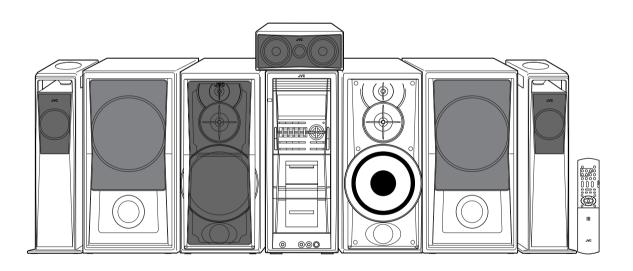
JVC



COMPACT COMPONENT SYSTEM

DX-T9

—Consists of CA-DXT9, SP-XT7, SP-WT9, SP-XCT9 and SP-XST9

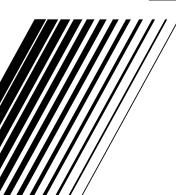












INSTRUCTIONS

For Customer Use:

Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No.

Serial No.

Warnings, Cautions and Others Mises en garde, précautions et indications diverses



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



The lightning flash with arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION — (b/l button!

Disconnect the mains plug to shut the power off completely. The \mathfrak{G}/I button in any position does not disconnect the mains line. The power can be remote controlled.

Attention — Commutateur 0/1!

Déconnecter la fiche de secteur pour couper complètement le courant. Le commutateur 0/1 ne coupe jamais complètement la ligne de secteur, quelle que soit sa position. Le courant peut être télécommandé.

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.

ATTENTION

Afin d'éviter tout risque d'électrocution, d'incendie, etc.:

- Ne pas enlever les vis ni les panneaux et ne pas ouvrir le coffret de l'appareil.
- 2. Ne pas exposer l'appareil à la pluie ni à l'humidité.

IMPORTANT FOR LASER PRODUCTS

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

IMPORTANT POUR PRODUITS LASER

- 1. PRODUIT LASER CLASSE 1
- 2. **ATTENTION**: N'ouvrez pas le couvercle supérieur. Il n'y a aucune pièce réparable par l'utilisateur à l'intérieur de l'appareil; confiez toute réparation à un personnel qualifié.
- ATTENTION: Rayonnement laser visible et/ou invisible de Classe 1M une fois ouvert. Ne pas fixer le faisceau ni regarder directement avec des instruments optiques.
- 4. REPRODUCTION DE L'ÉTIQUETTE: ÉTIQUETTE DE PRÉCAUTION PLACÉE À L'INTERIEUR DE L'APPAREIL



WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

For U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Note to CATV system installer:

This reminder is provided to call the CATV system installer's attention to Section 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

For Canada/pour le Canada

THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSIONS FROM DIGITAL APPARATUS AS SET OUT IN THE INTERFERENCE-CAUSING EQUIPMENT STANDARD ENTITLED "DIGITAL APPARATUS", ICES-003 OF THE DEPARTMENT OF COMMUNICATIONS.

CET APPAREIL NUMERIQUE RESPECTE LES LIMITES DE BRUITS RADIOELECTRIQUES APPLICABLES AUX APPAREILS NUMIRIQUES DE CLASSE B PRESCRITES DANS LA NORME SUR LE MATERIEL BROUILLEUR: "APPAREILS NUMERIQUES", NMB-003 EDICTEE PAR LE MINISTRE DES COMMUNICATIONS.

52 kg / 115 lbs.

CAUTION!

To avoid personal injury or accidentally dropping the unit, have two persons unpack, carry, and install the unit.

ATTENTION!

Pour éviter toute blessure personnelle ou toute chute accidentelle de l'appareil, celui-ci doit être déballé, transporté et installé par deux personnes.



[European Union only] [Union européenne seulement]

Introduction

Precautions



• Install the System in a location with adequate ventilation to prevent internal heat buildup in the System.



DO NOT install the System in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

- Install in a place which is level, dry and neither too hot nor too cold—between 5°C and 35°C (41°F and 95°F).
- Leave sufficient distance between the System and the TV.
- Keep the speakers away from the TV to avoid interference with the TV.

Power sources

 When unplugging the System from the wall outlet, always pull on the plug, not the AC power cord.



DO NOT handle the AC power cord with wet hands.

Moisture condensation

Moisture may condense on the lenses inside the System in the following cases:

- After starting to heat the room
- In a damp room
- If the System is brought directly from a cold to a warm place.

Should this occur, the System may malfunction. In this case, leave the System turned on for a few hours until the moisture evaporates, unplug the AC power cord, then plug it in again.

Internal heat

- Make sure there is good ventilation around the unit. Poor ventilation could overheat and damage the unit.
 - −A cooling fan is inside the unit to prevent heat buildup.



DO NOT block the ventilation openings or holes. If they are blocked by a newspaper or cloth, etc., the heat may not be able to get out.

Others

 Should any metallic object or liquid fall into the System, unplug the AC power cord and consult your dealer before operating any further.



DO NOT disassemble the System since there are no user serviceable parts inside.

 If you are not going to operate the System for an extended period of time, unplug the AC power cord from the wall outlet.

If anything goes wrong, unplug the AC power cord and consult your dealer.

Contents

Connections	3
Display Indication	6
Daily Operations—Playback	7
Canceling the Demonstration	
Listening to the Radio	
Playing Back a Disc	
Playing Back a Tape	. 11
Daily Operations—Sound & Other Adjustments	
Adjusting the Volume	. 12
Adjusting the Speaker Output Level	
Reinforcing the Bass Sound	
Selecting the Sound Modes	
Creating Your Own Sound Modes—User Mode	. 13
Selecting the Surround Modes	
Presetting Automatic DVD Video	
Sound Increase Level	. 14
Changing the Scanning Mode	. 15
Changing the Picture Tone	
Changing the Display Brightness	. 16
Reducing Power Consumption While on	
Standby—ECO Mode	
Setting the Clock	
Turning Off the Power Automatically	
Unique DVD/VCD Operations	
Selecting the Sound Track	
Selecting the Subtitle Language	
Selecting the View Angle	
Reviewing the Playback Quickly	
Selecting Browsable Still Pictures	
Playing Back Bonus Group	
Special Picture Playback	
Advanced Disc Operations	
Programming the Playing Order—Program Play	
Playing at Random—Random Play	
Playing Repeatedly—Repeat Play	. 22
Prohibiting Disc Ejection—Child Lock	
On-Screen Disc Operations	
On-screen Bar Information	
Operations Using the On-screen Bar	
Operations on the Control Screen	
Recording Operations	
Enjoying Karaoke	. 32
Singing Along (Karaoke)	. 32
Reducing the Lead Vocal—Vocal Masking	. 33
Scoring Your Karaoke Skill	. 33
Reserving Karaoke Songs—Karaoke Program Play	. 34
Timer Operations	
Setup Menu Operations	. 37
Operating the TV	
Additional Information	
Troubleshooting	
Specifications	
Parts Index	

Playable Disc Types









Video CD







DVD Logo is a trademark of DVD Format/Logo Licensing Corporation.

- CD-R/-RW: Recorded in the Audio CD/Video CD/ SVCD formats and MP3/WMA/JPEG files.
- DVD-R: Recorded in the DVD Video format.
- DVD-RW: Recorded in the DVD Video format or the Video Recording (DVD-VR) format.
- DVD-RAM: Recorded in the Video Recording (DVD-VR) format.

In addition to the above discs, this System can play back audio data recorded on CD Text, CD-G (CD Graphics), and CD-Extra.

- The following discs cannot be played back: DVD+R, DVD+RW, CD-I (CD-I Ready), Photo CD, etc. Playing back these discs will generate noise and damage the speakers.
- In this manual, "file" and "track" are interchangeably used for MP3/WMA/JPEG operations.

Caution for DualDisc playback:

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

Note on Region Code

This System can play back only DVD Videos whose Region Code numbers include "1."

EX.:









Audio formats

The System can play back the following digital audio formats.

• LPCM (Linear PCM), DIGITAL (Dolby Digital), DTS (Digital Theater Systems), MLP (Meridian Lossless Packing)

IMPORTANT: Before playing a disc, make sure of the following...

- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays.
- For disc playback, you can change the initial setting to vour preference. See "Setup Menu Operations" on page 37.

If " \(\rightarrow\) " appears on the TV screen when you press a **button,** the disc cannot perform the operation you have tried to do.

How to Read This Manual







- Button and control operations are explained in the table below.
- Some related tips and notes are explained later in the sections "Learning More about This System" and "Troubleshooting," but not in the same section explaining the operations (**INFO** indicates that the content has some information).

\mathcal{T}	
$\langle \cdot \rangle$	
\	

Indicates that you press the button briefly.



Indicates that you press the button **briefly and** repeatedly until an option you want is selected.



Indicates that you press one of the buttons.



Indicates that you **press and hold** the button for a specified period.

The number inside the arrow indicates the period of press (in the example, 2 seconds).



Indicates that you turn the control toward the specified direction(s).



Indicates that this operation is only possible using the remote control.



Indicates that this operation is only possible using the main unit.

- · Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.
- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.
- · "CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

Connections

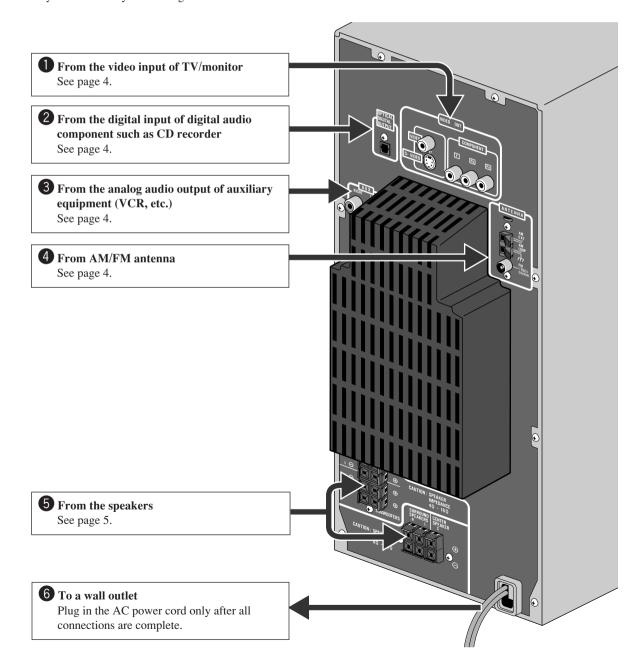
Do not connect the AC power cord until all other connections have been made.

- Connect VIDEO OUT directly to the video input of your TV. Connecting VIDEO OUT to a TV via a VCR may interfere with your viewing when playing back a copyprotected disc.
- Connecting VIDEO OUT to an integrated TV/VCR system may interfere with your viewing.

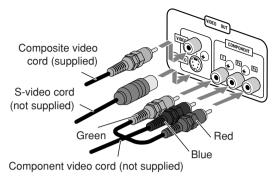
Supplied accessories

- FM antenna (x1)
- AM loop antenna (x1)
- Composite video cord (x1)
- Remote control (x1)
- Batteries (x2)

If any item is missing, consult your dealer immediately.

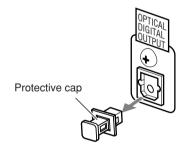


1 TV/monitor



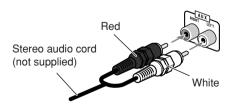
- To select progressive scanning mode (see page 15), use COMPONENT jacks.
- Connect the VIDEO jack, S-VIDEO jack, or COMPONENT jacks whichever you want to use.

Digital audio component



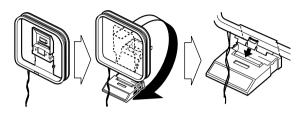
• Set "DIGITAL AUDIO OUTPUT" in the "AUDIO" menu correctly according to the connected digital audio equipment (see page 38). If the setting is incorrect, loud noise may be generated causing damage to the speakers.

Auxiliary equipment

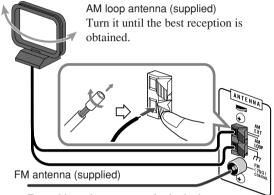


4 AM/FM antenna

To assemble the AM loop antenna

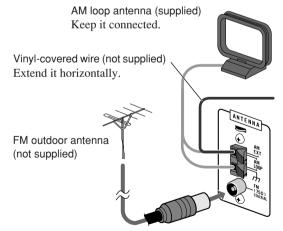


To connect AM/FM antenna



Extend it so that you can obtain the best reception.

For better AM/FM reception



- Disconnect the supplied FM antenna, and connect to an outdoor FM antenna using a 75 Ω wire with coaxial type connector (IEC or DIN45325).
- Make sure the antenna conductors do not touch any other terminals, connecting cords or the power cord. Also, keep the antennas away from metallic parts of the System, connecting cords, and the AC power cord. This could cause poor reception.

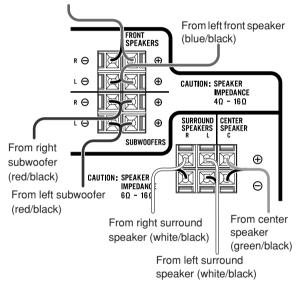
5 Speakers

To connect the speaker cords



• When connecting the speaker cords, match their polarity with that of the speaker terminals: blue/red/green/white/gray to (+) and black to (-).

From right front speaker (blue/black)



- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the System.
- The front and center speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.
 - When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.

Then wait at least 30 minutes before turning on the TV's main power switch again.

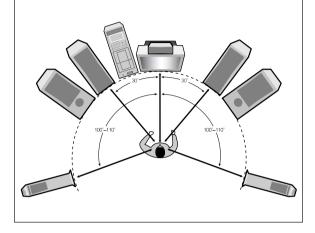
Some TVs may still be affected even though you have followed the above instruction. If this happens, move the speakers away from the TV.

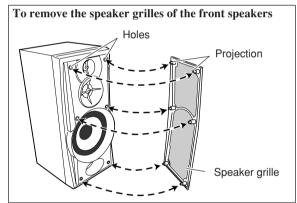


- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

Speaker layout

To enjoy multi-channel sound, locate the speakers as follows. If you cannot locate like this, adjust the speaker setting by using the SPK. SETTING menu (see page 38).





Preparing the remote control



When using the remote control, point the top of the remote control toward the remote sensor as directly as possible. If you operate it from a diagonal position, the operating range (approx. 5 m) may be shorter.

• Dispose of batteries in the proper manner, according to federal, state, and local regulations.

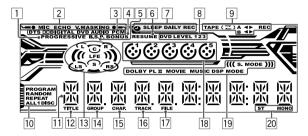


DO NOT recharge, short, disassemble, heat the battery or dispose of it in a fire.

Display Indication

The indications on the display tell you a lot of things while you are operating the System.

Before operating the System, be familiar with when and how the indicator illuminates on the display.



1 PROGRESSIVE indicator

- Lights when the progressive scanning mode is selected.
- 2 Karaoke operation indicators (see pages 32 to 34)
 - —•/•—: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - MIC: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - ECHO: lights when the echo effect is activated.
 - V.MASKING: lights when the Vocal Masking Mode is activated.
- 3 Source signal indicators
 - DTS: lights when a source signal is DTS.
 - DI DIGITAL: lights when a source signal is Dolby Digital.
 - DVD: lights when DVD Video is detected.
 - DVD AUDIO: lights when DVD Audio is detected.
 - PCM: lights when a source signal is linear PCM.
- 4 BONUS indicator
 - Lights when DVD Audio with bonus group is detected (see page 19).
- 5 B.S.P. indicator
 - Lights when browsable still pictures on DVD Audio are available (see page 18).
- 6 RESUME indicator
 - Lights when Resume is activated (see page 38).
- 7 Timer indicators
 - **(4)**: lights when Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: lights when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.
- 8 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD Video increase level.

9 Tape operation indicators

- TAPE: lights when a tape is loaded in either deck A or B.
- (**Z**) (Reverse Mode): lights to indicate the current Reverse Mode (see page 11).
- A: lights when a tape is in deck A.
- B: lights when a tape is in deck B.
- **◄** ► (tape direction):
- Lights to indicate the current tape running direction.
- Flashes slowly during playback and recording.
- Flashes quickly while rewinding a tape.
- REC: lights while recording.

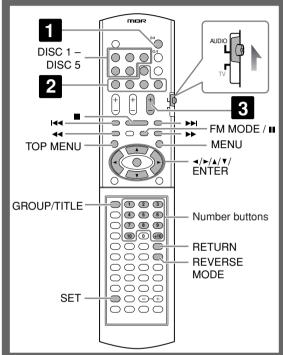
10 Disc operation indicators

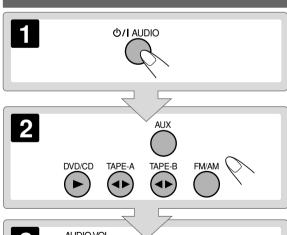
- PROGRAM: lights when Program Play is activated.
- RANDOM: lights when Random Play is activated.
- REPEAT: lights when Repeat Play is activated.
- ALL DISC: lights when All Disc Repeat is activated.
- 1 DISC: lights when One Disc Repeat is activated.1: lights when One Track/Chapter/Step Repeat is
- activated.

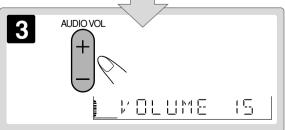
 11 Main display
- 12 TITLE indicator
 - Lights to indicate the title number for DVD Video.
- 13 Audio signal indicators
 - L/R/C/LS/RS/LFE: Lights to indicate the incoming audio channel signals.
 - Mary : Lights to indicate the speakers from which sound is emitted.
- 14 GROUP indicator
 - Lights to indicate the group number.
- 15 CHAP. indicator
 - Lights to indicate the chapter number.
- 16 TRACK indicator
 - · Lights to indicate the track number.
- 17 FILE indicator
 - Lights to indicate the file number.
- 18 Disc indicators
 - 1-5: lights to indicate the current disc tray.
 - : lights when a disc is detected on the disc tray; rotates during playback or paused.
- 19 Sound Mode/Surround Mode indicators (see page 13)
 - DOLBY PL II MOVIE/MUSIC: lights when Dolby Pro Logic Modes (Movie or Music) is activated.
 - S.MODE: lights when one of the Sound Modes/Surround Modes is activated.
 - DSP MODE: lights when one of the DSP Modes is activated.
- 20 FM reception indicators
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
 - MONO: lights while receiving an FM stereo station in monaural.

Daily Operations—Playback

In this manual, the operations using the remote control are mainly explained; however, you can use the buttons and controls on the main unit if they have the same (or similar) name and marks.







1 Turn on the power.

The STANDBY lamp on the main unit goes off.

• Without pressing **O/I** AUDIO, the System also turns on by pressing one of the source select buttons in the next step.

2 Select the source.

Playback automatically starts if the selected source is ready to start playback.

- If you press AUX, start playback on the external component.
- 3 Adjust the volume.
- 4 Operate the target source as explained later.

To turn off (standby) the System



The STANDBY lamp on the main unit lights in red.

- A small amount of power is always consumed even while on standby.
- You can reduce the standby power consumption by activating the ECO mode (see page 16).

For private listening

Connect a pair of headphones to the PHONES jack on the main unit. The sound will no longer come out of the speakers. Be sure to turn down the volume before connecting or putting on the headphones.

• Disconnecting the headphones will activate the speakers again.

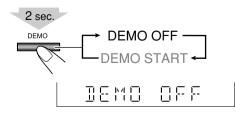


DO NOT turn off (standby) the System with the volume set to an extremely high level; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

Canceling the Demonstration





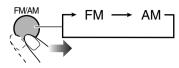


To start the demonstration, select DEMO START.

Listening to the Radio

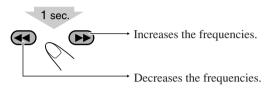


To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display.

When a station (frequency) with sufficient signal strength is tuned in, the frequency search stops.

• When you repeatedly press the button, the frequency changes step by step.

To stop searching manually, press either button.

If the FM station has poor reception





The MONO indicator lights on the display. Reception will improve though stereo effect is lost—monaural reception mode.

To restore the stereo effect, press the button again (the MONO indicator goes off).

To preset stations



You can preset 30 FM and 15 AM stations.

• To cancel the operation during procedure, press CANCEL.

1 Tune in to a station you want to preset.

You can also store the monaural reception mode for FM preset stations if selected.

2 Start presetting.



3 Select a preset number.



Examples: To select preset number 5, press 5.

4 5 6

To select preset number 15, press +10, then 5.

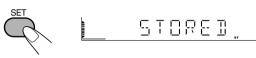
7 8 9 tr 10 0 +10 +

To select preset number 30, press +10, +10, then 10.

• You can also use +/- buttons.

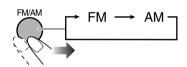


4 Store the station.



To tune in to a preset station

1 Select the band (FM or AM).



2 Select a preset number.







Examples:

To select preset number 5, press 5. To select preset number 15, press +10, then 5.

To select preset number 30, press +10, +10, then 10.

• You can also use |◀◀/▶►| buttons on the remote control or PRESET +/– buttons on the main unit.

Playing Back a Disc







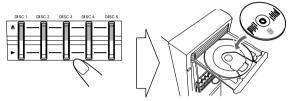


Before operating a disc, be familiar how a disc is recorded.

- DVD Video comprises of "Titles" which includes "Chapters," DVD Audio/MP3/WMA comprise of "Groups" which includes "Tracks," JPEG comprises of "Groups" which includes "Files," and CD/SVCD/VCD comprise of only "Tracks."
- For JPEG playback, see page 28.

To insert discs





• When using an 8 cm disc, place it on the inner circle of the disc tray.

To close the disc tray, press the same \triangle again.

• If you press ► for the same tray, the disc tray closes automatically and playback starts.

To start:	To pause:	To stop:
DVD/CD	FM MODE	
Playback of the current disc starts.	To release it, press DVD/CD ▶.	

While playing DVD/SVCD/VCD/MP3/WMA: This

System can store the stop point, and when you start playback again by pressing DVD/CD ▶, it starts from the position where you have stopped—Resume Play. (RESUME indicator lights up when you stop playback.)

To stop completely while Resume is activated, press twice. (To cancel Resume, see "RESUME" on page 38.)

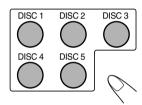
On-screen quide icons

- During disc playback, the following icons may appear for a while on the TV screen:
 - Appears at the beginning of a scene containing multi-angle views.
 - Appears at the beginning of a scene containing multi-audio languages.
 - Appears at the beginning of a scene containing multi-subtitle languages.
- The following icons will be also shown on the TV screen to indicate your current operation.



• To deactivate the on-screen guide icons, see "ON SCREEN GUIDE" on page 38.

To select a disc

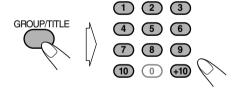


Playback starts.

To select a title/group



While playing a disc...



To select a chapter/track

While playing a disc...



or



• First time you press ►, you will go back to the beginning of the current chapter/track.



To locate a particular portion

While playing a disc except MP3/WMA/JPEG...



• No sound comes out while searching on DVD Video/ SVCD/VCD.

To return to normal playback, press DVD/CD ▶.

To select an item directly



You can select a title/chapter/track directly and start playback.

• For DVD Video, you can select a title before starting playback, while you can select a chapter after starting playback.





To select number 5, press 5. To select number 15, press +10, then 5.

To select number 30, press +10, +10, then 10.



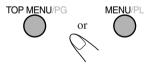
To play back by using the disc menu ()



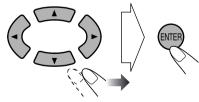
You can operate the disc play using the disc menu.

■ For DVD Video/DVD Audio

1 Show the disc menu.



2 Select an item on the disc menu.



· On some discs, you can also select items by entering the number using the number buttons.

■ For SVCD/VCD with PBC

While playing a disc with PBC, "PBC" appears on the display instead of the playing time.

When disc menu appears on the TV screen, select an item on the menu. Playback of the selected item starts.



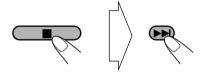
Examples:

To select number 5, press 5. To select number 15, press +10, then 5.

To select number 30, press +10, +10, then 10.

To move to the next or previous page of the current menu:	To return to the previous menu:
	RETURN

To cancel PBC



You can also cancel PBC by pressing the number buttons to start playback when disc menu is not shown on the TV screen.

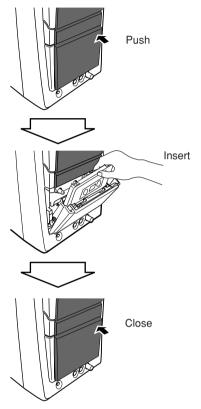
To reactivate PBC, press \blacksquare , then press \blacksquare .

Playing Back a Tape

To insert a tape

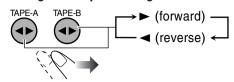
You can play back type I tapes.

• The use of C-120 or longer tape is not recommended.

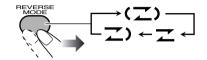


To start:	To stop:
TAPE-A TAPE-B	
To rewind tape:	

To change the tape running direction



To reverse the tape automatically



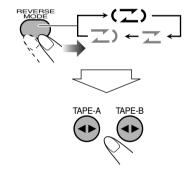
Tape is reversed, and playback repeats until you stop it.

Tape is not reversed. When the current side of the tape reaches its end, playback stops.

Tape is reversed once.

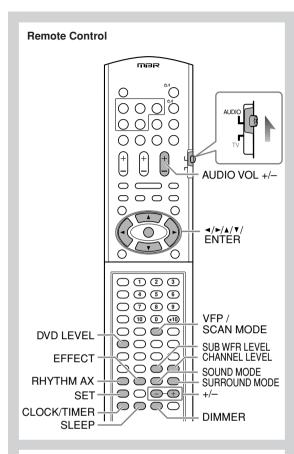
To play back both decks A and B continuously —Relay Play

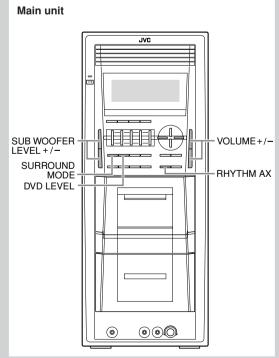
When the cassettes are set in both decks...



You can start playback of either deck A or B.

Daily Operations—Sound & Other Adjustments

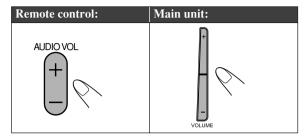




Adjusting the Volume



The volume level can be adjusted in 32 steps (VOLUME MIN. VOLUME 1 – VOLUME 30, and VOLUME MAX).



Adjusting the Speaker Output









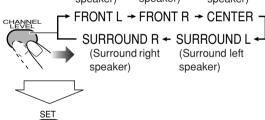


You can adjust the speaker output level from -6 (dB) to +6 (dB).

• You can also use the SPK. SETTING menu to adjust the speaker output level (see page 38).

1 Select the speaker you want to adjust.

(Front left (Front right (Center speaker) speaker) speaker)





2 Adjust the output level.



3 Repeat steps 1 and 2 to adjust other speakers.

Reinforcing the Bass Sound



To adjust the bass level gradually

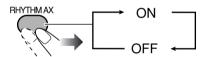


You can select the subwoofer level from level 0 (minimum) to level 4 (maximum).

Remote control:	Main unit:
SUB WFR	SUB WOOFER LEVEL

To emphasize rhythmical feeling—RHYTHM AX

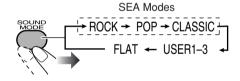
This function emphasizes the bass attack feeling.



Selecting the Sound Modes Remote Solly Solly



You can select one of the preset Sound Modes.



SEA (Sound Effect Amplifier) Modes	
ROCK	Boosts low and high frequency. Good for acoustic music (initial setting).
POP	Good for vocal music.
CLASSIC	Good for classical music.
User Modes	
USER1/2/3	Your individual mode stored in memory. See the next column "Creating Your Own Sound Modes—User Mode."

To cancel the Sound Mode, select "FLAT."

Creating Your Own Sound Remote ONLY





Modes—User Mode

You can adjust the preset Sound Modes to create your own Sound Modes which suit your taste. The changed settings can be stored as the USER1, USER2 and USER3 Modes.

While "USER1," "USER2," or "USER3" is shown on the display...

1 Enter the SEA Control Mode.

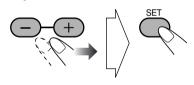


2



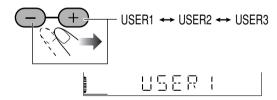
3 Adjust the SEA pattern.

- 1 Adjust BASS.
- 2 Adjust TREBLE.



• You can adjust the bass and treble level from -3

4 Select one of the User Modes.



5 Store the setting.



• The Sound Mode changes to the one you have stored.

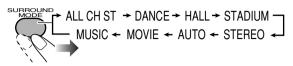
Selecting the Surround Modes



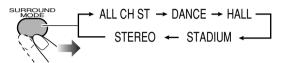


INFO

• For DVD/CD, TAPE-A, TAPE-B, AUX:



• For FM/AM:

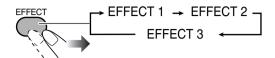


DSP Modes	
ALL CH ST	All Channel Stereo; Creates larger stereo sound field using all the connected speakers (initial setting).
DANCE	Increases resonance and bass.
HALL	Adds depth and brilliance to the sound.
STADIUM	Adds clarity and spreads the sound, as in an outdoor stadium.
Stereo Mode	
STEREO	Cancels the Surround Mode.
Auto Surroun	d Mode
AUTO	When multi-channel surround signal comes in, multi-channel surround mode is activated. When Dolby Surround signal comes in, MOVIE (Dolby Pro Logic II Movie) mode is selected. When 2-channel signal comes in, STEREO mode is selected.
Dolby Pro Logic II Modes	
MOVIE	Creates 5.1-channel surround field from 2-ch source (suitable for movie source).
MUSIC	Creates 5.1-channel surround field from 2-ch source (suitable for music source).

To adjust the DSP effect level (SNLY) (SNLY)



When one of the DSP Modes (except for "ALL CH ST") is selected...



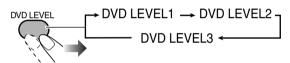
• The initial setting is "EFFECT 3."

Presetting Automatic DVD Video



Sound Increase Level

The DVD Video sound is sometimes recorded at a lower level than other discs and sources. You can set the increase level for the currently loaded DVD Video, so you do not have to adjust the volume when you change the source.



As the number increases, sound level also increases.

• The initial setting is "DVD LEVEL3."

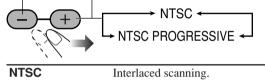
Changing the Scanning Mode Remote NFO



- If you connect a progressive TV through the COMPONENT jacks, you can enjoy a high quality picture from the built-in DVD player by selecting progressive scanning mode.
- You can change the setting only while the disc playback is stopped.
- 1 Enter the scanning mode setting mode.



2 Select the scanning mode.



For a conventional TV. NTSC Progressive scanning. **PROGRESSIVE** For a progressive TV.

3 Store the setting.



Changing the Picture Tone (BULLY) (STATE OF THE PICTURE TO THE PIC





While viewing a playback picture on the TV, you can select the preset picture tone, or adjust it and store your own preference.

To select a preset picture tone

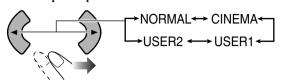
1 While playing, display VFP setting screen.





On the TV screen

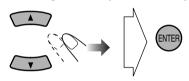
2 Select a preset picture tone.



NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

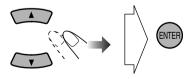
To adjust the picture tone

- 1 Select "USER1" or "USER2."
 - Follow steps 1 and 2 above.
- **2** Select a parameter you want to adjust.



GAMMA	Adjust if the neutral color is bright or dark. The brightness of dark and bright portions is maintained (–3 to +3).
BRIGHTNESS	Adjust if the picture is bright or dark as a whole (-8 to +8).
CONTRAST	Adjust if the far and near position is unnatural (–7 to +7).
SATURATION	Adjust if the picture is whitish or blackish (–7 to +7).
TINT	Adjust if human skin color is unnatural (–7 to +7).
SHARPNESS	Adjust if the picture is indistinct (-8 to +8).

3 Adjust the parameter.

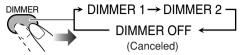


4 Repeat steps 2 to 3 to adjust other parameters.

To erase the VFP screen, press VFP again.

Changing the Display Brightness (ROMAN)





DIMMER 1	Dims the display and the illumination on the main unit*.
DIMMER 2	Dims the display (same as DIMMER 1) and turns off the illumination on the main unit*.

^{*}Except for the RHYTHM AX and KARAOKE SCORING lamps.

Reducing Power Consumption While on Standby—ECO Mode Remote (NLY)

You can reduce the power consumption while the System is turned off (on standby) by activating the ECO mode.

To activate the ECO mode, press DIMMER while the System is turned off (on standby). The display illumination (including the display demonstration) disappears.



To deactivate the ECO mode, press DIMMER again while the System is turned off (on standby). The display illumination appears.

Setting the Clock Remote (SNLY)







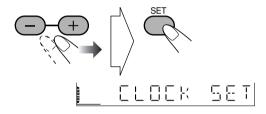
Without setting the build-in clock, you cannot use any timers.

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

1 Activate clock setting mode.



- If you have already adjusted the clock before, press the button repeatedly until the clock time starts flashing.
- **2** Adjust the hour, then minute.



Now the built-in clock starts working.

Turning Off the Power Automatically (Bendle)



With Sleep Timer, you can fall asleep while listening to music.

1 Specify the time (in minutes).

SLEEP
$$10 \rightarrow 20 \rightarrow 30 \rightarrow 60 \rightarrow 90$$
 Canceled $\leftarrow 150 \leftarrow 120 \leftarrow$

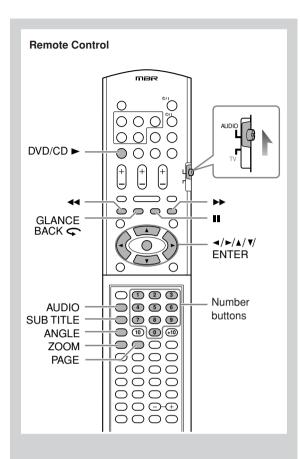
2 Wait until the set time goes off.

To check the time remaining until the shut-off time



• If you press the button repeatedly, you can change the shut-off time.

Unique DVD/VCD Operations



Selecting the Sound Track (Remote) (NFO)





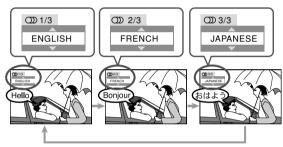
For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For DVD-VR/Karaoke SVCD/VCD: When playing back a track, you can select the audio channel to play.

• You can also select the audio track using the on-screen bar (see page 24).

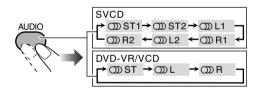
While playing DVD Video...



Ex.:



While playing a DVD-VR, SVCD, or VCD...



ST1/ST2/ST	To listen to normal stereo (2-channel) playback.
L1/L2/L	To listen to the left audio channel.
R1/R2/R	To listen to the right audio channel.

• SVCD can have 4 audio channels. Karaoke SVCD usually uses these 4 channels to record two 2-channel recordings (ST1/ST2).

Selecting the Subtitle Language (Remote)



For DVD Video: While playing back a chapter containing subtitles in different languages, you can select the subtitle language to display on the TV screen.

For DVD-VR: While playing, you can turn the subtitle on or

For SVCD: While playing, you can select the subtitles even if no subtitles are recorded on the disc.

• You can also select the subtitle language using the onscreen bar (see page 24).

While playing a DVD Video...

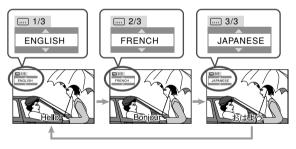
1 Display the subtitle selection window.



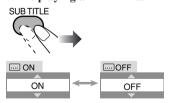
2 Select the subtitle language.



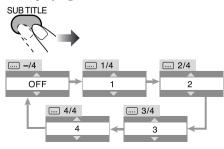
Ex.:



While playing a DVD-VR...



While playing an SVCD...



Selecting the View Angle Remote Solly





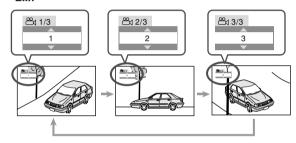
For DVD Video only: While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

• You can also select the view angle using the on-screen bar (see page 24).

While playing back...



Ex.:



Reviewing the Playback Quickly Remote (NLY)



For DVD Video/DVD-VR only: You can move the playback position to 10 seconds before the current position (only within the same title)—Glance Back.

While playing back...



Selecting Browsable Still Pictures Remote ONLY



For DVD Audio only: While playing back a track linked to browsable still pictures (B.S.P.), you can select the still picture (turn the page) to be shown on the TV screen.

- If a track is linked to browsable still pictures (B.S.P.), they are usually shown in turn automatically during playback.
- You can also select the page using the on-screen bar (see page 24).



Each time you press the button, the still picture changes one after another (if available).

Playing Back Bonus Group (Femole)

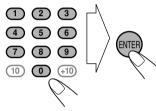


For DVD Audio only: Some DVD Audio discs have a special group called "bonus group" whose contents are not open to the public.

 To play back a bonus group, you have to enter the specific "key number" (a kind of password) for the bonus group.
 The way of getting the key number depends on the disc.

1 Select the bonus group.

- The bonus group is usually recorded as the last group (for example, if a disc contains 4 groups including a bonus group, "group 4" is the bonus group).
- For how to select the group, see "To select a title/group" on page 9.
- **2** Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■.

Special Picture Playback



Still picture playback

While playing...



Still picture playback starts.

To resume normal playback, press DVD/CD ▶.

Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ▶.

Slow-motion playback

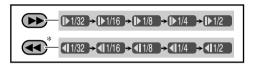
1 While playing...



Still picture playback starts.

2 Select slow motion speed.





* Not available for DVD-VR/SVCD/VCD.

To resume normal playback, press DVD/CD ▶.

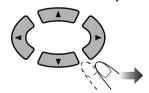
Zoom Remote ONLY >>>

1 While playing...



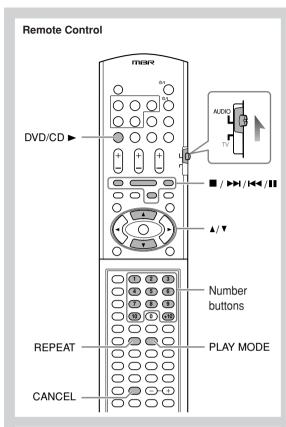
As the number increases, magnification also increases.

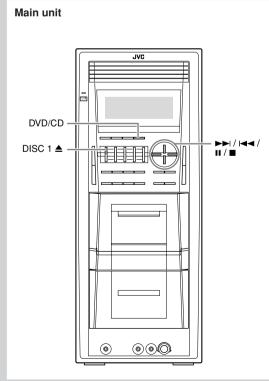
- For JPEG, see page 29.
- **2** Move the zoomed-in position.



To resume normal playback, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

Advanced Disc Operations





Programming the Playing Order (Remote only)

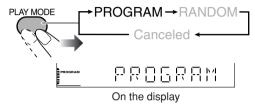






You can arrange the playing order of the tracks (up to 99) before you start playback.

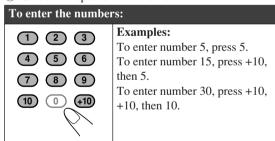
1 Before starting playback, activate Program Play.





On the TV screen

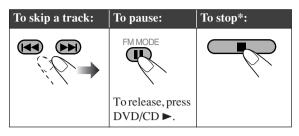
- **2** Select chapters or tracks you want for Program Play.
 - ① Select a disc number.
 - 2 Select a title or group number.
 - 3 Select a chapter or track number.



- 3 Repeat step 2 above until you finish what you want to program.
- Start playback.



Playback starts in the order you have programmed.

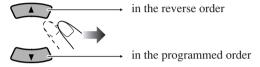


^{*}Resume does not work for Program Play.

To check the programmed contents



Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
CANCEL	
To add steps in the program:	
Repeat step 2 on page 20.	

To exit from Program Play

Before or after playback...

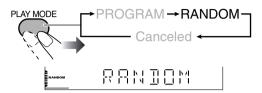


Playing at Random—Random Play Remote Solly



You can play the contents of all the loaded discs at random. • Random Play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback of the current disc starts in a random order. When all chapters/tracks on the current disc are played, playback of the next disc starts. Random Play ends when all loaded discs are played.

To skip:	To pause:	To stop:
To go to the beginning of the current track, press	To release, press DVD/CD ►.	

To exit from Random Play

Before or after playback...



Playing Repeatedly—Repeat Play Remote (NLY)



You can repeat playback.

- You can also select the repeat mode using the on-screen bar (see page 24).
- The indicator(s) lights on the display as follows to indicate the current repeat mode.

• For DVD Video:

While playing...



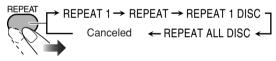
• For DVD Audio:

While playing or before playback...



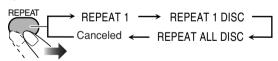
• For MP3/WMA:

While playing or before playback...



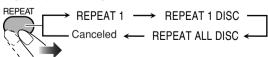
• For CD/SVCD/VCD:

While playing or before playback (without PBC for SVCD/ VCD)...



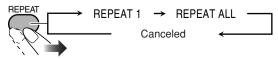
• For Random Play:

While playing or before playback...



• For Program Play:

While playing or before playback...



REPEAT 1	Repeats the current chapter/track.
REPEAT	Repeats the current title/group.
REPEAT 1 DISC*	Repeats the current disc.
REPEAT ALL DISC*	Repeats all discs.
REPEAT ALL	Repeats all programmed tracks.

^{*}These modes may not work correctly for DVD Video.

Prohibiting Disc Ejection



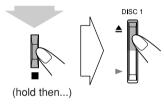


-Child Lock

You can lock the disc trays so that no one can eject the loaded discs.

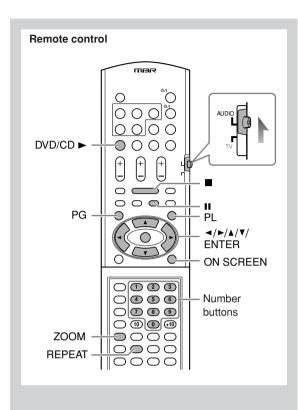
• This operation is possible only when the source is the disc player.

While on standby...



To cancel the prohibition, repeat the same procedure. "UNLOCKED" appears on the display.

On-Screen Disc Operations



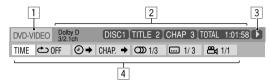
On-screen Bar Information



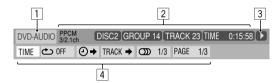
You can check the information on a disc (except for MP3/WMA/JPEG disc) and use some functions through the onscreen bar.

On-screen bars

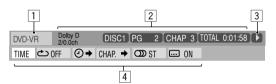
DVD Video



DVD Audio



DVD-VR



SVCD

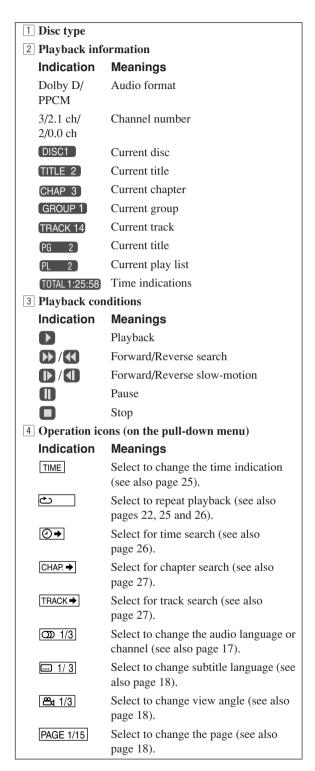


VCD



CD





Operations Using the Found STATE OF THE PROPERTY OF THE PROPER





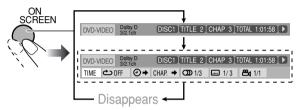
On-screen Bar

Basic operation procedures through the on-screen bar are as follows:

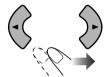
Ex.: Selecting a subtitle (French) for DVD Video:

While a disc is selected as the source...

1 Display the on-screen bar with the pull-down menu.



2 Select (highlight) the item you want.





3 Display the pop-up window.



4 Select the desired option in the pop-up window.



5 Finish the setting.



Pop-up window disappears.

To remove the on-screen bar



To change the time information

You can change the time information in the on-screen bar and the display window on the main unit.

1 Display the on-screen bar with the pull-down menu.



- 2 Make sure TIME is selected (highlighted).
- 3 Change the time indication.



TOTAL	Elapsed disc time.
T. REM	Remaining disc time.
TIME*	Elapsed playing time of the current chapter/track.
REM*	Remaining time of the current chapter/track.

^{*} Not available for DVD-VR.

To remove the on-screen bar



Repeat Play

- See also page 22.
- 1 While playing a disc (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
 - Except for DVD Video: Repeat Play can be selected before starting playback.
- 2 Select 🗁 .
- 3 Display the pop-up window.

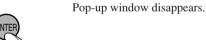


4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed
	tracks.
A-B	Repeats a desired portion (see the next
	page).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
PG	Repeats the current title (for DVD-VR
	only). See also page 29.
PL	Repeats the current play list (for DVD-
	VR only). See also page 29.
OFF	Cancels Repeat Play.

^{*} During Program Play or Random Play, "STEP" appears.

5 Finish the setting.



A-B Repeat

- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select 🖒 .
- 3 Display the pop-up window.



4 Select "A-B".



5 Select the start point (A).





- After selecting the starting point (A), you can search for the end point using >>.
- 6 Select the end point (B).



A-B Repeat starts. The selected portion plays repeatedly.

To cancel A-B Repeat, repeat steps **1** to **3**, and select "OFF" in step **4**.

To remove the on-screen bar



Time Search

You can move to a particular point by specifying the elapsed playing time from the beginning.

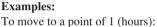
- 1 While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
 - Except for DVD: Time Search can be used before starting playback.
- 2 Select ⊕ .
- 3 Display the pop-up window.



4 Enter the time.

You can specify the time in hours/minutes/seconds.







02 (minutes): 00 (seconds), press 1, 0, 2, 0, then 0.



To move to a point of 54 (minutes): 00 (seconds), press 0, 5, 4, 0, then 0.

- It is always required to enter the hour digit (even "0" hour), but it is not required to enter trailing zeros (the last two digits in the examples above).
- 5 Finish the setting.



The System starts playing from the specified time.

To remove the on-screen bar



Chapter/Track Search

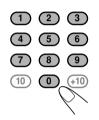
You can search for the number of the item to play. For DVD Video/DVD-VR: Chapter

For DVD Audio: Track

- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select CHAP. → or TRACK →.
- 3 Display the pop-up window.



4 Enter the desired chapter/track number.



Examples:

To select chapter/track 5, press 5. To select chapter/track 15, press 1, then 5.

To select chapter/track 30, press 3, then 0.

- To correct a misentry, press the number buttons until the desired number is shown in the pop-up window.
- 5 Finish the setting.



The System starts playing the searched chapter or track.

To remove the on-screen bar



Operations on the Control Remote SOLLY

Screen

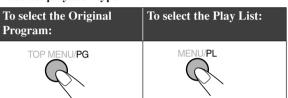


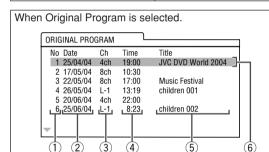
For DVD-VR/MP3/WMA/JPEG: You can search for and play the desired items through the control screen.

Control screen for DVD-RW/RAM in DVD-VR format

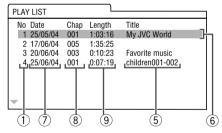
The control screen is superimposed on the TV screen when you call up Original Program (PG) or Play List (PL).

To select playback type





When Play List is selected.



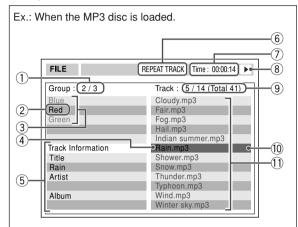
- 1 Title/Play list number
- ② Recording date
- 3 Recording source (TV station, the input terminal of the recording equipment, etc.)
- 4 Start time of recording
- 5 Title of the program/play list*
- 6 Highlight bar (current selection)
- 7 Creating date of play lists
- 8 Number of chapters
- 9 Playback time

To remove the control screen for DVD-VR, press ENTER.

^{*}The title of the original program or play list may not be displayed depending on the recording equipment.

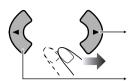
Control screen for MP3/WMA/JPEG disc

The control screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.



- ① Current group number/total group number
- 2 Current group
- 3 Group list
- 4 Current track
- (5) Track information (ID3 Tag Version 1.0: only for MP3/WMA)
- 6 Repeat Play setting
- (inly for MP3/WMA)
- 8 Operation mode icon
- ② Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
- 10 Highlight bar
- 1 Track list
- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 37).

To move the highlight (green) bar between group list and track list (for MP3/WMA/JPEG):



Moves the bar to the track list.

Moves the bar to the group list.

To select an item in the list:



Move the highlight bar to the desired item.

 If you move the highlight bar while playing back DVD-VR/ MP3/WMA, the selected item starts playback automatically.

To start playback

For DVD-VR/MP3/WMA:	
ENTER	Playback starts with the selected chapter/track. • Pressing DVD/CD ► also starts playback.
For JPEG:	
ENTER	The selected track (still picture) is displayed until you change it.
DVD/CD	Slide-show playback starts. Each track (still picture) is shown on the screen for a few seconds, then changes one after another.

- Once you start viewing a JPEG track, the control screen disappears.
- To cancel slide-show, and display the current still picture, press II.

To stop playback



To repeat title/play list for DVD-VR

While playing or before starting playback...

For Original Program



For Play List



REPEAT 1* Repeats the current chapter.

REPEAT* Repeats the current title/play list.

REPEAT 1 Repeats all titles on the current disc. **DISC***

REPEAT Repeats all loaded discs.
ALL DISC

To repeat slide-show for JPEG

While playing or before starting playback...



REPEAT 1 Repeats the current group.

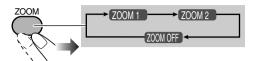
REPEAT 1 Repeats all files on the current disc.

DISC

REPEAT ALL Repeats all loaded discs. **DISC**

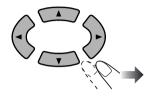
To zoom in the still picture (for JPEG)

1 During being paused...



As the number increases, magnification also increases.

2 Move the zoomed-in position.

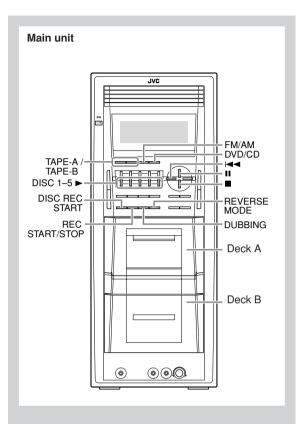


To cancel Zoom, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

^{*} Not available before starting playback.

[•] For Repeat Play of MP3/WMA, see pages 22 and 25.

Recording Operations



IMPORTANT

It should be noted that it may be unlawful to rerecord pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable program and in any literary, dramatic, musical, or artistic work embodied therein. Before recording, select the Stereo Mode ("STEREO"—see page 14) for DVD Video to downmix its multichannel sound into 2 channels; otherwise, you can only record the front left/right sound onto a tape.

Recording on a Tape

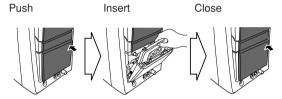




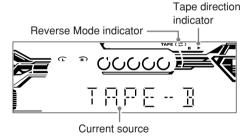


You can use type I tapes for recording.

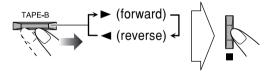
- To play a tape, see page 11.
- 1 Insert a recordable cassette in deck B.



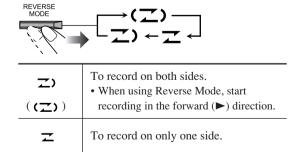
2 Check the tape running direction and Reverse Mode settings on the display.

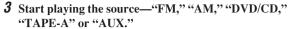


To change the direction



Change the Reverse Mode if necessary



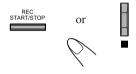


- · When recording from a disc, you can also use "Synchronized Disc Recording" (see the right column).
- When recording from deck A, you can also use "Dubbing" (see below).

4 Start recording.



To stop recording

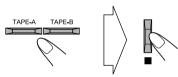


Dubbing Tapes





1 Change the source to TAPE.



- 2 Insert the source cassette in deck A, and a recordable cassette in deck B.
- **3** Check the tape running direction and Reverse Mode settings on the display.

See step 2 of "Recording on a Tape" on page 30.

4 Start dubbing.



· When either tape playback or recording ends, both cassette decks stop at the same time.

To stop dubbing



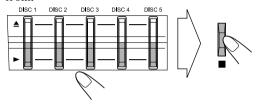
Synchronized Disc Recording





You can start and stop both disc play and tape recording at the same time.

- 1 Load a disc and insert a recordable cassette.
- 2 Check the tape running direction and Reverse Mode settings on the display.
 - See step 2 of "Recording on a Tape" on page 30.
- 3 Select the disc number you want to start recording from.



For recording desired tracks from discs:

You can program tracks to record in your preferred order.

• Select Program Play (and make a program; see page 20) without starting playback.

4 Start recording.



The disc playback and recording start from the first track.

- The System automatically creates 4second blanks between the tunes recorded on the tapes.
- When either disc play or recording ends, both disc player and the cassette deck stop at the same time.

To record only your favorite track—One Track Recording

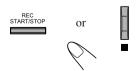
You can specify tracks to be recorded on the tape while listening to a disc (except for DVD Video).

While the track you want to record on the tape is playing...

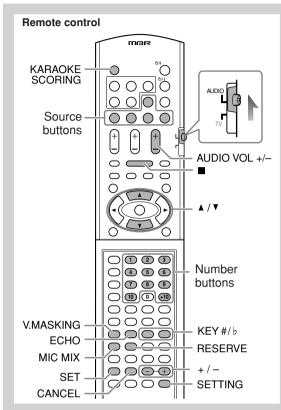


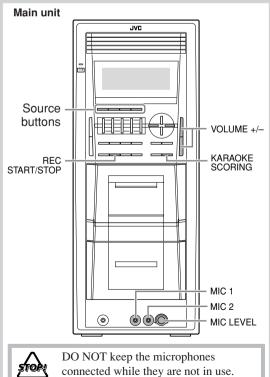
The disc player returns to the beginning of that track and the track is recorded on the tape. After recording, the disc player and cassette deck automatically stop.

To cancel while recording



Enjoying Karaoke





- For DVD Audio/DVD-VR: The functions described in this section are not available.
- When you activate the Mic Mixing Mode or Voice Masking Mode, multi-channel sounds are downmixed into 2 channels. The multi-channel surround mode ("ALL CH ST," "MOVIE," "MUSIC," or "AUTO" for multi-channel surround signals—see page 14) is changed to "STEREO" temporarily* (and restored when the Mic Mixing Mode or Voice Masking Mode is deactivated).
 - *The indicator remains on the display.

IMPORTANT

- · Always set MIC LEVEL to MIN when connecting or disconnecting the microphone.
- MIC LEVEL adjustment is valid for both microphones connected to the MIC 1 and MIC 2 jacks.

Singing Along (Karaoke)







You can enjoy singing along (Karaoke) by using one or two microphones.

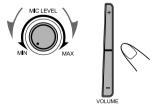
- By pressing REC START/STOP, you can record your singing-along.
- 1 Turn MIC LEVEL to MIN.



- **2** Connect the microphone(s) (not supplied) to the MIC 1 and/or MIC 2 jack.
- **3** Activate the Mic Mixing Mode.



- 4 Start playing a source—"FM," "AM," DVD/CD," "TAPE," or "AUX."
 - For Karaoke SVCD/VCD: Select a desired audio channel. See "Selecting the Sound Track" on page 17.
- **5** Sing into the microphone.
- **6** Adjust the MIC LEVEL and VOLUME.



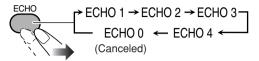
To cancel the Mic Mixing Mode, select "MIC OFF" in

To use microphone only, select "DVD/CD" in step 4, but do not start playback.

To apply an echo to your voice (Semole (N))



While the Mic Mix Mode is activated...

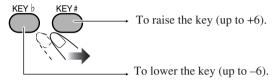


• As the number increases, echo level also increases.

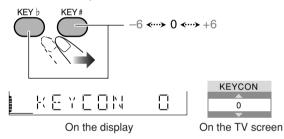
To adjust the key (disc playback only)



While playing back...



To cancel the Key Control



• Key Control is also canceled when you deactivate the Mic Mixing Mode, or select another track or disc.

Reducing the Lead Vocal Remote (NLY)

—Vocal Masking





If you want to reduce the lead vocal (of any source except DVD Audio/DVD-VR), you can use the Vocal Masking Mode.



V 14 4 OV 4	G 1 1 1
V.MASK 1	Cancels vocal on stereo sources.
V.MASK 2	Cancels the right audio channel.

To sing into microphone(s), activate the Mic Mixing Mode (follow steps **1** to **3** and **6** on page 32).

To cancel the Vocal Masking Mode, select "OFF."

Scoring Your Karaoke Skill





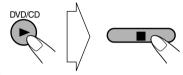
This System can score your Karaoke skill by comparing your singing along with the vocal on the playback disc.

- This function is for disc playback only.
- It is recommended to select the sound track as follows (see page 17):

For DVD Video: Select a sound track with vocal. For SVCD/VCD: Select "ST," "ST1," or "ST2."

• It is recommended to sing for more than one and a half minutes to make the scoring function work properly.

1 Select "DVD/CD" as the source.



2 Activate the scoring function.



On the TV screen

Playback of the first track starts and the Mic Mixing Mode is automatically activated (with the last adjustment for echo).

3 Sing into the microphone.

See steps 1, 2, and 6 on page 32.

• Adjust echo level and key if you want (see the left column).

After the song ends, playback stops and the score board appears on the TV screen with fanfare.



The latest top 3

To stop the playback in the middle of the song, press \blacksquare .

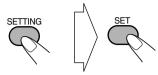
The scoring function is not canceled and your singing along is scored if the playback time is more than one minute.

To cancel the scoring function, press KARAOKE SCORING. The screen on the TV disappears. (The Mic Mixing Mode remains activated.)

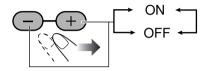
To turn on/off the fanfare (Remote only)



1 Enter the fanfare setting mode.



2 Select the fanfare setting.



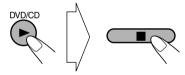
Reserving Karaoke Songs Remote Songs



-Karaoke Program Play

You can determine the playback order of the titles or tracks on the disc player. You can program up to 12 steps.

1 Change the source to "DVD/CD."



2 Activate Karaoke Program Play.



On the TV screen

- PROGRAM indicator flashes during this mode.
- **3** Select songs you want for Karaoke Program Play. Press the number buttons to select a song in the following order.
 - 1) Select a disc.
 - ② Select a title/group.
 - 3 Select a chapter/track.



10 0

Examples:

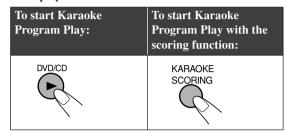
To select number 5, press 5. To select number 15, press +10, then 5.

To select number 30, press +10, +10, then 10.

4 Activate the Mic Mixing Mode.



5 Start playback.



Playback starts in the order you have programmed.

• For the Karaoke Program Play with the scoring function: Each time the song ends, playback stops and the score board appears. Press KARAOKE SCORING twice to start playback of the next track.

To check the programmed contents

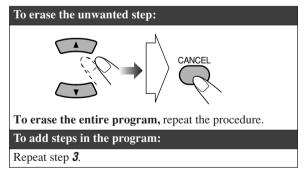


The Karaoke reserve screen appears.

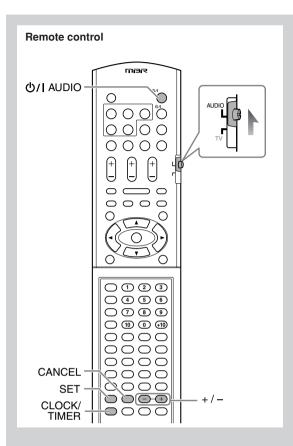
• You cannot display the Karaoke reserve screen while the scoring function is in use.

To modify the program

While the Karaoke reserve screen is shown on the TV...



Timer Operations



Setting the Timer Remote NLY

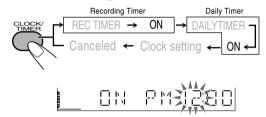




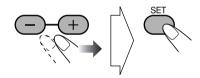


Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- · You cannot activate Daily Timer and Recording Timer at the same time. (Activating either timer deactivates the other timer.)
- To correct a misentry during the process, press CANCEL. You can return to the previous step.
- **1** Select one of the timer setting modes—ON for Daily Timer or Recording Timer.



2 Make the timer setting as you want.



Repeat the procedure for the following settings until finished:

- 1) Set the hour then minute for on-time.
- 2 Set the hour then minute for off-time.
- 3 For Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM." For Daily Timer: Select the playback source— "TUNER-FM," "TUNER-AM," "DISC," "TAPE-A," "TAPE-B" or "AUX IN."



EX.: When "TUNER-FM" is selected.

- 4 Select a preset station for "TUNER-FM" and "TUNER-AM," or select a disc, group, and then track number for "DISC."
- **(5)** Select the volume level.
 - You can select the volume level ("VOLUME 0" -"VOLUME 30" and "VOLUME --"). If you select "VOLUME --," the volume is set to the last level when the System has been turned off.

3 Turn off the System (on standby) if you have set the timer with the System turned on.



How Daily Timer works

Once the Daily Timer has been set, the timer indicator () and DAILY indicator are lit on the display. Daily Timer is activated at the same time everyday until the timer is turned off manually (see the next column).

 Daily Timer starts working only when the System is turned off (on standby).

When the on-time comes

The System turns on, tunes in to the specified station or starts playing the specified source, and sets the volume level to the preset level.

When the off-time comes

The System stops playback, and turns off (standby).

• The timer setting remains in memory until you change it.

How Recording Timer works

When Recording Timer has been set, the timer indicator (and the REC indicator are lit on the display. Recording Timer works only once.

• Recording Timer starts working only when the System is turned off (on standby).

When the on-time comes

The System turns on, tunes in to the specified station, sets the volume level to the preset level, and starts recording.

When the off-time comes

The System stops recording, and turns off (standby).

• The timer setting remains in memory until you change it.

To turn off the Timer after the setting is done

You can turn off the timer after it has been set.

- Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.
- **1** Select the timer you want to cancel (REC TIMER or DAILYTIMER) you want to cancel.



2 Turn off the selected timer.



• The timer indicator (lacktriangle) goes off.

To turn on the timer again, repeat step **1** and press SET in step **2**.

Timer Priority



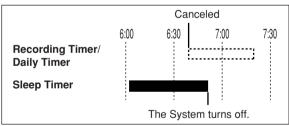




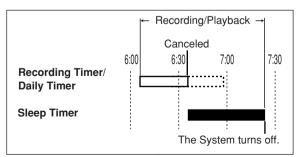


If the settings for Sleep Timer and Recording Timer/Daily Timer overlap, the timers work as described below.

• Sleep Timer (see page 16) has priority over the Recording Timer and Daily Timer.

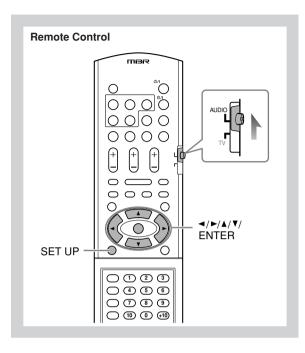


• In this case, Recording Timer/Daily Timer does not work.



 In this case, Recording Timer/Daily Timer is canceled. (If Sleep Timer shuts off the System earlier than the off time you have set for Recording Timer, recording stops when Sleep Timer shuts off the System.)

Setup Menu Operations

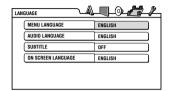


Initial settings



Some items in the menus cannot be changed during playback.

1 Press SET UP.



- **2** Press \triangleleft (or \triangleright) to select the menu.
- **3** Press \triangle (or ∇) to move to select the item.
- 4 Press ENTER.
- **5** Press ▲ (or ▼) to select the options, then press ENTER.

To erase a preference display Press SET UP.



LANGUAGE menu

Item	Contents
MENU LANGUAGE	You can select the initial menu language of DVD Video (see page 44).
AUDIO LANGUAGE	You can select the initial audio language of DVD Video (see page 44).
SUBTITLE	You can select the initial subtitle language of DVD Video (see page 44).
ON SCREEN LANGUAGE	You can select "ENGLISH," "SPANISH," or "FRENCH" as the on-screen language.

☐ PI

PICTURE menu

Item	Contents
MONITOR TYPE	You can select the monitor type to match your TV when you play back DVD Video discs recorded for
16:9 4:3 LB	wide-screen televisions.
	16:9 (Wide television screen): For a wide-screen (16:9) TV.
	4:3 LB (Letter Box conversion): For a conventional (4:3) TV. Displays a wide-screen picture to fit
10.00	the width of the TV screen keeping the aspect ratio.
4:3 PS	4:3 PS (Pan Scan conversion): For a conventional (4:3) TV. The picture is zoomed in to fill the screen vertically and the left and right sides of the picture are cut off.
	vertically and the left and right sides of the picture are cut off.
PICTURE SOURCE	You can obtain optimal picture quality by selecting the source type of the disc contents.
	AUTO: Normally, select this option. The System recognizes the picture type (film or video source) of
	the current disc according to the disc information.
	FILM: For a film source disc.
	VIDEO: For a video source disc.
SCREEN SAVER	You can set the screen saver function to ON or OFF .
	ON: The on-screen display becomes dark when no operation is done for about 5 minutes.
	OFF: To cancel the screen saver.
FILE TYPE	You can select a file type to play.
	AUDIO: To play MP3/WMA files.
	STILL PICTURE: To play JPEG files.



AUDIO menu

Item	Contents			
DIGITAL AUDIO OUTPUT	Set this item correctly when using the OPTICAL DIGITAL OUTPUT terminal on the rear.			
	PCM ONLY: When connecting to audio equipment which can decode only linear PCM signals.			
	DOLBY DIGITAL/PCM: When connecting to a Dolby Digital decoder or an amplifier with a buil			
	in Dolby Digital decoder.			
	STREAM/PCM: When connecting to a DTS decoder or an amplifier with a built-in DTS decoder.			
D.RANGE COMPRESSION	Set this item to listen to DVD Video recorded in Dolby Digital format at low or middle volume.			
	AUTO: You can enjoy powerful playback sound.			
	ON: Select this if the sound level of DVD Video is lower than the one of TV program to make the			
	sound at a lower volume clear.			



SPK. SETTING menu

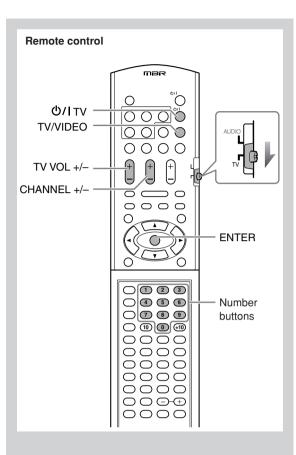
Item	Contents
LEVEL CRONT LET'S FSAMER Gell	Select this item, then press ENTER to show the LEVEL submenu for adjusting the speaker output level. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND RIGHT/LEFT SPEAKER: Select the speaker, then adjust the output level (–6 dB to +6 dB in 1 dB steps). TEST TONE: Turns on/off the test tone. • Select "ALL CH ST," "MUSIC," or "MOVIE" (see page 14) to adjust the output level for all speakers with the test tone.
DELAY DELAY (ROUTLET'S FRANKE 0 ms 1 ms	Select this item, then press ENTER to show the DELAY submenu for adjusting the speaker delay time. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND RIGHT/LEFT SPEAKER: Select the speaker, then adjust the delay time (0 ms to 15 ms in 1 ms steps). • Set one speaker to "0 ms," then set other speakers so that the sound from all speakers can reach you at the same time.



OTHERS menu

Item	Contents
RESUME	You can select Resume. ON: The System resumes playback from the position where playback has been stopped if the disc is still in the disc tray. OFF: Resume is deactivated.
ON SCREEN GUIDE	Activate or deactivate the on-screen guide. ON: Activate the on-screen guide. OFF: Deactivate the on-screen guide.

Operating the TV



Manufacturer's code					
Manufacturer	Code number				
JVC	01				
Hitachi	10				
Magnavox	02				
Mitsubishi	03				
Panasonic	04, 11				
RCA	05				
Samsung	12				
Sanyo	13, 14				
Sharp	06				
Sony	07				
Toshiba	08				
Zenith	09				

Operating TV



You can operate JVC's or other manufacturers' TV using this remote control.

1 Slide the AUDIO/TV selector to "TV."



2 Press and hold until the following steps are completed.



3



4 Enter the 2-digit manufacturer's code number.



7 8 9



5 Release O/I TV.

To operate the TV

to operate the	; IV	
To turn on or off the TV:	To select the input mode (either TV or VIDEO):	To adjust TV volume:
Ф/I TV	TV/VIDEO	TV VOL +
To select the TV	channel:	
78	3 6 or 9	CHANNEL +

Additional Information

Learning More about This System





Introduction (see pages 1 to 2)

Playable Disc Types:

- · About audio format
- Linear PCM: Uncompressed digital audio, the same format used for CDs and most studio masters.
- Dolby Digital: Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create realistic surround sound.
- DTS (Digital Theater Systems): Compressed digital audio, developed by Digital Theater Systems, Inc., which enables multi-channel like Dolby Digital. As the compression ratio is lower than for Dolby Digital, it provides wider dynamic range and better separation.
- · If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.

Daily Operations—Playback (see pages 7 to 11)

Listening to the Radio:

- If you store a new station into an occupied preset number, the previously stored station in that number will be erased.
- When you unplug the AC power cord or if a power failure occurs, the preset stations will be erased in a few days. If this happens, preset the stations again.

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- When playing back a DVD Audio disc recorded in MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals are recognized as the linear PCM signals, however, no indicator lights up on the display.
- This System can recognize up to 4 000 files in a disc. Also, the System can recognize up to 150 files per group and up to 99 groups in a disc.
- If there are any unplayable files in a folder, those files are also counted in the total file number.
- Playable files which do not belong to any groups are handled as Group 1.
- For MP3/WMA playback...
 - MP3/WMA discs require a longer readout time than regular CDs. (It depends on the complexity of the group/ file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This System can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).

- It is recommended that you make each MP3/WMA file at a sampling rate of 44.1 kHz and at bit rate of 128 kbps. This System cannot play back files made at bit rate of less than 64 kbps.

Daily Operations—Sound & Other Adjustments (see pages 12 to 16)

Reinforcing the Bass Sound:

• The adjustment for the subwoofer level does not affect the sound through the headphones.

Creating Your Own Sound Modes—User Mode:

• When you unplug the AC power cord or if a power failure occurs, the User Mode settings will be erased in a few days. If this happens, set the User Modes again.

Selecting the Surround Modes:

- Dolby Pro Logic II Modes: Dolby Pro Logic II Mode is a multichannel playback format to decode 2-channel sources into 5.1 channels. Dolby Pro Logic II reproduces spacious sound from original sound without adding any new sounds or tonal colorations.
- While you use the headphones, the Surround Mode is canceled temporarily ("STEREO" appears) and you cannot use SURROUND MODE and EFFECT.
- Some DVD Audio discs prohibit downmix. While playing back such a disc...
 - You cannot change the Surround Mode. ("MULTI CH" appears on the display.)
 - The System plays back the left front and right front signals when you have selected "STEREO" for the Surround Mode or when you use the headphones. ("LR ONLY" appears on the display.)

Changing the Scanning Mode:

- You cannot change the scanning mode to progressive in the following cases:
 - When your TV does not support the progressive video input.
- When you have not connected your TV to the unit using a component video cord.

Setting the Clock:

- "AM 12:00" will flash on the display until you set the clock.
- The clock may gain or lose 1 to 2 minutes per month. If this happens, reset the clock.

Unique DVD/VCD Operations (see pages 17 to 19)

Selecting the Sound Track:

 On some DVD Video discs, you cannot change audio languages while playing back.

Playing Back Bonus Group:

 You cannot select a track in the bonus group for Program Play.

Special Picture Playback:

- During slow-motion playback, no sound will be reproduced.
- You cannot use frame-by-frame playback for DVD-VR.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 20 to 22) Programming the Playing Order—Program Play:

- While programming steps...
 Your entry will be ignored if you have tried to program
 - an item number that does not exist on the disc (for example, selecting track 14 on a disc that only has 12 tracks).
- For SVCD/VCD/CD loaded on the other tray than the current one, the System may prompt for the group number entry as well, however, these entries will be ignored during playback.
- You cannot use Program Play and Random Play for DVD-VR/JPEG discs.
- The programmed contents will remain until you erase it.
- While the PROGRAM indicator is on, you cannot change the disc to play. (DISC 1 – 5 on the remote control and ► on the main unit do not work.)

On-Screen Disc Operations (see pages 23 to 29)

Operations Using the On-screen Bar:

- A-B Repeat:
 - A-B Repeat cannot be used on some DVDs.
- A-B Repeat is possible only within the same title or within the same track.

Operations on the Control Screen:

- For DVD-VR playback...
 - Original Program: The System can play back the original picture in the recorded order.
 - Play List: The System can play back the play list edited by the recording equipment. The control screen for the play list appears only when the disc has the play list.
- Resume is not available.
- For details about DVD-VR format and play list, refer to the manual of the recording equipment.
- For JPEG files playback...
- It is recommended that you record a file at 640 x 480 resolution. (If a file has been recorded at a resolution of more than 640 x 480, it will take a long time to be shown.)

- This System can play only baseline JPEG files*.
 Progressive JPEG files* or lossless JPEG files* cannot be played.
 - * Baseline JPEG format: Used for digital cameras, web, etc.

Progressive JPEG format: Used for web.

Lossless JPEG format: An old type and rarely used now.

- This System can play back JPEG files with the extension code <.jpg> or <.jpeg> (regardless of the letter case—upper/lower).
- This System may not play back JPEG files properly if they are recorded on devices other than digital still camera.
- During slide-show playback, zoom cannot be operated.

Recording Operations (see pages 30 to 31) General:

- You cannot change the source during recording.
- There is leader tape which cannot be recorded onto at the start and the end of cassette tapes. Thus, when recording discs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If no cassette is inserted or a protected tape has been inserted, "NO REC" appears on the display.
- The recording level is automatically set correctly. Thus, you can make sound adjustment other than the Surround Mode without affecting the recording level.

Recording on a Tape:

 When using Reverse Mode for recording, start recording in the forward (>>) direction first; otherwise, recording will stop when only one side (reverse) of the tape is recorded.

Synchronized Disc Recording:

- Recording starts from the first track even if you have selected a track by using ►►I/I◄■. To specify track(s) to record, program them (or use One Track Recording).
- While recording, you cannot use disc operation buttons (except for ■) and sound setting buttons (except for volume control).
- Everything on the disc goes onto the tape in the order on the disc, or according to the order you have made for Program Play.
- You cannot use Repeat Play during synchronized recording (Repeat Play will be canceled).
- DISC REC START button does not work:
- While playback is paused.
- When Random Play is activated.
- While playing back or being paused with Program Play.
- When the tape reaches its end in the forward direction (►) during recording, the last song will be re-recorded at the beginning of the reverse side (◄).
- When the tape reaches its end in the reverse side (◄) during recording, recording stops even though the disc is not entirely recorded.

Enjoying Karaoke (see pages 32 to 34)

General:

- When the Mic Mixing or Vocal Masking Mode is activated:
- Multichannel source will be downmixed into 2 channels temporarily.
- Dolby Pro Logic II Mode will be canceled temporarily.

Reducing the Lead Vocal—Vocal Masking:

- The Vocal Masking Mode setting is not applied to the optical digital output signals through the OPTICAL DIGITAL OUTPUT terminal.
- When playing a Karaoke disc in the Vocal Masking Mode, the vocal may not be reduced or the volume may be lower.
- On some music, the Vocal Masking Mode does not provide the correct effect.

Scoring Your Karaoke Skill:

- Before the scoring function is activated, you can select the track by pressing ►►I/I◄◄ (except for DVD Video and SVCD/VCD with PBC).
- If you press ►►I/I<
 while scoring, playback stops and scoring is canceled (but the track is not skipped).
- If you activate the scoring function while playback is stopped with Resume function, playback starts from the position you have stopped.
- You can also activate the scoring function while playing back. In this case, the scoring starts from that point.
- While the scoring function is in use, you cannot use the following buttons: V.MASKING, MIC MIX, RESERVE, and disc operation buttons (except for ►►)/!◄◄/■).
- Activating the scoring function cancels Repeat Play.
- You cannot use the scoring function during Program Play, Random Play, or recording.
- The ranking (top 3) is cleared when you turn off the System. (If the number of songs scored is less than 3, "0 POINT" appears.)

Reserving Karaoke Songs—Karaoke Program Play:

- If you have selected a disc tray on which DVD Audio or DVD-VR is loaded, that disc number is skipped.
- If DVD Audio or DVD-VR is loaded on the current tray, you cannot use Karaoke Program Play.
- When the track starts playback, that track number will be erased from the Karaoke reserve screen (the programmed contents will remain until you erase it).
- While the PROGRAM indicator is flashing, you cannot change the disc to play. (DISC 1 – 5 on the remote control and ► on the main unit do not work.)

Timer Operations (see pages 35 to 36)

Setting the Timer:

- If you do not specify the preset station or track number correctly while setting a timer, the currently selected station or the first track will be played when timer is activated.
- When you unplug the AC power cord or if a power failure occurs, the timer will be canceled. You need to set the clock first, then the timer again.
- Without stopping the recording, you cannot change the source after Recording Timer starts recording.
- If you set DVD Video as the source, Daily Timer will not work correctly.

Setup Menu Operations (see pages 37 to 38)

• If the upper and lower parts of the menu are cut off, adjust the picture size control of the TV.

LANGUAGE menu:

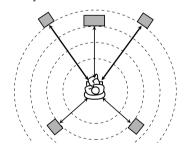
 When the language you have selected for MENU LANGUAGE, AUDIO LANGUAGE, or SUBTITLE is not recorded on a disc, the original language is used as the initial language.

PICTURE menu—MONITOR TYPE:

- Even if "4:3 PS" is selected, the screen size may become 4:3 letter box with some DVD Video discs. This depends on how the discs are recorded.
- When you select "16:9" for a picture whose aspect ratio is 4:3, the picture slightly changes due to the process for converting the picture width.

SPK. SETTING menu—DELAY:

• See the following diagram as an example for setting the delay time:



Front speakers:
0 ms
Center speaker:
1 ms
Surround speakers:
2 ms

OTHERS menu—ON SCREEN GUIDE:

 The setup menu and on-screen bar will be displayed (and recorded) even though this function is set to "OFF."
 Subtitles and the information for zoom-in always appear on the display regardless of this setting.

To get the best performance of the System, keep your discs, tapes, and mechanism clean.

Handling discs

- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.
- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, extreme temperatures, and moisture.

To clean the disc:

Wipe the disc with a soft cloth in a straight line from center to edge.

Handling cassette tapes

- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotate it.
 - If the tape is loose, it may get stretched, cut, or caught in the cassette.
- Be careful not to touch the tape surface.
- Avoid the following places to store the tape—in dusty places, in direct sunlight or heat, in moist areas, on a TV or speaker, or near a magnet.

To keep the best recording and playback sound quality

- · Use a cotton swab moistened with alcohol to clean the heads, capstans, and pinch rollers.
- Use a head demagnetizer (available at electronics and audio shops) to demagnetize the heads (when the System is turned off).



To protect your recording

Cassettes have two small tabs on the back to protect from unexpected erasure or rerecording.

To protect your recording, remove these



To re-record on a protected tape, cover the holes with adhesive tape.

Cleaning the System

- Stains should be wiped off with a soft cloth. If the System is heavily stained, wipe it with a cloth soaked in waterdiluted neutral detergent and wrung well, then wipe clean with a dry cloth.
- Since the System may deteriorate in quality, become damaged or get its paint peeled off, be careful about the following:
- DO NOT wipe it with a hard cloth.
- DO NOT wipe it forcefully.
- DO NOT wipe it with thinner or benzine.
- DO NOT apply any volatile substance such as insecticides to it.
- DO NOT allow any rubber or plastic to remain in contact for a long time.

Troubleshooting









If you are having a problem with your System, check this list for a possible solution before calling for service.

General:

Adjustments or settings are suddenly canceled before vou finish.

⇒ There is a time limit. Repeat procedure again.

Operations are disabled.

⇒ The built-in microprocessor may malfunction due to external electrical interference. Unplug the AC power cord and then plug it back in.

Unable to operate the System from the remote control.

- ⇒ The path between the remote control and the remote sensor on the System is blocked.
- ⇒ The batteries are exhausted.

No sound is heard.

- ⇒ Speaker connections are incorrect or loose.
- ⇒ Headphones are connected.

No picture appears on the screen.

⇒ The video cord connections are incorrect or loose.

No picture is displayed on the TV screen, the picture is blurred, or the picture is divided into two parts.

⇒ The System is connected to a TV which does not support progressive video input.

The left and right edges of the picture are missing on the

⇒ Select "4:3 LB" for "MONITOR TYPE" (see page 37).

Radio Operations:

Hard to hear broadcasts because of noise.

- ⇒ Antennas connections are incorrect or loose.
- ⇒ The AM loop antenna is too close to the System.
- ⇒ The FM antenna is not properly extended and positioned.

Disc Operations:

The disc does not play.

- ⇒ You have inserted a disc whose Region Code is not "1." ("REGION ERR" appears on the display.)
- ⇒ The disc is placed upside down. Place the disc with the label side up.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can only show ID3 Tag Version 1.

MP3 groups and tracks are not played back as you expect.

⇒ The playing order is determined when the disc was recorded. It depends on the writing application.

MP3/WMA or JPEG files are not played back.

- ⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the "FILE TYPE" setting (see page 37).
- ⇒ You have changed the "FILE TYPE" setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc playback sounds strange.

⇒ Cancel Key Control (see page 33).

No subtitle appears on the display though you have selected the initial subtitle language.

⇒ Some DVDs are programmed to always display no subtitle initially. If this happens, press SUB TITLE after starting play (see page 18).

Audio language is different from the one you have selected as the initial audio language.

⇒ Some DVDs are programmed to always use the original language initially. If this happens, press AUDIO after starting play (see page 17).

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- ⇒ Child Lock is in use. "LOCKED" appears in the display window (see page 22).
- ⇒ The Program Play is in use. Cancel the Program Play (see page 21).

Tape Operations:

The cassette holder cannot be opened.

⇒ Power supply from the AC power cord has been cut off while the tape was running. Turn on the System.

Recording Operations:

Impossible to record.

- ⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape.
- ⇒ The Karaoke scoring function is in use. Cancel the scoring function (see page 33).

Karaoke Operations:

Cannot activate the scoring function.

- ⇒ DVD Audio or DVD-VR is playing.
- ⇒ You cannot use the scoring function while recording, or while the disc menu for DVD Video/SVCD/VCD is shown on the TV screen.

Scoring result seems wrong (or "--" appears).

- ⇒ The playback time with the scoring function is too short. It is recommended to sing for more than one and a half minutes. (If playback time is less than one minute, the scoring is canceled.)
- ⇒ No input from the microphone or the input level (MIC LEVEL) is too low.
- \Rightarrow You have sung too quietly.

Timer Operations:

Daily Timer or Recording Timer does not work.

⇒ The System has been turned on when the on-time comes.

Timer starts working only when the System is turned off.

Language Code List

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

Amplifier section

Output Power:

FRONT SPEAKERS: 150 W per channel, min, RMS, driven into 4 Ω at 1 kHz with no more than 10% total harmonic distortion.

CENTER SPEAKER: 140 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

SURROUND SPEAKERS: 140 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

SUBWOOFERS: 150 W per channel, min. RMS, driven into 4 Ω at 1 kHz with no more than 10% total harmonic distortion.

Digital output:

OPTICAL DIGITAL OUTPUT:

 $-21 \text{ dBm to } -15 \text{ dBm } (660 \text{ nm } \pm 30 \text{ nm})$

Audio input sensitivity/Impedance

(Measured at 1 kHz, with tape recording signal 300 mV)

 $300 \text{ mV/}47 \text{ k}\Omega$ AUX: MIC 1/2: $3.0 \text{ mV/} 50 \text{ k}\Omega$

VIDEO OUT:

Color system: NTSC

VIDEO (composite): 1 V(p-p)/75 Ω S-VIDEO: Y (luminance) 1 V(p-p)/75 Ω C (chrominance, burst) $0.286 \text{ V(p-p)/75 }\Omega$

COMPONENT (Interlace/Progressive):

1 V(p-p)/75 Ω (Y) (PB/PR) $0.7 \text{ V(p-p)/75 }\Omega$

Speaker Terminals: $4 \Omega - 16 \Omega$ (front speakers/subwoofers)

 $6 \Omega - 16 \Omega$ (surround/center speakers)

Tuner section

FM tuning range: 87.5 MHz - 108.0 MHz AM tuning range: 530 kHz - 1 710 kHz

Disc player section

Playable disc: DVD Video/DVD Audio/CD/VCD/SVCD

CD-R/CD-RW (recorded in Audio CD/Video CD/ Super Video CD formats and MP3/WMA/JPEG

files)

DVD-R (recorded in DVD Video format)

DVD-RW (recorded in DVD Video format or DVD-

VR format)

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB Horizontal resolution: 500 lines Wow and flutter: Immeasurable

Cassette deck section

Frequency response

50 Hz – 14 000 Hz Normal (type I): Wow and flutter: 0.15% (WRMS)

General

AC 120 V \sim , 60 Hz Power requirement: Power consumption: 325 W (at operation)

> 22.9 W (on standby; with power saving off—Normal mode) 1.5 W (on standby; with power saving on—ECO mode)

Dimensions (W/H/D) (approx.): 185 mm x 460 mm x 361 mm

 $(7^{5}/_{16} \text{ in. } \times 18^{1}/_{8} \text{ in. } \times 14^{1}/_{4} \text{ in.})$ 11.4 kg (25.2 lbs) Mass (approx.):

Speakers

Front Speakers (SP-XT7)

Type: 3-Way 3-Speaker Bass Reflex (Magnetically-Shielded Type)

Woofer: $18 \text{ cm} (7^{-1}/_{8} \text{ in.}) \text{ cone x } 1$ Speaker systems: 5 cm (2 in.) cone x 1 Tweeter: $2 \text{ cm} (\frac{13}{16} \text{ in.}) \text{ dome x } 1$

150 W Power handling capacity: 4Ω Impedance:

35 Hz - 30 000 Hz Frequency range: Sound pressure level: 84 dB/W•m

Dimensions (W/H/D) (approx.): 204 mm x 460 mm x 270 mm $(8^{1}/_{16} \text{ in. } \times 18^{1}/_{8} \text{ in. } \times 10^{11}/_{16} \text{ in.})$

Mass (approx.): 4.6 kg (10.2 lbs) each

Surround Speakers (SP-XST9)

1-Way 2-Speaker Type: (Closed Type)

8 cm $(3 \frac{3}{16} \text{ in.})$ cone x 1 Speaker systems:

Power handling capacity: 140 W

Impedance: 6Ω

Frequency range: $80 \text{ Hz} - 22\ 000 \text{ Hz}$ Sound pressure level: 77 dB/W•m

Dimensions (W/H/D) (approx.): 145 mm x 460 mm x 170 mm

 $(5^{3}/_{4} \text{ in. } \times 18^{1}/_{8} \text{ in. } \times 6^{3}/_{4} \text{ in.})$

2.4 kg (5.3 lbs) each Mass (approx.):

Center Speaker (SP-XCT9)

Type: 2-Way 3-Speaker Bass Reflex (Magnetically-Shielded Type)

Woofer: 8 cm (3 $^{3}/_{16}$ in.) cone x 1 Tweeter: 2 cm ($^{13}/_{16}$ in.) dome x 1 Speaker systems:

Power handling capacity: 140 W Impedance: 6Ω

Frequency range: 85 Hz - 25 000 Hz Sound pressure level: 82 dB/W•m

Dimensions (W/H/D) (approx.): 222 mm x 102 mm x 101 mm

 $(8^{3}/_{4} \text{ in. } x 4^{1}/_{16} \text{ in. } x 4 \text{ in.})$

Mass (approx.): 0.8 kg (1.8 lbs)

Subwoofers (SP-WT9)

1-Way Bass Reflex Type:

(Magnetically-Shielded Type) $20 \text{ cm} (7^{7}/_{8} \text{ in.}) \text{ cone x } 1$

Speaker systems: 150 W Power handling capacity: Impedance: 4Ω

Frequency range: 32 Hz - 5000 HzSound pressure level: 87 dB/W•m

Dimensions (W/H/D) (approx.): 238 mm x 460 mm x 270 mm

 $(9^{3}/_{8} \text{ in. } \times 18^{1}/_{8} \text{ in. } \times 10^{11}/_{16} \text{ in.})$

Mass (approx.): 6.8 kg (15.0 lbs) each

Design and specifications are subject to change without notice.

OPTICAL DIGITAL OUTPUT Signals

DIGITAL AUDIO OUTPUT	Output Signals				
Playback disc	STREAM/PCM DOLBY DIGITAL/PCM PCM ONLY				
DVD Video		•			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM*1				
with 96 kHz, Linear PCM		48 kHz, 16 bit Linear PCM			
with Dolby Digital	Dolby Digi	ital bitstream	48 kHz, 16 bit Linear PCM		
with DTS	DTS bitstream	it Linear PCM			
DVD Audio*2					
with 48/96/192 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM				
with 44.1/88.2/176.4 kHz, 16/20/ 24 bit Linear PCM		44.1 kHz, 16 bit Linear PCM			
with Dolby Digital	Dolby Dig	ital bitstream	48 kHz, 16 bit Linear PCM		
with DTS	DTS bitstream	48 kHz, 16 bi	it Linear PCM		
DVD-RW/RAM in DVD-VR format					
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM*1				
with Dolby Digital	Dolby Digital bitstream 48 kHz, 16 bit Linear PC				
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM*1/48 kHz, 16 bit Linear PCM*1		Linear PCM*1		
CD with DTS	DTS bitstream 44.1 kHz, 16 bit Linear PCM		oit Linear PCM		
MP3/WMA disc	32/44.1/48 kHz, 16 bit Linear PCM				

^{*1} While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUTPUT terminal if the discs are not copy-protected.

^{*2} There is no output for DVD Audio with content protection set.

Parts Index

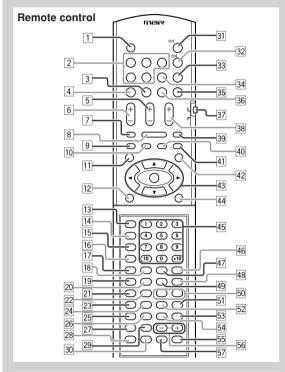


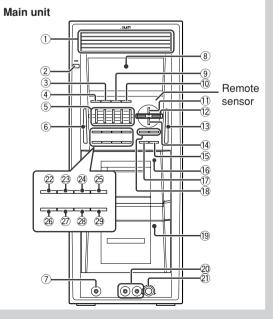
Button		Page	Button		Page	
ტ/ AUDIO	31	7	KEY #/ b	50	33	
ტ/ TV	32	39	MIC MIX	23	32, 34	
	8	9 – 11, 21	MENU/PL	42	10, 27	
▶/◀	9 41	8, 10, 11, 19	Number	45	8 – 10, 19, 20,	
▶▶/ ◀◀	7 39	9	buttons		26, 34, 39	
II	40	9, 19	ON SCREEN	44	24 – 27	
▲ / ▼ / ▶ / ∢ /	43	10, 15, 18, 19,	PAGE	18	18	
ENTER		24 – 29, 37, 39	PLAY MODE	49	20, 21	
+/-	56	12, 13, 15, 16,	REPEAT	20	22, 29	
		34, 35	RHYTHM AX	25	13	
ANGLE	16	18	RESERVE	24	34	
AUDIO	14	17	RETURN	46	10	
AUDIO/TV selector	37	7, 39	REVERSE MODE	48	11	
AUDIO VOL	38	7, 12	SCAN MODE	47	15	
+/-			SET	27	8, 12, 13, 16,	
AUX	34	7			34 – 36	
CANCEL	29	21, 34, 36	SET UP	12	37	
CHANNEL +/-	5	39	SETTING	55	34	
CHANNEL LEVEL	51	12	SLEEP	30	16	
			SOUND MODE	54	13	
CLOCK/ TIMER	28	16, 35, 36	SUB TITLE SUB WFR	15 52	18	
DIMMER	57	16	LEVEL			
DISC 1-5	2	9	SURROUND	53	14	
DVD LEVEL	19	14	MODE			
DVD/CD ►	4	7, 9	TAPE-A ◀▶	3	7, 11	
ЕСНО	22	33	TAPE-B ◀▶	36	7, 11	
EFFECT	26	14	TOP MENU/	11	10, 27	
FM MODE	40	8	PG			
FM/AM	35	7, 8	TV VOL +/-	6	39	
GLANCE	10	18	TV/VIDEO	33	39	
BACK 🗲			V.MASKING	21	33	
GROUP/	13	9	VFP	47	15	
TITLE			ZOOM	17	19, 29	
KARAOKE SCORING	1	33				

Main unit

Button		Page	Button		Page
ტ/I	2	7	DVD/CD	10	7, 9
Display	8	6	DVD LEVEL	23	14
•	14)	8 – 11, 21, 22	FM/AM	9	7, 8
▶/ ◄◄	18	8, 10, 11, 19	KARAOKE	15)	33
▶	12)	9	SCORING		
II	11)	9, 19	MIC 1/MIC 2	20	32
AUX	25	7	MIC LEVEL	21)	32
DEMO	24)	7	PHONES	7	7
Disc trays	1	9	PRESET +/-	12	8
DISC1-5 ►/▲	(5)	9, 22, 31	PUSH-OPEN ▲	16 19	11, 30
DISC REC START	26	31, 32	REC START/ STOP	27)	31
DUBBING	28	31	RHYTHM AX	17)	13

Button		Page	Button		Page	
REVERSE	29	11, 30	TAPE-A	4	7, 11, 31	
MODE			TAPE-B	3	7, 11, 30, 31	
SUBWOOFER	6	13	TUNING	18	8	
LEVEL +/-			VOLUME +/-	13	7, 12, 32	
SURROUND	22	14			=	
MODE						





TO OUR VALUED CUSTOMER -

THANK YOU FOR PURCHASING THIS JVC PRODUCT.
WE WANT TO HELP YOU ACHIEVE A PERFECT EXPERIENCE.

NEED HELP ON HOW TO HOOK UP?
NEED ASSISTANCE ON HOW TO OPERATE?
NEED TO LOCATE A JVC SERVICE CENTER?
LIKE TO PURCHASE ACCESSORIES?

JVC IS HERE TO HELP! TOLL FREE: 1(800)252-5722 http://www.jvc.com

Remember to retain your Bill of Sale for Warranty Service.

Do not attempt to service the product yourself

Caution

To prevent electrical shock, do not open the cabinet.

There are no user serviceable parts inside. Please refer to qualified service personnel for repairs.



LIMITED WARRANTY

JVC COMPANY OF AMERICA (JVC) warrants this product and all parts thereof, except as set forth below ONLY
TO THE ORIGINAL RETAIL PURCHASER to be FREE FROM DEFECTIVE MATERIALS AND WORKMANSHIP from
the date of original purchase for the period shown below. ("The Warranty Period")

PARTS

1 YR

1 YR

THIS LIMITED WARRANTY IS VALID ONLY IN THE FIFTY (50) UNITED STATES, THE DISTRICT OF COLUMBIA AND
IN THE COMMONWEALTH OF PUERTO RICO.

PARTS	LABOR
1 YR	1 YR

IN THE COMMONWEALTH OF PUERTO RICO.

WHAT WE WILL DO:

If this product is found to be defective within the warranty period, JVC will repair or replace defective parts with new or rebuilt equivalents at no charge to the original owner. Such repair and replacement services shall be rendered by JVC during normal business hours at JVC authorized service centers. Parts used for replacement are warranted only for the remainder of the Warranty Period. All products may be brought to a JVC authorized service center on a carry-in basis. Color televisions with a screen size of 27" or greater qualify for in-home service. In such cases, a technician will come to your home and either repair the TV there or remove and return it if it cannot be repaired in your home.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Please do not return your product to the retailer

Instead, return your product to the JVC authorized service center nearest you. If shipping the product to the service center, please be sure to package it carefully, preferably in the original packaging, and include a brief description of the problem(s). Please call 1-800-252-5722 to locate the nearest JVC authorized service center. Service locations can also be obtained from our website http://www.jvc.com. If your product qualifies for in-home service, the service representative will require clear access to the product.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department at 800-252-5722

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

- 1. Products which have been subject to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, or if repaired or serviced by anyone other than a service facility authorized by JVC to render such service, or if affixed to any attachment not provided with the products, or if the model or serial number has been altered, tampered with, defaced or removed;
- 2. Initial installation, installation and removal from cabinets or mounting systems.
- Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
- Damage that occurs in shipment, due to act of God, and cosmetic damage;
- Signal reception problems and failures due to line power surge;
- 6. Video Pick-up Tubes/CCD Image Sensors are covered for 90 days from the date of purchase;
- 8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase):
- 9. Products used for commercial purposes, including, but not limited to rental.

There are no express warranties except as listed above.

THE DURATION OF ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY, IS LIMITED TO THE DURATION OF THE EXPRESS WARRANTY HEREIN.

JVC SHALL NOT BE LIABLE FOR ANY LOSS OF USE OF THE PRODUCT, INCONVIENCE, OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTAL (INCLUDING, WITHOUT LIMITATION, DAMAGE TO TAPES, RECORDS OR DISCS) RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE, ARE LIMITED TO THE WARRANTY PERIOD SET FORTH ABOVE.

Some states do not allow the exclusion of incidental or consequential damages or limitations on how long an implied warranty lasts, so these limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

JVC COMPANY OF AMERICA

DIVISION OF JVC AMERICAS CORP.

1700 Valley Road Wavne, NJ 07470

http://www.jvc.com

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY DOES NOT APPLY. FOR DETAIL OF REFURBISHED PRODUCT WARRANTY, PLEASE REFER TO THE REFURBISHED PRODUCT WARRANTY INFORMATION PACKAGED WITH EACH REFURBISHED PRODUCT.

For customer use:	
Enter below the Model No. and Serial No. w Retain this information for future reference.	which is located either on the rear, bottom or side of the cabinet.
Model No.:	Serial No. :
Purchase date :	Name of dealer :

JVC