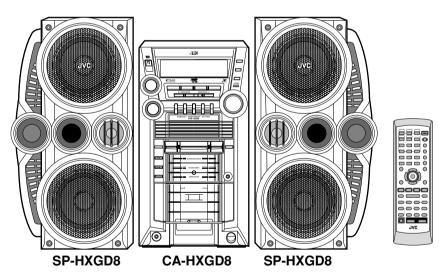
JVC



COMPACT COMPONENT SYSTEM

HX-GD8_Consists of CA-HXGD8 and SP-HXGD8















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.

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

CAUTION-STANDBY/ON U/I button!

Disconnect the mains plug to shut the power off completely (all lamps and indications go off). The STANDBY/ON \circlearrowleft I button in any position does not disconnect the mains line.

- When the unit is on standby, the STANDBY/ON lamp lights in red.
- When the unit is turned on, the STANDBY/ON lamp lights in green.

The power can be remote controlled.

Attention—Touche STANDBY/ON \circlearrowleft /I (attente/sous tension)!

Déconnectez la fiche secteur pour mettre l'appareil complètement hors tension (tous les témoins et toutes les indications s'éteignent). La touche STANDBY/ON 'b/I dans n'importe quelle position ne déconnecte pas l'appareil du secteur.

- Quand l'appareil est en mode d'attente, le témoin STANDBY/ON est allumé en rouge.
- Quand l'appareil est sous tension, le témoin STANDBY/ ON est allumé en vert.

L'alimentation ne peut pas être commandée à distance.

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.:

- 1 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.



38.0 kg / 84.0 lbs.

CAUTION!

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

ATTENTION!

Pour viter toute blessure personnelle ou chute accidentelle del appareil, faites d baller, transporter et installer I appareil par deux personnes.

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 or more 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.

For Canada/pour le Canada

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQUAU FOND.

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.

- 1 CLASS 1 LASER PRODUCT
- 2 **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.
- 3 **CAUTION**: Visible and invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
- 4 REPRODUCTION OF LABEL: CAUTION LABEL, PLACED INSIDE UNIT.

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.
- 3 **ATTENTION**: Risque de radiations laser visible et invisible quand l'appareil est ouvert ou que le systéme de verrouillage ne fonctionne pas ou a été mis hors service. Évitez toute exposition directe au rayon.
- 4 REPRODUCTION DE L'ÉTIQUETTE: ÉTIQUETTE DE PRÉCAUTION PLACÉE L'INTERIEUR DE L'APPAREIL.

CAUTION : Visible and invisible	ADVARSEL: Synlig og usynlig	VARNING : Synlig och	VARO: Avattaessa ja suojalukitus
laser radiation when open and	laserstråling når maskinen er	osynlig laserstrålning när	ohitettuna tai viallisena olet alttiina
			näkyvälle ja näkymättömälle
AVOID DIRECT EXPOSURE TO	Undgå direkte eksponering til	urkopplad. Betrakta ej	lasersäteilylle. Vältä säteen
BEAM. (e)	stråling. (d)	strålen. (s)	kohdistumista suoraan itseesi. (f)

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Introduction

Precautions

Installation



- Install in a place which is level, dry and neither too hot nor too cold—between 5°C (41°F) and 35°C (95°F).
- 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.

- Leave sufficient distance between the System and the TV.
- Keep the speakers away from the TV to avoid interference with 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

• A cooling fan is mounted on the rear panel to prevent heat buildup inside the unit.

For safety, observe the following carefully:



 Make sure there is good ventilation around the unit. Poor ventilation could overheat and damage the unit.

 DO NOT block the cooling fan and 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.

How to Read This Manual







To make the explanations in this manual as simple and easyto-understand as possible, we have adapted the following methods:

- Button and control operations are explained as listed in the table below. In this manual, the operations using the remote control is mainly explained; however, you can use the buttons and controls on the main unit if they have the same (or similar) name and marks.
- 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 (NEO indicates that the content has some informations). If you want to know more about the functions, or if you have a doubt about the function, go to these sections and you will find your answer there.

mere.	
	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.
2 sec.	 Indicates that you press and hold the button for a specified period. The number inside the arrow indicates the period of press (in this example, 2 seconds). If no number is inside the arrow, press and hold until the entire procedure is complete or until you get a result you want.
	Indicates that you turn the control toward the specified direction(s).
Remote	licates that this operation is only

possible using the remote control.

Indicates that this operation is only possible using the buttons and controls on

the main unit.

Getting Started

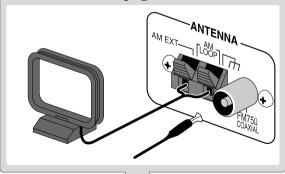
Step 1: Unpack the package and check the accessories.



Step 2: Prepare the remote control.



Step 3: Hook up the components such as AM/FM antennas, speakers, etc. (see pages 4 to 6).



Finally plug the AC power cord.

Now you can operate this System.



After unpacking, check to be sure that you have all the following items. The number in parentheses indicates the quantity of each piece supplied.

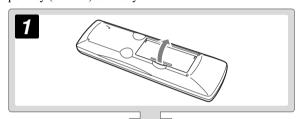
- FM antenna (1)
- AM loop antenna (1)
- Composite video cord (1)
- Remote control (1)
- Batteries (2)

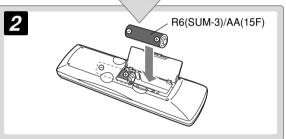
If any item is missing, consult your dealer immediately.

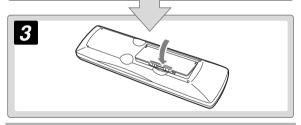
Step 2: Prepare the Remote Control



Insert the batteries into the remote control by matching the polarity (+ and –) correctly.







- · DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.



- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, the remote control will be damaged from battery leakage.

Step 3: Hook Up

If you need more detailed information, see page 6.

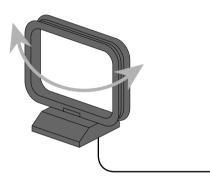
Turn the power off to all components before connections.

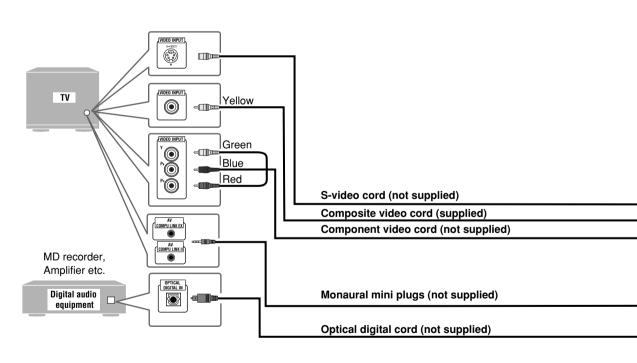
Illustrations of the input/output terminals below are typical examples.

When you connect other components, refer also to their manuals since the terminal names actually printed on the rear may vary.

AM loop antenna (supplied)

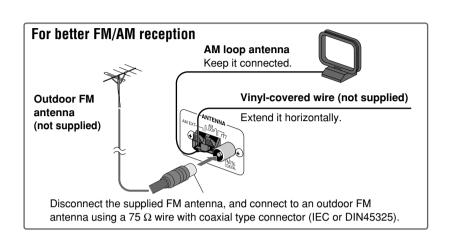
Turn it until the best reception is obtained.

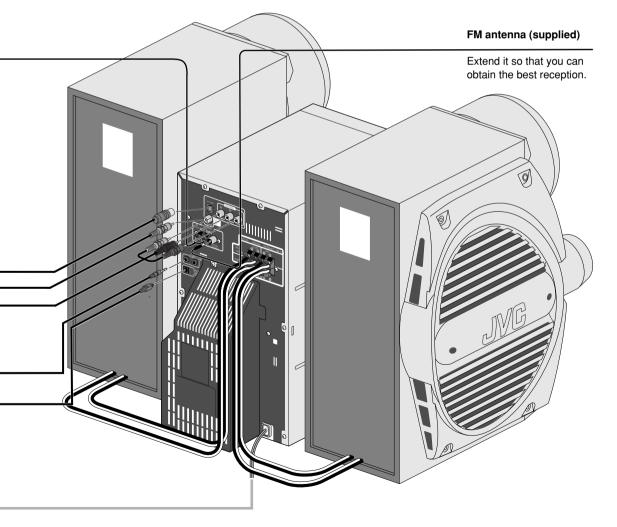




To a wall outlet

Plug the AC power cord only after all connections are complete.



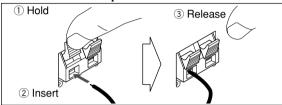


To assemble and connect the AM loop antenna

To assemble the AM loop antenna



To connect the AM loop antenna cords



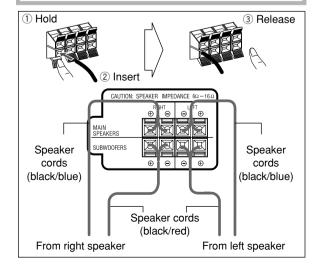
- If the AM loop antenna wire or speaker cords are covered with vinyl, remove the vinyl to expose the tip of the antenna by twisting the vinyl.
- Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. Also, keep the antennas away from metallic parts of the System, connecting cords, and the AC power cord. This could cause poor condition.

To connect the speaker cords

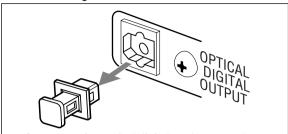
- When connecting the speaker cords, match the polarity of the speaker terminals: (+) to (+) and (-) to (-).
- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.



- 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.



To connect digital audio



Before connecting optical digital cord, remove the protective cap from the OPTICAL DIGITAL OUTPUT terminal.

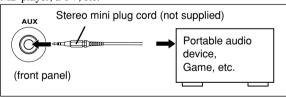
To connect the AV COMPU LINK cords

The AV COMPU LINK control system allows you to use JVC's TV with simple operations; by starting playing back a disc, the TV automatically turns on and changes the input mode to the appropriate position so that you can view the playback picture.

To use AV COMPU LINK, you need to connect the unit and the TV by using a cord with monaural mini-plugs (not supplied) in addition to the connection with a video cord (see page 4).

To connect other equipment

By using an stereo mini plug cord (not supplied), you can connect equipment with analog audio output jacks such as an MD player, a TV, etc.



If the audio output on the other equipment is not stereo mini plug type, use a plug adapter to convert the stereo mini plug to the corresponding plug of the audio output.

IMPORTANT

Always set volume to MIN when connecting or disconnecting the other equipment.



DO NOT plug in any equipment until all connections are complete.

Before Operating the System

Playable Disc Types



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

Disc Type	Mark (Logo)
DVD Video	VIDEO"
DVD Audio	AUDIO AUBIO/VIBRO
Video CD (VCD)	OSS Video CD
Super Video CD (SVCD)	USC VIDEO SECONO
Audio CD	COMPACT DIGITAL AUDIO
CD-R	The System can play back CD-R or CD-RW
CD-RW	recorded in the Audio CD, Video CD, SVCD, MP3, WMA, and JPEG formats.
DVD-R	The System can play back DVD-R or DVD-
DVD-RW	RW recorded in the video 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-ROM, DVD-RAM, DVD+R, DVD+RW, CD-I (CD-I Ready), CD-ROM, 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.

Note on Region Code

DVD players and DVDs have their own Region Code numbers. This unit can play back only DVDs recorded with the NTSC color system whose Region Code numbers include "1."

EX.:









If a DVD with the improper Region Code numbers is loaded, "REGION ERR" appears on the display and playback will not start.

Audio formats

The System can play back the following digital audio formats.

- LPCM (Linear PCM)
- DIGITAL (Dolby Digital)
- DTS (Digital Theater Systems)
- MPEG (MPEG Multichannel)
- MLP (Meridian Lossless Packing)

When playing a multi-channel encoded DVD, the System properly converts these multi-channel signals into 2 channels, and emits the downmixed sound from the speakers.

To enjoy the powerful sound of these multi-channel encoded DVDs, connect a proper decoder or an amplifier with a proper built-in decoder to the OPTICAL DIGITAL OUTPUT terminal on the rear.

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

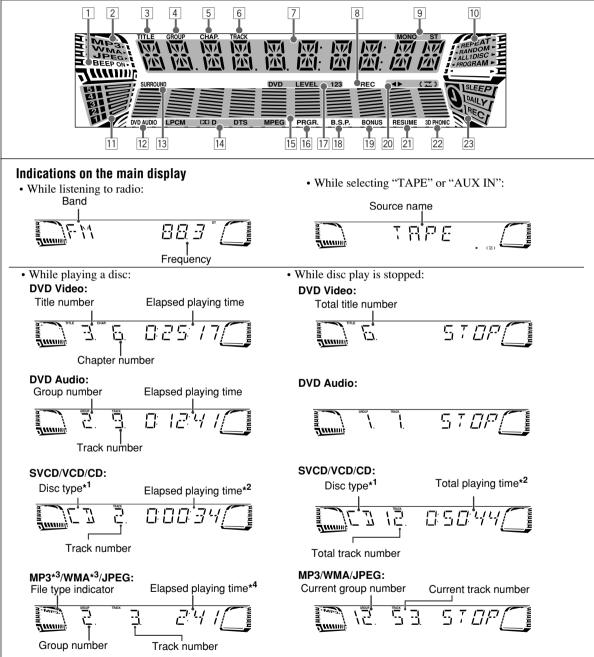
- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays on the TV screen.
- For disc playback, you can change the initial setting to your preference. See "Set up Menu Operations" on page 34.

If " \(\infty\)" appears on the TV screen when you press a button, the disc cannot accept the operation you have tried to do, or data required for that operation is not recorded on the disc.

- Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS 2.0+DIGITAL OUT" are trademarks of Digital Theater Systems, Inc.

About the Display Indication

The indications on the display teach 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 Disc type is displayed with the following abbreviation: "SV (SVCD)", "VD (VCD)", "CD (CD)".
- *2 While activating PBC function, "PBC" appears on the display instead of the playing time.
- *3 When you start playing an MP3/WMA track, the track name (and ID3 Tag) will be shown before the elapsed playing time appears.
- *4 While playing back a JPEG disc, "JPEG" appears on the display instead of the elapsed playing time.



• Lights when key-touch tone is activated.

² File type indicators

- MP3: lights while playing back an MP3 track.
- WMA: lights while playing back a WMA track.
- JPEG: lights while playing back a JPEG file.

3 TITLE indicator

- Lights to indicate the title number when the source is DVD Video.
- Lights to indicate the group title or track title when the source is an MP3/WMA disc.

4 GROUP indicator

• Lights to indicate the group number when the source is DVD Audio or MP3/WMA disc.

5 CHAP. indicator

 Lights to indicate the chapter number when the source is DVD Video.

6 TRACK indicator

 Lights to indicate the track number when the source is a disc (except for DVD Video).

7 Main display

- 8 REC indicator
 - Flashes while recording.

9 FM reception indicators

- MONO: lights while receiving an FM stereo station in monaural.
- ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.

10 Disc operation indicators

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

11 Disc indicators

- Each indicator shows the status of a disc placed on each corresponding disc tray (DISC1 – DISC5).
- -Lights up when a disc is loaded.
- Goes off when the unit detects there is no disc loaded on the disc tray.

12 DVD AUDIO indicator

· Lights when DVD Audio is detected.

13 SURROUND indicator

• Lights when the Surround mode is activated.

14 Source signal indicators

- LPCM:lights when a source signal is linear PCM.
- DC D: lights when a source signal is Dolby Digital.
- DTS: lights when a source signal is DTS Surround.
- MPEG: lights when a source signal is MPEG multichannel.
- 15 Audio level indicator
- 16 PRGR. indicator
 - Lights when the progressive scanning mode is selected.

17 DVD LEVEL 123 indicators

• Lights when the DVD Video is detected.

18 B.S.P. indicator

• Lights when browsable still picture on DVD Audio is available (see page 20).

19 BONUS indicator

• Lights when DVD Audio with bonus group is detected (see page 21).

20 Tape operation indicators

- **◄** ► (tape direction):
- -Lights to indicate the current tape running direction.
- -Flashes slowly during playback and recording.
- -Flashes quickly while rewinding a tape.
- Flashes intermittently while locating the beginning of a recording.
- (\(\sigma\) (reverse mode):
 - _ (∠): tape play continues endlessly.

21 RESUME indicator

• Lights when the Resume function is activated (see page 12).

22 3D PHONIC indicator

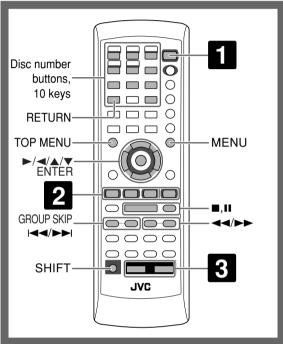
• Lights when 3D PHONIC is activated (see page 17).

23 Timer indicators

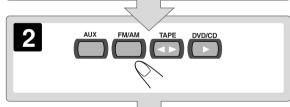
- **①**: lights when Sleep Timer is working or Daily Timer or Recording Timer stands by or is working or setting.
- SLEEP: flashes when the Sleep Timer is activated.
- DAILY: lights when the Daily Timer stands by; flashes while working or setting.
- REC: lights when the Recording Timer stands by; flashes while working or setting.

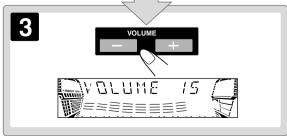
Daily Operations—Playback

In this manual, the operation using the remote control is 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 (STANDBY/ON), 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 source on the external component.
- 3 Adjust the volume.
- 4 Operate the target source as explained later.

To turn off (stand by) the system

STANDBY/ON

The STANDBY lamp on the main unit lights in red



 A small amount of power is always consumed even while on standby.

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 the headphones.

• Disconnecting the headphones will activate the speakers again.

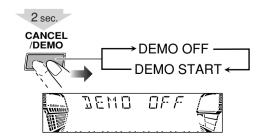


DO NOT turn off (stand by) the System with the volume set to an extremely high level; Otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

Canceling the Demonstration







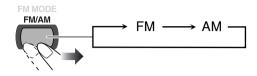
Listening to the Radio





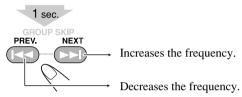


To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



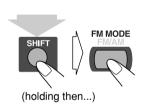
When a station (frequency) with sufficient signal strength is tuned in, the frequency search stops.

- When you repeatedly press the button, the frequency changes step by step.
- You can also use ◄◄/►► buttons on the main unit.

To stop searching manually, press either button.

If the received FM station is hard to listen





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.

1 Tune in to a station you want to preset, then enter into the presetting mode.



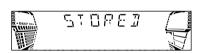


2 Select a preset number for the station you store.



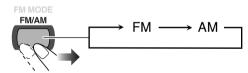
3 Store the station.





To turn in to a Preset Station

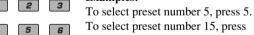
1 Select the band (FM or AM).



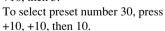
2 Select a preset number for the station you store.







+10, then 5. 7 8 9





 You can also use the PRESET +/- control on the main unit.

Playing Back a Disc

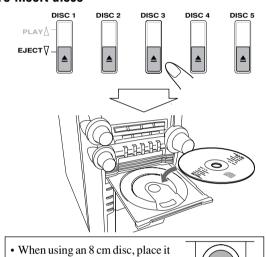


Before operating a disc, be familiar how a disc is recorded.

• DVD Video comprises of "Titles" which includes "Chapters," DVD Audio/MP3/WMA comprise of "Groups" which includes "Tracks," and CD/SVCD/VCD comprise of only "Tracks."

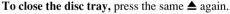
For JPEG playback, see "Operations on the CONTROL" on page 28.

To insert discs



tray.

on the inner circle of the disc



- If you press DVD/CD ▶, disc tray closes automatically and playback starts.

To start:	To pause:	To stop:
DVD/CD	To release it, press DVD/CD ►.	

While playing DVD/SVCD/VCD: 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 37.)

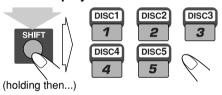
On-screen guide icons

- 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 37.

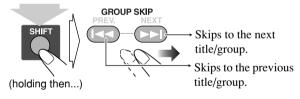
To select a playback disc



• You can also use the disc number play buttons on the unit.

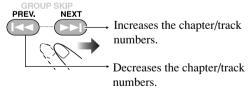
To select a title/group (Remote ONLY)

While playing a disc...



To select a chapter/track

While playing...



To locate a particular portion

While playing a disc except WMA/MP3...



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

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

To select an item directly (Solution)



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.

1 2 3 5 6 8 9

Examples:

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

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

To play back by using the disc menu

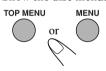


You can operate the disc play—DVD and SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

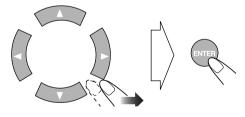
• When an SVCD or VCD with PBC is detected, "PBC" appears on the display instead of the playing time.

■ For DVD Video/DVD Audio:

1 Show the disc menu.



2 Select an item on the disc menu.

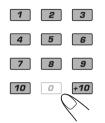


• With some discs, you can also select items by entering the number using the 10 keys.

■ For SVCD/VCD with PBC:

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

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

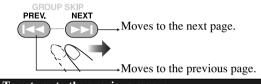


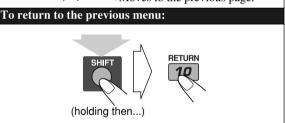
Examples:

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

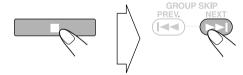
To select preset number 30, press +10, +10, then 10.

To move to the next or previous page of the current





To cancel PBC



You can also cancel PBC function by pressing the number button to select a track.

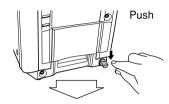
To reactivate PBC, press ■, then press ◄.

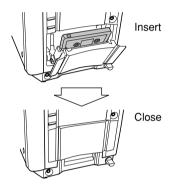
Playing Back a Tape

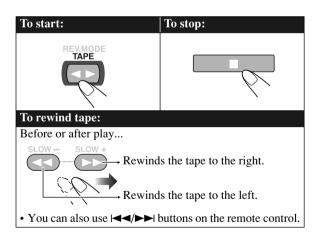
To insert a tape

You can play back type I tapes.

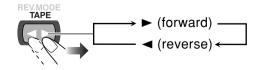
• The use of C-120 or longer tape is not recommended.



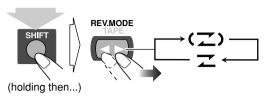




To change the tape running direction



To reverse the tape automatically

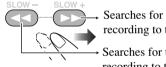


• You can also use REVERSE MODE button on the unit.

(ヹ)	Tape is automatically reversed, and playback repeats until you stop it.
Z	Tape will not be reversed. When the current side of the tape reaches its end, playback stops.

To locate the beginning or next of a recording— Music Scan

During play, designate where the recording you want is located—specify how many recordings need to be skipped on the tape.

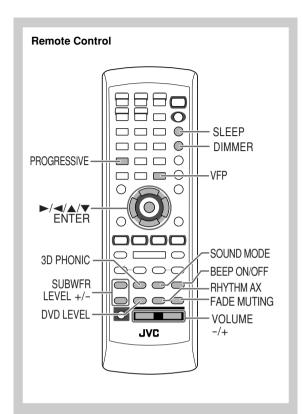


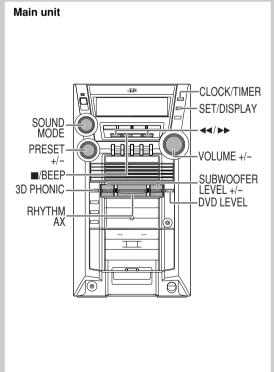
→ Searches for the beginning of the recording to the right.

Searches for the beginning of the recording to the left.

• You can also use |◄◄/▶►| buttons on the remote control.

Daily Operations—Sound&Other Adjustments





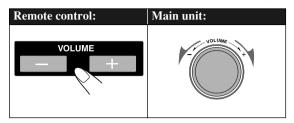
Adjusting the Volume







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



To drop the volume in a moment





To restore the volume, press again, or adjust the volume level.

Reinforcing the Bass Sound







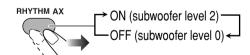
To adjust the subwoofer level gradually

You can select the subwoofer level from level 0 (minimum) to level 2 (maximum).



To emphasize rhythm feeling—RHYTHM AX

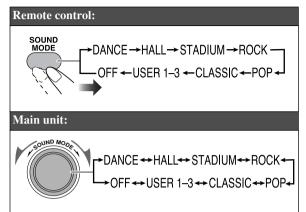
This function emphasizes bass attack feeling, and also changes the subwoofer level.



Selecting the Sound Modes



You can select one of the preset Sound Modes.



Surround modes*		
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.	
SEA (Sound Effect Amplifier) modes		
ROCK	Boosts low and high frequency. Good for acoustic music.	
POP	Good for vocal music.	
CLASSIC	Good for classical music.	
User modes		
USER 1/2/3	Your individual mode stored in memory. See the next column "Creating Your Own Sound Modes—User Mode."	
OFF	No Sound Mode effect (FLAT).	

^{*} Surround elements are added to the SEA elements to create being-there feeling in your room.

Creating Your Own Sound Modes—User Mode

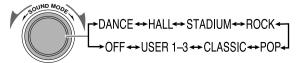






You can create your own Sound Modes to make sounds suit your taste. The changed settings can be stored as the USER 1, USER 2 and USER 3 modes.

Select one of the preset Sound Modes.



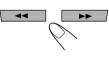
- · If you want to add surround elements into your Sound Mode, select one of the Surround modes.
- 2 Enter into the SEA Control Mode.
 - · You can enter the SEA Control Mode only while the Sound Mode appears on the display.



- Adjust the SEA pattern.
 - (1) Select one of the tone—BASS or TRE.



- 2 Adjust the level of the selected tone.
 - · You can adjust the bass and treble level from -3 to +3.



- 3 Repeat steps 1 and 2 to adjust the level of the other
- 4 Finish the SEA pattern setting.



Select one of the User modes in which you want to store your adjustment.



5 Finish the setting.

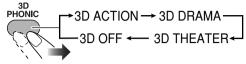




Selecting 3D PHONIC Mode







3D PHONIC ACTION On the TV screen

3D ACTION Suitable for action movies and sports programs. 3D DRAMA Creates natural and warm sound. Enjoy movies in a relaxed mood. **3D THEATER** Enjoy sound effects like in a major theater.

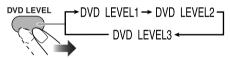
Presetting Automatic DVD VIDEO Sound







The DVD Video sound is sometimes recorded at a lower level than for 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 every time you change the source.



As the number increases, sound level also increases.





This System supports progressive scanning. 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 "PROGRESSIV."



PROGRESSIV	Progressive scanning. For a progressive TV.
INTERLACE	Interlaced scanning. For a conventional TV.

· PRGR. indicator lights on when progressive scanning mode is selected.

Changing the Picture Tone (Semole ONLY)



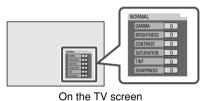


While showing a playback picture on the TV, you can select the preset picture tone, or adjust it and store your own likeliness.

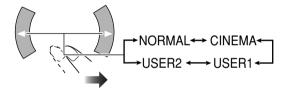
To select a preset picture tone

1 Activate VFP.





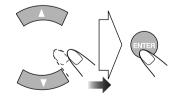
2 Select a preset picture tone.



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

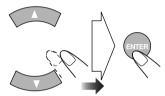
To adjust the picture tone

- 1 Select "USER1" or "USER2."
 - Follow steps 1 and 2 explained 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 $(-7 \text{ to } +7)$.
SATURATION	Adjust if the picture is whitish or blackish (-7 to +7).
TINT	Adjust if the human skin color is unnatural (–7 to +7).
SHARPNESS	Adjust if the picture is indistinct (-8 to +8).

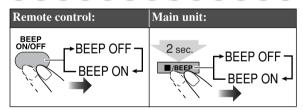
3 Adjust the parameter.



- 4 Repeat steps 2 to 3 to adjust other parameters.
- **5** Finish setting.



Turning On or Off the Key-Touch Tone



Changing the Display Brightness (Remote Control of Changing the Changing the Display Brightness (Remote Control of Changing the Chang



You can dim the display window. DIMMER



Setting the Clock





Without setting the build-in clock, you cannot use Daily/ Recording Timers (see page 32) and Sleep Timer (see next column).

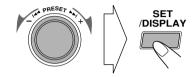
- To exit from the clock setting, press CLOCK/TIMER as required.
- To go back to the previous step, press CANCEL/DEMO.

1 Activate clock setting mode.

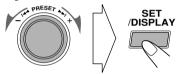




- If you have already adjusted the clock before, press the button repeatedly until the clock setting mode is selected.
- **2** Adjust the hour.

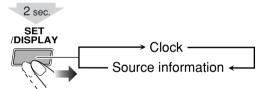


3 Adjust the minute.



Now the built-in clock starts working.

To check the current time during play



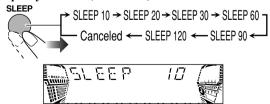
Turning Off the Power [Remote only] **Automatically**





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

- You can set Sleep Timer only while the System is turned
- **1** Specify the time (in minutes).



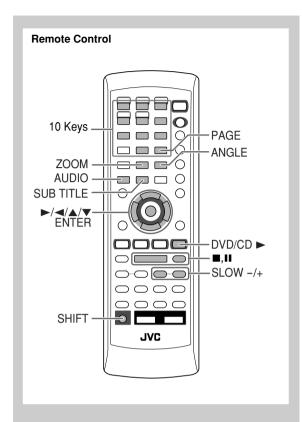
2 Wait until the set time goes off.

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 (Source)





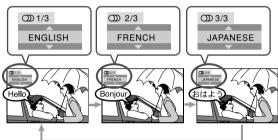
For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For SVCD/VCD: When playing back a track, you can select the audio channel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

• You can also select the audio track using the on-screen bar (see page 25).

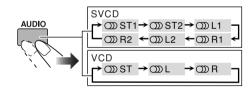
While playing a DVD Video...



Ex.:



While playing an 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. SVCD usually uses these 4 channels to record two 2-channel recordings (ST1/ ST2).

Selecting the Subtitle Language (Remote only)



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

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

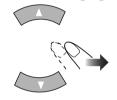
• You can also select the subtitle language using the onscreen bar (see page 25).

While playing a DVD Video...

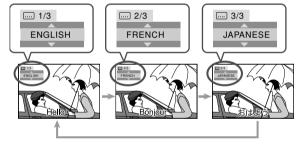
1 Display the subtitle selection window.



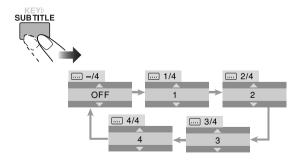
2 Select the subtitle language.



Ex.:



While playing an SVCD...



Selecting a View Angle (Remote only)

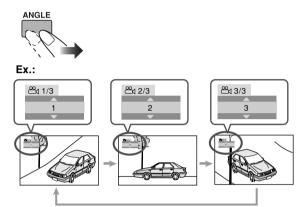




While playing back a chapter (of DVD Video) containing multi-view angles, you can view the same scene from different angles.

• You can also select the view angle using the on-screen bar (see page 25).

While playing back or paused...



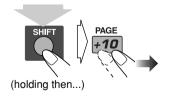
Selecting a Still Pictures on a Remote (NLY)



DVD AUDIO

While playing back a track (of DVD Audio) 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 25).

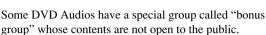


Each time you press the button, the still picture changes one after another (if available).

Playing Back a Bonus Group (Remote) (Smile)



on a DVD AUDIO

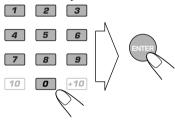


• To play back a bonus group, you have to enter the specific "key number" (a kind of password) for the bonus group. The way of getting the key number depends on the disc.

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 12.

2 Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■ or change to another source.

Special Picture Playback







Still picture playback

To start still picture playback:	To resume normal play- back:
While playing	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 ▶.

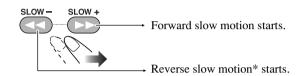
Slow-motion playback

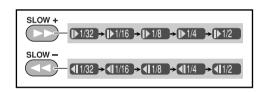
1 While playing...



Still picture playback starts.

2 Select slow motion speed.





*Only for DVD Video.

To resume normal playback, press DVD/CD ▶.

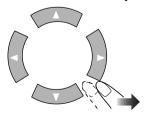
Zoom Remote (NLY)))

1 While playing back...



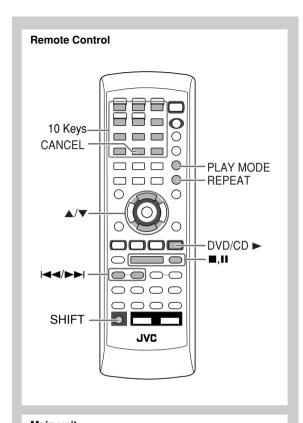
As the number increases, magnification also increases.

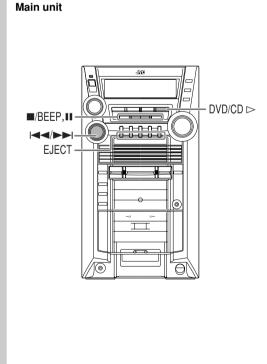
2 Move the zoomed-in position.



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

Advanced Disc Operations





Programming the Playing Order (Remote NLY)

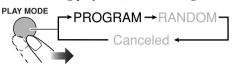






You can arrange the playing order of the tracks (up to 99) before you start playback.

1 Before starting playback, activate Program Play.

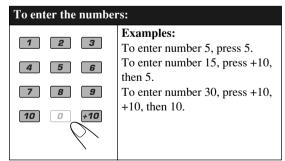




PROGRAM

On the TV screen

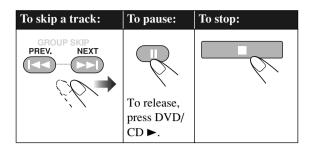
- **2** Select chapters or tracks you want for Program Play.
 - For DVD/MP3/WMA:
 - ① Select a disc number.
 - 2 Select a title or group number.
 - 3 Select a chapter or track number.
 - For SVCD/VCD/CD:
 - 1) Select a disc number.
 - Select a track number.



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



Playback starts in the order you have programmed.



To check the programmed contents





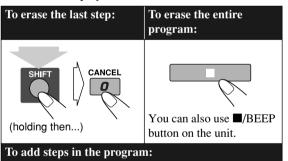
in the programmed order

→ in the reverse order

Remote ONLY

To modify the program

Before or after playback...



To exit from Program Play

Before or after playback...

Repeat step 2 on page 22.



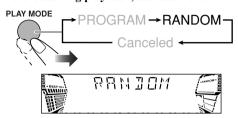
Playing at Random (Remote NILY)





You can play the contents of all tracks at random.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in a random order. Random Play ends when all chapters/tracks 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 (Remote ONLY) >>>>







• You can also select the repeat mode using the on-screen bar (see page 26).

Repeat Play

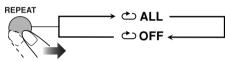
You can repeat playback.

• For DVD Video:

While playing...

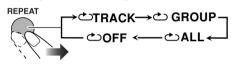


Before starting playback...



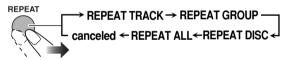
• For DVD Audio:

While playing or before playback...



• For MP3/WMA:

While playing or before playback...



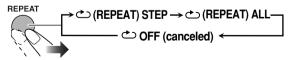
• For CD/SVCD/VCD:

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



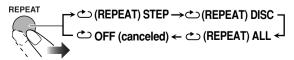
• For Program Play mode:

While playing or before playback...



• For Random Play mode:

While playing or before playback...



СНАР	Repeats the current chapter.
TITLE	Repeats the current title.
ALL	Repeats all discs or all programmed tracks.
TRACK	Repeats the current track.
GROUP	Repeats the current group.
DISC	Repeats the current disc.
STEP	Repeats the current track.
OFF	Selects to cancel Repeat Play mode.

Prohibiting Disc Ejection

—Child Lock





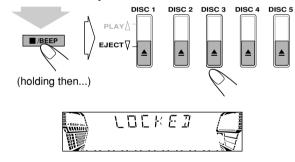




You can lock the disc trays so that no one can eject the loaded disc.

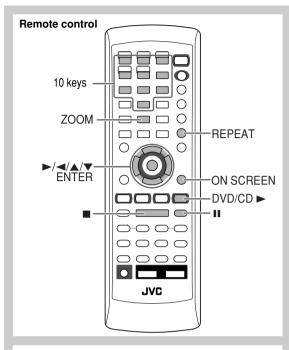
• This operation is possible only when the source is the disc player.

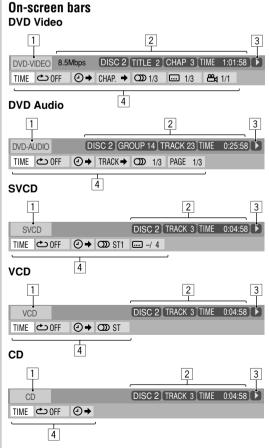
While the disc travs are closed...



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

On-Screen Disc Operations

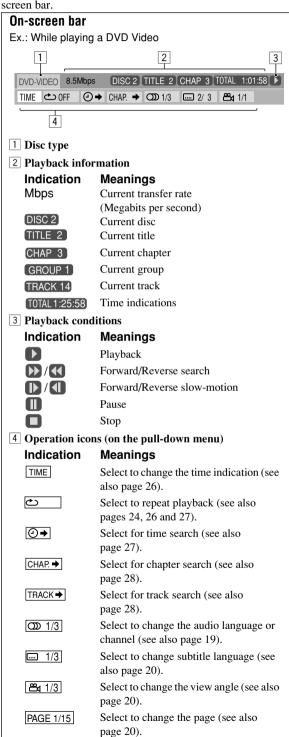




About the On-screen Bar



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



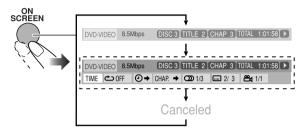
Operations Using the On-screen Bar



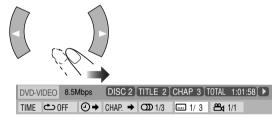
Basic operation procedure through the on-screen bar is as follows:

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 goes off.

To erase the on-screen bar



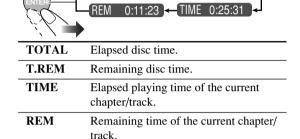
Changing the time information

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 1:01:58 → T.REM 0:35:24

To erase the on-screen bar



Repeat Play

- See also page 24.
- 1 While playing a disc (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
- 2 Select COFF.
- 3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs.
A-B	Repeats a desired portion (see page 27).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc.
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
OFF	Cancels Repeat Play.

- *During Program Play or Random Play, "STEP" appears.
- Repeat modes depend on the current playback disc. Refer to page 24.

5 Finish the setting.



Pop-up window goes off.

To cancel Repeat Play, select "OFF" in step 4.

To erase the on-screen bar



A-B Repeat

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



4 Select "A-B".



5 Select the start point (A).





6 Select the end point (B).



A-B Repeat starts. The selected portion plays repeatedly.
Before pressing ENTER, you can search for the end point using ▶▶.

Time Search

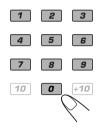
You can move to a particular point by specifying the elapsed playing time from the beginning.

- 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.



Examples:

To move to a point of 1 (hours): 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).
- To correct a misentry, press cursor

 to erase the last entry.
- 5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar



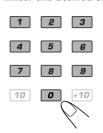
Chapter/Track Search

You can search for the chapter (DVD Video) or track (DVD Audio) number to play.

- 1 While playing, display the on-screen bar with the pulldown 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 To select chapter/track 15, press 1, then 5. To select chapter/track 30, press 3, then 0.

- To correct a misentry, press the 10 keys until the desired number shown in the pop-up window.
- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar



Operations on the CONTROL (Semole ONLY) >>>>

Screen

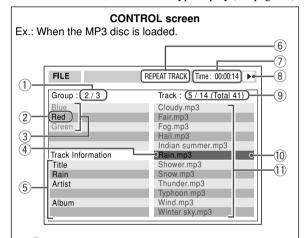




The CONTROL screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

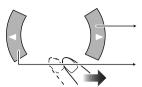
You can search for and play the desired tracks through the CONTROL screen.

• If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 36).



- 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
- Telapsed playing time of the current track (only for MP3/WMA)
- 8 Operation mode icon
- 9 Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
- 10 Highlight bar
- Track list

To move the highlight bar between group list and track list



Moves the bar to the track list

Moves the bar to the group list.

To select a group/track in the list



Move the highlight bar to a desired item.

 If you move the highlight bar while playing back an MP3/ WMA disc, the selected track starts playback automatically.

To start playback

For MP3/WMA:	
ENTER	Playback starts with the selected 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.

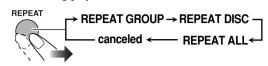
- Once you start playing back a JPEG track, the CONTROL screen goes off.
- To cancel slide-show, and display the current still picture, press II.

To stop playback



To repeat slide-show for JPEG

Before starting playback...



GROUP	Repeats the current group.
DISC	Repeats the current disc.
ALL	Repeats all discs.

• For Repeat Play of MP3/WMA, see page 24.

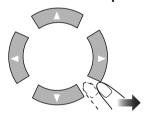
To zoom in the still picture

1 During playback is paused...



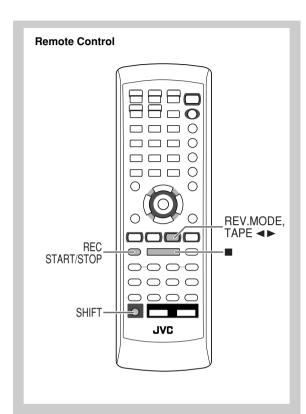
As the number increases, magnification also increases.

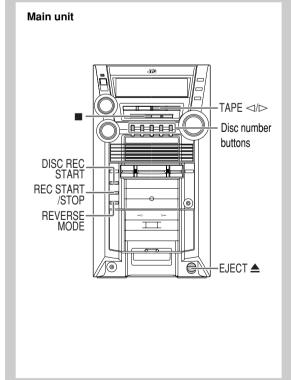
2 Move the zoomed-in position.



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

Advanced Tape Operations





IMPORTANT

It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

Recording on a Tape





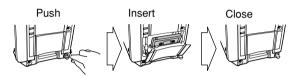




You can use type I tapes for recording.

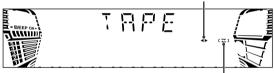
• To play a tape, see page 14.

1 Insert a recordable cassette.



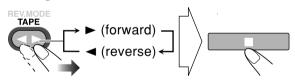
2 Check the tape running direction and Reverse Mode settings on the display.

Tape direction indicator

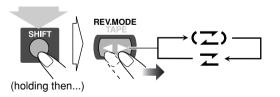


Reverse mode indicator

To change the direction

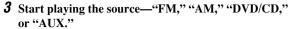


Change the Reverse mode if necessary.



• You can also use REVERSE MODE button on the unit.

(乙)	To record on both sides. • When using Reverse Mode, start recording in the forward (►) direction.
Z	To record on only one side.

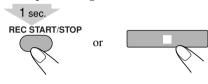


• When recording a disc, you can also use "Synchronized Disc Recording" (see the next column).

4 Start recording.



To stop recording



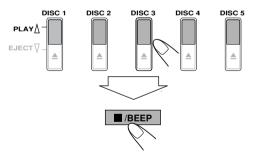
Synchronized Disc Recording



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 Select a disc.



For recording desired tracks on discs:

You can program tracks to record from plural discs with your preferred order.

• Select Program Play (and make a program (see page 22)) without starting playback.

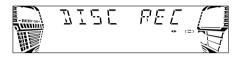
3 Check the tape running direction and Reverse Mode settings on the display.

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

4 Start recording.

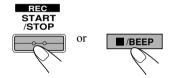


The System automatically creates 4-second blanks between the tunes recorded on the tapes.



• When either disc play or recording ends, both disc player and the cassette deck stop at the same time.

To stop recording



To record without creating a 4-second blank

- 1 Press DVD/CD ▶, then press II.
- 2 Press ► to go back to the beginning of the track.
- 3 Start recording.

To protect your recording

Cassettes have two small tabs on the back to protect from unexpected erasure or re-recording.

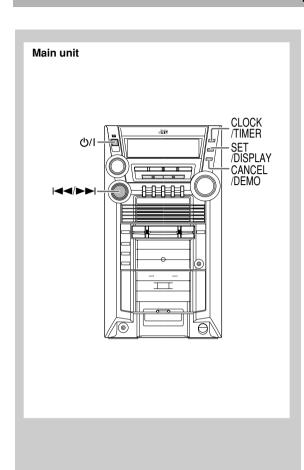
To protect your recording, remove these tabs.



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



Timer Operations



Setting the Timer

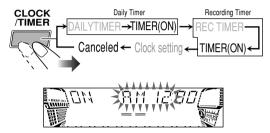






Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- To correct a misentry during the process, press CANCEL/DEMO. You can return to the previous step.
- 1 Select one of the timer setting modes (TIMER (ON)) you want to set—Daily Timer or Recording Timer.



Ex.: When Daily timer setting mode is selected.

2 Make the timer setting as you want.

Repeat the procedure until you finish setting in the following order:



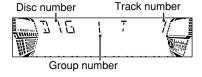
- 1) Set the hour then minute for on-time.
- **②** Set the hour then minute for off-time.
- ③ For Daily Timers: Select the playback source— "TUNER-FM," "TUNER-AM," "DISC," "TAPE" or "AUX IN."

For Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM."



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

Select a preset station for "TUNER-FM" and "TUNER-AM," or select a disc, group and track number for "DISC."



Ex.: When "DISC" is selected.

(5) For Daily Timers:

- You can select the volume level ("VOLUME 5," "VOLUME 10," "VOLUME 15" 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 actually works

Once the Daily Timer has been set, the timer (4) 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).

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 (stands by).

• The timer setting remains in memory until you change

How Recording Timer actually works

When Recording Timer has been set, Timer (4) indicator and the REC indicator are lit on the display. Recording Timer works only once.

When the on-time comes

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

When the off-time comes

The System stops recording, and turns off (stands by).

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

Even if the System is power on condition and selected other source, Recording Timer will be activated.

To turn off the Timer after its 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 (DAILYTIMER or REC TIMER) vou want to cancel.



2 Turn off the selected timer.



• The timer (**4**) indicator goes off.

To turn on the timer again, repeat the step 1 and press SET/DISPLAY.



Timer Priority



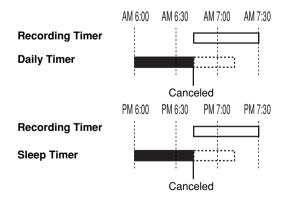




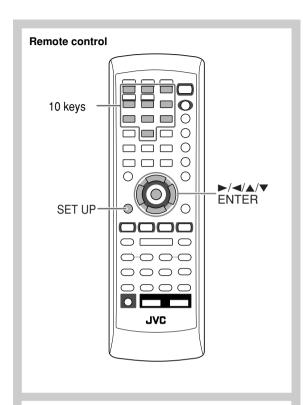


Since each timer can be set separately, you may wonder what happens if the setting for these timers overlaps.

• Recording Timer has priority over the Daily Timer and Sleep Timer (see page 18).



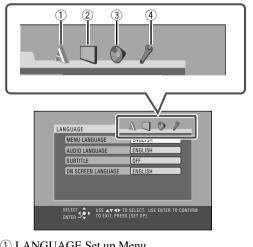
Set up Menu Operations



Set up Menu Icons

The icon for the selected Set up Menu will be highlighted.

Ex.: LANGUAGE Set up Menu is selected.



- 1 LANGUAGE Set up Menu
- ② PICTURE Set up Menu
- 3 AUDIO Set up Menu
- 4 OTHERS Set up Menu

Operating Procedure Found N





You can use the Set up Menus only when a disc is selected as the source and its playback is not yet started.

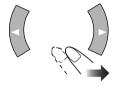
Ex.: Selecting "STILL PICTURE" for "FILE TYPE":

1 Show the set up menu.



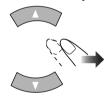


2 Select one of the set up menus.





3 Select the item you want to adjust.





4 Display the pop-up window.





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





6 Finish the setting.



7 Repeat steps 3 to 4 to set other items on the same Set up Menu.

Repeat steps 2 to 4 to set other items on another Set up Menu.

To finish the Set up Menu

SET UP



■ LANGUAGE Set up Menu

INFO

You can select the initial languages for disc playback. You can also select the language shown on the TV screen while operating this System.



MENU LANGUAGE

Some discs have multiple menu languages. Select from—ENGLISH, SPANISH, FRENCH, CHINESE, GERMAN, ITALIAN, JAPANESE, AA – ZU (see "Language Code List" on page 45).

AUDIO LANGUAGE

Some discs have multiple audio languages. Select from—ENGLISH, SPANISH, FRENCH, CHINESE, GERMAN, ITALIAN, JAPANESE, AA – ZU (see "Language Code List" on page 45).

SUBTITLE

Some discs have multiple subtitle languages. Select from—ENGLISH, SPANISH, FRENCH, CHINESE, GERMAN, ITALIAN, JAPANESE, AA – ZU (see "Language Code List" on page 45) or "OFF (no subtitle)."

ON SCREEN LANGUAGE

Select one of the languages shown on the TV from—ENGLISH, SPANISH, and FRENCH.

■ PICTURE Set up Menu



You can select the desired options concerning a picture or monitor screen.



MONITOR TYPE

You can select the monitor type of your TV when you play DVD VIDEO recorded with aspect ratio of 16:9.

Select one of the following settings:

16:9 (Wide television conversion):

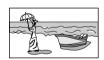
Select when the aspect ratio of your TV is 16:9 (wide TV) and when the TV has the screen size adjustment function.

4:3 LB (Letter Box):

Select when the aspect ratio of your TV is 4:3 (conventional TV). While viewing a wide screen picture, the black bars appear on the top and the bottom of the screen.

4:3 PS (Pan Scan):

Select when the aspect ratio of your TV is 4:3 (conventional TV). While viewing a wide screen picture, the black bars do not appear; however, the left and right edges of the pictures will not be shown on the screen.







Ex.: 16:9

Ex.: 4:3 LB

Ex: 4:3 PS

PICTURE SOURCE

You can obtain optimal picture quality by selecting an appropriate option—picture source type (either video source or film source).

Select one of the following:

AUTO: Normally select this.

When playing back a disc containing both video and film sources, the System automatically changes the processing to match it to the picture type (film or video source) of the current chapter.

FILM: To play a film source disc.

VIDEO: To play a video source disc.

SCREEN SAVER

You can activate or deactivate screen saver while operating the built-in disc player.

Select one of the following:

ON:	The pictures on the TV becomes dark when no operation is done for about 5 minutes.
OFF:	To cancel the screen saver.

FILE TYPE

If both audio tracks (MP3 or WMA files) and still picture (JPEG files) are recorded on a disc, you can select which to play

Select one of the following:

AUDIO:	To play MP3/WMA files.
STILL PICTURE:	To play JPEG files.

■ AUDIO Set up Menu



You can adjust the sound settings of the System.



DIGITAL AUDIO OUTPUT

When using the digital output terminal on the rear, set this correctly according to the connected component.

Select one of the following:

	0
PCM ONLY:	To connect to a linear PCM digital equipment such as an MD recorder.
DOLBY DIGITAL /PCM:	To connect to a Dolby Digital decoder or an amplifier with a built-in Dolby Digital decoder.
STREAM/PCM:	To connect to a DTS decoder or an amplifier with a built-in DTS decoder.

• See also "OPTICAL DIGITAL OUTPUT Signals" on page 47.

DOWN MIX

When playing a multi-channel DVD, the System converts the signals into 2 channels.

Downmix setting is effective for the speaker output (and digital audio output if "DIGITAL AUDIO OUTPUT" is set to "PCM ONLY") from this System.

Select one of the following:

DOLBY SURROUND:	To connect an amplifier with the Dolby Pro Logic decoder.
STEREO:	To connect a conventional stereo amplifier, receiver, MD player, TV, etc.

D. RANGE COMPRESSION

You can compress the dynamic range (the difference between the loudest sound and the softest sound) to enjoy a powerful sound even at a low volume level when listening to Dolby Digital software. This is useful at night.

• The effectiveness varies depends on a software.

Select one of the following:

AUTO:	To enjoy powerful sounds with full dynamic range.
ON:	Best for watching a movie at a low volume level.

■ OTHERS Set up Menu



You can change some other convenient functions.



RESUME

You can activate or deactivate Resume for disc playback (see page 12).

Select one of the following:

ON:	To activate Resume.
OFF:	To cancel Resume.

ON SCREEN GUIDE

You can activate or deactivate the on-screen guide icons (see page 12).

• When recording the picture on a VCR, select "OFF" to avoid recording the guide icons on your video tape.

Select one of the following:

ON:	To activate the on-screen guide icons.
OFF:	To cancel the on-screen guide icons.

AV COMPULINK MODE

When connecting the System to a JVC's TV with the AV COMPU LINK remote control system, select the proper setting.

Select one of the following:

DVD1:	To deactivate the AV COMPU LINK remote
	system.
DVD2.	To connect to the VIDEO-1 Input jack on the TV

DVD2: To connect to the VIDEO-1 Input jack on the TV using an S-video cord or component video cord.

DVD3: To connect to the VIDEO-2 Input jack on the TV using a composite cord.

• For details, see "To connect the AV COMPU LINK cords" on page 6.

PARENTAL LOCK

Select this to enter the PARENTAL LOCK submenu. See the section that follows.

Restricting the Review



You can restrict playback of DVD Video containing violent scenes and those unsuitable for your family members. Once you have set the rating level, such violent scenes (for which a higher level than you set is assigned) may be skipped or changed to another scene (depending on how the disc is programmed).

To set Parental Lock

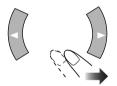
Set the rating level—Level 1 (most restrictive) to Level 8 (least restrictive).

1 Display the Set up Menu.



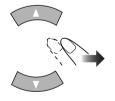


2 Select the OTHERS Set up Menus.





3 Select "PARENTAL LOCK."



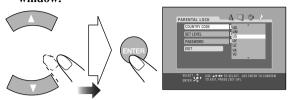


4 Enter the PARENTAL LOCK submenu.



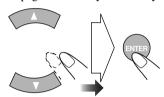


5 Select "COUNTRY CODE," then display the pop-up window.

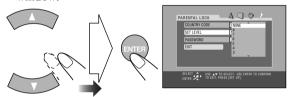


6 Select the country code of your area.

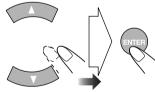
 See "Country/Area codes list for Parental Lock" on page 46 to find your country code.



7 Select "SET LEVEL," then display the pop-up window.

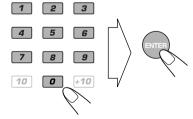


8 Set the rating level (NONE, 8-1).



The System automatically enters password entry mode.

9 Enter any 4-digit number for your password.



10 Finish the setting.

SET UP



To change the setting

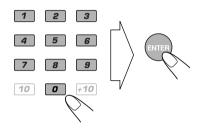
1 Display the PARENTAL LOCK sub menu.

• Follow steps 1 to 4 of "To set Parental Lock".



- "PASSWORD" is automatically selected.
- You cannot select any item other than "EXIT" until you enter the correct password.

2 Enter your password.

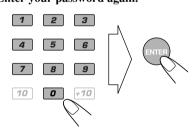


- If you enter a wrong password, "---" appears again.
- If you enter a wrong password three times, "EXIT" is automatically selected. In this case, press ENTER to exit from the PARENTAL LOCK submenu.
- If you forget your password, enter "8888."

3 Change the settings.

• Follow steps 5 to 8 of "To set Parental Lock".

4 Enter your password again.



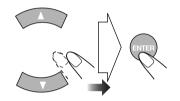
• If you want to change a password, enter a new four digit number in this step.

To release Parental Lock temporarily

When you set a strict rating level, some discs may not be played back at all. When you try to play such a disc, the following screen appears on the TV screen.



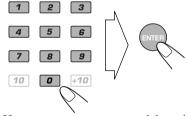
1 Select "TEMPORARY RELEASE," then ENTER.



"PASSWORD" is automatically selected.

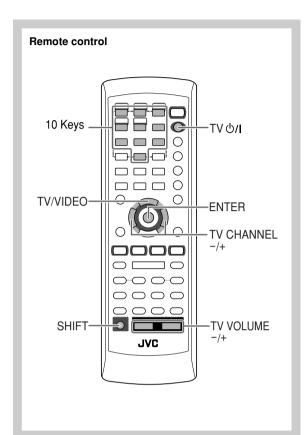
• If you do not play back such a disc, select "NOT RELEASE," then ENTER. Then eject the disc.

2 Enter your password.



• If you enter a wrong password three times, "NOT RELEASE" is automatically selected. In this case, press ENTER. Then eject the disc.

Operating the TV



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

Operating TV Remote (NLY)







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

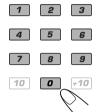
1 Keep pressing the button until the following steps are complete.



2 Enter the code setting mode.

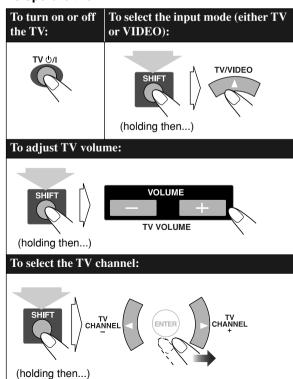


3 Enter the 2-digit manufacture's code number.



4 Release TV 心川.

To operate the TV



Additional Information

Learning More about This System



Before Operating the System (see pages 7 to 9)

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 the 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.
- When playing back a DVD Audio disc recorded by MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals recognized as the linear PCM signal, however, no indicator lights up in the display window.

Daily Operations—Playback (see pages 10 to 14)

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.
- Some DVD Audios prohibit downmix. When you play back such a disc, "LR ONLY" appears on the display and the System plays back the left front and right front signals.
- For MP3/WMA/JPEG playback...
 - MP3/WMA/JPEG discs are required a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA/JPEG 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/JPEG files with the extension code <.mp3>, <.wma> or <.jpg> (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.

- When discs* in more than one tray are loaded on the disc trays, they are played in sequence as follows:
- Ex.: When DISC 2 is pressed:
 - DISC 2⇒DISC 3⇒DISC 4⇒DISC 5⇒DISC 1 (then stops)
- * When no disc is loaded on the tray, that disc number is skipped.

Daily Operations—Sound&Other Adjustments (see pages 15 to 18)

Adjusting the Volume:

 Be sure to turn down the volume before connecting or putting the headphones.

Reinforcing the Bass Sound:

- RHYTHM AX function also affects the sound through the headphones.
- While listening with the headphones, you cannot adjust the subwoofer level.
- RHYTHM AX function and subwoofer level setting does not affect recording.
- You can adjust the subwoofer level while RHYTHM AX is on
- The subwoofer lamp changes brightness according to the subwoofer level.

Selecting the Sound Modes:

 The sound mode lamp and Surround mode lamp change brightness according to selecting Sound mode.

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 3D PHONIC Mode:

- While you use the headphones, 3D PHONIC mode is canceled temporary.
- 3D PHONIC setting is also applied to the optical digital output signals through the OPTICAL DIGITAL OUTPUT terminal.

Changing the Scanning Mode:

- To enjoy the progressive video picture, connect a TV with the progressive video input using component video cord.
- Do not change the progressive scanning mode 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.

Changing the Picture Tone:

 If no operation is done for about 10 seconds, the VFP setting screen disappears.

Selecting 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.

Turning Off the Power Automatically:

• If you turn off the System, Sleep Timer is canceled.

Unique DVD/VCD Operations (see pages 19 to 21)

Selecting the Sound Track:

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

Playing Back a Bonus Group on a DVD AUDIO:

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

Special Picture Playback:

- During slow-motion playback, no sound will be reproduced.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 22 to 24)

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). Such entries are ignored, and are erased from the program.
- For SVCD/VCD/CD, if the disc is not in current tray, the System may prompt for the group number entry as well, however, during playback, system will ignore these entries
- You cannot use Program Play and Random Play for JPEG discs.

Playing at Random—Random Play:

• Random Play cannot be used on some DVD discs.

Prohibiting Disc Ejection—Child Lock:

 If you try to eject discs while Child Lock is in use, "LOCKED" appears to inform you that the disc trays are locked.

On-Screen Disc Operations (see pages 25 to 29)

Operations Using the On-screen Bar

- A-B Repeat:
 - A-B Repeat cannot be used on some DVDs.
- For DVD Video, A-B Repeat is possible only within the same title.
- For DVD Audio/SVCD/VCD/CD, A-B Repeat is possible only within the same track.

Operations on the CONTROL Screen:

- 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 unit may not play back JPEG files properly which are recorded by the devices other than digital still camera.
- During Slide-show playback, zoom cannot be operated.

Advanced Tape Operations (see pages 30 and 31)

Recording on a Tape:

- The recording level is automatically set correctly. Thus, you can adjust the sound you are actually listening to without affecting the recording level.
- 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, "NO TAPE" appears on the display. If a protected tape has been inserted, "NO REC" appears on the display.
- 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.
- You cannot change source during recording.

Synchronized Disc Recording:

- While recording, you cannot use ►►I/I , ►►/ , DVD LEVEL, 3D PHONIC and source buttons.
- You can adjust volume control and sound setting (subwoofer level, RHYTHM AX, Sound mode) but the settings do not affect the recording sound.
- 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 Synchronized Recording with Repeat Play (Repeat Play will be canceled).
- When recording starts, "DISC REC" appears on the display and the REC (recording) indicator flashes.
- 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 entire
 disc is not entirely recorded.

Timer Operations (see pages 32 to 33)

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.

Timer Priority:

- If you set the Sleep Timer after Daily Timer starts playing the selected source, Daily Timer is canceled.
- If you set the Sleep Timer after Recording Timer starts recording, Recording Timer is canceled, but recording continues until Sleep Timer shuts off the power.

Set up Menu Operations (see pages 34 to 39)

LANGUAGE Set up 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 Set up Menu—MONITOR TYPE:

- Even if "4:3 PS" is selected, the screen size may become 4:3 letter box with some DVD Videos. 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.

AUDIO Set up Menu—DOWN MIX:

• This setting is not effective when DTS multi-channel software is played back.

OTHERS Set up Menu —ON SCREEN GUIDE:

• The set up menu and on-screen bar will be displayed (and recorded) even though this function is set to "OFF." Subtitles and the information for zooming 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, temperature extremes, 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 turned off).

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 strong.
- 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.



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 35).

Radio Operations:

Hard to listen to 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.

- ⇒ The disc is placed upside down. Place the disc with the label side up.
- ⇒ Parental Lock is in use (see page 38).

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 36).
- ⇒ 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.

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 20).

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 19).

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- ⇒ Child Lock is in use (see page 24).

Tape Operations:

The Cassette holder cannot be opened.

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

Recordings:

Impossible to record.

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape.

Timer operations:

Daily 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
AB	Abkhazian
AF	Afrikaans
AM	Ameharic
AR	Arabic
AS	Assamese
AY	Aymara
ΑZ	Azerbaijani
BA	Bashkir
BE	Byelorussian
BG	Bulgarian
BH	Bihari
BI	Bislama
BN	Bengali, Bangla
ВО	Tibetan
BR	Breton
CA	Catalan
CO	Corsican
CS	Czech
CY	Welsh
DA	Danish
DZ	Bhutani
EL	Greek
EO	Esperanto
ET	Estonian
EU	Basque
FA	Persian
FI	Finnish
FJ	Fiji
FO	Faroese
FY	Frisian
GA	Irish
GD	Scots Gaelic
GL	Galician
GN	Guarani
GU	Gujarati
HA	Hausa
HI	Hindi
HR	Croatian
HU	Hungarian
HY	Armenian
IA	Interlingua
IE	Interlingue
IK	Inupiak
IN	Indonesian
IS	Icelandic
IW	Hebrew
JI	Yiddish
	1

JW	Javanese
KA	Georgian
KK	Kazakh
KL	Greenlandic
KM	Cambodian
KN	Kannada
ко	Korean (KOR)
KS	Kashmiri
KU	Kurdish
KY	Kirghiz
LA	Latin
LN	Lingala
LO	Laothian
LT	Lithuanian
LV	Latvian, Lettish
MG	Malagasy
MI	Maori
MK	Macedonian
ML	Malayalam
MN	Mongolian
MO	Moldavian
MR	Marathi
MS	Malay (MAY)
MT	Maltese
MY	Burmese
NA	Nauru
NE	Nepali
NL	Dutch
NO	Norwegian
OC	Occitan
OM	(Afan) Oromo
OR	Oriya
PA	Panjabi
PL	Polish
PS	Pashto, Pushto
PT	Portuguese
QU	Quechua
RM	Rhaeto-Romance
RN	Kirundi
RO	Rumanian
RU	Russian
RW	Kinyarwanda
SA	Sanskrit
SD	Sindhi
SG	Sangho
SH	Serbo-Croatian
SI	Singhalese
SK	Slovak

SL	Slovenian
SM	Samoan
SN	Shona
so	Somali
SQ	Albanian
SR	Serbian
SS	Siswati
ST	Sesotho
SU	Sundanese
SV	Swedish
SW	Swahili
TA	Tamil
TE	Telugu
TG	Tajik
TH	Thai
TI	Tigrinya
TK	Turkmen
TL	Tagalog
TN	Setswana
то	Tonga
TR	Turkish
TS	Tsonga
TT	Tatar
TW	Twi
UK	Ukrainian
UR	Urdu
UZ	Uzbek
VI	Vietnamese
vo	Volapuk
wo	Wolof
XH	Xhosa
YO	Yoruba
ZU	Zulu

Country/Area codes list for Parental Lock

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

illai	LUUN	
DK	Denmark	
DM	Dominica	
DO	Dominican Republic	
DZ	Algeria	
EC	Ecuador	
EE	Estonia	
EG	Egypt	
EH	Western Sahara	
ER	Eritrea	
ES	Spain	
ET	Ethiopia	
FI	Finland	
FJ	Fiji	
FK	Falkland Islands (Malvinas)	
FM	Micronesia (Federated States of)	
FO	Faroe Islands	
FR	France	
FX	France, Metropolitan	
GA	Gabon	
GB	United Kingdom	
GD	Grenada	
GE	Georgia	
GF	French Guiana	
GH	Ghana	
GI	Gibraltar	
GL	Greenland	
GL Greenland GM Gambia		
GN	Guinea	
GP	Guadeloupe	
GQ	Equatorial Guinea	
GR	Greece	
GS	South Georgia and the South	
ds	Sandwich	
GT	Guatemala	
GU	Guam	
GW	Guinea-Bissau	
GY	Gunca-Bissau Guyana	
HK	Hong Kong	
HM	Heard Island and McDonald	
11171	Islands	
HN	Honduras	
HR	Croatia	
HT	Haiti	
HU	Hungary	
ID	Indonesia	
IE	Ireland	
IL IN	Israel India	
10	British Indian Ocean Territory	
IQ	Iraq	
IR	Iran (Islamic Republic of)	
IS	Iceland	
IT	Italy	
JM	Jamaica	

JO	Jordan	
JP	Japan	
KE	Kenya	
KG	Kyrgyzstan	
KH	Cambodia	
KI	Kiribati	
KM	Comoros	
KN	Saint Kitts and Nevis	
KP	Korea, Democratic People's	
	Republic of	
KR	Korea, Republic of	
KW	Kuwait	
KY	Cayman Islands	
KZ	Kazakhstan	
LA	Lao People's Democratic	
	Republic	
LB	Lebanon	
LC	Saint Lucia	
LI	Liechtenstein	
LK	Sri Lanka	
LR	Liberia	
LS	Lesotho	
LT	Lithuania	
LU	Luxembourg	
LV	Latvia	
LY	Libyan Arab Jamahiriya	
MA	Morocco	
MC	Monaco	
MD	Moldova, Republic of	
MG	Madagascar	
MH	Marshall Islands	
ML	Mali	
MM	Myanmar	
MN	Mongolia	
MO	Macau	
MP	Northern Mariana Islands	
MQ	Martinique	
MR	Mauritania	
MS	Montserrat	
MT	Malta	
MU	Mauritius	
MV	Maldives	
MW	Malawi	
MX	Mexico	
MY	Malaysia	
MZ	Mozambique	
NA	Namibia	
NC	New Caledonia	
NE	Niger	
NF	Norfolk Island	
NG	Nigeria	
NI	Nicaragua	
NL	Netherlands	
NO	Norway	

NP	Nepal	
NR	Nauru	
NU	Niue	
NZ	New Zealand	
OM	Oman	
PA	Panama	
PE	Peru	
PF	French Polynesia	
PG	Papua New Guinea	
PH	Philippines	
PK	Pakistan	
PL	Poland	
PM	Saint Pierre and Miquelon	
PN	Pitcairn	
PR	Puerto Rico	
PT	Portugal	
PW	Palau	
PY	Paraguay	
QA	Qatar	
RE	Réunion	
RO	Romania	
RU	Russian Federation	
RW	Rwanda	
SA	Saudi Arabia	
SB	Solomon Islands	
SC	Seychelles	
SD	Sudan	

SE	Sweden	
SG	Singapore	
SH	Saint Helena	
SI	Slovenia	
SJ	Svalbard and Jan Mayen	
SK	Slovakia	
SL	Sierra Leone	
SM	San Marino	
SN	Senegal	
so	Somalia	
SR	Suriname	
ST	Sao Tome and Principe	
SV	El Salvador	
SY	Syrian Arab Republic	
SZ	Swaziland	
TC	D Chad	
TD		
TF		
TG	Togo	
TH	Thailand	
TJ	Tajikistan	
TK	Tokelau	
TM	Turkmenistan	
TN	Tunisia	
TO	Tonga	
TP	East Timor	
TR	Turkey	

TETE	m: :1 1 1m1	
TT	Trinidad and Tobago	
TV	Tuvalu	
TW	Taiwan	
TZ	Tanzania, United Republic of	
UA	Ukraine	
UG	Uganda	
UM	United States Minor Outlying	
	Islands	
US	United States	
UY	Uruguay	
UZ	Uzbekistan	
VA	Vatican City State (Holy See)	
VC	Saint Vincent and the Grenadines	
VE	Venezuela	
VG	Virgin Islands (British)	
VI	Virgin Islands (U.S.)	
VN	Vietnam	
VU	Vanuatu	
WF	Wallis and Futuna Islands	
WS	Samoa	
YE	Yemen	
YT	Mayotte	
YU	Yugoslavia	
ZA	South Africa	
ZM	Zambia	
ZR	Zaire	
ZW	Zimbabwe	

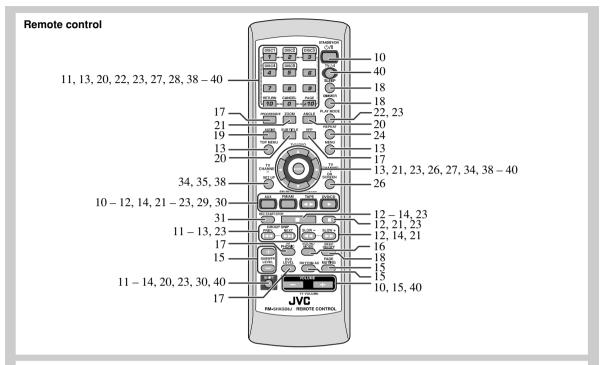
OPTICAL DIGITAL OUTPUT Signals

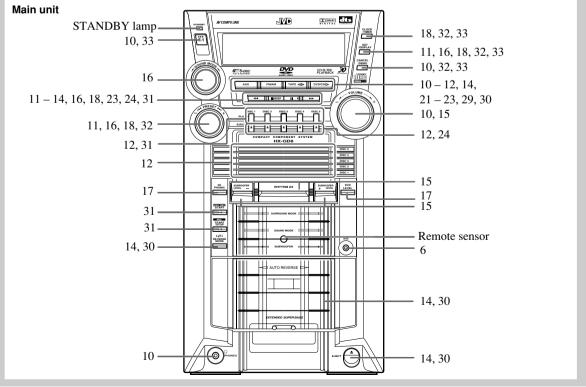
DIGITAL AUDIO OUTPUT	Output Signals		
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
DVD VIDEO			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM*		
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digi	tal bitstream	48 kHz, 16 bit Linear PCM
with DTS Digital Surround	DTS bitstream	48 kHz, 16 bi	t Linear PCM
DVD AUDIO			
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	I
with Dolby Digital	Dolby Digi	tal bitstream	48 kHz, 16 bit Linear PCM
with DTS Digital Surround	DTS bitstream	48 kHz, 16 bi	t Linear PCM
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM*/48 kHz, 16 bit Linear PCM*		
CD with DTS Digital Surround	DTS bitstream	44.1 kHz, 16 b	oit Linear PCM
MP3/WMA disc	32/44.1/48 kHz, 16 bit Linear PCM		

^{*} 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.

Parts Index

Refer to the pages to see how to use the buttons and controls.







Amplifier section—CA-HXGD8

Output Power:

SUBWOOFERS: 195 W per channel, min. RMS.

> driven into 6Ω at 63 Hz with no more than 10 % total harmonic

distortion.

MAIN SPEAKERS: 80 W per channel, min. RMS,

> driven into 6 Ω at 1 kHz with no more than 10 % total harmonic

distortion.

Audio input sensitivity/impedance

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

AUX: $300 \text{ mV}/47 \text{ k}\Omega$

Digital output:

OPTICAL DIGITAL OUTPUT:

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

VIDEO OUT:

Color system:NTSC

VIDEO (composite): 1 V(p-p)/75 Ω 1 V(p-p)/75 Ω

S-VIDEO: Y (luminance) C (chrominance, burst)

0.286 V(p-p)/75 Ω

COMPONENT (interlace/ progressive):

(Y) 1 V(p-p)/75 Ω

 (P_B/P_R) $0.7 \text{ V(p-p)/}75 \Omega$

Speaker Terminals: $6 \Omega - 16 \Omega$ (main speakers) $6 \Omega - 16 \Omega$ (subwoofers)

Others:

AV COMPU LINKx2 (\$\phi\$ 3.5)

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/ MP3/ WMA/

JPEG format)

DVD-R/DVD-RW (recorded in video

format)

90 dB Dynamic range: Horizontal resolution: 500 lines Wow and flutter: Immeasurable Cassette deck section

Frequency response

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

General

AC 120 V \sim , 60 Hz Power requirement:

Power consumption: 265 W/ 325 VA (at operation)

30 W (on standby)

Dimensions (approx.): 205 mm x 370 mm x 432 mm

 $(8^{1}/_{8} \text{ in. } \times 14^{5}/_{8} \text{ in. } \times 17^{1}/_{16} \text{ in.})$

(W/H/D)

Mass (approx.): 11 kg (24.3 lbs)

Supplied Accessories

See page 3.

Speaker section—SP-HXGD8

Type: 3-Way 4-Speaker Bass-Reflex Type

Speakers:

Subwoofer 20 cm $(7^{7}/_{8} \text{ in.})$ cone x 1

Woofer: 13.5 cm (5 $^{3}/_{8}$ in.) cone x 2

Tweeter: 5 cm (2 in.) cone x 1

Power handling capacity: Subwoofer: 195 W

Main speaker: 80 W

Impedance:

Subwoofer: 6 Ω

Main speaker: 6Ω

Frequency range:

Subwoofer: 30 Hz – 970 Hz

Main speaker: 75 Hz - 25 000 Hz

Sound pressure level:

Subwoofer: 83 dB/W•m

Main speaker: 88 dB/W•m

Dimensions (approx.): 240 mm x 457 mm x 407 mm

 $(9^{1}/_{2} \text{ in. } \times 18 \text{ in. } \times 16^{1}/_{16} \text{ in.})$

(W/H/D)

10 kg (22.1 lbs) each Mass (approx.):

Design and specifications are subject to change without notice.



LIMITED WARRANTY

AUDIO-1

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

١	PARTS	LABOR
	1 YR	1 YR

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

WHAT WE WILL DO:

If this product is found to be defective, JVC will repair or replace defective parts 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 and parts thereof may be brought to a JVC authorized service center on a carry-in basis except for Television sets having a screen size 25 inches and above which are covered on an in-home basis.

WHAT YOU MUST DO FOR WARRANTY SERVICE:

Return your product to a JVC authorized service center with a copy of your bill of sale. For your nearest JVC authorized service center, please call toll free: (800) 537-5722.

If service is not available locally, box the product carefully, preferably in the original carton, and ship, insured, with a copy of your bill of sale plus a letter of explanation of the problem to the nearest JVC Factory Service Center, the name and location of which will be given to you by the toll-free number.

If you have any questions concerning your JVC Product, please contact our Customer Relations Department.

WHAT IS NOT COVERED:

This limited warranty provided by JVC does not cover:

- 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 number
 or serial number has been altered, tampered with, defaced or removed;
- 2. Initial installation and installation and removal for repair;
- 3. Operational adjustments covered in the Owner's Manual, normal maintenance, video and audio head cleaning;
- 4. Damage that occurs in shipment, due to act of God, and cosmetic damage;
- 5. Signal reception problems and failures due to line power surge;
- 6. Video Pick-up Tubes/CCD Image Sensor, Cartridge, Stylus (Needle) are covered for 90 days from the date of purchase;
- 7. Accessories
- 8. Batteries (except that Rechargeable Batteries are covered for 90 days from the date of purchase):

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 THE LOSS OF USE OF THE PRODUCT, INCONVENIENCE, LOSS OR ANY OTHER DAMAGES, WHETHER DIRECT, INCIDENTAL OR CONSEQUENTIAL (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 MERCHANT-ABILITY 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 Wayne, NJ 07470

REFURBISHED PRODUCTS CARRY A SEPARATE WARRANTY, THIS WARRANTY <u>DOES NOT</u> APPLY. FOR DETAILS 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. which is located either on the rear, bottom or side of the cabinet. Retain this information for future reference.	
Model No. :	Serial No. :
Purchase data :	Name of dealer :

Authorized Service Centers



HOW TO LOCATE YOUR JVC SERVICE CENTER

TOLL FREE: 1 (800) 537-5722 http://www.jvc.com

Dear Customer,

In order to receive the most satisfaction from your purchase, please read the instruction booklet before operating the unit.In the event that repairs are necessary, please call 1 (800)537-5722 for your nearest authorized servicer or visit our website at www.JVC.com

Remember to retain your Bill of Sale for Warranty Service.

Do not service the television 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.

Accessories

To purchase accessories for your JVC product, please call toll free:1 (800)882-2345 or on the web at www.JVC.com

