



### **DVD/CD RECEIVER**

## KD-DV5302/KD-DV5301









For canceling the display demonstration, see page 5.

 $For installation \ and \ connections, \ refer \ to \ the \ separate \ manual.$ 



#### Thank you for purchasing a JVC product.

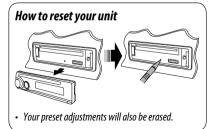
Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best

#### IMPORTANT FOR LASER PRODUCTS

- 1. CLASS 1 LASER PRODUCT
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
- CAUTION: Visible and/or invisible class 1M laser radiation when open. Do not view directly with optical instruments.
- 4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED OUTSIDE THE UNIT.

| CAUTION                                    | ATTENTION                            | AVISO                             | VARNING                       | 注意        | CAUTION                               |
|--|--------------------------------------|-----------------------------------|-------------------------------|-----------|---------------------------------------|
|  | RAYONNEMENT LASER                    |                                   |                               |           | VISIBLE AND/OR                        |
|  | VISIBLE ET/OU<br>INVISIBLE DE CLASSE |                                   | OSYNLIG<br>Laserstrålning.    |           | INVISIBLE CLASS II<br>LASER RADIATION |
| WHEN OPEN. DO NOT                          | 1M UNE FOIS OUVERT.                  | CUANDO ESTÁ                       | KLASS 1M, NAR DENNA           | レーザー放射が   | WHEN OPEN.                            |
| VIEW DIRECTLY WITH<br>OPTICAL INSTRUMENTS. |                                      | ABIERTO. NO MIRAR<br>DIRECTAMENTE | del ar oppnad.<br>Betrakta ej |           | do not stare<br>into beam.            |
|  | DES INSTRUMENTS                      | CON INSTRUMENTAL                  | STRÅLEN MED OPTISKA           | 見ないでください。 | FDA 21 CFR                            |
| (ENG)                                      | OPTIQUES. (FRA)                      | OPTICO. (ESP)                     | INSTRUMENT. (SWE)             | (JPN)     | (ENG)                                 |





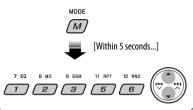
## How to forcibly eject a disc



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

#### How to use functions mode

If you press M MODE, the unit goes into functions mode, then the number buttons and ▲/▼ buttons work as different function buttons.



#### WARNINGS.

#### To prevent accidents and damage

- DO NOT install any unit in locations where:
  - it may obstruct the steering wheel and gearshift lever operations.
  - it may obstruct the operation of safety devices such as air bags.
  - it may obstruct visibility.
- DO NOT operate the unit while driving.
- If you need to operate the unit while driving, be sure to look ahead carefully.
- The driver must not watch the monitor while driving.
  - If the parking brake is not engaged, "DRIVER MUST NOT WATCH THE MONITOR WHILE DRIVING." appears on the monitor, and no playback picture will be shown.
  - This warning appears only when the parking brake wire is connected to the parking brake system built in the car (refer to the Installation/Connection Manual).

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

### 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.

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## Playable disc type

| Disc type                      | Disc type Recording format, file type, etc     |             |  |
|--------------------------------|--|-------------|--|
| DVD                            | DVD-Video (Region Code numbers include "2") *1 | <b>√</b> ОК |  |
|                                | DVD-Audio/DVD-ROM                              | ×NO         |  |
| DVD Recordable/Rewritable      | DVD-Video                                      |             |  |
| (DVD-R *2/-RW, +R/+RW *3)      | DivX Video                                     |             |  |
|                                | MPEG-1/MPEG-2 Video                            | <b>√</b> ОК |  |
|                                | MP3/WMA/WAV                                    |             |  |
|                                | JPEG/MPEG4                                     |             |  |
|                                | DVD-VR, +VR                                    | ×NO         |  |
| DVD-RAM                        | All  | ×NO         |  |
| Dual Disc                      | DVD side                                       | <b>√</b> ОК |  |
|                                | Non-DVD side                                   | ×NO         |  |
| CD/VCD                         | Audio CD (CD-DA)/DTS-CD *4                     |             |  |
|                                | VCD (Video CD)                                 | <b>√</b> ок |  |
|                                | CD-Text  |             |  |
|                                | CD-ROM/CD-I (CD-I Ready)                       | ×NO         |  |
| CD Recordable/Rewritable       | CD-DA  | √ок         |  |
| (CD-R/-RW)                     | DivX Video, VCD (Video CD)                     |             |  |
| Compliant to ISO 9660 level 1, | MPEG-1/MPEG-2 Video                            |             |  |
| level 2, Romeo, Joliet         | MP3/WMA/WAV                                    | 1           |  |
|                                | JPEG/MPEG4                                     | ×NO         |  |

<sup>\*1</sup> If you insert a DVD Video disc of an incorrect Region Code, "REGION CODE ERROR!" appears on the monitor.

### **Caution for DualDisc playback**

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

### **Caution on volume setting**

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

<sup>\*2</sup> DVD-R recorded in multi-border format is also playable (except for dual layer discs).

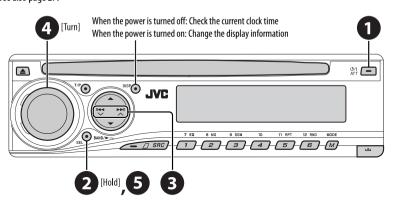
<sup>\*3</sup> It is possible to play back finalized +R/+RW (Video format only) discs. However, the use of +R double layer disc on this unit is not recommended.

<sup>\*4</sup> To reproduce DTS sound, use the DIGITAL OUT terminal (see also pages 30 and 35).

## Preparation

### Cancel the display demonstration and set the clock

• See also page 27.



- 1 Turn on the power.
- 2 Enter the PSM settings.
- 3 ⇒ 4 Cancel the display demonstrations Select "DEMO," then "DEMO OFF."

#### Set the clock

Select "CLOCK H" (hour), then adjust the hour.
Select "CLOCK M" (minute), then adjust the minute.
Select "24H/12H." then "24H" (hour) or "12H" (hour).

Finish the procedure.

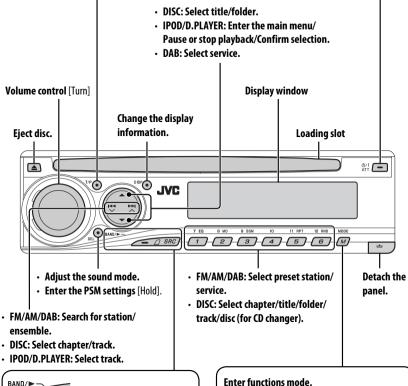
#### Indication language:

In this manual, English indications are used for purposes of explanation. You can select the indication language on the monitor on the "LANGUAGE" setting (see page 29).

## Basic operations — Control panel

- Activate/deactivate TA Standby Reception.
- Enter RDS programme search [Hold].

- · Turn on the power.
- Turn off the power [Hold].
- Attenuate the sound (if the power is on).



## BAND/▶-

- FM/AM/DAB: Select the bands.
- · DISC: Start playback.

### SRC /

Select the source.

FM/AM → DAB \* → DISC \* → CD-CH \*/IPOD \*/ **D.PLAYER** \* (or **EXT IN**) → **LINE IN** → (back to the beginning)

**RPT**: Select repeat play.

**RND**: Select random play.

(within 5 seconds)...

E0

MO

▲/▼ : Skip 10 chapters/tracks.

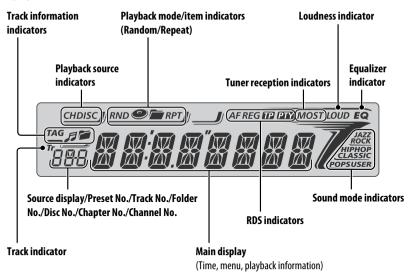
Press M MODE, then one of the following buttons

: Turn on/off monaural reception.

**SSM**: Automatic station presetting [Hold].

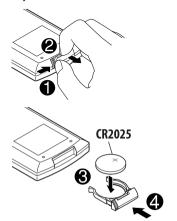
: Select the sound mode.

<sup>\*</sup> You cannot select these sources if they are not ready or not connected.



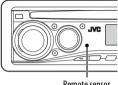
## **Basic operations** — Remote controller (RM-RK241)

## Installina the lithium coin battery (CR2025)



### Before using the remote controller:

- · Aim the remote controller directly at the remote sensor on the unit.
- DO NOT expose the remote sensor to bright light (direct sunlight or artificial lighting).



Remote sensor

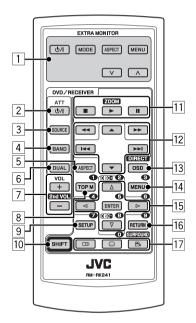
This unit is equipped with the steering wheel remote control function.

• See the Installation/Connection Manual (separate volume) for connection.

Continued on the next page

### Warning: To prevent accidents and damage

- Do not install any battery other than CR2025 or its equivalent.
- Do not leave the remote controller in a place (such as dashboards) exposed to direct sunlight for a long time: otherwise, it may explode.
- Store the battery in a place where children cannot reach.
- Do not recharge, short, disassemble, heat the battery, or dispose of it in a fire.
- Do not leave the battery with other metallic materials.
- Do not poke the battery with tweezers or similar tools.
- Wrap the battery with tape and insulate when throwing away or saving it.



#### **FXTRA MONITOR**

- 1 Monitor control buttons
  - Used for a JVC monitor—KV-MR9010, KV-MH6510, KV-M706, or KV-M705.

#### DVD/RECEIVER

- Turns the power on if pressed briefly or attenuates the sound when the power is on.
  - Turns the power off if pressed and held.
- 3 Selects the source.
- Selects the FM/AM/DAB bands.
- Not applicable for this unit.
- 6 Not applicable for this unit.
- Adjusts the volume level.
  - 2nd VOI: Not applicable for this unit.
- 8 \*1 DVD-Video/DivX: Shows disc menu.
  - VCD: Starts PBC playback.
- 9 \*1 Enters disc setup menu.
- 10 SHIFT button
- [1] (stop), ► (play), **||** (pause)
  - ► (play) also function as ZOOM button when pressed with SHIFT button (see page 17).
  - Not applicable for CD changer/iPod/D. player operations.

#### For advanced disc operations:

· • / •

DVD-Video: Selects the titles.
DivX/MPEG Video/MP3/WMA/WAV: Selects
the folders if included.

- · |**44**/**>>**|:
  - Reverse skip/forward skip if pressed briefly.
  - Reverse search/forward search if pressed and held.
- ►►: Reverse search/forward search.\*2

### For FM/AM tuner operations:

- ▲ / ▼: Changes the preset stations.
- **|⊲⊲/▶⊳**|:
  - Searches for stations automatically if pressed briefly.
  - Searches for stations manually if pressed and held.

#### For DAB tuner operations:

- ▲ / ▼: Changes the preset services.
- · |**44**/**>>**|:
  - Changes the service if pressed briefly.
  - Searches for ensembles if pressed and held.

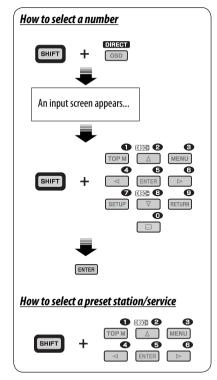
#### For Apple iPod/JVC D. player operations:

- ▼: Pauses/stops or resumes playback.
  - ▲: Enters the main menu.

    (Now ▲/▼/I◄◄/►►I work as the menu selecting buttons.) \*3
- I◄◄ / ▶▶I (in menu selecting mode):
  - Selects an item if pressed briefly. (Then, press ▼ to confirm the selection.)
  - Skips 10 items at a time if pressed and held.

#### · |**44**/**>>**|:

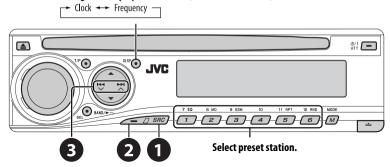
- Reverse skip/forward skip if pressed briefly.
- Reverse search/forward search if pressed and held
- Shows the on-screen bar.
  - Also functions as DIRECT button when pressed with SHIFT button. \*4
- 14 \*1 DVD-Video/DivX: Shows disc menu.
  - VCD: Starts PBC playback.
- 15 \*1 Makes selection/settings.
  - → / > : DivX: Searches for index during play.
  - DISC +/—: Changes discs when the source is "CD-CH."
- 16 \*1 RETURN button
- DVD-Video: Selects audio language (③), subtitles (…)\*1, angle (ڪڃ)\*5.
  - DivX: Selects audio language (③), subtitles (…).
  - VCD: Selects audio channel (3).



- \*1 Functions as number buttons when pressed with SHIFT button.
  - FM/AM/DAB: Selects preset stations/services.
  - Selects chapter/title/folder/track
     after entering search mode by
     pressing SHIFT and DIRECT.
- \*2 Not applicable for CD changer operations.
- \*3 **A**: Returns to the previous menu.
  - **▼** : Confirms the selection.
- \*4 You can directly select title/chapter/folder/track using the number buttons (see pages 15 and 16).
- \*5 Functions as SURROUND button when pressed with SHIFT button (not applicable for this unit).

## Listening to the radio

#### Change the display information (for non-RDS station)



- Select "FM/AM."
- 2 Select the bands.

FM1→ FM2 → FM3 → AM -

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



3 Search for a station to listen—Auto Search.

Manual Search: Hold either one of the buttons until "M" flashes on the display, then press it repeatedly.

# When an FM stereo broadcast is hard to receive

- $1 \frac{MODE}{M}$
- Parantian imprayes but store



Reception improves, but stereo effect will be lost.

• MO indicator lights up.

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

You can preset six stations for each band.

- **1** BAND/► FM1 → FM2 → FM3 → AM −
- 2 MODE

3 (Hold)



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

## Manual presetting

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

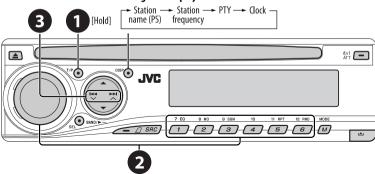
- 1 BAND/ $\rightarrow$  FM1 $\rightarrow$  FM2 $\rightarrow$  FM3 $\rightarrow$  AM $\rightarrow$



3 10 [Hold] P4

## Searching for FM RDS programme — PTY Search

#### Change the display information



- Activate PTV Search
- 2 Select one of the PTY codes (programme types). See the following for details.
- 3 Start searching.

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

## Storing your favorite programme types

You can store your favorite PTY codes into the number buttons.

- 1 Select a PTY code (see right column).
- 2 Select a preset number.



- 3 Repeat steps 1 and 2 for storing other PTY codes.
- **4** T/P

## Preset PTY codes in the number buttons (1 to 6):

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

#### PTY codes (available with the control dial):

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

## Activating/deactivating TA/PTY Standby Reception

| TA Standby Reception  | Indicator | PTY Standby Reception  | Indicator |
|---|-----------|--|-----------|
| Press TP to activate.   | <b>I</b>  | See page 27.   | PTY       |
| The unit temporarily will switch to Traffic Announcement (TA), if available, from any source other than AM. The volume changes to the preset TA volume level if the current level is lower than the preset level (see page 27). | Lights up | The unit temporarily will switch to your favorite PTY programme from any source other than AM. | Lights up |
| Not yet activated. Tune in to another station providing the RDS signals.  | Flashes   | Not yet activated. Tune in to another station providing the RDS signals.                       | Flashes   |
| Press T/P to deactivate.  | Goes off  | Select "OFF" for the PTY code (see page 27) to deactivate.                                     | Goes off  |

<sup>•</sup> When a DAB tuner is connected, TA/PTY Standby Reception also searches for services. (See also pages 22 and 27.)

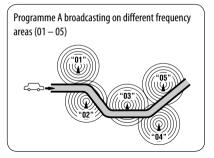
## Tracing the same programme—Network-Tracking Reception

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

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

## To change the Network-Tracking Reception setting, see "AF-REG" on page 27.

 When the DAB tuner is connected, refer to "Tracing the same programme—Alternative Frequency Reception" on page 22.



## Automatic station selection—Programme Search

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

If the signals from the FM RDS 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.

- The unit takes some time to tune in to another station using programme search.
- See also page 27.

## Disc operations

#### Before performing any operations...

Turn on the monitor to watch the playback picture. If you turn on the monitor, you can also control playback of other discs by referring to the monitor screen. (See pages 17 - 20.)

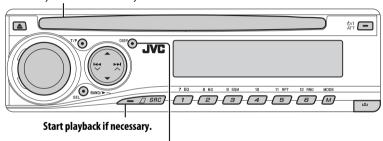
The disc type is automatically detected, and playback starts automatically (for DVD: automatic start depends on its internal program).

If the current disc does not have any disc menu, all tracks will be played repeatedly until you change the source or eiect the disc.

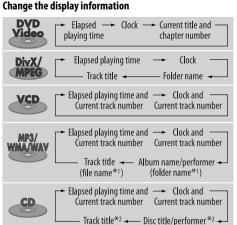
- If "\O" appears on the monitor when pressing a button, the unit cannot accept the operation you have tried to dη
- In some cases, without showing "Q," operations will not be accepted.

#### Insert the disc.

Playback starts automatically.



### Change the display information



## Prohibitina disc eiection



To cancel the prohibition, repeat the same procedure.

- \*1 If the file does not have Tag information or "TAG DISP" is set to "TAG OFF" (see page 28), folder name and file name appear. TAG indicator will not light up.
- \*2 "NO NAME" appears for an audio CD.

## Operations using the control panel

Pressing (or holding) the following buttons allows you to...

| Disc type       |   | HT AND        | 7 EQ 12 RND  1 6  (Number buttons) *3                             |
|-----------------|---|---------------|---|
| DVD<br>Video    | Press: Select chapter Hold: Reverse/fast-forward chapter *1 | Select title  | During stop: Locate title<br>During play/pause: Locate<br>chapter |
| DivX/<br>MPEG   | Press: Select track Hold: Reverse/fast-forward track *2     | Select folder | Locate particular folder directly                                 |
| VCD             | Press: Select track Hold: Reverse/fast-forward track *1     | _             | Locate particular track directly (PBC not in use)                 |
| MP3/<br>WMA/WAV | Press: Select track Hold: Reverse/fast-forward track *1     | Select folder | Locate particular folder directly                                 |
| CD              | Press: Select track Hold: Reverse/fast-forward track *1     | _             | Locate particular track directly                                  |

<sup>\*1</sup> Search speed changes to  $\times$ **2**  $\Longrightarrow \times$ **10** on the monitor.

After pressing M, press the following buttons to...

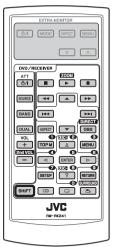
| Disc type       |   |          | 11 RPT 5  |           | 12 RND  |
|-----------------|---|----------|---|-----------|---|
| DVD<br>Video    | Skip 10 chapters (during play or pause) | CHP RPT: | Repeat current<br>chapter<br>Repeat current title | _         |   |
| DivX/<br>MPEG   | Skip 10 tracks (within the same folder) | l        | Repeat current track<br>Repeat current folder     | _         |   |
| VCD             | Skip 10 tracks (PBC not in use)         | TRK RPT: | Repeat current track (PBC not in use)             | DISC RND: | Randomly play all tracks (PBC not in use)   |
| MP3/<br>WMA/WAV | Skip 10 tracks (within the same folder) | 1        | Repeat current track<br>Repeat current folder     |           | Randomly play all<br>tracks of current<br>folder, then tracks of<br>next folders<br>Randomly play all<br>tracks |
| CD              | Skip 10 tracks                          | TRK RPT: | Repeat current track                              | DISC RND: | Randomly play all<br>tracks   |

<sup>•</sup> To cancel repeat play or random play, select "RPT OFF" or "RND OFF."

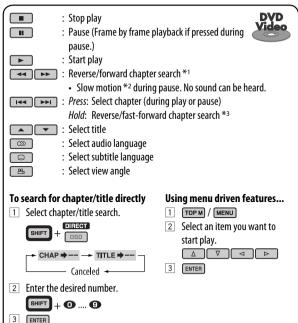
<sup>\*2</sup> Search speed changes ► 1 ⇒ ► 2 on the monitor.

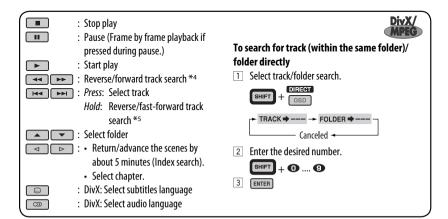
<sup>\*3</sup> Press to select number 1 to 6; hold to select number 7 to 12.

## Operations using the remote controller—RM-RK241



\*1, 2, 3, 4, 5 : See page 16.





: Stop play ш

: Pause (Frame by frame playback if pressed during pause.)

: Start play

: Reverse/forward track search \*1

 Forward slow motion \*2 during pause. No sound can be heard. (Reverse slow motion does not work )

Press: Select track

Hold: Reverse/fast-forward track

search \*3

: Select audio channel (ST: stereo, L: left, R: Right)

## Canceling the PBC playback...

DIRECT 2 SHIFT

3 Enter the desired number.

SHIFT \_ ()

4 ENTER

To resume PBC, press TOP M / MENU.

#### : Stop play : Pause

ത

 : Start play

Reverse/forward track search \*1

: Press: Select tracks

Hold: Reverse/fast-forward track

cearch \*3

Select folder

### To search for track (within the same folder)/folder directly





 Track Search - - - Folder Search - - -Canceled →

2 Enter the desired number

3 ENTER

#### : Stop play

Ш : Pause

: Start play

: Reverse/forward track search \*1

Press: Select tracks

Hold: Reverse/fast-forward track

search \*3

## To search for track directly







2 Enter the desired number.

SHIFT \_ ()

3 ENTER

- \*1 Search speed changes to  $\times 2 \Rightarrow \times 5 \Rightarrow \times 10 \Rightarrow \times 20 \Rightarrow \times 60$  on the monitor if pressed repeatedly.
- \*2 Slow motion speed changes to  $1/32 \Rightarrow 1/16 \Rightarrow 1/8 \Rightarrow 1/4 \Rightarrow 1/2$  on the monitor if pressed repeatedly.
- \*3 Search speed changes to  $\times$ **2**  $\Rightarrow$   $\times$ **10** on the monitor.
- \*4 Search speed changes  $\triangleright$  1  $\Rightarrow$   $\triangleright$  2  $\Rightarrow$   $\triangleright$  3 on the monitor if pressed repeatedly.
- \*5 Search speed changes  $\triangleright$  1  $\Rightarrow$   $\triangleright$  2 on the monitor.

#### Enlarging the view—Zoom in (DVD/DivX/MPEG Video/VCD)

During moving picture playback...

1 While holding SHIFT, press preparedly.





2 Move the enlarged portion.



• To cancel zoom, select "ZOOM OFF."

## Operations using the on-screen bar (DVD/DivX/MPEG Video/VCD)



These operations are possible on the monitor using the remote controller.

Show the on-screen bar (see page 18).

OSD (twice)

Select an item.



3 Make a selection.

ENTER

If pop-up menu appears...



- To cancel pop-up menu, press RETURN.
- For entering time/numbers, see the following.
- Remove the on-screen bar.

OSD

## Enterina time/numbers

Press ☐ ▼ to change the number, then press ☐ b to move to the next entry.

- Each time you press △ ▽ , the number increases/decreases by one value.
- After entering the numbers, press ENTER].
- It is not required to enter the zero and tailing zeros (the last two digits in the example below).

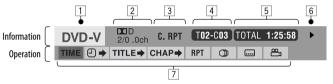
Fx.: Time search

**DVD**: : (Ex.: 1:02:00)

Press  $\triangle$  once, then  $\triangleright$  twice to go to the third entry,  $\triangle$  twice, then press ENTER.

#### On-screen har

Ex.: DVD-Video



- 1 Disc type
- DVD-Video/DTS-CD: Audio signal format type and channel
   VCD: PRC
- 3 Playback mode \*1

DVD-Video: T. RPT: Title repeat

C. RPT: Chapter repeat

DivX/MPEG Video: T. RPT: Track repeat

F. RPT: Folder repeat

VCD \*2: **T. RPT**: Track repeat

D. RND: Disc random

T. INT: Track intro \*3

4 Playback information

T02-C03 Current title/chapter
TBACK 01 Current track

FOOT-TOOT Current folder/track

5 Time indication

T. REM

TOTAL Elapsed playing time of the disc
(For DVD-Video, elapsed playing
time of the current title.)

DVD-Video: Remaining title time

VCD: Remaining disc time
Elapsed playing time of the current

chapter/track

REM Remaining time of the current

chapter/track

6 Playback status

▶ Play

Forward/reverse search

**I**▶ / **I** Forward/reverse slow-motion

Pause Stop

7 Operation icons

TIME Change time indication (see 5)

Time Search (Enter the elapsed playing time of the current title or of the disc.)

TITLE→ Title Search (by its number)

CHAP→ Chapter Search (by its number)

TRACK→ Track Search (by its number)

Change the audio language or audio

Change the subtitle language

Change the view angle

RPT Repeat play \*1

Intro play \*3

RND Random play \*1

\*1 For repeat play/random play, see also page 14.

\*2 While PBC is not in use.

\*3 Plays the beginning 15 seconds of...

TRACK INTRO: All tracks of the current disc.
FOLDER INTRO: First tracks of all folders of the

## Operations using the control screen (DivX/MPEG Video/MP3/WMA/WAV/CD)

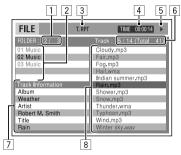


These operations are possible on the monitor using the remote controller.

- Show the control screen.
  - DivX/MPEG Video: Press uduring play.
  - MP3/WMA/WAV/CD: Automatically appear during play.
- 2 Select "Folder" column or "Track" column (except for CD).
- 3 Select a folder or track.
  - $\triangle$   $\nabla$
- 4 Start playback.

DivX/MPEG Video: Press ENTER / .
MP3/WMA/WAV/CD: Playback starts automatically.

#### Control screen



Fx: MP3/WMA/WAV disc

- 1 Current folder number/total folder number
- 2 Folder list with the current folder selected
- 3 Selected playback mode
- 4 Elapsed playing time of the current track
- 5 Operation mode icon (►, ■, II, ►►, ◄◄)
- 6 Current track number/total number of tracks in the current folder (total number of tracks on the disc)
- 7 Track information
- 8 Track list with the current track selected

### To select a playback mode

1 While control screen is displayed...





Playback mode selection screen appears on the folder list section of the control screen.

2 Select a playback mode.



3 Select an item.



REPEAT/INTRO: → FOLDER\*2 → TRACK → OFF → OFF → DISC → FOLDER\*2 →

→ OFF →

4 Confirm the selection.

ENTER

- \*1 Not selectable for DivX/MPFG Video
- \*2 Not selectable for CD

| Mode                    | Playback functions  |
|-------------------------|---|
| F. RPT (folder repeat): | Repeat current folder   |
| T. RPT (track repeat):  | Repeat current track  |
| F. INT (folder intro):  | Plays the beginning 15 seconds of first tracks of all folders of the current disc |
| T. INT (track intro):   | Plays the beginning 15 seconds of all tracks of the current disc                  |
| D. RND (disc random):   | Randomly play all tracks  |
| F. RND (folder random): | Randomly play all tracks of current folder, then tracks of next folders           |

## Operations using the list screen (DivX/MPEG Video/MP3/WMA/WAV)



These operations are possible on the monitor using the remote controller. Before playing, you can display the folder list/track list to confirm the contents and start playing a track.

Display the folder list while stop.



2 Select an item from the folder list.

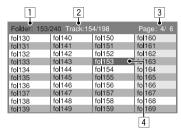


- Track list of the selected folder appears.
- To go back to the folder list, press RETURN.
- 3 Select a track to start playing.



• MP3/WMA/WAV: Control screen appears (see page 19).

#### List screen



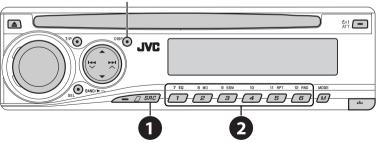
Ex.: Folder list

- 1 Current folder number/total folder number
- 2 Current track number/total number of tracks in the current folder
- 3 Current page/total number of the pages included in the list
- 4 Current folder/track (highlighted bar)

## Listening to the CD changer

#### Change the display information

(see page 13)



It is recommended to use a JVC MP3-compatible CD changer with your unit.

 You can only play conventional CDs (including CD Text) and MP3 discs.



Select a disc to start playing.

Press: For selecting disc number 1 - 6. Hold: For selecting disc number 7 - 12.



Press: Select track

Hold: Reverse/fast-forward track



MP3: Select folders

After pressing M, press the following buttons to...

Skip 10 tracks

|            | (MP3: within          | n the same folder)                                       |
|------------|-----------------------|--|
| 11 RPT     | TRK RPT:<br>FLDR RPT: | Repeat current track                                     |
| ری         | FLUN NFI.             | MP3: Repeat all tracks of<br>current folder              |
|            | DISC RPT:             | Repeat all tracks of the                                 |
|            |                       | current disc   |
| 12 RND     | FLDR RND:             | MP3: Randomly play all                                   |
| <u>[6]</u> |                       | tracks of the current folder,<br>then tracks of the next |
|            |                       | then didens of the field                                 |
|            |                       | folder   |
|            | DISC RND:             | Randomly play all tracks of                              |

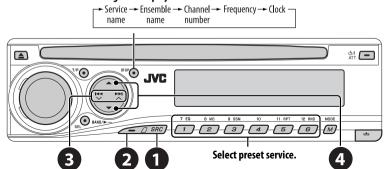
current disc

MAG RND: Randomly play all tracks of the inserted discs

 To cancel repeat play or random play, select "RPT OFF" or "RND OFF."

## Listening to the DAB tuner

#### Change the display information



- Select "DAR."
- **2** Select the bands.

  → DAB1 → DAB2 → DAB3
- 3 Searching for an ensemble.

  Manual Search: Hold either one of the buttons until "MANU" flashes on the display, then press it repeatedly.
- 4 Select a service (either primary or secondary) to listen to.

## Storing DAB services in memory

While listening to a DAB service...



# Activating/deactivating TA/PTY Standby Reception

- Operations are exactly the same as explained on page 12 for FM RDS stations.
- You cannot store PTY codes separately for the DAB tuner and for the FM tuner.

## Tracing the same programme— Alternative Frequency Reception ■

· While receiving a DAB service:

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

While receiving an FM RDS station:

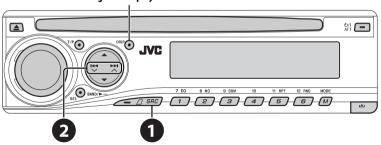
When driving in an area where a DAB service is broadcasting the same programme as the FM RDS station is broadcasting, this unit automatically tunes in to the DAB service.

When shipped from the factory, Alternative Frequency Reception is activated.

To deactivate the Alternative Frequency Reception, see page 28.

## Listening to the iPod/D. player

#### Change the display information



Before operating, connect either one of the following (separately purchased) to the CD changer jack on the rear of this unit.

- Interface adapter for iPod—KS-PD100 for controlling an iPod.
- D. player interface adapter—KS-PD500 for controlling a D. player.

#### **Preparations**

Make sure "CHANGER" is selected for the external input setting, see page 28.

- Select "IPOD" or "D. PLAYER."
- 2 Select a song to start playing.

## Selecting a track from the menu

1 Enter the main menu.



- This mode will be canceled if no operations are done for about 5 seconds
- 2 Select the desired menu.



#### For iPod:

PLAYLIST ← ARTISTS ← ALBUMS ← SONGS ← GENRES ← COMPOSER ← (back to the beginning)

#### For D. player:

PLAYLIST ←→ ARTIST ←→ ALBUM ←→ GENRE ←→ TRACK ←→ (back to the beginning)

#### 3 Confirm the selection.



- To move back to the previous menu, press .
- If a track is selected, playback starts automatically.



#### Pause/stop playback

• To resume playback, press the button again.



Press: Select tracks

Hold: Reverse/fast-forward track

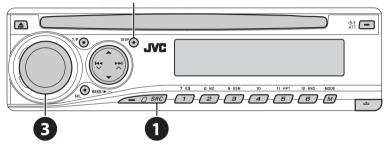
## After pressing M, press the following buttons to...

| 11 RPT 5 | ONE RPT:<br>ALL RPT: | Functions the same as "Repeat One" or "Repeat Mode → One." Functions the same as "Repeat All" or "Repeat Mode → All."  |
|----------|----------------------|--|
| 12 RND   | ALBM RND*:           | Functions the same as "Shuffle Albums" of the iPod.<br>I: Functions the same as "Shuffle Songs" or "Random Play → On." |

<sup>•</sup> To cancel repeat play or random play, select "RPT OFF" or "RND OFF."

## Listening to the other external components

### Change the display information



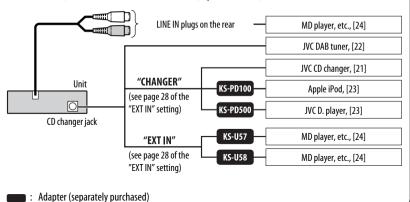
You can connect an external component to:

- CD changer jack on the rear using the Line Input Adapter—KS-U57 (not supplied) or AUX Input Adapter—KS-U58 (not supplied). Make sure "EXT IN" is selected for the external input setting, see page 28.
- · LINE IN plugs on the rear.
- Select "EXT IN" or "LINE IN."
- 2 Turn on the connected component and start playing the source.
- Adjust the volume.
- 4 Adjust the sound as you want (see pages 25 and 26).

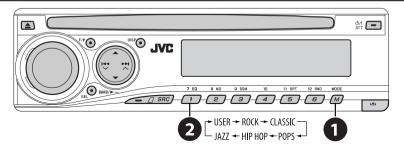
<sup>\*</sup> iPod: Functions only if you select "ALL" in "ALBUMS" of the main "MENU."

### Concept diagram of the external device connection

• For connection, see Installation/Connection manual (separate volume).



## Selecting a preset sound mode



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

## Adiustina the sound

1



2 Adjust the level.



| BAS *1 (bass)                        | -06 to +06  |
|--------------------------------------|-------------|
| Adjust the bass.                     |             |
| TRE *1 (treble)                      | -06 to +06  |
| Adjust the treble.                   |             |
| FAD *2 (fader)                       | R06 to F06  |
| Adjust the front and rear speaker    |             |
| balance.                             |             |
| BAL (balance)                        | L06 to R06  |
| Adjust the left and right speaker    |             |
| balance.                             |             |
| LOUD *1 (loudness)                   | LOUD ON or  |
| Boost low and high frequencies to    | LOUD OFF    |
| produce a well-balanced sound at low |             |
| volume level.                        |             |
| VOL.A *3 (volume adjust)             | -05 to +05; |
| Adjust and store auto-adjustment     | initial: 00 |
| volume level for each source,        |             |
| comparing to the FM volume level.    |             |
| VOL (volume)                         | 00 to 30    |
| Adjust the volume.                   | (or 50) *4  |

- \*1 When you adjust the bass, treble, or loudness, the adjustment you have made is stored for the currently selected sound mode (C-EQ) including "USER."
- \*2 If you are using a two-speaker system, set the fader level to "00."
- \*3 You cannot make an adjustment for FM. "FIX" appears.
- \*4 Depending on the amplifier gain control setting. (See page 28 for details.)

## General settings — PSM

You can change PSM (Preferred Setting Mode) items listed in the table on pages 27 and 28.

## 1 Enter the PSM settings.



(Hold

#### 2 Select a PSM item.



### 3 Select or adjust the selected PSM item.



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



| Indication  | Item<br>(: Initial)          | Setting, [reference page]   |  |
|---|------------------------------|---|--|
| <b>DEMO</b> Display demonstration                                   | • DEMO ON • DEMO OFF         | <ul> <li>Display demonstration will be activated automatically if no operation is done for about 20 seconds, [5].</li> <li>Cancels.</li> </ul>  |  |
| CLK DISP *1<br>Clock display  | • ON<br>• <u>OFF</u>         | <ul> <li>Clock time is shown on the display at all times when the power is turned off.</li> <li>Cancels; pressing DISP will show the clock time for about 5 seconds when the power is turned off, [5].</li> </ul>   |  |
| CLOCK H<br>Hour adjustment  | 0 – 23<br>(1 – 12)           | : Initial: 0 (0:00), [5].   |  |
| CLOCK M<br>Minute adjustment  | 00 – 59                      | : Initial: 00 (0:00), [5].  |  |
| 24H/12H<br>Time display mode  | • 12H<br>• <u>24H</u>        | : See also page 5 for setting.  |  |
| <b>CLK ADJ</b><br>Clock adjustment                                  | • <u>AUTO</u><br>• OFF       | The built-in clock is automatically adjusted using the CT (clock time) data in the RDS signal.     Cancels.   |  |
| AF-REG *2<br>Alternative frequency/<br>regionalization<br>reception | · AF REG                     | <ul> <li>When the currently received signals become weak, the unit switches to another station or service (the programme may differ from the one currently received), [12].</li> <li>When the currently received signals become weak, the unit switches to another station broadcasting the same programme.</li> <li>Cancels (not selectable when "DAB AF" is set to "AF ON").</li> </ul> |  |
| PTY-STBY<br>PTY standby   | OFF, PTY codes (see page 11) | : Activates PTY Standby Reception with one of the PTY codes, [11, 12].  |  |
| <b>TA VOL</b> Traffic announcement volume                           | VOL 00 – VOL<br>30 or 50 *3  | L : Initial: VOL 15, [12].  |  |
| P-SEARCH *2<br>Programme search                                     | • ON<br>• <u>OFF</u>         | : Activates Programme Search, [12].<br>: Cancels.   |  |

<sup>\*1</sup> If the power supply is not interrupted by turning off the ignition key of your car, it is recommended to select "OFF" to save the car's battery.

<sup>\*2</sup> Only for RDS FM stations.

<sup>\*3</sup> Depending on the "AMP GAIN" setting.

| Indication                                      | Item<br>(: Initial)                        | Setting, [reference page]  |
|---|--|--|
| DAB AF *4<br>Alternative frequency<br>reception | • AF OFF                                   | <ul><li>: Traces the programme among DAB services and FM RDS stations,</li><li>[22].</li><li>: Cancels.</li></ul>  |
| <b>DIMMER</b><br>Dimmer                         | • ON<br>• <u>OFF</u>                       | : Dims the display illumination.<br>: Cancels.   |
| <b>TEL</b> Telephone muting                     | • MUTING 1/<br>MUTING 2<br>• OFF           | Select either one which mutes the playback sounds while using a cellular phone.     Cancels.   |
| SCROLL*5<br>Scroll                              | • ONCE<br>• AUTO<br>• OFF                  | <ul> <li>Scrolls the track information once.</li> <li>Repeats scrolling (at 5-second intervals).</li> <li>Cancels. (Holding DISP can scroll the display regardless of the setting.)</li> </ul>   |
| EXT IN *6 External input                        | • <u>CHANGER</u><br>• EXT IN               | : To use a JVC CD changer, [21], or an Apple iPod/a JVC D. player, [23].<br>: To use any other external component, [24].   |
| TAG DISP<br>Tag display                         | • TAG ON<br>• TAG OFF                      | : Shows the tag while playing MP3/WMA/WAV tracks.<br>: Cancels.  |
| AMP GAIN Amplifier gain control                 | 2011 III · · · · · · · · · · · · · · · · · |  |
| IF BAND<br>Intermediate<br>frequency band       | • <u>AUTO</u><br>• WIDE                    | Increases the tuner selectivity to reduce interference noises between adjacent stations. (Stereo effect may be lost.)     Subject to interference noises from adjacent stations, but sound quality will not be degraded and the stereo effect will remain. |

<sup>\*4</sup> Displayed only when DAB tuner is connected.

<sup>\*5</sup> Some characters or symbols will not be shown correctly (or will be blanked) on the display.

<sup>\*6</sup> Displayed only when one of the following sources is selected—FM, AM, DAB, DISC, or LINE IN.

## Disc setup menu



These operations are possible on the monitor using the remote controller.

• Enter the disc setup menu while stop.



2 Select a menu.



3 Select an item you want to set up.





4 Select an option.



#### To return to normal screen

SETUP

| Menu     | ltem                  | Setting   |  |
|----------|-----------------------|---|--|
|          | MENU<br>LANGUAGE      | Select the initial disc menu language. Refer also to "Language codes" on page 36.                             |  |
| LANGUAGE | AUDIO<br>LANGUAGE     | Select the initial audio language. Refer also to "Language codes" on page 36.                                 |  |
| LANG     | SUBTITLE              | Select the initial subtitle language or remove the subtitle (OFF). Refer also to "Language codes" on page 36. |  |
|          | ON SCREEN<br>LANGUAGE | Select the language for the on screen display.  |  |



| AUDIO                |            |
|----------------------|------------|
| DIGITAL AUDIO OUTPUT | STREAM/PCM |
| DOWN MIX             | STEREO     |
| D. RANGE COMPRESSION | ON         |
|                      |            |



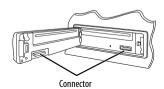
| Menu    | Item                    | Setting  |  |  |
|---------|-------------------------|--|--|--|
|         | MONITOR TYPE            | Select the monitor type to watch a wide screen picture on your monitor.  |  |  |
| RE      |                         | 16:9 4:3 LETTERBOX 4:3 PAN SCAN  |  |  |
| PICTURE | OSD POSITION            | Select the on-screen bar position on the monitor.  1 : Higher position  2 : Lower position (Guidance below the disc setup menu will disappear.)  |  |  |
|         | FILE TYPE               | Select the file type to play.  • AUDIO : Play MP3/WMA/WAV files.  • VIDEO : Play DivX/MPEG Video files.  |  |  |
|         | DIGITAL AUDIO<br>OUTPUT | Select the signal format to be emitted through the DIGITAL OUT (Optical) terminal.  OFF : Cancels. PCM ONLY : Select for an amplifier or a decoder incompatible with Dolby Digital, DTS, MPEG Audio, or when connecting to a recording device.  DOLBY DIGITAL/PCM : Select for an amplifier or a decoder compatible with Dolby Digital.  STREAM/PCM : Select for an amplifier or a decoder compatible with Dolby Digital, DTS, and MPEG Audio. |  |  |
| AUDIO   | DOWN MIX                | When playing back a multi-channel disc, this setting affects the signals reproduced through the LINE OUT jacks (and through the DIGITAL OUT terminal when "PCM ONLY" is selected for "DIGITAL AUDIO OUTPUT").  • SURROUND COMPATIBLE: Select to enjoy multi-channel surround audio by connecting an amplifier compatible with Dolby Surround.  • STEREO : Normally select this.  |  |  |
|         | D. RANGE<br>COMPRESSION | You can enjoy a powerful sound at low or middle volume levels while playing a Dolby Digital software.  • AUTO  : Select to apply the effect to multi-channel encoded software (excluding 1-channel and 2-channel software).  • ON  : Select to always use this function.   |  |  |
| ОТНЕВ   | DivX<br>REGISTRATION    | This unit has its own Registration Code. Once you have played back a disc in which the Registration Code recorded, this unit's Registration Code is overwritten for copyright protection.  |  |  |

## Maintenance

#### How to clean the connectors

Frequent detachment will deteriorate the connectors.

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



#### Moisture condensation

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

- After starting the heater in the car.
- If it becomes very humid inside the car. Should this occur, the unit may malfunction. In this case, eject the disc and leave the unit turned on for a few hours until the moisture evaporates.

### How to handle discs

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



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

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

Make sure to store discs into the cases after use.

### To keep discs clean

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



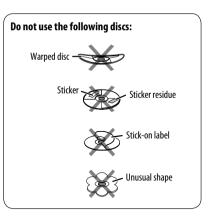
 Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean discs

## To play new discs

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



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



## More about this unit

#### General

#### Turning on the power

 By pressing SRC on the unit, you can also turn on the power. If the source is ready, playback starts.

#### Turning off the power

 If you turn off the power while listening to a disc, disc play will start automatically, next time you turn on the power.

#### FM/AM/RDS

#### Storing stations in memory

- During SSM search...
  - Received stations are preset in No. 1 (lowest frequency) to No. 6 (highest frequency).
  - When SSM is over, the station stored in No. 1 will be automatically tuned in.
- When storing stations, the previously preset stations are erased and stations are stored newly.

### **FM RDS operations**

- Network-Tracking Reception requires two types of RDS signals—PI (Programme Identification) and AF (Alternative Frequency) to work correctly. Without receiving these data correctly, Network-Tracking Reception will not operate correctly.
- If a Traffic Announcement is received by TA Standby Reception, the volume level automatically changes to the preset level (TA VOL) if the current level is lower than the preset level.
- TA Standby Reception and PTY Standby Reception will be temporarily canceled while listening to an AM station.
- When Alternative Frequency Reception is activated (with AF selected), Network-Tracking Reception is also activated automatically. On the other hand, Network-Tracking Reception cannot be deactivated without deactivating Alternative Frequency Reception. (See pages 27 and 28.)

 If you want to know more about RDS, visit <a href="http://www.rds.org.uk">http://www.rds.org.uk</a>>.

#### Disc

#### General

- In this manual, words "track" and "file" are interchangeably used when referring to DivX/MPEG Video/MP3/WMA/WAV files and their file names.
- This unit can also play back 8 cm discs.
- This unit can only play back audio CD (CD-DA) files if different type of files are recorded in the same disc.

#### Inserting a disc

#### Ejecting a disc

- If the ejected disc is not removed within 15 seconds, the disc is automatically inserted again into the loading slot to protect it from dust. Playback starts automatically.
- After ejecting a disc, "NO DISC" appears and you cannot operate some of the buttons. Insert another disc or press SRC to select another playback source.

## Playing Recordable/Rewritable discs

- This unit can recognize a total of 5 000 files and 250 folders (a maximum of 999 files per folder).
- This unit can recognize a total 25 characters for file/ folder names.
- · Use only "finalized" discs.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- This unit may be unable to play back some discs or files due to their characteristics or recording conditions.
- Rewritable discs may require a longer readout time.

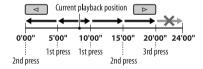
#### Plavina MP3/WMA/WAV files

- The maximum number of characters for folder and file names is 25 characters; 128 characters for MP3/ WMA/WAV tag information.
- This unit can play back files with the extension code <.mp3>, <.wma>, or <.wav> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for the MP3/WMA/WAV files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back files recorded in VBR (variable bit rate).
  - Files recorded in VBR have a discrepancy in elapsed time indication.
- This unit cannot play back the following files:
  - MP3 files encoded with MP3i and MP3 PRO format.
  - MP3 files encoded with Laver 1/2.
  - WMA files encoded with lossless, professional, and voice format.
  - WMA files which are not based upon Windows Media<sup>®</sup> Audio.
  - WMA files copy-protected with DRM.
  - Files which have the data such as ATRAC3, etc.
  - AAC files and OGG files

## Playing DivX files

- This unit can play back DivX files with the extension code <.divx>, <.div>, <.avi> (regardless of the letter case—upper/lower).
- This unit supports DivX 6.x, 5.x, 4.x, and 3.11.
- This unit supports DivX Media Format files, <.divx>
   or <.avi>.
- This unit can display a unique registration code— DivX Video-on-Demand (VOD—a kind of Digital Rights Management). For activation and more details, visit <www.divx.com/vod>.

- Audio stream should conform to MP3 or Dolby Digital.
- This unit does not support GMC (Global Motion Compression).
- The file encoded in the interlaced scanning mode may not be played back correctly.
- Index Search:



- This unit cannot play back the following files:
  - Files encoded in Codec (Compressor-decompressor) other than DivX Codec.
- If you want to know more about DivX, visit <a href="http://www.divx.com">http://www.divx.com</a>>.

#### Changing the source

 If you change the source, playback also stops (without ejecting the disc).
 Next time you select "DISC" for the playback source, disc play starts from where it has been stopped previously.

## **Playing MPEG Video files**

- This unit can play back MPEG Video files with the extension code <.mpg> or <.mpeg>.
- Audio stream should conform to MPEG1 Audio Layer 2.
- This unit cannot playback the following files:
  - WMV (Windows Media Video) files
  - RM (Real Media) format files

#### DAR

- Only the primary DAB service can be preset even when you store a secondary service.
- A previously preset DAB service is erased when a new DAB service is stored in the same preset number.

## iPod or D. plaver

- When you turn on this unit, the iPod or D. player is charged through this unit.
- While the iPod or D. player is connected, all operations from the iPod or D. player are disabled. Perform all operations from this unit.
- The text information may not be displayed correctly.
- If the text information includes more than 8 characters, it scrolls on the display. This unit can display up to 40 characters.

#### Notice:

When operating an iPod or a D. player, some operations may not be performed correctly or as intended. In this case, visit the following JVC web site:

**For iPod users:** <a href="http://www.jvc.co.jp/english/car/support/ks-pd100/index.html">http://www.jvc.co.jp/english/car/support/ks-pd100/index.html</a>

For D. player users: <a href="http://www.jvc.co.jp/">http://www.jvc.co.jp/</a> english/car/support/ks-pd500/index.html>

## General settings—PSM

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

### Disc setup menu

- When the language you have selected is not recorded on a disc, the original language is automatically used as the initial language. In addition, for some discs, the initial languages settings will not work as you set due to their internal disc programming.
- When you select "16:9" for a picture whose aspect ratio is 4:3, the picture slightly changes due to the process for converting the picture width.
- Even if "4:3 PAN SCAN" is selected, the screen size may become "4:3 LETTERBOX" for some discs.

#### On-screen auide icons

During playback, the following guide icons may appear for a while on the monitor.

Playback
Pause

: DVD-Video/VCD: Forward slow motion

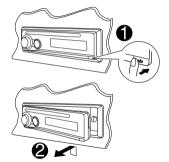
: DVD-Video: Reverse slow motion

: Forward search : Reverse search

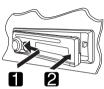
DVD: The following icons appear at the beginning of a scene containing:

Multi-subtitle languagesMulti-audio languagesMulti-angle views

## Detaching the control panel



## Attaching the control panel



#### About sounds reproduced through the rear terminals

- Through the analog terminals (Speaker out/LINE OUT): 2-channel signal is emitted. When playing a multi-channel encoded disc, multi-channel signals are downmixed. DTS sound cannot be reproduced. (AUDIO—DOWN MIX: see page 30.)
- Through DIGITAL OUT (optical):

Digital signals (Linear PCM, Dolby Digital, DTS, MPEG Audio) are emitted through this terminal. (For more details, see table below.)

To reproduce multi-channel sounds such as Dolby Digital, DTS, and MPEG Audio, connect an amplifier or a decoder compatible with these multi-channel sources to this terminal, and set "DIGITAL AUDIO OUTPUT" correctly. (See page 30.)

### Output signals through the DIGITAL OUT terminal

Output signals are different depending on the "DIGITAL AUDIO OUTPUT" setting on the setup menu (see page 30).

|   |                    | Output Signal  |  |                                      |     |  |
|---|--------------------|--|--|--------------------------------------|-----|--|
| Playback Disc                                     |                    | STREAM/PCM   | DOLBY DIGITAL/<br>PCM                            | PCM ONLY                             | OFF |  |
| <b>DVD-Video</b> 48 kHz, 16/20/24 bits Linear PCM |                    | 48 kHz, 16 bits stereo Linear PCM *  |  |                                      |     |  |
|   | 96 kHz, Linear PCM | 48 kH  | z, 16 bits stereo Linea                          | ar PCM                               |     |  |
|   | Dolby Digital      | Dolby Digit  | al bitstream                                     | 48 kHz, 16 bits<br>stereo Linear PCM |     |  |
| DTS   |                    | DTS bitstream  |  |                                      |     |  |
|   | MPEG Audio         | MPEG bitstream   | MPEG bitstream 48 kHz, 16 bits stereo Linear PCM |                                      |     |  |
| Audio CD, Video CD                                |                    | 44.1 kHz, 16 bits stereo Linear PCM /<br>48 kHz, 16 bits stereo Linear PCM |  |                                      | OFF |  |
| Audio CD v  | vith DTS           | DTS bitstream  |  |                                      |     |  |
| DivX  | Dolby Digital      |  |  | 48 kHz, 16 bits<br>stereo Linear PCM |     |  |
|   | MPEG Audio         | 32/44.   | 1/48 kHz, 16 bits Line                           | ear PCM                              |     |  |
| MPEG  |                    | 44.1/48 kHz, 16 bits Linear PCM  |  |                                      |     |  |
| MP3/WMA   |                    | 32/44.1/48 kHz, 16 bits Linear PCM   |  |                                      |     |  |
| WAV   |                    | 44.1 kHz, 16 bits stereo Linear PCM  |  |                                      |     |  |

<sup>\*</sup> Digital signals may be emitted at 20 or 24 bits (at their original bit rate) through the DIGITAL OUT terminal if the discs are not copy-protected.

| Code | Language        | Code | Language     | Code | Language         | Code | Language           | Code | Language   |
|------|-----------------|------|--------------|------|------------------|------|--------------------|------|------------|
|      | , ,             |      |              |      | , <b>,</b> , ,   |      |                    |      |            |
| AA   | Afar            | FA   | Persian      | KL   | Greenlandic      | 00   | Occitan            | ST   | Sesotho    |
| AB   | Abkhazian       | FI   | Finnish      | KM   | Cambodian        | OM   | (Afan) Oromo       | SU   | Sundanese  |
| AF   | Afrikaans       | FJ   | Fiji         | KN   | Kannada          | OR   | Oriya              | SW   | Swahili    |
| AM   | Ameharic        | F0   | Faroese      | KO   | Korean (KOR)     | PA   | Panjabi            | TA   | Tamil      |
| AR   | Arabic          | FY   | Frisian      | KS   | Kashmiri         | PL   | Polish             | TE   | Telugu     |
| AS   | Assamese        | GA   | Irish        | KU   | Kurdish          | PS   | Pashto, Pushto     | TG   | Tajik      |
| AY   | Aymara          | GD   | Scots Gaelic | KY   | Kirghiz          | PT   | Portuguese         | TH   | Thai       |
| ΑZ   | Azerbaijani     | GL   | Galician     | LA   | Latin            | QU   | Quechua            | TI   | Tigrinya   |
| BA   | Bashkir         | GN   | Guarani      | LN   | Lingala          | RM   | Rhaeto-<br>Romance | TK   | Turkmen    |
| BE   | Byelorussian    | GU   | Gujarati     | LO   | Laothian         | RN   | Kirundi            | TL   | Tagalog    |
| BG   | Bulgarian       | НА   | Hausa        | LT   | Lithuanian       | RO   | Rumanian           | TN   | Setswana   |
| ВН   | Bihari          | HI   | Hindi        | LV   | Latvian, Lettish | RW   | Kinyarwanda        | TO   | Tonga      |
| BI   | Bislama         | HR   | Croatian     | MG   | Malagasy         | SA   | Sanskrit           | TR   | Turkish    |
| BN   | Bengali, Bangla | HU   | Hungarian    | MI   | Maori            | SD   | Sindhi             | TS   | Tsonga     |
| ВО   | Tibetan         | HY   | Armenian     | MK   | Macedonian       | SG   | Sangho             | TT   | Tatar      |
| BR   | Breton          | IA   | Interlingua  | ML   | Malayalam        | SH   | Serbo-Croatian     | TW   | Twi        |
| CA   | Catalan         | IE   | Interlingue  | MN   | Mongolian        | SI   | Singhalese         | UK   | Ukrainian  |
| CO   | Corsican        | IK   | Inupiak      | MO   | Moldavian        | SK   | Slovak             | UR   | Urdu       |
| CS   | Czech           | IN   | Indonesian   | MR   | Marathi          | SL   | Slovenian          | UZ   | Uzbek      |
| CY   | Welsh           | IS   | Icelandic    | MS   | Malay (MAY)      | SM   | Samoan             | VI   | Vietnamese |
| DZ   | Bhutani         | IW   | Hebrew       | MT   | Maltese          | SN   | Shona              | V0   | Volapuk    |
| EL   | Greek           | JI   | Yiddish      | MY   | Burmese          | SO   | Somali             | W0   | Wolof      |
| E0   | Esperanto       | JW   | Javanese     | NA   | Nauru            | SQ   | Albanian           | ХН   | Xhosa      |
| ET   | Estonian        | KA   | Georgian     | NE   | Nepali           | SR   | Serbian            | Y0   | Yoruba     |
| EU   | Basque          | KK   | Kazakh       | NO   | Norwegian        | SS   | Siswati            | ZU   | Zulu       |

## Troubleshooting

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

|                  | Symptom   | Remedy/Cause  |  |
|------------------|---|---|--|
| General          | Sound cannot be heard from the speakers.  | <ul><li>Adjust the volume to the optimum level.</li><li>Check the cords and connections.</li></ul>                              |  |
| Ğ                | The unit does not work at all.  | Reset the unit (see page 2).  |  |
| FM/AM            | SSM automatic presetting does not work.   | Store stations manually.  |  |
| FW/              | Static noise while listening to the radio.  | Connect the aerial firmly.  |  |
|                  | Disc cannot be played back.   | Insert the disc correctly.  |  |
|                  | Disc can be neither played back nor ejected.  | <ul> <li>Unlock the disc (see page 13).</li> <li>Eject the disc forcibly (see page 2).</li> </ul>                               |  |
|                  | Recordable/Rewritable discs cannot be played back.     Tracks on the Recordable/Rewritable discs cannot be skipped. | Insert a finalized disc.     Finalize the discs with the component which you have used for recording.                           |  |
| nera             | Disc cannot be recognized.  | Eject the disc forcibly (see page 2).   |  |
| Discs in general | Sound and pictures are sometimes interrupted or distorted.  | <ul><li>Stop playback while driving on rough roads.</li><li>Change the disc.</li><li>Check the cords and connections.</li></ul> |  |
|                  | No playback picture (DVD-Video/DivX/MPEG/<br>VCD) appears on the monitor.   | Parking brake wire is not connected properly. (See Installation/Connection Manual.)   |  |
|                  | No picture appears on the monitor at all.   | <ul><li>Connect the video cord correctly.</li><li>Select a correct input on the monitor.</li></ul>                              |  |
|                  | The left and right edges of the picture are missing on the monitor.   | Select "4:3 LETTERBOX" (see page 30).   |  |

|                             | Symptom   | Remedy/Cause  |  |
|-----------------------------|---|---|--|
|                             | Disc cannot be played back.   | <ul> <li>Change the disc.</li> <li>Record the tracks using a compliant application in the appropriate discs (see page 4).</li> <li>Add the extension code &lt;.divx&gt;, &lt;.div&gt;, &lt;.avi&gt;, &lt;.mpg&gt;, &lt;.mpeg&gt;, &lt;.mp3&gt;, &lt;.wma&gt;, or &lt;.wav&gt; to the file names.</li> </ul> |  |
|                             | Noise is generated.   | Skip to another track or change the disc.   |  |
| /WMA/WAV                    | Longer readout time is required.  | Readout time varies due to the complexity of the folder/file configuration. Do not use too many hierarchies and folders.  |  |
| deo/MP3                     | Tracks cannot play back as you have intended them to play.                                  | Playback order is determined when files are recorded.   |  |
| DivX/MPEG Video/MP3/WMA/WAV | No sound can be heard when picture is<br>displayed while playing a DivX/MPEG Video<br>file. | <ul> <li>Record the audio track using MP3 or Dolby Digital as the audio stream of DivX files.</li> <li>Record the audio track using MPEG1 Audio Layer 2 as the audio stream for MPEG Video files.</li> </ul>  |  |
|                             | Elapsed playing time is not correct.  | This sometimes occurs during playback. This is caused by how the tracks are recorded.   |  |
|                             | • "PLEASE" and "EJECT" appear alternately on the display.                                   | Insert a disc that contains tracks of appropriate formats.  |  |
|                             | Correct characters are not displayed (e.g. album name).                                     | This unit can only display letters (upper case), numbers, and a limited number of symbols.  |  |
|                             | • "NO DISC" appears on the display.   | Insert a disc into the magazine.  |  |
| <b>=</b>                    | • "NO MAG" appears on the display.  | Insert the magazine.  |  |
| CD changer                  | • "RESET 8" appears on the display.   | Connect this unit and the CD changer correctly and press the reset button of the CD changer.  |  |
| J                           | • "RESET 1" — "RESET 7" appears on the display.   | Press the reset button of the CD changer.   |  |
|                             | The CD changer does not work at all.  | Reset the unit (see page 2).  |  |
|                             | • "noSIGNAL" appears on the display.  | Move to an area with stronger signals.  |  |
| DAB                         | • "RESET 8" appears on the display.   | Connect this unit and the DAB tuner correctly and reset the unit (see page 2).  |  |
| ă                           | The DAB tuner does not work at all.   | Reconnect this unit and the DAB tuner correctly. Then, reset the unit (see page 2).   |  |
|                             | • "ANTENNA" appears on the display.   | Check the cords and connections.  |  |

|               | Symptom   | Remedy/Cause  |  |
|---------------|---|---|--|
|               | The iPod or D. player does not turn on or does not work.                                  | <ul><li>Check the connecting cable and its connection.</li><li>Charge the battery.</li><li>Update the firmware version.</li></ul> |  |
|               | The sound is distorted.   | Deactivate the equalizer either on this unit or the iPod/D. player.   |  |
|               | • "NO IPOD" or "NO DP" appears on the display.  | <ul><li> Check the connecting cable and its connection.</li><li> Charge the battery.</li></ul>                                    |  |
|               | • Playback stops.   | The headphones are disconnected during playback. Restart the playback operation (see page 23).                                    |  |
| Pod/D. player | No sound can be heard when connecting an iPod nano.                                       | <ul><li>Disconnect the headphones from the iPod nano.</li><li>Update the firmware version of the iPod nano.</li></ul>             |  |
| iPod/         | No sound can be heard.     "ERROR 01" appears on the display when connecting a D. player. | Disconnect the adapter from the D. player. Then, connect it again.  |  |
|               | • "NO FILES" or "NO TRACK" appears on the display.  | No tracks are stored. Import tracks to the iPod or D. player.   |  |
|               | • "RESET 1" — "RESET 7" appears on the display.   | Disconnect the adapter from both this unit and iPod/D. player. Then, connect it again.  |  |
|               | • "RESET 8" appears on the display.   | Check the connection between the adapter and this unit.   |  |
|               | The iPod's or D. player's controls do not work after disconnecting from this unit.        | Reset the iPod or D. player.  |  |

- Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Out" are registered trademarks of DTS, Inc.
- "DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.
- DivX, DivX Ultra Certified, and associated logos are trademarks of DivX, inc. and are used under license.
- Official DivX® Ultra Certified product
- Plays all versions of DivX® video (including DivX® 6) with enhanced playback of DivX® media files and the DivX® Media Format
- Microsoft and Windows Media are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries.

# Specifications

|                                | Maximum Power<br>Output:  | Front/Rear:                              | 50 W per channel   |  |
|--------------------------------|---------------------------|--|--|--|
|                                | Output (RMS):             |  | 19 W per channel into 4 $\Omega$ , 40 Hz to 20 000 Hz at no more than 0.8% total harmonic distortion |  |
| Z                              | Load Impedance:           |  | 4Ω (4Ω to 8Ω allowance)  |  |
|                                | Tone Control Range:       | Bass:                                    | ±12 dB at 100 Hz   |  |
| <b>AUDIO AMPLIFIER SECTION</b> |                           | Treble:                                  | ±12 dB at 10 kHz   |  |
| PLF                            | Signal to Noise Ratio:    |  | 70 dB  |  |
| ) AM                           | Audio Output Level:       | Digital (DIGITAL OUT: Optical):          | Signal wave length: 660 nm   |  |
| Ĭ                              |                           |  | Output level: –21 dBm to –15 dBm   |  |
|                                |                           | Line-Out Level/Impedance:                | 2.5 V/20 kΩ load (full scale)  |  |
|                                |                           | Output Impedance:                        | 1 kΩ   |  |
|                                | Color system:             |  | PAL  |  |
|                                | Video Output (composite): |  | 1 Vp-p/75 Ω  |  |
|                                | Other Terminal:           | CD changer, LINE IN, Steering wheel remo | ote input  |  |

|         | Frequency Range: | FM:                                      | 87.5 MHz to 108.0 MHz                                |
|---------|------------------|--|--|
|         |                  | AM:                                      | (MW) 522 kHz to 1 620 kHz<br>(LW) 144 kHz to 279 kHz |
| N N     | FM Tuner:        | Usable Sensitivity:                      | 11.3 dBf (1.0 μV/75 Ω)                               |
| SECTION |                  | 50 dB Quieting Sensitivity:              | 16.3 dBf (1.8 μV/75 Ω)                               |
| TUNER S |                  | Alternate Channel Selectivity (400 kHz): | 65 dB  |
| ₽       |                  | Frequency Response:                      | 40 Hz to 15 000 Hz                                   |
|         |                  | Stereo Separation:                       | 30 dB  |
|         | MW Tuner:        | Sensitivity/Selectivity:                 | 20 μV/35 dB  |
|         | LW Tuner:        | Sensitivity:                             | 50 μV  |

|                       | Signal Detection System: |        | Non-contact optical pickup (semiconductor laser) |   |
|-----------------------|--------------------------|--------|--|---|
| DVD/CD PLAYER SECTION | Number of Channels:      |        |  | 2 channels (stereo)   |
|                       | Frequency Response:      |        | DVD, fs=48 kHz/96 kHz:                           | 16 Hz to 22 000 Hz  |
|                       |                          |        | CD, fs=44.1 kHz:                                 | 16 Hz to 20 000 Hz  |
|                       | Dynamic Range            | :      |  | 96 dB   |
|                       | Signal-to-Noise          | Ratio: |  | 98 dB   |
|                       | Wow and Flutte           | er:    |  | Less than measurable limit  |
|                       | DivX/MPEG<br>Video:      | Video: | Max. Resolution:                                 | 720 × 480 pixels (30 fps)<br>720 × 576 pixels (25 fps)  |
|                       |                          | Audio: | Bit Rate:  | DivX: 32 kbps — 320 kbps<br>MPEG Video: 32 kbps — 320 kbps  |
|                       |                          |        | Sampling Frequency:                              | DivX: MPEG-1: 32 kHz, 44.1 kHz, 48 kHz<br>MPEG-2: 16 kHz, 22.05 kHz, 24 kHz<br>MPEG Video: 32 kHz, 44.1 kHz, 48 kHz |
|                       | MP3:                     |        | Bit Rate:  | 32 kbps — 320 kbps  |
|                       |                          |        | Sampling Frequency:                              | MPEG-1: 32 kHz, 44.1 kHz, 48 kHz<br>MPEG-2: 16 kHz, 22.05 kHz, 24 kHz   |
|                       | WMA:                     |        | Bit Rate:  | 32 kbps – 320 kbps  |
|                       |                          |        | Sampling Frequency:                              | 22.05 kHz, 32 kHz, 44.1 kHz, 48 kHz   |
|                       | WAV:                     |        | Quantization Bit Rate:                           | 16 bit  |
|                       |                          |        | Sampling Frequency:                              | 44.1 kHz  |
|                       | <u> </u>                 |        | I  |   |

|         | Power Requirement:                    | Operating Voltage:           | DC 14.4 V (11 V to 16 V allowance) |
|---------|---------------------------------------|------------------------------|------------------------------------|
| GENERAL | Grounding System:                     |                              | Negative ground                    |
|         | Allowable Operating Temp              | erature:                     | 0°C to +40°C                       |
|         | Dimensions (W $\times$ H $\times$ D): | Installation Size (approx.): | 182 mm × 52 mm × 158 mm            |
|         |                                       | Panel Size (approx.):        | 187 mm × 58 mm × 13 mm             |
|         | Mass (approx.):                       |                              | 1.6 kg (excluding accessories)     |

Design and specifications are subject to change without notice.

# Having TROUBLE with operation? Please reset your unit

Refer to page of How to reset your unit

