

JVC



ENGLISH

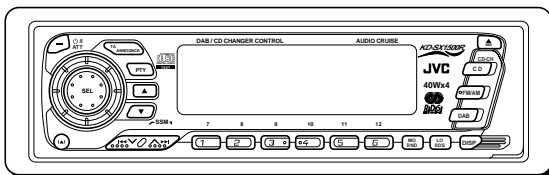
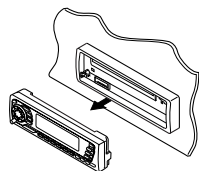
DEUTSCH

FRANÇAIS

NEDERLANDS

CD RECEIVER
CD-RECEIVER
RECEPTEUR CD
CD-RECEIVER

KD-SX1500R



For installation and connections, refer to the separate manual.

Angaben zu Einbau und Verkabelung entnehmen Sie bitte der gesonderten Anleitung.

Pour l'installation et les raccordements, se référer au manuel séparé.

Zie de afzonderlijke handleiding voor details aangaande het installeren en verbinden van het toestel.

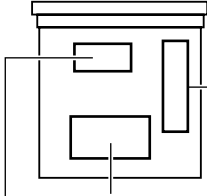
INSTRUCTIONS

BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING

LVT0203-001A
[E]

Position and reproduction of labels

Bottom panel of the main unit



Name/Rating plate



Caution:

This product contains a laser component of higher laser class than Class 1.

CAUTION

We highly recommend you to avoid any text reading while driving because of safety reasons! Do not risk your or other people's life and get involved in an accident in whatever form.

Note:

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.

DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgåudsættelse for stråling. (d)

WARNING: Osynlig laserstråling när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)

VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

IMPORTANT FOR LASER PRODUCTS

Precautions:

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

BEFORE USE

* For safety...

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

* Temperature inside the car...

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

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

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To be continued on the next page

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 CD and adjust it as required during playback.

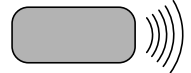
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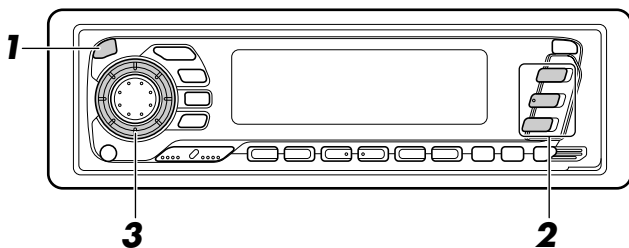
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BASIC OPERATIONS



Note:

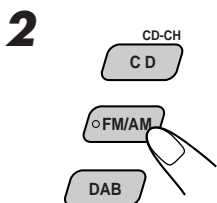
When you use this unit for the first time, set the built-in clock correctly, see page 23.



Turn on the power.

Note on One-Touch Operation:

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



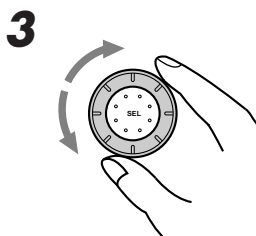
Select the source.

To operate the tuner, see pages 6 – 17.

To operate the CD player, see pages 18 – 21.

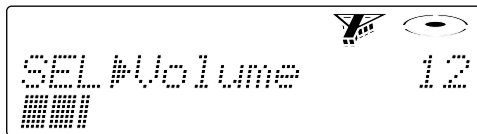
To operate the CD changer, see pages 34 – 36.

To operate the DAB tuner, see pages 37 – 46.



Adjust the volume.

Volume level appears.



4 Adjust the sound as you want (see page 22).

To drop the volume in a moment

Press $\text{P}/\text{I}/\text{ATT}$ briefly while listening to any source. “ATT” starts flashing on the display, and the volume level will drop in a moment.

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

To turn off the power

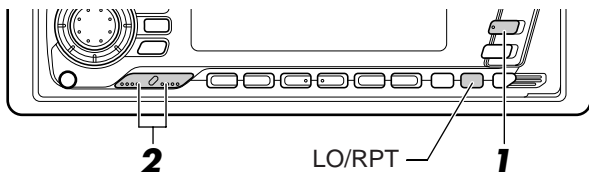
Press $\text{P}/\text{I}/\text{ATT}$ for more than 1 second.



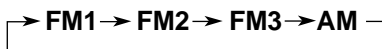
RADIO OPERATIONS

ENGLISH

Listening to the radio

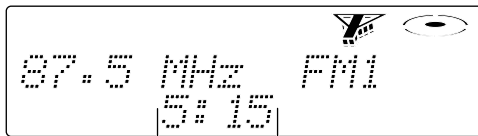


1



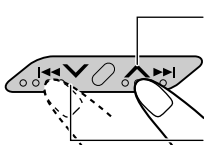
Select the band (FM1, FM2, FM3 or AM).

You can select any one of FM1, FM2, and FM3 to listen to an FM station.



Clock time (or other indications: see also page 28) appears.

2



To search stations of higher frequencies

To search stations of lower frequencies

Start searching a station.

When a station is received, searching stops.

- If the program received is broadcast in stereo, the ST indicator lights up on the display.

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

To tune in a particular frequency without searching

1 Press FM/AM repeatedly to select the band (FM or AM).

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

Now you can manually change the frequency while "Manual" is flashing.

3 Press ▲▶▶ or ◀◀▼ repeatedly until the frequency you want is reached.

- If you hold down the button, the frequency keeps changing (in 50 kHz intervals for FM and 9 kHz intervals for AM-MW/LW) until you release the button.

To tune in FM stations only with strong signals

Press LO/RPT (Local/Repeat) so that "Local On" appears on the display.

Each time you press the button, "Local On" and "Local Off" alternates.

To tune in all receivable FM stations, press LO/RPT (Local/Repeat) again so that "Local Off" appears.

Note:

This function only works while searching FM stations including SSM preset (see page 7).

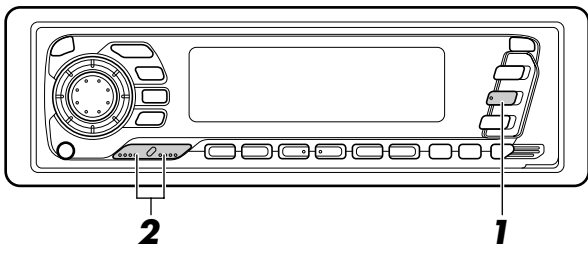
Storing stations in memory

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

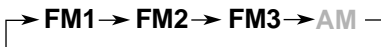
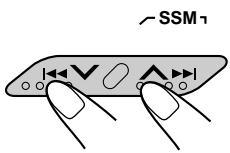
- Automatic preset of FM stations: SSM (Strong-station Sequential Memory)
- Manual preset of both FM and AM stations

FM station automatic preset: SSM

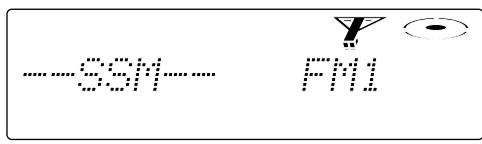
You can preset 6 local FM stations in each FM band (FM1, FM2 and FM3).


1


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


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).

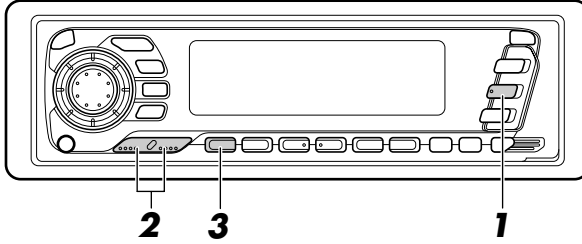
When automatic preset is over, the station stored in number button 1 will be automatically tuned in.



Manual preset

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

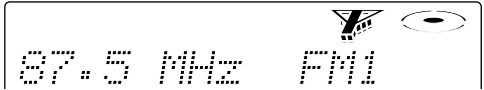
EXAMPLE: Storing an FM station of 88.3 MHz into the preset number 1 of the FM1 band



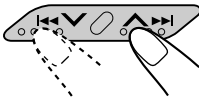
1



Select the FM1 band.

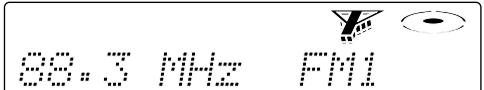


2

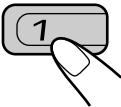


Tune into a station of 88.3 MHz.

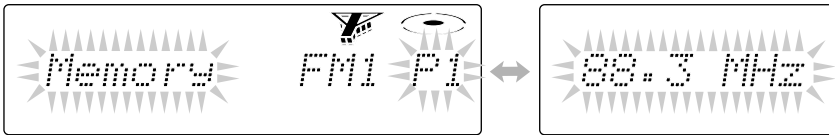
See page 6 to tune into a station.



3



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



"Memory" and station frequency alternately appear for a while.

4

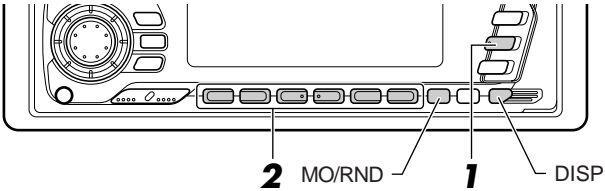
Repeat the above procedure to store other stations into other preset numbers.

Note:

A previously preset station is erased when a new station is stored in the same preset number.

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 7 and 8.



1 Select the band (FM1, FM2, FM3 or AM) you want.

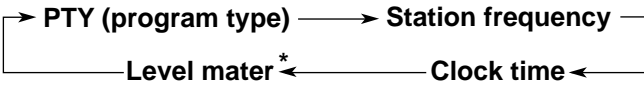
→ **FM1** → **FM2** → **FM3** → **AM** ←

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

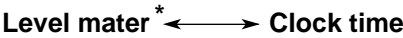
To change the display information while receiving a station

Press DISP. Each time you press the button, the following information is shown on the lower part of the display.

When receiving an FM RDS station: Its PS (station name), band, and preset channel number (if any) are always shown in the main display.



When receiving an AM station: Its station frequency, band, and preset channel number (if any) are always shown in the main display.



* Level meter will not appear when "Level Meter" is deactivated (see page 28).

When an FM stereo broadcast is hard to receive:

Press MO/RND (Mono/Random) while listening to an FM stereo broadcast. The MO indicator lights up on the display, and the sound you hear becomes monaural but reception will be improved.

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



What you can do with RDS EON

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc. Another advantage of RDS function is called “EON (Enhanced Other Networks).” The EON indicator lights up while receiving an FM station with the EON data. By using the EON data sent from a station, you can tune into a different station of a different network broadcasting your favorite program or traffic announcement while listening to another program or to another source such as CD.

By receiving the RDS signals, this unit can do the following:

- Tracing the same program automatically (Network-tracking Reception)
- Standby Reception of TA (Traffic Announcement) or your favorite program
- PTY (Program Type) search
- TA (Traffic Announcement) search
- And some other functions

Tracing the same program automatically (Network-Tracking Reception)

When driving in an area where FM reception is not good, the tuner built in this unit automatically tunes in another RDS station, broadcasting the same program with stronger signals. So, you can continue to listen to the same program in its finest reception, no matter where you drive. (See the illustration on the next page.)

Two types of the RDS signals are used to make Network-Tracking Reception work correctly — PI (Program Identification) and AF (Alternative Frequency) data.

Without receiving these data correctly from the RDS station you are listening to, Network-Tracking Reception will not operate.

To use Network-Tracking Reception

- 1 Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press **▲▶▶** or **◀◀▼** to select “Alternative,” if not shown on the display.
The current setting for this function also appears.
- 3 Press **▲** to select “FM ↔ FM Y.”
The AF indicator lights up on the display, and Network-Tracking Reception is activated.

To cancel Network-Tracking Reception

Press **▼** to select “FM ↔ FM N” in step 3 above. The AF indicator goes off.

Note:

When connecting the DAB tuner to this receiver, see also “Tracing the same program automatically (Alternative Reception)” on page 41.

**When Network-Tracking Reception is in use, you can also adjust “RDS Regional”**

- 1 Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press $\blacktriangle\blacktriangleright$ or $\blacktriangleleft\blacktriangleright$ to “RDS Regional,” if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial to select either “Regional On” or “Regional Off.”
 - When “Regional On” is selected, the REG indicator lights up on the display.
 - When “Regional Off” is selected, the REG indicator goes off.

When the AF indicator lights, but REG indicator does not

Network-Tracking is activated without “RDS Regional.”

Switches to another station within the same network when the received signals from the current station become weak.

Note:

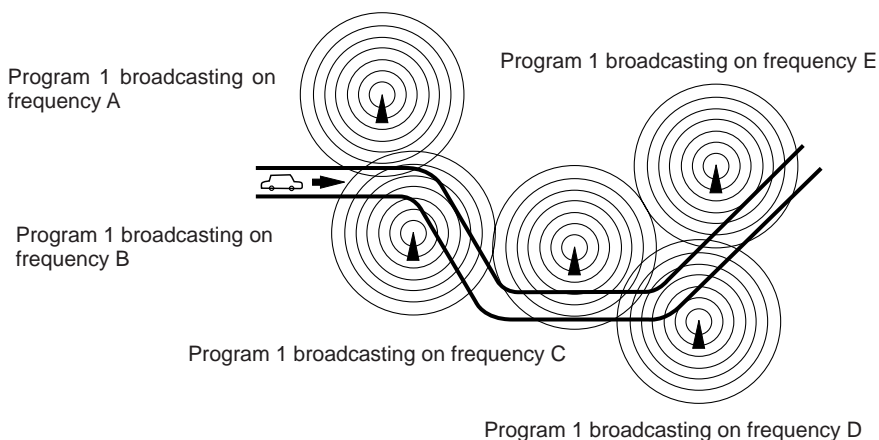
In this mode, the program may differ from the one currently received.

When both the AF indicator and the REG indicator light up

Network-Tracking is activated with “RDS Regional.”

Switches to another station, within the same network, broadcasting the same program when the received signals from the current station become weak.

The same program can be received on different frequencies.





Using Standby Reception

Standby Reception allows the unit to switch temporarily to your favorite program (PTY: Program TType) and Traffic Announcement (TA) from the current source (another FM RDS station, CD, and other connected components).

Note:

Standby Reception will not work if you are listening to an AM station.

TA Standby Reception



Press TP/ANNOUNCE briefly to activate TA Standby Reception. The TP indicator lights up (as follows).



TP

- **If you press the button while listening to an FM RDS station supporting TA signal**, the TP indicator lights up *with its frame*. This receiver now stands by for the TA signal reception.
- **If you press the button while listening to an FM RDS station NOT supporting TA signal**, the TP indicator lights up *without its frame*. In this case, TA Standby Reception does not work.

To use TA Standby Reception, tune into a station supporting TA signal by pressing **▲▶▶** or **◀◀▼**. “Search” (or “Local Search”: see page 6) appears on the display, and the unit searches for a station supporting TA signal. When a station supporting the signal is tuned in, the TP indicator is lit *with its frame*. NOW this receiver stands by for the TA signal reception.



TP

- **If you press the button while listening to any other source than AM**, this unit starts searching for an FM station supporting TA signal in the background — without affecting your listening to the source currently selected. (During this background search, the TP indicator remains lit *without its frame*.)
 - The TP indicator comes to light up *with its frame* when an FM station supporting TA signal is tuned in the background. This receiver now stands by for the TA signal reception.
 - The TP indicator keeps lit *without its frame* when an FM station supporting TA signal is NOT tuned in the background. In this case, this receiver cannot stand by for TA signal reception.

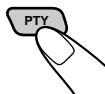
How TA Standby Reception works:

If a Traffic Announcement (or Road Traffic Flash) starts broadcasting while TA Standby Reception is activated, “Traffic” (or “Traffic flash”) appears and the unit tunes into the station (or DAB service) broadcasting Traffic Announcement (or Road Traffic Flash). The volume increases to the preset TA volume level (see page 16) and the Traffic Announcement (or Road Traffic Flash) can be heard.

To deactivate TA Standby Reception, press TP/ANNOUNCE briefly again. Each time you press the button, TA Standby Reception turns on and off.



PTY Standby Reception



Press PTY briefly to activate PTY Standby Reception.
The PTY indicator lights up (as follows).



- **If you press the button while listening to an FM RDS station supporting PTY signals**, the PTY indicator lights up *with its frame*. This receiver now stands by for the selected PTY signal reception.
- **If you press the button while listening to an FM RDS station NOT supporting PTY signals**, the PTY indicator lights up *without its frame*. In this case, PTY Standby Reception does not work.

PTY

To use PTY Standby Reception, tune into a station supporting PTY signals by pressing **▲▶▶|** or **|◀◀▼**. “Search” (or “Local Search”: see page 6) appears on the display, and the unit searches for a station supporting PTY signals. When a station supporting the signal is tuned in, the PTY indicator is lit *with its frame*. NOW this receiver stands by for the selected PTY signal reception.

- **If you press the button while listening to any other source than AM**, this unit starts searching for an FM station supporting PTY signal in the background — without affecting your listening to the source currently selected. (During this background search, the PTY indicator remains lit *without its frame*.)



– The PTY indicator comes to light up *with its frame* when an FM station supporting PTY signal is tuned in the background. This receiver now stands by for the PTY signal reception.

PTY

– The PTY indicator keeps lit *without its frame* when an FM station supporting PTY signal is NOT tuned in the background. In this case, this receiver cannot stand by for PTY signal reception.

How PTY Standby Reception works:

If a program of the selected PTY starts broadcasting while the PTY Standby Reception is activated, the selected PTY code name flashes and the unit tunes into the station broadcasting the program. The program of the selected PTY can be heard.

To deactivate PTY Standby Reception, press PTY briefly again.

Each time you press the button, PTY Standby Reception turns on and off.

To select your favorite program for PTY Standby Reception

You can select your favorite program for PTY Standby Reception to store in memory.

When shipped from the factory, “News” is stored for PTY Standby Reception.

- See also “Changing the general settings (PSM)” on page 26.

- 1 Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press **▲▶▶|** or **|◀◀▼** to select “PTY Standby,” if not shown on the display.
- 3 Select one of twenty-nine PTY codes. (See page 17.)
The selected PTY code name appears on the display and is stored into memory.
- 4 Press SEL (select) again to finish the setting.



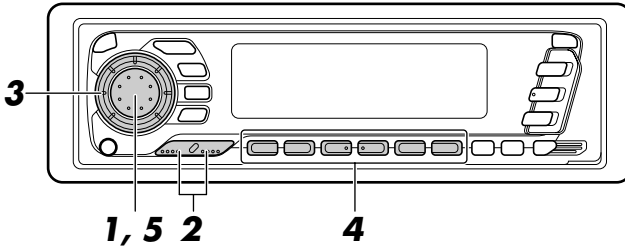
Searching your favorite program (PTY Search)

You can search one of your 6 favorite program types stored in memory.

When shipped from the factory, the following 6 program types have been stored in the number buttons (1 to 6).

1	2	3	4	5	6
Pop Music	Rock Music	Easy Listening	Serious Classics	Current Affairs	Varied Speech

To store your favorite program types

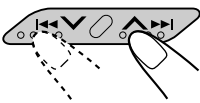


1



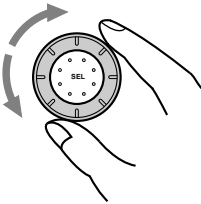
Press and hold SEL (Select) for more than 2 seconds to call up the Preferred Setting Mode (PSM: see page 26).

2



Select "PTY Search," if not shown on the display. The current setting for this function also appears.

3



Select one of twenty-nine PTY codes. (See page 17.)

Selected code name appears on the display.

- If the code already stored in memory is selected, it will flash and the preset number will appear on the display.

4



Press and hold the number button for more than 2 seconds to store the PTY code selected into the preset number you want.

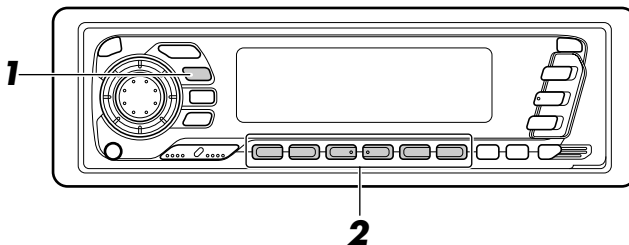
PTY preset number appears, and the selected code name flashes on the display.

5

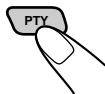


Finish the setting.

To search your favorite program type

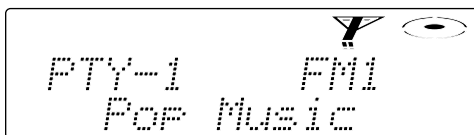


1

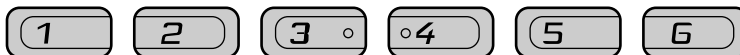


Press and hold PTY (Program TYPe) for more than 1 second while listening to an FM station.

The last selected PTY code and preset number appear.



2



Select one of PTY codes stored in preset number buttons (1 to 6).

PTY search for your favorite program starts after 5 seconds.

- If there is a station broadcasting a program of the same PTY code you selected, that station is tuned in.
- If there is no station broadcasting a program of the same PTY code you selected, the station will not change.

Note:

In some areas, the PTY search will not work correctly.



Other convenient RDS functions and adjustments

Automatic selection of the station when using the number buttons

Usually when you press the number button, the preset station is tuned in.

However, when the preset station is an RDS station, something different will happen. If the signals from that preset station are not sufficient for good reception, this unit starts searching another station broadcasting the same program as the original preset station is broadcasting, then if any station broadcasting the same program is found, the station will be tuned in.

Setting the TA volume level

You can preset the volume level for TA Standby Reception. When a traffic program is received, the volume level automatically changes to the preset level.

• See also “Changing the general settings (PSM)” on page 26.

- 1 Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press $\blacktriangle \blacktriangleright \blacktriangleright$ or $\blacktriangleleft \blacktriangleleft \blacktriangledown$ repeatedly until “TA Volume” appears on the display, if not shown. The current setting for this function also appears.
- 3 Rotate the control dial to set the volume to the level (0 to 50) you want.
- 4 Press SEL again to finish the setting.

Automatic clock adjustment

When shipped from the factory, the clock built in this unit has been set to be readjust automatically using the CT (Clock Time) data in the RDS signal.

If you do not want to use automatic clock adjustment, follow the procedure below.

• See also “Changing the general settings (PSM)” on page 26.

- 1 Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press $\blacktriangle \blacktriangleright \blacktriangleright$ or $\blacktriangleleft \blacktriangleleft \blacktriangledown$ repeatedly until “Auto Adjust” appears on the display, if not shown. The current setting for this function also appears.
- 3 Rotate the control dial counterclockwise to select “Adjust Off.” Automatic clock adjustment is canceled.
- 4 Press SEL again to finish the setting.

To reactivate automatic clock adjustment, repeat the same procedure and select “Adjust On” in step 3 by rotating the control dial clockwise.

Note:

It takes about 2 minutes to adjust the time using the CT data. So, you must tune to the station for more than 2 minutes continuously; otherwise, the clock time will not be adjusted



PTY codes

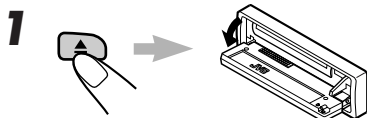
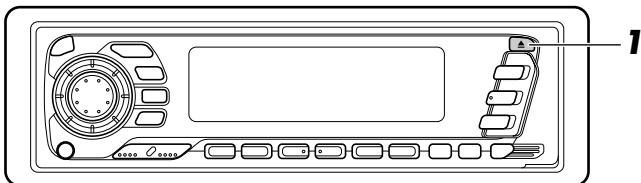
News:	News
Current Affairs:	Topical programs expanding on current news or affairs
Information:	Programs which impart advice on a wide variety of topics
Sport:	Sport events
Education:	Educational programs
Drama:	Radio plays
Cultures:	Programs on national or regional culture
Science:	Programs on natural science and technology
Varied Speech:	Other programs like comedies or ceremonies
Pop Music:	Pop music
Rock Music:	Rock music
Easy Listening:	Easy-listening music
Light classics M (music):	Light music
Serious Classics:	Classical music
Other Music:	Other music
Weather & Metr (metropolitan):	Weather information
Finance:	Reports on commerce, trading, the stock market, etc.
Children's Progs (programs):	Entertainment programs for children
Social Affairs:	Programs on social activities
Religion:	Programs dealing with any aspect of belief or faith, or the nature of existence or ethics
Phone In:	Programs where people can express their views either by phone or in a public forum
Travel & Touring:	Programs about travel destinations, package tours, and travel ideas and opportunities
Leisure & Hobby:	Programs concerned with recreational activities such as gardening, cooking, fishing, etc.
Jazz Music:	Jazz music
Country Music:	Country music
National Music:	Current popular music from another nation or region, in that country's language
Oldies Music:	Classic pop music
Folk Music:	Folk music
Documentary:	Programs dealing with factual matters, presented in an investigative style



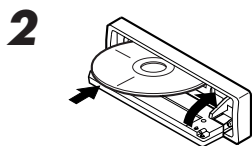
CD OPERATIONS

ENGLISH

Playing a CD



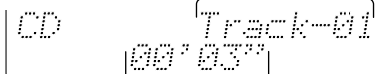
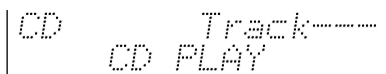
Open the control panel.



1. Insert a disc into the loading slot.

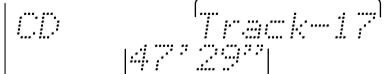
The unit turns on, draws a CD and starts playback automatically.

2. Close the control panel by hand.



Total track number of the inserted disc

Current track
Elapsed playing time



Total playing time of the inserted disc



Notes:

- When a CD is inserted upside down, "Please Eject" flashes on the display. When you open the control panel by pressing ▲, the CD automatically ejects.
- When you play a CD Text, the disc title, performer then the first track title appears before the current track and elapsed playing time appears on the display. See also "Playing a CD Text" (page 21) and "Selecting the scroll mode for CD Text information" (page 30).

Note on One-Touch Operation:

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

To stop play and eject the CD

Press ▲.

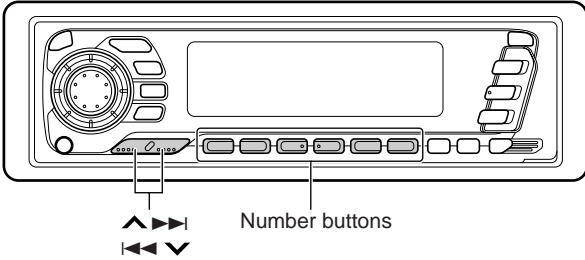
CD play stops, the control panel opens, then the CD automatically ejects from the loading slot. If you change the source, the CD play also stops (without ejecting the CD this time).

Notes:

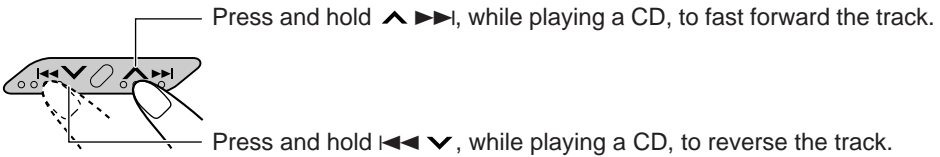
- If the ejected disc is not removed for about 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. (CD play will not start this time.)
- You can eject the CD even when the unit is turned off.



Locating a track or a particular portion on a CD



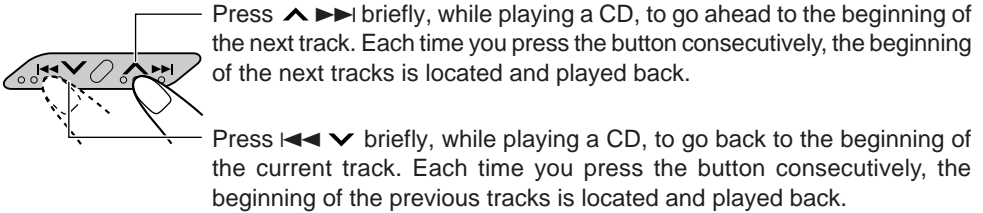
To fast forward or reverse the tracks



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

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

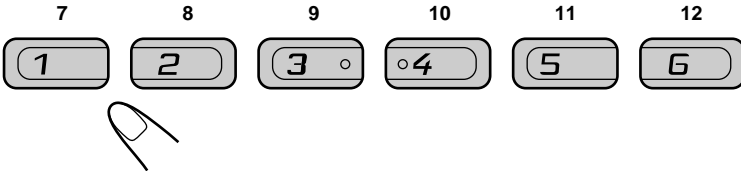
To go to the next tracks or the previous tracks



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

To go to a particular track directly

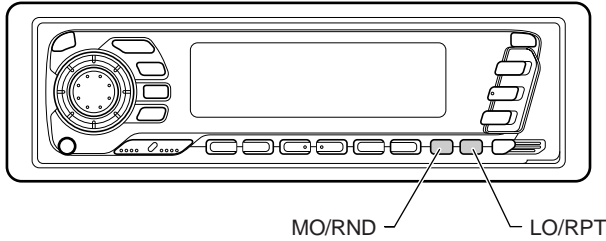


Press the number button corresponding to the track number to start its playback.

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



Selecting CD playback modes

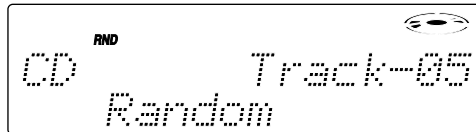


To play back tracks at random (Random Play)

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



Each time you press MO/RND (Mono/Random) while playing a CD, 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.



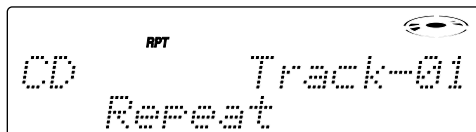
To play back tracks repeatedly (Repeat Play)

You can play back the current track repeatedly.



Each time you press LO/RPT (Local/Repeat) while playing a CD, CD repeat play mode turns on and off alternately.

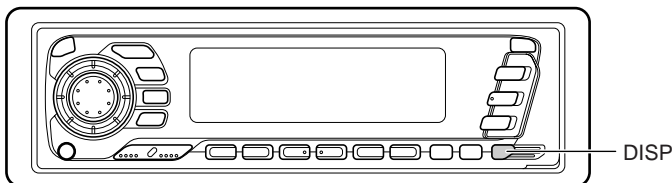
When the repeat mode is turned on, the RPT indicator lights up on the display.





Playing a CD Text

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



Select text display mode while playing a CD Text.

Each time you press the button, the display changes to show the following:

↓
Disc title (and its performer) *
 ↓
Current track no. and its track title **
 ↓
Current track no. and elapsed playing time
 ↓
Current track no. and clock time
 ↓
Current track no. and level meter ***

* When playing a conventional CD, "Disc Title No Name" appears.

** When playing a conventional CD, this does not appear.

*** This appears only when "Level Meter" is activated (see page 28).

Notes:

- The display shows up to 32 characters at one time and scrolls if there are more than 32 characters. See also "Selecting the scroll mode for CD Text information" on page 30.
- Some characters or symbols will not be shown (and be blanked) on the display.

To prohibiting CD ejection

CD-CH



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

While pressing CD, press and hold ϕ /I/ATT for more than 2 seconds. "No Eject" flashes on the display for about 5 seconds, and the CD is locked and cannot be ejected.



To cancel the prohibition and unlock the CD, press ϕ /I/ATT again for more than 2 seconds, while pressing CD. "Eject OK" flashes on the display for about 5 seconds, and the CD is unlocked.

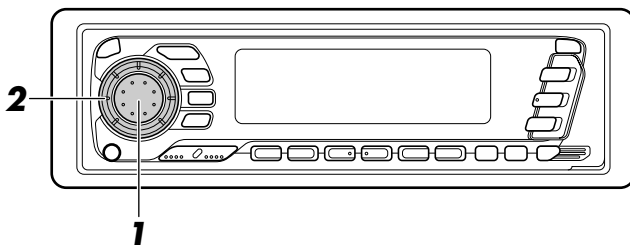


SOUND ADJUSTMENTS

ENGLISH

Adjusting the sound

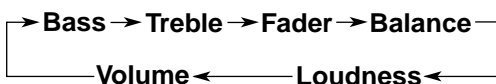
You can adjust the sound characteristics to your preference.



1



Select the item you want to adjust.



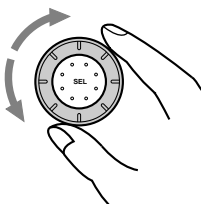
Indication	To do:	Range
Bass	Adjust the bass	-06 (min.) — +06 (max.)
Treble	Adjust the treble	-06 (min.) — +06 (max.)
Fader*	Adjust the front and rear speaker balance	R06 (Rear only) — F06 (Front only)
Balance	Adjust the left and right speaker balance	L06 (Left only) — R06 (Right only)
Loudness**	Turning on/off the loudness function	On / Off
Volume	Adjust the volume	00 (min.) — 50 (max.)

Notes:

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

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

2



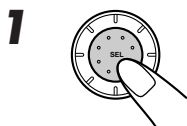
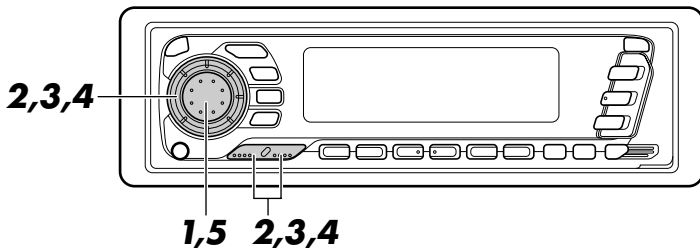
Adjust the level.

Note:

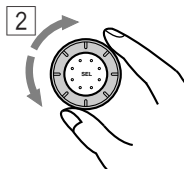
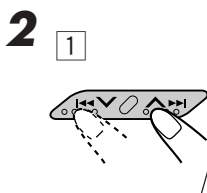
Normally the control dial works as the volume control. So you do not have to select "Volume" to adjust the volume level.

Setting the clock

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



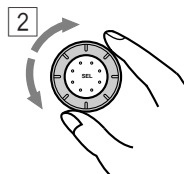
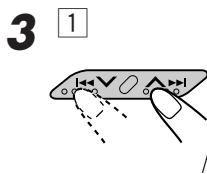
Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.



Set the hour.

1 Select “Clock Hour” if not shown on the display.

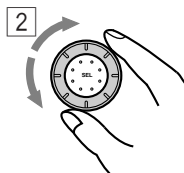
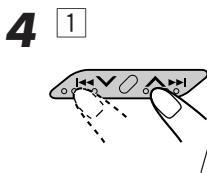
2 Adjust the hour.



Set the minute.

1 Select “Clock Minute.”

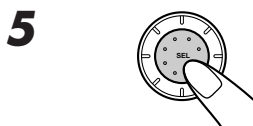
2 Adjust the minute.



Set the clock system.

1 Select “Clock 24H/12H.”

2 Select “24H” or “12H.”



Finish the setting.

To check the current clock time while the unit is turned off, press DISP.

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

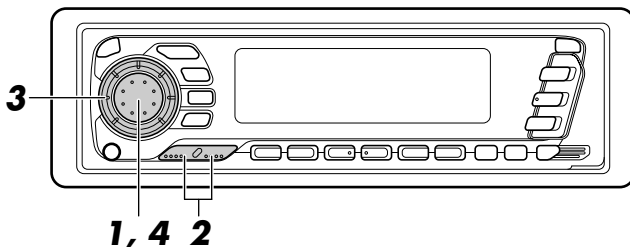
Controlling the volume automatically (Audio Cruise)

You can select the proper cruise mode for your car.

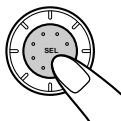
This unit change the volume level automatically (at 3 possible levels) based on the driving speed of your car by detecting the alternator's generating frequency (Audio Cruise).

If you want to use this mode, follow the procedures 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.

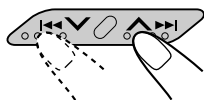


1



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

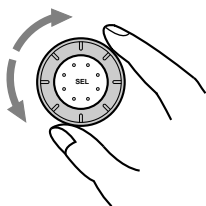
2



Select "Cruise Mode," if not shown on the display.

The current setting for this function also appears.

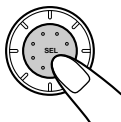
3



Select the Audio Cruise setting you want.

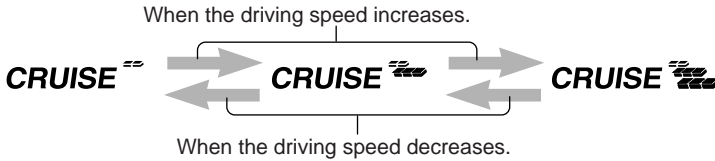
→ Cruise 1 ↔ Cruise 2 ↔ Cruise Off ←

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.



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 “PSM” appears on the display.
- 2 Press ▲ ►► or ◀◀ ▼ repeatedly until “Cruise Mode” appears, if not shown on the display.
The current setting for this function also appears.
- 3 Rotate the control dial to select either “Cruise 1” or “Cruise 2.”
- 4 Press ▲ ►► twice (or ◀◀ ▼ repeatedly) so that “Boost” (with its current setting level) appears on the lower part of the display.
- 5 Rotate the control dial to select the boost level (among 01 to 15) you want while the current boost level is shown on the display.
- 6 Press SEL 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 “PSM” appears on the display.
- 3 Press ▲ ►► or ◀◀ ▼ repeatedly until “Cruise Mode” appears, if not shown on the display.
The current setting for this function also appears.
- 4 Rotate the control dial to select either “Cruise 1” or “Cruise 2.”
- 5 Press ▲ ►► once (or ◀◀ ▼ repeatedly) so that “+ OR – RPM Set” appears on the lower part of the display.
- 6 Rotate the control dial to select the idling speed you want.
“Memory” flashes for a while.
 - If “No Input” flashes on the lower part of the display, check to see if the connection is correct.
- 7 Press SEL to finish the setting.

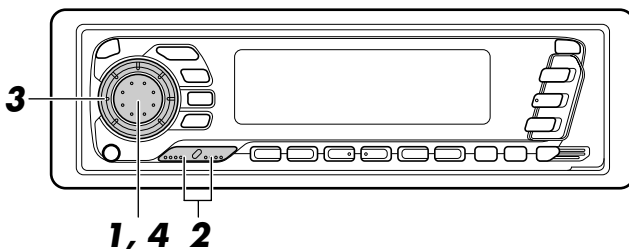
When the setting is complete, the unit automatically checks to see if Audio Cruise functions correctly with this new idling setting. If it does not function correctly, Audio Cruise is canceled automatically and the idling setting becomes invalid.

• 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

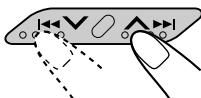


1



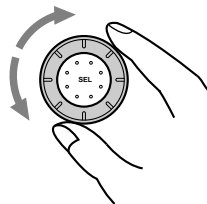
Press and hold SEL (Select) for more than 2 seconds so that “PSM” appears on the display.

2



Select the PSM item you want to adjust. (See page 27.)

3



Select or adjust the PSM item selected above.

4



Finish the setting.

						Factory-preset settings	See page
		Select.		Set.			
Clock Hour	Hour adjustment	Back	Advance	0:00	23		
Clock Minute	Minute adjustment	Back	Advance				
Clock 24H/12H	24/12-hour time system	12H	24H	24H	23		
Auto Adjust	Automatic setting of the clock	Adjust Off	Adjust On	Adjust On	16		
Display	Display mode	Normal ↔ Clock ↑↔ Level Meter ↓↔		Normal	28		
PTY Standby	PTY standby	(See page 44.)		News	13		
PTY Search	PTY search			(See page 14.)	14		
Announce*	Announcement standby			(See page 44.)	44		
DRC Effect*	DRC effect	DRC 1 ↔ DRC 2 ↓↔ DRC Off ↔ DRC 3		DRC Off	46		
Alternative	Alternative reception	(See pages 10 and 41.)		(See pages 10 and 41.)	10, 41		
RDS Regional	RDS regional	Regional Off	Regional On	Regional Off	11		
TA Volume	Traffic announcement volume	Level Indicator (00 – 50)		Volume 20	16		
Level Meter	Level meter	Level Meter Off	Level Meter On	Level Meter On	28		
Dimmer Mode	Dimmer	Dimmer Auto ↔ Dimmer Off ↑↔ Dimmer On ↓↔		Dimmer Auto	29		
Cruise Mode	Audio cruise	Cruise 1 ↔ Cruise 2 ↑↔ Cruise Off ↓↔		Cruise Off	24		
+ OR – RPM**	RPM adjustment	—————		800 rpm	25		
Boost**	Boost level	Boost 01 – 15		Boost 05	25		
Telephone	Audio mute for cellular phone system	Muting Off ↔ Muting 1 ↑↔ Muting 2 ↓↔		Muting Off	29		
Beep Switch	Key-touch tone	Beep Off	Beep On	Beep On	30		
Contrast	Display contrast	Contrast 01 – 10		Contrast 05	30		
CD Text	CD Text scroll Mode	Scroll Once ↔ Scroll Auto ↑↔ Scroll Off ↓↔		Scroll Once	30		
DAB Text*	Dynamic Label Segment display mode	On ↔ Headline Only ↑↔ Off ↓↔		On	46		

* When connecting the DAB tuner, you can adjust these items.

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

- Press SEL (Select) when the setting is complete.

Changing the initial display mode

You can change the initial indication on the lower part of the display while playing any source. When shipped from the factory, "Normal" is selected.

- Normal: With this setting selected, the indication selected by pressing DISP (display) remains on the display until you change it.
- Clock: Clock time appears.
- Level Meter: Audio level indicator appears.

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press \blacktriangle \blacktriangleright \blacktriangleright or \blacktriangleleft \blacktriangleleft \blacktriangleleft to select "Display," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the indication changes as follows:



- 4 Press SEL to finish the setting.

Notes:

- Though "Clock" or "Level Meter" is selected, you can show the other indications for a while by pressing DISP.
- * You can select "Level Meter" only when "Level Meter" is set to be activated. See below.

Turning on/off the level meter

You can turn on or off the level meter indication.

When shipped from the factory, "Level Meter On" is selected.

- Level Meter On: Level meter is turned on.
- Level Meter Off: Level meter is turned off.

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press \blacktriangle \blacktriangleright \blacktriangleright or \blacktriangleleft \blacktriangleleft \blacktriangleleft to select "Level Meter," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial until the setting you want appears on the display.
 - To select "Level Meter On," rotate it clockwise.
 - To select "Level Meter Off," rotate it counterclockwise.

Level Meter On \longleftrightarrow Level Meter Off

- 4 Press SEL to finish the setting.

Selecting the dimmer mode

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

When shipped from the factory, "Dimmer Auto" is selected.

- Dimmer Auto: Activates Auto Dimmer.
- Dimmer Off: Cancels Auto Dimmer.
- Dimmer On: Always dims the display.

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press **▲▶▶** or **◀◀▼** to select "Dimmer Mode," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the indication changes as follows:



- 4 Press SEL to finish the setting.

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.

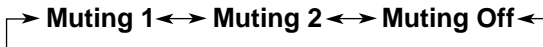
In this case, set the dimmer mode to "Dimmer On" or "Dimmer Off".

Selecting the telephone muting

This mode is used when a cellular phone system is connected. Depending on the phone system used, select either "Muting 1" or "Muting 2," whichever mutes the sounds from this unit. When shipped from the factory, "Muting Off" is selected.

- Muting 1: Select this if this setting can mute the sounds.
- Muting 2: Select this if this setting can mute the sounds.
- Muting Off: Cancels the telephone muting.

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press **▲▶▶** or **◀◀▼** to select "Telephone," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the setting changes as follows:



- 4 Press SEL to finish the setting.

Turning on/off the key-touch tone

You can deactivate the key-touch tone if you do not want to make it beep when you press a button. When shipped from the factory, "Beep On" is selected.

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

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press **▲▶▶▶** or **▶▶▶▼** to select "Beep Switch," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial to turn on or off the key-touch tone.
 - To select "Beep On," rotate it clockwise.
 - To select "Beep Off," rotate it counterclockwise.

Beep On ↔ Beep Off

- 4 Press SEL to finish the setting.

Adjusting the display contrast level

When the display of the unit is hardly to see, you can adjust contrast of the brightness of the display.

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press **▲▶▶▶** or **▶▶▶▼** to select "Contrast," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial to adjust the contrast (level 01 to 10).
- 4 Press SEL to finish the setting.

Selecting the scroll mode for CD Text information

You can select Scroll Mode for the CD Text information display if it consists of more than 32 characters. When shipped from the factory, "Scroll Once" is selected.

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

- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press **▲▶▶▶** or **▶▶▶▼** to select "Scroll Mode," if not shown on the display. The current setting for this function also appears.
- 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the indication changes as follows:

→ **Scroll Once** ↔ **Scroll Auto** ↔ **Scroll Off** ←

- 4 Press SEL to finish the setting.

Note:

Even if Scroll Mode is set to "Scroll Off," you can scroll the CD Text information display by pressing DISP for more than 1 second.

Detaching the control panel

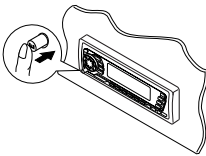
You can detach the control panel when leaving the car.

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

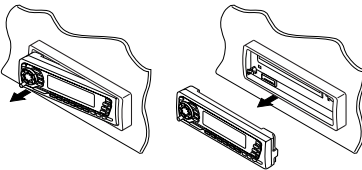
How to detach the control panel

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

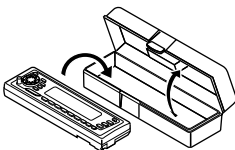
- 1 Unlock the control panel.



- 2 Pull the control panel out of the unit.

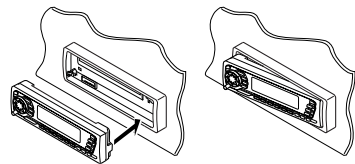


- 3 Put the detached control panel into the provided case.

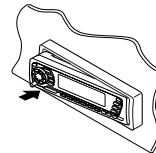


How to attach the control panel

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



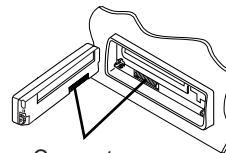
- 2 Press the left side of the control panel to fix it to the panel holder.



Note on cleaning the connectors:

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

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



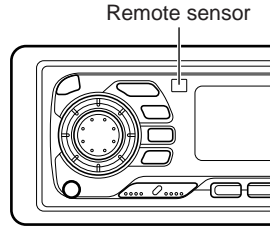
Connectors



REMOTE OPERATIONS

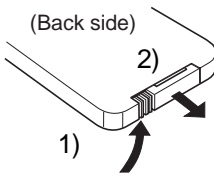
Before using the remote controller:

- 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).



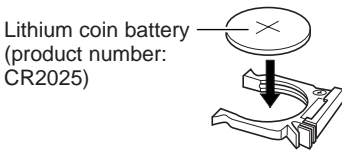
Installing the battery

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



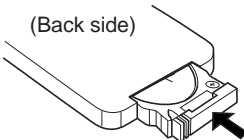
1. Remove the battery case.

- 1) Push in the direction indicated by the arrow with your right hand thumbnail.
- 2) Remove the battery case.



2. Replace the battery.

Put the battery in the case with the + side facing upwards.



3. Return the battery case.

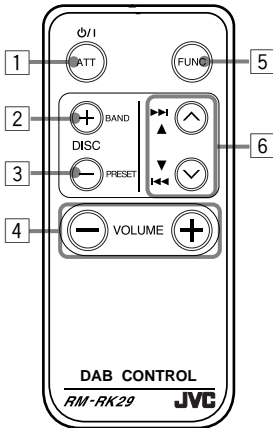
Insert again the battery case pushing until you hear a clicking sound.

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 Functions the same as the O/I/ATT button on the main unit.
- 2
 - Functions as the BAND button while listening to the radio (or the DAB tuner).
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.
- 3
 - Functions as the PRESET button while listening to the radio (or the DAB tuner).
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 source.
Each time you press FUNC (Function), the source changes.
- 6
 - Searches stations while listening to the radio (FM/AM).
 - By pressing briefly and repeatedly, searches ensembles while listening to the DAB tuner.
 - By pressing and holding, selects services while listening to the DAB tuner.
 - 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.



CD CHANGER OPERATIONS

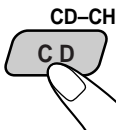
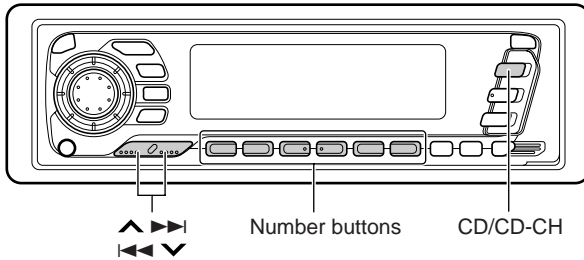
We recommend that you use one of the CH-X series (ex: CH-X1200) with your unit. If you have another CD automatic changer, consult your JVC IN-CAR ENTERTAINMENT dealer for connections.

- 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, you can select CD and CD automatic changer .

CD* ↔ CD-CH

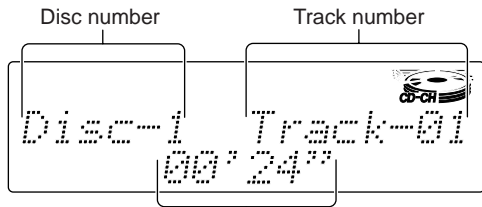
* If a CD is not in the loading slot of this unit, you cannot select "CD."

Playback starts from the first track of the first disc.

All tracks of all discs are played back.

Note on One-Touch Operation:

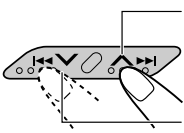
When you press CD/CD-CH, the power automatically comes on. You do not have to press /I/ATT to turn on the power.



Elapsed playing time (or other indications: see page 28) appears.



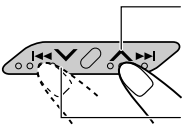
To fast forward or reverse the tracks



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

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

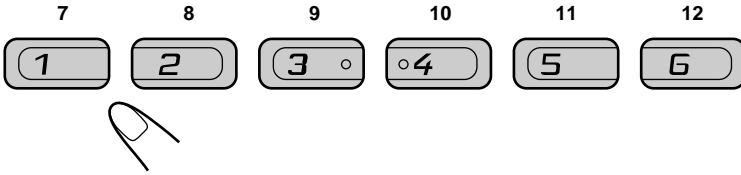
To go to the next tracks or the previous tracks



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.

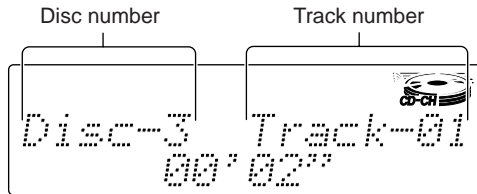
Press **◀◀ v** briefly, while playing a CD, to go back to the beginning of the current track. Each time you press the button consecutively, the beginning of the previous tracks is located and played back.

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.

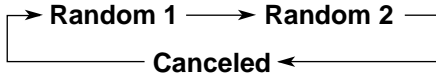
For details, see "Playing a CD Text" on page 21.

Selecting CD playback modes

To play back tracks at random (Random Play)



Each time you press MO/RND (Mono/Random) while playing a CD, CD random play mode changes as follows:

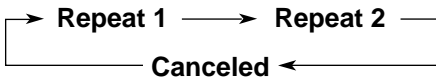


Mode	RND Indicator	Plays at random
Random 1	Lights	All tracks of the current disc, then the tracks of the next disc, and so on.
Random 2	Flashes	All tracks of all discs inserted in the magazine.

To play back tracks repeatedly (Repeat Play)



Each time you press LO/RPT (Local/Repeat), while playing a CD, CD repeat play mode changes as follow:



Mode	RPT Indicator	Plays repeatedly
Repeat 1	Lights	The current track (or specified track).
Repeat 2	Flashes	All tracks of the current disc (or specified disc).

DAB TUNER OPERATIONS

We recommend that you use DAB (Digital Audio Broadcasting) tuner KT-DB1500 with your unit.

If you have another DAB tuner, consult your JVC IN-CAR ENTERTAINMENT dealer.

- Refer also to the Instructions supplied with your DAB tuner.

What is DAB system?

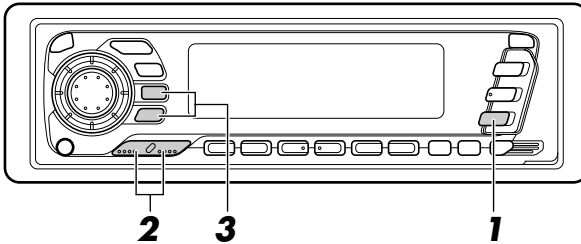
DAB is one of the digital radio broadcasting systems available today. It can deliver CD quality sound without any annoying interference and signal distortion. Furthermore, it can carry text, pictures and data.

In contrast to FM broadcast, where each program is transmitted on its own frequency, DAB combines several programs (called “services”) to form one “ensemble.”

With the DAB tuner connected with this unit, you can enjoy these DAB services.

Tuning into an ensemble and one of the services

A typical ensemble has 6 or more programs (services) broadcast at the same time. After tuning into an ensemble, you can select a service you want to listen to.



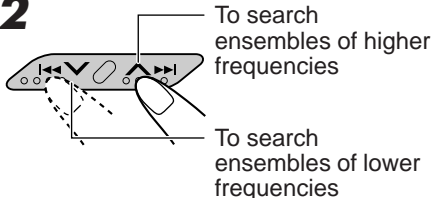
1



Select the DAB band (DAB 1, DAB 2, or DAB 3). You can select any one of DAB 1, DAB 2, and DAB 3 to tune into an ensemble.



2

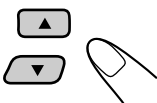


Start searching an ensemble.

When an ensemble is received, searching stops.

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

3



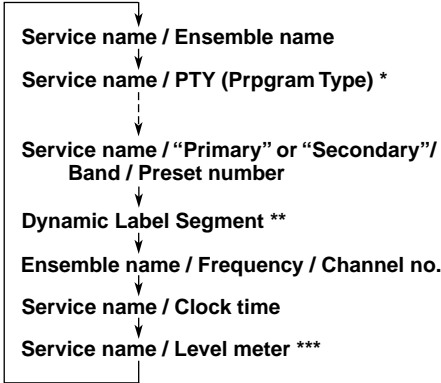
Select a service (including primary and secondary services) you want to listen to.

To change the display information while tuning into an ensemble

Normally service name and ensemble name is shown on the display.

If you want to check other information, press DISP.

Each time you press the button, the following information appears for a while on the display.



* Each service can have several PTY codes and can use two types of PTY code — “Static PTY” and “Dynamic PTY.” Static PTY does not change for the service and shows what program this service is, for example, “Pop Music” or “Rock Music.” On the other hand, Dynamic PTY changes as the service goes on to show its actual and current contents. When Dynamic PTY is shown on the display, it flashes.

** Dynamic Label Segment (DLS): Text information sent with the tuned service. Not displayed when “DAB Text” is set to “Off.” (See page 46.)

*** Not displayed when “Level Meter” is set to “Level Meter Off.” (See page 28.)

To tune in a particular ensemble without searching:

- 1 Press DAB repeatedly to select the DAB band (DAB 1, DAB 2, or DAB 3).
- 2 Press and hold $\wedge \blacktriangleright \blacktriangleleft$ or $\blacktriangleleft \blacktriangleright \vee$ until “Manual” starts flashing on the display. Now you can manually change the frequency while “Manual” is flashing.
- 3 Press $\wedge \blacktriangleright \blacktriangleleft$ or $\blacktriangleleft \blacktriangleright \vee$ repeatedly until the ensemble you want is reached.
 - If you hold down the button, the frequency keeps changing until you release the button.
- 4 Press \blacktriangle or \blacktriangledown to select the service you want.

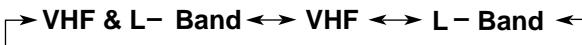
Selecting available tuning range

DAB services are broadcast on the following frequency bands — VHF (BAND III): 174 to 240 MHz, L-BAND: 1452 to 1492 MHz.

In some areas, only one of them are used for broadcasting. So, if you know which band is used in your area, you can select one of or both of these frequency bands as the tuning range of DAB band of this unit. If you set the tuning range correctly, tuning or searching speed will become faster. When shipped from the factory, the tuning range for each DAB band has been set to “VHF & L-BAND.”

- REMEMBER if you do the following operation, the microcomputer built-in the DAB tuner will be reset to the initial settings.

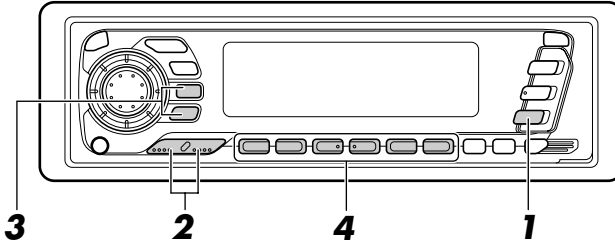
- 1 Press and hold DAB for more than 2 seconds.
- 2 Rotate the control dial to select a proper frequency band for the DAB band in your area.



- 3 Press and hold DAB for more than 2 seconds again to finish the setting.

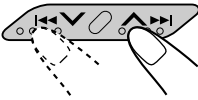
Storing DAB services in memory

You can preset up to 6 DAB services in each DAB band (DAB 1, DAB 2 and DAB 3) manually.

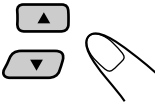

1


Select the DAB band (DAB 1, DAB 2, or DAB 3) you want.

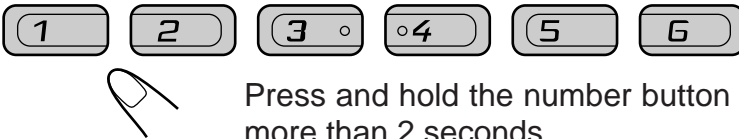
Each time you press the button, the DAB band changes as follows:


2


Tune into an ensemble you want.

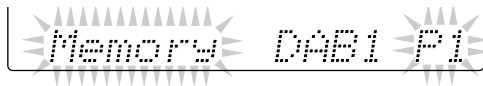
3


Select a service of the ensemble you want.

4


Press and hold the number button (1– 6) for more than 2 seconds.

Ex. When you press number button 1.



Preset number and "Memory" flash for a while.

Note:

When you store a DAB service while listening to a secondary service, the unit beeps and primary service is also stored in the same preset number. In this case, when you press the preset number button, primary service is recalled first. (See page 40.)

5

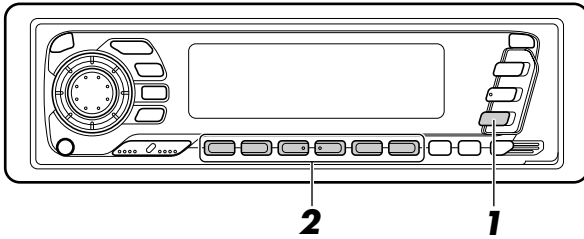
Repeat the above procedure to store other DAB services into other preset numbers.

Note:

A previously preset DAB service is erased when a new DAB service is stored in the same preset number.

Tuning into a preset DAB service

You can easily tune into a preset DAB service. Remember that you must store services first. If you have not stored them yet, see pages 39.



1

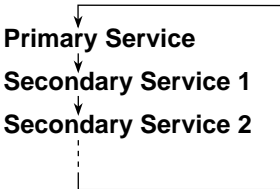
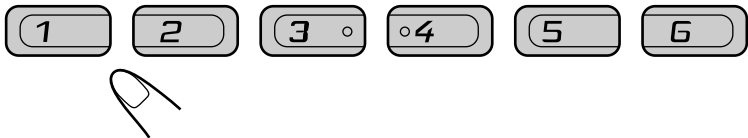


Select the DAB band (DAB 1, DAB 2, or DAB 3) you want.

Each time you press the button, the DAB band changes as follows:



2



Select the number (1 – 6) for the preset DAB service (primary) you want.

When secondary services are available for the preset channel, you can select the secondary services by pressing same number button repeatedly.

What you can do more with DAB

With the DAB tuner connected, you can use the following convenient functions.

- Tracing the same program (service) automatically while driving where the same DAB ensemble is not received
- Road Traffic Flash Standby Reception
- Standby Reception of 9 types of Announcement signals
- PTY Standby Reception
- PTY search

Tracing the same program automatically (Alternative Reception)

You can keep listening to the same program

- **While receiving a DAB service:**

When driving in an area where a service cannot be received, this unit automatically tune in another ensemble or FM RDS station, broadcasting the same program.

- **While receiving an FM RDS station:**

When driving in an area where a service is broadcasting the same program, this unit automatically tune into the ensemble. (See also page 10.)

Note:

When reception switches between DAB and FM, the listening volume level may increase or decrease inconveniently. This change in the volume level results from unequal audio injection levels at broadcaster site, but not from the malfunction of this unit.

To use Alternative Reception

When shipped from the factory, all Alternative Receptions are activated.

- 1 Press and hold SEL (select) for more than 2 seconds so that "PSM" appears on the display.
- 2 Press \blacktriangle \blacktriangleright or \blacktriangleleft \blacktriangledown to select "Alternative," if not shown on the display.
- 3 Rotate the control dial until the Alternative Reception type you want to use appears. The current setting (Y: Yes – activated, N: No – deactivated) for the selected type also appears.
 - FM \leftrightarrow FM: For tracing the program among FM RDS stations (see page 10).
 - DAB \leftrightarrow FM: For tracing the program among DAB services and FM RDS stations.
 - DAB \leftrightarrow DAB: For tracing the program among DAB services.

Note:

When "DAB \leftrightarrow FM" is activated, "FM \leftrightarrow FM" is also activated automatically. On the other hand, "FM \leftrightarrow FM" cannot be deactivated without deactivating "DAB \leftrightarrow FM."

- 4 Press \blacktriangle or \blacktriangledown to activate or deactivate the Alternative Reception.
 - Select "Y" to activate the Alternative Reception of the selected type so that the AF indicator lights up on the display.
 - Select "N" to deactivate the Alternative Reception of the selected type. When both "DAB \leftrightarrow FM" and "DAB \leftrightarrow DAB" are set to "N," the AF indicator goes off.
- 5 Repeat step 3 and 4 to set the other types of Alternative Reception.
- 6 Press SEL (select) again to finish the setting.

Using Standby Reception

Standby Reception allows the unit to switch temporarily to a Road Traffic Flash (traffic announcement), another important announcement broadcast, and a service of your favorite type from the current source.

Road Traffic Flash Standby Reception



Press TP/ANNOUNCE briefly to activate Road Traffic Flash Standby Reception.

The TP indicator lights up (as follows).



- **If you press the button while listening to a service supporting Road Traffic Flash signal**, the TP indicator lights up *with its frame*. This receiver now stands by for the Road Traffic Flash signal reception.

TP

- **If you press the button while listening to a service NOT supporting Road Traffic Flash signal**, the TP indicator lights up *without its frame*.

In this case, Road Traffic Flash Standby Reception does not work.

- If an FM RDS station supporting TA signal is tuned in the background. This receiver stands by for the TA signal reception and the TP indicator lights up *with its frame*.



- **If you press the button while listening to any other source than AM**

- The TP indicator comes to light up *with its frame* when a service supporting Road Traffic Flash signal (or an FM RDS station supporting TA signal) is tuned in the background. This receiver now stands by for the Road Traffic Flash signal (or TA signal) reception.

TP

- The TP indicator keeps lit *without its frame* when a service supporting Road Traffic Flash signal (or an FM RDS station supporting TA signal) is NOT tuned in the background. In this case, this receiver cannot stand by for Road Traffic Flash signal (or TA signal) reception.

How Road Traffic Flash Standby Reception works:

If a Road Traffic Flash (or Traffic Announcement) starts broadcasting while the Road Traffic Flash Standby Reception is activated, “Traffic flash” (or “Traffic”) appears and the unit tunes into the service (or FM RDS station) broadcasting Road Traffic Flash (or Traffic Announcement). The volume increases to the preset TA volume level and the Road Traffic Flash (or Traffic Announcement) can be heard.

To deactivate Road Traffic Flash Standby Reception, press TP/ANNOUNCE briefly again. Each time you press the button, Road Traffic Flash Standby Reception turns on and off.

Announcement Standby Reception



Press and hold TP/ANNOUNCE for more than 1 second to activate Announcement Standby Reception.

The ANNOUNCE indicator lights up (as follows).

ANNOUNCE

- **While listening to a service supporting Announcement signals**, the ANNOUNCE indicator lights up *with its frame*. This receiver now stands by for Announcement signal reception.

ANNOUNCE

- **While listening to a service NOT supporting Announcement signals**, the ANNOUNCE indicator lights up *without its frame*.

In this case, Announcement Standby Reception does not work.

- **If you press the button while listening to any other source**

ANNOUNCE

- The ANNOUNCE indicator comes to light up *with its frame* when a service supporting Announcement signal is tuned in the background. This receiver now stands by for the Announcement signal reception.

ANNOUNCE

- The ANNOUNCE indicator keeps lit *without its frame* when a service supporting Announcement signal is NOT tuned in the background. In this case, this receiver cannot stand by for Announcement signal reception.

How Announcement Standby Reception works:

If a service of the selected Announcement type starts broadcasting while the Announcement Standby Reception is activated, the selected Announcement type name appears and the unit tunes into the service. The service of the selected Announcement type can be heard.

To deactivate Announcement Standby Reception, press and hold TP/ANNOUNCE again. Each time you press and hold the button for more than 1 second, Announcement Standby Reception turns on and off.

To activate your favorite Announcement types for Announcement Standby Reception

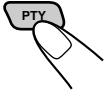
When shipped from the factory, all Announcement Standby Receptions are deactivated.

- 1 Press and hold SEL (select) for more than 2 seconds so that “PSM” appears on the display.
- 2 Press **▲▶▶** or **◀◀▼** to select “Announce,” if not shown on the display.
- 3 Rotate the control dial until the Announcement type you want to use appears.
The current setting (Y: Yes – activated, N: No – deactivated) for the selected Announcement type also appears.
 - You can use the following Announcement types as the sources for Announcement Standby Reception — Transport, Warning/Serv (service), News Flash, Weather Flash, Event, Special Event, Radio Info (information), Sports News, and Financial News.
- 4 Press **▲** or **▼** to activate or deactivate the Announcement Standby Reception of the selected type.
 - Select “Y” to activate the type selected in above step.
 - Select “N” to deactivate the type selected in above step.
- 5 Repeat step 3 and 4 to set the other types of Announcement Standby Reception.
- 6 Press SEL (select) again to finish the setting.

Notes:

- *When a DAB service broadcasts an Alarm signal (one type of Announcement signals to be used for emergency cases), the unit automatically tunes into that service. The interruption triggered by Alarm signal cannot be deactivated because of its importance. Furthermore, it also forces the unit to break any other source.*
- *The Road Traffic Flash, another high priority type of Announcement signal is incorporated with the TP function as described on page 42.*

PTY Standby Reception



Press PTY briefly to activate PTY Standby Reception.

The PTY Standby Reception works only if the service provider signals out a Dynamic PTY rather than a Static PTY.

The PTY indicator lights up (as follows).



PTY

- **If you press the button while listening to a service supporting Dynamic PTY signals**, the PTY indicator lights up *with its frame*.

- **If you press the button while listening to a service NOT supporting Dynamic PTY signals**, the PTY indicator lights up *without its frame*.

In this case, PTY Standby Reception does not work.

- **If you press the button while listening to any other source**

- The PTY indicator comes to light up *with its frame* when a service supporting Dynamic PTY signal is tuned in the background. This receiver now stands by for the PTY signal reception.



PTY

- The PTY indicator keeps lit *without its frame* when a service supporting Dynamic PTY signal is NOT tuned in the background. In this case, this receiver cannot stand by for PTY signal reception.

How PTY Standby Reception works:

If a service starts broadcasting the selected PTY while the PTY Standby Reception is activated, the selected PTY name flashes and the unit tunes into the service. The service of the selected PTY can be heard.

To deactivate PTY Standby Reception, press PTY briefly again.

Each time you press the button, PTY Standby Reception turns on and off.

To select your favorite PTY for PTY Standby Reception

See page 13.

- You cannot select your favorite PTY separately for FM RDS “PTY Standby Reception” and for DAB “PTY Standby Reception.”

To search your favorite service (PTY Search)

To store your favorite PTY, see page 14.

- You cannot store your favorite PTY separately for FM RDS “PTY Standby Reception” and for DAB “PTY Standby Reception.”

To search your favorite service:

1 Press and hold PTY for more than 1 second.

2 Press one of the present number buttons (1 to 6) to search for a service of your favorite PTY.

- If there is a service of the same PTY code (either Static or Dynamic PTY) you selected, that service is tuned in.

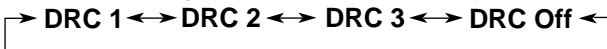
- If there is no service of the same PTY code you selected, the last tuned service will be tuned in again.

Adjusting Dynamic Range Control (DRC) effect

In a noisy environment such as in a car, listening condition and sound quality can be improved by reducing the dynamic range of the DAB audio signal. For this purpose, some service provides Dynamic Range Control signals together with their regular program signals.

This unit can use this Dynamic Range Control signals to reduce the dynamic range and obtain the best possible listening condition and sound quality. When shipped from the factory, "DRC Off" is selected.

- See also "Changing the general settings (PSM)" on page 26.
- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
 - 2 Press $\blacktriangle \blacktriangleright \blacktriangleright$ or $\blacktriangleleft \blacktriangleleft \blacktriangledown$ to select "DRC Effect," if not shown on the display. The current setting for this function also appears.
 - 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the setting turns on and off alternately.



Select one of following according to your preference.

As the number increases, the DRC effect level also increases.

DRC 1 < DRC 2 < DRC 3

To cancel the DRC effect, select "DRC Off."

- 4 Press SEL again to finish the setting.
 - When the settings other than "DRC Off" is selected, the DRC indicator lights up on the display. (The DRC indicator lights up *with its frame* only when the unit received DRC signal from the tuned service.)

Selecting DAB radio text display mode

You can select the DAB radio text (DLS: Dynamic Label Segment) display mode. When shipped from the factory, "On" is selected.

- On: Text segments are sequentially scrolled if it consists of more than 32 characters.
 - Headline Only: Shows the Headline Only and any remainder which is sent from a service is refused.
 - Off: Cancels DLS display.
- 1 Press and hold SEL (Select) for more than 2 seconds so that "PSM" appears on the display.
 - 2 Press $\blacktriangle \blacktriangleright \blacktriangleright$ or $\blacktriangleleft \blacktriangleleft \blacktriangledown$ to select "DAB Text," if not shown on the display. The current setting for this function also appears.
 - 3 Rotate the control dial until the setting you want appears on the display. As you rotate the dial, the indication changes as follows:



- 4 Press SEL to finish the setting.

Note:



"Headline Only" allows a service provider to show the significant content of a message which is supposed to alter in a very low frequency.

If the service provider does not implement the corresponding command to determine the headline, the entire text presentation is discarded and this unit performs as if "Off" is selected.

CAUTION

We highly recommend you to avoid any text reading while driving because of safety reasons! Do not risk your or other people's life and get involved in an accident in whatever form.

Handling CDs

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

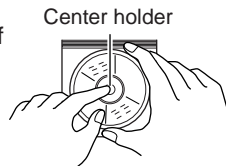
How to handle CDs

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

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

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

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



To keep CDs clean

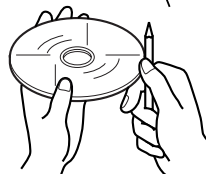
A dirty CD may not play correctly. If a CD does become dirty, wipe it with a soft cloth in a straight line from center to edge.



To play new CDs

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

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



Moisture condensation

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

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

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

CAUTIONS:

- Do not insert 8cm (3 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.

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

ENGLISH

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 loading slot (or in the magazine).	Insert CD.
	CD is inserted incorrectly.	Insert it correctly.
• “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.
	This unit is not connected to a DAB tuner unit correctly.	Connect this unit and the DAB tuner unit correctly.
• “Reset 1-Reset 7” appears on the display.	_____	Press the reset button of the CD changer.
• CD can be neither played back nor ejected.	The CD player may function incorrectly.	Press CD and SEL at the same time for more than 2 seconds. (“Please Eject” appears on the display.) When you open the control panel by pressing ▲, be careful not to drop CD when it is ejected.
• 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 /ATT and SEL at the same time for more than 2 seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.)

SPECIFICATIONS

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 40 watts per channel

Rear: 40 watts per channel

Continuous Power Output (RMS):

Front: 16 watts per channel into 4 Ω , 40 to 20,000 Hz at no more than 0.8 % total harmonic distortion.

Rear: 16 watts per channel into 4 Ω , 40 to 20,000 Hz at no more than 0.8 % total harmonic distortion.

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

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 to 20,000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.0 V/20 k Ω load (full scale)

Output Impedance: 1 k Ω

TUNER SECTION

Frequency Range:

FM: 87.5 to 108.0 MHz

AM: (MW) 522 to 1,620 kHz

(LW) 144 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 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 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 volts (11 to 16 volts allowance)

Grounding System: Negative ground

Allowable Operating Temperature: 0°C to +40°C

Dimensions (W x H x D):

Installation Size:

182 x 52 x 150 mm

Panel Size: 188 x 58 x 11 mm

Mass: 1.4 kg (excluding accessories)

Design and specifications subject to change without notice.



JVC
VICTOR COMPANY OF JAPAN, LIMITED