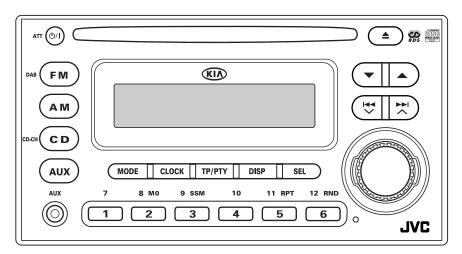




CD RECEIVER

KW-S601









Thank you for purchasing a JVC product.

Please read all instructions carefully before operation, to ensure your complete understanding and to obtain the best possible performance from the unit.

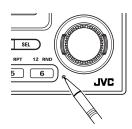
IMPORTANT FOR LASER PRODUCTS

- 1. CLASS 1 LASER PRODUCT
- 2. **CAUTION:** Do not open the top cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
- 3. **CAUTION:** Visible and/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.

ı	CAUTION	ATTENTION	AVISO	VARNING	注意	CAUTION
		RAYONNEMENT LASER		SYNLIG OCH/ELLER		VISIBLE AND/OR
-1					及び/または不可視	INVISIBLE CLASS II
-1	LASER RADIATION	INVISIBLE DE CLASSE	VISIBLE Y/O INVISIBLE	LASERSTRÄLNING,	のクラス 1 M	LASER RADIATION
-1	WHEN OPEN. DO NOT	1M UNE FOIS OUVERT.	CUANDO ESTÁ	KLASS 1M, NÅR DENNA	レーザー放射が	WHEN OPEN.
-1	VIEW DIRECTLY WITH	NE PAS REGARDER	ABIERTO. NO MIRAR	DEL ÅR ÖPPNAD.	出ます。	DO NOT STARE
-1	OPTICAL INSTRUMENTS.	DIRECTEMENT AVEC	DIRECTAMENTE	BETRAKTA EJ	光学装置で直接	INTO BEAM.
1	IEC60825-1:2001	DES INSTRUMENTS	CON INSTRUMENTAL	STRÅLEN MED OPTISKA	見ないでください。	
ı	(ENG)	OPTIQUES. (FRA)	ÓPTICO. (ESP)	INSTRUMENT. (SWE)	(JPN)	LV44603-003A

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.

How to reset your unit



• Your preset adjustments will also be erased.

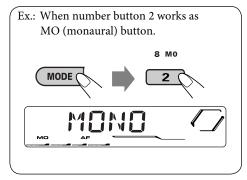
How to forcibly eject a disc



• Be careful not to drop the disc when it ejects.

How to use the MODE button

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



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

How to read this manual

- Button operations are mainly explained with the illustrations in the table below.
- Some related tips and notes are explained in "More about this unit" (see pages 19 21).

Ø.	Press bri	efly.
	Press rep	eatedly.
000	Ø	Press either one.
Hold		d hold until your esponse begins.
+ Hold		d hold both at the same time.

The following marks are used to indicate...



: Built-in CD player operations.



: External CD changer operations.



: Indicator displayed for the corresponding operation.

Warning:

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

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.

CONTENTS

Control panel	4
Getting started	5
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Sound adjustments	12
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iPod®/D. player operations	15
Other external component operations	17
DAB tuner operations	17
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Specifications	25

For safety...

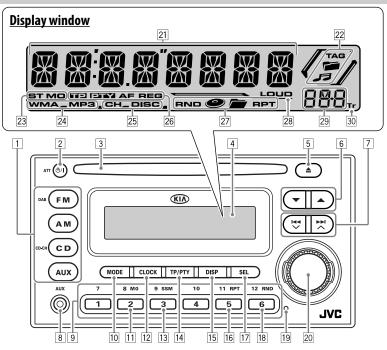
- Do not raise the volume level too much, as this will block outside sounds, making driving dangerous.
- Stop the car before performing any complicated operations.

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.

Control panel

Parts identification



- Source buttons —FM/DAB, AM, CD/CD-CH, AUX
- 2 **७/।** ATT (standby/on attenuator) button
- 3 Loading slot
- 4 Display window
- 5 **≜** (eject) button
- 6 **▲** (up) / **▼** (down) buttons
- 7 |**◄◄ ∨/▶▶**| **∧** buttons
- 8 AUX (auxiliary) input jack
- 9 Number buttons
- 10 MODE button
- [1] MO (monaural) button
- 12 CLOCK button
- SSM (Strong-station Sequential Memory) button
- 14 TP/PTY (traffic programme/programme type) button
- 15 DISP (display) button
- 16 RPT (repeat) button
- 17 SEL (select) button
- 18 RND (random) button
- 19 Reset button

20 Control dial

Display window

- 21 Main display
- 22 Track information indicators—TAG (ID3 Tag), **(folder)**, **(track/file)**
- 23 Tuner reception indicators—ST (stereo), MO (monaural)
- 24 Track type indicators—WMA, MP3
- 25 Playback source indicators—CH (CD changer), DISC (built-in CD player)
- 26 RDS indicators—TP, PTY, AF, REG
- 28 LOUD (loudness) indicator
- 29 Source display
- 30 Tr (track) indicator

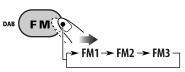
Getting started

Basic operations ■

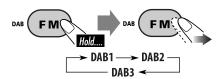




2 For FM tuner



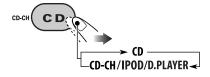
For DAB* tuner



For AM tuner



For CD*, CD changer* or iPod*/D.player*



For external component connected to AUX input jack



* You cannot select these sources if they are not ready or not connected.

3 Adjust the volume.



Volume level appears.



Adjust the sound as you want. (See page 12.)

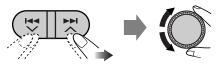
To drop the volume in a moment (ATT) To restore the sound, press it again.	ATT (0)/I
To turn off the power	Hold

Basic settings

- See also "General settings PSM" on pages 13 and 14.
- Setting the time display mode



2 Select "24H/12H," then "24H" (hour) or "12H" (hour).



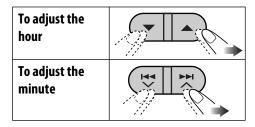
3 Finish the procedure.



Setting the clock



2 Setting the hour and minute.

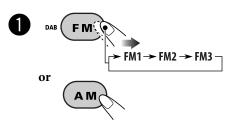


To use these buttons for their original functions again, wait for 15 seconds without pressing any of these buttons or press CLOCK again.

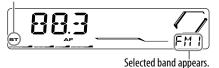
To check the current clock time while listening to a source



Radio operations



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



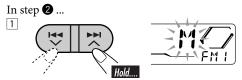
Start searching for a station.



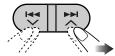
When a station is received, searching stops.

To stop searching, press the same button again.

To tune in to a station manually



2 Select a desired station frequency.



When an FM stereo broadcast is hard to receive



Lights up when monaural mode is activated.



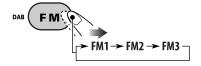
Reception improves, but stereo effect will be lost.

To restore the stereo effect, repeat the same procedure. "MONO OFF" appears and the MO indicator goes off.

Storing stations in memory

You can preset six stations for each band.

- FM station automatic presetting— SSM (Strong-station Sequential Memory)
- 1 Select the FM band (FM1 FM3) you want to store into.



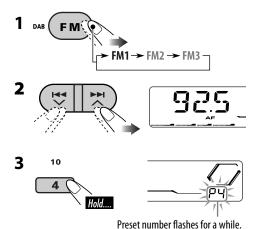


"SSM" flashes, then disappears when automatic presetting is over.

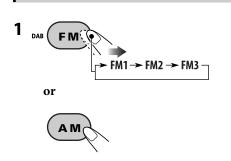
Local FM stations with the strongest signals are searched and stored automatically in the FM band

Manual presetting

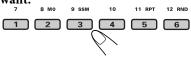
Ex.: Storing FM station of 92.5 MHz into preset number 4 of the FM1 band.



Listening to a preset station



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



FM RDS operations

What you can do with RDS

RDS (Radio Data System) allows FM stations to send an additional signal along with their regular programme signals.

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

- Programme Type (PTY) Search (see the following)
- TA (Traffic Announcement) and PTY Standby Receptions (see pages 8 and 13)
- Tracing the same programme automatically
 —Network-Tracking Reception (see page 9)
- Programme Search (see page 13)

Searching for your favorite FM RDS programme

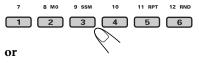
You can tune in to a station broadcasting your favorite programme by searching for a PTY code

• To store your favorite programme types, see page 8.



The last selected PTY code appears.

2 Select one of your favorite programme types.

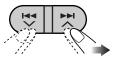


Select one of the PTY codes (see page 8).



Continued on the next page

3 Start searching for your favorite programme.



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

PTY codes

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

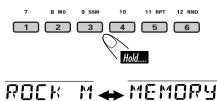
Storing your favorite programme types

You can store six favorite programme types.

<u>Preset programme types in the number buttons</u> (1 to 6):

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

- **1** Select a PTY code (see page 7).
- 2 Select the preset number (1 6) you want to store into.



Ex.: When "ROCK M" is selected

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

4 Finish the procedure.



Using the standby receptions

■ TA Standby Reception

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

The volume changes to the preset TA volume level if the current level is lower than the preset level (see page 13).

To activate TA Standby Reception



The TP (Traffic Programme) indicator either lights up or flashes

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

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

To deactivate the TA Standby Reception



The TP indicator goes off.

PTY Standby Reception

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

To activate and select your favorite PTY code for PTY Standby Reception, see page 13.

The PTY indicator either lights up or flashes.

• If the PTY indicator lights up, PTY Standby Reception is activated.

• If the PTY indicator flashes, PTY Standby Reception is not yet activated.

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

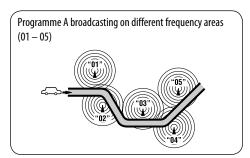
To deactivate the PTY Standby Reception, select "OFF" for the PTY code (see page 13). The PTY indicator goes off.

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 below).

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

To change the Network-Tracking Reception setting, see "AF-REG" on page 13.



<u>To check other information while listening to</u> an FM RDS station



Station name (PS) \rightarrow Station Frequency \rightarrow Programme type (PTY) \rightarrow Clock \rightarrow (back to the beginning)

Disc operations

Playing a disc in the unit

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



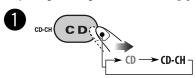
To stop play and eject the disc



Playing discs in the CD changer

All discs in the magazine will be played repeatedly until you change the source.

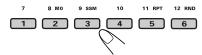
• Ejecting the magazine will also stop playback.



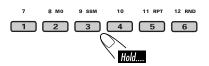
2

Select a disc.

For disc number from 01 - 06:



For disc number from 07 – 12:



About MP3 and WMA tracks

MP3 and WMA "tracks" (words "file" and "track" are used interchangeably) are recorded in "folders."

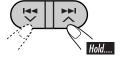
About the CD changer

It is recommended to use a JVC

MP3-compatible CD changer with your unit.

- You can also connect MP3-incompatible CD changers. However, these units are not compatible with MP3 discs.
- You cannot use the CH-X99, CH-X100, and KD-MK series CD changers with this unit.
- You cannot play any WMA disc in the CD changer.
- Disc text information recorded in the CD Text can be displayed when a JVC CD Text compatible CD changer is connected.

To fast-forward or reverse the track





To go to the next or previous tracks





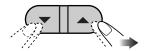
To go to the next or previous folders (only for MP3/WMA)

For MP3 tracks:



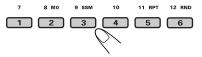
For WMA tracks:



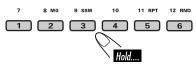


To locate a particular track (for CD) or folder (for MP3/ WMA) directly

To select a number from 01 - 06:

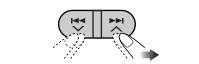


To select a number from 07 – 12:



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

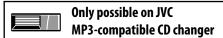
To select a particular track in a folder (for MP3/WMA):



Other main functions

Skipping tracks quickly during play





• For MP3/WMA, you can skip tracks within the same folder.

Ex.: To select track 32 while playing a track whose number is a single digit (1 to 9)



2



Each time you press the button, you can skip 10 tracks.

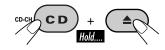
• After the last track, the first track will be selected and vice versa.



Prohibiting disc ejection



You can lock a disc in the loading slot.





To cancel the prohibition, repeat the same procedure.



Changing the display information



While playing an audio CD or a CD Text



While playing an MP3/WMA*2 disc

• When "TAG DISP" is set to "TAG ON" (see page 14)



• When "TAG DISP" is set to "TAG OFF"



- A: Elapsed playing time with the current track number
- **B** : Clock with the current track number
- *1 If the current disc is an audio CD, "NO NAME" appears.
- *2 Only for the built-in CD player.
- *3 If an MP3/WMA file does not have Tag information, folder name and file name appear. In this case, the TAG indicator will not light up.

Selecting the playback modes

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



2 Select your desired playback mode.

■ Repeat play



Mode Plays repeated	ly
---------------------	----

TRK RPT: The current track. RPT FLDR RPT*1: All tracks of the current

folder. (RPT)

DISC RPT*²: All tracks of the current disc.

@ RPT

RPT OFF: Cancels.

■ Random play

12 RND



Mode Plays at random

FLDR RND*1: All tracks of the current

folder, then tracks of the next folder and so on. (RND)

DISC RND: All tracks of the current disc.

RND @

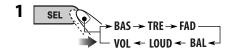
MAG RND*2: All tracks of the inserted

discs. RND

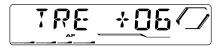
RND OFF: Cancels.

Sound adjustments

You can adjust the sound characteristics to your preference.







Ex.: When "TRE" is selected

Indication, [Range]

BAS (bass), [-06 to +06] Adjust the bass.

TRE (treble), [-06 to +06] Adjust the treble.

FAD* (fader), [R06 to F06]

Adjust the front and rear speaker balance.

BAL (balance), [L06 to R06] Adjust the left and right speaker balance.

LOUD (loudness), [LOUD ON or LOUD OFF] Boost low and high frequencies to produce a well-balanced sound at low volume level.

VOL (volume), [00 to 50] Adjust the volume.

^{*1} Only while playing an MP3/WMA disc.

^{*2} Only while playing discs in the CD changer.

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

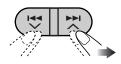
General settings — PSM

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

1



2 Select a PSM item.



3 Adjust the PSM item selected.



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



Indications	Selectable settings, [reference page] 12H = 24H, [5] [Initial: 24H]			
24H/12H Time display mode				
CLK ADJ Clock adjustment	AUTO OFF	: [Initial]; The built-in clock is automatically adjusted using the CT (clock time) data in the RDS signal. : Cancels.		
AF-REG Alternative frequency/ regionalization reception	When the weak AF AF REG OFF	 e received signals from the current FM RDS station become : [Initial]; Switches to another station (the programme may differ from the one currently received), [9]. • The AF indicator lights up. : Switches to another station broadcasting the same programme. • The AF and REG indicators light up. : Cancels (not selectable when "DAB AF" is set to "AF ON"). 		
PTY-STBY PTY standby		PTY Standby Reception with one of the PTY codes, [8]. ial] \rightarrow PTY codes, [8] \rightarrow (back to the beginning)		
TA VOL Traffic announcement volume	[Initial: V	OL 15]; VOL 00 — VOL 50, [8]		
P-SEARCH Programme search	ON	 Using the AF data, the unit tunes in to another frequency broadcasting the same programme as the original preset RDS station is if the preset station signals are not sufficient. [Initial]; Cancels. 		

Indications	Selectable settings, [reference page]			
DAB AF*1 Alternative frequency reception	AF OFF	: [Initial]; Traces the programme among DAB services and FM RDS stations, [9, 18]. : Cancels.		
DAB VOL*1 DAB volume adjustment		ljust the volume level (VOL -12 — VOL $+12$) of DAB tuner are FM sound level and store it in memory. $DL 00$]		
DIMMER Dimmer	 AUTO : [Initial]; Dims the display when you turn on the headlights. ON : Activates dimmer. OFF : Cancels. 			
ILL SW Illumination switch	You can se GREEN [Initial: Gr			
SCROLL*2 Scroll	 ONCE : [Initial]; Scrolls the track information once. AUTO : Repeats scrolling (5-second intervals in between). OFF : Cancels. Pressing DISP for more than one second can scroll the display regardless of the setting. 			
AUX ADJ Auxiliary input level adjustment	A. ADJ 00	- A. ADJ 05: Adjust the auxiliary input level accordingly, to avoid the sudden increase of the output level when changing the source from external component connected to the AUX input jack on the control panel. [Initial: A. ADJ 00]		
TAG DISP Tag display	TAG ON TAG OFF	: [Initial]; Shows the Tag information while playing MP3/WMA tracks, [11]. : Cancels.		
IF BAND Intermediate frequency filter	AUTO WIDE	 : [Initial]; Increases the tuner selectivity to reduce interference noises between close 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. 		

^{*1} Displayed only when DAB tuner is connected.
*2 Some characters or symbols will not be shown correctly (or will be blanked) on the display.

iPod®/D. player operations

This unit is ready for operating an Apple iPod or a JVC D. player from the control panel.

Before operating your iPod or D. player: 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.
- For details, refer also to the manual supplied with the interface adapter.

Caution:

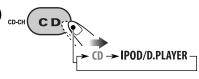
Make sure to turn off this unit or turn off the vehicle's ignition switch before connecting or disconnecting the iPod or D. player.

Preparations:









Playback starts automatically from where it has been paused*1 or stopped*2 previously.

3 Adjust the volume.





Adjust the sound as you want. (See page 12.)

 Make sure the equalizer on the iPod or D. player is deactivated.

To pause*1 or stop*2 playback To resume playback, press it again.	5
To fast-forward or reverse the track	Hold
To go to the next or previous tracks	

- *1 For iPod
- *2 For D. player

Selecting a track from the menu

1 Enter the main menu.



Now the $\triangle/\nabla/|\triangle|$ \triangle buttons work as the menu selecting buttons*3.

- *3 The menu selecting mode will be canceled:
 - If no operations are done for about 5 seconds.
 - When you confirm the selection of a track.

2 Select the desired menu.



For iPod:

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

For D. player:

PLAYLIST ↔ ARTIST ↔ ALBUM ↔ GENRE \leftrightarrow TRACK \leftrightarrow (back to the beginning)

3 Confirm the selection.



To move back to the previous menu, press A.

- If a track is selected, playback starts automatically.
- If the selected item has another layer, you will enter the layer. Repeat steps 2 and 3 until the desired track is played.
- Holding I◀◀ ▼/▶▶I ▲ can skip 10 items at a time.

Selecting the playback modes



2 Select your desired playback mode.

■ Repeat play



11 RPT

ONE RPT (RPT)

Functions the same as "Repeat One" of the iPod or "Repeat Mode → One" for the D. player.

ALL RPT (RPT)

Functions the same as "Repeat All" of the iPod or "Repeat Mode → All" for the D. player.

RPT OFF

Cancels.

Random play

12 RND



ALBM RND* RND



Functions the same as "Shuffle Albums" of the iPod.

SONG RND/RND ON RND

Functions the same as "Shuffle Songs" of the iPod or "Random Play \rightarrow On" of the D. player.

RND OFF

Cancels.

* For iPod: Only if you select "ALL" in "ALBUMS" of the main "MENU."

To check other information while listening to an iPod or a D. player



Other external component operations

You can connect an external component to the AUX (auxiliary) input jack on the control panel.

For listening to iPod or D. player, see pages 15 and 16.



For selecting the external component connected to AUX input jack.



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



Adjust the sound as you want. (See page 12.)

DAB tuner operations

What is DAB system?

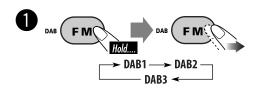
Digital Audio Broadcasting (DAB) can deliver digital quality sound without any annoying interference and signal distortion. Furthermore, it can carry text, pictures, and data. When transmitting, DAB combines several programmes (called "services") to form one "ensemble." In addition, each "service"—called "primary service"—can also be divided into its components (called "secondary service"). A typical ensemble has six or more programmes (services) broadcast at the same time.

By connecting the DAB tuner, this unit can do the following:

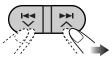
• Tracing the same programme automatically —Alternative Frequency Reception (see "DAB AF" on page 14).

It is recommended to use DAB tuner KT-DB1000 with your unit. If you have another DAB tuner, consult your JVC IN-CAR ENTERTAINMENT dealer.

• Refer also to the Instructions supplied for your DAB tuner.



2 Start searching for an ensemble.



When an ensemble is received, searching stops.

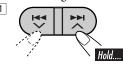
To stop searching, press the same button again.

Select a service (either primary or secondary) to listen to.

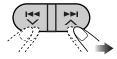


To tune in to an ensemble manually

Start searching for an ensemble, as in step 2 ...



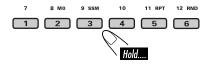
2 Select a desired ensemble frequency.



Storing DAB services in memory

You can preset six DAB services (primary) for each band.

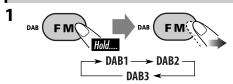
- 1 Select a service you want (see above).
- **2** Select the preset number (1 6) you want to store into.



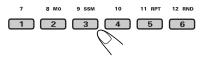


Preset number flashes for a while.

Tuning in to a preset DAB service



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



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

Tracing the same programme— Alternative Frequency Reception

You can keep listening to the same programme by activating the 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 14.

To change the display information while tuning to an ensemble



Service name → Ensemble name → Channel number → Frequency → Clock → (back to the beginning)

More about this unit

Basic operations

Turning on the power

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

<u>Turning off the power</u>

 If you turn off the power while listening to a disc, disc play will start from where playback has been stopped previously, next time you turn on the power.

Tuner operations

Storing stations in memory

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

FM RDS operations

- Network-Tracking Reception requires two types of RDS signals—PI (Programme Identification) and AF (Alternative Frequency) to work correctly. Without receiving these data correctly, Network-Tracking Reception will not operate 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.
- 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 page 13.)
- If you want to know more about RDS, visit «http://www.rds.org.uk».

Disc operations

Caution for DualDisc playback

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

General

 This unit has been designed to reproduce CDs/CD Texts, and CD-Rs (Recordable)/ CD-RWs (Rewritable) in audio CD (CD-DA), MP3, and WMA formats.

Inserting a disc

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

Playing a disc

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

Playing a CD-R or CD-RW

- Use only "finalized" CD-Rs or CD-RWs.
- This unit can play back only files of the same type which are first detected if a disc includes both audio CD (CD-DA) files and MP3/ WMA files.
- This unit can play back multi-session discs; however, unclosed sessions will be skipped while playing.
- Some CD-Rs or CD-RWs may not play back on this unit because of their disc characteristics, or for the following reasons:
 - Discs are dirty or scratched.
 - Moisture condensation occurs on the lens inside the unit.
 - The pickup lens inside the unit is dirty.
 - CD-R/CD-RW on which the files are written with "Packet Write" method.
 - There are improper recording conditions (missing data, etc.) or media conditions (stained, scratched, warped, etc.).
- CD-RWs may require a longer readout time since the reflectance of CD-RWs is lower than that of regular CDs.
- Do not use the following CD-Rs or CD-RWs:
 - Discs with stickers, labels, or a protective seal stuck to the surface.
 - Discs on which labels can be directly printed by an ink jet printer.

Using these discs under high temperatures or high humidities may cause malfunctions or damage to the unit.

Playing an MP3/WMA disc

- This unit can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
- This unit can show the names of albums, artists (performer), and Tag (Version 1.0, 1.1, 2.2, 2.3, or 2.4) for MP3 files and for WMA files.
- This unit can display only one-byte characters. No other characters can be correctly displayed.
- This unit can play back MP3/WMA files meeting the conditions below:
 - Bit rate: 8 kbps 320 kbps
 - Sampling frequency:
 48 kHz, 44.1 kHz, 32 kHz (for MPEG-1)
 24 kHz, 22.05 kHz, 16 kHz (for MPEG-2)
 48 kHz, 44.1 kHz, 32 kHz (for WMA)
 - Disc format: ISO 9660 Level 1/Level 2,
 Romeo, Joliet, Windows long file name
- The maximum number of characters for file/ folder names vary among the disc format used (includes 4 extension characters—<.mp3> or <.wma>).
 - ISO 9660 Level 1: up to 12 characters
 - ISO 9660 Level 2: up to 31 characters
 - Romeo*: up to 128 (60) characters
- Joliet*: up to 64 (30) characters
- Windows long file name*: up to 128 (60) characters
- * The parenthetic figure is the maximum number of characters for file/folder names in case the total number of files and folders is 271 or more.
- This unit can play back files recorded in VBR (variable bit rate).
 Files recorded in VBR have a discrepancy
 - in elapsed time display, and do not show the actual elapsed time. Especially, after performing the search function, this difference becomes noticeable.
- This unit can recognize a total of 512 files, of 200 folders, and of 8 hierarchies.

- This unit cannot play back the following files:
 - MP3 files encoded with MP3i and MP3 PRO format.
 - MP3 files encoded in an inappropriate format.
 - MP3 files encoded with Layer 1/2.
 - WMA files encoded with lossless, professional, and voice format.
 - WMA files which are not based upon Windows Media® Audio.
 - WMA files copy-protected with DRM.
 - Files which have the data such as WAVE, ATRAC3, etc.
- The search function works but search speed is not constant.

Changing the source

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

Ejecting a disc

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

General settings—PSM

• "AUTO" setting for "DIMMER" may not work correctly on some vehicles, particularly on those having a control dial for dimming. In this case, change the "DIMMER" setting to any other than "AUTO."

iPod® or D. player operations ■

- 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.
 - Some characters such as accented letters cannot be shown correctly on the display.
 - Depends on the condition of communication between the iPod or D. player and the unit.
- If the text information includes more than 8 characters, it scrolls on the display (see also page 14). 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: http://www.jvc.co.jp/ english/car/support/ks-pd100/index.html>

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

DAB tuner operations

- Only primary DAB services can be presetted 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.

Maintenance

Moisture condensation

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

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

How to handle discs

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

 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.



Center holder

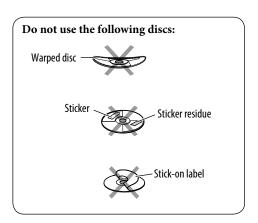
 Do not use any solvent (for example, conventional record cleaner, spray, thinner, benzine, etc.) to clean discs.

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.



Troubleshooting

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

	Symptoms	Remedies/Causes	
General	Sound cannot be heard from the speakers.	Adjust the volume to the optimum level.Check the cords and connections.	
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.	
FM	Static noise while listening to the radio.	Connect the aerial firmly.	
	Disc cannot be played back.	Insert the disc correctly.	
	CD-R/CD-RW cannot be played back. The control of R/CD R/CD R/CD R/CD R/CD R/CD R/CD R/CD	 Insert a finalized CD-R/CD-RW. Finalize the CD-R/CD-RW with the component 	
Disc playback	Tracks on the CD-R/CD-RW cannot be skipped.	which you used for recording.	
Discpl	Disc can be neither played back nor ejected.	 Unlock the disc (see page 11). Eject the disc forcibly (see page 2).	
	Disc sound is sometimes interrupted.	 Stop playback while driving on rough roads. Change the disc. Check the cords and connections.	
	Disc cannot be played back.	 Use a disc with MP3/WMA tracks recorded in the format compliant with ISO 9660 Level 1, Level 2, Romeo, or Joliet. Add the extension code <.mp3> or <.wma> to the file names. 	
back	Noise is generated.	Skip to another track or change the disc. (Do not add the extension code <.mp3> or <.wma> to non-MP3 or WMA tracks.)	
MP3/WMA playback	A longer readout time is required ("CHECK" keeps flashing on the display).	Do not use too many hierarchies and folders.	
MP	Tracks do not play back in the order you have intended them to play.	Playback order is determined when the files are recorded.	
	Elapsed playing time is not correct.	This sometimes occurs while playing. This is caused by how the tracks are recorded on the disc.	
	"NO FILES" appears on the display.	Insert a disc that contains MP3/WMA tracks.	
	Correct characters are not displayed (e.g. album name).	This unit can only display letters (upper case), numbers, and a limited number of symbols.	

	Symptoms	Remedies/Causes
	"NO DISC" appears on the display.	Insert a disc into the magazine.
	"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.
ě	• "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).
	The iPod or D. player does not turn on or does not work.	Check the connecting cable and its connection.Update the firmware version.Change the battery.
	Buttons do not work as intended.	The functions of the buttons have been changed. Press MODE before performing the operation.
	The sound is distorted.	Deactivate the equalizer either on the unit or the iPod/D. player.
	"NO IPOD" or "NO DP" appears on the display.	Check the connecting cable and its connection.
Pod/D. player playback	Playback stops.	The headphones are disconnected during playback. Restart the playback operation using the control panel (see page 15).
player p	No sound can be heard when connecting an iPod nano.	Disconnect the headphones from the iPod nano.
iPod/D.	 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 the 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.
	• "noSIGNAL" appears on the display.	Move to an area with stronger signals.
	• "RESET 8" appears on the display.	Connect this unit and the DAB tuner correctly and reset the unit (see page 2).
DAB	"ANTENANG" appears on the display.	Check the cords and connections.
	The DAB tuner does not work at all.	Reconnect this unit and the DAB tuner correctly and reset the unit (see page 2).

Specifications

AUDIO AMPLIFIER SECTION

Maximum Power Output:

Front: 50 W per channel Rear: 50 W per channel Continuous Power Output (RMS):

Front: 19 W per channel into 4 Ω , 40 Hz

to 20 000 Hz at no more than 0.8%

total harmonic distortion.

Rear: 19 W per channel into 4Ω , 40 Hz

to 20 000 Hz at no more than 0.8%

total harmonic distortion.

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

Tone Control Range:

Bass: $\pm 10 \text{ dB}$ at 100 Hz Treble: $\pm 10 \text{ dB}$ at 10 kHz

Frequency Response: 40 Hz to 20 000 Hz

 $\label{eq:signal-to-Noise Ratio: 70 dB} $$ Line-Out Level/Impedance: $$ 2.5 \ V/20 \ k\Omega \ load \ (full \ scale) $$$

Output Impedance: 1 k Ω

Other Terminals:

CD changer, AUX (auxiliary) input jack

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

[MW Tuner]

Sensitivity: $20 \mu V$ Selectivity: 35 dB

[LW Tuner]

Sensitivity: 50 µV

CD PLAYER SECTION

Type: Compact disc player

Signal Detection System: Non-contact optical

pickup (semiconductor laser)

Number of Channels: 2 channels (stereo) Frequency Response: 5 Hz to 20 000 Hz

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

Wow and Flutter: Less than measurable limit

MP3 Decoding Format: MPEG1/2 Audio Layer 3 Max. Bit Rate: 320 kbps

WMA (Windows Media® Audio) Decoding

Format:

Max. Bit Rate: 192 kbps

GENERAL

Power Requirement:

Operating Voltage:

DC 14.4 V (11 V to 16 V allowance)

Grounding System: Negative ground Allowable Operating Temperature:

0°C to +40°C

Dimensions (W \times H \times D):

Installation Size (approx.):

 $180 \text{ mm} \times 100 \text{ mm} \times 148 \text{ mm}$

Set Size (approx.):

 $188 \text{ mm} \times 100 \text{ mm} \times 175 \text{ mm}$

Mass (approx.):

2.0 kg (excluding accessories)

Design and specifications are subject to change without notice.

- 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.

Having TROUBLE with operation? Please reset your unit

Refer to page of How to reset your unit



