

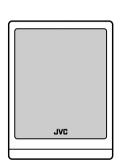


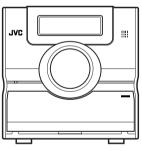
COMPACT COMPONENT SYSTEM

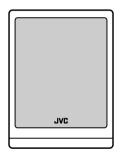
EX-D5

Consists of CA-EXD5 and SP-EXD1

















INSTRUCTIONS

Warnings, cautions and others

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- 1. Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

CAUTION — STANDBY/ON ७/| button!

Disconnect the mains plug to shut the power off completely (the STANDBY lamp goes off).

The STANDBY/ON U/I button in any position does not disconnect the mains line.

- When the system is on standby, the STANDBY lamp lights red.
- When the system is turned on, the STANDBY lamp lights green.

The power can be remote controlled.

CAUTION

- Do not block the ventilation openings or holes. (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

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 gualified service personnel.
- CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

CAUTION: Visible and invisible | ADVARSEL: Synlig og usynlig | VARNING : Synlig och | VARO: A vartaessa ja soplativibus | laser stadition when open and laserstillning rån maskiner en og synlig | absenstralning når ohtebuta ble vialidese old attilmer interfock staller of debated, able neller interfocken feller. I den öppnas och spärner är nävigelle ja raksynalliforatille AVOID DIRCT EXPOSURET ID Undgå direkte eksponering fill unkopplatd. Betrakta ej laserstallylike: Valta sätem BEAM. (e) staller st

Caution: Proper Ventilation

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

- 1. Front:No obstructions and open spacing.
- Sides/Top/Back:No obstructions should be placed in the areas shown by the dimensions below.
- Bottom:Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.

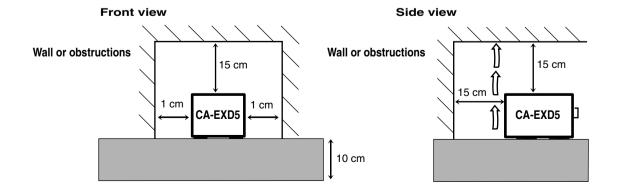


Table of contents

About discs	3
Description of parts	
Getting started	
Using the remote control	6
Putting the batteries in the remote control	6
Operating the TV using the remote control	
Connecting up	8
Selecting an AM interval spacing	11
Changing the color system	11
Basic operations	
Playing discs	12
Playback	
To switch the display	13
Select what you want to play by using	
the number buttons	
To stop playback	
To pause playback	
To advance picture frame-by-frame	
Fast reverse/Fast forward search Playing back from a position 10 seconds	14
before (One Touch Replay)	15
Slow Motion Playback	
Skip to the beginning of the selection	
To change the brightness of	
the display window (DIMMER)	16
Adjusting the volume	
Adjusting sound quality	
Turning off the sound temporarily (MUTING)	
Advanced operations	
Playing audio/video files	16
Resume Playback	
Select the scene to be played	
Program Playback/Random Playback	
•	
Repeat Playback	
Other convenient functions	
Selecting the subtitles	
Selecting the audio language	
Selecting a view angleEnlarging the picture (ZOOM)	
Adjusting the picture (200M)	
Creating realistic sound (3D PHONIC)	
Adjusting playback level (DVD LEVEL)	
, wasting playback lovel (DVD LLVLL)	20

Enjoying better pictures (SCAN MODE)........... 26

Functions specific to DVD AUDIO	3
Listening to radio	
Listening to a radio broadcast32	<u>-</u>
Tuning in to a preset station33	}
Convenient functions	
Using USB wireless transmission34	
Listening to the sound of other audio device 37	
Setting the various timer37	
Setting the built-in clock37	,
Setting the daily timer37	
Auto Standby38	
Sleep Timer39	
Tray Lock39	,
Reference	
Troubleshooting40)
Language codes41	
Specifications42	

How to read this manual

- · Operations are described by mainly using the remote control buttons. If there are the same marks on the main unit, the buttons on the main unit can also be used.
- The following marks tell you for which type of the discs the operation can be made.











JPEG

- The illustrations and TV screens may be different between the actual case and the description.
- "VCD" is an abbreviation of "Video CD". "SVCD" is an abbreviation of "Super Video CD".

Special cautions

Notes on handling

Important cautions

Installation of the system

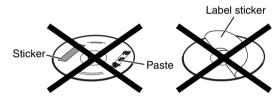
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the
- Do not use the system in a place subject to vibration.

Power cord

- Do not handle the power cord with wet hands.
- A small amount of power is always consumed while the power cord is connected to the wall outlet.
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



Note about copyright laws

Check the copyright laws in your country before recording from DVDs, VCDs, SVCDs, and CDs. Recording of copyrighted material may infringe copyright

Note about copy guard system

DVDs are protected by copy guard system. When you connect the system to your VCR directly, the copy guard system activates and the picture may not be played back correctly.

Safety precautions

Avoid moisture, water and dust

Do not place the system in moist or dusty places.

Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating device.

When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plug from the wall outlet.

Do not block the vents

Blocking the vents may damage the system.

Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

When condensation or water drops adhere to the

In any of the following cases, condensation or water drops may adhere to the lens to prevent the system from working properly:

- Immediately after starting to heat the room
- When the system is installed in a steamy or damp
- When the system is suddenly moved from a cold place to a warm space

In any of these cases, leave the system turned on for 1 or 2 hours before use.

Supplied accessories

Check to be sure you have all of the supplied accessories.

The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

- Remote control (1)
- Batteries (2)
- FM antenna (1)
- AM loop antenna (1)
- Power cord (1)
- Composite video cord (1)
- Speaker cords (2)
- USB wireless transmitter (1)
- Extension cable for the USB wireless transmitter (1)

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "MLP Lossless", and the double-D

symbol are trademarks of Dolby Laboratories. "DTS" and "DTS 2.0+DIGITAL OUT" are registered trademarks of Digital Theater Systems, Inc. This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

About discs Introduction

Playable disc types

This system has been designed to play back the following discs:

DVD VIDEO, DVD AUDIO, VCD, SVCD, CD

This system can also play back the following discs:

- Finalized DVD-R/-RW discs recorded in the DVD VIDEO format.
- · CD-R/RW discs recorded in the following formats
 - · Music CDs (finalized discs)
 - VCDs
 - SVCDs
 - MP3/WMA/JPEG discs recorded in ISO 9660 (for details, refer to "Notes on CD-R and CD-RW")

However, some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them.

Only sounds can be played back from the following discs:

MIX-MODE CD CD-G CD-EXTRA CD TEXT

Discs you can play:

Discs you can play.		
Disc Type	Mark (Logo)	Video Format
DVD VIDEO	VIDEO TIM VIDEO	PAL/ NTSC
DVD AUDIO	AUDIO/VIDEO AUDIO	l
VCD	COMPACT VIDEO CD	PAL/ NTSC
SVCD	COMPACT VIDEO VIDEO SUPER VIDEO	PAL/ NTSC
CD	COMPACT DIGITAL AUDIO	
CD-R	COMPACT CITCH DIGITAL AUDIO Recordable	_
CD-RW	COMPACT DIGITAL AUDIO REWritable	_

is a trademark of DVD Format/Logo Licensing Corporation.

* Note on Region Code

DVD players and DVD VIDEOs have their own Region Code numbers. This system can only play back a DVD VIDEO recorded with the Region Code number and video format mentioned below.

For your available Region Code, check the rear panel of your main unit.

This system can play back only DVD VIDEOs whose Region Code numbers include "4".

Examples:









If a DVD VIDEO with an improper Region Code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

 On some DVD VIDEOs, DVD AUDIOs, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this system.

Notes on DVD-R and DVD-RW

 This system can also play finalized DVD-Rs or DVD-RWs recorded in DVD-Video format.

Notes on CD-R and CD-RW

- This system can also play CD-Rs or CD-RWs if MP3, WMA, and JPEG files are recorded on them with ISO 9660 format.
- This system supports "multi-session" discs (up to 20 sessions).
- This system cannot play "packet write" (UDF format) discs. Some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them.

Discs that cannot be played back

 The following discs cannot be played back: DVD-ROM, DVD-RAM, DVD-R/-RW (recorded in VR format), CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.

Playing back these discs will generate noise and damage the speakers.

Damaged discs and discs in an extraordinary shape (other than a disc of 12 cm or 8 cm in diameter) cannot be played back.

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.

About discs (continued)

Notes on all files

- The system can only recognize and play files with one of the following extensions, which can be in any combination of upper and lower case;
 • MP3: ".MP3", ".mp3"
 • WMA: ".WMA", ".wma"
 • JPEG: ".JPG", ".JPEG", ".jpg", ".jpeg"
- If a character other than single byte English characters is used in the file name of an MP3/WMA/JPEG file, the track/file name will not be displayed correctly.
- The system recognizes up to 150 tracks (files) per group, 99 groups per disc, and the total number of the tracks (files) that the system can play is 1 000.
- Some files may not be played back normally because of their disc characteristics or recording conditions.

For MP3/WMA files

- An off-the-shelf MP3 disc may be played in an order different from that indicated on the label attached to the disc.
- The system supports MP3/WMA files recorded with a bit rate of 32 - 320 kbps and a sampling frequency of 16 kHz, 22.05 kHz, 24 kHz (WMA only), 32 kHz, 44.1 kHz, or 48 kHz.
- If the tag information (album name, artist, and track title, etc.) is recorded on a disc, it appears in the file control display on the TV screen.
- We recommend to record each piece of material (song) at a sample rate of 44.1 kHz and at a data transfer rate of 128 (96 for WMA only) kbps.
- This system cannot play back files encoded with Multiple Bit Rate (MBR). (MBR is a format to encode a file content at several different bit rates.)

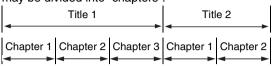
For JPEG files

- We recommend to record a file at 640 x 480 resolution.
- This system can play a baseline JPEG file, excluding monochromatic JPEG files.
- This system can play JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function is applied such as the automatic rotation function of a digital camera, data goes beyond the DCF standard, so the image may not be displayed).
- If data has been processed, edited and restored with PC image editing software, the data may not be displayed.
- This system cannot play animations such as MOTION JPEG, or still images (TIFF etc.) other than JPEG, and image data with sound.
- An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.

Disc structure

DVD VIDEO

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".



DVD AUDIO

A DVD AUDIO consists of "groups" and each group may be divided into "tracks".

Some discs include a "bonus group" that requires a password for playing (page 27).



VCD/SVCD/CD

VCD, SVCD and CD consist of "tracks".

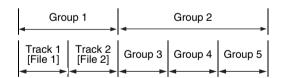
In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



MP3/WMA [JPEG] discs

On an MP3/WMA [JPEG] disc, each still picture (material) is recorded as a track [file]. Tracks [Files] are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

This unit simplifies the hierarchical construction of a disc and manages folders by "groups".

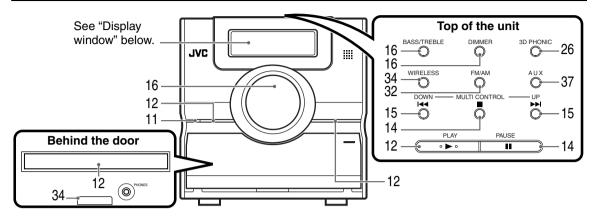


This product can recognize up to 1 000 tracks [files] in a disc. Also, the product can recognize up to 150 tracks [files] per group and up to 99 groups in a disc. Since the unit ignores the tracks [files] whose numbers are exceeding 150 and the groups whose numbers are exceeding 99, they cannot be played back.

 If there is any type of files other than MP3/WMA [JPEG] files in a folder, those files are also counted in the total file number.

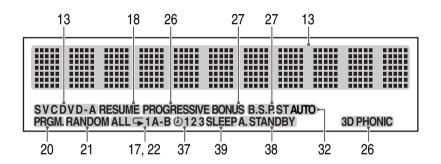
The numbers represent the page numbers.

Front panel

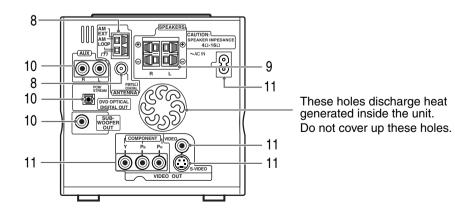


* Connect headphones (not supplied) with a stereo mini plug. If the headphones are connected, the speakers and subwoofer will not produce any sound.

Display window

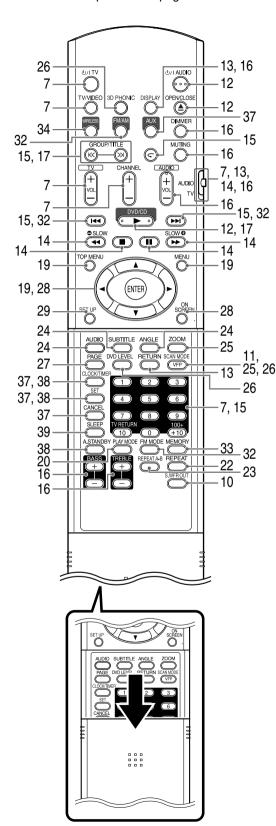


Rear panel

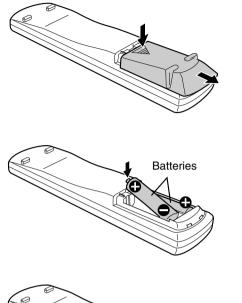


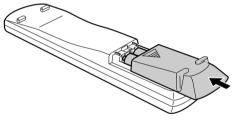
Using the remote control

The numbers represent the page numbers.



Putting the batteries in the remote control





If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6 (SUM-3)/AA(15F) type dry-cell batteries.

CAUTION

- Do not use a used battery and a new battery together.
- Do not use different types of batteries at the same time.
- Take out the batteries if the remote control is not to be used for a long time. Otherwise it may cause a leakage.

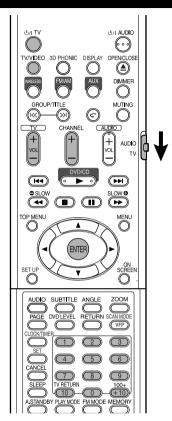
Remote control operation

When operating the remote control, point it towards the front panel of the main unit. If the remote control is operated from a direction that is extremely oblique or when there is an obstacle in the way, signals may not be transmitted.

If the remote control sensor is exposed to a strong light such as direct sunlight, correct operation may not be carried out.

This page is for when operating your TV using the remote control of this product.

Operating the TV using the remote control



Setting the manufacturer's code

1 Slide the remote control mode selector to the TV side.



2 Keep pressing down U/ITV.

NOTE

Keep pressing down U/I TV until Step **4** is complete.

3 Press ENTER.

4 Press number buttons (1-9, 0).

Ex.:

For a Hitachi TV: Press 1, then 0. For a Toshiba TV: Press 0, then 8.

If there are more than one manufacturer's codes, try them in turn and select the one that causes the product to work properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
RCA	05	Zenith	09

NOTE

Manufacturer's codes may be changed without notice. You may not be able to operate a TV produced by the manufacturer shown above.

5 Release ७/۱ TV.

For TV operation

Operate the remote control by pointing it towards the TV.

©/ITV	Turn ON/OFF the power.	
CHANNEL +	Change channels.	
TV + VOL	Adjust volur	me.
1 ~ 9 / 0 / +10	AUDIO TV 1	Select channels.
TV RETURN	Alternates between the previously selected channel and the current channel.	
TV/VIDEO	Switch TV a	and video input.

^{*1} Make sure to slide the remote control mode selector to the TV side in advance.

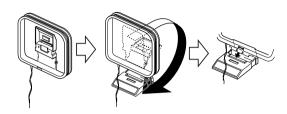
NOTE

When the batteries are replaced, perform the manufacturer's code setting again.

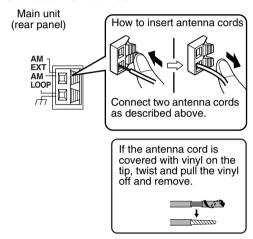
Connecting antennas

Connecting AM loop antenna (supplied)

1 Set up the AM loop antenna.

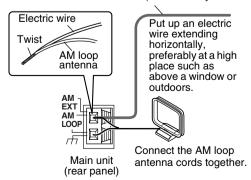


2 Connect antenna cords.

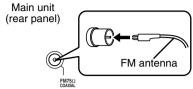


- 3 Turn the AM loop antenna to the direction of the best radio reception.
 - Locate the AM loop antenna as far away from the main unit as possible.
 - Do not locate the AM loop antenna on a metallic table or close to a TV, personal computer, etc.
 Otherwise it may result in bad radio reception.
- When good radio reception cannot be obtained with the supplied AM loop antenna

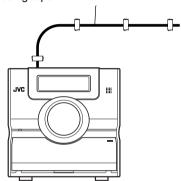
Electric wire: 3 - 5 m (commercially available)



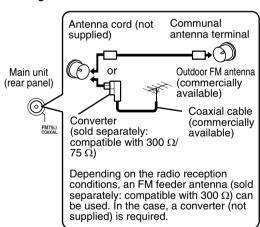
Connecting FM antenna (supplied)



Put the antenna up straight in the direction where the best radio reception can be obtained, and fix by using tape.



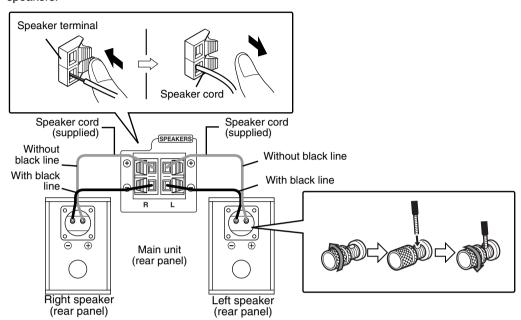
 When good radio reception cannot be obtained with the supplied antenna or when using a communal antenna



For details of connecting a separately sold antenna, refer to the user guide for the antenna or converter.

Connecting speakers

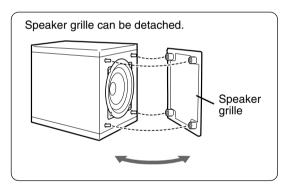
There is no difference between the left and right speakers.



CAUTION

- DO NOT connect more than one speaker to one speaker terminal.
- The speakers of this product are magnetically shielded, but color irregularities may occur on the TV depending on how the speakers are installed. Keep in mind the following.
 - Turn off the main power of your TV before installing the speakers. Wait for about 30 minutes before turning on the TV again.
 - If color irregularity occurs in pictures, keep a distance of more than 10 cm between the TV and the speakers.

The speakers employ natural wood for the diaphragm and the cabinet in order to reproduce the original sound faithfully. The appearance will therefore be different for each unit.



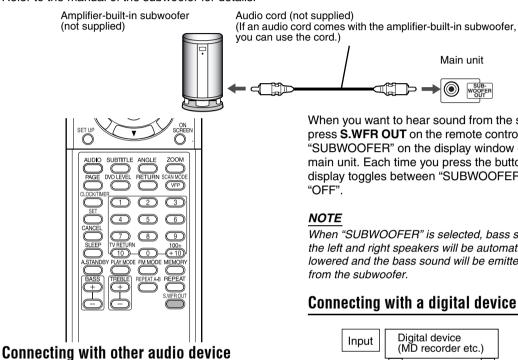
- Impedance of speaker that can be connected to the main unit is within a range of 4 Ω to 16 Ω .
- In order to have a sufficient cooling effect, leave a space of more than 1 cm between the main unit and the speakers or other objects.

Connecting other devices

This page is for when connecting the main unit with other devices

Connecting subwoofer

With an amplifier-built-in subwoofer (not supplied), you can enjoy a more dynamic bass sound. Refer to the manual of the subwoofer for details.



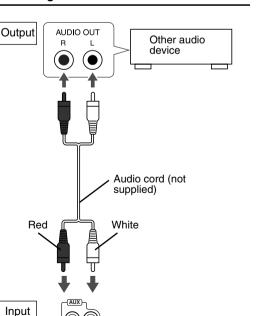
When you want to hear sound from the subwoofer. press S.WFR OUT on the remote control to display "SUBWOOFER" on the display window on the main unit. Each time you press the button, the display toggles between "SUBWOOFER" and "OFF".

Main unit

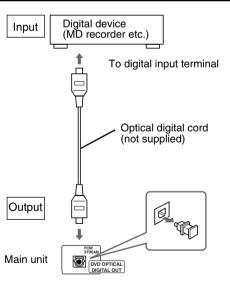
NOTE

When "SUBWOOFER" is selected, bass sound from the left and right speakers will be automatically lowered and the bass sound will be emitted mainly from the subwoofer.

Connecting with a digital device



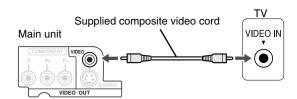
Main unit



CAUTION

- · For details of signals to be output, refer to page
- · If connecting the main unit with equipment with the function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO" (page 30) will be invalid regarding sound from the digital audio output of the main unit.

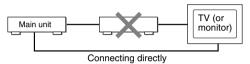
Connecting with TV



CAUTION

Connect the main unit directly with a TV (or a monitor) without routing through a VCR.

Otherwise it may cause picture distortion while playing.

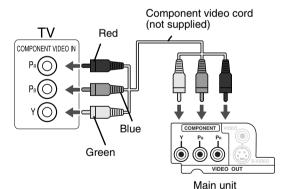


Also, when connecting the main unit to a TV with a VCR built in, there may be picture distortion while playing.

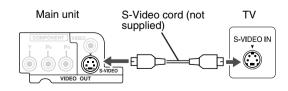
You can enjoy pictures of better quality using the following cord instead of the supplied video cord.

Connecting by using the component video cord

You can enjoy better quality pictures than when using the S-Video cord.



Connecting by using the S-Video cord



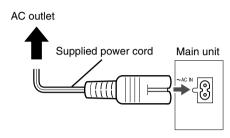
CAUTION

Use one of either the S-Video cord or the component video cord. If both cords are used, pictures may not be played properly.

NOTE

- In order to enjoy pictures with Progressive mode (page 26), the TV is required to have Progressive video input.
- If the component video input jacks of your TV are BNC type, use a plug adapter (not supplied) to convert the plugs.

Connecting the power cord



- Connect the power cord after all other connections are complete.
- The standby indicator (on the front panel) will be lit.

Selecting an AM interval spacing

You can change the AM interval spacing.

Some countries space AM stations 9 kHz apart, and some countries use 10 kHz spacing.

- Before doing the following procedure, select AM as source, then turn off the unit.
- . Use the buttons on the main unit.

To set the AM tuner to the 10 kHz spacing:

While holding ►►I, press STANDBY/ON ७/I.

To set the AM tuner to the 9 kHz spacing:

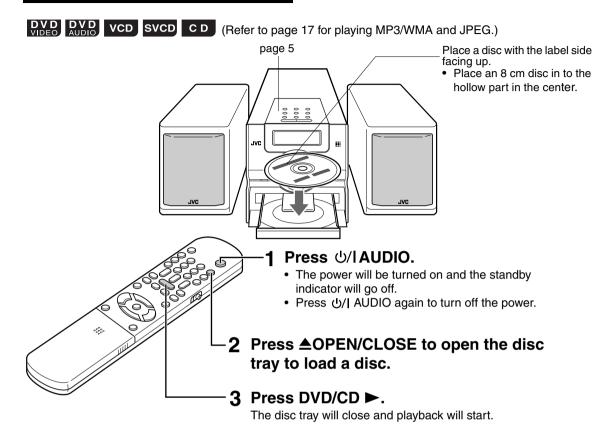
While holding I←, press STANDBY/ON ७/।.

Changing the color system

You can select the video output to match it to the color system of your TV (PAL or NTSC).

- 1 Press and hold VFP for 4 seconds while the system is turned off (on standby).
- 2 Press cursor
 ✓ to select the video output.
- 3 Press ENTER to set the video output.

Playback



The power will be turned on when any of PLAY
 , WIRELESS, FM/AM, AUX, or ≜ on the main unit and DVD/CD , WIRELESS, FM/AM, AUX, or ≜OPEN/CLOSE on the remote control is pressed while the power is off.

 If any button other than ≜ or ≜OPEN/CLOSE is pressed, the source will also be changed (if there is a disc loaded, playback will start).

NOTE

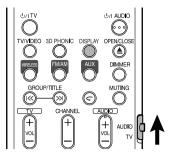
- A menu screen may be displayed on the TV after starting playback of a DVD/VCD/SVCD. In this case, select a desired item to playback by using the following buttons on the remote control.
 - Select a desired item using cursor ▲/▼/◄/► and press ENTER.
 - Select a desired item using the number buttons.
- Depending on the disc, actual operation may be different from the description.



Screens displayed on the TV when the power is turned ON.

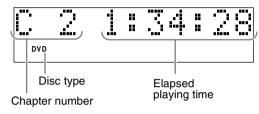
The following messages appear depending on the status of the system. (When FM, AM, WIRELESS or AUX is selected as a source, the messages do not appear.)

NOW READING	Appears when the system is reading the disc information. Wait for a while.
REGION CODE ERROR!	Appears when the Region Code of the DVD VIDEO does not match the code the system supports. (page 3)
NO DISC	Appears when no disc is loaded.
OPEN	Appears when opening the disc tray.
CLOSE	Appears when closing the disc tray.
CANNOT PLAY THIS DISC	Appears when trying to play back an unplayable disc.



Display window during disc playback

Ex.: When a DVD VIDEO is played



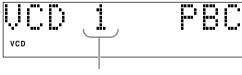
Ex.: When a DVD AUDIO is played



Track number

If "BONUS" or "B.S.P." is displayed during a DVD AUDIO playback, refer to page 27.

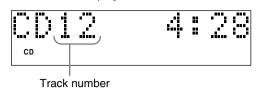
Ex.: When an SVCD or VCD is played



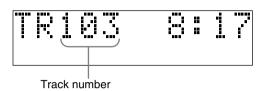
Track number

- When playing an SVCD, the SVCD indicator lights instead of the VCD indicator.
- PBC (Play Back Control): A signal recorded in a VCD (version 2.0) for controlling playback. It is possible to enjoy interactive software or software with a search function using a menu screen recorded in a PBC compatible VCD. To play a disc with the PBC function OFF, carry out the following operations.
 - Designate the track number using the number buttons while the disc is stopped.
 - Designate the track number using ►►I while the disc is stopped, and then press DVD/CD ►.
- Press RETURN to go back to the upper layer during the PBC playback of a VCD or SVCD.

Ex.: When a CD is played



Ex.: When an MP3/WMA file is played

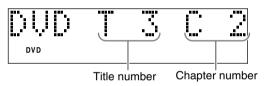


To switch the display

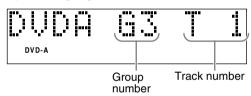
Press **DISPLAY**.

Each time you press the button, the display indication changes temporarily as follows:

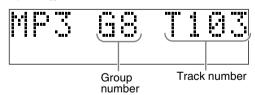
For DVD VIDEO



For DVD AUDIO



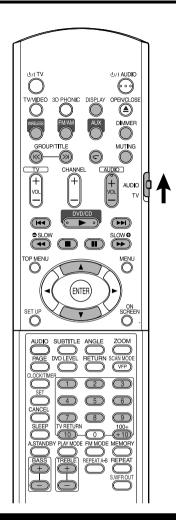
For MP3/WMA



For SVCD/VCD/CD

The clock time indication appears on the display window.

- Before setting the clock (page 37), "0:00" appears.
- When the unit is turned off, pressing DISPLAY turns off the clock indication to save the power consumption.



Select what you want to play by using the number buttons



NOTE

- Set the remote control mode selector to
 AUDIO before using the number buttons.

 AUDIO SELECTION OF THE PROPERTY OF TH
- For a VCD or SVCD, this operation can be carried out when the disc is stopped, or during playback without the PBC function.
- For a DVD AUDIO, CD, MP3/WMA or JPEG, this operation can also be carried out when the disc is stopped.
- This operation may not be carried out for some discs.

Designate the chapter number or track number to play during playback.

 Refer to "How to use the number buttons" on page 15.

To stop playback



Press ■ during playback.

To pause playback



Press II during playback.

To start normal playback again, press DVD/CD ▶.

 For JPEG slide-show, pressing DVD/CD ► starts playback from the next file.

To advance picture frame-by-frame



Press II during pause.

 Each time you press the button, picture will be advanced frame-by-frame.

Fast reverse/Fast forward search



Press **◄◄** or **▶▶** during playback.

 Each time you press the button, the speed increases (×2, ×5, ×10, ×20, ×60). To restore the normal speed, press DVD/CD ►.

- Fast reverse/Fast forward search cannot be carried out for MP3, WMA, and JPEG.
- For a DVD VIDEO, VCD or SVCD, no sound comes out during Fast reverse/Fast forward search.
- For a CD or DVD AUDIO, sound is intermittent during Fast reverse/Fast forward search.

Playing back from a position 10 seconds before (One Touch Replay)



Press \subset during playback.

NOTE

- This operation may not be carried out for some
- It is not possible to go back to the previous title.

Slow Motion Playback



pause.

- Each time you press the button, the playback speed increases ($\times 1/32$, $\times 1/16$, $\times 1/8$, $\times 1/4$,
- Press DVD/CD ➤ to start normal playback again.

NOTE

- No sound will be produced.
- · The picture motion in the reverse direction may not be smooth.
- · For a VCD or SVCD, Slow Motion Playback can be carried out in the forward direction only.

Skip to the beginning of the selection







Press | ◀ or ▶ b | during playback*.

- Press ►►I to skip the next chapter or track.
- Press I◄◄ once to skip back to the beginning of the chapter or track currently being played (except for JPEG).
- Press GROUP/TITLE K or ≫ to select the title
- During playback of a JPEG disc, press ►►I or cursor ▼ to play the next file, or press I◄◄ or cursor \(\Delta \) to play the previous file.

NOTE

- For a VCD or SVCD, this operation can be carried out during playback without the PBC function.
- Except for a DVD VIDEO, this operation can also be carried out while the disc is stopped.
- This operation may not be carried out for some discs.

How to use the number buttons

Ex.:

5: 5

15: (+10) → (5)

20: (+10) → (10)

25: $(+10) \rightarrow (+10) \rightarrow (5)$



Guide icons displayed on the TV screen (On-screen guide)



: Plav



: Pause



: Fast reverse/Fast forward search



: Slow Motion Plavback (reverse/forward directions)



: Containing multi-angle views (page 24)



Containing multi-audio languages (page 24)



: Containing multi-subtitle languages (page 24)



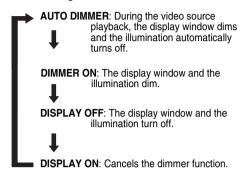
: The disc cannot accept the operation you have attempted.

Playing audio/video files

To change the brightness of the display window (DIMMER)

Press DIMMER repeatedly.

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



 When the unit is turned off, pressing DISPLAY turns off the clock indication to save the power consumption.

The items above can be carried out for all sources.

Adjusting the volume

Press AUDIO VOL +/-.

NOTE

The volume can be also adjusted by turning the **VOLUME** control on the main unit.

Adjusting sound quality

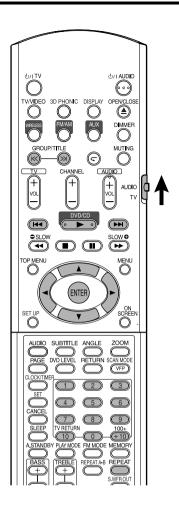
Bass: Press BASS +/-.
Treble: Press TREBLE +/-.

• Adjustable range: -5 to +5

Turning off the sound temporarily (MUTING)

Press MUTING.

- No sound will come out from the speakers, headphones and the subwoofer.
- Press MUTING again to restore the sound.



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Playback

MP3 JPEG

Display of an MP3/WMA disc is described here as an example.

For a JPEG disc, read "track" as "file".

NOTE

When playing a disc containing both MP3/WMA and JPEG files, set one of them to be played, then turn on the system again (page 29).

1 Load a disc.

Current group /total Playback mode (PROGRAM, group number RANDOM, REPEAT) Elapsed playing time of Tag information (for current track (for MP3/ MP3/WMA) WMA) FILE PROGRAM REPEAT STEP TIME 00:02:15 : 10 / 30 (Total 01. Cloudy.mp3 Red 02. Fair.mp3 Green 03. Fog.mp3 04. Hail.mp3 05. Indian summer.mp3 06. Rain.mp3 Track Information Title 07. Shower.mp3 08. Snow.mp3 Weathe 09. Thunder.mp3 Artist 10. Typhoon.mp3 11. Wind.mp3 Album 12. Winter sky r Vature Current track Current group (file) Current track (file) / Total track (file) total track (file) number on disc number on current aroup

Playback status

- 2 Press cursor **△**/▼ to select a group.
- 3 Press cursor ► to move to the track list.
 - Press cursor

 to go back to the group list.
- 4 Press cursor **△**/▼ to select a track.

5 Press DVD/CD ► or ENTER.

NOTE

- GROUP/TITLE KK, ≫I can also be used in Step 2.
- The number buttons can also be used in Step 4. In this case, Step 5 is not needed. (For how to use the number buttons, refer to page 15.)
- I◄◄ or ➤►I can also be used in Step 4. In this case, Step 5 is not needed.

Repeat playback

MP3 WMA JPEG

1 Press REPEAT.

• Each time you press the button, the Repeat mode and its indication change as follows:

Repeat items	On the TV	On the display window
Current track (MP3/WMA only)	REPEAT TRACK	REP TRK
Current group	REPEAT GROUP	REP GRP ←
Entire disc	REPEAT ALL	REP ALL
Cancel	No indication	REP OFF
Current track during Program/ Random play (MP3/WMA only)	REPEAT STEP	REP STEP G1
All tracks during Program/Random play (MP3/WMA only)	REPEAT ALL	REP ALL all ⊊

2 Press DVD/CD ▶.

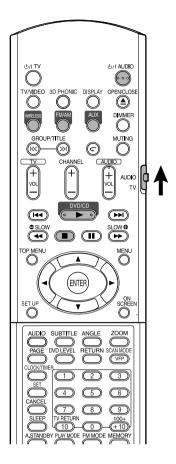
NOTE

- The Repeat types can be changed during playback.
- The Repeat mode will be automatically canceled if there is a file that cannot be played (page 3).

Slide-Show Playback JPEG

- In Step **5**, for a JPEG disc, when **DVD/CD** ▶ is pressed, files will be continuously played from the selected file (Slide-Show Playback), and when **ENTER** is pressed, only a selected file will be played.
- Display time for a file in Slide-Show Playback is about 3 seconds.
- When all files are played through, the playback will be automatically stopped.

Resume Playback



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



DVD DVD VCD SVCD

This system can store the stop point, and when you start playback again by pressing DVD/CD ► (even while on standby), it starts from the position where you have stopped—Resume Play. The RESUME indicator lights on the display window when you stop playback.

How to suspend playback

Perform any of the following operations during playback.

Press ■ once.*

Press 也/ AUDIO to turn off the power.

Change the source to WIRELESS, FM, AM or AUX.* $\,$

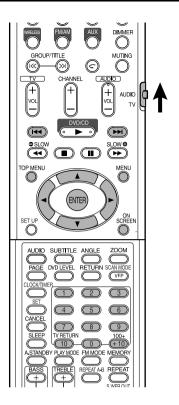
* Even if the power is turned off by pressing U/| AUDIO after this, the position where playback has been stopped will be stored.



To start playback from the stored position

Press DVD/CD ▶.

- This function does not work in Program Playback or Random Playback.
- The position where playback starts again may be a little different from the stopped position.
- When a disc menu is displayed, the Resume function may not work.
- The audio language, the subtitle language and the angle at that time are stored as well as the stopped position.
- The stored position will be cleared if the disc tray is opened. Further, if ■ is pressed during playback, "RESUME" will be displayed. If ■ is pressed again, the stored information will be cleared.
- At the time of purchase, Resume is set to ON.
 Resume can be set to OFF (page 30).



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Select the scene from the menu

DVD DVD VCD SVCD

- 1 Press MENU or TOP MENU while the disc is stopped or during playback*1.
 - The disc menu screen will be displayed.
 - Only TOP MENU can be used for DVD AUDIOs.
- 2 Press cursor ▲/▼/◄/► (only for a DVD VIDEO or DVD AUDIO) or the number buttons to select the scene to be played.
 - Refer to "How to use the number buttons" (page 15).

3 Press ENTER.

NOTE

- *1 For a VCD and SVCD, this operation can be carried out only when the PBC function is off.
- This operation cannot be carried out for a disc without a menu screen.
- Playback may start for some discs without pressing ENTER.

Designate the time (Time search)

DVD DVD VCD SVCD C D

1 Press ON SCREEN twice during playback².

The menu bar will be displayed (page 28).

- Press cursor **◄/►** to select **②→**|.
- 3 Press ENTER.
- 4 Input the time^{*3} using the number buttons (1-9, 0).

Ex.: When you want to play a DVD VIDEO from the position of (0 hour) 23 minutes 45 seconds, press the buttons in the order:



If you input wrong numbers, press cursor
 to delete the numbers and re-input.

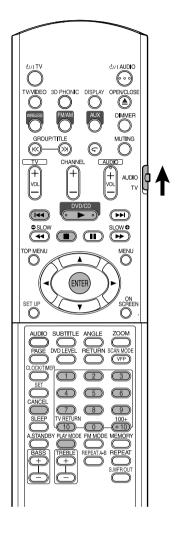
5 Press ENTER.

To delete the menu bar, press ON SCREEN.

- This function does not work for a DVD VIDEO with no time information recorded.
- This function does not work during Program or Random Playback.
- *2 For a VCD and an SVCD, the operation can be carried out when the disc is stopped or during playback without the PBC function.
- *3 Time search for a DVD VIDEO is from the beginning of the title, for a DVD AUDIO from the beginning of the track being played. Time search for a VCD, an SVCD and a CD is as follows:
 - When the disc is stopped, time search is from the beginning of the disc.
 - When the disc is being played, time search is within the track currently being played.

Program Playback/Random Playback





NOTE

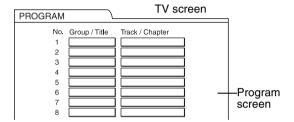
Set the remote control mode selector to **AUDIO** before using the number buttons.



Play the disc in the desired order (Program Playback)

It is possible to program a maximum of 99 chapters or tracks. The same chapter or track can be programmed more than once.

1 While the disc is stopped, press PLAY MODE repeatedly to display "PROGRAM" on the display window on the main unit.



2 Create a program following the description on the TV screen.

Refer to "How to use the number buttons" (page 15).

- The input content varies depending on the disc type.
 - DVD VIDEO: Titles and chapters
 - · VCD, SVCD, CD: Tracks
 - DVD AUDIO, MP3/WMA:

Groups and tracks

- To select a DVD AUDIO bonus group, carry out the operations of "Playing the Bonus Group" on page 27 in advance to erase the display "BONUS".
- If the input number of chapters or tracks is greater than 99, "MEM FULL" will be displayed.
- In the case of a VCD, SVCD or CD, when the total playback time reaches 9 hours 59 minutes 59 seconds, "--:--" will be displayed on the display window (it is possible to continue programming).

To program on the display window on the main unit, operate as follows:

- (1) Select a title/group using the number buttons.
- Designate a chapter/track number using the number buttons.
 - Refer to "How to use the number buttons" (page 15).
 - The program number will be displayed on the lower display window (Ex.: "P2").
- (3) Repeat the above operations (1) and (2) to complete the program. Then, advance to Step 3.

NOTE

- The group/title number flashes on the display window after making each program step.
- Only for a DVD VIDEO, DVD AUDIO, VCD, or an MP3/WMA: If you press ENTER instead of designating a track/chapter number, "ALL" is displayed and all of the tracks/chapters in the selected group/title are programmed.

3 Press DVD/CD ▶.

- To resume normal playback, press PLAY MODE repeatedly to show the playback indication on the display window on the main unit while the disc is stopped. The program content will not be erased.
- The following operations erase the program content:
 - Press CANCEL repeatedly (Programs will be erased one by one)
 - Press while the disc is stopped
 - · Open the disc tray
 - Turn off the power

Playing the disc in a random order (Random Playback)

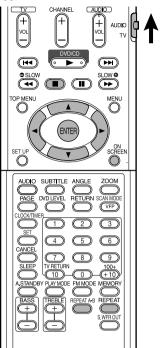
- 1 Press PLAY MODE repeatedly to display "RANDOM" on the display window on the main unit while the disc is stopped.
 - "RANDOM" will also be displayed on the TV screen.

2 Press DVD/CD ▶.

- The same chapter or track will not be played twice.
- To resume normal playback, press PLAY MODE repeatedly to show the playback indication on the display window on the main unit while the disc is stopped.
- Random Playback will also be canceled by carrying out the following operations:
 - Open the disc tray
 - Turn off the power
- The previous track will not be returned to even if I◄◄ is pressed repeatedly during Random Playback (the beginning of the current chapter or track will be returned to).

Repeat Playback

Refer to page 17 for Repeat Playback of MP3/WMA and JPEG files.



Playing the title/chapter/ group/track/all tracks repeatedly (REPEAT)



Press REPEAT during playback.

 Each time you press the button, the Repeat mode and its indication change as follows:

For DVD VIDEO

Repeat items	On the TV	On the display window
Current chapter	СНАР	REP CHAP ⊊1
Current title	TITLE	REP TTL
Cancel	OFF	REP OFF

For DVD AUDIO

Repeat items	On the TV	On the display window
Current track	TRACK	REP TRK
Current group	GROUP	REP GRP
Cancel	OFF	REP OFF

For CD/VCD/SVCD

Repeat items	On the TV	On the display window
Current track	TRACK	REP TRK
All tracks	Č)ALL	REP ALL
Cancel	OFF	REP OFF

NOTE

- For a VCD and SVCD, the operation can be carried out only when the disc is stopped or during playback without the PBC function.
- It is possible to set Repeat mode on the menu bar.
 For how to operate, refer to "Playing the designated part repeatedly (A-B Repeat Playback)" (page 23).
- For a DVD VIDEO and DVD AUDIO, if the source is switched to FM, AM, WIRELESS or AUX, the Repeat mode will be canceled.

Repeat Playback during Program or Random Playback

Repeat items	On the TV	On the display window
Current chapter/ track	STEP or REPEAT STEP	REP STEP
All tracks during Program/Random play	CALL or REPEAT ALL	REP ALL
Cancel	OFF or no indication	REP OFF

Playing the designated part repeatedly (A-B Repeat Playback)



1 Press ON SCREEN twice during playback.

The menu bar (page 28) will be displayed.

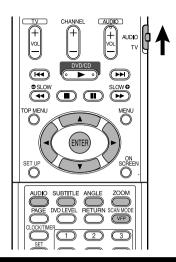
- **3** Press ENTER.
- 4 Press cursor ▲/▼ to display

A-B ■

Other Repeat modes can be selected here. For other Repeat modes, refer to "Playing the title/chapter/group/track/all tracks repeatedly (REPEAT)" (page 22).

- 5 Press ENTER at the start point of the part to be repeated (designating A point).
 - The icon on the menu bar will be 🖒 🕒 🗓.
- 6 Press ENTER at the end point of the part to be repeated (designating B point).
 - The icon on the menu bar will be and the part between A and B points will be played repeatedly.
 - A-B Repeat Playback will be canceled by carrying out the following operations:
 - Press ■.
 - Select 🖒 A-B and press **ENTER** twice.

- A-B Repeat Playback is possible only within the same title or track. A-B Repeat Playback cannot be carried out during PBC playback, Program Playback, Random Playback and Repeat Playback.
- You can do the A-B Repeat Playback using the REPEAT A-B button on the remote control.



Selecting the subtitles

DVD SVCD DVD AUDIO

(only for moving image)

1 Press SUBTITLE during playback of a disc containing subtitles in several languages.

Ex.:



 Each time you press the button, the subtitle will be alternated between ON and OFF.

2 Press cursor ▲/▼ to select a subtitle language.

- For a language code such as "AA", refer to "Language codes" (page 41).
- The manner of displaying subtitle languages may be different depending on the disc.
- 3 Wait for a few seconds or press ENTER to go off the window.

NOTE

- It is also possible to operate by using the menu bar (page 28).
- For an SVCD, each time you press SUBTITLE in Step 1, the subtitle type and OFF will be alternated.

Selecting the audio language



1 Press AUDIO during playback of a disc containing several audio languages.

Ex.:



- Each time you press the button, the audio language will be alternated. Also, the audio language can be changed by pressing cursor ▲/▼.
- For a language code such as "AA", refer to "Language codes" (page 41).
- "ST", "L" and "R" displayed when playing a VCD or SVCD respectively represent "Stereo", "Left sound" and "Right sound".
- **2** Wait for a few seconds or press ENTER to go off the window.

NOTE

It is also possible to operate by using the menu bar (page 28).

Selecting a view angle

DVD DVD VIDEO AUDIO

(only for moving image)

1 Press ANGLE during playback of a scene containing multi-view angles.

Ex.:



- Each time you press the button, the angle will be alternated. Also, the angle can be changed by pressing cursor ▲/▼.
- 2 Wait for a few seconds or press ENTER to go off the window.

NOTE

It is also possible to operate by using the menu bar (page 28).

Enlarging the picture



DVD VCD SVCD DVD JPEG





(only for moving image)

- Press ZOOM during playback or while paused.
 - Each time you press the button, the picture magnification will be changed.
 - (For a JPEG) You cannot change the picture magnification during slide-show playback.
- 2 Select the portion you want to see by using cursor $\triangle/\nabla/\triangle$.
 - To resume normal playback, select "ZOOM OFF" in Step 1.

Adjusting the picture







Press VFP during playback or while paused.

The current setting will be displayed on the TV screen.

NORMAL	
GAMMA	0
BRIGHTNESS	0
CONTRAST	0
SATURATION	0
TINT	0
SHARPNESS	0

- GAMMA: Adjust this if the neutral color is bright or dark. The brightness of dark and bright portion is maintained.
- BRIGHTNESS: Adjust this if the picture is bright or dark on the whole.
- . CONTRAST: Adjust this if the far and near position is unnatural.
- SATURATION: Adjust this if the picture is whitish or blackish.
- TINT: Adjust this if the appearance of flesh tone is unnatural.
- SHARPNESS: Adjust this if the picture is indistinct.

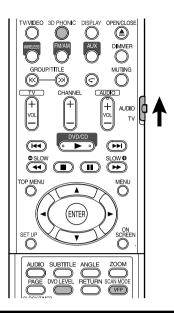
2 Press cursor **◄/>** to select VFP

- It is recommended to select "NORMAL" usually, or "CINEMA" in a dark room. When either "NORMAL" or "CINEMA" is selected, go to Step 7.
- · When either "USER 1" or "USER 2" is selected, the adjustment can be carried out in detail in the operations after Step 3.
- 3 Press cursor **▲/▼** to select an item to be adjusted.
- 4 Press ENTER.



- 5 Press cursor **△/**▼ to change the value.
- 6 Press ENTER. To adjust other items, go back to Step 3.
- Press VFP to go off the window.

- · If no operation is made for several seconds during the procedure, the settings made so far will be automatically stored.
- "VFP" is an abbreviation of "Video Fine Processor".



Creating realistic sound (3D PHONIC)









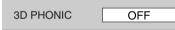


The two speakers produce an effect resembling surround-sound.

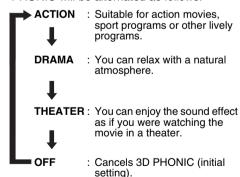
Press 3D PHONIC during playback.

Ex.:

TV screen



· Each time you press the button, the 3D PHONIC will be alternated as follows:



· While 3D PHONIC is activated, "3D PHONIC" appears and the 3D PHONIC indicator lights on the display window.

NOTE

- 3D PHONIC is effective for the speakers and headphones.
- When noise is produced or sound is distorted, set 3D PHONIC to "OFF".
- You cannot operate some DVD AUDIO discs.

Adjusting playback level (DVD LEVEL)

The audio of a DVD VIDEO may be recorded at a lower level (volume) than for other types of disc. If the difference is not to your liking, adjust the DVD Level

Press DVD LEVEL during playback.

- Each time you press the button, the level will be alternated among "NORMAL", "MIDDLE" and "HIGH".
- · Select the level while listening to the sound played.

NOTE

- DVD Level is effective only for playback of a DVD
- Even if the DVD Level is changed, the output level from the digital audio output terminal will not be changed.

Enjoying better pictures (SCAN MODE)

In the Progressive mode, better pictures can be enjoyed.

CAUTION

- In order to enjoy pictures in the Progressive mode, the following requirements should be met:
 - There must be a component video input terminal on the TV set connected to the main unit.
 - The main unit and the TV set must be connected using a component video cord (page 11).

When the above requirements are not satisfied, leave the main unit in the Interlace mode. If the Progressive mode is set, pictures may be distorted.

Press and hold SCAN MODE for 4 seconds when there is no disc loaded or while the disc is stopped.

• Each time you press and hold the button, the scan mode alternates between the "PROGRESSIVE" mode and the "INTERLACE" mode.

NOTE

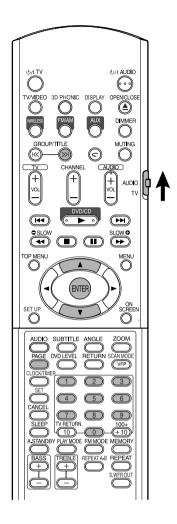
Progressive mode:

All scanned lines will be displayed at once. Pictures of higher resolution than those in the Interlace mode can be realized.

Interlace mode:

This is a conventional image method. Half of the scanned lines displayed in the Progressive mode will appear, alternating with the other half.





NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Playing the Bonus Group

There are some DVD AUDIO discs with a special group, called "Bonus Group", recorded.

NOTE

This operation can be carried out when "BONUS" is lit on the display window on the main unit.

- 1 Press GROUP/TITLE ≫ repeatedly during playback to select a bonus group.
 - "KEY____" appears on the TV screen, and on the display window on the main unit.
 - The bonus group is usually recorded as the last group.
- 2 Press the number buttons to enter a pin code (4 digits).

The method of getting a pin code may be different depending on the disc.

- 3 Press ENTER.
 - When a correct pin code is entered, "BONUS" disappears and the playback of the bonus group starts.
 - If an incorrect pin code is entered, try entering a correct pin code again.

Browsable Still Pictures (B.S.P.)

There are some DVD AUDIO discs with still pictures recorded. Among the still pictures, there are pictures called B.S.P. (Browsable Still Pictures). With these pictures, it is possible to switch a picture as if turning over pages.

NOTE

This operation can be carried out when "B.S.P." is lit on the display window on the main unit.

1 Press PAGE during playback.

Each time you press the button, the still picture will be switched over. It is also possible to switch the picture using cursor $\blacktriangle/\blacktriangledown$.

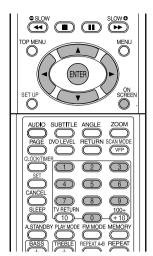
Ex.:



2 Wait for a few seconds or press ENTER to go off the window.

Using the menu bar





NOTE

- Set the remote control mode selector to AUDIO before using the number buttons.
- This operation can be carried out when there is a disc loaded. There are some functions that may not work while the disc is stopped.

1 Press ON SCREEN twice.

The status bar and the menu bar will appear on the TV screen.



The above is an example for a DVD VIDEO.

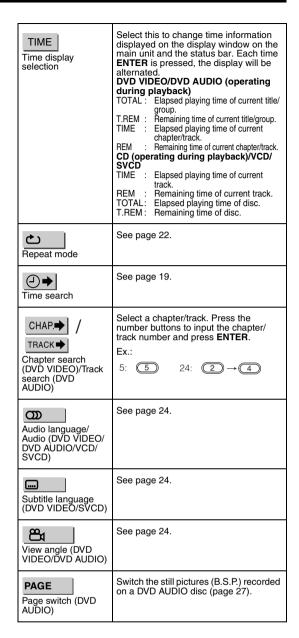
2 Press cursor **◄/►** to select an item to be operated.

3 Press ENTER.

- The selected function can be set. For the setting content, refer to the following "Functions list".
- · The currently active function shows.
- To delete the menu bar, press ON SCREEN.

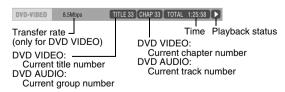
Functions list

For the functions with no special description for the operations, press cursor ▲/▼ to select, and press ENTER to determine.



Information displayed on the status bar

DVD VIDEO/DVD AUDIO (the example below is for a DVD VIDEO)



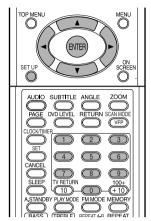
VCD/SVCD/CD (the example below is for a CD)



NOTE

The playback status mark has the same meaning of the mark on the On-screen guide (page 15).





The initial settings of the system can be changed according to the environment the system is used in.

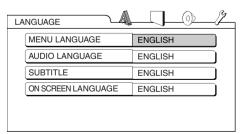
NOTE

- Set the remote control mode selector to **AUDIO** before using the number buttons.
 - ns. AUDIO
- The top and bottom of the preference screen may not be displayed on a wide TV. Adjust the picture size on the TV.

Basic operations

Press SET UP while the disc is stopped or no disc is loaded ("NO DISC" is displayed).

 The following screen will be displayed on the TV.



 Proceed with operations by following the description on the TV screen.



LANGUAGE

NOTE

 If the selected language is not recorded on the disc, the optimum language set for the disc will be displayed. • For a language code such as "AA", refer to the "Language codes" (page 41).

Items	Contents
MENU LANGUAGE	Select the language for the DVD VIDEO menu.
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.
SUBTITLE	Select the subtitle language for the DVD VIDEO.
ON SCREEN LANGUAGE	Select the language displayed on the preference screens.



PICTURE

Items	Contents (: initial setting)
MONITOR TYPE	Select a display method suitable for your TV. 16:9/16:9 MULTI: Select this when the aspect ratio of your wide TV is fixed to 16:9 (when playing a DVD VIDEO recorded at 4:3, the system automatically adjusts the screen width of the output signal). 4:3 LB/4:3 MULTI LB(Letter Box): Select this when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the black bars appear on the top and bottom of the screen. 4:3 PS/4:3 MULTI PS (Pan Scan): Select this when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the left and right edges of the picture will not be shown on the screen. (If the disc is not compatible with Pan Scan, the picture will be displayed at the Letter Box ratio.) • By selecting "MULTI" mode, the color system of the System changes automatically to match that of the loaded disc.
PICTURE SOURCE	Select an item suitable to the video source. AUTO: The video source type (a video or film) is automatically selected. FILM: Select this item when you want to view a film or video recorded with the progressive scan method. VIDEO: Select this item when you want to view a normal video.
SCREEN SAVER	Select the Screen Saver mode between ON / OFF (Screen Saver activates when there is no operation made for about 5 minutes since a still picture was last displayed).
FILE TYPE	If there are both MP3/WMA and JPEG files on a disc, you can select which files to play. AUDIO: Select this item when you want to play back MP3/WMA files. STILL PICTURE: Select this item when you want to play back JPEG files.

\bigcirc

AUDIO

-	
Items	Contents (: initial setting)
DIGITAL AUDIO OUTPUT	Select an output signal type from the following in accordance with the device connected to the digital audio output terminal (AV amplifier, etc.). (See the list below for the preference items and output signal.)
	PCM ONLY: Device corresponding only to linear PCM.
	DOLBY DIGITAL/PCM: Dolby digital decoder or a device having the same function.
	STREAM/PCM: DTS/Dolby digital decoder or a device having the same function.
DOWN MIX	Switch signal from the digital output terminal of the DVD VIDEO according to the connected device. Select this when Digital Audio Output is set to "PCM ONLY".
	DOLBY SURROUND: A Dolby Pro Logic decoder-built-in device.
	STEREO : An ordinary device.
	When 3D PHONIC is activated, Down Mix does not work.
D (Dynamic). RANGE COMPRESSION	To make adjustments for the difference between a high volume and a low volume when playing back with low volume (only for a DVD recorded with Dolby digital).
	AUTO: D. Range Compression automatically works.
	ON: D. Range Compression always works.



Items	Contents (: initial setting)
RESUME	Select ON /OFF. (page 18)
ON SCREEN GUIDE	Select ON /OFF. (page 15)
PARENTAL LOCK	Set the Parental Lock function to cut off violent scenes or replace the scenes with others. (This is effective only for discs equipped with the Parental Lock function.)
	COUNTRY CODE (page 31): Select your country.
	SET LEVEL: The restriction is stricter as the number becomes smaller. "NONE" is no restriction.
	PASSWORD (essential): Enter four-digit number as your password using the number buttons (1-9, 0) every time. (Enter "8888" if you forget your password.) The password is required at the time of playback.
	If you enter a wrong password three times, "EXIT" will be automatically selected.

List of relationships of DIGITAL AUDIO OUTPUT preference items and output signal

Playback disc		DIGITAL AUDIO OUTPUT	
	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
48 kHz, 16/20/24 bits Linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO	48	kHz, 16 bits stereo linear P	CM
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO	46 KHZ, 10 DIS SIEIEU IIIIEAI POW		
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	44.1 kHz, 16 bits stereo linear PCM		
DTS DVD VIDEO	DTS bit stream	48 kHz, 16 bits s	tereo linear PCM
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGITAL bit stream 48 kHz, 16 bits stered linear PCM		
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM/48kHz, 16 bits linear PCM		
DTS CD	DTS bit stream	44.1 kHz, 16 b	oits linear PCM
MP3/WMA disc	32/44.1/48 kHz. 16 bits stereo linear PCM		

- For a DVD VIDEO: There is a 20 bit or 24 bit output for DVD VIDEO without content protection set.
- For a DVD AUDIO: There is no output for DVD AUDIO with content protection set.

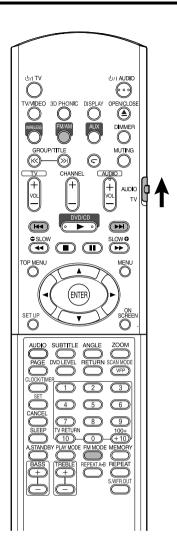
AD Andorra	
AE United Arab Em	nirates
AF Afghanistan	
AG Antigua and Ba	ırbuda
Al Anguilla	
AL Albania	
AM Armenia	
AN Netherlands An	itilles
AO Angola	
AQ Antarctica	
AR Argentina	
AS American Samo	оа
AT Austria	
AU Australia	
AW Aruba	
AZ Azerbaijan	
BA Bosnia and	
Herzegovina	
BB Barbados	
BD Bangladesh	
BE Belgium	
BF Burkina Faso	
BG Bulgaria	
BH Bahrain	
BI Burundi	
BJ Benin	
BM Bermuda	
BN Brunei Darussa	lam
BO Bolivia	
BR Brazil	
BS Bahamas	
BT Bhutan	
BV Bouvet Island	
BW Botswana	
BY Belarus	
BZ Belize	
CA Canada	
CC Cocos (Keeling)
Islands	,
CF Central African	
Republic	
CG Congo	
CH Switzerland	
CI Côte d'Ivoire	
CK Cook Islands	
CL Chile	
CM Cameroon	
CN China	
CO Colombia	
CR Costa Rica	
CU Cuba CV Cape Verde	
	d
	iu
CZ Czech Republic	
DE Germany	
DJ Djibouti	
DK Denmark	
DM Dominica	- نامان -
DO Dominican Rep	UDIIC
DZ Algeria	
EC Ecuador	
EE Estonia	
EG Egypt	
ELL 14/ . O .	
EH Western Sahara ER Eritrea	<u>a</u>

ES	Spain
ET	Ethiopia
FI	Finland
FJ	Fiji
FK	Falkland Islands
	(Malvinas)
FM	Micronesia
1 171	
	(Federated States of)
FO	Faroe Islands
FR	France
FX	France, Metropolitan
GA	Gabon
GB	United Kingdom
GD	Grenada
GE	Georgia
GF	French Guiana
GH	Ghana
GI	Gibraltar
GL	Greenland
GM	Gambia
GN	Guinea
GP	Guadeloupe
	· ·
GQ	Equatorial Guinea
GR	Greece
GS	South Georgia and
	the South Sandwich
	Islands
GT	Guatemala
GU	Guam
GW	Guinea-Bissau
GY	Guyana
HK	Hong Kong
HM	Heard Island and
1 11111	McDonald Islands
LINI	
HN	Honduras
HR	Croatia
HT	Haiti
HU	Hungary
ID	Indonesia
IE	Ireland
IL	Israel
IN	India
10	British Indian Ocean
	Territory
IQ	Iraq
IR	Iran (Islamic Republic of)
IS	Iceland
IT	Italy
JM	Jamaica
JO	Jordan
JP	Japan
KE	Kenya
KG	Kyrgyzstan
KH	Cambodia
KI	Kiribati
KM	Comoros
KN	Saint Kitts and Nevis
KP	Korea, Democratic
"	People's Republic of
KR	Korea, Republic of
KW	
	Kuwait
KY	Cayman Islands
1/-	
KZ	Kazakhstan
KZ LA	Lao People's

I I	
LC Saint Lucia	
LI Liechtenstein	
LK Sri Lanka	
LR Liberia	
LS Lesotho	
LT Lithuania	
LU Luxembourg	
LV Latvia	
LY Libyan Arab	
Jamahiriya	
MA Morocco	
MC Monaco	
MD Moldova, Republic of	of
MG Madagascar	
MH Marshall Islands	
ML Mali	
MM Myanmar	
MN Mongolia	
MO Macau	
MP Northern Mariana	
Islands	
MQ Martinique	
MR Mauritania	
MS Montserrat	
MT Malta	
MU Mauritius	
MU Mauritius MV Maldives	
MU Mauritius MV Maldives MW Malawi	
MU Mauritius MV Maldives MW Malawi MX Mexico	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay	
MU Mauritius MV Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay QA Qatar	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay QA Qatar RE Réunion	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay QA Qatar RE Réunion RO Romania	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay QA Qatar RE Réunion RO Romania RU Russian Federation	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PY Paraguay QA Qatar RE Réunion RO Romania RU Russian Federation RW Rwanda	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PW Palau PW Palau PW Palau PP Paraguay QA Qatar RE Réunion RO Romania RU Russian Federation RW Rwanda SA Saudi Arabia	
MU Mauritius MV Maldives MW Malawi MX Mexico MY Malaysia MZ Mozambique NA Namibia NC New Caledonia NE Niger NF Norfolk Island NG Nigeria NI Nicaragua NL Netherlands NO Norway NP Nepal NR Nauru NU Niue NZ New Zealand OM Oman PA Panama PE Peru PF French Polynesia PG Papua New Guinea PH Philippines PK Pakistan PL Poland PM Saint Pierre and Miquelon PN Pitcairn PR Puerto Rico PT Portugal PW Palau PW Palau PW Palau PW Palau RU Russian Federation RW Rwanda	

SD	Sudan
SE	Sweden
SG	Singapore
SH	Saint Helena
SI	Slovenia
SJ	Svalbard and Jan
	Mayen
SK	Slovakia
SL	Sierra Leone
SM	San Marino
SN	Senegal
SO	Somalia
SR	Suriname
ST	Sao Tome and Principe
SV	El Salvador
SY	Syrian Arab Republic
SZ	Swaziland
TC	Turks and Caicos
	Islands
TD	Chad
TF	French Southern
	Territories
TG	Togo
TH	Thailand
TJ	Tajikistan
TK	Tokelau
TM	Turkmenistan
TN	Tunisia
ТО	Tonga
TP	East Timor
TR	Turkey
TT	Trinidad and Tobago
TV	Tuvalu
TW	Taiwan
TZ	Tanzania, United
UA	Republic of
	Ukraine
UG	Uganda United States Minor
UIVI	Outlying Islands
US	United States
UY	Uruguay
UZ	Uzbekistan
VA	Vatican City State
"	(Holy See)
VC	Saint Vincent and the
.	Grenadines
VE	Venezuela
VG	Virgin Islands (British)
VI	Virgin Islands (U.S.)
VN	Viet Nam
VU	Vanuatu
WF	Wallis and Futuna
	Islands
WS	Samoa
YE	Yemen
YT	Mayotte
YU	Yugoslavia
ZA	South Africa
ZM	Zambia
ZR	Zaire
ZW	Zimbabwe

Listening to a radio broadcast



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Selecting a station

1 Press FM/AM.

Each time you press the button, FM and AM change alternately.

2 Press | ◄ ◄ / ▶ ► | to select the station (frequency).

Automatic tuning:

Hold down I◄◄/►►I until the system starts searching, and then release the button. (The AUTO indicator lights while searching.) When a station of sufficient signal strength is tuned in to, the system stops searching automatically.

To stop searching manually, press I◄◄/▶►I.

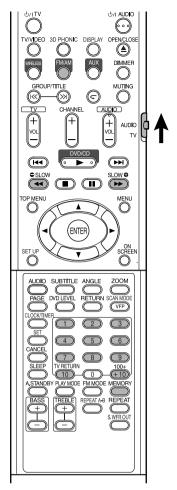
Manual tuning:

Each time you press I◄◄/▶►I, the frequency changes.

 When an FM stereo program is received, the ST (Stereo) indicator lights.

NOTE

If the stereo FM program currently tuned in to is noisy, you can improve the reception by pressing FM MODE to switch to the monaural mode. If you press FM MODE again, or tune in to another station, the receiving mode returns automatically to the stereo mode.



Presetting stations in the system allows you to easily tune in to a station.

NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Presetting stations

The system stores up to 30 FM stations and up to 15 AM stations.

- 1 Select a station you want to store (page 32 for how to select).
- 2 Press MEMORY.

"MEMORY" is flashing on the display window for a while.

- 3 Select the number you want to store by pressing number buttons while "MEMORY" is flashing.
 - You can also select the number by using the number buttons.
 - Refer to "How to use the number buttons" (page 15).
- 4 Press MEMORY while the selected number is flashing.

"STORED" appears on the display window and the selected station is stored.

NOTE

- Storing a new station to a used number erases the previously stored station.
- After storing new stations, do not unplug the AC power cord to turn off the system. If you do so, the new preset stations will be cleared.

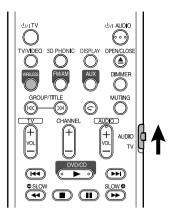
Tuning in to a preset station

- 1 Press FM/AM to select either FM or AM.
- 2 Press the number buttons to select the memory number of a station you want to tune in to.

Refer to "How to use the number buttons" (page 15).

You can also select by pressing ◀◀/▶▶.

Using USB wireless transmission



You can enjoy music from your PC through the wireless connection.

Remember you cannot send any signal or data to your PC from this system.

IMPORTANT

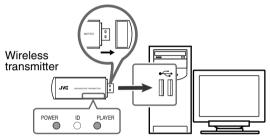
- Always set volume to "VOL MIN" when connecting or disconnecting the other equipment.
- When using USB wireless transmission to listen to music, AVOID
 - any shock/vibration/knocking to the transmitter
 - using any metal, plastic parts or your palm to cover up the transmitter
 - putting either transmitter or main unit or both of them near the microwave oven
 - plugging off the transmitter while playing back music and for several seconds until your PC detects the transmitter.

1 Turn on your PC and start running Windows.

 For smooth operation, do not run too many applications simultaneously when your PC has been turned on.

2 Connect the supplied wireless transmitter to the USB connector of the PC.

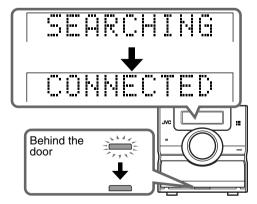
- Before connecting the transmitter to the PC, remove the cover of the transmitter.
- For Windows® Me, Windows® 2000, or Windows® XP: When you connect the transmitter, the PC will detect the transmitter automatically.
 - For Windows® 98/98SE: When you connect the transmitter for the first time, you need to install the driver (page 35).
- The POWER and PLAYER indicators on the transmitter light up.



 If your PC does not detect the transmitter, disconnect the transmitter and connect it again. If it does not work yet, restart Windows.

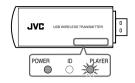
3 Press WIRELESS.

The system enters "wireless transmission" mode.



4 Start the music application and play any music on your PC.

The PLAYER indicator on the transmitter flashes.

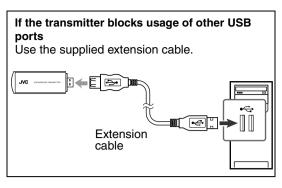


Your PC music is transmitted to the system. Enjoy listening!

How to install the driver (for Windows® 98/98SE)

For the first time the transmitter is connected, "Add New Hardware Wizard" appears after "New Hardware Found" message is shown for a while. Install the driver as follows using the Wizard.

- Prepare the Windows® 98/98SE installation CD-ROM supplied with your PC
- 1 Click "Next".
- 2 Select "Search for the best driver for your device (Recommended)," then click "Next".
- 3 Choose "CD-ROM drive" for the location of driver.
- 4 Insert the Windows® 98/98SE installation CD-ROM into the CD-ROM drive of the PC, then click "Next".
 - You may select to use "Specify a location" if your Windows® 98/98SE drivers already exist inside your PC hard disc.
- 5 Click "Next" again.
- 6 Click "Finish" to complete the installation.
 - You may need to restart Windows.



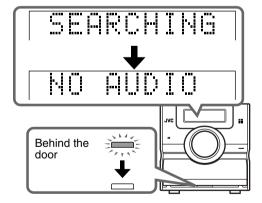
NOTE

- Refer also to the manuals supplied with the music application software installed in the PC.
- When not using the PC as the playback source, disconnect the transmitter.
- The music may not be played back correctly interrupted or degraded—due to your PC settings and PC specifications.
- The signal-reachable distance is about 20 m, but it may differ depending on the operating conditions and circumstances.
- Though the transmitter may become hot, it is not a malfunction.

If no music is played on the PC for about 30 minutes

The transmitter enters "sleep" mode ("SEARCHING" is displayed and the indicator behind the door flashes). Playing music from the PC will reactivate the wireless transmission.

 "NO AUDIO" is displayed and the indicator goes off 5 minutes after the system displays "SEARCHING" (or no music source is detected by the system).



If noise comes during playback or playback is interrupted with the wireless connection, try either operation below:

- press CHANNEL on the transmitter to search for another frequency. Each time you press CHANNEL, the frequency advances one channel up from CH 1 up to CH 13.
- press and hold CHANNEL for more than three seconds to make sure the transmitter detects the best frequency automatically.

If the transmitter has an influence on the wireless systems (based on IEEE 802.11b/11g, the cordless telephone, and the microwave oven), try the operations below:

- to keep the distance between the transmitter and the LAN antenna utilize the supplied extension cord.
- press CHANNEL on the transmitter to search for another frequency. Each time you press CHANNEL, the frequency advances one channel up from CH 1 up to CH 13.
- press and hold CHANNEL for more than three seconds to make sure the transmitter detects the best frequency automatically.

If no sound comes from the speakers, check the following items:

- check the transmitter is detected properly as follows: open the Control Panel on your PC, select [Sounds and Audio Devices] → [Audio] tab → [Sound playback] → [Default device], and check [Default device] is set to [USB Speaker]*.
- check the playback software on your PC is compatible with the USB device.
- · select "WIRELESS" as the source.
- · adjust the volume level on the system.

NOTE

* English version of Windows XP® is used for the explanation. If your PC is running on a different version of operation system or language, the description may differ.

For Windows® 98/98SE: open the Control Panel, select [Multimedia], choose [AUDIO] at Playback section, and make sure [USB Audio Device] is selected.

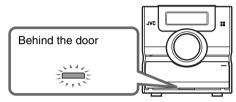
If you are playing back CD from your DVD/CD-ROM at [Multimedia] properties, select [CD Music] and click on to the box indicating [Enable digital CD audio for this CD-ROM device].

If the system keeps displaying "SEARCHING" while the transmitter is connected to the PC, check the following items:

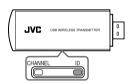
- keep proper distance between the system and your PC.
- no obstacles in between the transmitter and the main unit.

If the system still displays "SEARCHING," follow the procedure below.

- Make sure the transmitter is connected to the PC:
- 1 While pressing and holding ■, press STANDBY/ON ७/I on the main unit. The system enters "ID learning" mode. The indicator behind the door starts flashing fast.



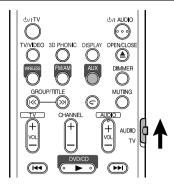
- · In 20 seconds:
- 2 Press and hold ID on the transmitter.



When the ID Learning is successful, the indicator behind the door stops flashing and lights up ("ID SYNC OK" is displayed).

* Microsoft®, Windows® 98/98SE, Windows® Me, Windows® 2000 and Windows® XP are registered trademarks of Microsoft corporation.

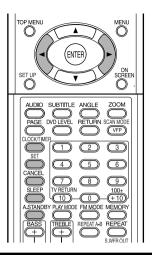
Listening to the sound of other audio device



Connect the other audio device to this system in advance (page 10).

- 1 Press AUX.
 The source changes to AUX.
- 2 Play the other audio device.
 For details, refer to the manual of the device connected.
- 3 Adjust the volume and the sound quality of the system (page 16).

Setting the various timer



Setting the built-in clock

Without setting the built-in clock, you cannot use any timers.

- To exit from the clock setting, press CLOCK/TIMER as required.
- To correct a misentry during the procedure below, pressing CANCEL can return to the previous step.

1 Press CLOCK/TIMER.



- If you have already adjusted the clock before, press the button repeatedly until the clock time starts flashing.
- 2 Press cursor

 → to adjust the hour, then press SET.
- 3 Press cursor **◄/►** to adjust the minute, then press SET.

Now the built-in clock starts to work.

Setting the daily timer

Using the daily timer, you can wake up with your favorite song.

- You can store the three daily timer settings; however, you can activate only one of the daily timer
- To correct a misentry during the procedure below, pressing CANCEL can return to the previous step.

How the daily timer works:

Once the daily timer has been set, the timer indicator and timer number indicator (1/2/3) are lit on the display window. Daily timer turns on the system at the same time everyday until the timer setting is canceled manually or another daily timer is activated.

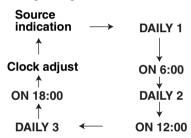
When the on-time comes:

The system turns on, tunes in to the specified station or start playback the loaded disc with the volume level set to the preset level.

- The timer setting remains in memory until you can change it.
- Without canceling the daily timer, you can change the source or adjust the volume after the daily timer starts playback.

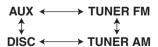
1 Press CLOCK/TIMER repeatedly to show "DAILY 1."

 Each time you press the button, the clock setting changes as follows:



- 3 Press cursor

 → to adjust the minute of the timer-on time, then press SET.
- 4 Repeat Step 2 and 3 to set the timer-off time.
- 5 Press cursor
 √> to select the playback source, then SET.
 - Each time you press the button, the clock setting changes as follows:



- When selecting the tuner, press cursor
 to select a preset channel.
- When selecting "DISC", you can specify the group and track. For the discs other than MP3/WMA, the group selection does not take effect.

- 6 Press cursor </br>
 √> to adjust the volume level, then SET.
- **7** Turn off the system.

To turn off the timer setting

- 1 Press CLOCK/TIMER repeatedly to select the timer setting.
- **2** Press CANCEL to turn off the selected setting.
 - Pressing **SET** activates the timer setting again.

Auto Standby

If there is no operation for 3 minutes while the disc is stopped, the power will be automatically turned off.

Press A.STANDBY during playback or while the disc is stopped, or no disc is loaded ("NO DISC" appears).

The A.STANDBY indicator lights on the display window on the main unit.

When a stopped state is entered (after playback is finished, for example), the A.STANDBY indicator starts blinking.

This means that the power will be turned off automatically if there is no operation for 3 minutes. And 10 seconds before the power is turned off, "A.STANDBY" starts flashing.

Releasing Auto Standby

Press A.STANDBY.

"A.STANDBY" will be turned off on the display window on the main unit.

NOTE

When the source is FM, AM, WIRELESS or AUX, Auto Standby does not work.

Sleep Timer

When the time you specify elapses, the system will be turned off by itself.

Press SLEEP.

Each time you press the button, the time indicated on the display window on the main unit changes (in minutes).

Changing the time

Reselect the time by pressing SLEEP repeatedly.

Confirming the time

Press SLEEP once while Sleep Timer is set.

Releasing

Press **SLEEP** repeatedly until "SLEEP OFF" appears.

NOTE

Sleep Timer will also be released when the power is turned off.

Tray Lock Convenient functions

You can lock the disc tray to prevent the disc from being ejected.

Setting

While the system is turned off, press ≜ (Open/Close) with ■ (Stop) on the main unit held. "LOCKED" appears on the display window on the main unit.

Releasing

Carry out the same operations as those for setting. "UNLOCKED" appears on the display window on the main unit.

Troubleshooting

When you encounter a problem that seems to be a fault, check the following points before contacting your JVC service center.

Power source

Power does not come on.

- The power cord is not connected to the main unit or an AC outlet.
 - → Connect the power cord correctly (page 11).

Operation

You cannot operate any button.

 Some specific operations may be inhibited for some discs.

The remote control does not work.

- The dry-cell batteries have run out.
 - → Replace the batteries (page 6).

■ A disc cannot be played back.

- In the case of DVD VIDEO discs
 - → Check the Region Code number of the discs (page 3).
- "NO PLAY" is displayed on the display window.

It is not a disc that can be played on this system.

- → Check the disc type (page 3).
- Parental Lock is set (page 30).

About images

■ No picture appears.

- · The video cord is not connected correctly.
 - → Page 11
- Both of the component video jack and S-Video jack are connected.
 - → Connect either (page 11).

■ The picture is distorted.

- A VCR is connected between the main unit and the TV set.
 - → Connect the main unit directly to the TV set (page 11).
- Although this system is connected to a non-Progressive TV set, DVD's scan mode is set to "PROGRESSIVE".
 - → Set the scan mode to "INTERLACE" (page 26).

The screen size is abnormal.

- The screen size is set improperly.
 - → Set "MONITOR TYPE" according to the TV set you are using (page 29).

■ The TV screen darkens.

- "SCREEN SAVER" is set.
 - → If set, press any button (page 29).

■ The screen cannot be switched.

 The Progressive mode is applied only to component video output.

About sound

There is no sound.

- · Speakers are not connected correctly.
 - → Page 9
- · The sound is muted.
 - → Page 16
- "NO AUDIO" is displayed on the display window.

The disc may have been produced through illegal copying.

→ Confirm at the store where you bought the disc.

■ The sound is weak compared with TV or Video.

- "DVD LEVEL" is set to "NORMAL".
 - \rightarrow Set to other than "NORMAL" (page 26).

■ The sound is distorted.

- · The volume is turned up too high.
 - → Turn down the volume (page 16).

No sound comes out of the subwoofer.

- · "SUBWOOFER" is turned off.
 - → Press **S.WFR OUT** to turn on (page 10).

The music through the wireless connection stops.

- Noise and static electricity may stop the music through the wireless connection. In this case, do the following operations:
 - → Disconnect and connect the wireless transmitter
 - → Restart the music software on your PC
 - \rightarrow Turn off and on the system

About radio

The sound is noisy while receiving/Receiving is disabled.

- · The antenna is not connected correctly.
 - → Connect the antenna correctly (page 8).

Others

It is not possible to switch audio or subtitles between languages.

- The disc does not contain 2 or more languages.
 - → If only a single language is recorded on the disc, switching to another language is impossible (page 24).

■ No subtitle is displayed.

- The disc does not contain any subtitles.
 - → A DVD VIDEO without subtitles cannot display any subtitles.
- The subtitle language is set to "OFF".
 - → Specify a language (page 29).
- Before or after A point or B point in A-B Repeat Playback, no subtitle may be displayed.

■ The disc cannot be ejected.

- · Tray Lock is set.
 - → page 39

"LR ONLY" is displayed on the display window (for a DVD AUDIO).

 Because, for the track being played back, down mix is inhibited for multi-channel sound, the sound of L and R is output directly (a normal action).

If the system does not work properly despite correction measures above

Many functions of this system are implemented by microcomputers. If pressing any button does not result in the normal action, disconnect the power plug from the outlet, wait for a while, and reconnect the system.

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

General

Power source: AC 240 V \sim , 50 Hz Power consumption: 25 W (in operation) 1.0 W (on standby)

Weight: 3.0 kg

External dimensions

 $(W \times H \times D)$: 150 mm x 152 mm x 246 mm

DVD player

Playable discs: DVD VIDEO, DVD AUDIO, VCD,

SVCD, CD, CD-R/RW (CD, VCD, MP3, WMA, JPEG format), DVD-R/-RW (video format)

Video output

Color system: PAL/NTSC Horizontal resolution: 500 lines

Composite x1: 1.0 V (p-p)/75 Ω ,

synchronization negative S-video x1: Y output: 1.0 V (p-p)/75 Ω,

synchronization negative

C output:

For PAL 0.3 V (p-p)/75 Ω For NTSC 0.286 V (p-p)/75 Ω

Component x1: Y output: 1.0 V (p-p)/75 Ω

P_B/P_R output: 0.7 V (p-p)/75 Ω

Audio output

Analog sound output: Speakers x2

> Output power: 18 W per channel, min.

RMS, at 4 Ω at 1 kHz with no more than 10% total harmonic distortion

Fitting impedance: 4 O to 16 O Headphones x1: 11 mW/32 Ω Fitting impedance: 16 Ω to 1 k Ω Subwoofer x1: 500 mVrms/10 k Ω

Digital sound output:

-21 dBm to -15 dBm Optical x1:

Audio input

Sound input: AUX x1

400 mV/50 k Ω

USB Wireless Transmission

The USB wireless transmitter supplied with this System supports Direct Sequence Spreading Spectrum (DSSS) using 2.4 GHz frequency band.

Tuner

FM tuner:

Receiving frequency: 87.5 MHz to 108.0 MHz Antenna: 75 Ω - Unbalanced type

AM tuner:

Receiving frequency: 530 kHz to 1 710 kHz

(at 10 kHz interval spacing) 531 kHz to 1 710 kHz (at 9 kHz interval spacing)

External antenna jack (loop Antenna:

antenna)

Speaker

Type: Full range

> 1-way bass-reflex type Magnetically shielded type

Speaker: 8 cm cone x1 Frequency response: 55 to 20 000 Hz

Power handling capacity: 30 W Impedance: 4 O. 80 dB/W·m Sound pressure level:

Dimension (W x H x D): 120 mm x 151 mm x 241 mm

Weiaht: 1.8 kg each

Designs and Specifications are subject to change without notice.

JVC



COMPACT COMPONENT SYSTEM

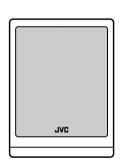
组合音响系统

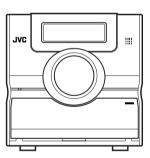
EX-D5

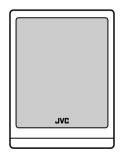
Consists of CA-EXD5 and SP-EXD1

由 CA-EXD5 及 SP-EXD1 組成









WOOD CONE







INSTRUCTIONS

使用说明书

Warnings, cautions and others

警告,注意及其他须知事项

CAUTION

To reduce the risk of electrical shocks, fire, etc.:

- Do not remove screws, covers or cabinet.
- 2. Do not expose this appliance to rain or moisture.

CAUTION — STANDBY/ON U/ button!

Disconnect the mains plug to shut the power off completely (the STANDBY lamp goes off). The STANDBY/ON U/I button in any position does

not disconnect the mains line.

- When the system is on standby, the STANDBY lamp lights red.
- When the system is turned on, the STANDBY lamp lights green.

The power can be remote controlled.

CAUTION

- · Do not block the ventilation openings or holes. (If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
- Do not place any naked flame sources, such as lighted candles, on the apparatus.
- · When discarding batteries, environmental problems must be considered and local rules or laws governing the disposal of these batteries must be followed strictly.
- Do not expose this apparatus to rain, moisture, dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

注意

为了减少触电,火灾等危险:

- 1. 请勿擅自卸下螺丝钉,盖子或机壳。
- 2. 请勿让本机受雨淋或置潮湿环境中。

注意-STANDBY/ON む/I 开关!

无论 STANDBY/ON U/I开关在任何位置, 电源线的电源还是没有被切断, 若要将电源完全关闭,应把电源插头拔离插座

(STANDBY/ON 灯熄灭)。

- 当主机正处于备用状态,STANDBY灯为红色。
- 当主机开启后,STANDBY灯为青色。

电源开关可用遥控器控制。

注意

- 请勿堵塞通风口或通风孔。 (如果通风口或通风孔被报纸或布等堵塞,热量将 无法散出。)
- 请勿在本设备上放置任何裸露的火源,如点燃的蜡
- 处理废弃电池时,必须考虑环境问题,并严格遵守 当地关于处理废弃电池的有关法律或规定。
- 切勿将本装置暴露于雨水所及、潮湿、滴水或易于 溅起水花的地方,亦不要将任何装满液体的物件 (如花瓶)放置在本装置上。

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 invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 4. REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE THE UNIT.

镭射产品的重要说明

- 1. 一级镭射产品。
- 2. **注意**:请勿打开顶盖板,本机内部没有用户可自行维修的部件; 所有维修工作应由有资格的人员完成。
- **3. 注意**: 当内部锁定装置失效或者损坏后,打开盖板可能会产生可见或不可见的镭射辐射。应避免受到镭射光束的直接照射。
- 4. 标签的复制标示:注意标签位于机内。

CAUTION: Visible and invisible | ADVARSEL: Synlig og usynlig | VARNING: Synlig och | VARO: Avatlaessa ja sopjaluklus laser dalation when open and laserställing när maskinen er osynlig lasersträlning när printetlock lailed or debated: den eller interlocke nigled, den oppnas och spärren är nävynlig ja akvyntitionalle AVOID DIRECT EXPOSURET TO Uhdgå direkte eksponering till utvopplad. Betrakta el laserställelyle: Valta steller (e) staffeln (e) staffeln. (s) oktobistratiosaucional steller.

Caution: Proper Ventilation

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

- 1. Front:No obstructions and open spacing.
- Sides/Top/Back:No obstructions should be placed in the areas shown by the dimensions below.
- 3. Bottom:Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.

注意:正确通风

为免发生触电和火警的危险,及防止本机受损,请将本机如下放置:

1. 前面: 没有障碍物及地方开阔。

2. 侧面/顶面/背面: 在图中所示范围中,不应放置任何障碍物。

3. 底部: 放置在水平面上。放置在一个高 10 厘米或以上的台上,以保持足够的通风道。

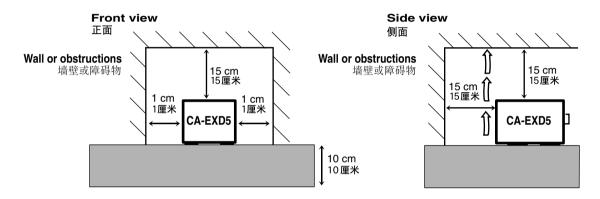


Table of contents

Introduction
About discs
Description of parts
Getting started
Using the remote control
Putting the batteries in the remote control
Operating the TV using the remote control
Connecting up
Selecting an AM interval spacing
Changing the color system 1
Basic operations
Playing discs12
Playback12
To switch the display13
Select what you want to play by using
the number buttons
To stop playback
To pause playback14 To advance picture frame-by-frame14
Fast reverse/Fast forward search14
Playing back from a position 10 seconds
before (One Touch Replay)15
Slow Motion Playback15
Skip to the beginning of the selection 15
To change the brightness of
the display window (DIMMER) 16
Adjusting the volume
Adjusting sound quality16 Turning off the sound temporarily (MUTING) 16
running on the sound temporarily (Mo rind) To
Advanced operations
Playing audio/video files16
Resume Playback18
Select the scene to be played19
Program Playback/Random Playback20
Repeat Playback22
Other convenient functions24
Selecting the subtitles24
Selecting the audio language24
Selecting a view angle
Enlarging the picture (ZOOM)
Adjusting the picture quality (VFP)
Croading realistic sound (OD 1 HOMO)

Adjusting playback level (DVD LEVEL) 26

Enjoying better pictures (SCAN MODE).......... 26

Functions specific to DVD AUDIO	27 27 28 29
Country/Area codes	31
Listening to radio	
Listening to a radio broadcast	
Tuning in to a preset station	33
Convenient functions	
Using USB wireless transmission	
Listening to the sound of other audio device	
Setting the various timer	
Setting the built-in clock	
Setting the daily timer	
Auto Standby	
Sleep Timer	
Tray Lock	39
Reference	
Troubleshooting	40
Language codes	41
Specifications	42

How to read this manual

- · Operations are described by mainly using the remote control buttons. If there are the same marks on the main unit, the buttons on the main unit can also be used.
- The following marks tell you for which type of the discs the operation can be made.













JPEG

- The illustrations and TV screens may be different between the actual case and the description.
- "VCD" is an abbreviation of "Video CD". "SVCD" is an abbreviation of "Super Video CD".

Special cautions

Notes on handling

Important cautions

Installation of the system

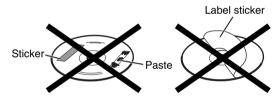
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the
- Do not use the system in a place subject to vibration.

Power cord

- Do not handle the power cord with wet hands.
- A small amount of power is always consumed while the power cord is connected to the wall outlet.
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



Note about copyright laws

Check the copyright laws in your country before recording from DVDs, VCDs, SVCDs, and CDs. Recording of copyrighted material may infringe copyright

Note about copy guard system

DVDs are protected by copy guard system. When you connect the system to your VCR directly, the copy guard system activates and the picture may not be played back correctly.

Safety precautions

Avoid moisture, water and dust

Do not place the system in moist or dusty places.

Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating device.

When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plug from the wall outlet.

Do not block the vents

Blocking the vents may damage the system.

Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

When condensation or water drops adhere to the

In any of the following cases, condensation or water drops may adhere to the lens to prevent the system from working properly:

- Immediately after starting to heat the room
- When the system is installed in a steamy or damp
- When the system is suddenly moved from a cold place to a warm space

In any of these cases, leave the system turned on for 1 or 2 hours before use.

Supplied accessories

Check to be sure you have all of the supplied accessories.

The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

- Remote control (1)
- Batteries (2)
- FM antenna (1)
- AM loop antenna (1)
- Power cord (1)
- AC plug adapter (1) (except for Hong Kong)
- Composite video cord (1)
- Speaker cords (2)
- USB wireless transmitter (1)
- Extension cable for the USB wireless transmitter (1)

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "MLP Lossless", and the double-D

symbol are trademarks of Dolby Laboratories. "DTS" and "DTS 2.0+DIGITAL OUT" are registered trademarks of Digital Theater Systems, Inc. This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Playable disc types

This system has been designed to play back the following

DVD VIDEO, DVD AUDIO, VCD, SVCD, CD

This system can also play back the following discs:

- Finalized DVD-R/-RW discs recorded in the DVD VIDEO format.
- CD-R/RW discs recorded in the following formats
 - Music CDs (finalized discs)
 - VCDs
 - **SVCDs**
 - MP3/WMA/JPEG discs recorded in ISO 9660 (for details, refer to "Notes on CD-R and CD-RW")

However, some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them.

Only sounds can be played back from the following discs:

MIX-MODE CD

CD-G

CD-EXTRA CD TEXT

Discs you can play:

Discs you can play.			
Disc Type	Mark (Logo)	Video Format	
DVD VIDEO	VIDEO TM VIDEO	PAL/ NTSC	
DVD AUDIO	AUDIO/VIDEO AUDIO	l	
VCD	COMPACT Video CD	PAL/ NTSC	
SVCD	COMPACT VIDEO VIDEO SUPER VIDEO	PAL/ NTSC	
CD	COMPACT DIGITAL AUDIO	l	
CD-R	COMPACT CITE DIGITAL AUDIO Recordable	_	
CD-RW	COMPACT DIGITAL AUDIO REWITADIE	_	

is a trademark of DVD Format/Logo Licensing Corporation.

* Note on Region Code

DVD players and DVD VIDEOs have their own Region Code numbers. This system can only play back a DVD VIDEO recorded with the Region Code number and video format mentioned below.

For your available Region Code, check the rear panel of your main unit.

This system can play back only DVD VIDEOs whose Region Code numbers include "3".

Examples:









If a DVD VIDEO with an improper Region Code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

On some DVD VIDEOs, DVD AUDIOs, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this system.

Notes on DVD-R and DVD-RW

This system can also play finalized DVD-Rs or DVD-RWs recorded in DVD-Video format.

Notes on CD-R and CD-RW

- This system can also play CD-Rs or CD-RWs if MP3, WMA, and JPEG files are recorded on them with ISO 9660 format.
- This system supports "multi-session" discs (up to 20 sessions).
- This system cannot play "packet write" (UDF format) discs. Some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them.

Discs that cannot be played back

The following discs cannot be played back: DVD-ROM, DVD-RAM, DVD-R/-RW (recorded in VR format), CD-ROM, CD-I (CD-I Ready), Photo CD, SACD, etc.

Playing back these discs will generate noise and damage the speakers.

Damaged discs and discs in an extraordinary shape (other than a disc of 12 cm or 8 cm in diameter) cannot be played back.

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.

About discs (continued)

Notes on all files

- The system can only recognize and play files with one of the following extensions, which can be in any combination of upper and lower case;

 - MP3: ".MP3", ".mp3" WMA: ".WMA", ".wma" JPEG: ".JPG", ".JPEG", ".jpg", ".jpeg"
- If a character other than single byte English characters is used in the file name of an MP3/WMA/JPEG file, the track/file name will not be displayed correctly.
- The system recognizes up to 150 tracks (files) per group, 99 groups per disc, and the total number of the tracks (files) that the system can play is 1 000.
- Some files may not be played back normally because of their disc characteristics or recording conditions.

For MP3/WMA files

- An off-the-shelf MP3 disc may be played in an order different from that indicated on the label attached to
- The system supports MP3/WMA files recorded with a bit rate of 32 - 320 kbps and a sampling frequency of 16 kHz, 22.05 kHz, 24 kHz (WMA only), 32 kHz, 44.1 kHz, or 48 kHz.
- If the tag information (album name, artist, and track title, etc.) is recorded on a disc, it appears in the file control display on the TV screen.
- We recommend to record each piece of material (song) at a sample rate of 44.1 kHz and at a data transfer rate of 128 (96 for WMA only) kbps.
- This system cannot play back files encoded with Multiple Bit Rate (MBR). (MBR is a format to encode a file content at several different bit rates.)

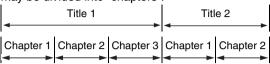
For JPEG files

- We recommend to record a file at 640 x 480 resolution.
- This system can play a baseline JPEG file, excluding monochromatic JPEG files.
- This system can play JPEG data taken with a digital camera conforming to the DCF (Design Rule for Camera File System) standard (when a function is applied such as the automatic rotation function of a digital camera, data goes beyond the DCF standard, so the image may not be displayed).
- If data has been processed, edited and restored with PC image editing software, the data may not be displayed.
- This system cannot play animations such as MOTION JPEG, or still images (TIFF etc.) other than JPEG, and image data with sound.
- An image with a resolution of more than 8 192 x 7 680 pixels cannot be displayed.

Disc structure

DVD VIDEO

A DVD VIDEO consists of "titles" and each title may be divided into "chapters".



DVD AUDIO

A DVD AUDIO consists of "groups" and each group may be divided into "tracks".

Some discs include a "bonus group" that requires a password for playing (page 27).



VCD/SVCD/CD

VCD, SVCD and CD consist of "tracks".

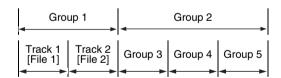
In general, each track has its own track number. (On some discs, each track may also be further divided by indexes.)



MP3/WMA [JPEG] discs

On an MP3/WMA [JPEG] disc, each still picture (material) is recorded as a track [file]. Tracks [Files] are usually grouped into a folder. Folders can also include other folders, creating hierarchical folder layers.

This unit simplifies the hierarchical construction of a disc and manages folders by "groups".

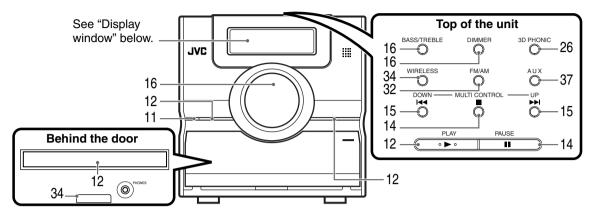


This product can recognize up to 1 000 tracks [files] in a disc. Also, the product can recognize up to 150 tracks [files] per group and up to 99 groups in a disc. Since the unit ignores the tracks [files] whose numbers are exceeding 150 and the groups whose numbers are exceeding 99, they cannot be played back.

 If there is any type of files other than MP3/WMA [JPEG] files in a folder, those files are also counted in the total file number.

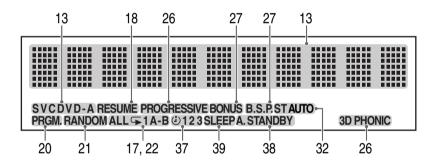
The numbers represent the page numbers.

Front panel

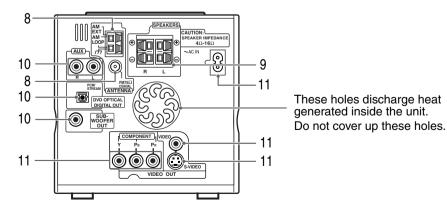


* Connect headphones (not supplied) with a stereo mini plug. If the headphones are connected, the speakers and subwoofer will not produce any sound.

Display window

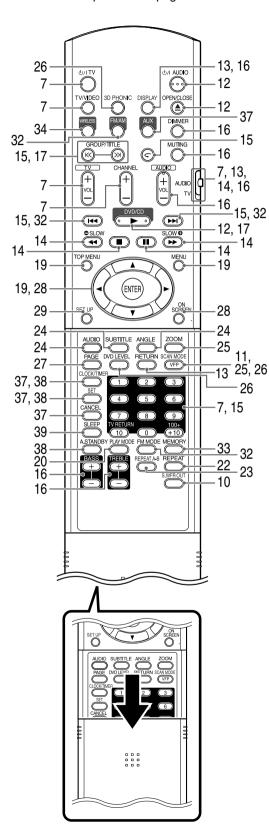


Rear panel

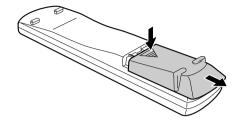


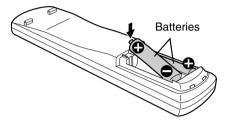
Using the remote control

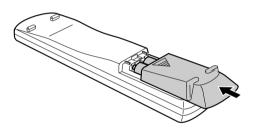
The numbers represent the page numbers.



Putting the batteries in the remote control







If the range or effectiveness of the remote control decreases, replace the batteries. Use two R6 (SUM-3)/AA(15F) type dry-cell batteries.

CAUTION

- Do not use a used battery and a new battery together.
- Do not use different types of batteries at the same time.
- Take out the batteries if the remote control is not to be used for a long time. Otherwise it may cause a leakage.

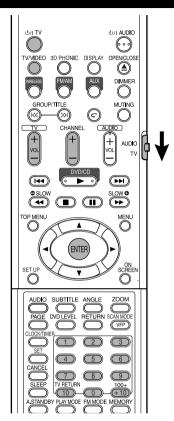
Remote control operation

When operating the remote control, point it towards the front panel of the main unit. If the remote control is operated from a direction that is extremely oblique or when there is an obstacle in the way, signals may not be transmitted.

If the remote control sensor is exposed to a strong light such as direct sunlight, correct operation may not be carried out.

This page is for when operating your TV using the remote control of this product.

Operating the TV using the remote control



Setting the manufacturer's code

1 Slide the remote control mode selector to the TV side.



2 Keep pressing down U/ITV.

NOTE

Keep pressing down U/I TV until Step 4 is complete.

- **3** Press ENTER.
- 4 Press number buttons (1-9, 0).

Ex.:

For a Hitachi TV: Press 1, then 0. For a Toshiba TV: Press 0, then 8.

If there are more than one manufacturer's codes, try them in turn and select the one that causes the product to work properly.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sanyo	13
Magnavox	02	Sharp	06
Mitsubishi	03	Sony	07
Panasonic	04, 11	Toshiba	08
RCA	05	Zenith	09

NOTE

Manufacturer's codes may be changed without notice. You may not be able to operate a TV produced by the manufacturer shown above.

5 Release ⊍/ITV.

For TV operation

Operate the remote control by pointing it towards the TV.

Ů/ITV	Turn ON/OFF the power.	
CHANNEL +	Change channels.	
TV + VOL	Adjust volume.	
1 ~ 9 / 0 / 410	AUDIO TV 1	Select channels.
TV RETURN	Alternates between the previously selected channel and the current channel.	
TV/VIDEO	Switch TV and video input.	

^{*1} Make sure to slide the remote control mode selector to the TV side in advance.

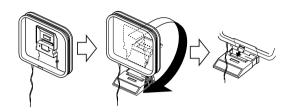
NOTE

When the batteries are replaced, perform the manufacturer's code setting again.

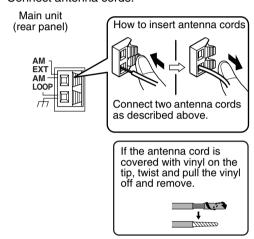
Connecting antennas

Connecting AM loop antenna (supplied)

1 Set up the AM loop antenna.



2 Connect antenna cords.

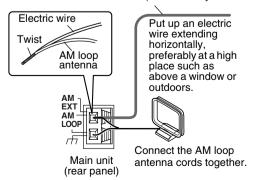


3 Turn the AM loop antenna to the direction of the best radio reception.

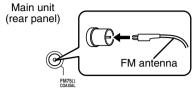
Locate the AM loop antenna as far away from the main unit as possible.

- Do not locate the AM loop antenna on a metallic table or close to a TV, personal computer, etc.
 Otherwise it may result in bad radio reception.
- When good radio reception cannot be obtained with the supplied AM loop antenna

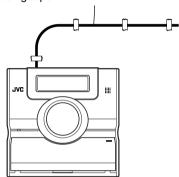
Electric wire: 3 - 5 m (commercially available)



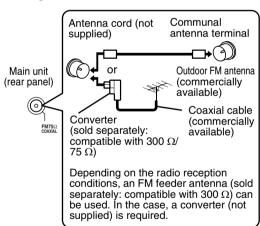
Connecting FM antenna (supplied)



Put the antenna up straight in the direction where the best radio reception can be obtained, and fix by using tape.



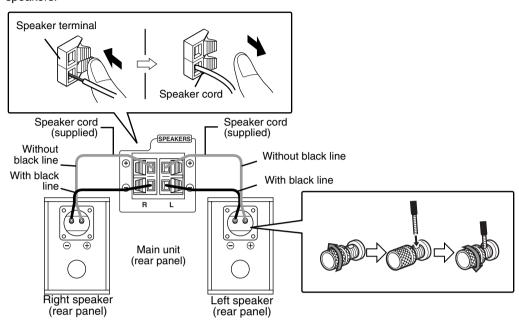
 When good radio reception cannot be obtained with the supplied antenna or when using a communal antenna



For details of connecting a separately sold antenna, refer to the user guide for the antenna or converter.

Connecting speakers

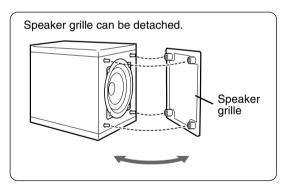
There is no difference between the left and right speakers.



CAUTION

- DO NOT connect more than one speaker to one speaker terminal.
- The speakers of this product are magnetically shielded, but color irregularities may occur on the TV depending on how the speakers are installed. Keep in mind the following.
 - Turn off the main power of your TV before installing the speakers. Wait for about 30 minutes before turning on the TV again.
 - If color irregularity occurs in pictures, keep a distance of more than 10 cm between the TV and the speakers.

The speakers employ natural wood for the diaphragm and the cabinet in order to reproduce the original sound faithfully. The appearance will therefore be different for each unit.



NOTE

- Impedance of speaker that can be connected to the main unit is within a range of 4 Ω to 16 Ω .
- In order to have a sufficient cooling effect, leave a space of more than 1 cm between the main unit and the speakers or other objects.

Connecting other devices

This page is for when connecting the main unit with other devices.

Connecting subwoofer

Output

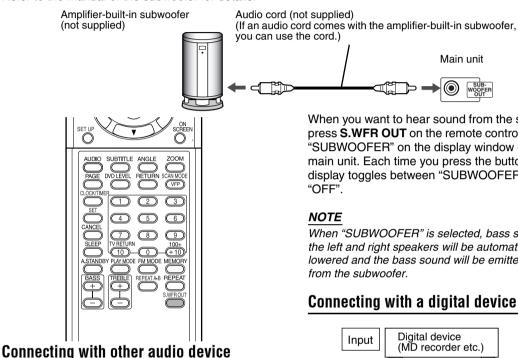
Red

Input

AUDIO OUT

White

With an amplifier-built-in subwoofer (not supplied), you can enjoy a more dynamic bass sound. Refer to the manual of the subwoofer for details.



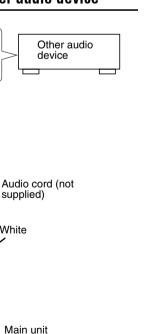
When you want to hear sound from the subwoofer. press S.WFR OUT on the remote control to display "SUBWOOFER" on the display window on the main unit. Each time you press the button, the display toggles between "SUBWOOFER" and "OFF".

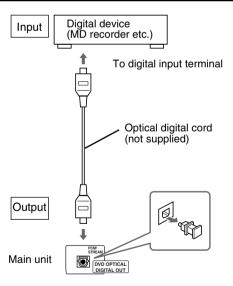
Main unit

NOTE

When "SUBWOOFER" is selected, bass sound from the left and right speakers will be automatically lowered and the bass sound will be emitted mainly from the subwoofer.

Connecting with a digital device

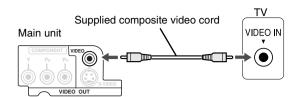




CAUTION

- · For details of signals to be output, refer to page
- · If connecting the main unit with equipment with the function of a Dolby Digital decoder, the setting in "D. RANGE COMPRESSION" of "AUDIO" (page 30) will be invalid regarding sound from the digital audio output of the main unit.

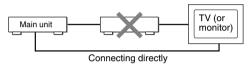
Connecting with TV



CAUTION

Connect the main unit directly with a TV (or a monitor) without routing through a VCR.

Otherwise it may cause picture distortion while playing.

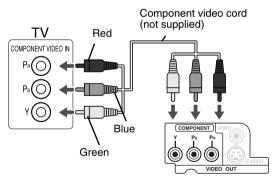


Also, when connecting the main unit to a TV with a VCR built in, there may be picture distortion while playing.

You can enjoy pictures of better quality using the following cord instead of the supplied video cord.

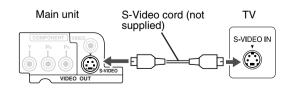
Connecting by using the component video cord

You can enjoy better quality pictures than when using the S-Video cord.



Main unit

Connecting by using the S-Video cord



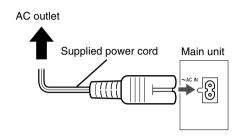
CAUTION

Use one of either the S-Video cord or the component video cord. If both cords are used, pictures may not be played properly.

NOTE

- In order to enjoy pictures with Progressive mode (page 26), the TV is required to have Progressive video input.
- If the component video input jacks of your TV are BNC type, use a plug adapter (not supplied) to convert the plugs.

Connecting the power cord



- Connect the power cord after all other connections are complete.
- The standby indicator (on the front panel) will be lit.

Selecting an AM interval spacing

You can change the AM interval spacing.

Some countries space AM stations 9 kHz apart, and some countries use 10 kHz spacing.

- Before doing the following procedure, select AM as source, then turn off the unit.
- . Use the buttons on the main unit.

To set the AM tuner to the 10 kHz spacing:

While holding ►►I, press STANDBY/ON ७/I.

To set the AM tuner to the 9 kHz spacing:

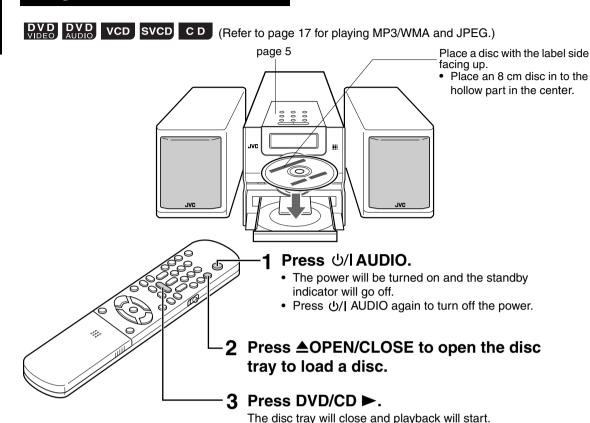
While holding I──, press STANDBY/ON ७/I.

Changing the color system

You can select the video output to match it to the color system of your TV (PAL or NTSC).

- 1 Press and hold VFP for 4 seconds while the system is turned off (on standby).
- 2 Press cursor **◄/►** to select the video output.
- 3 Press ENTER to set the video output.

Playback



The power will be turned on when any of PLAY
 , WIRELESS, FM/AM, AUX, or ≜ on the main unit and DVD/CD , WIRELESS, FM/AM, AUX, or ≜OPEN/CLOSE on the remote control is pressed while the power is off.

 If any button other than ≜ or ≜OPEN/CLOSE is pressed, the source will also be changed (if there is a disc loaded, playback will start).

NOTE

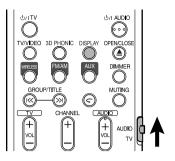
- A menu screen may be displayed on the TV after starting playback of a DVD/VCD/SVCD. In this case, select a desired item to playback by using the following buttons on the remote control.
 - Select a desired item using cursor ▲/▼/◄/► and press ENTER.
 - Select a desired item using the number buttons.
- Depending on the disc, actual operation may be different from the description.



Screens displayed on the TV when the power is turned ON.

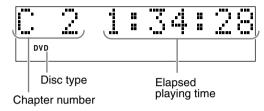
The following messages appear depending on the status of the system. (When FM, AM, WIRELESS or AUX is selected as a source, the messages do not appear.)

NOW READING	Appears when the system is reading the disc information. Wait for a while.
REGION CODE ERROR!	Appears when the Region Code of the DVD VIDEO does not match the code the system supports. (page 3)
NO DISC	Appears when no disc is loaded.
OPEN	Appears when opening the disc tray.
CLOSE	Appears when closing the disc tray.
CANNOT PLAY THIS DISC	Appears when trying to play back an unplayable disc.



Display window during disc playback

Ex.: When a DVD VIDEO is played



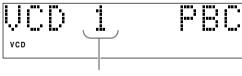
Ex.: When a DVD AUDIO is played



Track number

If "BONUS" or "B.S.P." is displayed during a DVD AUDIO playback, refer to page 27.

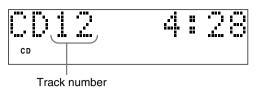
Ex.: When an SVCD or VCD is played



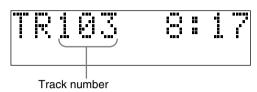
Track number

- When playing an SVCD, the SVCD indicator lights instead of the VCD indicator.
- PBC (Play Back Control): A signal recorded in a VCD (version 2.0) for controlling playback. It is possible to enjoy interactive software or software with a search function using a menu screen recorded in a PBC compatible VCD. To play a disc with the PBC function OFF, carry out the following operations.
 - Designate the track number using the number buttons while the disc is stopped.
 - Designate the track number using ►►I while the disc is stopped, and then press DVD/CD ►.
- Press RETURN to go back to the upper layer during the PBC playback of a VCD or SVCD.

Ex.: When a CD is played



Ex.: When an MP3/WMA file is played

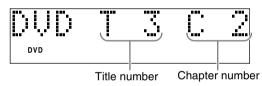


To switch the display

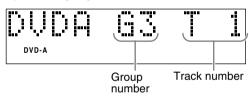
Press DISPLAY.

Each time you press the button, the display indication changes temporarily as follows:

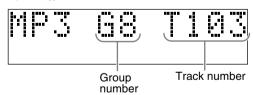
For DVD VIDEO



For DVD AUDIO



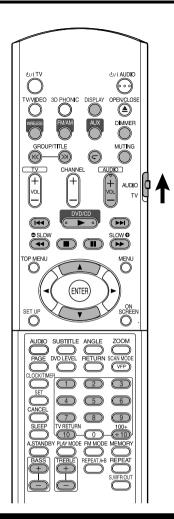
For MP3/WMA



For SVCD/VCD/CD

The clock time indication appears on the display window.

- Before setting the clock (page 37), "0:00" appears.
- When the unit is turned off, pressing DISPLAY turns off the clock indication to save the power consumption.



Select what you want to play by using the number buttons



NOTE

- Set the remote control mode selector to
 AUDIO before using the number buttons.

 AUDIO Selection for the number buttons.

 AUDIO Selection for the number buttons.
- For a VCD or SVCD, this operation can be carried out when the disc is stopped, or during playback without the PBC function.
- For a DVD AUDIO, CD, MP3/WMA or JPEG, this operation can also be carried out when the disc is stopped.
- This operation may not be carried out for some discs.

Designate the chapter number or track number to play during playback.

 Refer to "How to use the number buttons" on page 15.

To stop playback



Press ■ during playback.

To pause playback



Press II during playback.

To start normal playback again, press DVD/CD ▶.

 For JPEG slide-show, pressing DVD/CD ➤ starts playback from the next file.

To advance picture frame-by-frame



Press II during pause.

 Each time you press the button, picture will be advanced frame-by-frame.

Fast reverse/Fast forward search



Press **◄◄** or **▶▶** during playback.

 Each time you press the button, the speed increases (×2, ×5, ×10, ×20, ×60). To restore the normal speed, press DVD/CD ►.

NOTE

- Fast reverse/Fast forward search cannot be carried out for MP3, WMA, and JPEG.
- For a DVD VIDEO, VCD or SVCD, no sound comes out during Fast reverse/Fast forward search.
- For a CD or DVD AUDIO, sound is intermittent during Fast reverse/Fast forward search.

Playing back from a position 10 seconds before (One Touch Replay)



Press \subset during playback.

NOTE

- This operation may not be carried out for some
- It is not possible to go back to the previous title.

Slow Motion Playback



pause.

- Each time you press the button, the playback speed increases ($\times 1/32$, $\times 1/16$, $\times 1/8$, $\times 1/4$,
- Press DVD/CD ➤ to start normal playback again.

NOTE

- · No sound will be produced.
- · The picture motion in the reverse direction may not be smooth.
- · For a VCD or SVCD, Slow Motion Playback can be carried out in the forward direction only.

Skip to the beginning of the selection







Press | ◀ or ▶ b | during playback*.

- Press ►►I to skip the next chapter or track.
- Press I◄◄ once to skip back to the beginning of the chapter or track currently being played (except for JPEG).
- Press GROUP/TITLE K or ≫ to select the title
- During playback of a JPEG disc, press ►►I or cursor ▼ to play the next file, or press I◄◄ or cursor \(\Delta \) to play the previous file.

NOTE

- For a VCD or SVCD, this operation can be carried out during playback without the PBC function.
- Except for a DVD VIDEO, this operation can also be carried out while the disc is stopped.
- This operation may not be carried out for some discs.

How to use the number buttons

Ex.:

5: 5

15: (+10) → (5)

20: (+10) → (10)

25: $(+10) \rightarrow (+10) \rightarrow (5)$



Guide icons displayed on the TV screen (On-screen guide)



: Plav



: Pause



: Fast reverse/Fast forward search



: Slow Motion Plavback (reverse/forward directions)



: Containing multi-angle views (page 24)



Containing multi-audio languages (page 24)



: Containing multi-subtitle languages (page 24)

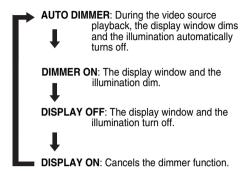


: The disc cannot accept the operation you have attempted.

To change the brightness of the display window (DIMMER)

Press DIMMER repeatedly.

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



 When the unit is turned off, pressing DISPLAY turns off the clock indication to save the power consumption.

The items above can be carried out for all sources.

Adjusting the volume

Press AUDIO VOL +/-.

NOTE

The volume can be also adjusted by turning the VOLUME control on the main unit.

Adjusting sound quality

Bass: Press BASS +/-. Treble: Press TREBLE +/-.

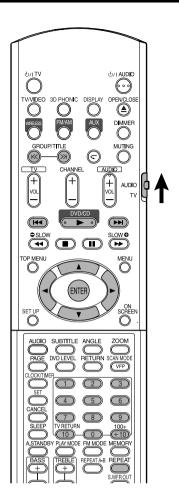
• Adjustable range: -5 to +5

Turning off the sound temporarily (MUTING)

Press MUTING.

- · No sound will come out from the speakers, headphones and the subwoofer.
- Press MUTING again to restore the sound.

Playing audio/video files



NOTE

Set the remote control mode selector to AUDIO before using the number buttons.



Playback



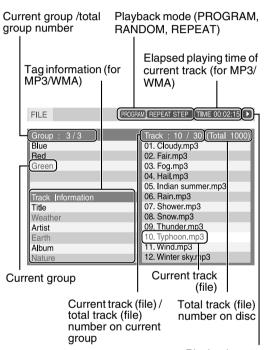
Display of an MP3/WMA disc is described here as an example.

For a JPEG disc, read "track" as "file".

NOTE

When playing a disc containing both MP3/WMA and JPEG files, set one of them to be played, then turn on the system again (page 29).

1 Load a disc.



- Playback status
- 2 Press cursor ▲/▼ to select a group.
- 3 Press cursor ► to move to the track list.
 - Press cursor

 to go back to the group list.
- 4 Press cursor ▲/▼ to select a track.

5 Press DVD/CD ▶ or ENTER.

NOTE

- GROUP/TITLE KK, ≫I can also be used in Step 2.
- The number buttons can also be used in Step 4. In this case, Step 5 is not needed. (For how to use the number buttons, refer to page 15.)
- I◄◄ or ➤►I can also be used in Step 4. In this case, Step 5 is not needed.

Repeat playback

MP3 WMA

1 Press REPEAT.

• Each time you press the button, the Repeat mode and its indication change as follows:

Repeat items	On the TV	On the display window
Current track (MP3/WMA only)	REPEAT TRACK	REP TRK ⊊1
Current group	REPEAT GROUP	REP GRP ←
Entire disc	REPEAT ALL	REP ALL
Cancel	No indication	REP OFF
Current track during Program/ Random play (MP3/WMA only)	REPEAT STEP	REP STEP
All tracks during Program/Random play (MP3/WMA only)	REPEAT ALL	REP ALL all ⊊

2 Press DVD/CD ▶.

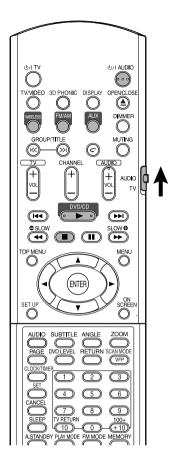
NOTE

- The Repeat types can be changed during playback.
- The Repeat mode will be automatically canceled if there is a file that cannot be played (page 3).

Slide-Show Playback JPEG

- In Step **5**, for a JPEG disc, when **DVD/CD** ▶ is pressed, files will be continuously played from the selected file (Slide-Show Playback), and when **ENTER** is pressed, only a selected file will be played.
- Display time for a file in Slide-Show Playback is about 3 seconds.
- When all files are played through, the playback will be automatically stopped.

Resume Playback



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



DVD DVD VCD SVCD

This system can store the stop point, and when you start playback again by pressing DVD/CD ► (even while on standby), it starts from the position where you have stopped—Resume Play. The RESUME indicator lights on the display window when you stop playback.

How to suspend playback

Perform any of the following operations during playback.

Press ■ once.*

Press 也/ AUDIO to turn off the power.

Change the source to WIRELESS, FM, AM or AUX.*

* Even if the power is turned off by pressing U/I AUDIO after this, the position where playback has been stopped will be stored.

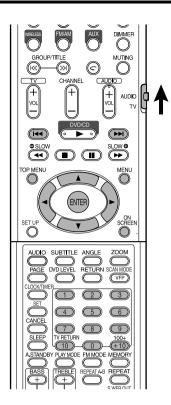


To start playback from the stored position

Press DVD/CD ▶.

NOTE

- This function does not work in Program Playback or Random Playback.
- The position where playback starts again may be a little different from the stopped position.
- When a disc menu is displayed, the Resume function may not work.
- The audio language, the subtitle language and the angle at that time are stored as well as the stopped position.
- The stored position will be cleared if the disc tray is opened. Further, if ■ is pressed during playback, "RESUME" will be displayed. If ■ is pressed again, the stored information will be cleared.
- At the time of purchase, Resume is set to ON.
 Resume can be set to OFF (page 30).



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Select the scene from the menu

DVD DVD VCD SVCD

- 1 Press MENU or TOP MENU while the disc is stopped or during playback*1.
 - The disc menu screen will be displayed.
 - Only TOP MENU can be used for DVD AUDIOs.
- 2 Press cursor ▲/▼/◄/► (only for a DVD VIDEO or DVD AUDIO) or the number buttons to select the scene to be played.
 - Refer to "How to use the number buttons" (page 15).
 - When the menu screen has a couple of pages, press I◄◄ or ►►I to change the page (only for a VCD and SVCD).

3 Press ENTER.

NOTE

- *1 For a VCD and SVCD, this operation can be carried out only when the PBC function is off.
- This operation cannot be carried out for a disc without a menu screen.
- Playback may start for some discs without pressing ENTER.

Designate the time (Time search)

DVD DVD VCD SVCD CD

1 Press ON SCREEN twice during playback².

The menu bar will be displayed (page 28).

- 2 Press cursor **◄/►** to select ②**→**|.
- 3 Press ENTER.
- 4 Input the time^{*3} using the number buttons (1-9, 0).

Ex.: When you want to play a DVD VIDEO from the position of (0 hour) 23 minutes 45 seconds, press the buttons in the order:



If you input wrong numbers, press cursor

to delete the numbers and re-input.

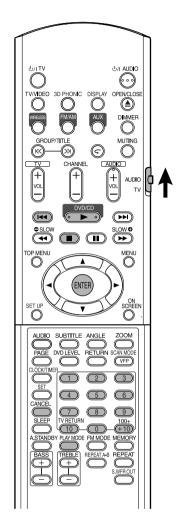
5 Press ENTER.

To delete the menu bar, press ON SCREEN.

NOTE

- This function does not work for a DVD VIDEO with no time information recorded.
- This function does not work during Program or Random Playback.
- *2 For a VCD and an SVCD, the operation can be carried out when the disc is stopped or during playback without the PBC function.
- *3 Time search for a DVD VIDEO is from the beginning of the title, for a DVD AUDIO from the beginning of the track being played. Time search for a VCD, an SVCD and a CD is as follows:
 - When the disc is stopped, time search is from the beginning of the disc.
 - When the disc is being played, time search is within the track currently being played.





NOTE

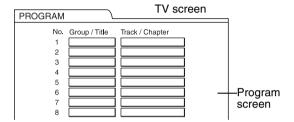
Set the remote control mode selector to **AUDIO** before using the number buttons.



Play the disc in the desired order (Program Playback)

It is possible to program a maximum of 99 chapters or tracks. The same chapter or track can be programmed more than once.

1 While the disc is stopped, press PLAY MODE repeatedly to display "PROGRAM" on the display window on the main unit.



2 Create a program following the description on the TV screen.

Refer to "How to use the number buttons" (page 15).

- The input content varies depending on the disc type.
 - DVD VIDEO: Titles and chapters
 - VCD, SVCD, CD: Tracks
 - DVD AUDIO, MP3/WMA:

Groups and tracks

- To select a DVD AUDIO bonus group, carry out the operations of "Playing the Bonus Group" on page 27 in advance to erase the display "BONUS".
- If the input number of chapters or tracks is greater than 99, "MEM FULL" will be displayed.
- In the case of a VCD, SVCD or CD, when the total playback time reaches 9 hours 59 minutes 59 seconds, "--:--" will be displayed on the display window (it is possible to continue programming).

To program on the display window on the main unit, operate as follows:

- (1) Select a title/group using the number buttons.
- (2) Designate a chapter/track number using the number buttons.
 - Refer to "How to use the number buttons" (page 15).
 - The program number will be displayed on the lower display window (Ex.: "P2").
- (3) Repeat the above operations (1) and (2) to complete the program. Then, advance to Step 3.

NOTE

- The group/title number flashes on the display window after making each program step.
- Only for a DVD VIDEO, DVD AUDIO, VCD, or an MP3/WMA: If you press ENTER instead of designating a track/chapter number, "ALL" is displayed and all of the tracks/chapters in the selected group/title are programmed.

3 Press DVD/CD ▶.

- To resume normal playback, press
 PLAY MODE repeatedly to show the
 playback indication on the display window
 on the main unit while the disc is stopped.
 The program content will not be erased.
- The following operations erase the program content:
 - Press CANCEL repeatedly (Programs will be erased one by one)
 - Press while the disc is stopped
 - · Open the disc tray
 - Turn off the power

Playing the disc in a random order (Random Playback)

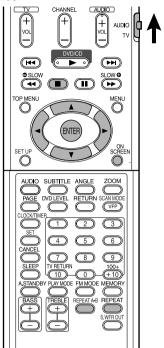
- 1 Press PLAY MODE repeatedly to display "RANDOM" on the display window on the main unit while the disc is stopped.
 - "RANDOM" will also be displayed on the TV screen.

2 Press DVD/CD ►.

- The same chapter or track will not be played twice.
- To resume normal playback, press PLAY MODE repeatedly to show the playback indication on the display window on the main unit while the disc is stopped.
- Random Playback will also be canceled by carrying out the following operations:
 - Open the disc tray
 - · Turn off the power
- The previous track will not be returned to even if I◄◄ is pressed repeatedly during Random Playback (the beginning of the current chapter or track will be returned to).

Repeat Playback

Refer to page 17 for Repeat Playback of MP3/WMA and JPEG files.



Playing the title/chapter/ group/track/all tracks repeatedly (REPEAT)



Press REPEAT during playback.

• Each time you press the button, the Repeat mode and its indication change as follows:

For DVD VIDEO

Repeat items	On the TV	On the display window
Current chapter	СНАР	REP CHAP
Current title	TITLE	REP TTL
Cancel	OFF	REP OFF

For DVD AUDIO

Repeat items	On the TV	On the display window
Current track	TRACK	REP TRK
Current group	₾ GROUP	REP GRP
Cancel	₾ OFF	REP OFF

For CD/VCD/SVCD

Repeat items	On the TV	On the display window
Current track	TRACK	REP TRK
All tracks	Č)ALL	REP ALL
Cancel	OFF	REP OFF

NOTE

- For a VCD and SVCD, the operation can be carried out only when the disc is stopped or during playback without the PBC function.
- It is possible to set Repeat mode on the menu bar.
 For how to operate, refer to "Playing the designated part repeatedly (A-B Repeat Playback)" (page 23).
- For a DVD VIDEO and DVD AUDIO, if the source is switched to FM, AM, WIRELESS or AUX, the Repeat mode will be canceled.

Repeat Playback during Program or Random Playback

Repeat items	On the TV	On the display window
Current chapter/ track	STEP or REPEAT STEP	REP STEP
All tracks during Program/Random play	CALL or REPEAT ALL	REP ALL
Cancel	OFF or no indication	REP OFF

Playing the designated part repeatedly (A-B Repeat Playback)



1 Press ON SCREEN twice during playback.

The menu bar (page 28) will be displayed.

- 2 Press cursor **◄/►** to select **△** OFF |.
- 3 Press ENTER.
- 4 Press cursor **▲**/▼ to display

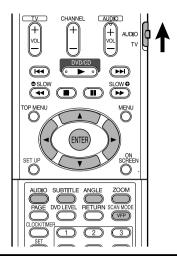
A−B .

Other Repeat modes can be selected here. For other Repeat modes, refer to "Playing the title/chapter/group/track/all tracks repeatedly (REPEAT)" (page 22).

- 5 Press ENTER at the start point of the part to be repeated (designating A point).
 - The icon on the menu bar will be 🖒 🕒 .
- 6 Press ENTER at the end point of the part to be repeated (designating B point).
 - The icon on the menu bar will be <u>A-B</u> and the part between A and B points will be played repeatedly.
 - A-B Repeat Playback will be canceled by carrying out the following operations:
 - Press ■.
 - Select 🖒 A-B | and press **ENTER** twice.

NOTE

- A-B Repeat Playback is possible only within the same title or track. A-B Repeat Playback cannot be carried out during PBC playback, Program Playback, Random Playback and Repeat Playback.
- You can do the A-B Repeat Playback using the REPEAT A-B button on the remote control.



Selecting the subtitles

DVD SVCD DVD AUDIO

(only for moving image)

1 Press SUBTITLE during playback of a disc containing subtitles in several languages.

Ex.:



 Each time you press the button, the subtitle will be alternated between ON and OFF.

2 Press cursor ▲/▼ to select a subtitle language.

- For a language code such as "AA", refer to "Language codes" (page 41).
- The manner of displaying subtitle languages may be different depending on the disc.
- **3** Wait for a few seconds or press ENTER to go off the window.

NOTE

- It is also possible to operate by using the menu bar (page 28).
- For an SVCD, each time you press SUBTITLE in Step 1, the subtitle type and OFF will be alternated.

Selecting the audio language



1 Press AUDIO during playback of a disc containing several audio languages.

Ex.:



- Each time you press the button, the audio language will be alternated. Also, the audio language can be changed by pressing cursor ▲/▼.
- For a language code such as "AA", refer to "Language codes" (page 41).
- "ST", "L" and "R" displayed when playing a VCD or SVCD respectively represent "Stereo", "Left sound" and "Right sound".
- **2** Wait for a few seconds or press ENTER to go off the window.

NOTE

It is also possible to operate by using the menu bar (page 28).

Selecting a view angle

DVD DVD VIDEO AUDIO

(only for moving image)

1 Press ANGLE during playback of a scene containing multi-view angles.

Ex.:



- Each time you press the button, the angle will be alternated. Also, the angle can be changed by pressing cursor ▲/▼.
- 2 Wait for a few seconds or press ENTER to go off the window.

NOTE

It is also possible to operate by using the menu bar (page 28).

Enlarging the picture



DVD VCD SVCD DVD JPEG





(only for moving image)

Press ZOOM during playback or while paused.

- Each time you press the button, the picture magnification will be changed.
- (For a JPEG) You cannot change the picture magnification during slide-show playback.

2 Select the portion you want to see by using cursor $\triangle/\nabla/\triangle$.

• To resume normal playback, select "ZOOM OFF" in Step 1.

Adjusting the picture







Press VFP during playback or while paused.

The current setting will be displayed on the TV screen.



- GAMMA: Adjust this if the neutral color is bright or dark. The brightness of dark and bright portion is maintained.
- BRIGHTNESS: Adjust this if the picture is bright or dark on the whole.
- . CONTRAST: Adjust this if the far and near position is unnatural.
- **SATURATION:** Adjust this if the picture is whitish or blackish.
- TINT: Adjust this if the appearance of flesh tone is unnatural.
- SHARPNESS: Adjust this if the picture is indistinct.

2 Press cursor **◄/►** to select VFP

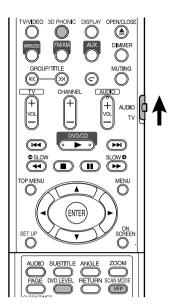
- It is recommended to select "NORMAL" usually, or "CINEMA" in a dark room. When either "NORMAL" or "CINEMA" is selected, go to Step 7.
- When either "USER 1" or "USER 2" is selected, the adjustment can be carried out in detail in the operations after Step 3.
- 3 Press cursor **△**/▼ to select an item to be adjusted.
- 4 Press ENTER.



- 5 Press cursor **△**/**▼** to change the value.
- 6 Press ENTER. To adjust other items, go back to Step 3.
- Press VFP to go off the window.

NOTE

- · If no operation is made for several seconds during the procedure, the settings made so far will be automatically stored.
- "VFP" is an abbreviation of "Video Fine Processor".



Creating realistic sound (3D PHONIC)









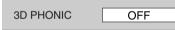


The two speakers produce an effect resembling surround-sound.

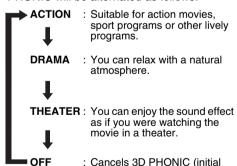
Press 3D PHONIC during playback.

Ex.:

TV screen



· Each time you press the button, the 3D PHONIC will be alternated as follows:



· While 3D PHONIC is activated, "3D PHONIC" appears and the 3D PHONIC indicator lights on the display window.

setting).

NOTE

- 3D PHONIC is effective for the speakers and headphones.
- When noise is produced or sound is distorted, set 3D PHONIC to "OFF".
- You cannot operate some DVD AUDIO discs.

Adjusting playback level (DVD LEVEL)

The audio of a DVD VIDEO may be recorded at a lower level (volume) than for other types of disc. If the difference is not to your liking, adjust the DVD Level

Press DVD LEVEL during playback.

- Each time you press the button, the level will be alternated among "NORMAL", "MIDDLE" and "HIGH".
- · Select the level while listening to the sound played.

NOTE

- · DVD Level is effective only for playback of a DVD
- Even if the DVD Level is changed, the output level from the digital audio output terminal will not be changed.

Enjoying better pictures (SCAN MODE)

In the Progressive mode, better pictures can be enjoyed.

CAUTION

- In order to enjoy pictures in the Progressive mode, the following requirements should be met:
 - There must be a component video input terminal on the TV set connected to the main unit.
 - The main unit and the TV set must be connected using a component video cord (page 11).

When the above requirements are not satisfied, leave the main unit in the Interlace mode. If the Progressive mode is set, pictures may be distorted.

Press and hold SCAN MODE for 4 seconds when there is no disc loaded or while the disc is stopped.

• Each time you press and hold the button, the scan mode alternates between the "PROGRESSIVE" mode and the "INTERLACE" mode.

NOTE

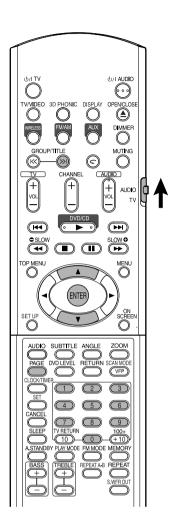
Progressive mode:

All scanned lines will be displayed at once. Pictures of higher resolution than those in the Interlace mode can be realized.

Interlace mode:

This is a conventional image method. Half of the scanned lines displayed in the Progressive mode will appear, alternating with the other half.





NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Playing the Bonus Group

There are some DVD AUDIO discs with a special group, called "Bonus Group", recorded.

NOTE

This operation can be carried out when "BONUS" is lit on the display window on the main unit.

Press GROUP/TITLE ≫ repeatedly during playback to select a bonus group.

"KEY____" appears on the TV screen, and on the display window on the main unit.

- The bonus group is usually recorded as the last group.
- 2 Press the number buttons to enter a pin code (4 digits).

The method of getting a pin code may be different depending on the disc.

- 3 Press ENTER.
 - When a correct pin code is entered, "BONUS" disappears and the playback of the bonus group starts.
 - If an incorrect pin code is entered, try entering a correct pin code again.

Browsable Still Pictures (B.S.P.)

There are some DVD AUDIO discs with still pictures recorded. Among the still pictures, there are pictures called B.S.P. (Browsable Still Pictures). With these pictures, it is possible to switch a picture as if turning over pages.

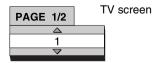
NOTE

This operation can be carried out when "B.S.P." is lit on the display window on the main unit.

1 Press PAGE during playback.

Each time you press the button, the still picture will be switched over. It is also possible to switch the picture using cursor $\blacktriangle/\blacktriangledown$.

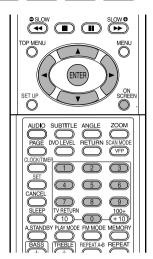
Ex.:



2 Wait for a few seconds or press ENTER to go off the window.

Using the menu bar





NOTE

- Set the remote control mode selector to AUDIO before using the number buttons.
- This operation can be carried out when there is a disc loaded. There are some functions that may not work while the disc is stopped.
- **1** Press ON SCREEN twice.

The status bar and the menu bar will appear on the TV screen.

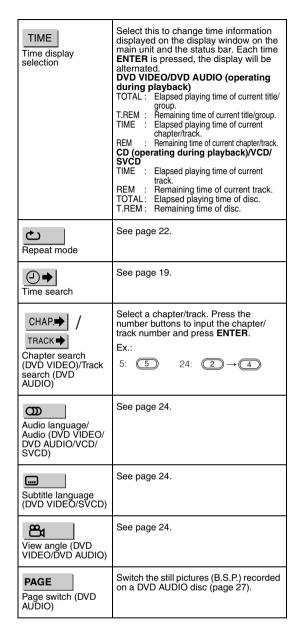


The above is an example for a DVD VIDEO.

- 2 Press cursor **◄/►** to select an item to be operated.
- **3** Press ENTER.
 - The selected function can be set. For the setting content, refer to the following "Functions list".
 - · The currently active function shows.
 - To delete the menu bar, press ON SCREEN.

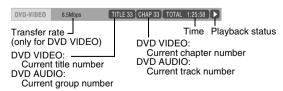
Functions list

For the functions with no special description for the operations, press cursor ▲/▼ to select, and press ENTER to determine.



Information displayed on the status bar

DVD VIDEO/DVD AUDIO (the example below is for a DVD VIDEO)



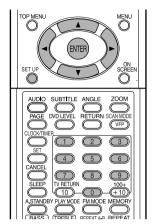
VCD/SVCD/CD (the example below is for a CD)



NOTE

The playback status mark has the same meaning of the mark on the On-screen guide (page 15).





The initial settings of the system can be changed according to the environment the system is used in.

NOTE

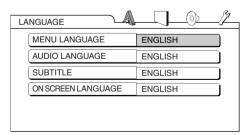
- · Set the remote control mode selector to
- AUDIO before using the number buttons. • The top and bottom of the preference screen may not be displayed on a wide TV. Adjust

Basic operations

the picture size on the TV.

Press SET UP while the disc is stopped or no disc is loaded ("NO DISC" is displayed).

• The following screen will be displayed on the TV.



 Proceed with operations by following the description on the TV screen.



LANGUAGE

NOTE

 If the selected language is not recorded on the disc, the optimum language set for the disc will be displayed.

· For a language code such as "AA", refer to the "Language codes" (page 41).

Items	Contents	
MENU LANGUAGE	Select the language for the DVD VIDEO menu.	
AUDIO LANGUAGE	Select the audio language for the DVD VIDEO.	
SUBTITLE	Select the subtitle language for the DVD VIDEO	
ON SCREEN Select the language displayed on the preference screens.		



PICTURE

Items	Contents (: initial setting)			
MONITOR	,			
TYPE	Select a display method suitable for your TV. 16:9/16:9 MULTI: Select this when the aspect ratio of your wide TV is fixed to 16:9 (when playing a DVD VIDEO recorded at 4:3, the system automatically adjusts the screen width of the output signal). 4:3 LB/4:3 MULTILB(Letter Box): Select this when the aspect ratio of your TV is			
	conventional 4:3. While viewing a wide screen picture, the black bars appear on the top and bottom of the screen.			
	4:3 PS / 4:3 MULTI PS (Pan Scan): Select this when the aspect ratio of your TV is conventional 4:3. While viewing a wide screen picture, the left and right edges of the picture will not be shown on the screen. (If the disc is not compatible with Pan Scan, the picture will be displayed at the Letter Box ratio.)			
	By selecting "MULTI" mode, the color system of the System changes automatically to match that of the loaded disc.			
PICTURE SOURCE	Select an item suitable to the video source. AUTO: The video source type (a video or film) is automatically selected. FILM:			
	Select this item when you want to view a film or video recorded with the progressive scan method. VIDEO: Select this item when you want to view a normal video.			
SCREEN SAVER	Select the Screen Saver mode between ON / OFF (Screen Saver activates when there is no operation made for about 5 minutes since a still picture was last displayed).			
FILE TYPE	If there are both MP3/WMA and JPEG files on a disc, you can select which files to play. [AUDIO]: Select this item when you want to play back MP3/WMA files. STILL PICTURE: Select this item when you want to play back JPEG files.			



AUDIO

Items	Contents (: initial setting)			
DIGITAL AUDIO OUTPUT	Select an output signal type from the following in accordance with the device connected to the digital audio output terminal (AV amplifier, etc.). (See the list below for the preference items and output signal.)			
	PCM ONLY: Device corresponding only to linear PCM.			
	DOLBY DIGITAL/PCM: Dolby digital decoder or a device having the same function.			
	STREAM/PCM: DTS/Dolby digital decoder or a device having the same function.			
DOWN MIX	Switch signal from the digital output terminal of the DVD VIDEO according to the connected device. Select this when Digital Audio Output is set to "PCM ONLY".			
	DOLBY SURROUND: A Dolby Pro Logic decoder-built-in device.			
	STEREO : An ordinary device.			
	When 3D PHONIC is activated, Down Mix does not work.			
D (Dynamic). RANGE COMPRESSION	To make adjustments for the difference between a high volume and a low volume when playing back with low volume (only for a DVD recorded with Dolby digital).			
	AUTO: D. Range Compression automatically works.			
	ON: D. Range Compression always works.			



Items	Contents (: initial setting)		
RESUME	Select ON /OFF. (page 18)		
ON SCREEN GUIDE	Select ON /OFF. (page 15)		
PARENTAL LOCK	Set the Parental Lock function to cut off violent scenes or replace the scenes with others. (This is effective only for discs equipped with the Parental Lock function.)		
	COUNTRY CODE (page 31): Select your country.		
	SET LEVEL: The restriction is stricter as the number becomes smaller. "NONE" is no restriction.		
	PASSWORD (essential): Enter four-digit number as your password using the number buttons (1-9, 0) every time. (Enter "8888" if you forget your password.) The password is required at the time of playback.		
	If you enter a wrong password three times, "EXIT" will be automatically selected.		

List of relationships of DIGITAL AUDIO OUTPUT preference items and output signal

Disubselvation	DIGITAL AUDIO OUTPUT			
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY	
48 kHz, 16/20/24 bits Linear PCM DVD VIDEO 96 kHz linear PCM DVD VIDEO	- 48 kHz, 16 bits stereo linear PCM			
48/96/192 kHz, 16/20/24 bits linear PCM DVD AUDIO				
44.1/88.2/176.4 kHz, 16/20/24 bits linear PCM DVD AUDIO	44.1 kHz, 16 bits stereo linear PCM			
DTS DVD VIDEO	DTS bit stream 48 kHz, 16 bits stereo linear PCM			
DOLBY DIGITAL DVD VIDEO/ DVD AUDIO	DOLBY DIGITAL bit stream		48 kHz, 16 bits stereo linear PCM	
CD/VCD/SVCD	44.1 kHz, 16 bits stereo linear PCM/48kHz, 16 bits linear PCM			
DTS CD	DTS bit stream 44.1 kHz, 16 bits linear PCM			
MP3/WMA disc	32/44.1/48 kHz, 16 bits stereo linear PCM			

NOTE

- For a DVD VIDEO: There is a 20 bit or 24 bit output for DVD VIDEO without content protection set.
- For a DVD AUDIO: There is no output for DVD AUDIO with content protection set.

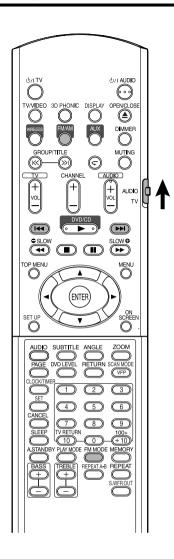
AD	Andorra		
AE	United Arab Emirates		
AF	Afghanistan		
AG	Antigua and Barbuda		
Al	Anguilla		
AL	Albania		
AM	Armenia		
AN	Netherlands Antilles		
AO	Angola		
AQ	Antarctica		
AR	Argentina		
AS	American Samoa		
AT	Austria		
AU	Australia		
AW	Aruba		
AZ	Azerbaijan		
BA	Bosnia and		
DD	Herzegovina		
BB	Barbados		
BD BE	Bangladesh Belgium		
BF	Burkina Faso		
BG	Bulgaria		
BH	Bahrain		
BI	Burundi		
BJ	Benin		
BM	Bermuda		
BN	Brunei Darussalam		
ВО	Bolivia		
BR	Brazil		
BS	Bahamas		
BT	Bhutan		
BV	Bouvet Island		
BW	Botswana		
	D 1		
BY	Belarus		
BY BZ	Belize		
BZ	Belize		
BZ CA CC	Belize Canada Cocos (Keeling) Islands		
BZ CA	Belize Canada Cocos (Keeling) Islands Central African		
BZ CA CC	Belize Canada Cocos (Keeling) Islands Central African Republic		
BZ CA CC CF	Belize Canada Cocos (Keeling) Islands Central African Republic Congo		
BZ CA CC CF	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland		
BZ CA CC CF CG CH	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire		
BZ CA CC CF CG CH CI CK	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands		
BZ CA CC CF CG CH CI CK CL	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile		
BZ CA CC CF CG CH CI CK CL CM	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon		
BZ CA CC CF CG CH CI CK CL CM	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China		
BZ CA CC CF CG CH CI CK CL CM CN CO	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia		
BZ CA CC CF CG CH CI CK CL CM CN CO CR	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde		
BZ CA CC CF CG CH CI CK CL CM CN CO CCR CU CV CX	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CX CY	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CX CY CZ	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic		
BZ CA CC CF CG CH CI CK CL CM CO CO CC CV CV CY CZ DE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany		
BZ CA CC CF CG CH CI CK CL CM CO CR CU CV CV CZ DE DJ	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti		
BZ CA CC CF CG CH CI CK CL CM CO CR CU CV CY CZ DE DJ DK	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CY CZ DE DJ DK DM	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CY CZ DE DJ DK DM DO	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CZ DE DJ DK DM DO DZ EC EE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia		
BZ CA CC CF CG CH CI CK CL CM CN CO CX CY CZ DE DJ DK DM DO DZ EC EE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia Egypt		
BZ CA CC CF CG CH CI CK CL CM CN CO CR CU CV CZ DE DJ DK DM DO DZ EC EE	Belize Canada Cocos (Keeling) Islands Central African Republic Congo Switzerland Côte d'Ivoire Cook Islands Chile Cameroon China Colombia Costa Rica Cuba Cape Verde Christmas Island Cyprus Czech Republic Germany Djibouti Denmark Dominica Dominican Republic Algeria Ecuador Estonia		

ES	Spain	
ET	Ethiopia	
FI	Finland	
FJ	Fiji	
FK	Falkland Islands	
	(Malvinas)	
FM	Micronesia	
	(Federated States of)	
FO	Faroe Islands	
FR	France	
FX	France, Metropolitan	
GA	Gabon	
GB	United Kingdom	
GD	Grenada	
GE	Georgia	
GF	French Guiana	
GH	Ghana	
GI	Gibraltar	
GL	Greenland	
GM	Gambia	
GN	Guinea	
GP	Guadeloupe	
GQ	Equatorial Guinea	
GR	Greece	
GS	South Georgia and	
	the South Sandwich	
	Islands	
GT	Guatemala	
GU	Guam	
GW	Guinea-Bissau	
GY	Guyana	
HK	Hong Kong	
HM	Heard Island and	
	McDonald Islands	
HN	Honduras	
HR	Croatia	
HT	Haiti	
HU	Hungary	
ID	Indonesia	
IE_	Ireland	
IL	Israel	
IN	India	
Ю	British Indian Ocean	
10	Territory	
IQ IR	Iraq Iran (Islamic Republic of)	
IS		
IT	Italy	
JM	Jamaica	
JO	Jordan	
JP	Japan	
KE	Kenya	
KG	Kyrgyzstan	
KH	Cambodia	
KI	Kiribati	
KM	Comoros	
KN	Saint Kitts and Nevis	
KP	Korea, Democratic	
	People's Republic of	
KR	Korea, Republic of	
KW	Kuwait	
KY	Cayman Islands	
KZ	Kazakhstan	
LA	Lao People's	
	Democratic Republic	
LB	Lebanon	

LC	Saint Lucia	
LI	Liechtenstein	
LK	Sri Lanka	
LR	Liberia	
LS	Lesotho	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
LY	Libyan Arab	
	Jamahiriya	
Ν.Α.Δ		
MA	Morocco	
MC	Monaco	
MD	Moldova, Republic of	
MG	Madagascar	
МН	Marshall Islands	
ML	Mali	
MM	Myanmar	
MN	Mongolia	
MO	Macau	
MP	Northern Mariana	
IVIE		
	Islands	
MQ	Martinique	
MR	Mauritania	
MS	Montserrat	
MT	Malta	
MU	Mauritius	
MV	Maldives	
MW	Malawi	
MX	Mexico	
MY	Malaysia	
MZ	Mozambique	
NA	Namibia	
NC	New Caledonia	
NE	Niger	
NF	Norfolk Island	
NG	Nigeria	
NI	Nicaragua	
NL	Netherlands	
NO	Norway	
NP	Nepal	
NR	Nauru	
NU	Niue	
NZ	New Zealand	
OM	Oman	
PA	Panama	
PE	Peru	
PF	French Polynesia	
	Papua New Guinea	
PG		
PH	Philippines	
PK	Pakistan	
PL	Poland	
PM	Saint Pierre and	
' '''		
	Miquelon	
PN	Pitcairn	
PR	Puerto Rico	
PT	Portugal	
PW	Palau	
PY	Paraguay	
QA	Qatar	
RE	Réunion	
RO	Romania	
RU	Russian Federation	
RW	Rwanda	
SA	Saudi Arabia	
SB	Solomon Islands	
SC		
_ SC	Seychelles	

SD	Sudan	
SE	Sweden	
SG		
	Singapore	
SH	Saint Helena	
SI	Slovenia	
SJ	Svalbard and Jan	
	Mayen	
SK	Slovakia	
SL	Sierra Leone	
SM	San Marino	
SN	Senegal	
SO	Somalia	
SR	Suriname	
ST	Sao Tome and Principe	
SV	El Salvador	
SY	Syrian Arab Republic	
SZ	Swaziland	
TC	Turks and Caicos	
	Islands	
TD	Chad	
TF	French Southern	
'F		
	Territories	
TG	Togo	
TH	Thailand	
TJ	Tajikistan	
TK	Tokelau	
TM	Turkmenistan	
TN	Tunisia	
TO	Tonga	
TP	East Timor	
TR	Turkey	
TT	Trinidad and Tobago	
TV	Tuvalu	
TW	Taiwan	
TZ	Tanzania, United	
	Republic of	
UA	Ukraine	
UG	Uganda	
UM	United States Minor	
Olvi		
110	Outlying Islands	
US	United States	
UY	Uruguay	
UZ	Uzbekistan	
VA	Vatican City State	
1	(Holy See)	
VC	Saint Vincent and the	
1	Grenadines	
VE	Venezuela	
VG		
	Virgin Islands (British)	
VI	Virgin Islands (U.S.)	
VN	Viet Nam	
VU	Vanuatu	
WF	Wallis and Futuna	
L	Islands	
WS	Samoa	
YE	Yemen	
YT	Mayotte	
YU	Yugoslavia	
	_	
ZA	South Africa	
ZM	Zambia	
ZR	Zaire	
ZW	Zimbabwe	

Listening to a radio broadcast



NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Selecting a station

1 Press FM/AM.

Each time you press the button, FM and AM change alternately.

2 Press | ◄ ◄ / ▶ ► | to select the station (frequency).

Automatic tuning:

Hold down I◄◄/▶►I until the system starts searching, and then release the button. (The AUTO indicator lights while searching.) When a station of sufficient signal strength is tuned in to, the system stops searching automatically.

To stop searching manually, press I◄◄/▶►I.

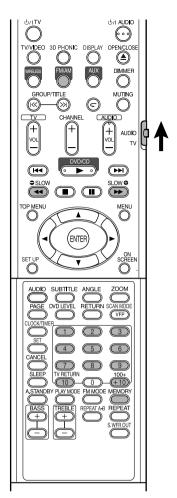
Manual tuning:

Each time you press I◄◄/▶►I, the frequency changes.

 When an FM stereo program is received, the ST (Stereo) indicator lights.

NOTE

If the stereo FM program currently tuned in to is noisy, you can improve the reception by pressing FM MODE to switch to the monaural mode. If you press FM MODE again, or tune in to another station, the receiving mode returns automatically to the stereo mode.



Presetting stations in the system allows you to easily tune in to a station.

NOTE

Set the remote control mode selector to **AUDIO** before using the number buttons.



Presetting stations

The system stores up to 30 FM stations and up to 15 AM stations.

- 1 Select a station you want to store (page 32 for how to select).
- **2** Press MEMORY.

"MEMORY" is flashing on the display window for a while.

- 3 Select the number you want to store by pressing number buttons while "MEMORY" is flashing.
 - You can also select the number by using the number buttons.
 - Refer to "How to use the number buttons" (page 15).
- 4 Press MEMORY while the selected number is flashing.

"STORED" appears on the display window and the selected station is stored.

NOTE

- Storing a new station to a used number erases the previously stored station.
- After storing new stations, do not unplug the AC power cord to turn off the system. If you do so, the new preset stations will be cleared.

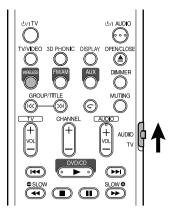
Tuning in to a preset station

- 1 Press FM/AM to select either FM or AM.
- 2 Press the number buttons to select the memory number of a station you want to tune in to.

Refer to "How to use the number buttons" (page 15).

You can also select by pressing ◀◀/▶▶.

Using USB wireless transmission



You can enjoy music from your PC through the wireless connection.

Remember you cannot send any signal or data to your PC from this system.

IMPORTANT

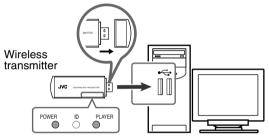
- Always set volume to "VOL MIN" when connecting or disconnecting the other equipment.
- When using USB wireless transmission to listen to music, AVOID
 - any shock/vibration/knocking to the transmitter
 - using any metal, plastic parts or your palm to cover up the transmitter
 - putting either transmitter or main unit or both of them near the microwave oven
 - plugging off the transmitter while playing back music and for several seconds until your PC detects the transmitter.

1 Turn on your PC and start running Windows.

 For smooth operation, do not run too many applications simultaneously when your PC has been turned on.

2 Connect the supplied wireless transmitter to the USB connector of the PC.

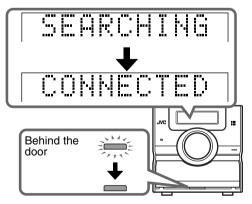
- Before connecting the transmitter to the PC, remove the cover of the transmitter.
- For Windows® Me, Windows® 2000, or Windows® XP: When you connect the transmitter, the PC will detect the transmitter automatically.
 - For Windows® 98/98SE: When you connect the transmitter for the first time, you need to install the driver (page 35).
- The POWER and PLAYER indicators on the transmitter light up.



 If your PC does not detect the transmitter, disconnect the transmitter and connect it again. If it does not work yet, restart Windows.

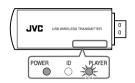
3 Press WIRELESS.

The system enters "wireless transmission" mode.



4 Start the music application and play any music on your PC.

The PLAYER indicator on the transmitter flashes.

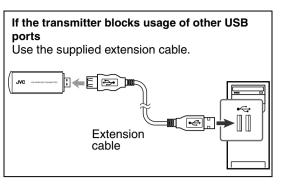


Your PC music is transmitted to the system. Enjoy listening!

How to install the driver (for Windows® 98/98SE)

For the first time the transmitter is connected, "Add New Hardware Wizard" appears after "New Hardware Found" message is shown for a while. Install the driver as follows using the Wizard.

- Prepare the Windows® 98/98SE installation CD-ROM supplied with your PC
- 1 Click "Next".
- 2 Select "Search for the best driver for your device (Recommended)," then click "Next".
- 3 Choose "CD-ROM drive" for the location of driver.
- 4 Insert the Windows® 98/98SE installation CD-ROM into the CD-ROM drive of the PC, then click "Next".
 - You may select to use "Specify a location" if your Windows® 98/98SE drivers already exist inside your PC hard disc.
- 5 Click "Next" again.
- 6 Click "Finish" to complete the installation.
 - You may need to restart Windows.



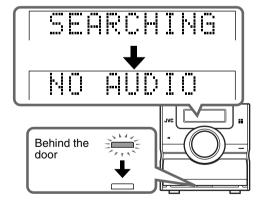
NOTE

- Refer also to the manuals supplied with the music application software installed in the PC.
- When not using the PC as the playback source, disconnect the transmitter.
- The music may not be played back correctly interrupted or degraded—due to your PC settings and PC specifications.
- The signal-reachable distance is about 20 m, but it may differ depending on the operating conditions and circumstances.
- Though the transmitter may become hot, it is not a malfunction.

If no music is played on the PC for about 30 minutes

The transmitter enters "sleep" mode ("SEARCHING" is displayed and the indicator behind the door flashes). Playing music from the PC will reactivate the wireless transmission.

 "NO AUDIO" is displayed and the indicator goes off 5 minutes after the system displays "SEARCHING" (or no music source is detected by the system).



If noise comes during playback or playback is interrupted with the wireless connection, try either operation below:

- press CHANNEL on the transmitter to search for another frequency. Each time you press CHANNEL, the frequency advances one channel up from CH 1 up to CH 13.
- press and hold CHANNEL for more than three seconds to make sure the transmitter detects the best frequency automatically.

If the transmitter has an influence on the wireless systems (based on IEEE 802.11b/11g, the cordless telephone, and the microwave oven), try the operations below:

- to keep the distance between the transmitter and the LAN antenna utilize the supplied extension cord
- press CHANNEL on the transmitter to search for another frequency. Each time you press CHANNEL, the frequency advances one channel up from CH 1 up to CH 13.
- press and hold CHANNEL for more than three seconds to make sure the transmitter detects the best frequency automatically.

If no sound comes from the speakers, check the following items:

- check the transmitter is detected properly as follows: open the Control Panel on your PC, select [Sounds and Audio Devices] → [Audio] tab → [Sound playback] → [Default device], and check [Default device] is set to [USB Speaker]*.
- check the playback software on your PC is compatible with the USB device.
- · select "WIRELESS" as the source.
- · adjust the volume level on the system.

NOTE

* English version of Windows XP® is used for the explanation. If your PC is running on a different version of operation system or language, the description may differ.

For Windows® 98/98SE: open the Control Panel, select [Multimedia], choose [AUDIO] at Playback section, and make sure [USB Audio Device] is selected.

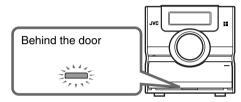
If you are playing back CD from your DVD/CD-ROM at [Multimedia] properties, select [CD Music] and click on to the box indicating [Enable digital CD audio for this CD-ROM device].

If the system keeps displaying "SEARCHING" while the transmitter is connected to the PC, check the following items:

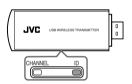
- keep proper distance between the system and your PC.
- no obstacles in between the transmitter and the main unit.

If the system still displays "SEARCHING," follow the procedure below.

- Make sure the transmitter is connected to the PC:
- 1 While pressing and holding ■, press STANDBY/ON ७/I on the main unit. The system enters "ID learning" mode. The indicator behind the door starts flashing fast.



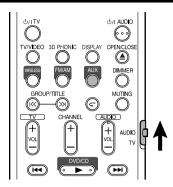
- · In 20 seconds:
- 2 Press and hold ID on the transmitter.



When the ID Learning is successful, the indicator behind the door stops flashing and lights up ("ID SYNC OK" is displayed).

* Microsoft®, Windows® 98/98SE, Windows® Me, Windows® 2000 and Windows® XP are registered trademarks of Microsoft corporation.

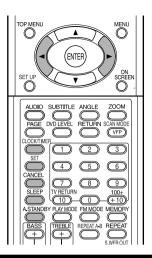
Listening to the sound of other audio device



Connect the other audio device to this system in advance (page 10).

- 1 Press AUX.
 The source changes to AUX.
- 2 Play the other audio device.
 For details, refer to the manual of the device connected.
- Adjust the volume and the sound quality of the system (page 16).

Setting the various timer



Setting the built-in clock

Without setting the built-in clock, you cannot use any timers.

- To exit from the clock setting, press CLOCK/TIMER as required.
- To correct a misentry during the procedure below, pressing CANCEL can return to the previous step.
- 1 Press CLOCK/TIMER.



- If you have already adjusted the clock before, press the button repeatedly until the clock time starts flashing.
- 2 Press cursor

 → to adjust the hour, then press SET.
- 3 Press cursor **◄/►** to adjust the minute, then press SET.

Now the built-in clock starts to work.

Setting the daily timer

Using the daily timer, you can wake up with your favorite song.

- You can store the three daily timer settings; however, you can activate only one of the daily timer
- To correct a misentry during the procedure below, pressing CANCEL can return to the previous step.

How the daily timer works:

Once the daily timer has been set, the timer indicator and timer number indicator (1/2/3) are lit on the display window. Daily timer turns on the system at the same time everyday until the timer setting is canceled manually or another daily timer is activated.

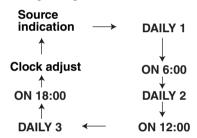
When the on-time comes:

The system turns on, tunes in to the specified station or start playback the loaded disc with the volume level set to the preset level.

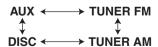
- The timer setting remains in memory until you can change it.
- Without canceling the daily timer, you can change the source or adjust the volume after the daily timer starts playback.

1 Press CLOCK/TIMER repeatedly to show "DAILY 1."

 Each time you press the button, the clock setting changes as follows:



- 2 Press cursor
 /▶ to adjust the hour of the timer-on time, then press SET.
- 3 Press cursor
 √► to adjust the minute of the timer-on time, then press SET.
- 4 Repeat Step 2 and 3 to set the timer-off time.
- Press cursor
 √> to select the playback source, then SET.
 - Each time you press the button, the clock setting changes as follows:



- When selecting the tuner, press cursor
 to select a preset channel.
- When selecting "DISC", you can specify the group and track. For the discs other than MP3/WMA, the group selection does not take effect.

- 6 Press cursor **◄/►** to adjust the volume level, then SET.
- **7** Turn off the system.

To turn off the timer setting

- 1 Press CLOCK/TIMER repeatedly to select the timer setting.
- 2 Press CANCEL to turn off the selected setting.
 - Pressing SET activates the timer setting again.

Auto Standby

If there is no operation for 3 minutes while the disc is stopped, the power will be automatically turned off.

Press A.STANDBY during playback or while the disc is stopped, or no disc is loaded ("NO DISC" appears).

The A.STANDBY indicator lights on the display window on the main unit.

When a stopped state is entered (after playback is finished, for example), the A.STANDBY indicator starts blinking.

This means that the power will be turned off automatically if there is no operation for 3 minutes. And 10 seconds before the power is turned off, "A.STANDBY" starts flashing.

Releasing Auto Standby

Press A.STANDBY.

"A.STANDBY" will be turned off on the display window on the main unit.

NOTE

When the source is FM, AM, WIRELESS or AUX, Auto Standby does not work.

Sleep Timer

When the time you specify elapses, the system will be turned off by itself.

Press SLEEP.

Each time you press the button, the time indicated on the display window on the main unit changes (in minutes).

Changing the time

Reselect the time by pressing SLEEP repeatedly.

Confirming the time

Press **SLEEP** once while Sleep Timer is set.

Releasing

Press **SLEEP** repeatedly until "SLEEP OFF" appears.

NOTE

Sleep Timer will also be released when the power is turned off.

Tray Lock Convenient functions

You can lock the disc tray to prevent the disc from being ejected.

Setting

While the system is turned off, press ≜ (Open/Close) with ■ (Stop) on the main unit held. "LOCKED" appears on the display window on the main unit.

Releasing

Carry out the same operations as those for setting. "UNLOCKED" appears on the display window on the main unit.

Troubleshooting

When you encounter a problem that seems to be a fault, check the following points before contacting your JVC service center.

Power source

Power does not come on.

- The power cord is not connected to the main unit or an AC outlet.
 - → Connect the power cord correctly (page 11).

Operation

You cannot operate any button.

 Some specific operations may be inhibited for some discs.

The remote control does not work.

- The dry-cell batteries have run out.
 - → Replace the batteries (page 6).

■ A disc cannot be played back.

- In the case of DVD VIDEO discs
 - → Check the Region Code number of the discs (page 3).
- "NO PLAY" is displayed on the display window.

It is not a disc that can be played on this system.

- → Check the disc type (page 3).
- Parental Lock is set (page 30).

About images

■ No picture appears.

- · The video cord is not connected correctly.
 - → Page 11
- Both of the component video jack and S-Video jack are connected.
 - → Connect either (page 11).

■ The picture is distorted.

- A VCR is connected between the main unit and the TV set.
 - → Connect the main unit directly to the TV set (page 11).
- Although this system is connected to a non-Progressive TV set, DVD's scan mode is set to "PROGRESSIVE".
 - → Set the scan mode to "INTERLACE" (page 26).

The screen size is abnormal.

- The screen size is set improperly.
 - → Set "MONITOR TYPE" according to the TV set you are using (page 29).

■ The TV screen darkens.

- "SCREEN SAVER" is set.
 - → If set, press any button (page 29).

■ The screen cannot be switched.

 The Progressive mode is applied only to component video output.

About sound

■ There is no sound.

- · Speakers are not connected correctly.
 - → Page 9
- · The sound is muted.
 - → Page 16
- "NO AUDIO" is displayed on the display window

The disc may have been produced through illegal copying.

→ Confirm at the store where you bought the disc.

■ The sound is weak compared with TV or Video.

- "DVD LEVEL" is set to "NORMAL".
 - \rightarrow Set to other than "NORMAL" (page 26).

■ The sound is distorted.

- · The volume is turned up too high.
 - → Turn down the volume (page 16).

No sound comes out of the subwoofer.

- · "SUBWOOFER" is turned off.
 - → Press **S.WFR OUT** to turn on (page 10).

■ The music through the wireless connection stops.

- Noise and static electricity may stop the music through the wireless connection. In this case, do the following operations:
 - → Disconnect and connect the wireless transmitter
 - → Restart the music software on your PC
 - \rightarrow Turn off and on the system

About radio

The sound is noisy while receiving/Receiving is disabled.

- · The antenna is not connected correctly.
 - → Connect the antenna correctly (page 8).

Others

It is not possible to switch audio or subtitles between languages.

- The disc does not contain 2 or more languages.
 - → If only a single language is recorded on the disc, switching to another language is impossible (page 24).

No subtitle is displayed.

- · The disc does not contain any subtitles.
 - → A DVD VIDEO without subtitles cannot display any subtitles.
- The subtitle language is set to "OFF".
 - → Specify a language (page 29).
- Before or after A point or B point in A-B Repeat Playback, no subtitle may be displayed.

■ The disc cannot be ejected.

- Tray Lock is set.
 - → page 39

"LR ONLY" is displayed on the display window (for a DVD AUDIO).

 Because, for the track being played back, down mix is inhibited for multi-channel sound, the sound of L and R is output directly (a normal action).

If the system does not work properly despite correction measures above

Many functions of this system are implemented by microcomputers. If pressing any button does not result in the normal action, disconnect the power plug from the outlet, wait for a while, and reconnect the system.

Code	Language	Code	Language
AA	Afar	MK	Macedonian
AB	Abkhazian	ML	Malayalam
AF	Afrikaans	MN	Mongolian
AM	Ameharic	MO	Moldavian
AR	Arabic	MR	Marathi
AS	Assamese	MS	Malay (MAY)
AY	Aymara	MT	Maltese
AZ	Azerbaijani	MY	Burmese
BA	Bashkir	NA	Nauru
BE	Byelorussian	NE	Nepali
BG	Bulgarian	NL	Dutch
BH	Bihari	NO	Norwegian
BI BN	Bislama	OC OM	Occitan
BO	Bengali, Bangla Tibetan	OR	(Afan) Oromo Oriya
BR	Breton	PA	Panjabi
CA	Catalan	PL	Polish
CO	Corsican	PS	Pashto, Pushto
CS	Czech	PT	Portuguese
CY	Welsh	QU	Quechua
DA	Danish	RM	Rhaeto-Romance
DZ	Bhutani	RN	Kirundi
EL	Greek	RO	Rumanian
EO	Esperanto	RU	Russian
ET	Estonian	RW	Kinyarwanda
EU	Basque	SA	Sanskrit
FA	Persian	SD	Sindhi
FI	Finnish	SG	Sangho
FJ	Fiji	SH	Serbo-Croatian
FO	Faroese	SI	Singhalese
FY	Frisian	SK	Slovak
GA	Irish	SL	Slovenian
GD	Scots Gaelic	SM	Samoan
GL	Galician	SN	Shona
GN	Guarani	SO	Somali
GU	Gujarati	SQ SR	Albanian
HA HI	Hausa	SS	Serbian
HR	Hindi Croatian	ST	Siswati Sesotho
HU	Hungarian	SU	Sundanese
HY	Armenian	SV	Swedish
IA	Interlingua	SW	Swahili
IE .	Interlingue	TA	Tamil
<u>ik</u>	Inupiak	TE	Telugu
IN	Indonesian	TG	Tajik
IS	Icelandic	TH	Thai
IW	Hebrew	TI	Tigrinya
JI	Yiddish	TK	Turkmen
JW	Javanese	TL	Tagalog
KA	Georgian	TN	Setswana
KK	Kazakh	TO	Tonga
KL	Greenlandic	TR	Turkish
KM	Cambodian	TS	Tsonga
KN	Kannada	TT	Tatar
KO	Korean (KOR)	TW	Twi
KS	Kashmiri	UK	Ukrainian
KU	Kurdish	UR	Urdu
KY	Kirghiz	UZ	Uzbek
LA LN	Latin	VI VO	Volenuk
LO	Lingala Laothian	WO	Volapuk Wolof
LT	Lithuanian	XH	Xhosa
LV	Latvian, Lettish	YO	Yoruba
MG	Malagasy	ZU	Zulu
MI	Maori		1-0.0
		l	

SpecificationsReference

General

Power source: AC 110-240 V \sim , 50/60 Hz

For Hong Kong only:

AC 220 V \sim , 50 Hz 25 W (in operation)

Power consumption: 25 W (in operation) 1.3 W (on standby)

For Hong Kong only:

25 W (in operation)

1.0 W (on standby)

Weight: 3.0 kg

External dimensions

(W x H x D): 150 mm x 152 mm x 246 mm

DVD player

Playable discs: DVD VIDEO, DVD AUDIO, VCD,

SVCD, CD, CD-R/RW (CD, VCD, MP3, WMA, JPEG format), DVD-R/-RW (video format)

Video output

Color system: PAL/NTSC Horizontal resolution: 500 lines

Composite x1: 1.0 V (p-p)/75 Ω ,

synchronization negative S-video x1: Y output: 1.0 V $(p-p)/75 \Omega$,

synchronization negative

C output:

For PAL 0.3 V (p-p)/75 Ω For NTSC 0.286 V (p-p)/75 Ω

Component x1: Y output: 1.0 V (p-p)/75 Ω

P_B/P_R output: 0.7 V (p-p)/75 Ω

Audio output

Analog sound output:

Speakers x2

Output power: 18 W per channel, min. RMS, at 4 Ω at 1 kHz with no more than 10% total harmonic distortion

Fitting impedance: 4Ω to 16Ω Headphones x1: $11 \text{ mW/32 } \Omega$ Fitting impedance: 16Ω to $1 \text{ k}\Omega$ Subwoofer x1: $500 \text{ mVrms/} 10 \text{ k}\Omega$

Digital sound output:

Optical x1: -21 dBm to -15 dBm

Audio input

Sound input: AUX x1

400 mV/50 k Ω

USB Wireless Transmission

The USB wireless transmitter supplied with this System supports Direct Sequence Spreading Spectrum (DSSS) using 2.4 GHz frequency band.

Tuner

FM tuner:

Receiving frequency: 87.5 MHz to 108.0 MHz Antenna: 75 Ω - Unbalanced type

AM tuner:

Receiving frequency: 530 kHz to 1 710 kHz

(at 10 kHz interval spacing) 531 kHz to 1 710 kHz (at 9 kHz interval spacing)

Antenna: External antenna jack (loop

antenna)

Speaker

Type: Full range

1-way bass-reflex type Magnetically shielded type

Speaker: 8 cm cone x1 Frequency response: 55 to 20 000 Hz

Power handling capacity: 30 W Impedance: 4 Ω

Sound pressure level: 80 dB/W⋅m Dimension (W x H x D): 120 mm x 151 mm x 241 mm

Weight: 1.8 kg each

Designs and Specifications are subject to change without notice.

JVC