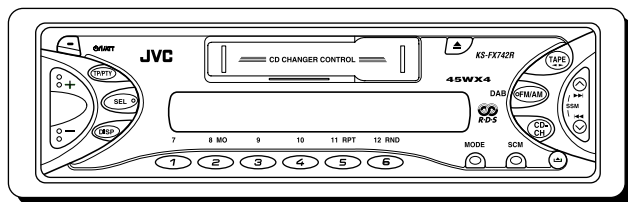
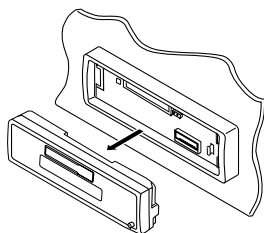


JVC



CASSETTE RECEIVER
CASSETTEN-RECEIVER
RADIOCASSETTE
RADIO/CASSETTESPELER

KS-FX742R



For installation and connections, refer to the separate manual.

Für den Einbau und die Anschlüsse siehe das eigenständige Handbuch.

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

Bijzonderheden over de installatie en aansluiting van het apparaat vindt u in de desbetreffende handleiding.

INSTRUCTIONS

BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING

GET0114-001A
[E/EX]

ENGLISH

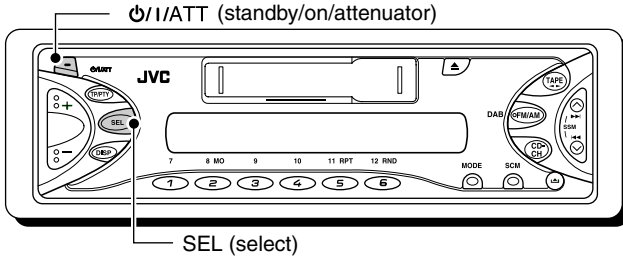
DEUTSCH

FRANÇAIS

NERLANDS

How to reset your unit

While holding SEL (select), press O/I/ATT (standby/on/attenuator) for more than 2 seconds. This will reset the built-in microcomputer.



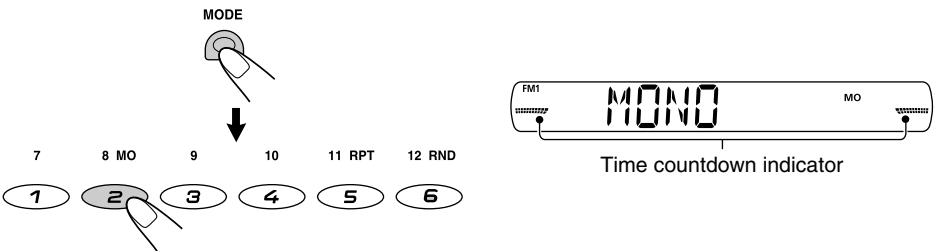
Note:

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

How to use the MODE button

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

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



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

- Pressing MODE again also clears the functions mode.

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

CONTENTS

| | | | |
|--|-----------|---|-----------|
| How to reset your unit | 2 | OTHER MAIN FUNCTIONS | 22 |
| How to use the MODE button | 2 | Changing the general settings (PSM) | 22 |
| LOCATION OF THE BUTTONS | 4 | Detaching the control panel | 25 |
| Control panel | 4 | CD CHANGER OPERATIONS | 26 |
| BASIC OPERATIONS | 5 | Playing discs | 26 |
| Turning on the power | 5 | Selecting the playback modes | 28 |
| Setting the clock | 6 | EXTERNAL COMPONENT OPERATIONS ... | 29 |
| RADIO OPERATIONS | 7 | Playing an external component | 29 |
| Listening to the radio | 7 | DAB TUNER OPERATIONS | 30 |
| Storing stations in memory | 8 | Tuning in to an ensemble and one of the | |
| Tuning in to a preset station | 9 | services | 30 |
| RDS OPERATIONS | 10 | Storing DAB services in memory | 32 |
| What you can do with RDS | 10 | Tuning in to a preset DAB service | 33 |
| Other convenient RDS functions and | | TROUBLESHOOTING | 34 |
| adjustments | 14 | MAINTENANCE | 36 |
| TAPE OPERATIONS | 17 | SPECIFICATIONS | 37 |
| Listening to a cassette | 17 | | |
| Finding the beginning of a tune | 18 | | |
| Other convenient tape functions | 18 | | |
| SOUND ADJUSTMENTS | 20 | | |
| Adjusting the sound | 20 | | |
| Selecting preset sound modes | 21 | | |
| Storing your own sound adjustments | 21 | | |

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.

BEFORE USE

***For safety....**

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

***Temperature inside the car...**

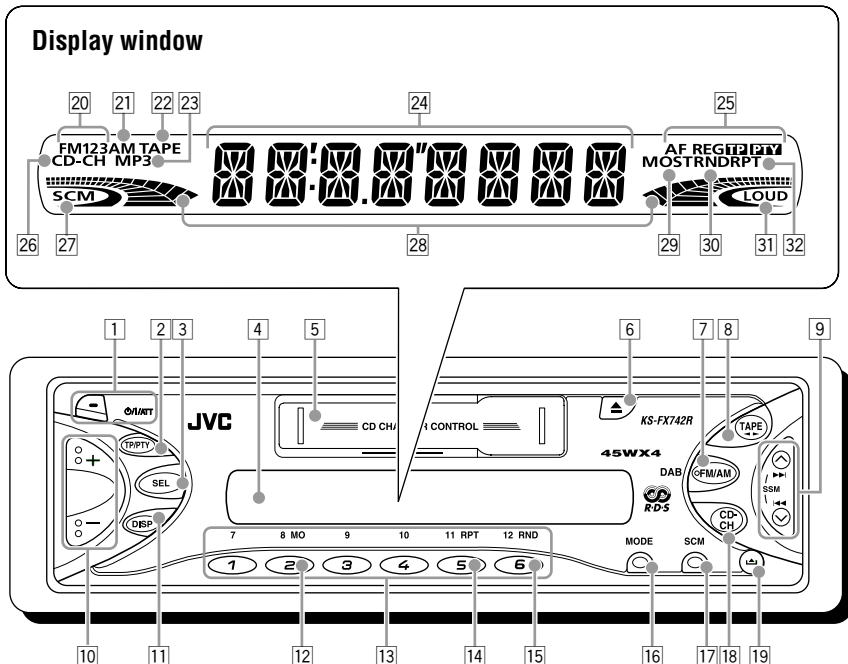
If you have parked the car for a long time in hot or cold weather, wait until the temperature in the car becomes normal before operating the unit.



LOCATION OF THE BUTTONS

ENGLISH

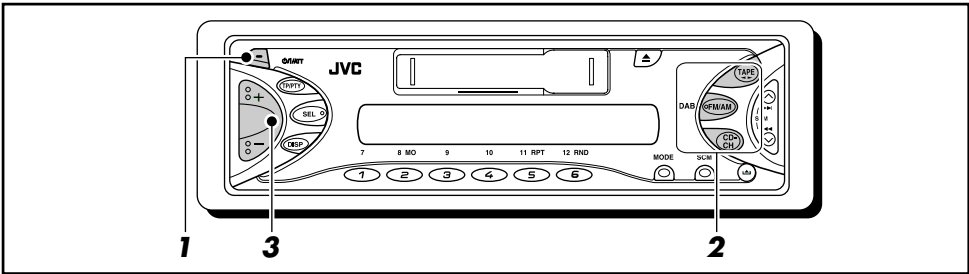
Control panel



- 1 $\text{O}/\text{I}/\text{ATT}$ (standby/on/attenuator) button
- 2 TP/PTY (traffic programme/programme type) button
- 3 SEL (select) button
- 4 Display window
- 5 Cassette compartment
- 6 \blacktriangle (eject) button
- 7 FM/AM (DAB) button
- 8 TAPE $\blacktriangleleft\blacktriangleright$ button
- 9 \blacktriangle \blacktriangleright / \blacktriangleleft \blacktriangleright \blacktriangleleft \blacktriangleright buttons
 - Also functions as SSM buttons when pressed together.
- 10 +/- buttons
- 11 DISP (display) button
- 12 MO (monaural) button
- 13 Number buttons
- 14 RPT (repeat) button
- 15 RND (random) button
- 16 MODE button
- 17 SCM (sound control memory) button
- 18 CD-CH (CD changer) button
- 19 \blacktriangle (control panel release) button

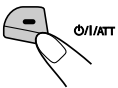
Display window

- 20 FM band indicators (FM1, FM2, FM3)
- 21 AM band indicator
- 22 TAPE indicator
- 23 MP3 indicator
 - Lights up only when playing an MP3 disc on a JVC MP3-compatible CD changer.
- 24 Main display
- 25 RDS indicators
AF, REG, TP, PTY
- 26 CD-CH (CD changer) indicator
- 27 SCM (sound control memory) indicator
- 28 Volume (or audio) level indicator
- 29 Tuner reception indicators
MO (monaural), ST (stereo)
- 30 RND (random) indicator
- 31 LOUD (loudness) indicator
- 32 RPT (repeat) indicator



Turning on the power

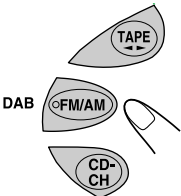
1 Turn on the power.



Note on One-Touch Operation:

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

2 Select the source.



To operate the tuner (FM or AM), see pages 7 – 16.

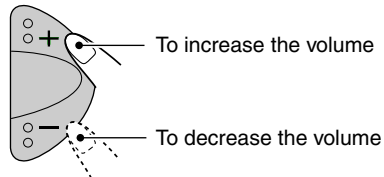
To play a tape, see pages 17 – 19.

To operate the CD changer, see pages 26 – 28.

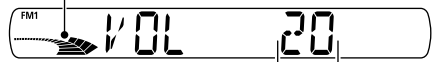
To operate the external component (LINE IN), see page 29.

To operate the DAB tuner, see pages 30 – 33.

3 Adjust the volume.



Volume (or audio) level indicator (see page 24)



Volume level appears.

4 Adjust the sound as you want. (See pages 20 and 21.)

To drop the volume in a moment

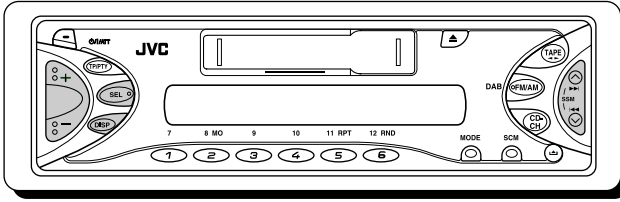
Press \odot /I/ATT briefly while listening to any source. "ATT" starts flashing on the display, and the volume level will drop in a moment.

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

To turn off the power

Press and hold \odot /I/ATT for more than one second.

"SEE YOU" appears, then the unit turns off.



Setting the clock

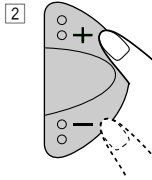
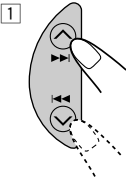
You can also set the clock system to either 24 hours or 12 hours.

- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 23.)



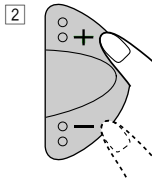
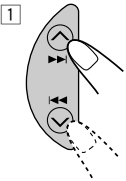
- 2 Set the hour.

- 1 Select "CLOCK H" (hour) if not shown on the display.
- 2 Adjust the hour.



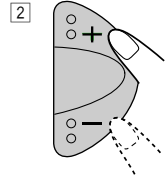
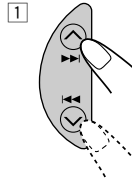
- 3 Set the minute.

- 1 Select "CLOCK M" (minute).
- 2 Adjust the minute.



- 4 Set the clock system.

- 1 Select "24H/12H."
- 2 Select "24H" or "12H."



- 5 Finish the setting.



To check the current clock time or change the display mode



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

- During tuner operation:
Frequency ↔ Clock

Notes:

- For the indication change during RDS operation, see page 15.
- For the indication change during DAB operation, see page 31.

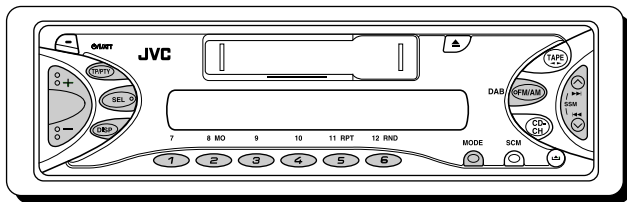
- During tape operation:
Tape direction (TAPE) ↔ Clock

- During CD changer operation:



- During power off:

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



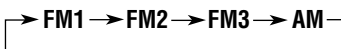
Listening to the radio

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

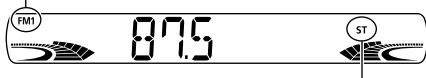
Searching a station automatically: Auto search

1 Select the band (FM1 – 3, AM).

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



Selected band appears.

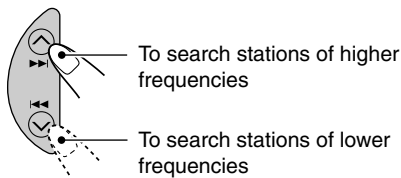


Lights up when receiving an FM stereo broadcast with sufficient signal strength.

Note:

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

2 Start searching a station.



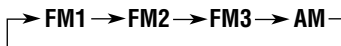
When a station is received, searching stops.

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

Searching a station manually: Manual search

1 Select the band (FM1 – 3, AM).

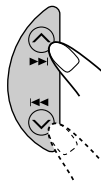
Each time you press the button, the band changes as follows:



Note:

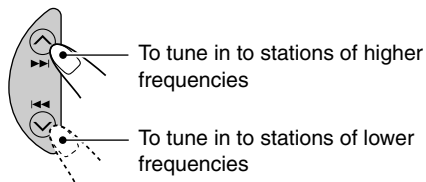
This receiver has three FM bands (FM1, FM2, FM3). You can use any one of them to listen to an FM broadcast.

2 Press and hold or until “M” (manual) starts flashing on the display.





3 Tune in to a station you want while “M” (manual) is flashing.



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

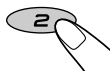
When an FM stereo broadcast is hard to receive:

MODE



1 Press MODE to enter the functions mode while listening to an FM stereo broadcast.

8 MO



2 Press MO (monaural), while still in the functions mode, so that the MO indicator lights up on the display.

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

MO (monaural) indicator



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

Storing stations in memory

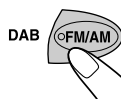
You can use one of the following two methods to store broadcasting stations in memory.

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

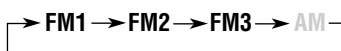
FM station automatic preset: SSM

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

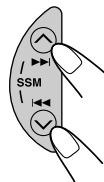
1 Select the FM band (FM1 – 3) you want to store FM stations into.



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



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).

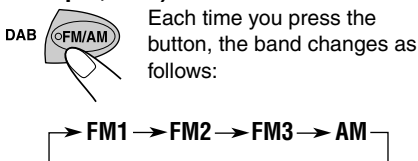
When automatic preset is over, the station stored in number button 1 will be automatically tuned in.

Manual preset

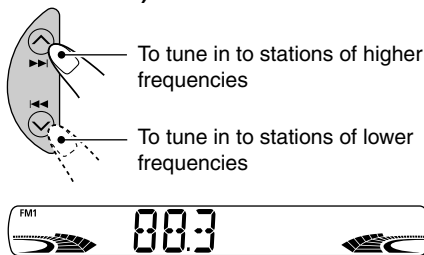
You can preset up to 6 stations in each band (FM1, FM2, FM3, and AM) manually.

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

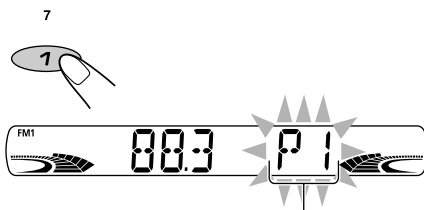
1 Select the band (FM1 – 3, AM) you want to store stations into (in this example, FM1).



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



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



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

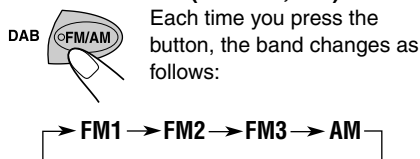
Notes:

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

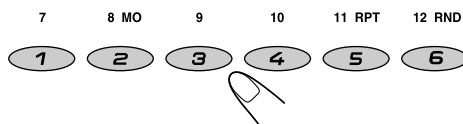
Tuning in to a preset station

You can easily tune in to a preset station. Remember that you must store stations first. If you have not stored them yet, see “Storing stations in memory” on pages 8 and 9.

1 Select the band (FM1 – 3, AM).



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





What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals. For example, the stations send their station names, as well as information about what type of programme they broadcast, such as sports or music, etc.

Another advantage of RDS function is called "Enhanced Other Networks." By using the Enhanced Other Networks data sent from a station, you can tune in to a different station of a different network broadcasting your favorite programme or traffic announcement while listening to another programme or to another source such as tape.

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

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

Tracing the same programme automatically (Network-Tracking Reception)

When driving in an area where FM reception is not good, the tuner built in this unit automatically tunes in to another RDS station, broadcasting the same programme with stronger signals. So, you can continue to listen to the same programme in its finest reception, no matter where you drive. (See the illustration on page 16.)

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

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

To use Network-Tracking Reception

You can select the different modes of network-tracking reception to continue listening to the same programme in its finest reception. When shipped from the factory, "AF" is selected.

- **AF:** Network-Tracking Reception is activated with Regionalization set to "off." With this setting, the unit switches to another station within the same network when the receiving signals from the current station become weak. (In this mode, the programme may differ from the one currently received.) The AF indicator lights up but the REG indicator does not.
- **AF REG:** Network-Tracking Reception is activated with Regionalization set to "on." With this setting, the unit switches to another station, within the same network, broadcasting the same programme when the receiving signals from the current station become weak. Both the AF indicator and the REG indicator light up.
- **OFF:** Network-Tracking Reception is deactivated. Neither the AF indicator nor the REG indicator lights up.

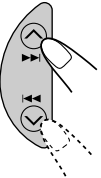




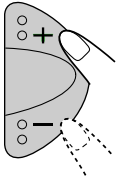
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 23.)**



- 2 Select “AF-REG” (alternative frequency/regionalization reception) if not shown on the display.**



- 3 Select the desired mode—“AF,” “AF REG,” or “OFF.”**



- 4 Finish the setting.**



Using TA Standby Reception

TA Standby Reception allows the unit to switch temporarily to Traffic Announcement (TA) from the current source (another FM station, tape, or other connected components).

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

Press TP/PTY to activate TA Standby Reception.



- **When the current source is FM,** the TP indicator either lights up or flashes.

- If the TP indicator lights up, TA Standby Reception is activated.

If a station starts broadcasting a traffic announcement, “TRAFFIC” appears on the display, and this unit automatically tunes in to the station. The volume changes to the preset TA volume level (see page 15) and the traffic announcement can be heard.

- If the TP indicator flashes, TA Standby Reception is not yet activated since the station being received does not provide the signals used for TA Standby Reception.

To activate TA Standby Reception, you need to tune in to another station providing these signals. Press **▲▶▶** or **▶▶▶▼** to search for such a station.

When a station providing these signals is tuned in, the TP indicator stops flashing and remains lit. Now TA Standby Reception is activated.

- **When the current source is other than FM,** the TP indicator lights up.

If a station starts broadcasting a traffic announcement, “TRAFFIC” appears on the display, and this unit automatically changes the source and tunes in to the station.

To deactivate the TA Standby Reception, press TP/PTY again. The TP indicator disappears.



Using PTY Standby Reception

PTY Standby Reception allows the unit to switch temporarily to your favorite programme (PTY: Programme Type) from the current source (another FM station, tape, or other connected components).

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

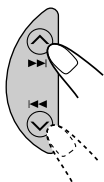
You can select your favorite programme type for PTY Standby Reception.

When shipped from the factory, PTY Standby Reception is turned off. ("OFF" is selected for PTY Standby Reception.)

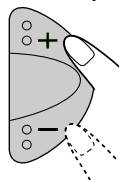
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 23.)**



- 2 Select "PTY STBY" (standby) if not shown on the display.**



- 3 Select one of the twenty-nine PTY codes. (See page 16.)**



Selected code name appears on the display and is stored into memory.

- 4 Finish the setting.**



- **When the current source is FM**, the PTY indicator either lights up or flashes.
 - **If the PTY indicator lights up**, PTY Standby Reception is activated.

If a station starts broadcasting the selected PTY programme, this unit automatically tunes in to the station.
 - **If the PTY indicator flashes**, PTY Standby Reception is not yet activated since the station being received does not provide the signals used for PTY Standby Reception. To activate PTY Standby Reception, you need to tune in to another station providing these signals. Press \blacktriangle \blacktriangleright \blacktriangleleft or \blacktriangleleft \blacktriangleright \blacktriangledown to search for such a station.

When a station providing these signals is tuned in, the PTY indicator stops flashing and remains lit. Now PTY Standby Reception is activated.
 - **When the current source is other than FM**, the PTY indicator lights up.

If a station starts broadcasting the selected PTY programme, this unit automatically changes the source and tunes in to the station.
- To deactivate the PTY Standby Reception**, select "OFF" in step **3** on the left column. The PTY indicator disappears.



Searching your favorite programme

You can search any one of the PTY codes. In addition, you can store your 6 favorite programme types in the number buttons. When shipped from the factory, the following 6 programme types have been stored in the number buttons (1 to 6).

To store your favorite programme types, see below.

To search your favorite programme type, see page 14.

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

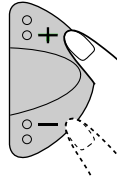
To store your favorite programme types

- 1 Press and hold TP/PTY for more than 2 seconds while listening to an FM station.



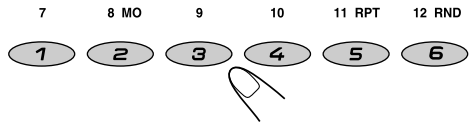
The last selected PTY code appears.

- 2 Select one of the twenty-nine PTY codes. (See page 16.)



Selected code name appears on the display.

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



"MEMORY" and the selected code name will flash alternately.

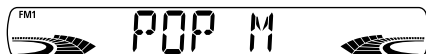
- 4 Press and hold TP/PTY for more than 2 seconds to exit from this mode.





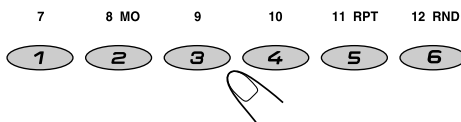
To search your favorite programme type

- 1 Press and hold TP/PTY for more than 2 seconds while listening to an FM station.



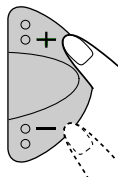
The last selected PTY code appears.

- 2 To select one of your favorite programme type



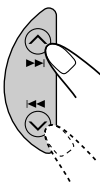
or

To select any one of the twenty-nine PTY codes



Ex.: When "ROCK M" is selected

- 3 Press \wedge \triangleright or \triangleleft \triangledown to start PTY search for your favorite programme.



- If there is a station broadcasting a programme of the same PTY code as you selected, that station is tuned in.
- If there is no station broadcasting a programme of the same PTY code as 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, using the AF data, tunes in to another frequency broadcasting the same programme as the original preset station is broadcasting. (Programme search)

- The unit takes some time to tune in to another station using Programme search.

To activate programme search, follow the procedure below.

- See also "Changing the general settings (PSM)" on page 22.

- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press \wedge \triangleright or \triangleleft \triangledown to select "P(Programme)-SEARCH."
- 3 Press + to select "ON."
Now programme search is activated.
- 4 Press SEL (select) to finish the setting.

To cancel programme search, repeat the same procedure and select "OFF" in step 3 by pressing -.



Changing the display mode while listening to an FM station

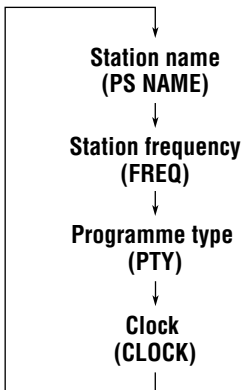
You can change the initial indication on the display to station name (PS NAME), station frequency (FREQ), or clock time (CLOCK) while listening to an FM RDS station.

- See also “Changing the general settings (PSM)” on page 22.

- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
- 2 Press \blacktriangle \blacktriangleright or \blacktriangleleft \blacktriangledown to select “DISPMODE” (display mode).
- 3 Press + or – to set to the desired indication (“PS NAME”, “FREQ”, or “CLOCK”).
- 4 Press SEL (select) to finish the setting.

Note:

By pressing DISP (display), you can change the display while listening to an FM RDS station only. Each time you press the button, the following information appears on the display:



- Then, the display goes back to the original indication in several seconds.

Setting the TA volume level

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

- See also “Changing the general settings (PSM)” on page 22.
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
 - 2 Press \blacktriangle \blacktriangleright or \blacktriangleleft \blacktriangledown to select “TA VOL” (volume).
 - 3 Press + or – to set to the desired volume. You can set it from “VOL 00” to “VOL 50.”
 - 4 Press SEL (select) to finish the setting.

Automatic clock adjustment

When shipped from the factory, the clock built in this unit is set to be readjusted 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 22.
- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display.
 - 2 Press \blacktriangle \blacktriangleright or \blacktriangleleft \blacktriangledown to select “AUTO ADJ” (adjustment).
 - 3 Press – to select “OFF.”
Now automatic clock adjustment is canceled.
 - 4 Press SEL (select) to finish the setting.

To reactivate clock adjustment, repeat the same procedure and select “ON” in step 3 by pressing +.

Note:

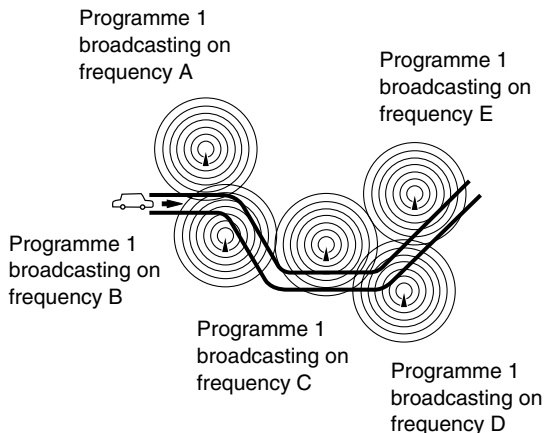
You must stay tuned to the same station for more than 2 minutes after setting “AUTO ADJ” to “ON.” Otherwise, the clock time will not be adjusted. (This is because the unit takes up to 2 minutes to capture the CT data in the RDS signal.)

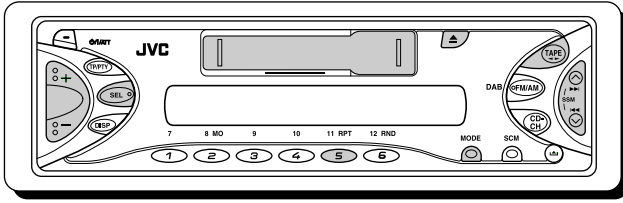


PTY codes

| | | | |
|-----------|--|-----------|---|
| NEWS: | News | SOCIAL: | Programmes on social activities |
| AFFAIRS: | Topical programmes expanding on current news or affairs | RELIGION: | Programmes dealing with any aspect of belief or faith, or the nature of existence or ethics |
| INFO: | Programmes which impart advice on a wide variety of topics | PHONE IN: | Programmes where people can express their views either by phone or in a public forum |
| SPORT: | Sport events | TRAVEL: | Programmes about travel destinations, package tours, and travel ideas and opportunities |
| EDUCATE: | Educational programmes | LEISURE: | Programmes concerned with recreational activities such as gardening, cooking, fishing, etc. |
| DRAMA: | Radio plays | JAZZ: | Jazz music |
| CULTURE: | Programmes on national or regional culture | COUNTRY: | Country music |
| SCIENCE: | Programmes on natural science and technology | NATION M: | Current popular music from another nation or region, in that country's language |
| VARIED: | Other programmes like comedies or ceremonies | OLDIES: | Classic pop music |
| POP M: | Pop music | FOLK M: | Folk music |
| ROCK M: | Rock music | DOCUMENT: | Programmes dealing with factual matters, presented in an investigative style |
| EASY M: | Easy-listening music | | |
| LIGHT M: | Light music | | |
| CLASSICS: | Classical music | | |
| OTHER M: | Other music | | |
| WEATHER: | Weather information | | |
| FINANCE: | Reports on commerce, trading, the Stock Market, etc. | | |
| CHILDREN: | Entertainment programmes for children | | |

The same programme can be received on different frequencies.

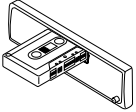




Listening to a cassette

You can play back type I (normal) tapes.

1 Insert a cassette into the cassette compartment.



The unit turns on and tape play starts automatically. When one side of the tape reaches its end during play, the other side of the tape automatically starts playing. (Auto Reverse)

Note on One-Touch Operation:

When a cassette is already in the cassette compartment, select the cassette player as the source by pressing **TAPE** ◀▶ to start tape play.

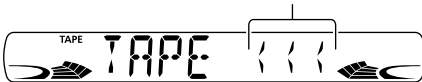
2 Select the tape direction.



Each time you press **TAPE** ◀▶, the tape direction changes alternately—forward (TAPE ▶) and reverse (TAPE ◀).



↑↓ Tape direction



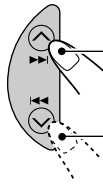
To stop play and eject the cassette

Press ▲.

Tape play stops and the cassette automatically ejects from the cassette compartment. The source changes to the previously selected one. If you change the source, tape play also stops (without ejecting the cassette this time).

- You can also eject the cassette by pressing ▲ while the unit is turned off.

To fast-forward and rewind a tape



Press ▲▶▶▶ for more than one second to fast-forward the tape. When the tape reaches its end, the tape is reversed and playback starts from the beginning of the other side.

Press ◀◀◀◀ for more than one second to rewind the tape. When the tape reaches its end, playback of the same side starts.

To stop fast forward and rewind at any position on the tape, press **TAPE** ◀▶.

Tape play starts from that position on the tape.

Note:

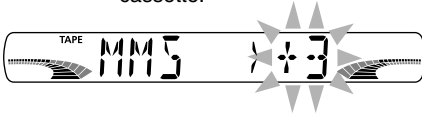
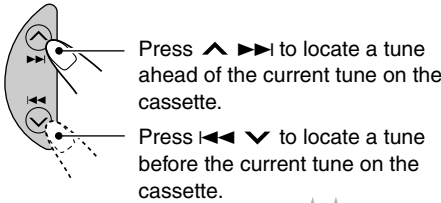
When the tape reaches its end while fast-forwarding, the tape direction will be changed automatically.

Finding the beginning of a tune

Multi Music Scan allows you to automatically start playback from the beginning of a specified tune. You can specify up to 9 tunes ahead of or before the current tune.

During playback

Specify where (how many tunes ahead of or before the current tune) the tune you want is located.



Each time you press the buttons, the number changes up to ± 9 .

When the beginning of the specified tune is located, playback starts automatically.

Notes:

- While locating a specified tune:
 - If the tape is rewind to its beginning, playback starts from the beginning of that side.
 - If the tape is fast-forwarded to the end, it is reversed and played from the beginning of the other side.
- In the following cases, the Multi Music Scan function may not operate correctly:
 - Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions between tunes.
 - Tapes with short non-recorded sections.
 - Tapes with high level of noise or humming between tunes.
 - Tapes with tunes recorded at low recording levels.

Other convenient tape functions

Skipping the blank portions on the tape

You can skip blank portions between the tunes (Blank Skip).

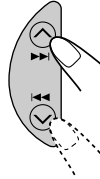
When this function is on, the unit skips blank portions of 15 seconds or more, fast-forwards to the next tune, then starts playing it.

- See also “Changing the general settings (PSM)” on page 22.

- 1 Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (PSM: see page 23.)**

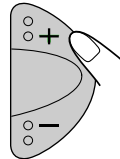


- 2 Press or to select “B. SKIP” (blank skip).**



- 3 Press + to select “ON.”**

Now Blank Skip is activated.



- 4 Finish the setting.**



To cancel Blank Skip, repeat the same procedure and select “OFF” in step **3** by pressing –.



Playing the current tune repeatedly

You can play the current tune repeatedly (Repeat Play).

MODE



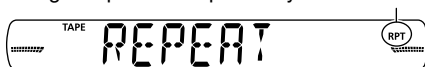
1 Press MODE to enter the functions mode while playing a tune you want to repeat.

11 RPT



2 Press RPT (repeat), while still in the functions mode, so that the RPT indicator lights up on the display.

Lights up when Repeat Play is turned on.



When the tune has been played, the tape is automatically rewound to the beginning of that tune and the same tune will be played again.

To cancel Repeat Play, repeat steps **1** and **2** above again so that the RPT indicator goes off.

Note:

In the following cases, Blank Skip and Repeat Play may not operate correctly:

- Tapes with tunes having long pianissimo passages (very quiet parts) or non-recorded portions during tunes.
- Tapes with short non-recorded sections.
- Tapes with high level noise or humming between tunes.
- Tapes with tunes recorded at low recording levels.

Prohibiting cassette ejection

You can prohibit cassette ejection and lock a cassette in the cassette compartment.

While pressing TAPE ◀▶, press and hold ▲ (eject) for more than 2 seconds.



"NO EJECT" flashes on the display for about 5 seconds, and the cassette is locked and cannot be ejected.

To cancel the prohibition and unlock the cassette

While pressing TAPE ◀▶, press and hold ▲ (eject) again for more than 2 seconds. "EJECT OK" flashes on the display for about 5 seconds, and the cassette is unlocked.



Note:

If you press ▲ while cassette ejection is prohibited, the cassette will not be ejected.



SOUND ADJUSTMENTS

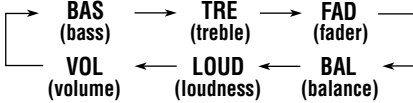
Adjusting the sound

You can adjust the sound characteristics to your preference.

1 Select the item you want to adjust.



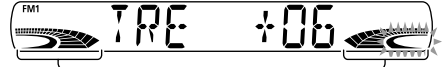
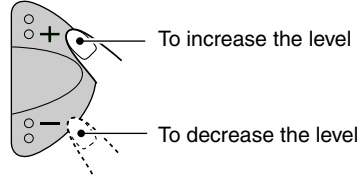
Each time you press the button, the adjustable items change as follows:



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

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

2 Adjust the level.



Equalization pattern changes as you adjust the bass or treble.

Ex.: When you adjust "TRE" (treble)

Note:

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



Selecting preset sound modes

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

Select the sound mode you want.

SCM



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



Ex.: When you select "BEAT"

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

Notes:

- You can adjust each sound mode to your preference, and store it in memory. If you want to adjust and store your original sound mode, see "Storing your own sound adjustments" below.
- To adjust the bass and treble reinforcement levels or to turn on/off the loudness function, see page 20.

Storing your own sound adjustments

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

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

1 Call up the sound mode you want to adjust.

SCM



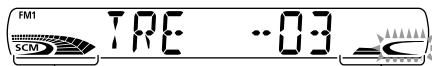
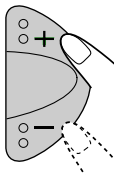
- See left column for details.

2 Select "BAS" (bass), "TRE" (treble), or "LOUD" (loudness).



3 Adjust the bass or treble level or turn the loudness function ON/OFF.

- See page 20 for details.



Equalization pattern changes as you adjust the bass or treble.

Ex.: When you adjust "TRE" (treble)

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

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

SCM



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

6 Repeat the same procedure to store other sound modes.

To reset to the factory settings, repeat the same procedure and reassign the preset values listed in the table on the left column.



OTHER MAIN FUNCTIONS

Changing the general settings (PSM)

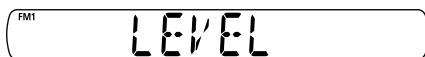
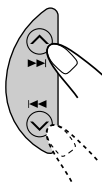
You can change the items listed on the next page by using the PSM (Preferred Setting Mode) control.

Basic Procedure

- 1** Press and hold SEL (select) for more than 2 seconds so that one of the PSM items appears on the display. (See page 23.)

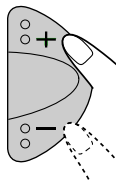


- 2** Select the PSM item you want to adjust. (See page 23.)



Ex.: When you select "LEVEL"

- 3** Adjust the PSM item selected.



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

- 5** Finish the setting.





Preferred Setting Mode (PSM) items

| | | 1 | | 2 | | 3 | | Factory-preset settings | See page |
|-----------------|---|---------|--|-----------|--|-------------------|-------------------------------------|-------------------------|----------|
| | | Hold... | | Select... | | Set... | | | |
| | | | | | | | | | |
| | | Hold... | | Select... | | Set... | | | |
| | | | | | | - | + | | |
| CLOCK H | Hour adjustment | | | | | Back | Advance | 0:00 | 6 |
| CLOCK M | Minute adjustment | | | | | Back | Advance | | |
| 24H/12H | 24/12-hour time display | | | | | 12H | 24H | 24H | 6 |
| AUTO ADJ | Automatic clock setting | | | | | OFF | ON | ON | 15 |
| DISPMODE | Display mode | | | | | PS NAME ↔ ↑ ↘ | FREQ ← ↙ | PS NAME | 15 |
| CH DISP | Changer display | | | | | TIME | DISC | DISC | 24 |
| AF-REG | Alternative frequency/ Regionalization reception | | | | | AF ↔ ↑ ↘ | AF REG ← ↙ | AF | 11 |
| PTY STBY | PTY standby | | | | | OFF → | 29 programme types (see page 16) | OFF | 12 |
| TA VOL | Traffic announcement volume | | | | | VOL 00 – VOL 50 | | VOL 20 | 15 |
| P-SEARCH | Programme search | | | | | OFF | ON | OFF | 14 |
| LEVEL | Level display | | | | | AUDIO 1 ↔ ↑ ↘ | AUDIO 2 ← ↙ | AUDIO 2 | 24 |
| TEL | Telephone muting | | | | | MUTING 1 ↔ ↑ ↘ | MUTING 2 ← ↙ | OFF | 24 |
| B. SKIP | Blank skip | | | | | OFF | ON | OFF | 18 |
| EXT IN* | External component | | | | | CHANGER | LINE IN | CHANGER | 24 |

• Press SEL (select) to finish the setting.

* Displayed only when one of the following sources is selected—FM, AM, and tape.



To set the changer display—CH DISP

This mode is used to check the display information of the CD changer.

When shipped from the factory, “DISC” is selected.

- DISC: Disc number and track number appear.
- TIME: Elapsed playing time and track number appear.

To select the level meter—LEVEL

You can select the level display according to your preference.

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

- AUDIO 1: Shows the audio level indicator.
- AUDIO 2: Alternates “AUDIO 1” setting and illumination display.
- OFF: Erases the audio level indicator.

To select the telephone muting—TEL

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, this mode is deactivated.

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

To select the external component to use—EXT IN

You can connect the external component to the CD changer jack on the rear using the Line Input Adapter KS-U57 (not supplied).

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

When shipped from the factory, CD changer is selected as the external component.

- CHANGER: To use the CD changer.
- LINE IN: To use the external component other than CD changer.

Note:

For connecting the Line Input Adapter KS-U57 and the external component, refer to the Installation/Connection Manual (separate volume).



Detaching the control panel

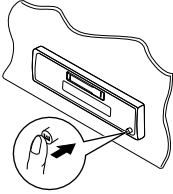
You can detach the control panel when leaving the car.

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

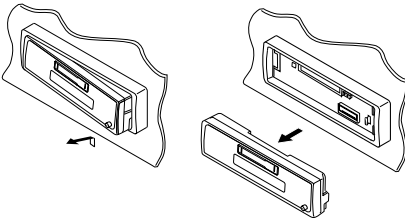
Detaching the control panel

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

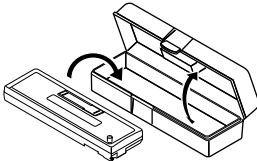
1 Unlock the control panel.



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

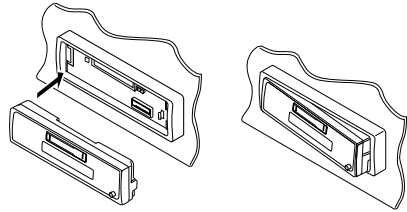


3 Put the detached control panel into the provided case.

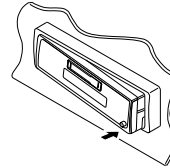


Attaching the control panel

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



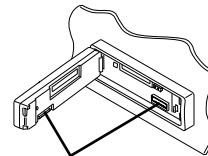
2 Press the right side of the control panel to fix it to the panel holder.



Note on cleaning the connectors:

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

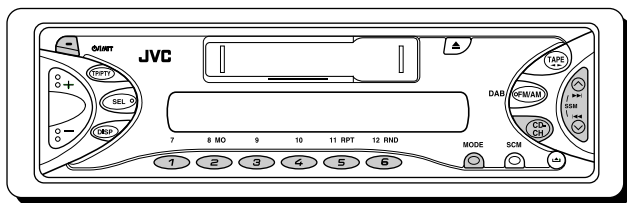
To minimize this possibility, periodically wipe the connectors with a cotton swab or cloth moistened with alcohol, being careful not to damage the connectors.



Connectors



CD CHANGER OPERATIONS



We recommend that you use the JVC MP3-compatible CD changer with your unit.

By using this CD changer, you can play back your original CD-Rs (Recordable) and CD-RWs (Rewritable) recorded either in audio CD format or in MP3 format.

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

Before operating your CD changer:

- Refer also to the Instructions supplied with your CD changer.
- If no discs are in the magazine of the CD changer or the discs are inserted upside down, "NO CD" will appear on the display. If this happens, remove the magazine and set the discs correctly.
- If no magazine is loaded in the CD changer, "NO MAG" appears on the display. If this happens, insert the magazine in the CD changer.
- 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 and make sure the cords are connected firmly. Then, press the reset button of the CD changer.

Playing discs

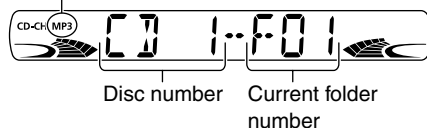
Select the CD changer (CD-CH).



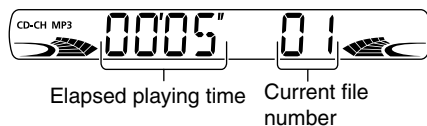
- **When the current disc is an MP3 disc:** Playback starts from the first folder of the current disc once file check is completed.



↓ MP3 indicator lights up.

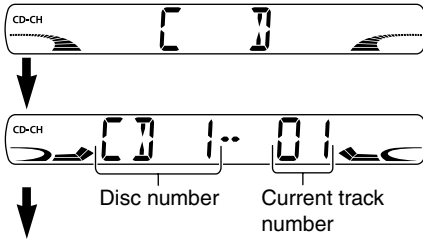


If you have selected "TIME" for "CH DISP" (see page 24), the display changes as follows:

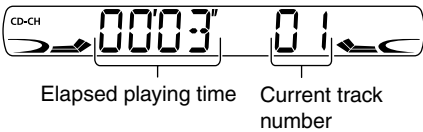


• **When the current disc is a CD:**

Playback starts from the first track of the current disc.



If you have selected "TIME" for "CH DISP" (see page 24), the display changes as follows:

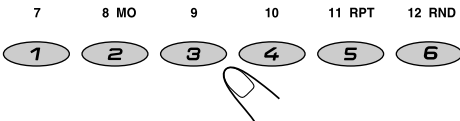


Notes:

- When you press CD-CH, the power automatically comes on. You do not have to press /ATT to turn on the power.
- If you change the source, CD changer play also stops. Next time you select the CD changer as the source, CD changer play starts from where playback has been stopped previously.

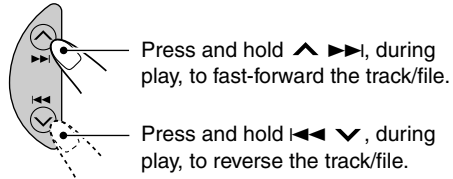
To go to a particular disc directly

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 one second.

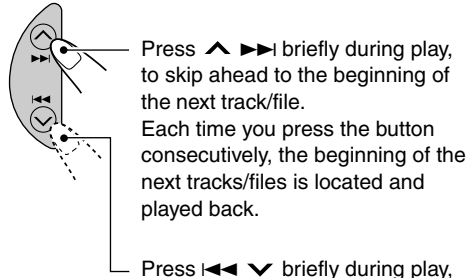
To fast-forward or reverse the track/file



Press and hold , during play, to fast-forward the track/file.

Press and hold , during play, to reverse the track/file.

To go to the next or previous tracks/files



Press briefly during play, to skip ahead to the beginning of the next track/file.

Each time you press the button consecutively, the beginning of the next tracks/files is located and played back.

Press briefly during play, to skip back to the beginning of the current track/file.

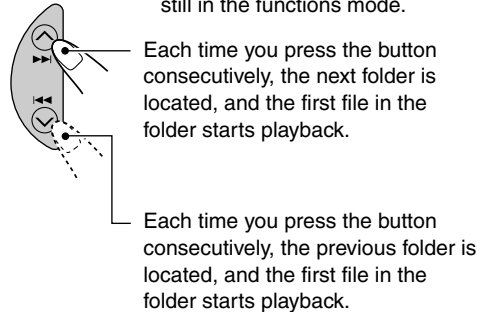
Each time you press the button consecutively, the beginning of the previous tracks/files is located and played back.

To skip to the next or previous folder (only for MP3 discs)

1 Press MODE to enter the functions mode while playing an MP3 disc.



2 Press or while still in the functions mode.

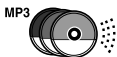


Each time you press the button consecutively, the next folder is located, and the first file in the folder starts playback.

Each time you press the button consecutively, the previous folder is located, and the first file in the folder starts playback.

Note:

If the current playing disc is an MP3 disc, files are skipped within the same folder.



Selecting the playback modes

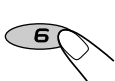
To play back tracks/files at random (Disc Random/Magazine Random Play)

MODE



1 Press MODE to enter the functions mode during play.

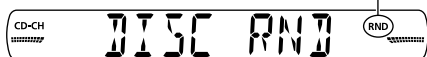
12 RND



2 Press RND (random), while still in the functions mode, so that "DISC RND" or "MAG RND" appears on the display. Each time you press the button, the random play mode changes as follows:



RND indicator lights up.



Ex.: When you select "DISC RND"

Note:

MP3 indicator also lights up if the current playing disc is an MP3 disc.

| Mode | RND indicator | Plays at random |
|----------|---------------|--|
| DISC RND | Lights | All tracks/files of the current (or specified) disc. |
| MAG RND | Flashes | All tracks/files of the inserted discs. |

To play back tracks/files repeatedly (Track Repeat/Disc Repeat Play)

MODE



1 Press MODE to enter the functions mode during play.

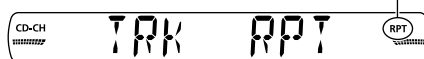
11 RPT



2 Press RPT (repeat), while still in the functions mode, so that "TRK RPT" or "DISC RPT" appears on the display. Each time you press the button, the repeat play mode changes as follows:



RPT indicator lights up.

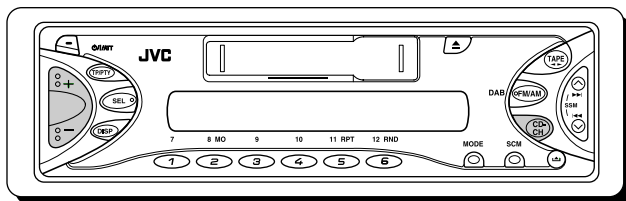


Ex.: When you select "TRK RPT"

Note:

MP3 indicator also lights up if the current playing disc is an MP3 disc.

| Mode | RPT indicator | Plays repeatedly |
|----------|---------------|--|
| TRK RPT | Lights | The current (or specified) track/file. |
| DISC RPT | Flashes | All tracks/files of the current (or specified) disc. |



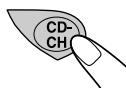
Playing an external component

You can connect the external component to the CD changer jack on the rear using the Line Input Adapter KS-U57 (not supplied).

Preparations:

- For connecting the Line Input Adapter KS-U57 and the external component, refer to the Installation/ Connection Manual (separate volume).
- Before operating the external component using the following procedure, select the external input correctly. See “To select the external component to use—EXT IN” on page 24.


- 1 Select the external component (LINE IN).**



- If “LINE IN”* does not appear on the display, see page 24 and select the external input (“LINE IN”).

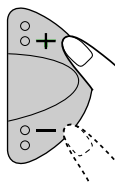
* Displayed only when one of the following sources is selected—FM, AM, and tape.

Note on One-Touch Operation:

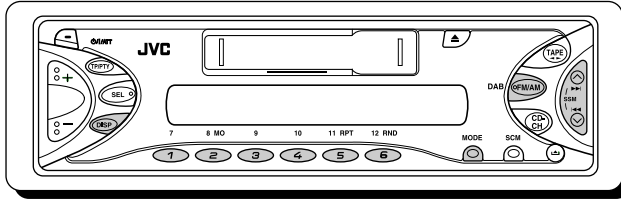
When you press CD-CH, the power automatically comes on. You do not have to press /WATT to turn on the power.

- 2 Turn on the connected component and start playing the source.**

- 3 Adjust the volume.**



- 4 Adjust the sound characteristics you want. (See pages 20 and 21.)**



We recommend that you use DAB (Digital Audio Broadcasting) tuner KT-DB1500 or KT-DB1000 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 programme is transmitted on its own frequency, DAB combines several programmes (called “services”) to form one “ensemble.”

In addition, each “service”—called “primary service”—can also be divided into its components (called “secondary service”).

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

Tuning in to an ensemble and one of the services

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

Before you start...

Press FM/AM (DAB) briefly if tape, CD changer, or external component is the current source.

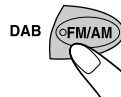
1 Select the DAB tuner.



Each time you press and hold the button, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ↔ FM/AM

2 Select the DAB band (DAB1, DAB2, or DAB3).



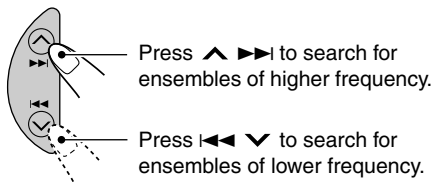
Each time you press the button, the DAB band changes as follows:



Note:

This receiver has three DAB bands (DAB1, DAB2, DAB3). You can use any of them to tune in to an ensemble.

3 Start searching for an ensemble.



When an ensemble is received, searching stops.

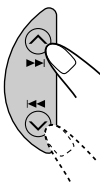
To stop searching before an ensemble is received, press the same button you have pressed for searching.

4 Select a service you want to listen to.

MODE



1 Press MODE to enter the functions mode while listening to the DAB tuner.



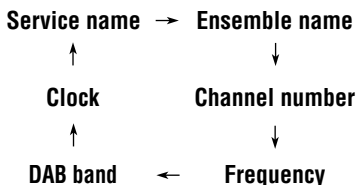
2 Press ^ >>> or <<< v to select a service you want, while still in the functions mode.

To change the display information while tuning in an ensemble

Normally service name is shown on the display. If you want to check the ensemble name or its frequency, press DISP (display).



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



To tune in to a particular ensemble without searching

Before you start...

Press FM/AM (DAB) briefly if tape, CD changer, or external component is the current source.

- 1 Press and hold FM/AM (DAB) to select DAB tuner as the source.
- 2 Press FM/AM (DAB) repeatedly to select the DAB band (DAB1, DAB2, or DAB3).
- 3 Press and hold ^ >>> or <<< v for more than one second.
- 4 Press ^ >>> or <<< v repeatedly until the ensemble you want is reached.
 - If you hold down the button, the frequency keeps changing until you release the button.
- 5 Select a service you want to listen to.
 - 1 Press MODE to enter the functions mode while listening to the DAB tuner.
 - 2 Press ^ >>> or <<< v to select a service you want, while still in the functions mode.

To restore the FM/AM tuner

Press and hold FM/AM (DAB) again.

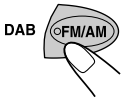
Storing DAB services in memory

You can preset up to 6 DAB services in each DAB band (DAB1, DAB2, and DAB3) manually.

Before you start....

Press FM/AM (DAB) briefly if tape, CD changer, or external component is the current source.

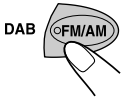
1 Select the DAB tuner.



Each time you press and hold the button, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ↔ FM/AM

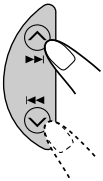
2 Select the DAB band (DAB1, DAB2, or DAB3) you want.



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

DAB1 → DAB2 → DAB3

3 Tune in to an ensemble you want.

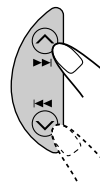


4 Select a service you want to listen to.

MODE



1 Press MODE to enter the functions mode while listening to the DAB tuner.



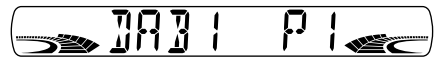
2 Press ▲▶▶ or ◀◀▼ to select a service you want, while still in the functions mode.

5 Press and hold the number button (in this example, 1) you want to store the selected service into for more than 2 seconds.

7



Selected service name and DAB band/preset number appear alternately for a while. ↓



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

Notes:

- You can only preset primary DAB services. If you store a secondary service, its primary service will be stored instead.
- A previously preset DAB service is erased when a new DAB service is stored in the same preset number.
- Preset DAB services are erased when the power supply to the memory circuit is interrupted (for example, during battery replacement). If this occurs, preset the DAB services again.

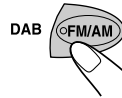
Tuning in to a preset DAB service

You can easily tune in to a preset DAB service. Remember that you must store services first. If you have not stored them yet, “Storing DAB services in memory” on pages 32 and 33.

Before you start...

Press FM/AM (DAB) briefly if tape, CD changer, or external component is the current source.

1 Select the DAB tuner.



Each time you press and hold the button, the DAB tuner and the FM/AM tuner are alternately selected.

DAB ↔ FM/AM

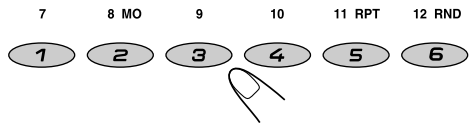
2 Select the DAB band (DAB1, DAB2, or DAB3) you want.



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



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



Note:

If the selected primary service has some secondary services, pressing the same number button repeatedly will tune in to the secondary services.



TROUBLESHOOTING

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

| | Symptoms | Causes | Remedies |
|---------------|--|--|---|
| General | <ul style="list-style-type: none"> • Sound cannot be heard from the speakers. | <p>The volume level is set to the minimum level.</p> <hr/> <p>Connections are incorrect.</p> | <p>Adjust it to the optimum level.</p> <hr/> <p>Check the cords and connections.</p> |
| | <ul style="list-style-type: none"> • This unit does not work at all. | <p>The built-in microcomputer may have functioned incorrectly due to noise, etc.</p> | <p>While holding SEL (select), press /I/ATT (standby/on/attenuator) for more than 2 seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.) (See page 2.)</p> |
| FM/AM | <ul style="list-style-type: none"> • SSM (Strong-station Sequential Memory) automatic preset does not work. | <p>Signals are too weak.</p> | <p>Store stations manually.</p> |
| | <ul style="list-style-type: none"> • Static noise while listening to the radio. | <p>The aerial is not connected firmly.</p> | <p>Connect the aerial firmly.</p> |
| Tape Playback | <ul style="list-style-type: none"> • A cassette tape cannot be ejected. | <p>Cassette ejection is prohibited.</p> | <p>While holding TAPE , press (eject) for more than 2 seconds.</p> |
| | <ul style="list-style-type: none"> • A cassette tape cannot be inserted. | <p>You have tried to insert a cassette in the wrong way.</p> | <p>Insert the cassette with the exposed tape facing right.</p> |
| | <ul style="list-style-type: none"> • Cassette tapes become hot. | <p>This is not a malfunction.</p> | <p>_____</p> |
| | <ul style="list-style-type: none"> • Tape sound is at very low level and sound quality is degraded. | <p>The tape head is dirty.</p> | <p>Clean it with a head cleaning tape.</p> |



| Symptoms | Causes | Remedies |
|---|--|---|
| • “NO CD” appears on the display. | No disc is in the magazine. | Insert discs into the magazine. |
| | Discs are inserted upside down. | Insert discs correctly. |
| | The current disc does not contain any MP3 files. | Insert a disc that contains MP3 files. |
| • “NO MAG” appears on the display. | No magazine is loaded in the CD changer. | Insert the magazine. |
| • “RESET 8” appears on the display. | This unit is not connected to the CD changer correctly. | Connect this unit and the CD changer correctly and press the reset button of the CD changer. |
| • “RESET 1” – “RESET 7” appears on the display. | _____ | Press the reset button of the CD changer. |
| • The CD changer does not work at all. | The built-in microcomputer may function incorrectly due to noise, etc. | While holding SEL (select), press ϕ /I/ATT (standby/on/attenuator) for more than 2 seconds to reset the unit. (The clock setting and preset stations stored in memory are erased.) (See page 2.) |

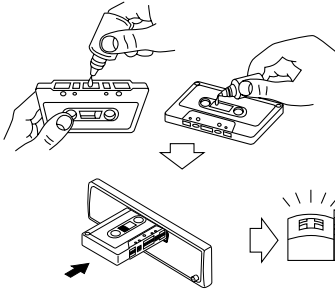
CD Changer



MAINTENANCE

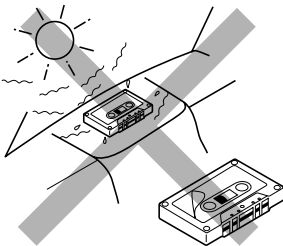
This unit requires very little attention, but you will be able to extend the life of the unit if you follow the instructions below.

To clean the head



- Clean the heads after every 10 hours of use using a wet-type head cleaning tape (available at an audio store).
When the head becomes dirty, you may realize the following symptoms:
 - Sound quality is reduced.
 - Sound level decreases.
 - Sound drops out.
- Do not play dirty or dusty tapes.
- Do not touch the highly-polished head with any metallic or magnetic tools.

To keep the tape clean



- Always store the cassettes in their storage cases after use.
- Do not store cassettes in the following places:
 - Subject to direct sunlight
 - With high humidity
 - At extremely hot temperatures

CAUTION:

- Do not play the cassettes with peeling labels; otherwise, they can damage the unit.
- Tighten tapes to remove slack since loose tape may become entangled with the mechanism.
- Do not leave a cassette in the cassette compartment after use, as the tape may become slack.

The function below is also provided to ensure the longer life of this unit.

Ignition key-off release/Ignition key-on play

- Turning off the ignition key with a cassette in the compartment automatically releases the tape from the unit's tapehead.
- Turning on the ignition key with a cassette in the compartment starts playback automatically if you turned off the ignition during tape play.

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 45 W per channel

Rear: 45 W per channel

Continuous Power Output (RMS):

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

Rear: 17 W per channel into 4 Ω , 40 Hz
to 20 000 Hz at no more than
0.8% total harmonic distortion.

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

Tone Control Range:

Bass: ± 10 dB at 100 Hz

Treble: ± 10 dB at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

Signal-to-Noise Ratio: 70 dB

Line-Out Level/Impedance:

2.0 V/20 k Ω load (250 nWb/m)

Output Impedance: 1 k Ω

TUNER SECTION

Frequency Range:

FM: 87.5 MHz to 108.0 MHz

AM: (MW) 522 kHz to 1 620 kHz

(LW) 144 kHz to 279 kHz

[FM Tuner]

Usable Sensitivity:

11.3 dBf (1.0 μ V/75 Ω)

50 dB Quieting Sensitivity:

16.3 dBf (1.8 μ V/75 Ω)

Alternate Channel Selectivity (400 kHz):

65 dB

Frequency Response: 40 Hz to 15 000 Hz

Stereo Separation: 30 dB

Capture Ratio: 1.5 dB

[MW Tuner]

Sensitivity: 20 μ V

Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50 μ V

CASSETTE DECK SECTION

Wow & Flutter: 0.11% (WRMS)

Fast-Wind Time: 100 sec. (C-60)

Frequency Response: 30 Hz to 16 000 Hz
(Normal tape)

Signal-to-Noise Ratio: 56 dB

Stereo Separation: 40 dB

GENERAL

Power Requirement:

Operating Voltage: DC 14.4 V

(11 V to 16 V allowance)

Grounding System: Negative ground

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

Dimensions (W \times H \times D):

Installation Size (approx.):

182 mm \times 52 mm \times 150 mm

Panel Size (approx.):

188 mm \times 58 mm \times 11 mm

Mass (approx.):

1.4 kg (excluding accessories)

Design and specifications are subject to change without notice.