

Notes:

- For the external component connection, see the Installation/Connection Manual (separate volume).
- See also "Assigning names to the sources" on page 48 if you want to match the name shown on the display with the name of the connected component.

Using a subwoofer

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

• Refer also to the instructions supplied with your subwoofer.

To set the subwoofer cutoff frequency, see "To select the subwoofer cutoff frequency" on page 46.

To adjust the subwoofer output volume, see "Adjusting the sound" on page 17.



CD CHANGER OPERATIONS

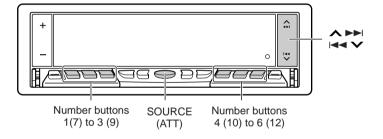
We recommend that you use one of the CH-X series (ex: CH-X1200) with your unit. If you have another CD automatic changer, consult your JVC car audio dealer for connections.

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

Before operating your CD automatic changer:

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

Playing CDs





Select the CD automatic changer.

Each time you press the button, the source changes as described on page 6.

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



Disc number appears.

Note:

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



To fast-forward or reverse the track



Press and hold ▲ ▶▶I, 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 $\blacktriangleleft \blacktriangleleft \checkmark$ briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

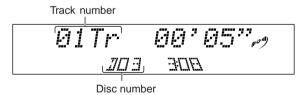
To go to a particular disc directly



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

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

Ex. When disc number 3 is selected



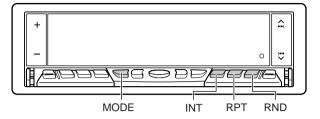
To show the CD Text information

This is possible only when connecting a JVC CD automatic changer equipped with CD Text reading capability.

See "Playing a CD Text" on page 16.



Selecting CD playback modes



To play back tracks at random (Random Play)

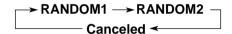


1 Press MODE while playing a CD.

"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.







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

To play back tracks repeatedly (Repeat Play)



1 Press MODE while playing a CD.

"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.

2 Press RPT (Repeat), while "MODE" is still on the display, so that the RPT indicator lights up on the display.



Each time you press the button, CD repeat play mode changes as follows:

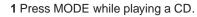


Mode	RPT Indicator	Plays repeatedly
REPEAT1	Lights	The current track (or specified track).
REPEAT2	Flashes	All tracks of the current disc (or specified disc).



To play back only intros (Intro Scan)





"MODE" appears on the lower part of the display, and the number buttons can work as different function buttons.

 ${\bf 2}$ Press INT (Intro), while "MODE" is still on the display.

Each time you press the button, CD intro scan mode changes as follows:





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



MAINTENANCE

Handling CDs

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

How to handle CDs

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

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

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

Make sure to store CDs into the cases after use.

To keep CDs clean

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

To play new CDs

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

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

Moisture condensation

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

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

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

CAUTIONS:

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

When playing a CD-R (Recordable)

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

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

About mistracking:

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

We recommend that you stop CD play while driving on such rough roads.









TROUBLESHOOTING



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

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

TO BE CONTINUED ON THE NEXT PAGE



Symptoms	Causes	Remedies
Your voice commands (either Operation or Access	Microphone is not connected.	Connect it correctly.
Commands) do not operate the receiver.	Voice control unit is not connected.	Connect it correctly.
	Your voice does not reach the microphone.	Attach the microphone to the place indicated in the Installation/Connection manual (separate volume).
You cannot use all Operation Commands.	"USER" is selected for "VOICE WORD." In this case, you can use only the Operation Commands for which you have registered your own voices.	Register your own voices for all Operation Commands.
The receiver operates unintentionally when another person speaks in your car.	"STANDARD" is selected for "VOICE WORD."	Select "USER" for "VOICE WORD." (See page 39)
You cannot register your own commands.	"STANDARD" is selected for "VOICE WORD."	Select "USER" for "VOICE WORD." (See page 39)
	Noises inside or outside the car will interfere.	Change the microphone position or take any other methods to eliminate the noises.
This unit does not work at all. The CD changer does not work at all.	The built-in microcomputer may function incorrectly due to noise, etc.	Press the reset button on the front panel. (See page 2)

SPECIFICATIONS

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 45 W per channel Rear: 45 W per channel

Continuous Power Output (RMS):

Front: 17 W per channel into 4 Ω , 40 Hz

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

Rear: 17 W per channel into 4 Ω , 40 Hz

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

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

Tone Control Range:

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

Frequency Response: 40 Hz to 20,000 Hz

Signal-to-Noise Ratio: 70 dB Line-In Level/Impedance: 1.5 V/20 kΩ load

Line-Out Level/Impedance:

4.0 V/20 k Ω load (full scale) Output Impedance: 1 k Ω

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 107.9 MHz

(with channel interval set to 200 kHz)

87.5 MHz to 108.0 MHz

(with channel interval set to 50 kHz)

AM: 530 kHz to 1,710 kHz

(with channel interval set to 10 kHz)

531 kHz to 1,602 kHz

(with channel interval set to 9 kHz)

[FM Tuner]

Usable Sensitivity: 11.3 dBf (1.0 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: 35 dB Capture Ratio: 1.5 dB

[AM Tuner]

Sensitivity: 20 µV Selectivity: 35 dB

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical

pickup (semiconductor laser)

Number of channels: 2 channels (stereo) Frequency Response: 5 Hz to 20.000 Hz

Dynamic Range: 96 dB Signal-to-Noise Ratio: 98 dB

Wow and Flutter: Less than measurable limit

GENERAL

Power Requirement:

Operating Voltage: DC 14.4 V (11 V to

16 V allowance)

Grounding System: Negative ground Allowable Operating Temperature: 0°C to +40°C (32°F to 104°F)

Main unit

Dimensions (W x H x D):

Installation Size:

182 mm x 52 mm x 160 mm (7-3/16" x 2-1/16" x 6-5/16")

Panel Size: 188 mm x 58 mm x 8 mm

(7-7/16" x 2-5/16" x 3/8")

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

Voice control unit

Dimensions (W x H x D):

122 mm x 34 mm x 73 mm (4-13/16" x 1-3/8" x 2-7/8")

Mass: 310 g (0.69 lbs)

Design and specifications subject to change without notice.

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

Having TROUBLE with operation? Please reset your unit

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

USA ONLY

Call 1-800-252-5722

http://www.jvcservice.com We can help you!





