

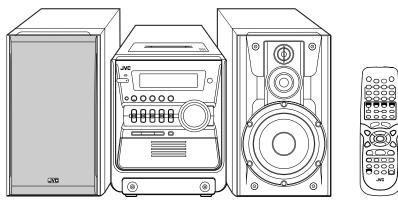


MICRO COMPONENT SYSTEM

微型组合音响

UX-GD7 —Consists of CA-UXGD7 and SP-UXGD7

一由 CA-UXGD7 及 SP-UXGD7 组成















Digital Direct Progressive Scan



INSTRUCTIONS

使用说明书

Warnings, Cautions and Others 警告,注意及其他须知事项

CAUTION— 0/I (standby/on) button!

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

- When the unit is on standby, the STANDBY lamp lights in red.
- When the unit is turned on, the STANDBY lamp lights goes off.

The power can be remote controlled.

CAUTION

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

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

CAUTION

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

注意一0/1(待机/开) 开关!

将主电源插头从插座上拔出以完全关闭电源(全部灯光和指示灯熄灭)。**少/I** 开关处于任何状况也没有完全有完全切断主线。

- 当本机处于备用模式时,STANDBY 灯将亮起红色。
- 当本机被启动时,STANDBY 灯将熄灭。

电源开关可用遥控器控制。

注意

为了减少触电,火灾等危险:

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

注意

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

Caution: Proper Ventilation

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

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

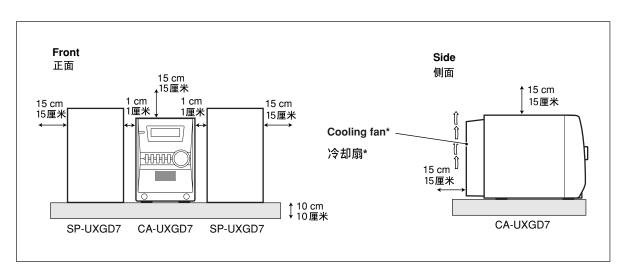
注意:正确通风

为免发生触电和火警的危险,及防止本机受损,请将本机如下放置:

1. 前面: 没有障碍物及地方开阔。

2. 侧面 / 顶面 / 背面: 在图中所示范围中,不应放置任何障碍物。

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



* About the cooling fan

A cooling fan is mounted on the rear panel of the unit to prevent abnormal temperature inside the unit, thus assuring normal operation of theunit. The cooling fan automatically starts rotating to intake external cool air when the volume is increased up to more than a certain level.

* 关于冷却扇

冷却扇安装在本机的后部用以防止本机内部温度异常,从而保持本机的正常操作。当音量增加到一定的水平时,冷却扇自动开始旋转吸入外部凉爽的空气。

IMPORTANT FOR LASER PRODUCTS

- 1. CLASS 1 LASER PRODUCT
- CAUTION: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.
- 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.

镭射产品的重要说明

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

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

ADVARSEL: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d) VARNING:Synligochosynliglaserstrålningnärden öppnasoch spärren ärurkopplad.Betraktaejstrålen.(s)

VARO: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

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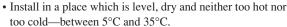
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Introduction



Installation



• Install the System in a location with adequate ventilation to prevent internal heat buildup inside 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 main unit (see page G-2).

For safety, observe the following carefully:



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

 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.

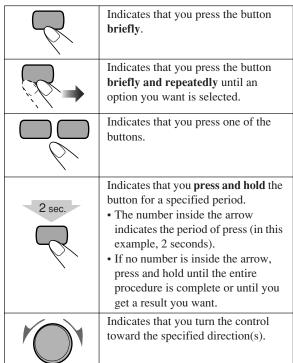
If anything goes wrong, unplug the AC power cord and consult your dealer.

How to Read This Manual



To make in this manual as simple and easy-to-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" (on pages 40 to 42) and "Troubleshooting" (on page 44), but not in the same section explaining the operations. If you want to know more about the functions, or if you have a doubt about the functions, go to these sections and you will find the answers.





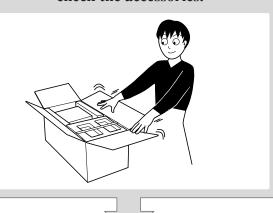
Indicates that this operation is only possible using the remote control.



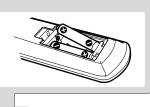
Indicates that this operation is only possible using the buttons and controls on the main unit.

Getting Started

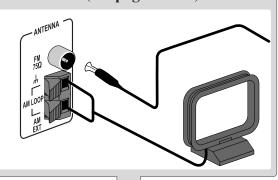
Step 1: Unpack the package and check the accessories.



Step 2: Prepare the remote control.

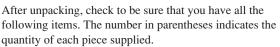


Step 3: Hook up the components such as AM/FM antennas, speakers, etc. (see pages 4 to 6).



Finally plug the AC power cord. Now you can operate the System.

Step 1: Unpack



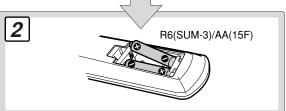
- FM antenna (1)
- AM loop antenna (1)
- Remote control (1)
- Composite video cord (1)
- Batteries (2)
- AC plug adapter (1) (except for Hong Kong)
 If any item is missing, consult your dealer immediately.

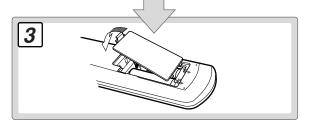
Step 2: Prepare the Remote Control



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

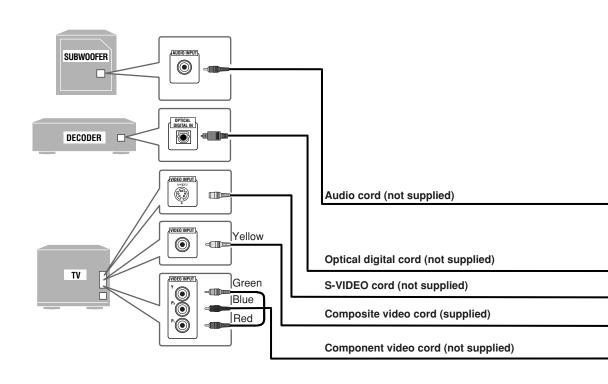
If you need more detailed information, see page 6.

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.

Turn off all components before connections.

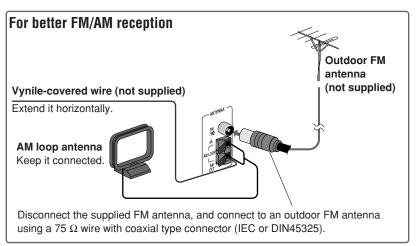
AM loop antenna (supplied)
Turn it until the best reception is obtained.

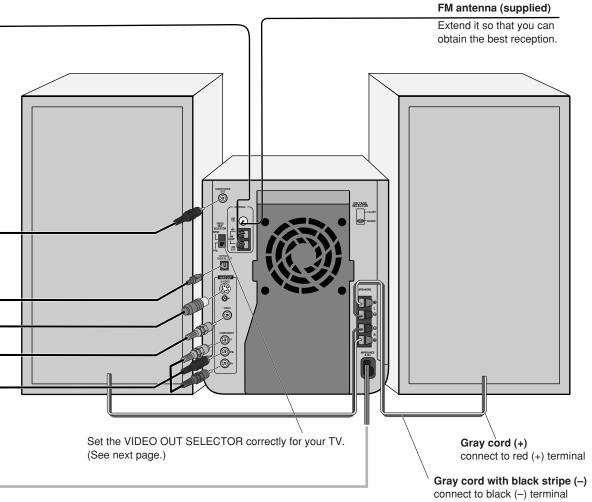


To a wall outlet

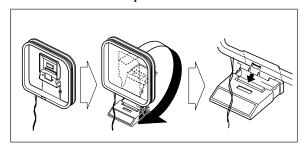
Plug the AC power cord only after all connections are complete.

• If the wall outlet does not match the AC plug, use the supplied AC plug adapter (except for Hong Kong).

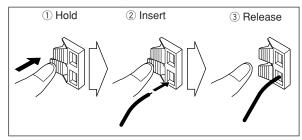




To assemble and connect the AM loop antenna To assemble the AM loop antenna



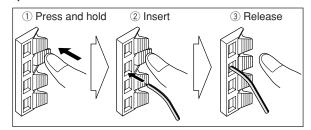
To connect the AM loop antenna



- 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 reception.

To connect the speaker cords

Connect the right speaker to the R terminals, and the left speaker to the L terminals.



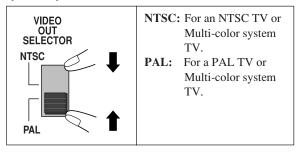
When connecting the speaker cords, match the polarity of the speaker terminals: gray cord (+) to red (+) and gray cord with black stripe (-) to black (-).



- DO NOT connect more than one speaker to each terminal.
- DO NOT allow the conductor of the speaker cords to be in touch with the metallic parts of the System.

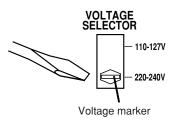
To set the video output selector

You can select the video output to match it to the color system of your TV.



Adjusting the voltage selector

Use a screwdriver to slide the voltage selector so that the voltage marker is pointing at the same voltage as where you are plugging in the unit. (See also the back cover page.)



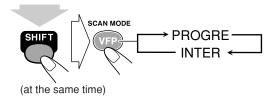


DO NOT plug in before setting the voltage selector on the rear of the unit and all connection procedures are complete.

Changing the Scanning Mode (South 1887)



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 progressive mode.



PROGRE (Progressive)	Progressive scanning. For a progressive TV. The PROGRESSIVE indicator lights.
INTER (Interlaced)	Interlaced scanning. For a conventional TV.

Before Operating the System

Playable Disc Types

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

Disc Type	Mark (Logo)	Video Format	Region Code* Number
DVD Video	VIDEO N		3 or
DVD Audio	AUDIO/VIDEO" AUDIO"	NTSC	ALL
Video CD (VCD)	OSCITAL VIDEO VIDEO CD	or PAL	
Super Video CD (SVCD)	SUPER VOICE WIDEO		
Audio CD	COMPACT CISS DIGITAL AUDIO		
CD-R	Recorded in the Audio CD, VCD, SVCD, MP3		
CD-RW	or JPEG format.		
DVD-R	Recorded in the DVD Video, MP3 or JPEG format.		
DVD-RW	Recorded in the DVD Video, MP3, JPEG or		
DVD-RAM	DVD-VR (video recording) format.		

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

- It is possible to play back finalized +R/+RW (DVD video format only) discs. "DVD" appears to the display when a +R/ +RW disc is loaded.
- The following discs cannot be played back:
 CD-I (CD-I Ready), CD-ROM, Photo CD, SACD, etc.
 Playing back these discs will generate noise and damage the speakers.
- DVD Video/DVD-VR comprises "Titles/Playlists" which includes "Chapters." DVD Audio/MP3/JPEG comprises "Groups/Folders" which includes "Tracks/Files." CD/SVCD/VCD comprises only "Tracks."
- In this manual, "file" and "track" are interchangeably used for MP3/JPEG operations.

* Note on Region Code

DVD players and DVDs have their own Region Code numbers. This System can play back only DVDs recorded with the NTSC or PAL color system whose Region Code numbers including "3."

Ex.:









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

Caution for DualDisc playback:

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

DVD Video—digital audio formats

The System can play back the following digital audio formats.

- 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 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 digital output terminal on the rear.

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

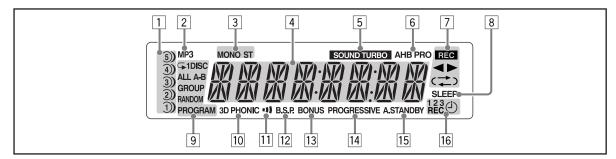
- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays on the TV screen.
- For disc playback, you can change the initial setting to your preference. See "Setup Menu Operations" on page 35.

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.

"DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.

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 tray indicators

- 1–5: Disc tray number indicators
-) (tray indicator):
 - -Lights when the disc is detected.
 - -Blinking while playing back a disc.
 - -Goes off when there is no disc in the tray.
- (disc indicator): Lights when the disc in the tray is currently selected.

² MP3 indicator

• Lights when the current track is recorded in MP3 format.

3 FM reception indicators

- MONO: Lights when FM reception mode is monaural.
- ST (stereo): Lights while an FM stereo station with sufficient signal strength is tuned in.

4 Main display

- While listening to radio; band (or preset number) and station frequency appear.
- While playing a disc; see "Indications on the main display while operating a disc" on page 9.
- While inserted a tape; "TAPE" appears.
- While not inserted a tape; "NO TAPE" appears.
- While selecting "AUX"; "AUX" appears.

5 SOUND TURBO indicator

 Lights when SOUND TURBO II is activated (see page 16).

6 AHB (active hyper bass) PRO indicator

• Lights when AHB PRO is activated (see page 16).

7 Tape operation indicators

- REC indicator
 - -Lights while recording.
- **◄** ► (tape direction):
 - -Lights to indicate the current tape running direction.
 - -Flashes slowly during playback and recording.
- -Flashes quickly while rewinding a tape.
- (₹)(Reverse mode):
 - -(→): Tape play continues endlessly.
- − ⇒ : Tape automatically reverses once.
- → : Tape play stops at the end of one side.

8 SLEEP indicator

• Lights when the Sleep Timer is activated (see page 19).

9 Disc operation indicators

- 🔾 : Lights when Repeat mode is activated.
- 1: Lights when One Track Repeat is activated.
- 1DISC: Lights when One Disc Repeat is activated.
- ALL: Lights when All Disc Repeat is activated.
- A-B: Lights when A-B Repeat is activated.
- GROUP: Lights when Group Repeat is activated.
- RANDOM: Lights when Random Play mode is activated.
- PROGRAM: Lights when Program Play mode is activated.

10 3D PHONIC indicator

• Lights when 3D PHONIC is activated (see page 13).

11 Clear Voice indicator

 Lights when Clear Voice function is activated (see page 17).

12 B.S.P. indicator

• Lights when the current disc is DVD Audio with browsable still picture (see page 22).

13 BONUS indicator

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

14 PROGRESSIVE indicator

 Lights when progressive scanning mode is selected (see page 6).

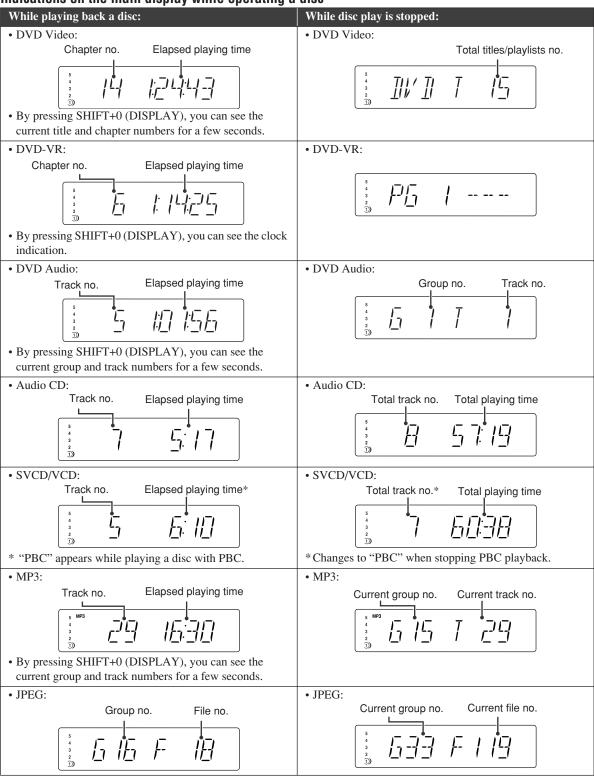
15 A. (auto) STANDBY indicator (see page 19)

- Lights when Auto Standby is activated.
- Flashes when disc playback stops with Auto Standby activated.

16 Timer indicators (see pages 33 and 34)

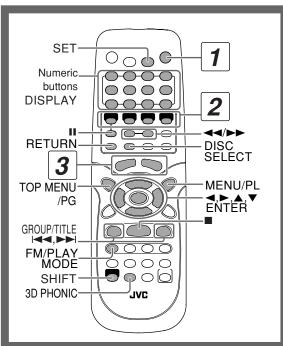
- REC: Lights when the Recording Timer stands by; flashes while setting or working.
- ②: Lights when Daily Timer or Recording Timer stands by; flashes while working.
- 1/2/3: Lights up when a Daily Timer (1, 2, or 3) stands by; flashes while setting or working.

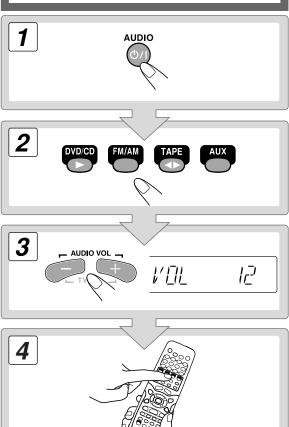
Indications on the main display while operating a disc



[•] If "RESUME" is "ON" (see page 38), "RESUME" appears when you stop playback (except for Audio CD and MP3/JPEG discs).

Daily Operations—Playback





1 Turn on the power.

The STANDBY lamp on the main unit turns off.

• Without pressing AUDIO &/I, the System turns on by pressing one of the source selecting buttons in the next step.

2 Select the source.

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

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

To turn off (standby) the System



The STANDBY lamp on the main unit lights up.

• 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 on the headphones.

• Disconnecting the headphones will activate the speakers again.

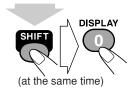


DO NOT turn off (standby) the System with the volume set to an extremely high level; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

To turn off the clock indication



While the System is turned off...



 Press the button again, to display the clock indication.

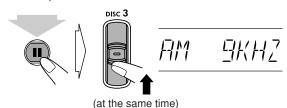
Listening to the Radio

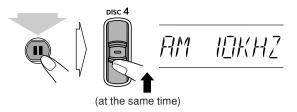


To select the AM tuner interval spacing

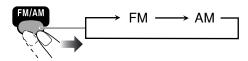
Some countries space AM stations 9 kHz spacing, and other countries use 10 kHz spacing.

You can change the AM tuner intervals while the System is on stand by and the last selected source is AM.



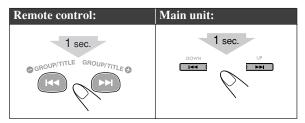


To select the band (FM or AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display.

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

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

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 the stations (NLY)



You can preset 30 FM and 15 AM stations.

1 Tune in to a station you want to preset.

- You can also store the monaural reception mode for FM preset stations if selected.
- **2** Activate the preset number entry mode.



- Finish the following process while the indication on the display is flashing (5 seconds).
- **3** Select a preset number for the station.



Ex.:

To select preset number 5, press 5.

To select preset number 15, press +10, then 5. To select preset number 30, press +10, +10, then 10.



4 Store the station.

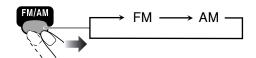


Š I NRF 11

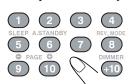
To tune in to a preset station



1 Select a band—FM or AM.



2 Select a preset number you have stored.



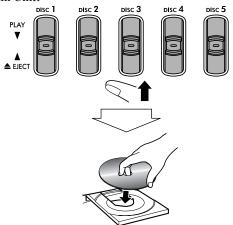
• You can also use the ◀◀/▶▶ to select a preset station.

Playing Back a Disc

• For MP3/JPEG playback, see "Operations on the CONTROL Screen" on page 29.

To insert a disc

You can insert a disc while playing another source. **Main Unit:**



To close the disc tray and start playback, press down the same lever again.

- When current selected disc tray open, you can use DVD/CD ► to close the disc tray and start playback (depending on how the disc is programmed internally).
- If you press up ≜ EJECT for a tray to open it with another tray already open, the other tray automatically closes, and then the tray you have pressed up ≜ EJECT comes out.

To start:	To pause:	To stop:
OVD/CD OF	To release, 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" appears on the display when you stop playback.)

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

 When operating the System, the on-screen guide icon (see the following table) appears on the TV screen.
 To deactivate the on-screen guide icons, see "ON SCREEN GUIDE" on page 38.

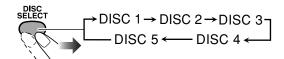
On-screen guide icons

- During playback, the following icons may appear on the TV screen:
 - At the beginning of a scene containing multiangle views.
 - At the beginning of a scene containing multiaudio sounds.
 - At the beginning of a scene containing multisubtitles.
- The following icons will be also shown on the TV screen to indicate your current operation (for more details, see page 26).



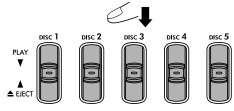
To select a disc

Remote Control:

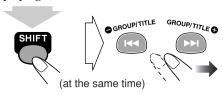


• When current source is not disc, press DVD/CD ► to select the disc player as the source during "PLAY" flashing on the display.

Main Unit:



To select a title/group (Semicle 1987) While playing DVD or MP3...



- Group name appears on the display for MP3.
- This feature may not work for some discs.

To select a chapter/track

While playing a disc except SVCD/VCD with PBC...



• First time you press |◄◄, you can go back to the beginning of the current chapter/track.

To locate a particular portion



While playing a disc except MP3/JPEG...



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

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

To locate an item directly



You can select a title/playlist/chapter/track directly and start playback with the numeric buttons.

• For DVD Video/DVD-VR, you can select a title/playlist/ track before starting playback, a chapter after starting playback.

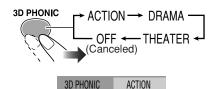
To select number 5, press 5. To select number 15, press +10, then 5.

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

To use 3D PHONIC



While playing...



On the TV screen

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

• 3D PHONIC indicator also lights up.

To play back using the disc menu



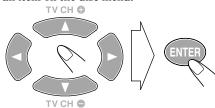
You can operate a disc—DVD Video/DVD Audio/DVD-VR, SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

■ For DVD Video/DVD Audio:

1 Show the disc menu.



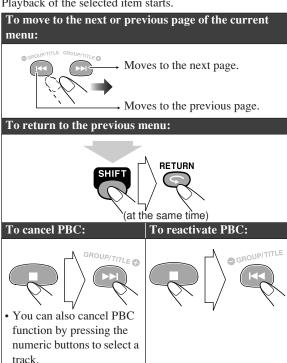
2 Select an item on the disc menu.



- You cannot use this function while displaying the pull-down menu (see page 27).
- · With some discs, you can also select items by entering the number using the numeric buttons.

■ 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 with the numeric buttons (see "To locate an item directly" on the left for how to use the numeric buttons). Playback of the selected item starts.



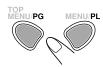
■ For DVD-VR:

DVD-VR format has the following two ways of playing.

- Original program (ORIGINAL PROGRAM):
 The System can play back items in a DVD-VR disc in the recorded order conventionally.
- Playlist (PLAY LIST):

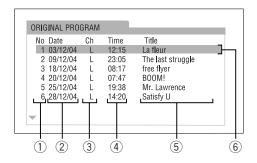
The System can play back the playlist edited with the DVD recording equipment.

1 Show the ORIGINAL PROGRAM or PLAY LIST.

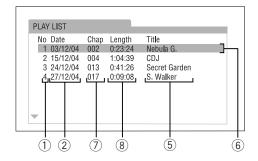


TOP MENU/**PG:** shows the ORIGINAL PROGRAM. MENU/**PL:** shows the PLAY LIST. (The playlist appears only when the playlist is on the DVD-VR disc.)

Ex.: ORIGINAL PROGRAM:

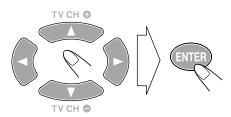


Ex.: PLAY LIST:



- 1 Listed number
- 2 Recording date
- ③ Recorded channel
- 4 Recording time
- 5 Title/Playlist
- 6 Highlight bar (current selection)
- 7 Chapters included
- 8 Playback time

2 Select an item on the disc menu.



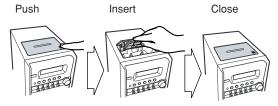
 You cannot use this function while displaying the pulldown menu (see page 26).

With some discs, you can also select items by entering the number using the numeric buttons.

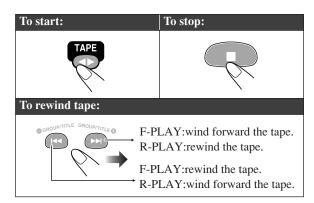
Playing Back a Tape

To insert a tape

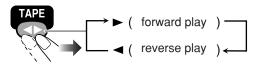
You can play back type I tapes.



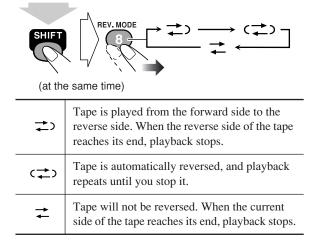
With the tape side facing backside



To change the tape running direction



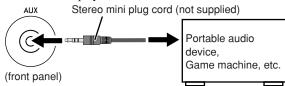
To reverse the tape automatically



Playing Back from Other Equipment

To connect other equipment

By using a stereo mini plug cord (not supplied), you can connect other 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.

• Refer to the manuals supplied with the other equipment.

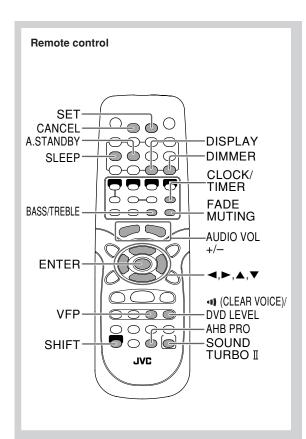
IMPORTANT

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

To select other equipment for the source



Daily Operations—Sound&Other Adjustments

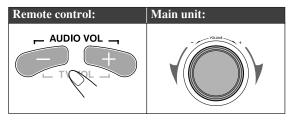




Adjusting the Volume



You can adjust the volume level from level 0 (VOL MIN) to level 31 (VOL MAX).



To drop the volume in a moment





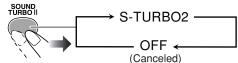
To restore the volume, press again, or adjust the volume level.

Adjusting the Sound



To emphasize the sound—SOUND TURBO II

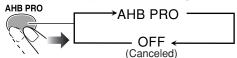
This function emphasizes the sound.



To emphasize heavy bass sound—AHB PRO



This function dynamically enhances bass response.



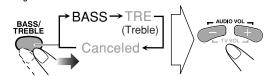
To adjust the tone—BASS/TREBLE



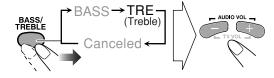
You can adjust the bass and treble level from 0 to +5.

• When you adjust this setting, the SOUND TURBO II is canceled automatically.

To adjust the bass

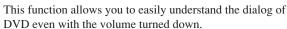


To adjust the treble

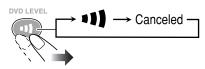


Making DVD Voice Clear—CLEAR VOICE





• This function only works for center-channel signal encoded multi-channel disc.



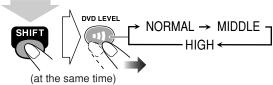
Presetting Automatic DVD Sound Increase







Some DVD Videos/DVD Audios are recorded at a lower sound volume level than that of other discs or sources. You can increase the level for the currently loaded DVD Video/ DVD Audio.



	· · · · · · · · · · · · · · · · · · ·
NORMAL	Original recording level.
MIDDLE	Output level is increased (less than "HIGH").
HIGH	Output level is increased (more than "MIDDLE").

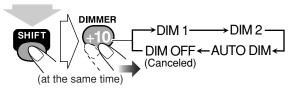
• Once the current DVD Video/DVD Audio is ejected, this setting is canceled and set automatically to "NORMAL."

Changing the Display Brightness—DIMMER



You can dim the display window.

• This function cannot use when the System is on standby.



DIM 1	Dims the display.
DIM 2	Erases the display illumination.
AUTO DIM	Erase the display illumination when playback starts. This function works only when playing DVD/VCD/SVCD or JPEG files. The display illuminates when playback stops.

Changing the Picture Tone—VFP (Video









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

To select a preset picture tone

1 Activate VFP.



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

On the TV screen

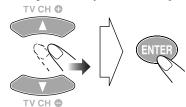
2 Select a preset picture tone.



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

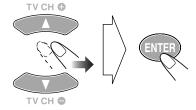
To adjust the picture tone

- 1 Select "USER1" or "USER2."
 - Follow steps 1 and 2 explained on page 17.
- 2 Select a parameter you want to adjust.



GAMMA	Adjust if the neutral color is bright or dark $(-3 \text{ to } +3)$.
BRIGHTNESS	Adjust if the entire picture is bright or dark $(-8 \text{ to } +8)$.
CONTRAST	Adjust if the far and near positions are unnatural (–7 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.

To erase the screen, press VFP again.

Setting the Clock (Remote ONLY) >>> (Setting the Clock (Setting the Cl







Without setting the built-in clock, you cannot use the Daily Timer or Recording Timer (see page 33), and Sleep Timer (see next page).

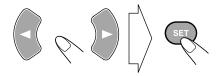
- To exit from the clock setting, press CLOCK/TIMER as
- To go back to the previous step, press CANCEL.

1 Activate the clock setting mode.

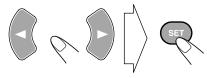


• If you have already adjusted the clock before, press the button repeatedly until the clock setting mode is selected (see page 33).

2 Adjust the hour.

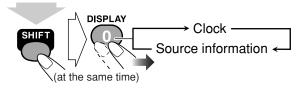


3 Adjust the minute.



Now the built-in clock starts working.

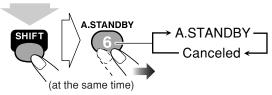
To check the current clock time during play



• While playing a DVD or MP3, you cannot check the current clock time (see page 9).



To turn off the System after playback is over— Auto Standby

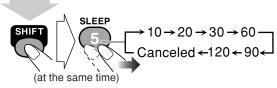


When Auto Standby is in use, the A.STANDBY indicator lights on the display. When the disc play stops, the A.STANDBY indicator starts flashing. If no operation is done for about 3 minutes while the indicator is flashing, the System turns off (in standby) automatically.

• Auto Standby does not work while you are listening to radio (FM/AM) and the external component (AUX).

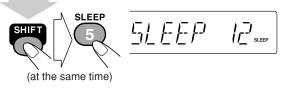
To turn off the System after a certain period of time—Sleep Timer

1 Specify the time (in minutes).



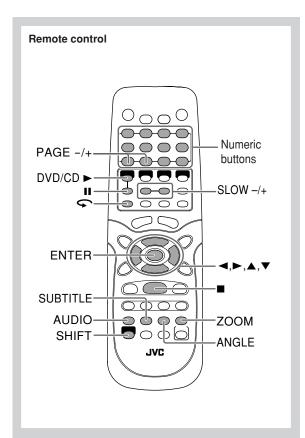
- SLEEP indicator also lights up on the display.
- **2** Wait until the set time goes off.

To check the time remaining until the shut-off time



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

Unique Disc Operations



Selecting the Sound Track (Romote) >>>>





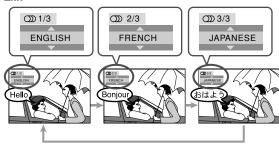


For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For SVCD/VCD/DVD-VR: While playing back a track, you can select the audio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

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

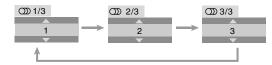


While playing a DVD Video...

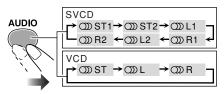


While playing a DVD Audio...

Ex.:



While playing an SVCD/VCD/DVD-VR...



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

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

Selecting the Subtitle Language (Semote) >>>



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

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

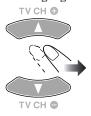
• You can also select the subtitle language using the onscreen bar (see page 26).

While playing a DVD Video...

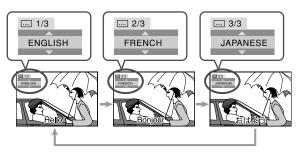
1 Display the subtitle selection window.



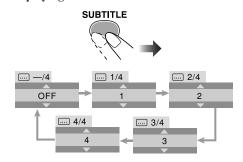
2 Select the subtitle language.



Ex.:



While playing an SVCD...



Selecting the View Angle (Remote NLY N)

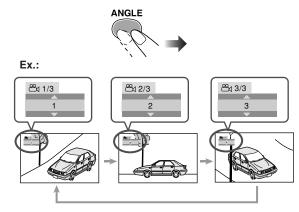




While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- This function is only used while playing DVD Video.
- You can also select the multi-view angles using the onscreen bar (see page 26).

While playing...



Playing Back a Bonus Group (Remote ONLY) >>>>





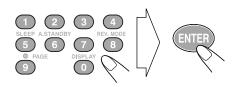
Some DVD Audios have a special group called "bonus group" whose contents are not open to the public.

- This function is only used while playing 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.

7 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).
- When the bonus group is detected, BONUS indicator lights up.
- For how to select the group, see "To select a title/group" on page 12.

2 Enter the key number.



 $oldsymbol{3}$ Follow the interactive instructions shown on the TV screen.

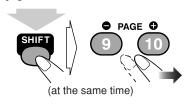
To cancel the key number entry, press ■.

Selecting Browsable Still Pictures (Semote Solly)



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

- This function is only used while playing DVD Audio.
- When a DVD Audio with browsable still pictures is detected, B.S.P. indicator lights up.
- 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 26).



Special Effect Playback (Special Effet Playb







Still picture playback

To start still picture playback:	To resume normal playback:
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 ▶.

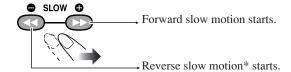
Slow-motion playback

1 While playing...



Still picture playback starts.

2 Select slow-motion speed.





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

To resume normal playback, press DVD/CD ▶.

To replay the previous scenes (One touch replay function) (Remote only)

• This function is used while playing DVD Video/DVD-VR.



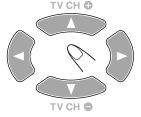
The playback position moves back about 10 seconds before the current position (only within the same title/playlist).

Zoom Remote (NLY)))

1 While playing...



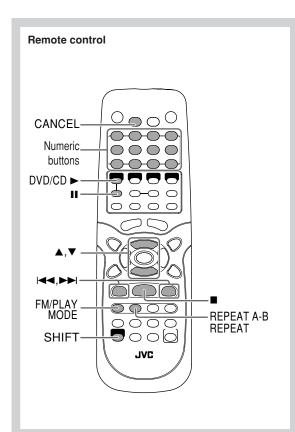
- As the number increases, magnification also increases.
- **2** Move the zoomed-in position.



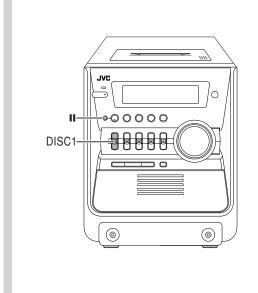
To resume normal playback, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

To use this function for JPEG (still pictures), see "To zoom in the still picture" on page 30.

Advanced Disc Operations



Main unit



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

1 Before starting playback, activate Program Play.







On the TV screen

- **2** Select chapters/tracks you want to program with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - For DVD Video/MP3:
 - (1) Select a disc number on "Disc" column.
 - ② Select a group/title number on "Group/Title" column.
 - 3 Select a track/chapter number on "Track/Chapter" column.

• For SVCD/VCD/CD:

- (1) Select a disc number on "Disc" column.
- ② Select a track number on "Track/Chapter" column.
- Even if the disc is not in the selected tray, the System may prompt for the group number entry as well, however, during playback, the System will ignore these entries.
- If you have programmed a group/title number for SVCD/VCD/CD, the System will ignore the group/title number and play the track number you have programmed.
- **3** If you want to program another chapters or tracks, repeat the step 2 above.

to be continued...

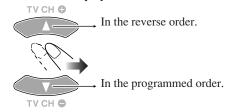
4 Start playback.



Playback starts in the order you have programmed.

To skip a step:	To pause:	To stop:
OGROUP/TITLE GROUP/TITLE	To release, press DVD/CD ▶.	

To check the programmed contents Before or after playback...

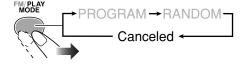


To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
TV/VIDEO	
To add steps in the program:	
Repeat step 2 on page 23.	

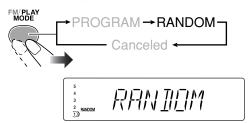
To exit from Program Play Before or after playback...



You can play the chapters or tracks of all loaded discs at random.

• Random Play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in random order. Random Play continues to the disc on the next tray when all the chapters or tracks in the current disc are played once (when Repeat Play is not activated).

• Playback ends when all the discs are played once (when Repeat Play is not activated).

To skip a chapter/ track:	To pause:	To stop:
GROUP/TITLE (*)		
To skip to the beginning of the current track, press ►.	To release, press DVD/CD ►.	

 During Random Play, you cannot select the disc to play by using DISC SELECT.

To exit from Random Play

Before or after playback...



Playing Repeatedly (Remote only)

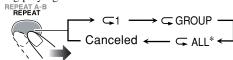


 You can also select the repeat mode using the on-screen bar (see page 27).

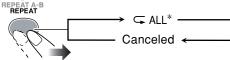
Repeat Play

• For DVD Video/DVD-VR:

During playing...

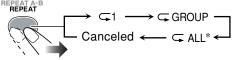


Before playback...



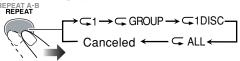
• For DVD Audio:

During or before playback...



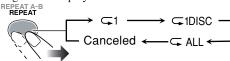
• For MP3:

During or before playback...

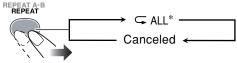


• For CD/SVCD/VCD:

During or before playback without PBC...

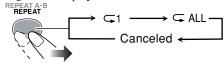


During playback with PBC...



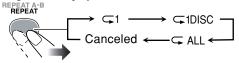
• For Program Play:

During or before playback...



• For Random Play:

During or before playback...



→ ALL*	Repeats the discs in all tray or all programmed tracks.
5 1	Repeats the current chapter/track.
G GROUP	Repeats the current title/group/playlist.
G 1DISC	Repeats the current disc.
Canceled	Cancels Repeat Play mode.

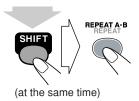
^{*} When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, this function may not work correctly.

A-B Repeat

You can repeat playback of a desired portion by specifying the beginning (point A) and the ending (point B).

- A-B Repeat cannot be used for MP3 or for some DVDs.
- A-B Repeat can be used within the same title/playlist while playing a DVD Video/DVD-VR, and within the same track for the other discs.

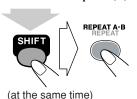
1 While playing (without PBC for SVCD/VCD), select the start point (A).



• A- lights on the display.

• DA appears on the TV screen if the TV is turned on.

2 Select the end point (B).



→ A- changes to → A-B.

- CA-B appears on the TV screen and A-B Repeat starts.
- You can search for the end point using ►►.

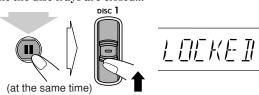
To cancel A-B Repeat, press REPEAT A-B again while holding SHIFT.

Prohibiting Disc Ejection—Child Lock

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

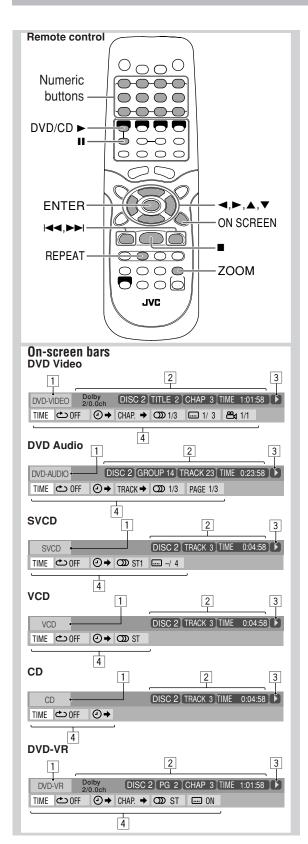
• This is possible while the System is on standby and the clock indication is turned on (see page 10).

While the disc trays are closed...



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

On-Screen Disc Operations



On-screen Bar Information



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

1 Disc type		
2 Playback information		
Indication	Meanings	
Dolby 2	Audio format	
0.0ch DISC 2	Channel number Current disc	
TITLE 2	Current title/program list/playlist (for DVD-VR; "PG" or "PL" appears instead of "TITLE").	
CHAP 3	Current chapter	
GROUP 1	Current group	
TRACK 14	Current track	
(TIME 1:25:58)	Time indications	
3 Operation modes		
Indication	Meanings	
	Playback	
D / 4	Forward/Reverse search	
I / (Forward/Reverse slow-motion	
	Pause	
	Stop	
4 Function icor	ns (on the pull-down menu)	
Indication	Meanings	
TIME	Select to change the time indication.	
₾ OFF	Select to repeat playback.	
⊙ →	Select for time search.	
CHAP. →	Select for chapter search.	
TRACK →	Select for track search.	
(CDD) 1/3	Select to change the audio language or channel (see also page 20).	
1/3	Select to change subtitle language (see also page 21).	
24 1/3	Select to change the view angle (see also page 21).	
PAGE 1/5	Select to change the page (see also page 22).	

 You cannot use

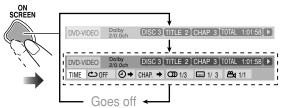
, ▶, ▲, and ▼ buttons to select the disc menu while displaying the pull-down menu.

Operations Using the On-screen Bar (South 1987)

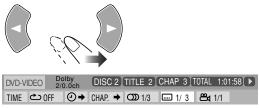


Ex.: Selecting a subtitle (French) for DVD Video: While a disc is selected as the source...

7 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



For detailed operations of the following functions, see also "Operations Using the On-screen Bar" on the left.

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

To erase the on-screen bar



Repeat Play

- See also page 25.
- **1** While playing (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 or all programmed tracks (not for some DVD Videos).
A-B	Repeats a desired portion (see next column).
TITLE	Repeats the current title*.
GROUP	Repeats the current group.
DISC	Repeats the current disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK**	Repeats the current track.
OFF	Cancels Repeat Play.

- * During playing DVD-VR, "PG" (Program List) or "PL" (Play List) appears.
- **During Program Play and Random Play, "STEP" appears.

5 Finish the setting.



A-B Repeat

- See also page 25.
- While playing, display the on-screen bar with the pulldown menu.
- **2** Select ७०೯೯.
- **3** Display the pop-up window.



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.

For DVD Video/DVD Audio/DVD-VR:

You can specify the elapsed time for the current title/playlist.

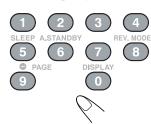
For CD/SVCD/VCD:

- While playing back, you can specify the elapsed time for the current track except for SVCD/VCD with PBC.
- While stopped, you can specify the elapsed time for the disc except for SVCD/VCD with PBC.
- **1** Display the on-screen bar with the pull-down menu.
- **2** Select ⊙ → .
- **3** Display the pop-up window.



4 Enter the time.

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



Ex.:

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 the disc from the selected playing time.

Chapter/Track Search

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

- **7** 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 with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - To correct a misentry, press the numeric buttons until the desired number shown in the pop-up window.
- **5** Finish the setting.



The System starts playing the searched chapter or track.

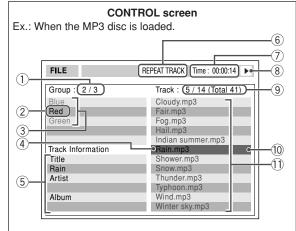
Operations on the CONTROL Screen (Source) (Source)



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

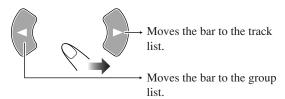
You can search for and play the desired tracks through the CONTROL screen.

• If both types of files (MP3 and JPEG) are recorded on a disc, select the file type to play (see page 37).

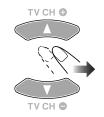


- ① Current group number/total group number
- 2 Current group
- 3 Group list
- 4 Current track (in blue)
- (5) Track information (ID3 Tag Version 1.0: only for MP3)
- (6) Repeat Play setting
- 7 Elapsed playing time of the current track (only for MP3)
- 8 Operation mode icon
- (9) Current track number/total number of tracks in the current group (total number of tracks on the disc)
- 10 Highlight (green) bar
- 11) Track list

To move the highlight bar between group list and track 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 disc, the selected track starts playback automatically.

To start playback



Playback starts with the selected track.

Pressing DVD/CD ► also starts playback.

If the track is JPEG, selected still picture is displayed until you change it.

Unique JPEG Operations



You can enjoy the Slide-show playback for JPEG files. Each track (still picture) on the disc is shown on the screen for few seconds, then changes one after another.

To start the Slide-show while the CONTROL screen is on the $TV\ screen$



- Once the Slide-show starts, the CONTROL screen goes off.
- Some discs automatically start the Slide-show.

To cancel the Slide-show and display the current still picture



To skip a track:	To pause:	To stop playback:
GROUP/TITLE GROUP/TITLE &	To release, press DVD/CD ▶.	

To repeat Slide-show

During or before playback...



Ģ GROUP	Repeats the current group.
₲ 1DISC	Repeats the current disc.
→ ALL	Repeats all discs.

To zoom in the still picture

• You cannot zoom in the still picture during the Slide-show.

1 While playing...



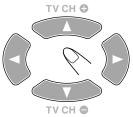


2 Change the magnification.



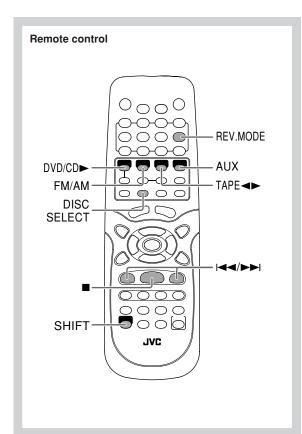
As the number increases, magnification also increases.

3 Move the zoomed-in position.



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

Advanced Tape Operations



DVD/CD DISC 1,2,3,4,5 REC REC

IMPORTANT

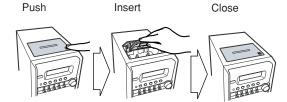
It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.

Recording on a Tape

You can use type I tapes for recording.

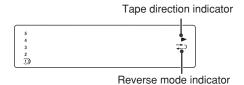
• To play a tape, see page 15.

1 Insert a recordable cassette.

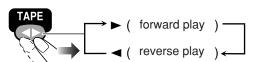


With the tape side facing backside

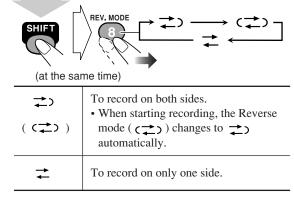
2 Check the tape running direction and Reverse mode settings on the display.



To change the direction



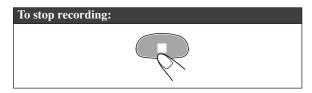
To change the Reverse mode if necessary



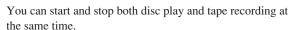
- 3 Select and start playing the source—"FM," "AM," "DVD/CD," or "AUX IN."
 - When recording a disc, you can also use "Synchronized Disc Recording" (see next page). to be continued...

4 Start recording.



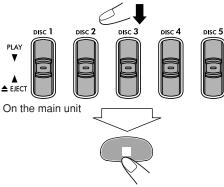


Synchronized Disc Recording



To record the entire disc

- **1** Load a disc and insert a recordable cassette.
 - If the current playing source is not the CD player, press DVD/CD ▶, then ■.
- **2** Check the tape running direction and Reverse mode settings on the display.
 - See step 2 of "Recording on a Tape" on page 31.
- **3** Select the disc number you want to start recording from.



4 Start recording.



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

On the main unit

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

To record a "Live" disc

It will not be desirable to put 4-second blank portions between the tunes recorded on the tape.

To record the entire disc without any interruption recorded, start playing the disc (press DVD/CD ►), then pause the disc play (press ■) and go back to the beginning of the current chapter/track (press ◄◄) before pressing REC.

To record Program Play or Random Play

- 1 Select Program Play (and make a program) or Random Play, but do not start playback.
- 2 Press REC to start recording.

To record only your favorite track

You can specify tracks to be recorded on the tape while listening to a disc.

- This function is not available for DVD Video.
- **1** Start playing a disc.



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



On the main unit

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

3 Repeat steps 1 and 2 to record other tracks you want.

• You can exchange the discs if necessary.

To protect your recording

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

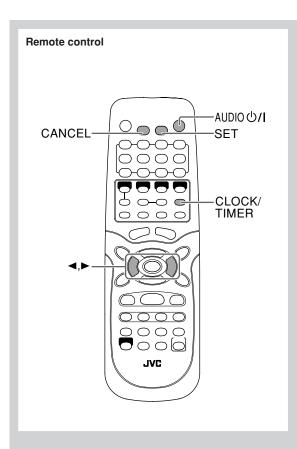
To protect your recording, remove these tabs.



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



Timer Operations

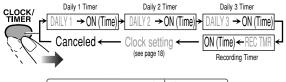


Setting the Timer (Remote ONLY)»)



Using Daily Timer, you can wake up with your favorite music. You can store three Daily Timer and one Recording Timer settings; however, you can activate only one of the timers at a time.

- To exit from the timer setting, press CLOCK/TIMER as required.
- To correct a misentry during the process, press CANCEL. You can return to the previous step.
- 1 Select one of the timer setting modes you want to set— Daily 1 ON time, Daily 2 ON time, Daily 3 ON time, or Recording ON time.



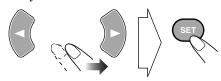


Ex.: When Daily Timer 1 setting mode is selected

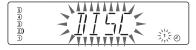
- When the clock has not been adjusted, pressing CLOCK/TIMER makes the System enter the clock setting mode (see page 18).
- **2** Make the timer setting as you want.

Repeat the following operations until you finish setting in the following order—

For Daily Timers:



- 1 Set the hour then the minute for on-time.
- 2 Set the hour then the minute for off-time.
- ③ Select the playback source—"TUNER FM,"
 "TUNER AM," "TAPE," "DISC," or "AUX."



- **4** For "TUNER FM" and "TUNER AM": Select a preset channel (see page 11).
 - Select "FM --" or "AM --" for the last selected station.

For "DISC": Select the disc number, title/group/ playlist number, then the chapter/track number (see page 12).

• Select "DISC –" for the last selected disc tray number.

For "AUX": Connect the other equipment (see page 15).

to be continued...

5 Select the volume level.

You can select the volume level ("1" to "MAX" and "VOL --"). If you select "VOL --," the volume is set to the last level when the System has been turned off.

Once settings are complete, the Timer setting information appears in sequence.

For Recording Timer:

- ① Set the hour then the minute for on-time.
- **②** Set the hour then the minute for off-time.
- 3 Select "TUNER FM" or "TUNER AM."
- **4** Select a preset channel.
- **5** Select the volume level.
- **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 (②) indicator and timer number indicator (1/2/3) 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) or another timer is activated.

When the on-time comes

The System turns on, tunes in to the specified station or start playing the loaded disc with the specified track, and sets the volume level gently to the preset level.

- You cannot start the specified title/playlist/chapter/ track of DVD Video/DVD-VR/SVCD/VCD, though you can select it at the timer setting.
 DVD Video/DVD-VR/SVCD/VCD starts playback
- While Daily Timer is working, the timer (②) indicator and timer number indicator (1/2/3) flash on the display.

When the off-time comes

from the beginning.

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

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

How Recording Timer actually works

When Recording Timer has been set, the timer (②) 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 gently to preset level, 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.

To turn off the Timer after its setting is done

Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.

1 Select the Timer you want to cancel.



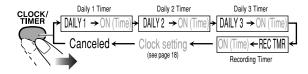
Ex.: To cancel Daily Timer 1

2 Turn off the selected Timer.



To turn on the Timer

1 Select the Timer (DAILY 1, DAILY 2, DAILY 3, or REC) you want to activate.

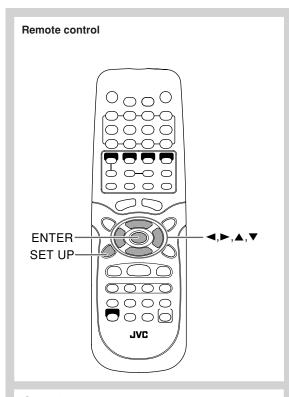




2 Activate the selected Timer.



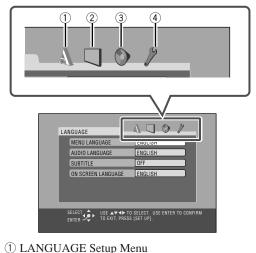
Setup Menu Operations



Setup Menu Icons

The icon for the selected Setup Menu will be highlighted.

Ex.: LANGUAGE Setup Menu is selected.



- 2 PICTURE Setup Menu
- 3 AUDIO Setup Menu
- 4 OTHERS Setup Menu

Operating Procedure Remote N







You can use the Setup 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 Display the Setup Menu.



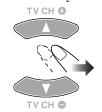


2 Select one of the Setup Menus.





${\it 3}$ Select the item you want to adjust.



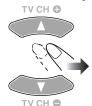


4 Display the pop-up window.





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





to be continued...

6 Finish the setting.



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

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

To exit from the Setup Menu



■ LANGUAGE Setup Menu

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, RUSSIAN, 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, RUSSIAN, 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, RUSSIAN, 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 screen from-ENGLISH, CHINESE and SPANISH.

■ PICTURE Setup Menu

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



MONITOR TYPE

Select the monitor type of your TV to play DVD Video/ DVD-VR recorded with aspect ratio of 16:9.

For the multi-color system TV

When you use a multi-color system TV, you can change the color system of the System automatically by selecting "MULTI" options as the monitor type. In this case, the color system of the System is changed to match the color system of the loaded disc regardless the VIDEO OUT SELECT or setting for better picture quality (see "To set the video output selector" on page 6).

Select one of the following:

16:9 / 16:9 MULTI (Wide television conversion):

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

4:3 LB (Letter Box) / 4:3 MULTI LB:

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

4:3 PS (Pan Scan) / 4:3 MULTI PS:

Select when the aspect ratio of your TV is 4:3. 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

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

FILE TYPE

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

Select one of the following:

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

■ AUDIO Setup 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:

PCM ONLY:	To connect to a linear PCM digital equipment.
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 OUT Signals" on page 46.

DOWN MIX

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

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

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 recorder, etc.

D. (Dynamic) 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 apply the compression effect to the downmixed multi-channel sound.
ON:	To always apply the compression effect for all Dolby Digital software. Loud sound will become low and vice versa.

■ OTHERS Setup Menu

You can change some other convenient functions.



RESUME

You can activate or deactivate Resume for disc playback (see pages 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 pages 12 and 26).

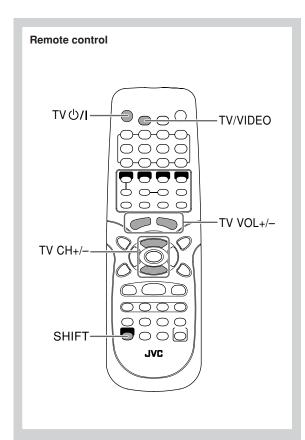
• When recording the picture on a VCR, select "OFF" to avoid recording the guide icons on your video tape.

Select one of the following:

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

Operating the TV





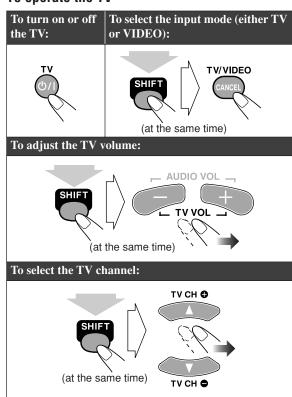
Operating TV Remote (NLY)»)





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

To operate the TV



Additional Information

Learning More about This System



Getting Started (see pages 3 to 6)

Changing the Scanning Mode:

• To enjoy the progressive video picture, connect a TV with the progressive video input using component video cord.

Daily Operations—Playback (see pages 10 to 15)

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:

- When using an 8 cm disc, place it on the inner circle of the
- 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 malfunction of this System.
- When discs* in more than one tray are loaded on the disc trays, they are played in sequence as follows. (When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, playback of the disc next to these discs will not start.):

Ex.: When DISC 2 is selected:

DISC 2⇒DISC 3⇒DISC 4⇒DISC 5⇒DISC 1⇒

- * When no disc is loaded on the disc tray, that disc number
- · You can exchange discs while playing or selecting another
- Some DVD Audio discs prohibit downmixed output. 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.
- 3D Phonic setting is also applied to the optical digital output signals through the OPTICAL DIGITAL OUT terminal.
- For DVD-VR playback...
 - When making a disc, use the UDF-Bridge format.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
 - If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.
- You cannot use reverse slow motion, Program Play, and Random Play.
- For MP3/JPEG playback...
- This System cannot play "packet write" discs.
- MP3/JPEG discs require a longer readout time than regular CDs. (It depends on the complexity of the group/ file configuration.)

- Some MP3/JPEG files cannot be played back and will be skipped. This results from their recording processes and conditions.
- When making MP3 discs, use ISO 9660 Level 1 or Level 2 for the disc format.
- This System can play back MP3/JPEG files with the extension code <.mp3> or <.jpg> (regardless of the letter case—upper/lower).
- It is recommended that you make each MP3 file at a sampling rate of 44.1 kHz and at a bit rate of 128 kbps.
- This System can recognize the total of 1000 tracks and of 99 groups (each group can contain up to 150 tracks). Those exceeding the maximum number cannot be recognized.
- This System can show up to 23 characters of the file (track) names (except for extension) and 30 characters of the ID3 tags on the display and the TV screen.
- Some characters or symbols will not be shown (and will be blanked) on the display.
- When using Resume on SVCD or VCD with PBC, the playback might start on a position slightly different from where you have stopped.
- You can use Resume only for the DVD/SVCD/VCD except for some discs-depending how the disc is programmed.

Playing Back a Tape:

- It is not recommended to use the C-120 or longer tapes. These tapes easily jams in the pinch rollers and capstans, and may cause characteristic deterioration.
- When you open the cassette holder, the reverse mode is set

Daily Operations—Sound&Other Adjustments (see pages 16 to 19)

Adjusting the Volume:

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

Adjusting the Sound:

• This function also affects the sound through the headphones.

Setting the clock:

- "0:00" will flash on the display until you set the clock.
- The clock may gain or lose 1 to 2 minutes per month. If this happens, reset the clock.

Unique Disc Operations (see pages 20 to 22)

- · During slow-motion playback, no sound will be reproduced.
- One touch replay function works only within the same title/ playlist, though it works between chapters.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 23 to 25)

Programming the Playing Order—Program Play:

- If you try to program a 100th track, "MEM FULL (memory full)" appears on the display.
- 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).
- You cannot use Program Play for JPEG or DVD-VR discs.
- You cannot eject tray while in Program Play.

Playing at Random—Random Play:

- The I◄◀ button does not work for skipping chapters or tracks, but only work for going back to the beginning of the current chapter or track.
- You cannot use Random Play for JPEG or DVD-VR discs.

On-Screen Disc Operations (see pages 26 to 30)

- 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 longer time to be shown.)
 - This System can play only baseline JPEG files.
 Progressive or lossless JPEG files cannot be played.

Baseline JPEG format: Used for digital cameras,

web, etc.

Progressive JPEG format: Used for web.

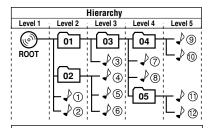
Lossless JPEG format: An old type and rarely used

now.

- This System may not play back JPEG files properly which are not recorded by digital still cameras.
- If progressive or lossless JPEG files are played back, a black screen appears. In this case, stop playback and select a baseline JPEG file. Note that it may take a long time to select another file.

MP3/JPEG groups/tracks configuration

This System plays back the tracks as follows.



01 Group with its play order

♪① Track with its play order

Advanced Tape Operations (see pages 31 and 32)

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 end of cassette tapes. Thus, when recording CDs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If you start recording with no cassette or 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 can also change Reverse mode setting (→) and →) after starting recording.
- You cannot open or close the disc tray while recording.

Synchronized Disc Recording:

When the tape reaches its end in the forward direction (>) during recording with Reverse mode set to (>), the last tune will be re-recorded at the beginning of the reverse side.

Timer Operations (see pages 33 and 34)

- 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.
- If you set the Sleep Timer after Daily Timer starts playing the selected source, Daily Timer is canceled.
- 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.
- You cannot use the SLEEP timer while activating the Recording timer.

Setup Menu Operations (see pages 35 to 38)

LANGUAGE Setup 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 Setup Menu—MONITOR TYPE:

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

AUDIO Setup Menu—DOWN MIX:

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

OTHERS Setup Menu—ON SCREEN GUIDE:

 Setup Menus 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 and mechanism clean.

Handling discs

- When removing the disc from its case, hold 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.
- 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.

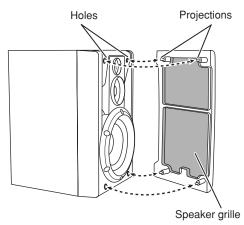
To keep the best recording and playback sound quality:

- 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 water-diluted 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 strongly.
- 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.

To remove the speaker grilles



Troubleshooting • • • • • •

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

General:

Adjustments or settings are suddenly canceled before you finish.

⇒ There is a time limit. Repeat the 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.
- \Rightarrow Point it at the remote sensor on the front panel.
- ⇒ Signals cannot reach the remote sensor. More closer to the System.
- ⇒ The batteries are exhausted.

No sound is heard from the speakers.

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

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

- ⇒ The video cord connections are incorrect or loose.
- ⇒ The System is connected to a TV which does not support progressive scanning.

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

⇒ Select "4:3 LB/4:3 MULTI LB" for "MONITOR TYPE" (see page 36).

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.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can show ID3 Tag Version 2.4 or earlier.

MP3/JPEG 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/JPEG tracks are not played back.

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

"NO AUDIO" appears.

⇒ This System cannot play back illegally produced DVD Audio discs.

"LR ONLY" appears.

⇒ Some DVD Audio discs prohibit downmixed output. When you play back such a disc, this System plays back the left front and right front signals only.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- \Rightarrow Child Lock is in use (see page 25).

Tape Operations:

The cassette holder cannot be opened.

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

Impossible to record.

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape (see page 32).

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.

Setup Menu Operations:

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 SUBTITLE after starting play (see page 21).

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 20).

Language Code List

AA	Afar
AB	
	Abkhazian
AF	Afrikaans
AM	Ameharic
AR	Arabic
AS	Assamese
AY	Aymara
AZ	Azerbaijani
BA	Bashkir
BE	Byelorussian
BG	Bulgarian
BH	Bihari
BI	Bislama
BN	Bengali, Bangla
BO	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

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

OPTICAL DIGITAL OUT Signals

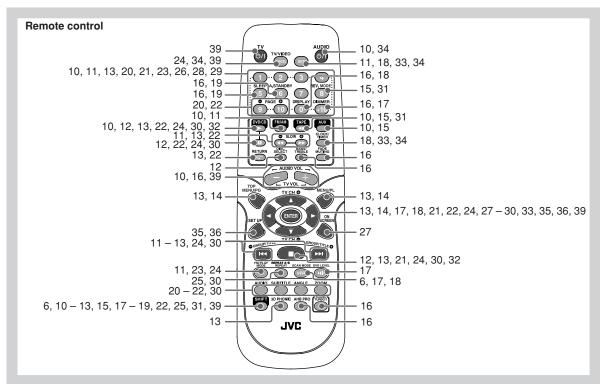
DIGITAL AUDIO OUTPUT	Output Signals		
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
DVD Video			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹		
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digital bitstream 44		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit Linear PCM	
DVD Audio			
with 48/96/192 kHz, 16/20/24 bit Linear PCM	No output* ²		
with 44.1/88.2/176.4 kHz, 16/20/24 bit Linear PCM	No output* ³		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit	Linear PCM
DVD-RW/RAM/ROM in DVD-VR format	48 kHz, 16 bit Linear PCM		
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM/48 kHz, 16 bit Linear PCM		
CD with DTS	DTS bitstream	44.1 kHz, 16 bi	t Linear PCM
MP3 disc	32/44.1/48 kHz, 16 bit Linear PCM		

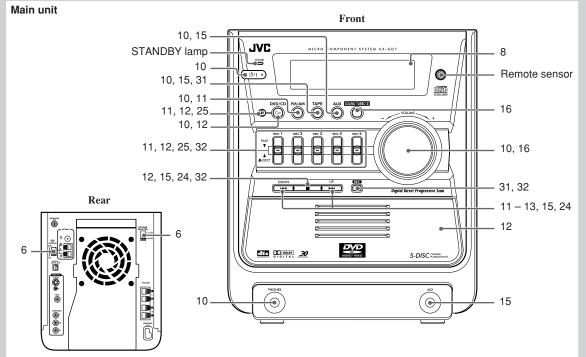
^{*1} While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUT terminal if the discs are not copy-protected.

^{*2} When the disc is not copyright protected, "48 kHz, 16 bit Linear PCM" signal is output. *3 When the disc is not copyright protected, "44.1 kHz, 16 bit Linear PCM" signal is output.

Parts Index

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







Amplifier section

Output Power: 140 W (70 W+70 W) at 6Ω (10% THD)

Analog input:

AUX: Sensitivity/Impedance (at 1 kHz)

 $400 \text{ mV}/47 \text{ k}\Omega$

Digital output:

OPTICAL DIGITAL OUT:

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

VIDEO OUT:

Color system: NTSC or PAL selectable VIDEO (composite): $1 \text{ V(p-p)/75 }\Omega$ $1 \text{ V(p-p)/75 }\Omega$ S-VIDEO: Y (luminance)

C (chrominance, burst)

 $0.286 \text{ V(p-p)/75 }\Omega$

COMPONENT: (Y) $1 \text{ V(p-p)/75 }\Omega$

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

Speaker terminals: Impedance $6 \Omega - 16 \Omega$

Tuner section

FM tuning range: 87.50 MHz - 108.00 MHz531 kHz – 1 710 kHz (at 9 kHz) AM tuning range:

530 kHz - 1 710 kHz (at 10 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/JPEG

format)

DVD-R (recorded in video/MP3/JPEG

format)

DVD-RW/DVD-RAM (recorded in video/

DVD-VR/MP3/JPEG format)

500 lines Horizontal resolution: Wow and flutter: Immeasurable

General

Power requirement: AC 110 – 127 / 220 – 240 V \sim

(adjustable with the voltage selector),

50 Hz (in Hong Kong)

50 Hz/60 Hz (except for Hong Kong)

Power consumption: 160 W (at operation)

1.3 W (on standby)

Dimensions (approx.): 189 mm x 224 mm x 406 mm

(W/H/D)

Mass (approx.): 6.5 kg

Speakers

Type: 3-way Bass-reflex type

Magnetically shielded

Speaker systems: Woofer: 12 cm cone x 1

Squawker: 4 cm cone x 1 Tweeter: 1.5 cm dome x 1

Power handling capacity: 70 W Impedance: 6Ω

45 Hz – 20 000 Hz Frequency range:

Sound pressure level: 84 dB/W•m

Dimensions (approx.): 165 mm x 286 mm x 237 mm

(W/H/D)

Mass (approx.): 2.8 kg each

Supplied Accessories

See page 3.

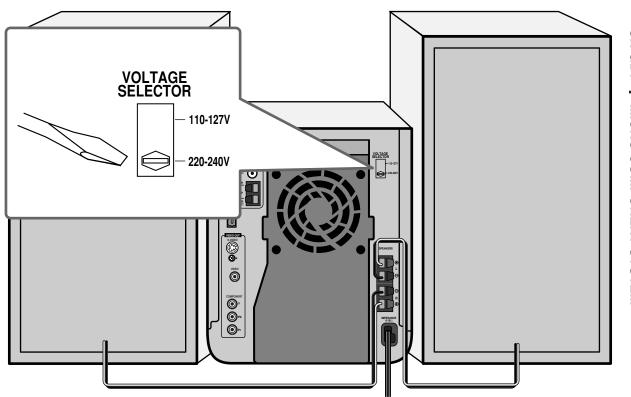
• Thisproductincorporatescopyrightprotectiontechnologythatis protected by U.S. patents and other intellectual property rights. Useofthiscopyrightprotectiontechnologymustbeauthorizedby Macrovision, and is intended for home and other limited viewing usesonlyunlessotherwiseauthorizedby Macrovision. Reverse engineering or disassembly is prohibited.

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITIONTELEVISIONSETSAREFULLYCOMPATIBLE WITHTHISPRODUCTANDMAYCAUSEARTIFACTSTOBE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

Design and specifications are subject to change without notice.

Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia, and U.K.)

主(AC)电源线路说明(不适用于欧洲、美国、加拿大、 澳大利亚及英国型号)



CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

有关主(AC)电源线路的重要事项

接插电源以前,请务必检查当地的主(AC)电源线路电压是否和位于本机外面的电压选择开关设定的位置一致。如果不一致,请重新设定电压选择开关使其符合当地电压,以免损坏机器或引起火灾/触电的危险。

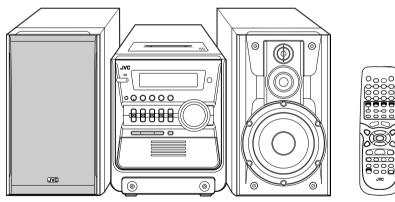


JVC



MICRO COMPONENT SYSTEM

UX-GD7 —Consists of CA-UXGD7 and SP-UXGD7















Digital Direct Progressive Scan



Warnings, Cautions and Others

CAUTION— O/I (standby/on) button!

Disconnect the mains plug to shut the power off completely (all lamps and indications go off). The **७/।** button in any position does not disconnect the mains line.

- When the unit is on standby, the STANDBY lamp lights in red.
- When the unit is turned on, the STANDBY lamp lights goes off.

The power can be remote controlled.

CAUTION

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

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

CAUTION

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

IMPORTANT FOR LASER PRODUCTS

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

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)

ADVARSEL: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

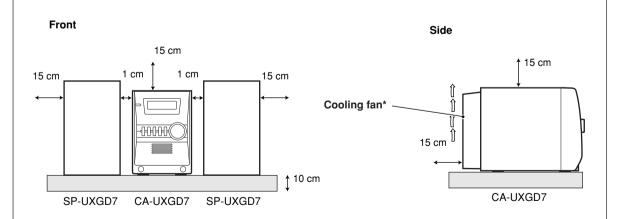
Caution: Proper Ventilation

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

1. Front: No obstructions and open spacing.

2. Sides/ Top/ Back: No obstructions should be placed in the areas shown by the dimensions below.

3. Bottom: Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.



* About the cooling fan

A cooling fan is mounted on the rear panel of the unit to prevent abnormal temperature inside the unit, thus assuring normal operation of theunit. The cooling fan automatically starts rotating to intake external cool air when the volume is increased up to more than a certain level.

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Introduction



- Install in a place which is level, dry and neither too hot nor too cold—between 5°C and 35°C.
- Install the System in a location with adequate ventilation to prevent internal heat buildup inside 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

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 main unit (see page G-2).

For safety, observe the following carefully:



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

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

How to Read This Manual

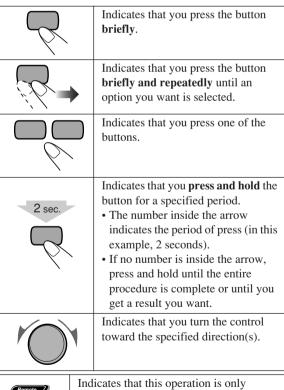






To make in this manual as simple and easy-to-understand as possible, we have adapted the following methods:

- 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" (on pages 40 to 42) and "Troubleshooting" (on page 44), but not in the same section explaining the operations. If you want to know more about the functions, or if you have a doubt about the functions, go to these sections and you will find the answers.



possible using the remote control.

Indicates that this operation is only

the main unit.

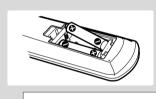
possible using the buttons and controls on

Getting Started

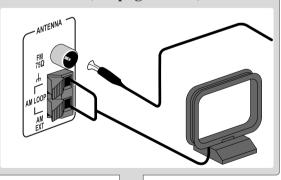
Step 1: Unpack the package and check the accessories.



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 the 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.

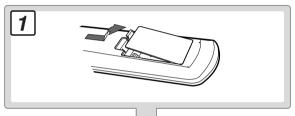
- FM antenna (1)
- AM loop antenna (1)
- Remote control (1)
- Composite video cord (1)
- Batteries (2)
- AC plug adapter (1)

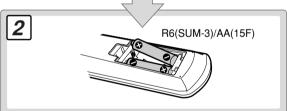
If any item is missing, consult your dealer immediately.

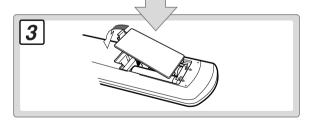
Step 2: Prepare the Remote Control



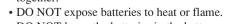
Insert the batteries into the remote control by matching the polarity (+ and -) correctly.







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



• 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

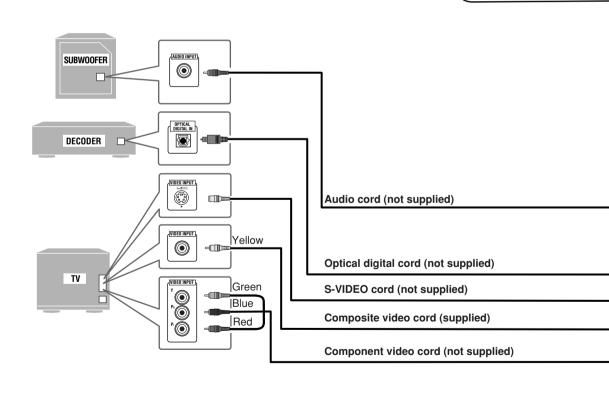
If you need more detailed information, see page 6.

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.

Turn off all components before connections.

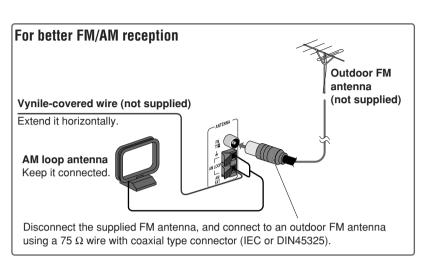
AM loop antenna (supplied)
Turn it until the best reception is obtained.

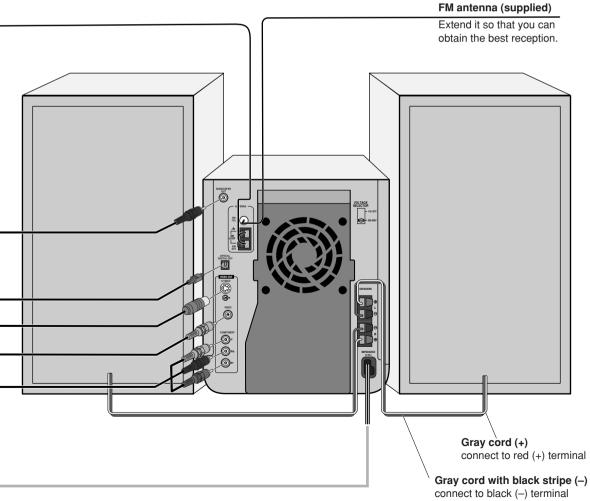


To a wall outlet

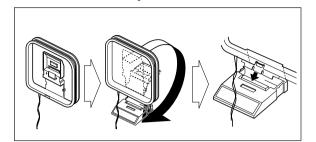
Plug the AC power cord only after all connections are complete.

• If the wall outlet does not match the AC plug, use the supplied AC plug adapter.

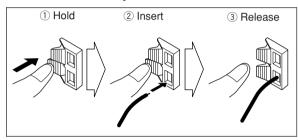




To assemble and connect the AM loop antenna To assemble the AM loop antenna



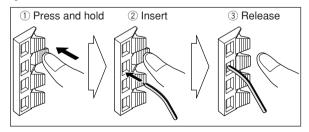
To connect the AM loop antenna



- 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 reception.

To connect the speaker cords

Connect the right speaker to the R terminals, and the left speaker to the L terminals.



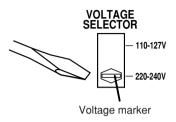
When connecting the speaker cords, match the polarity of the speaker terminals: gray cord (+) to red (+) and gray cord with black stripe (-) to black (-).



- DO NOT connect more than one speaker to each terminal.
- DO NOT allow the conductor of the speaker cords to be in touch with the metallic parts of the System.

Adjusting the voltage selector

Use a screwdriver to slide the voltage selector so that the voltage marker is pointing at the same voltage as where you are plugging in the unit. (See also the back cover page.)





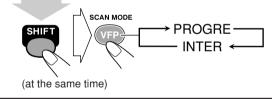
DO NOT plug in before setting the voltage selector on the rear of the unit and all connection procedures are complete.

Changing the Scanning Mode Remote (s)





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 progressive mode.



PROGRE (Progressive)	Progressive scanning. For a progressive TV. The PROGRESSIVE indicator lights.
INTER (Interlaced)	Interlaced scanning. For a conventional TV.

Before Operating the System

Playable Disc Types



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

Disc Type	Mark (Logo)	Video Format	Region Code* Number
DVD Video	VIDEO N		1 or
DVD Audio	AUDIO/VIDEO AUDIO		ALL
Video CD (VCD)	OSCITAL VIDEO VIDEO CD	NTSC	
Super Video CD (SVCD)	COMPACT VIDEO WIDEO CD		
Audio CD	COMPACT CISC DIGITAL AUDIO		
CD-R	Recorded in the Audio CD	, VCD, SV	CD, MP3
CD-RW	or JPEG format.		
DVD-R	Recorded in the DVD Video, MP3 or JPEG format.		
DVD-RW	Recorded in the DVD Vide	eo, MP3, JI	PEG or
DVD-RAM	DVD-VR (video recording	g) format.	

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

- It is possible to play back finalized +R/+RW (DVD video format only) discs. "DVD" appears to the display when a +R/ +RW disc is loaded.
- The following discs cannot be played back:
 CD-I (CD-I Ready), CD-ROM, Photo CD, SACD, etc.
 Playing back these discs will generate noise and damage the speakers.
- DVD Video/DVD-VR comprises "Titles/Playlists" which includes "Chapters." DVD Audio/MP3/JPEG comprises "Groups/Folders" which includes "Tracks/Files." CD/ SVCD/VCD comprises only "Tracks."
- In this manual, "file" and "track" are interchangeably used for MP3/JPEG operations.

* Note on Region Code

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

Ex.:









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

Caution for DualDisc playback:

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

DVD Video—digital audio formats

The System can play back the following digital audio formats.

- 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 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 digital output terminal on the rear.

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

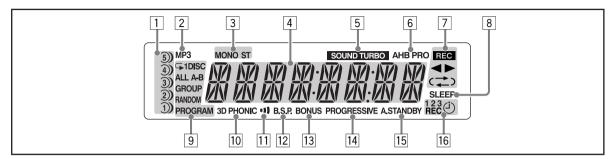
- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays on the TV screen
- For disc playback, you can change the initial setting to your preference. See "Setup Menu Operations" on page 35.

If " \(\mathbb{O}\) " 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.

"DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.

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 tray indicators

- 1-5: Disc tray number indicators
-) (tray indicator):
 - -Lights when the disc is detected.
- -Blinking while playing back a disc.
- -Goes off when there is no disc in the tray.
- (disc indicator): Lights when the disc in the tray is currently selected.

2 MP3 indicator

• Lights when the current track is recorded in MP3 format.

3 FM reception indicators

- MONO: Lights when FM reception mode is monaural.
- ST (stereo): Lights while an FM stereo station with sufficient signal strength is tuned in.

4 Main display

- While listening to radio; band (or preset number) and station frequency appear.
- While playing a disc; see "Indications on the main display while operating a disc" on page 9.
- While inserted a tape; "TAPE" appears.
- While not inserted a tape; "NO TAPE" appears.
- While selecting "AUX"; "AUX" appears.

5 SOUND TURBO indicator

 Lights when SOUND TURBO II is activated (see page 16).

6 AHB (active hyper bass) PRO indicator

• Lights when AHB PRO is activated (see page 16).

7 Tape operation indicators

- REC indicator
 - -Lights while recording.
- **◄** ► (tape direction):
 - -Lights to indicate the current tape running direction.
 - -Flashes slowly during playback and recording.
 - -Flashes quickly while rewinding a tape.
- (Reverse mode):
- (→): Tape play continues endlessly.
- − → : Tape automatically reverses once.
- → : Tape play stops at the end of one side.

8 SLEEP indicator

• Lights when the Sleep Timer is activated (see page 19).

9 Disc operation indicators

- 🔾 : Lights when Repeat mode is activated.
- 1: Lights when One Track Repeat is activated.
- 1DISC: Lights when One Disc Repeat is activated.
- ALL: Lights when All Disc Repeat is activated.
- A-B: Lights when A-B Repeat is activated.
- GROUP: Lights when Group Repeat is activated.
- RANDOM: Lights when Random Play mode is activated.
- PROGRAM: Lights when Program Play mode is activated.

10 3D PHONIC indicator

• Lights when 3D PHONIC is activated (see page 13).

11 Clear Voice indicator

• Lights when Clear Voice function is activated (see page 17).

12 B.S.P. indicator

• Lights when the current disc is DVD Audio with browsable still picture (see page 22).

13 BONUS indicator

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

14 PROGRESSIVE indicator

• Lights when progressive scanning mode is selected (see page 6).

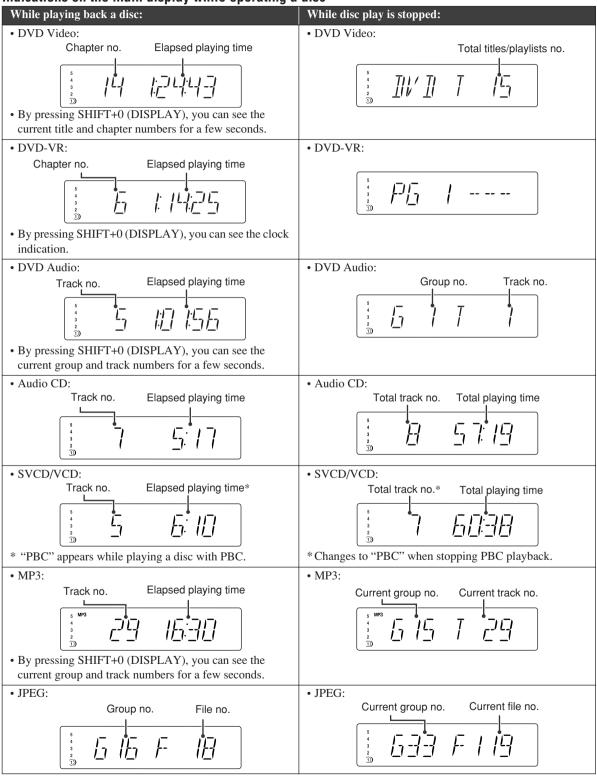
15 A. (auto) STANDBY indicator (see page 19)

- Lights when Auto Standby is activated.
- Flashes when disc playback stops with Auto Standby activated.

16 Timer indicators (see pages 33 and 34)

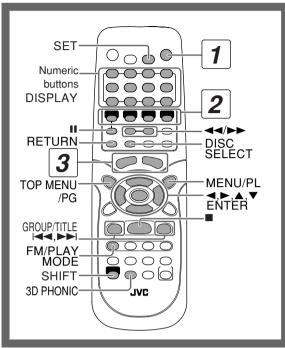
- REC: Lights when the Recording Timer stands by; flashes while setting or working.
- ②: Lights when Daily Timer or Recording Timer stands by; flashes while working.
- 1/2/3: Lights up when a Daily Timer (1, 2, or 3) stands by; flashes while setting or working.

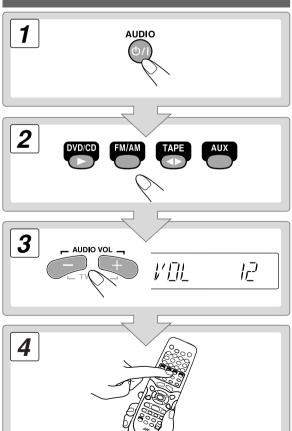
Indications on the main display while operating a disc



[•] If "RESUME" is "ON" (see page 38), "RESUME" appears when you stop playback (except for Audio CD and MP3/JPEG discs).

Daily Operations—Playback





1 Turn on the power.

The STANDBY lamp on the main unit turns off.

- Without pressing AUDIO **O**/I, the System turns on by pressing one of the source selecting buttons in the next step.
- 2 Select the source.

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

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

To turn off (standby) the System



The STANDBY lamp on the main unit lights up.

• 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 on the headphones.

• Disconnecting the headphones will activate the speakers again.

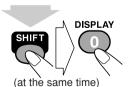


DO NOT turn off (standby) the System with the volume set to an extremely high level; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

To turn off the clock indication



While the System is turned off...



 Press the button again, to display the clock indication.

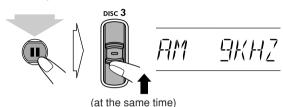
Listening to the Radio

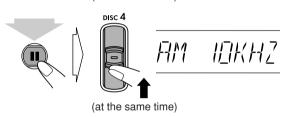


To select the AM tuner interval spacing

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

You can change the AM tuner intervals while the System is on stand by and the last selected source is AM.



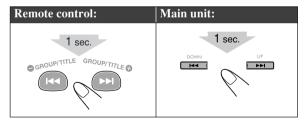


To select the band (FM or AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display.

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

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

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 the stations Remote (NLY)



You can preset 30 FM and 15 AM stations.

1 Tune in to a station you want to preset.

- You can also store the monaural reception mode for FM preset stations if selected.
- **2** Activate the preset number entry mode.



- Finish the following process while the indication on the display is flashing (5 seconds).
- **3** Select a preset number for the station.



Ex.:

To select preset number 5, press 5.

To select preset number 15, press +10, then 5. To select preset number 30, press +10, +10, then



4 Store the station.

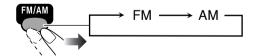


570REI

To tune in to a preset station



1 Select a band—FM or AM.



2 Select a preset number you have stored.



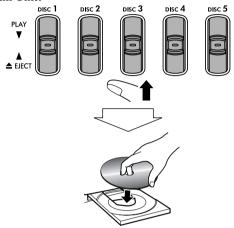
• You can also use the **◄◄/▶▶** to select a preset station.

Playing Back a Disc

• For MP3/JPEG playback, see "Operations on the CONTROL Screen" on page 29.

To insert a disc

You can insert a disc while playing another source. **Main Unit:**



To close the disc tray and start playback, press down the same lever again.

- When current selected disc tray open, you can use DVD/CD ► to close the disc tray and start playback (depending on how the disc is programmed internally).

To start:	To pause:	To stop:
DVD/CD or	To release, 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" appears on the display when you stop playback.)

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

 When operating the System, the on-screen guide icon (see the following table) appears on the TV screen.
 To deactivate the on-screen guide icons, see "ON SCREEN GUIDE" on page 38.

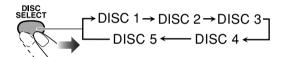
On-screen guide icons

- During playback, the following icons may appear on the TV screen:
 - At the beginning of a scene containing multiangle views.
 - At the beginning of a scene containing multiaudio sounds.
 - At the beginning of a scene containing multisubtitles.
- The following icons will be also shown on the TV screen to indicate your current operation (for more details, see page 26).



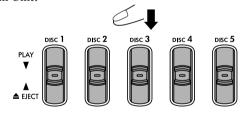
To select a disc

Remote Control:

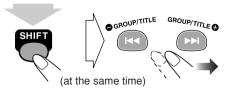


• When current source is not disc, press DVD/CD► to select the disc player as the source during "PLAY" flashing on the display.

Main Unit:



To select a title/group (Solution)
While playing DVD or MP3...



- Group name appears on the display for MP3.
- This feature may not work for some discs.

To select a chapter/track

While playing a disc except SVCD/VCD with PBC...



• First time you press | ◄ ◄, you can go back to the beginning of the current chapter/track.

To locate a particular portion (Source) (Source)



While playing a disc except MP3/JPEG...



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

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

To locate an item directly (SOULY N)



You can select a title/playlist/chapter/track directly and start playback with the numeric buttons.

• For DVD Video/DVD-VR, you can select a title/playlist/ track before starting playback, a chapter after starting playback.

Ex.:

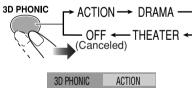
To select number 5, press 5. To select number 15, press +10, then 5.

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

To use 3D PHONIC



While playing...



On the TV screen

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

• 3D PHONIC indicator also lights up.

To play back using the disc menu



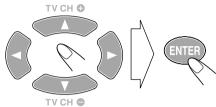
You can operate a disc-DVD Video/DVD Audio/DVD-VR, SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

■ For DVD Video/DVD Audio:

1 Show the disc menu.



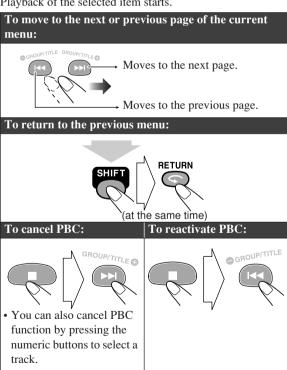
2 Select an item on the disc menu.



- You cannot use this function while displaying the pull-down menu (see page 27).
- With some discs, you can also select items by entering the number using the numeric buttons.

■ 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 with the numeric buttons (see "To locate an item directly" on the left for how to use the numeric buttons). Playback of the selected item starts.

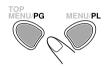


■ For DVD-VR:

DVD-VR format has the following two ways of playing.

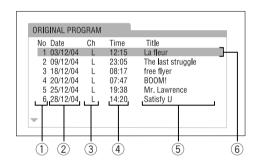
- Original program (ORIGINAL PROGRAM): The System can play back items in a DVD-VR disc in the recorded order conventionally.
- Playlist (PLAY LIST):
 The System can play back the playlist edited with the DVD recording equipment.

1 Show the ORIGINAL PROGRAM or PLAY LIST.

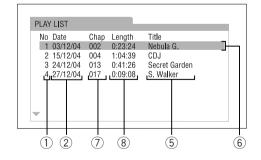


TOP MENU/**PG:** shows the ORIGINAL PROGRAM. MENU/**PL:** shows the PLAY LIST. (The playlist appears only when the playlist is on the DVD-VR disc.)

Ex.: ORIGINAL PROGRAM:

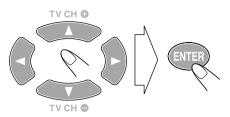


Ex.: PLAY LIST:



- (1) Listed number
- ② Recording date
- ③ Recorded channel
- 4 Recording time
- 5 Title/Playlist
- 6 Highlight bar (current selection)
- 7 Chapters included
- 8 Playback time

2 Select an item on the disc menu.



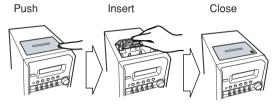
• You cannot use this function while **displaying the pull-down menu** (see page 26).

With some discs, you can also select items by entering the number using the numeric buttons.

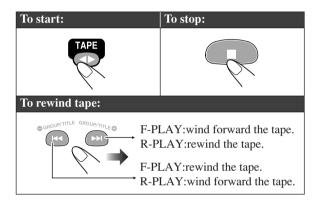
Playing Back a Tape

To insert a tape

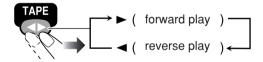
You can play back type I tapes.



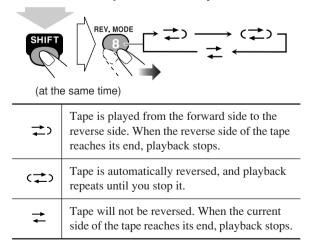
With the tape side facing backside



To change the tape running direction



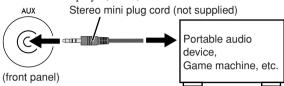
To reverse the tape automatically



Playing Back from Other Equipment

To connect other equipment

By using a stereo mini plug cord (not supplied), you can connect other 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.

• Refer to the manuals supplied with the other equipment.

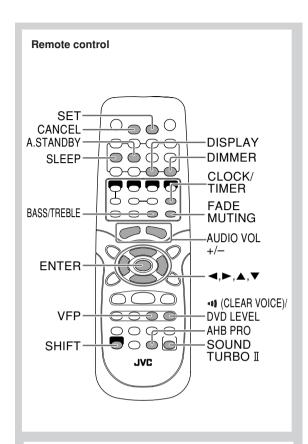
IMPORTANT

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

To select other equipment for the source



Daily Operations—Sound&Other Adjustments

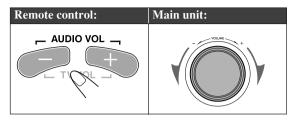




Adjusting the Volume



You can adjust the volume level from level 0 (VOL MIN) to level 31 (VOL MAX).



To drop the volume in a moment





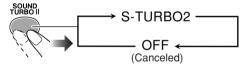
To restore the volume, press again, or adjust the volume level.

Adjusting the Sound



To emphasize the sound—SOUND TURBO II

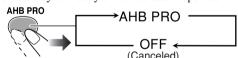
This function emphasizes the sound.



To emphasize heavy bass sound—AHB PRO



This function dynamically enhances bass response.



To adjust the tone—BASS/TREBLE



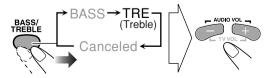
You can adjust the bass and treble level from 0 to +5.

• When you adjust this setting, the SOUND TURBO II is canceled automatically.

To adjust the bass



To adjust the treble



Making DVD Voice Clear—CLEAR VOICE





This function allows you to easily understand the dialog of DVD even with the volume turned down.

• This function only works for center-channel signal encoded multi-channel disc.



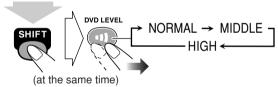
Presetting Automatic DVD Sound Increase







Some DVD Videos/DVD Audios are recorded at a lower sound volume level than that of other discs or sources. You can increase the level for the currently loaded DVD Video/ DVD Audio.



NORMAL	Original recording level.
MIDDLE	Output level is increased (less than "HIGH").
HIGH	Output level is increased (more than "MIDDLE").

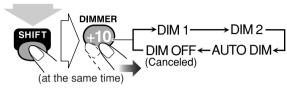
• Once the current DVD Video/DVD Audio is ejected, this setting is canceled and set automatically to "NORMAL."

Changing the Display Brightness—DIMMER



You can dim the display window.

• This function cannot use when the System is on standby.



DIM 1	Dims the display.
DIM 2	Erases the display illumination.
AUTO DIM	Erase the display illumination when playback starts. This function works only when playing DVD/VCD/SVCD or JPEG files. The display illuminates when playback stops.

Changing the Picture Tone-VFP (Video









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

To select a preset picture tone

1 Activate VFP.



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

On the TV screen

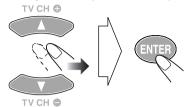
2 Select a preset picture tone.



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

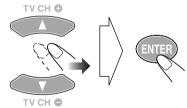
To adjust the picture tone

- 1 Select "USER1" or "USER2."
 - Follow steps 1 and 2 explained on page 17.
- **2** Select a parameter you want to adjust.



GAMMA	Adjust if the neutral color is bright or dark $(-3 \text{ to } +3)$.
BRIGHTNESS	Adjust if the entire picture is bright or dark $(-8 \text{ to } +8)$.
CONTRAST	Adjust if the far and near positions are unnatural (–7 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.

To erase the screen, press VFP again.

Setting the Clock (SOULY N)







Without setting the built-in clock, you cannot use the Daily Timer or Recording Timer (see page 33), and Sleep Timer (see next page).

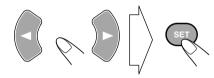
- To exit from the clock setting, press CLOCK/TIMER as required.
- To go back to the previous step, press CANCEL.

1 Activate the clock setting mode.



• If you have already adjusted the clock before, press the button repeatedly until the clock setting mode is selected (see page 33).

2 Adjust the hour.

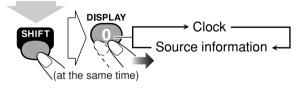


3 Adjust the minute.



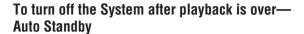
Now the built-in clock starts working.

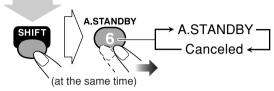
To check the current clock time during play



• While playing a DVD or MP3, you cannot check the current clock time (see page 9).

Turning Off the Power Automatically



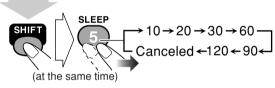


When Auto Standby is in use, the A.STANDBY indicator lights on the display. When the disc play stops, the A.STANDBY indicator starts flashing. If no operation is done for about 3 minutes while the indicator is flashing, the System turns off (in standby) automatically.

• Auto Standby does not work while you are listening to radio (FM/AM) and the external component (AUX).

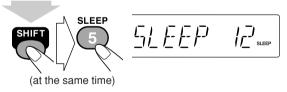
To turn off the System after a certain period of time—Sleep Timer

1 Specify the time (in minutes).



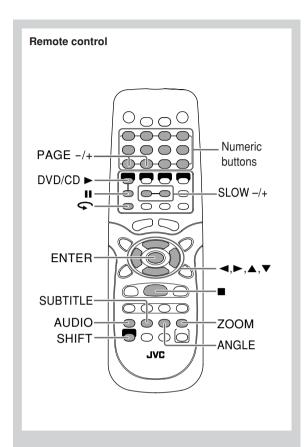
- SLEEP indicator also lights up on the display.
- **2** Wait until the set time goes off.

To check the time remaining until the shut-off time



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

Unique Disc Operations



Selecting the Sound Track (Remote NLY)





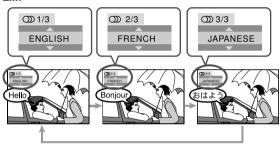
For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For SVCD/VCD/DVD-VR: While playing back a track, you can select the audio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

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



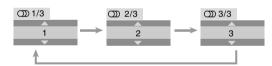
While playing a DVD Video...

Ex.:

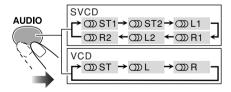


While playing a DVD Audio...

Ex.:



While playing an SVCD/VCD/DVD-VR...



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

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

Selecting the Subtitle Language (Bendle)»)



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

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

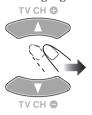
• You can also select the subtitle language using the onscreen bar (see page 26).

While playing a DVD Video...

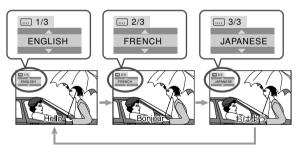
1 Display the subtitle selection window.



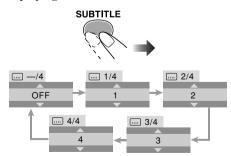
2 Select the subtitle language.



Ex.:



While playing an SVCD...



Selecting the View Angle (Remote ONLY)

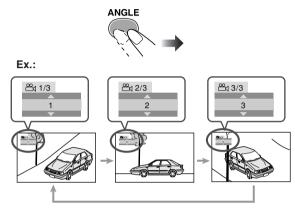




While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- This function is only used while playing DVD Video.
- You can also select the multi-view angles using the onscreen bar (see page 26).

While playing...



Playing Back a Bonus Group (Bonus)





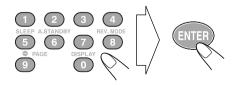
Some DVD Audios have a special group called "bonus group" whose contents are not open to the public.

- This function is only used while playing 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).
- When the bonus group is detected, BONUS indicator lights up.
- For how to select the group, see "To select a title/group" on page 12.

$m{2}$ Enter the key number.



 $oldsymbol{3}$ Follow the interactive instructions shown on the TV screen.

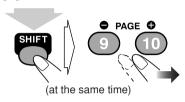
To cancel the key number entry, press ■.

Selecting Browsable Still Pictures (Remote only)



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

- This function is only used while playing DVD Audio.
- When a DVD Audio with browsable still pictures is detected, B.S.P. indicator lights up.
- 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 26).



Special Effect Playback (Remote ONLY)»)





Still picture playback

To start still picture playback:	To resume normal playback:
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 ▶.

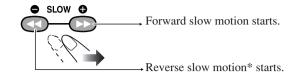
Slow-motion playback

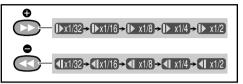
1 While playing...



Still picture playback starts.

2 Select slow-motion speed.





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

To resume normal playback, press DVD/CD ▶.

To replay the previous scenes (One touch replay function) Remote (%)

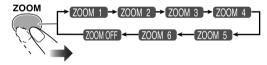
• This function is used while playing DVD Video/DVD-VR.

RETURN

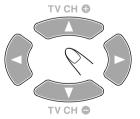
The playback position moves back about 10 seconds before the current position (only within the same title/playlist).

Zoom Remote ONLY

1 While playing...



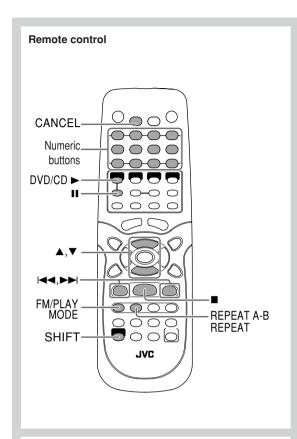
- As the number increases, magnification also increases.
- **2** Move the zoomed-in position.

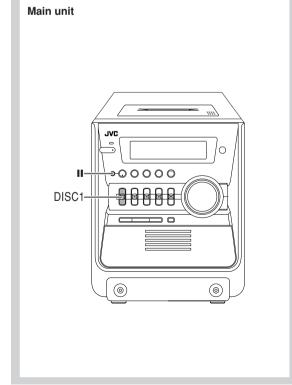


To resume normal playback, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

To use this function for JPEG (still pictures), see "To zoom in the still picture" on page 30.

Advanced Disc Operations





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

1 Before starting playback, activate Program Play.







On the TV screen

- **2** Select chapters/tracks you want to program with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - For DVD Video/MP3:
 - ① Select a disc number on "Disc" column.
 - 2 Select a group/title number on "Group/Title" column.
 - 3 Select a track/chapter number on "Track/Chapter" column.

• For SVCD/VCD/CD:

- ① Select a disc number on "Disc" column.
- 2 Select a track number on "Track/Chapter" column.
- Even if the disc is not in the selected tray, the System may prompt for the group number entry as well, however, during playback, the System will ignore these entries.
- If you have programmed a group/title number for SVCD/VCD/CD, the System will ignore the group/title number and play the track number you have programmed.
- **3** If you want to program another chapters or tracks, repeat the step **2** above.

to be continued...

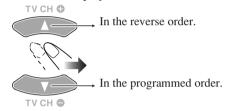
4 Start playback.



Playback starts in the order you have programmed.

To skip a step:	To pause:	To stop:
● GROUP/TITLE GROUP/TITLE ●	To release, press DVD/CD ▶.	

To check the programmed contents Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
TV/VIDEO	
To add steps in the program:	
Repeat step 2 on page 23.	

To exit from Program Play Before or after playback...



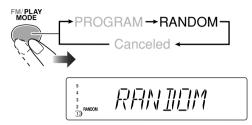
Playing at Random—Random Play (Romote)»)



You can play the chapters or tracks of all loaded discs at random.

• Random Play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in random order. Random Play continues to the disc on the next tray when all the chapters or tracks in the current disc are played once (when Repeat Play is not activated).

• Playback ends when all the discs are played once (when Repeat Play is not activated).

To skip a chapter/ track:	To pause:	To stop:
To skip to the beginning of the current track, press ◄.	To release, press DVD/CD ▶.	

• During Random Play, you cannot select the disc to play by using DISC SELECT.

To exit from Random Play Before or after playback...





• You can also select the repeat mode using the on-screen bar (see page 27).

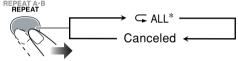
Repeat Play

• For DVD Video/DVD-VR:

During playing...



Before playback...



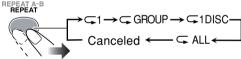
• For DVD Audio:

During or before playback...



• For MP3:

During or before playback...

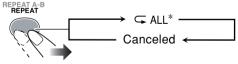


• For CD/SVCD/VCD:

During or before playback without PBC...

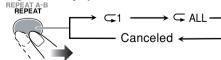


During playback with PBC...



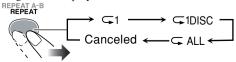
• For Program Play:

During or before playback...



• For Random Play:

During or before playback...



→ ALL*	Repeats the discs in all tray or all programmed tracks.
5 1	Repeats the current chapter/track.
Ģ GROUP	Repeats the current title/group/playlist.
→ 1DISC	Repeats the current disc.
Canceled	Cancels Repeat Play mode.

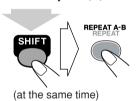
* When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, this function may not work correctly.

A-B Repeat

You can repeat playback of a desired portion by specifying the beginning (point A) and the ending (point B).

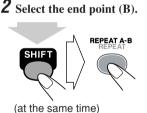
- A-B Repeat cannot be used for MP3 or for some DVDs.
- A-B Repeat can be used within the same title/playlist while playing a DVD Video/DVD-VR, and within the same track for the other discs.

7 While playing (without PBC for SVCD/VCD), select the start point (A).



► A- lights on the display.

• 🖒 A- appears on the TV screen if the TV is turned on.



• ► A-B appears on the TV screen and A-B Repeat

 You can search for the end point using ▶►.

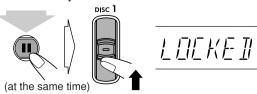
To cancel A-B Repeat, press REPEAT A-B again while holding SHIFT.

Prohibiting Disc Ejection—Child Lock

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

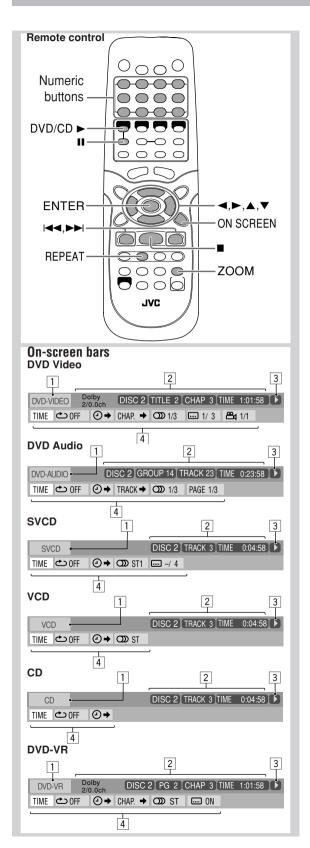
• This is possible while the System is on standby and the clock indication is turned on (see page 10).

While the disc trays are closed...



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

On-Screen Disc Operations



On-screen Bar Information



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

1 Disc type			
2 Playback info	2 Playback information		
Indication	Meanings		
Dolby 2	Audio format		
0.0ch	Channel number		
DISC 2	Current disc		
(TITLE 2)	Current title/program list/playlist (for DVD-VR; "PG" or "PL" appears instead of "TITLE").		
CHAP 3	Current chapter		
GROUP 1	Current group		
(TRACK 14)	Current track		
(TIME 1:25:58)	Time indications		
3 Operation me	odes		
Indication	Meanings		
	Playback		
>> / 41	Forward/Reverse search		
	Forward/Reverse slow-motion		
	Pause		
	Stop		
4 Function icor	ns (on the pull-down menu)		
Indication	Meanings		
TIME	Select to change the time indication.		
OFF	Select to repeat playback.		
⊙ →	Select for time search.		
CHAP. →	Select for chapter search.		
TRACK→	Select for track search.		
(CDD) 1/3	Select to change the audio language or channel (see also page 20).		
1/3	Select to change subtitle language (see also page 21).		
≃ ₄ 1/3	Select to change the view angle (see also page 21).		
PAGE 1/5	Select to change the page (see also page 22).		

 You cannot use

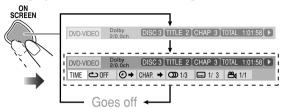
, ▶, ▲, and ▼ buttons to select the disc menu while displaying the pull-down menu.

Operations Using the On-screen Bar (South South)

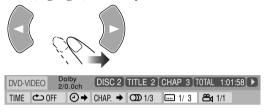


Ex.: Selecting a subtitle (French) for DVD Video: While a disc is selected as the source...

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



For detailed operations of the following functions, see also "Operations Using the On-screen Bar" on the left.

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

To erase the on-screen bar



Repeat Play

- See also page 25.
- **1** While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
- 2 Select OFF.
- **3** Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks (not for some DVD Videos).
A-B	Repeats a desired portion (see next column).
TITLE	Repeats the current title*.
GROUP	Repeats the current group.
DISC	Repeats the current disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK**	Repeats the current track.
OFF	Cancels Repeat Play.

- * During playing DVD-VR, "PG" (Program List) or "PL" (Play List) appears.
- ** During Program Play and Random Play, "STEP" appears.

5 Finish the setting.



A-B Repeat

- See also page 25.
- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select COFF.
- **3** Display the pop-up window.



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.

For DVD Video/DVD Audio/DVD-VR:

You can specify the elapsed time for the current title/playlist.

For CD/SVCD/VCD:

- While playing back, you can specify the elapsed time for the current track except for SVCD/VCD with PBC.
- While stopped, you can specify the elapsed time for the disc except for SVCD/VCD with PBC.
- 1 Display the on-screen bar with the pull-down menu.
- **2** Select ⊙ → .
- **3** Display the pop-up window.



4 Enter the time.

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



Ex.:

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 the disc from the selected playing time.

Chapter/Track Search

You can search for the chapter (DVD Video/DVD-VR) 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 with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - To correct a misentry, press the numeric buttons until the desired number shown in the pop-up window.
- **5** Finish the setting.



The System starts playing the searched chapter or track.

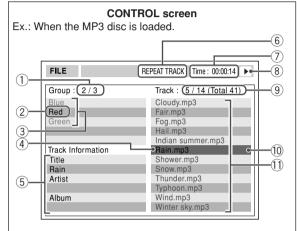
Operations on the CONTROL Screen (South 1987)



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

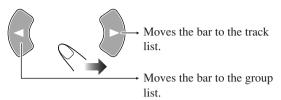
You can search for and play the desired tracks through the CONTROL screen.

• If both types of files (MP3 and JPEG) are recorded on a disc, select the file type to play (see page 37).

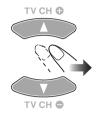


- (1) Current group number/total group number
- (2) Current group
- 3 Group list
- 4 Current track (in blue)
- 5 Track information (ID3 Tag Version 1.0: only for MP3)
- 6 Repeat Play setting
- 7 Elapsed playing time of the current track (only for MP3)
- (8) Operation mode icon
- (9) Current track number/total number of tracks in the current group (total number of tracks on the disc)
- (10) Highlight (green) bar
- (1) Track list

To move the highlight bar between group list and track 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 disc, the selected track starts playback automatically.

To start playback



Playback starts with the selected track.

Pressing DVD/CD ► also starts playback.

If the track is JPEG, selected still picture is displayed until you change it.

Unique JPEG Operations



You can enjoy the Slide-show playback for JPEG files. Each track (still picture) on the disc is shown on the screen for few seconds, then changes one after another.

To start the Slide-show while the CONTROL screen is on the $TV\ screen$



- Once the Slide-show starts, the CONTROL screen goes off.
- Some discs automatically start the Slide-show.

To cancel the Slide-show and display the current still picture



To skip a track:	To pause:	To stop playback:
GROUP/TITLE GROUP/TITLE G	To release, press DVD/CD ▶.	

To repeat Slide-show

During or before playback...



Ģ GROUP	Repeats the current group.
₲ 1DISC	Repeats the current disc.
→ ALL	Repeats all discs.

To zoom in the still picture

• You cannot zoom in the still picture during the Slide-show.

1 While playing...

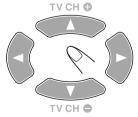


2 Change the magnification.



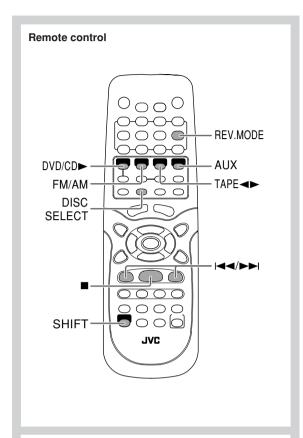
As the number increases, magnification also increases.

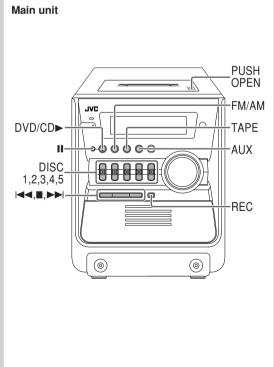
3 Move the zoomed-in position.



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.

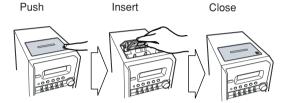
Recording on a Tape



You can use type I tapes for recording.

• To play a tape, see page 15.

1 Insert a recordable cassette.

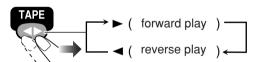


With the tape side facing backside

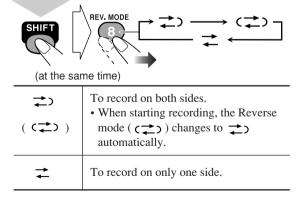
2 Check the tape running direction and Reverse mode settings on the display.



To change the direction



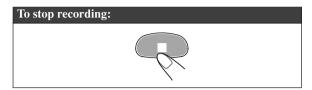
To change the Reverse mode if necessary



- 3 Select and start playing the source—"FM," "AM," "DVD/CD," or "AUX IN."
 - When recording a disc, you can also use "Synchronized Disc Recording" (see next page). to be continued...

4 Start recording.





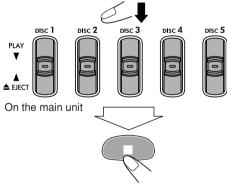
Synchronized Disc Recording



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

To record the entire disc

- **1** Load a disc and insert a recordable cassette.
 - If the current playing source is not the CD player, press DVD/CD ▶, then ■.
- **2** Check the tape running direction and Reverse mode settings on the display.
 - See step 2 of "Recording on a Tape" on page 31.
- **3** Select the disc number you want to start recording from.



4 Start recording.



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

On the main unit

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

To record a "Live" disc

It will not be desirable to put 4-second blank portions between the tunes recorded on the tape.

To record the entire disc without any interruption recorded, start playing the disc (press DVD/CD ►), then pause the disc play (press ■) and go back to the beginning of the current chapter/track (press ◄◄) before pressing REC.

To record Program Play or Random Play

- 1 Select Program Play (and make a program) or Random Play, but do not start playback.
- 2 Press REC to start recording.

To record only your favorite track

You can specify tracks to be recorded on the tape while listening to a disc.

- This function is not available for DVD Video.
- 1 Start playing a disc.



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



On the main unit

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

3 Repeat steps 1 and 2 to record other tracks you want.

• You can exchange the discs if necessary.

To protect your recording

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

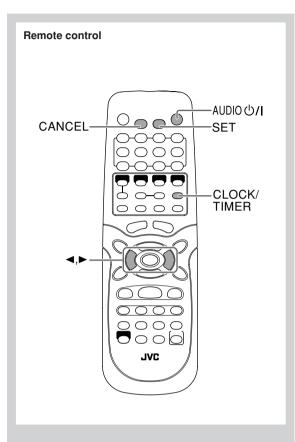
To protect your recording, remove these tabs.



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



Timer Operations



Setting the Timer (Remote)»)



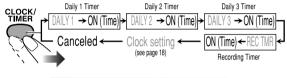






Using Daily Timer, you can wake up with your favorite music. You can store three Daily Timer and one Recording Timer settings; however, you can activate only one of the timers at a time.

- To exit from the timer setting, press CLOCK/TIMER as
- To correct a misentry during the process, press CANCEL. You can return to the previous step.
- 1 Select one of the timer setting modes you want to set— Daily 1 ON time, Daily 2 ON time, Daily 3 ON time, or Recording ON time.



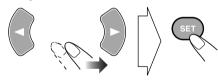


Ex.: When Daily Timer 1 setting mode is selected

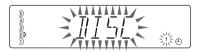
- · When the clock has not been adjusted, pressing CLOCK/TIMER makes the System enter the clock setting mode (see page 18).
- $m{2}$ Make the timer setting as you want.

Repeat the following operations until you finish setting in the following order-

For Daily Timers:



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



- 4 For "TUNER FM" and "TUNER AM": Select a preset channel (see page 11).
 - Select "FM --" or "AM --" for the last selected

For "DISC": Select the disc number, title/group/ playlist number, then the chapter/track number (see page 12).

• Select "DISC -" for the last selected disc tray number.

For "AUX": Connect the other equipment (see page 15).

to be continued...

(5) Select the volume level.

You can select the volume level ("1" to "MAX" and "VOL --"). If you select "VOL --," the volume is set to the last level when the System has been turned off.

Once settings are complete, the Timer setting information appears in sequence.

For Recording Timer:

- 1) Set the hour then the minute for on-time.
- 2) Set the hour then the minute for off-time.
- 3 Select "TUNER FM" or "TUNER AM."
- **4** Select a preset channel.
- (5) Select the volume level.
- **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 (②) indicator and timer number indicator (1/2/3) 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) or another timer is activated.

When the on-time comes

The System turns on, tunes in to the specified station or start playing the loaded disc with the specified track, and sets the volume level gently to the preset level.

- You cannot start the specified title/playlist/chapter/ track of DVD Video/DVD-VR/SVCD/VCD, though you can select it at the timer setting.
 - DVD Video/DVD-VR/SVCD/VCD starts playback from the beginning.
- While Daily Timer is working, the timer (②) indicator and timer number indicator (1/2/3) flash on the display.

When the off-time comes

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

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

How Recording Timer actually works

When Recording Timer has been set, the timer (\bigcirc) 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 gently to preset level, and starts recording.

When the off-time comes

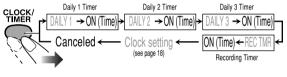
The System stops recording, and turns off (stands by).

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

To turn off the Timer after its setting is done

Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.

1 Select the Timer you want to cancel.





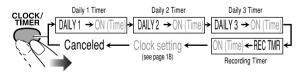
Ex.: To cancel Daily Timer 1

2 Turn off the selected Timer.



To turn on the Timer

1 Select the Timer (DAILY 1, DAILY 2, DAILY 3, or REC) you want to activate.



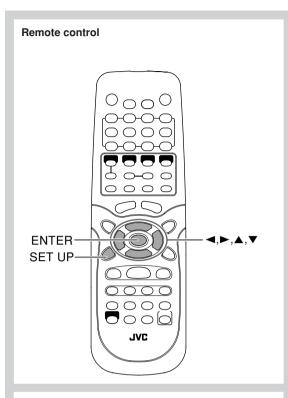


Ex.: When Daily Timer 1 is selected

2 Activate the selected Timer.



Setup Menu Operations

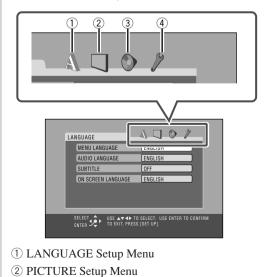


Setup Menu Icons

3 AUDIO Setup Menu 4 OTHERS Setup Menu

The icon for the selected Setup Menu will be highlighted.

Ex.: LANGUAGE Setup Menu is selected.



Operating Procedure Personal Service (Source Control of the Contro







You can use the Setup 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 Display the Setup Menu.



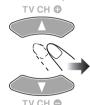


2 Select one of the Setup Menus.





 ${\it 3}$ Select the item you want to adjust.



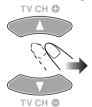


4 Display the pop-up window.





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





to be continued...

6 Finish the setting.



7 Repeat steps **3** to **4** to set other items on the same Setup Menu.

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

To exit from the Setup Menu



■ LANGUAGE Setup Menu

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, RUSSIAN, 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, RUSSIAN, 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, RUSSIAN, 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 screen from—ENGLISH, SPANISH and FRENCH.

■ PICTURE Setup Menu

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



MONITOR TYPE

Select the monitor type of your TV to play DVD Video/DVD-VR recorded with aspect ratio of 16:9.

For the multi-color system TV

When you use a multi-color system TV, you can change the color system of the System automatically by selecting "MULTI" options as the monitor type. In this case, the color system of the System is changed to match the color system of the loaded disc regardless the VIDEO OUT SELECT or setting for better picture quality (see "Adjusting the voltage selector" on page 6).

Select one of the following:

16:9 / 16:9 MULTI (Wide television conversion):

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

4:3 LB (Letter Box) / 4:3 MULTI LB:

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

4:3 PS (Pan Scan) / 4:3 MULTI PS:

Select when the aspect ratio of your TV is 4:3. 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.: 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 picture on the TV screen becomes dark when		
	no operation is done for about 5 minutes.		
OFF:	To cancel the screen saver.		

FILE TYPE

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

Select one of the following:

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

■ AUDIO Setup 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:

PCM ONLY:	To connect to a linear PCM digital equipment.	
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 OUT Signals" on page 46.

DOWN MIX

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

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

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 recorder, etc.

D. (Dynamic) 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 apply the compression effect to the downmixed multi-channel sound.
ON:	To always apply the compression effect for all Dolby Digital software. Loud sound will become low and vice yersa.

■ OTHERS Setup Menu

You can change some other convenient functions.



RESUME

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

Select one of the following:

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

ON SCREEN GUIDE

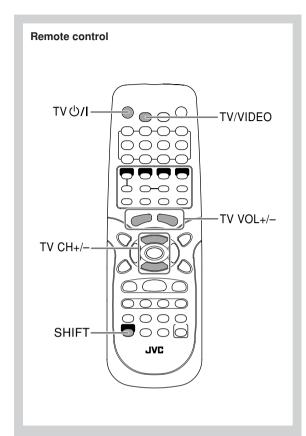
You can activate or deactivate the on-screen guide icons (see pages 12 and 26).

• 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.

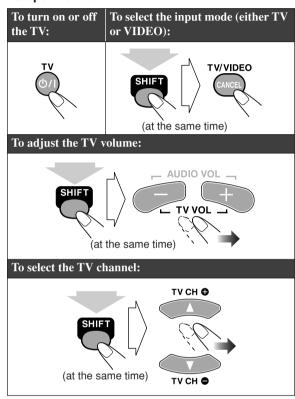
Operating the TV





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

To operate the TV



Additional Information

Learning More about This System





Getting Started (see pages 3 to 6)

Changing the Scanning Mode:

• To enjoy the progressive video picture, connect a TV with the progressive video input using component video cord.

Daily Operations—Playback (see pages 10 to 15)

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:

- When using an 8 cm disc, place it on the inner circle of the
- 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 malfunction of this System.
- When discs* in more than one tray are loaded on the disc trays, they are played in sequence as follows. (When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, playback of the disc next to these discs will not start.):

Ex.: When DISC 2 is selected:

DISC 2⇒DISC 3⇒DISC 4⇒DISC 5⇒DISC 1⇒ (then stops)

- * When no disc is loaded on the disc tray, that disc number is skipped.
- You can exchange discs while playing or selecting another
- Some DVD Audio discs prohibit downmixed output. 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.
- 3D Phonic setting is also applied to the optical digital output signals through the OPTICAL DIGITAL OUT terminal.
- For DVD-VR playback...
 - When making a disc, use the UDF-Bridge format.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
 - If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.
 - You cannot use reverse slow motion, Program Play, and Random Play.
- For MP3/JPEG playback...
- This System cannot play "packet write" discs.
- MP3/JPEG discs require a longer readout time than regular CDs. (It depends on the complexity of the group/ file configuration.)

- Some MP3/JPEG files cannot be played back and will be skipped. This results from their recording processes and conditions.
- When making MP3 discs, use ISO 9660 Level 1 or Level 2 for the disc format.
- This System can play back MP3/JPEG files with the extension code <.mp3> or <.jpg> (regardless of the letter case-upper/lower).
- It is recommended that you make each MP3 file at a sampling rate of 44.1 kHz and at a bit rate of 128 kbps.
- This System can recognize the total of 1000 tracks and of 99 groups (each group can contain up to 150 tracks). Those exceeding the maximum number cannot be recognized.
- This System can show up to 23 characters of the file (track) names (except for extension) and 30 characters of the ID3 tags on the display and the TV screen.
- Some characters or symbols will not be shown (and will be blanked) on the display.
- When using Resume on SVCD or VCD with PBC, the playback might start on a position slightly different from where you have stopped.
- You can use Resume only for the DVD/SVCD/VCD except for some discs-depending how the disc is programmed.

Playing Back a Tape:

- It is not recommended to use the C-120 or longer tapes. These tapes easily jams in the pinch rollers and capstans, and may cause characteristic deterioration.
- When you open the cassette holder, the reverse mode is set to ⇒∋.

Daily Operations—Sound&Other Adjustments (see pages 16 to 19)

Adjusting the Volume:

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

Adjusting the Sound:

• This function also affects the sound through the headphones.

Setting the clock:

- "0:00" will flash on the display until you set the clock.
- The clock may gain or lose 1 to 2 minutes per month. If this happens, reset the clock.

Unique Disc Operations (see pages 20 to 22)

- During slow-motion playback, no sound will be reproduced.
- One touch replay function works only within the same title/ playlist, though it works between chapters.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 23 to 25)

Programming the Playing Order—Program Play:

- If you try to program a 100th track, "MEM FULL (memory full)" appears on the display.
- 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).
- You cannot use Program Play for JPEG or DVD-VR discs.
- You cannot eject tray while in Program Play.

Playing at Random—Random Play:

- The I◄◀ button does not work for skipping chapters or tracks, but only work for going back to the beginning of the current chapter or track.
- You cannot use Random Play for JPEG or DVD-VR discs.

On-Screen Disc Operations (see pages 26 to 30)

- 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 longer time to be shown.)
- This System can play only baseline JPEG files.
 Progressive or lossless JPEG files cannot be played.

Baseline JPEG format: Used for digital cameras,

web, etc.

Progressive JPEG format: Used for web.

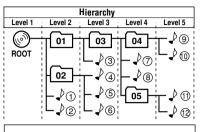
Lossless JPEG format: An old type and rarely used

now.

- This System may not play back JPEG files properly which are not recorded by digital still cameras.
- If progressive or lossless JPEG files are played back, a black screen appears. In this case, stop playback and select a baseline JPEG file. Note that it may take a long time to select another file.

MP3/JPEG groups/tracks configuration

This System plays back the tracks as follows.



01 Group with its play order

♪
① Track with its play order

Advanced Tape Operations (see pages 31 and 32)

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 end of cassette tapes. Thus, when recording CDs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If you start recording with no cassette or 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 can also change Reverse mode setting (→) and →)
 after starting recording.
- You cannot open or close the disc tray while recording.

Synchronized Disc Recording:

When the tape reaches its end in the forward direction (>) during recording with Reverse mode set to (>), the last tune will be re-recorded at the beginning of the reverse side.

Timer Operations (see pages 33 and 34)

- 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.
- If you set the Sleep Timer after Daily Timer starts playing the selected source, Daily Timer is canceled.
- 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.
- You cannot use the SLEEP timer while activating the Recording timer.

Setup Menu Operations (see pages 35 to 38)

LANGUAGE Setup 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 Setup Menu—MONITOR TYPE:

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

AUDIO Setup Menu—DOWN MIX:

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

OTHERS Setup Menu—ON SCREEN GUIDE:

 Setup Menus 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 and mechanism clean.

Handling discs

- When removing the disc from its case, hold 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.
- 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.

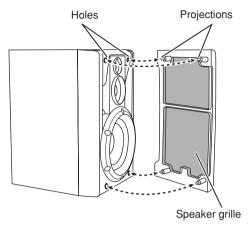
To keep the best recording and playback sound quality:

- 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 strongly.
- 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.

To remove the speaker grilles





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 you finish.

⇒ There is a time limit. Repeat the 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.
- \Rightarrow Point it at the remote sensor on the front panel.
- ⇒ Signals cannot reach the remote sensor. More closer to the System.
- ⇒ The batteries are exhausted.

No sound is heard from the speakers.

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

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

- ⇒ The video cord connections are incorrect or loose.
- ⇒ The System is connected to a TV which does not support progressive scanning.

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

⇒ Select "4:3 LB/4:3 MULTI LB" for "MONITOR TYPE" (see page 36).

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.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can show ID3 Tag Version 2.4 or earlier.

MP3/JPEG 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/JPEG tracks are not played back.

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

"NO AUDIO" appears.

⇒ This System cannot play back illegally produced DVD Audio discs.

"LR ONLY" appears.

⇒ Some DVD Audio discs prohibit downmixed output. When you play back such a disc, this System plays back the left front and right front signals only.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- \Rightarrow Child Lock is in use (see page 25).

Tape Operations:

The cassette holder cannot be opened.

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

Impossible to record.

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape (see page 32).

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.

Setup Menu Operations:

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 SUBTITLE after starting play (see page 21).

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 20).

Language Code List

AA	Afar
AB	Abkhazian
AF	Afrikaans
AM	Ameharic
AR	Arabic
AS	Assamese
AY	Aymara
AZ	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

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
TO	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

OPTICAL DIGITAL OUT Signals

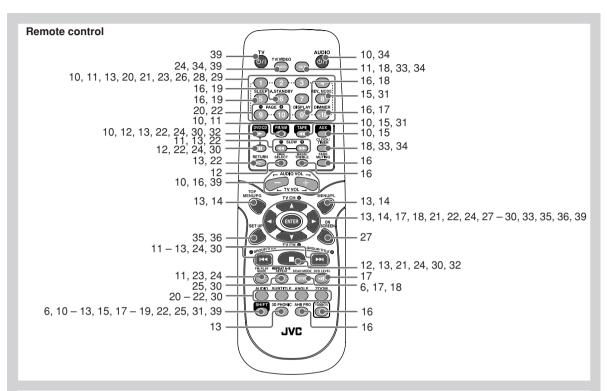
DIGITAL AUDIO OUTPUT	Output Signals		
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
DVD Video			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹		
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit	Linear PCM
DVD Audio		·	
with 48/96/192 kHz, 16/20/24 bit Linear PCM	No output* ²		
with 44.1/88.2/176.4 kHz, 16/20/24 bit Linear PCM	No output*3		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit	Linear PCM
DVD-RW/RAM/ROM in DVD-VR format	48 kHz, 16 bit Linear PCM		
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM/48 kHz, 16 bit Linear PCM		
CD with DTS	DTS bitstream	DTS bitstream 44.1 kHz, 16 bit Linear PCM	
MP3 disc	32/44.1/48 kHz, 16 bit Linear PCM		

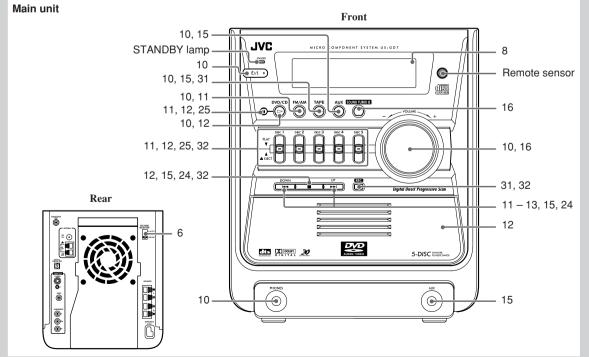
^{*1} While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUT terminal if the discs are not copy-protected.

^{*2} When the disc is not copyright protected, "48 kHz, 16 bit Linear PCM" signal is output. *3 When the disc is not copyright protected, "44.1 kHz, 16 bit Linear PCM" signal is output.

Parts Index

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





Amplifier section

Output Power: 140 W (70 W+70 W) at 6 Ω (10% THD)

Analog input:

AUX: Sensitivity/Impedance (at 1 kHz)

 $400 \text{ mV}/47 \text{ k}\Omega$

Digital output:

OPTICAL DIGITAL OUT:

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

VIDEO OUT:

NTSC Color system: VIDEO (composite): 1 V(p-p)/75 Ω S-VIDEO: Y (luminance) 1 V(p-p)/75 Ω

C (chrominance, burst)

0.286 V(p-p)/75 Ω

COMPONENT: (Y) 1 V(p-p)/75 Ω

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

Speaker terminals: Impedance $6\Omega - 16\Omega$

Tuner section

FM tuning range: 87.50 MHz - 108.00 MHz AM tuning range: 531 kHz – 1 710 kHz (at 9 kHz)

530 kHz – 1 710 kHz (at 10 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/JPEG

format)

DVD-R (recorded in video/MP3/JPEG

format)

DVD-RW/DVD-RAM (recorded in video/

DVD-VR/MP3/JPEG format)

Horizontal resolution: 500 lines Wow and flutter: Immeasurable

General

Power requirement: AC 110 – 127 / 220 – 240 V \sim

(adjustable with the voltage selector),

50 Hz/60 Hz

Power consumption: 160 W (at operation)

1.3 W (on standby)

Dimensions (approx.): 189 mm x 224 mm x 406 mm

(W/H/D)

Mass (approx.): 6.5 kg

Speakers

Type: 3-way Bass-reflex type

Magnetically shielded

Speaker systems: Woofer: 12 cm cone x 1

Squawker: 4 cm cone x 1 Tweeter: 1.5 cm dome x 1

Power handling capacity: 70 W

Impedance: 6.0

Frequency range: $45 \text{ Hz} - 20\ 000 \text{ Hz}$

84 dB/W•m Sound pressure level:

Dimensions (approx.): 165 mm x 286 mm x 237 mm

(W/H/D)

2.8 kg each Mass (approx.):

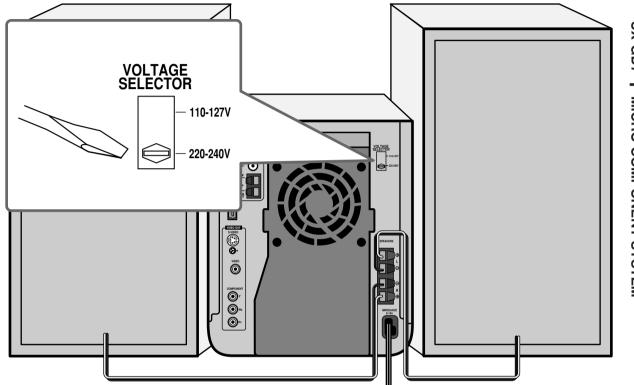
Supplied Accessories

See page 3.

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

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

Design and specifications are subject to change without notice.



CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.







MICRO COMPONENT SYSTEM

لام اجهزة صوتية مركبة

UX-GD7 —Consists of CA-UXGD7 and SP-UXGD7 يتألف هذا النظام من الاجهزة SP-UXGD7، CA-UXGD7













Digital Direct Progressive Scan



كتيب تعليمات التشقيل

Warnings, Cautions and Others تحذیرات ، تنبیهات و اشیاء اخری

CAUTION-0/I (standby/on) button!

Disconnect the mains plug to shut the power off completely (all lamps and indications go off). The (1)/1 button in any position does not disconnect the mains line.

- When the unit is on standby, the STANDBY lamp lights in red.
- · When the unit is turned on, the STANDBY lamp lights goes

The power can be remote controlled.

CAUTION

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

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

CAUTION

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

تحذير — زر الاستعداد للتشغيل/التشغيل STANDBY/ON 🖒 ا

انزع قابس سلك الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كليا. (تنطفىء كل اللمبات والبيانات). لا يفصل زر الاستعداد للتشغيل/التشغيل

آرك STANDBY/ON باي وضع من الاوضاع خط الطاقة الكهربائية عن الجهاز.

- عندما يكون الجهاز في حالة استعداد للتشغيل، تضيء لمبة الاستعداد للتشغيل STANDBY/ON باللون الاحمر.
 عندما يكون الجهاز في حالة تشغيل، تضيء لمبة الاستعداد للتشغيل
 - STANDBY/ON باللون اخضر.
 - بمكن التحكم عن بعد بالطاقة الكهر بائية.

تحذير لتجنب خطر الحريق، الصدمات الكهربائية، الخ.:

١. لا تفك البراغي أو الاغطية أو الخزانة.
 ٢. لا تعرض هذا الجهاز للمطر أو للرطوبة.

تحذير

لا تغلق فتحات التهوية او الثقوب.

(في حالة اغلاق فتحات التهوية او الثقوب بواسطة ورق الصحف او القماش، الخ، فانه يمكن ان لا تخرج الحرارة للخارج.)

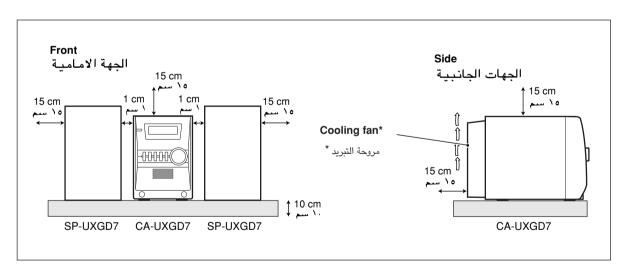
- لا تضع اية مصادر حرارية مكشوفة، مثل الشموع المضيئة،
- عند اتلاف البطاريات، يجب اخذ مشاكل البيئية بعين الاعتبار ويجب التقيّد بالانظمة المحلية او القوانين التي تحكم اتلاف هذه البطاريات بصورة دقيقة.
 - لا تعرّض هذا الجهاز للمطر، او الرطوبة، او تنقيط الماء، او رشق الماء ولا تضع اى اوعية مملوءة بالماء او السوائل مثل مزهريات الورد على هذا الجهاز.

Caution: Proper Ventilation

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

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

سير، ،سهويه الصحيحه لتجنب حصول صدمات كهربائية واخطار الحريق ومنع حصول تلف وضرر للجهاز، ركّب الجهاز كما يلي: ١ الجهة الامامية: يجب أن لا يكون هناك عواثق ويجب أن تكون المنطقة مفتوحة أمام الجهاز. ٢ الجهات الجانبية / العلوية / الخلفية: يجب عدم وضع عوائق في المناطق المبينة بالابعاد في الاسفل. ٣ القاعدة: يجب وضع الجهاز على سطح منبسط. أترك مسافة كافية من أجل التهوية بواسطة وضع الجهاز على حامل بارتفاع ١٠ سم أو أكثر.



* About the cooling fan

A cooling fan is mounted on the rear panel of the unit to prevent abnormal temperature inside the unit, thus assuring normal operation of theunit. The cooling fan automatically starts rotating to intake external cool air when the volume is increased up to more than a certain level.

* حول مروحة التبريد

يوجد مروحة تبريد مركبة على اللوحة الخلفية للجهاز وذلك لمنع تجمّع الحرارة غير الطبيعية داخل الجهاز، ولهذا تمكّن هذه المروحة من التشغيل الطبيعي للجهاز. يبدأ دوران مروحة التبريد اوتوماتيكيا من اجل ادخال هواء بارد من الخارج وذلك عندما ترتفع الحرارة داخل الجهاز اكثر من المستوى المحدد.

IMPORTANT FOR LASER PRODUCTS

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

مهم للمنتجات الليزرية

 ١. صنف ١ منتج ليزري
 ٢. تحذير: لا تفتح الغطاء العلوي. لا يوجد اجزاء داخل الجهاز يستطيع المستخدم صيانتها؛ اترك جميع اعمال الصيانة مهما كانت للاشخاص المؤهلين والمختصين بالصيانة.

٣. تحذير: هنالك أشعة ليزرية مرئية وغير مرئية عند الفتح والعبث بالاجزاء الداخلية او تعطيل اقفال الامان. تجنّب التعرض المباشر للاشعة.

٤. ملصق تحذير المنتج: ملصق التحذير CAUTION LABEL، موجود داخل الحهان.

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta strålen. (s)

ADVARSEL: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

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Introduction



- Install in a place which is level, dry and neither too hot nor too cold—between 5°C and 35°C.
- Install the System in a location with adequate ventilation to prevent internal heat buildup inside 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

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 main unit (see page G-2).

For safety, observe the following carefully:



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

• 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

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

How to Read This Manual

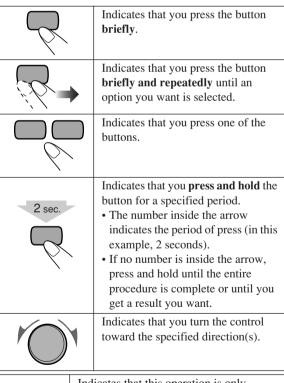






To make in this manual as simple and easy-to-understand as possible, we have adapted the following methods:

- 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" (on pages 40 to 42) and "Troubleshooting" (on page 44), but not in the same section explaining the operations. If you want to know more about the functions, or if you have a doubt about the functions, go to these sections and you will find the answers.





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



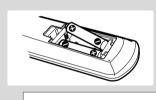
Indicates that this operation is only possible using the buttons and controls on the main unit.

Getting Started

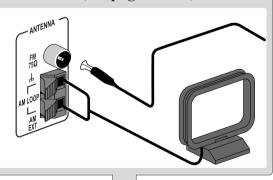
Step 1: Unpack the package and check the accessories.



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 the System.

Step 1: Unpack









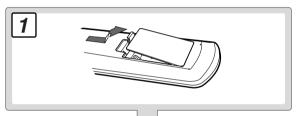
After unpacking, check to be sure that you have all the following items. The number in parentheses indicates the quantity of each piece supplied.

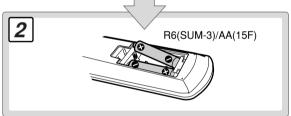
- FM antenna (1)
- AM loop antenna (1)
- Remote control (1)
- Composite video cord (1)
- Batteries (2)
- AC plug adapter (1) (except for Saudi Arabia) If any item is missing, consult your dealer immediately.

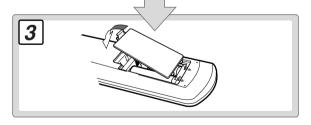
Step 2: Prepare the Remote Control



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







- · DO NOT use an old battery together with a
- 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

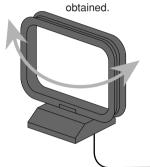
If you need more detailed information, see page 6.

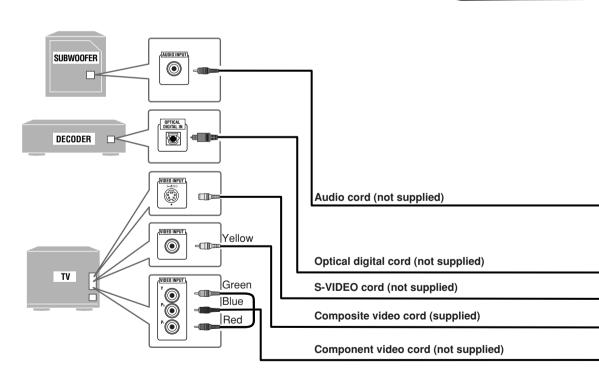
Illustrations of the input/output terminals below are typical examples.

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

Turn off all components before connections.

AM loop antenna (supplied)
Turn it until the best reception is

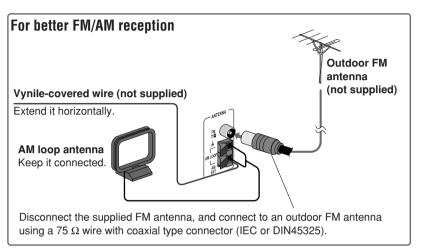


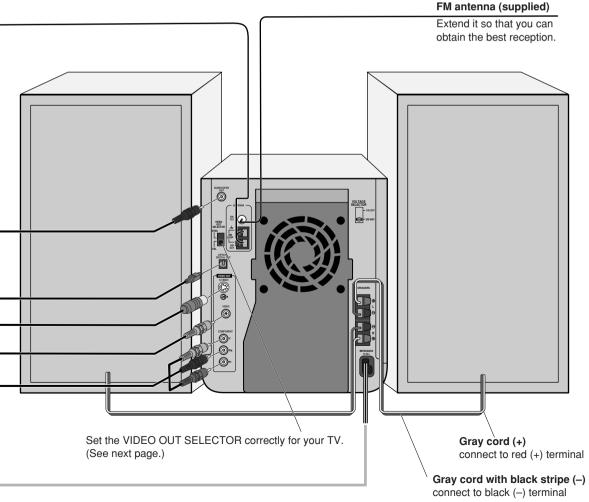


To a wall outlet

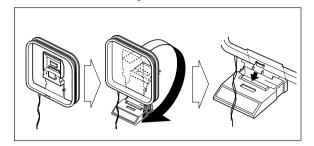
Plug the AC power cord only after all connections are complete.

• If the wall outlet does not match the AC plug, use the supplied AC plug adapter (except for Saudi Arabia).

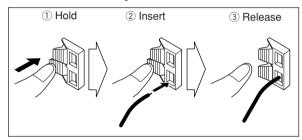




To assemble and connect the AM loop antenna To assemble the AM loop antenna



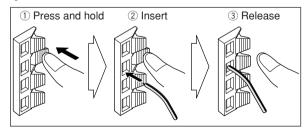
To connect the AM loop antenna



- 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 reception.

To connect the speaker cords

Connect the right speaker to the R terminals, and the left speaker to the L terminals.



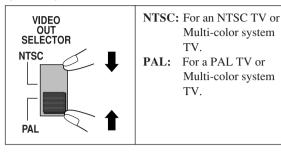
When connecting the speaker cords, match the polarity of the speaker terminals: gray cord (+) to red (+) and gray cord with black stripe (-) to black (-).



- DO NOT connect more than one speaker to each terminal.
- DO NOT allow the conductor of the speaker cords to be in touch with the metallic parts of the System.

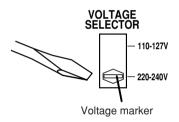
To set the video output selector

You can select the video output to match it to the color system of your TV.



Adjusting the voltage selector

Use a screwdriver to slide the voltage selector so that the voltage marker is pointing at the same voltage as where you are plugging in the unit. (See also the back cover page.)





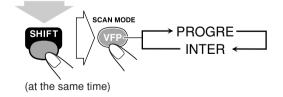
DO NOT plug in before setting the voltage selector on the rear of the unit and all connection procedures are complete.

Changing the Scanning Mode (NUT) (N)





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 progressive mode.



PROGRE (Progressive)	Progressive scanning. For a progressive TV. The PROGRESSIVE indicator lights.
INTER (Interlaced)	Interlaced scanning. For a conventional TV.

Before Operating the System

Playable Disc Types



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

Disc Type	Mark (Logo)	Video Format	Region Code* Number
DVD Video	VIDEO N		2 or
DVD Audio	AUDIO/VIDEO AUDIO	NTSC	ALL
Video CD (VCD)	DISC Video CD	or PAL	
Super Video CD (SVCD)	COMPACT VIDEO WIDEO CD		
Audio CD	COMPACT COMPACT DIGITAL AUDIO		
CD-R	Recorded in the Audio CD, VCD, SVCD, MP3		
CD-RW	or JPEG format.		
DVD-R	Recorded in the DVD Video, MP3 or JPEG format.		
DVD-RW	Recorded in the DVD Video, MP3, JPEG or		
DVD-RAM	DVD-VR (video recording) format.		

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

- It is possible to play back finalized +R/+RW (DVD video format only) discs. "DVD" appears to the display when a +R/ +RW disc is loaded.
- The following discs cannot be played back:
 CD-I (CD-I Ready), CD-ROM, Photo CD, SACD, etc.
 Playing back these discs will generate noise and damage the speakers.
- DVD Video/DVD-VR comprises "Titles/Playlists" which includes "Chapters." DVD Audio/MP3/JPEG comprises "Groups/Folders" which includes "Tracks/Files." CD/ SVCD/VCD comprises only "Tracks."
- In this manual, "file" and "track" are interchangeably used for MP3/JPEG operations.

* Note on Region Code

DVD players and DVDs have their own Region Code numbers. This System can play back only DVDs recorded with the NTSC or PAL color system whose Region Code numbers including "2."

Ex.:









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

Caution for DualDisc playback:

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

DVD Video—digital audio formats

The System can play back the following digital audio formats.

- 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 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 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 "Setup Menu Operations" on page 35.

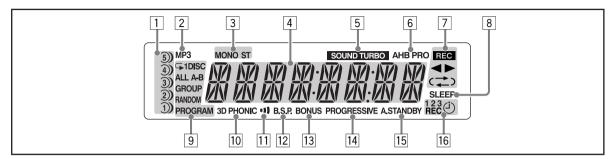
If " \(\infty\) " appears on the TV screen when you press a button, the disc cannot accept the operation you have tried to do, or data required for that operation is not recorded on the disc.

- 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.

"DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.

Display Indicators

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 tray indicators

- 1-5: Disc tray number indicators
-) (tray indicator):
 - -Lights when the disc is detected.
 - -Blinking while playing back a disc.
 - -Goes off when there is no disc in the tray.
- (disc indicator): Lights when the disc in the tray is currently selected.

2 MP3 indicator

• Lights when the current track is recorded in MP3 format.

3 FM reception indicators

- MONO: Lights when FM reception mode is monaural.
- ST (stereo): Lights while an FM stereo station with sufficient signal strength is tuned in.

4 Main display

- While listening to radio; band (or preset number) and station frequency appear.
- While playing a disc; see "Indications on the main display while operating a disc" on page 9.
- While inserted a tape; "TAPE" appears.
- While not inserted a tape; "NO TAPE" appears.
- While selecting "AUX"; "AUX" appears.

5 SOUND TURBO indicator

 Lights when SOUND TURBO II is activated (see page 16).

6 AHB (active hyper bass) PRO indicator

• Lights when AHB PRO is activated (see page 16).

7 Tape operation indicators

- REC indicator
 - -Lights while recording.
- **◄** ► (tape direction):
 - -Lights to indicate the current tape running direction.
 - -Flashes slowly during playback and recording.
 - -Flashes quickly while rewinding a tape.
- (Reverse mode):
- (→): Tape play continues endlessly.
- − → : Tape automatically reverses once.
- → : Tape play stops at the end of one side.

8 SLEEP indicator

• Lights when the Sleep Timer is activated (see page 19).

9 Disc operation indicators

- 🗲 : Lights when Repeat mode is activated.
- 1: Lights when One Track Repeat is activated.
- 1DISC: Lights when One Disc Repeat is activated.
- ALL: Lights when All Disc Repeat is activated.
- A-B: Lights when A-B Repeat is activated.
- GROUP: Lights when Group Repeat is activated.
- RANDOM: Lights when Random Play mode is activated.
- PROGRAM: Lights when Program Play mode is activated.

10 3D PHONIC indicator

• Lights when 3D PHONIC is activated (see page 13).

11 Clear Voice indicator

• Lights when Clear Voice function is activated (see page 17).

12 B.S.P. indicator

• Lights when the current disc is DVD Audio with browsable still picture (see page 22).

13 BONUS indicator

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

14 PROGRESSIVE indicator

 Lights when progressive scanning mode is selected (see page 6).

15 A. (auto) STANDBY indicator (see page 19)

- · Lights when Auto Standby is activated.
- Flashes when disc playback stops with Auto Standby activated.

16 Timer indicators (see pages 33 and 34)

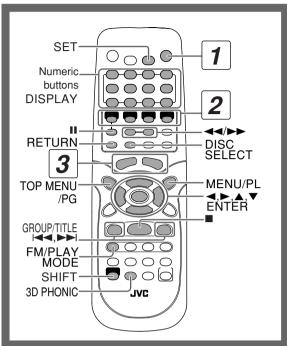
- REC: Lights when the Recording Timer stands by; flashes while setting or working.
- ②: Lights when Daily Timer or Recording Timer stands by; flashes while working.
- 1/2/3: Lights up when a Daily Timer (1, 2, or 3) stands by; flashes while setting or working.

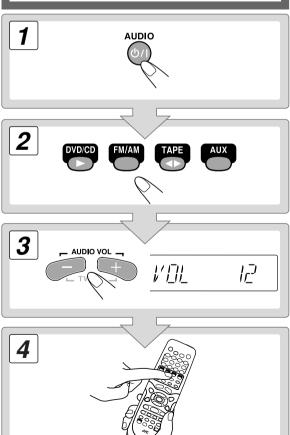
Indications on the main display while operating a disc

indications on the main display while operating a	
While playing back a disc:	While disc play is stopped:
• DVD Video:	• DVD Video:
Chapter no. Elapsed playing time	Total titles/playlists no.
5 4 3 2 3)	
• By pressing SHIFT+0 (DISPLAY), you can see the current title and chapter numbers for a few seconds.	
• DVD-VR:	• DVD-VR:
Chapter no. Elapsed playing time	
	\$ P5 /
By pressing SHIFT+0 (DISPLAY), you can see the clock indication.	
• DVD Audio:	• DVD Audio:
Track no. Elapsed playing time	Group no. Track no.
By pressing SHIFT+0 (DISPLAY), you can see the current group and track numbers for a few seconds.	
• Audio CD:	Audio CD:
Track no. Elapsed playing time	Total track no. Total playing time
5: 17 3: 7: 17	
SVCD/VCD: Track no. Elapsed playing time*	SVCD/VCD: Total track no.* Total playing time
	5
* "PBC" appears while playing a disc with PBC.	*Changes to "PBC" when stopping PBC playback.
• MP3:	• MP3:
Track no. Elapsed playing time	Current group no. Current track no.
5 MP3 4 5 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
By pressing SHIFT+0 (DISPLAY), you can see the current group and track numbers for a few seconds.	
• JPEG:	• JPEG:
Group no. File no.	Current group no. Current file no.
	533 F 119
	<u>I</u>

[•] If "RESUME" is "ON" (see page 38), "RESUME" appears when you stop playback (except for Audio CD and MP3/JPEG discs).

Daily Operations—Playback





1 Turn on the power.

The STANDBY lamp on the main unit turns off.

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

2 Select the source.

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

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

To turn off (standby) the System



The STANDBY lamp on the main unit lights up.

• 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 on the headphones.

• Disconnecting the headphones will activate the speakers again.

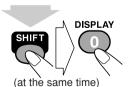


DO NOT turn off (standby) the System with the volume set to an extremely high level; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

To turn off the clock indication



While the System is turned off...



 Press the button again, to display the clock indication.

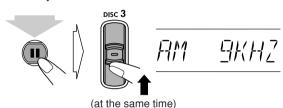
Listening to the Radio

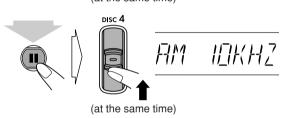


To select the AM tuner interval spacing

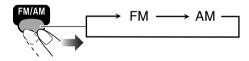
Some countries space AM stations 9 kHz spacing, and other countries use 10 kHz spacing.

You can change the AM tuner intervals while the System is on stand by and the last selected source is AM.



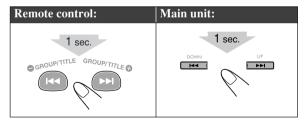


To select the band (FM or AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display.

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

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

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 the stations Remote (NLY)



You can preset 30 FM and 15 AM stations.

1 Tune in to a station you want to preset.

- You can also store the monaural reception mode for FM preset stations if selected.
- **2** Activate the preset number entry mode.



- Finish the following process while the indication on the display is flashing (5 seconds).
- **3** Select a preset number for the station.



Ex.:

To select preset number 5, press 5.

To select preset number 15, press +10, then 5. To select preset number 30, press +10, +10, then



4 Store the station.

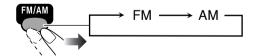




To tune in to a preset station



1 Select a band—FM or AM.



2 Select a preset number you have stored.



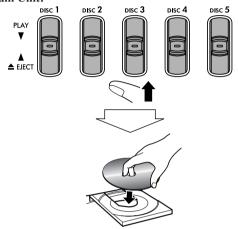
• You can also use the **◄◄/▶▶** to select a preset station.

Playing Back a Disc

• For MP3/JPEG playback, see "Operations on the CONTROL Screen" on page 29.

To insert a disc

You can insert a disc while playing another source. **Main Unit:**



To close the disc tray and start playback, press down the same lever again.

- When current selected disc tray open, you can use DVD/CD ► to close the disc tray and start playback (depending on how the disc is programmed internally).
- If you press up ▲ EJECT for a tray to open it with another tray already open, the other tray automatically closes, and then the tray you have pressed up ▲ EJECT comes out.

To start:	To pause:	To stop:
Or Or	To release, 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" appears on the display when you stop playback.)

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

 When operating the System, the on-screen guide icon (see the following table) appears on the TV screen.
 To deactivate the on-screen guide icons, see "ON SCREEN GUIDE" on page 38.

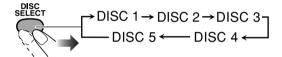
On-screen guide icons

- During playback, the following icons may appear on the TV screen:
 - At the beginning of a scene containing multiangle views.
 - At the beginning of a scene containing multiaudio sounds.
 - At the beginning of a scene containing multisubtitles.
- The following icons will be also shown on the TV screen to indicate your current operation (for more details, see page 26).



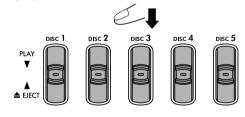
To select a disc

Remote Control:



 When current source is not disc, press DVD/CD ► to select the disc player as the source during "PLAY" flashing on the display.

Main Unit:



To select a title/group (Solution)
While playing DVD or MP3...



- Group name appears on the display for MP3.
- This feature may not work for some discs.

To select a chapter/track

While playing a disc except SVCD/VCD with PBC...



• First time you press |◄◄, you can go back to the beginning of the current chapter/track.

To locate a particular portion (Source) (Source)



While playing a disc except MP3/JPEG...



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

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

To locate an item directly (SOULY N)



You can select a title/playlist/chapter/track directly and start playback with the numeric buttons.

• For DVD Video/DVD-VR, you can select a title/playlist/ track before starting playback, a chapter after starting playback.

Ex.:

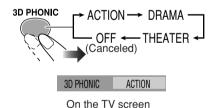
To select number 5, press 5. To select number 15, press +10, then 5.

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

To use 3D PHONIC



While playing...



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

• 3D PHONIC indicator also lights up.

To play back using the disc menu



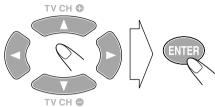
You can operate a disc-DVD Video/DVD Audio/DVD-VR, SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

■ For DVD Video/DVD Audio:

1 Show the disc menu.



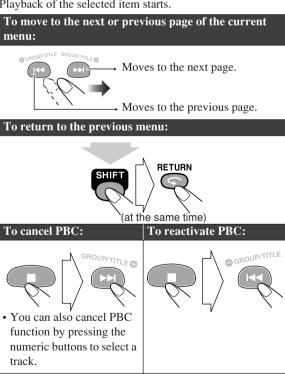
2 Select an item on the disc menu.



- You cannot use this function while displaying the pull-down menu (see page 27).
- With some discs, you can also select items by entering the number using the numeric buttons.

■ 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 with the numeric buttons (see "To locate an item directly" on the left for how to use the numeric buttons). Playback of the selected item starts.

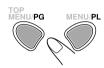


■ For DVD-VR:

DVD-VR format has the following two ways of playing.

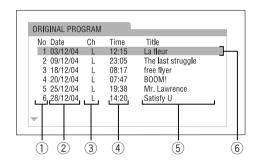
- Original program (ORIGINAL PROGRAM): The System can play back items in a DVD-VR disc in the recorded order conventionally.
- Playlist (PLAY LIST):
 The System can play back the playlist edited with the DVD recording equipment.

1 Show the ORIGINAL PROGRAM or PLAY LIST.

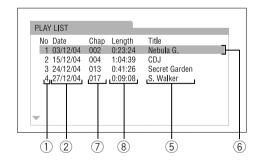


TOP MENU/**PG:** shows the ORIGINAL PROGRAM. MENU/**PL:** shows the PLAY LIST. (The playlist appears only when the playlist is on the DVD-VR disc.)

Ex.: ORIGINAL PROGRAM:

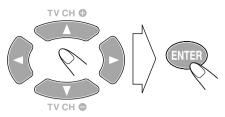


Ex.: PLAY LIST:



- (1) Listed number
- ② Recording date
- ③ Recorded channel
- 4 Recording time
- 5 Title/Playlist
- 6 Highlight bar (current selection)
- 7 Chapters included
- 8 Playback time

2 Select an item on the disc menu.



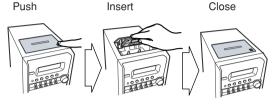
• You cannot use this function while **displaying the pull-down menu** (see page 26).

With some discs, you can also select items by entering the number using the numeric buttons.

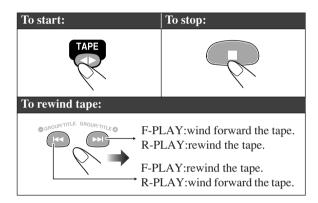
Playing Back a Tape

To insert a tape

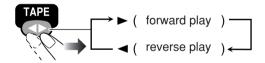
You can play back type I tapes.



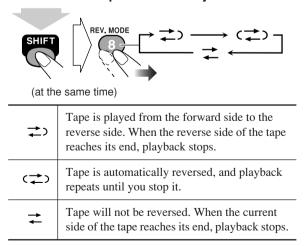
With the tape side facing backside



To change the tape running direction



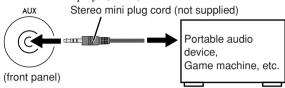
To reverse the tape automatically



Playing Back from Other Equipment

To connect other equipment

By using a stereo mini plug cord (not supplied), you can connect other 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.

• Refer to the manuals supplied with the other equipment.

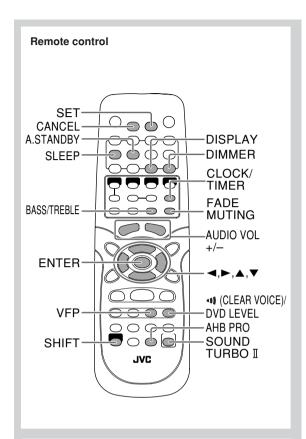
IMPORTANT

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

To select other equipment for the source



Daily Operations—Sound&Other Adjustments

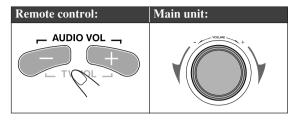




Adjusting the Volume



You can adjust the volume level from level 0 (VOL MIN) to level 31 (VOL MAX).



To drop the volume in a moment





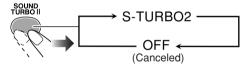
To restore the volume, press again, or adjust the volume level.

Adjusting the Sound



To emphasize the sound—SOUND TURBO II

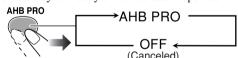
This function emphasizes the sound.



To emphasize heavy bass sound—AHB PRO



This function dynamically enhances bass response.



To adjust the tone—BASS/TREBLE



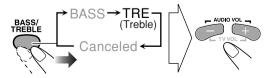
You can adjust the bass and treble level from 0 to +5.

• When you adjust this setting, the SOUND TURBO II is canceled automatically.

To adjust the bass



To adjust the treble



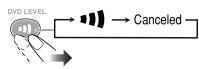
Making DVD Voice Clear—CLEAR VOICE





This function allows you to easily understand the dialog of DVD even with the volume turned down.

• This function only works for center-channel signal encoded multi-channel disc.

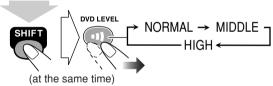


Presetting Automatic DVD Sound Increase





Some DVD Videos/DVD Audios are recorded at a lower sound volume level than that of other discs or sources. You can increase the level for the currently loaded DVD Video/ DVD Audio.



NORMAL	Original recording level.
MIDDLE	Output level is increased (less than "HIGH").
HIGH	Output level is increased (more than "MIDDLE").

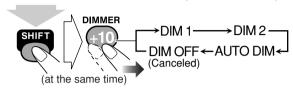
• Once the current DVD Video/DVD Audio is ejected, this setting is canceled and set automatically to "NORMAL."

Changing the Display Brightness—DIMMER



You can dim the display window.

• This function cannot use when the System is on standby.



DIM 1	Dims the display.
DIM 2	Erases the display illumination.
AUTO DIM	Erase the display illumination when playback starts. • This function works only when playing DVD/VCD/SVCD or JPEG files. • The display illuminates when playback stops.

Changing the Picture Tone-VFP (Video









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

To select a preset picture tone

1 Activate VFP.



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

On the TV screen

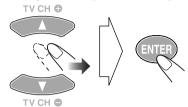
2 Select a preset picture tone.



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

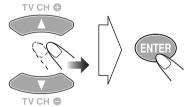
To adjust the picture tone

- **1** Select "USER1" or "USER2."
 - Follow steps 1 and 2 explained on page 17.
- **2** Select a parameter you want to adjust.



GAMMA	Adjust if the neutral color is bright or dark (-3 to +3).
BRIGHTNESS	Adjust if the entire picture is bright or dark $(-8 \text{ to } +8)$.
CONTRAST	Adjust if the far and near positions are unnatural (–7 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.

To erase the screen, press VFP again.

Setting the Clock (SOULY N)







Without setting the built-in clock, you cannot use the Daily Timer or Recording Timer (see page 33), and Sleep Timer (see next page).

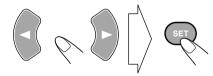
- To exit from the clock setting, press CLOCK/TIMER as required.
- To go back to the previous step, press CANCEL.

1 Activate the clock setting mode.



• If you have already adjusted the clock before, press the button repeatedly until the clock setting mode is selected (see page 33).

2 Adjust the hour.

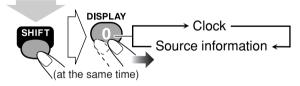


3 Adjust the minute.



Now the built-in clock starts working.

To check the current clock time during play

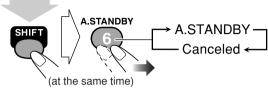


• While playing a DVD or MP3, you cannot check the current clock time (see page 9).

Turning Off the Power



To turn off the System after playback is over— Auto Standby

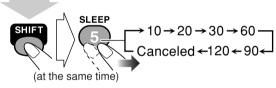


When Auto Standby is in use, the A.STANDBY indicator lights on the display. When the disc play stops, the A.STANDBY indicator starts flashing. If no operation is done for about 3 minutes while the indicator is flashing, the System turns off (in standby) automatically.

• Auto Standby does not work while you are listening to radio (FM/AM) and the external component (AUX).

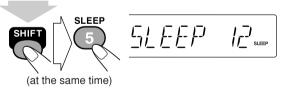
To turn off the System after a certain period of time—Sleep Timer

1 Specify the time (in minutes).



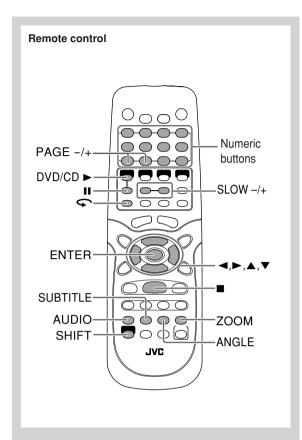
- SLEEP indicator also lights up on the display.
- **2** Wait until the set time goes off.

To check the time remaining until the shut-off time



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

Unique Disc Operations



Selecting the Sound Track (Remote NILY) >>>>





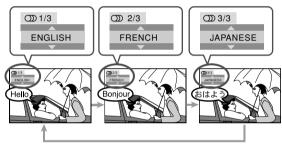
For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For SVCD/VCD/DVD-VR: While playing back a track, you can select the audio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

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



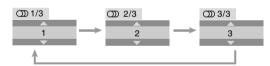
While playing a DVD Video...

Ex.:

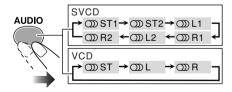


While playing a DVD Audio...

Ex.:



While playing an SVCD/VCD/DVD-VR...



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

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

Selecting the Subtitle Language (Bendle)»)



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

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

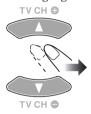
• You can also select the subtitle language using the onscreen bar (see page 26).

While playing a DVD Video...

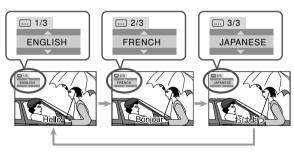
1 Display the subtitle selection window.



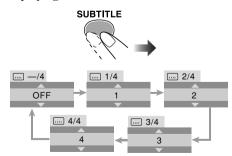
2 Select the subtitle language.



Ex.:



While playing an SVCD...



Selecting the View Angle Remote NLY

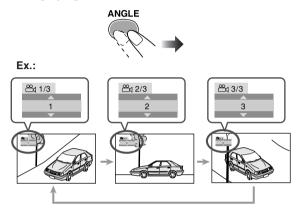




While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- This function is only used while playing DVD Video.
- You can also select the multi-view angles using the onscreen bar (see page 26).

While playing...



Playing Back a Bonus Group (Bonus)





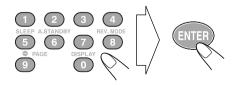
Some DVD Audios have a special group called "bonus group" whose contents are not open to the public.

- This function is only used while playing 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).
- When the bonus group is detected, BONUS indicator lights up.
- For how to select the group, see "To select a title/group" on page 12.

$m{2}$ Enter the key number.



 $oldsymbol{3}$ Follow the interactive instructions shown on the TV screen.

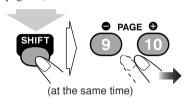
To cancel the key number entry, press ■.

Selecting Browsable Still Pictures (Remote only)



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

- This function is only used while playing DVD Audio.
- When a DVD Audio with browsable still pictures is detected, B.S.P. indicator lights up.
- 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 26).



Special Effect Playback (Remote ONLY)





Still picture playback

To start still picture playback:	To resume normal playback:
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 ▶.

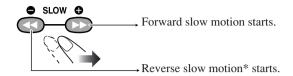
Slow-motion playback

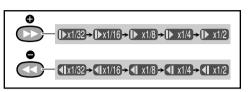
1 While playing...



Still picture playback starts.

2 Select slow-motion speed.





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

To resume normal playback, press DVD/CD ▶.

To replay the previous scenes (One touch replay function) Remote (%)

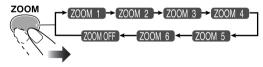
• This function is used while playing DVD Video/DVD-VR.

RETURN

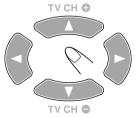
The playback position moves back about 10 seconds before the current position (only within the same title/playlist).

Zoom Remote ONLY

1 While playing...



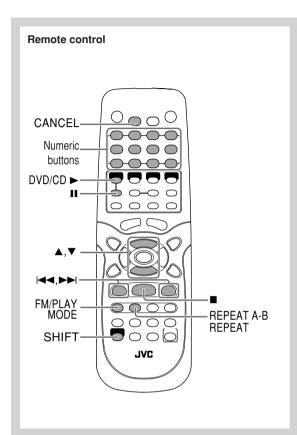
- · As the number increases, magnification also increases.
- **2** Move the zoomed-in position.

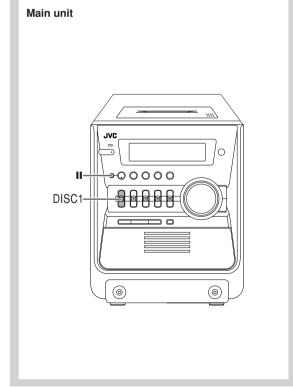


To resume normal playback, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

To use this function for JPEG (still pictures), see "To zoom in the still picture" on page 30.

Advanced Disc Operations





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

1 Before starting playback, activate Program Play.







On the TV screen

- **2** Select chapters/tracks you want to program with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - For DVD Video/MP3:
 - ① Select a disc number on "Disc" column.
 - ② Select a group/title number on "Group/Title" column.
 - 3 Select a track/chapter number on "Track/Chapter" column.

• For SVCD/VCD/CD:

- ① Select a disc number on "Disc" column.
- 2 Select a track number on "Track/Chapter" column.
- Even if the disc is not in the selected tray, the System may prompt for the group number entry as well, however, during playback, the System will ignore these entries.
- If you have programmed a group/title number for SVCD/VCD/CD, the System will ignore the group/title number and play the track number you have programmed.
- **3** If you want to program another chapters or tracks, repeat the step **2** above.

to be continued...

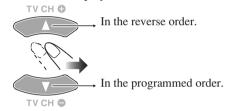
4 Start playback.



Playback starts in the order you have programmed.

To skip a step:	To pause:	To stop:
● GROUP/TITLE GROUP/TITLE ●	To release, press DVD/CD ▶.	

To check the programmed contents Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
TV/VIDEO CANCEL	
To add steps in the program:	
Repeat step 2 on page 23.	

To exit from Program Play Before or after playback...



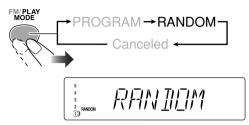
Playing at Random—Random Play (Romote)»)



You can play the chapters or tracks of all loaded discs at random.

• Random Play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in random order. Random Play continues to the disc on the next tray when all the chapters or tracks in the current disc are played once (when Repeat Play is not activated).

• Playback ends when all the discs are played once (when Repeat Play is not activated).

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

• During Random Play, you cannot select the disc to play by using DISC SELECT.

To exit from Random Play Before or after playback...



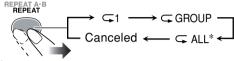


• You can also select the repeat mode using the on-screen bar (see page 27).

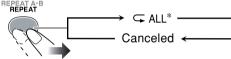
Repeat Play

• For DVD Video/DVD-VR:

During playing...

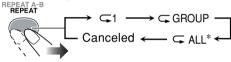


Before playback...



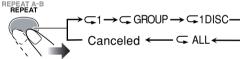
• For DVD Audio:

During or before playback...



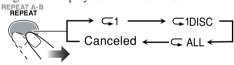
• For MP3:

During or before playback...

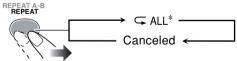


• For CD/SVCD/VCD:

During or before playback without PBC...

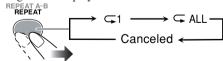


During playback with PBC...



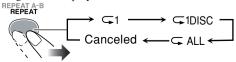
• For Program Play:

During or before playback...



• For Random Play:

During or before playback...



→ ALL*	Repeats the discs in all tray or all programmed tracks.
5 1	Repeats the current chapter/track.
Ģ GROUP	Repeats the current title/group/playlist.
G 1DISC	Repeats the current disc.
Canceled	Cancels Repeat Play mode.

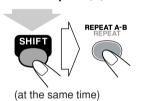
* When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, this function may not work correctly.

A-B Repeat

You can repeat playback of a desired portion by specifying the beginning (point A) and the ending (point B).

- A-B Repeat cannot be used for MP3 or for some DVDs.
- A-B Repeat can be used within the same title/playlist while playing a DVD Video/DVD-VR, and within the same track for the other discs.

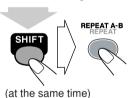
7 While playing (without PBC for SVCD/VCD), select the start point (A).



► A- lights on the display. • 🖒 A- appears on the

TV screen if the TV is turned on.

2 Select the end point (B).



• ► A-B appears on the TV screen and A-B Repeat

 You can search for the end point using ▶►.

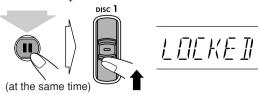
To cancel A-B Repeat, press REPEAT A-B again while holding SHIFT.

Prohibiting Disc Ejection—Child Lock

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

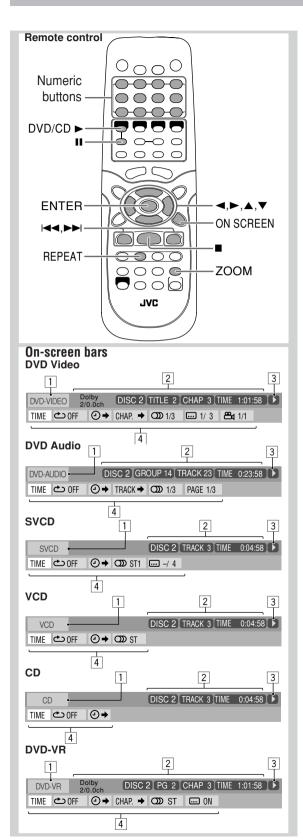
• This is possible while the System is on standby and the clock indication is turned on (see page 10).

While the disc trays are closed...



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

On-Screen Disc Operations



On-screen Bar Information



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

1 Disc type	
2 Playback information	
Indication	Meanings
Dolby 2	Audio format
0.0ch	Channel number
(DISC 2)	Current disc
TILE 2	Current title/program list/playlist (for DVD-VR; "PG" or "PL" appears instead of "TITLE").
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
(TIME 1:25:58)	Time indications
3 Operation modes	
Indication	Meanings
	Playback
>> / (()	Forward/Reverse search
	Forward/Reverse slow-motion
	Pause
	Stop
4 Function icon	s (on the pull-down menu)
Indication	Meanings
TIME	Select to change the time indication.
₾ OFF	Select to repeat playback.
⊕→	Select for time search.
CHAP. →	Select for chapter search.
TRACK→	Select for track search.
◯ 1/3	Select to change the audio language or channel (see also page 20).
1/3	Select to change subtitle language (see also page 21).
2 1/3 1/3 1/3 1/3 1/3 1/3 1/3 1/3 1/3 1/3	Select to change the view angle (see also page 21).
PAGE 1/5	Select to change the page (see also page 22).

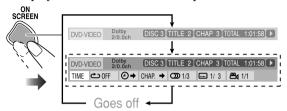
 You cannot use ◄, ►, ▲, and ▼ buttons to select the disc menu while displaying the pull-down menu.

Operations Using the On-screen Bar (South 1987)

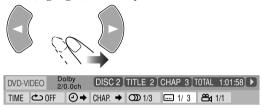


Ex.: Selecting a subtitle (French) for DVD Video: While a disc is selected as the source...

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



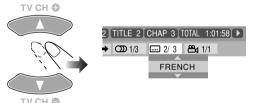
2 Select (highlight) the item you want.



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



For detailed operations of the following functions, see also "Operations Using the On-screen Bar" on the left.

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

To erase the on-screen bar



Repeat Play

- See also page 25.
- **1** While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
- 2 Select OFF.
- **3** Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks (not for some DVD Videos).
A-B	Repeats a desired portion (see next column).
TITLE	Repeats the current title*.
GROUP	Repeats the current group.
DISC	Repeats the current disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK**	Repeats the current track.
OFF	Cancels Repeat Play.

- * During playing DVD-VR, "PG" (Program List) or "PL" (Play List) appears.
- ** During Program Play and Random Play, "STEP" appears.

5 Finish the setting.



A-B Repeat

- See also page 25.
- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select COFF.
- **3** Display the pop-up window.



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.

For DVD Video/DVD Audio/DVD-VR:

You can specify the elapsed time for the current title/playlist.

For CD/SVCD/VCD:

- While playing back, you can specify the elapsed time for the current track except for SVCD/VCD with PBC.
- While stopped, you can specify the elapsed time for the disc except for SVCD/VCD with PBC.
- **1** Display the on-screen bar with the pull-down menu.
- **2** Select ⊙ → .
- **3** Display the pop-up window.



4 Enter the time.

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



Ex.:

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).

5 Finish the setting.



The System starts playing the disc from the selected playing time.

Chapter/Track Search

You can search for the chapter (DVD Video/DVD-VR) 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 with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - To correct a misentry, press the numeric buttons until the desired number shown in the pop-up window.
- **5** Finish the setting.



The System starts playing the searched chapter or track.

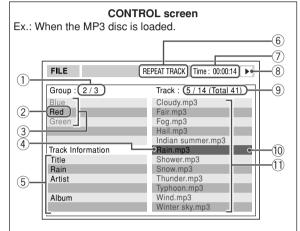
Operations on the CONTROL Screen (Remote ONLY)



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

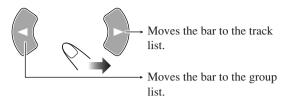
You can search for and play the desired tracks through the CONTROL screen.

• If both types of files (MP3 and JPEG) are recorded on a disc, select the file type to play (see page 37).

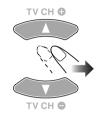


- (1) Current group number/total group number
- (2) Current group
- 3 Group list
- 4 Current track (in blue)
- 5 Track information (ID3 Tag Version 1.0: only for MP3)
- 6 Repeat Play setting
- 7 Elapsed playing time of the current track (only for MP3)
- (8) Operation mode icon
- (9) Current track number/total number of tracks in the current group (total number of tracks on the disc)
- (10) Highlight (green) bar
- 11 Track list

To move the highlight bar between group list and track 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 disc, the selected track starts playback automatically.

To start playback



Playback starts with the selected track.

Pressing DVD/CD ► also starts playback.

If the track is JPEG, selected still picture is displayed until you change it.

Unique JPEG Operations



You can enjoy the Slide-show playback for JPEG files. Each track (still picture) on the disc is shown on the screen for few seconds, then changes one after another.

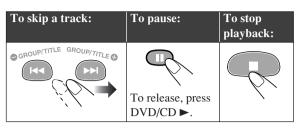
To start the Slide-show while the CONTROL screen is on the $TV\ screen$



- Once the Slide-show starts, the CONTROL screen goes off
- Some discs automatically start the Slide-show.

To cancel the Slide-show and display the current still picture





To repeat Slide-show

During or before playback...



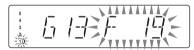
Ģ GROUP	Repeats the current group.
→ 1DISC	Repeats the current disc.
→ ALL	Repeats all discs.

To zoom in the still picture

• You cannot zoom in the still picture during the Slide-show.

1 While playing...



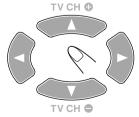


2 Change the magnification.



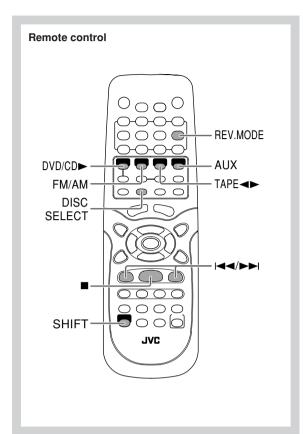
As the number increases, magnification also increases.

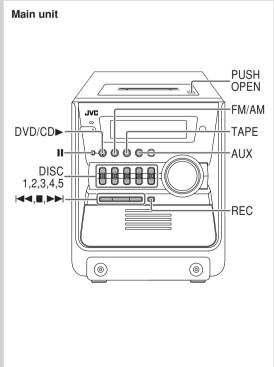
3 Move the zoomed-in position.



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 15.

1 Insert a recordable cassette.

Insert Push Close

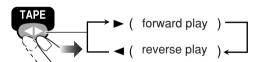


With the tape side facing backside

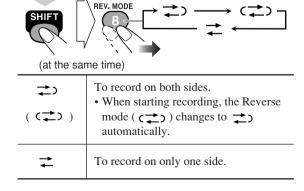
2 Check the tape running direction and Reverse mode settings on the display.



To change the direction



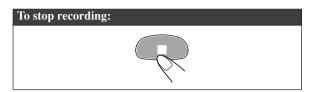
To change the Reverse mode if necessary



- 3 Select and start playing the source—"FM," "AM," "DVD/CD," or "AUX IN."
 - When recording a disc, you can also use "Synchronized Disc Recording" (see next page). to be continued...

4 Start recording.





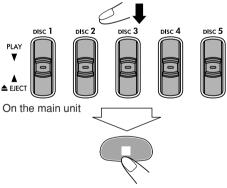
Synchronized Disc Recording



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

To record the entire disc

- **1** Load a disc and insert a recordable cassette.
 - If the current playing source is not the CD player, press DVD/CD ▶, then ■.
- 2 Check the tape running direction and Reverse mode settings on the display.
 - See step 2 of "Recording on a Tape" on page 31.
- **3** Select the disc number you want to start recording from.



4 Start recording.



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

On the main unit

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

To record a "Live" disc

It will not be desirable to put 4-second blank portions between the tunes recorded on the tape.

To record the entire disc without any interruption recorded, start playing the disc (press DVD/CD ►), then pause the disc play (press ■) and go back to the beginning of the current chapter/track (press ◄◄) before pressing REC.

To record Program Play or Random Play

- 1 Select Program Play (and make a program) or Random Play, but do not start playback.
- 2 Press REC to start recording.

To record only your favorite track

You can specify tracks to be recorded on the tape while listening to a disc.

- This function is not available for DVD Video.
- **1** Start playing a disc.



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



On the main unit

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

3 Repeat steps 1 and 2 to record other tracks you want.

• You can exchange the discs if necessary.

To protect your recording

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

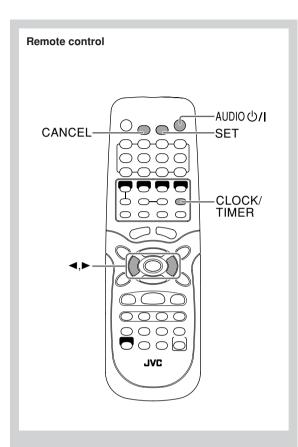
To protect your recording, remove these tabs.



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



Timer Operations

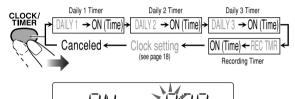


Setting the Timer (Remote ONLY)



Using Daily Timer, you can wake up with your favorite music. You can store three Daily Timer and one Recording Timer settings; however, you can activate only one of the timers at a time.

- To exit from the timer setting, press CLOCK/TIMER as required.
- To correct a misentry during the process, press CANCEL. You can return to the previous step.
- 1 Select one of the timer setting modes you want to set— Daily 1 ON time, Daily 2 ON time, Daily 3 ON time, or Recording ON time.

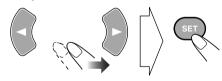


Ex.: When Daily Timer 1 setting mode is selected

- When the clock has not been adjusted, pressing CLOCK/TIMER makes the System enter the clock setting mode (see page 18).
- **2** Make the timer setting as you want.

Repeat the following operations until you finish setting in the following order—

For Daily Timers:



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



- **4** For "TUNER FM" and "TUNER AM": Select a preset channel (see page 11).
 - Select "FM --" or "AM --" for the last selected

For "DISC": Select the disc number, title/group/ playlist number, then the chapter/track number (see page 12).

• Select "DISC -" for the last selected disc tray number.

For "AUX": Connect the other equipment (see page 15).

to be continued...

5 Select the volume level.

You can select the volume level ("1" to "MAX" and "VOL --"). If you select "VOL --," the volume is set to the last level when the System has been turned off.

Once settings are complete, the Timer setting information appears in sequence.

For Recording Timer:

- 1) Set the hour then the minute for on-time.
- 2 Set the hour then the minute for off-time.
- 3 Select "TUNER FM" or "TUNER AM."
- **4** Select a preset channel.
- (5) Select the volume level.
- **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 (②) indicator and timer number indicator (1/2/3) 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) or another timer is activated.

When the on-time comes

The System turns on, tunes in to the specified station or start playing the loaded disc with the specified track, and sets the volume level gently to the preset level.

- You cannot start the specified title/playlist/chapter/ track of DVD Video/DVD-VR/SVCD/VCD, though you can select it at the timer setting.
 - DVD Video/DVD-VR/SVCD/VCD starts playback from the beginning.
- While Daily Timer is working, the timer (②) indicator and timer number indicator (1/2/3) flash on the display.

When the off-time comes

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

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

How Recording Timer actually works

When Recording Timer has been set, the timer (\bigcirc) 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 gently to preset level and starts recording.

When the off-time comes

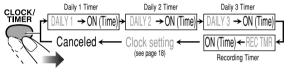
The System stops recording, and turns off (stands by).

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

To turn off the Timer after its setting is done

Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.

1 Select the Timer you want to cancel.





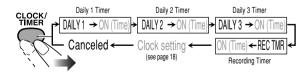
Ex.: To cancel Daily Timer 1

2 Turn off the selected Timer.



To turn on the Timer

1 Select the Timer (DAILY 1, DAILY 2, DAILY 3, or REC) you want to activate.



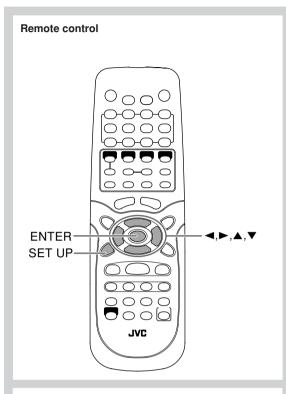


Ex.: When Daily Timer 1 is selected

2 Activate the selected Timer.



Setup Menu Operations

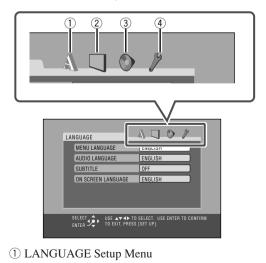


Setup Menu Icons

② PICTURE Setup Menu 3 AUDIO Setup Menu 4 OTHERS Setup Menu

The icon for the selected Setup Menu will be highlighted.

Ex.: LANGUAGE Setup Menu is selected.



Operating Procedure (Remote NLY)







You can use the Setup 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 Display the Setup Menu.



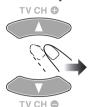


2 Select one of the Setup Menus.





 ${\it 3}$ Select the item you want to adjust.



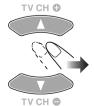


4 Display the pop-up window.





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





to be continued...

6 Finish the setting.



7 Repeat steps **3** to **4** to set other items on the same Setup Menu.

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

To exit from the Setup Menu



■ LANGUAGE Setup Menu

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, RUSSIAN, 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, RUSSIAN, 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, RUSSIAN, 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 screen from—ENGLISH, CHINESE and SPANISH.

■ PICTURE Setup Menu

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



MONITOR TYPE

Select the monitor type of your TV to play DVD Video/DVD-VR recorded with aspect ratio of 16:9.

For the multi-color system TV

When you use a multi-color system TV, you can change the color system of the System automatically by selecting "MULTI" options as the monitor type. In this case, the color system of the System is changed to match the color system of the loaded disc regardless the VIDEO OUT SELECT or setting for better picture quality (see "To set the video output selector" on page 6).

Select one of the following:

16:9 / 16:9 MULTI (Wide television conversion):

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

4:3 LB (Letter Box) / 4:3 MULTI LB:

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

4:3 PS (Pan Scan) / 4:3 MULTI PS:

Select when the aspect ratio of your TV is 4:3. 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 picture on the TV screen becomes dark when
	no operation is done for about 5 minutes.
OFF:	To cancel the screen saver.

FILE TYPE

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

Select one of the following:

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

■ AUDIO Setup 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:

PCM ONLY:	To connect to a linear PCM digital equipment.	
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 OUT Signals" on page 46.

DOWN MIX

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

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

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 recorder, etc.

D. (Dynamic) 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 apply the compression effect to the downmixed multi-channel sound.
ON:	To always apply the compression effect for all Dolby Digital software. Loud sound will become low and vice versa.

■ OTHERS Setup Menu

You can change some other convenient functions.



RESUME

You can activate or deactivate Resume for disc playback (see pages 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 pages 12 and 26).

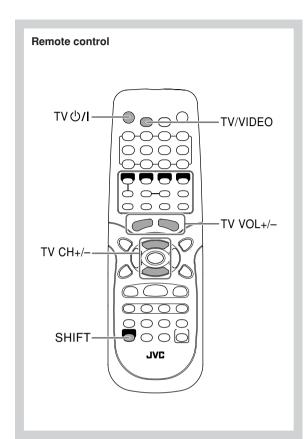
• When recording the picture on a VCR, select "OFF" to avoid recording the guide icons on your video tape.

Select one of the following:

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

Operating the TV





Operating TV (Remote SNLY)



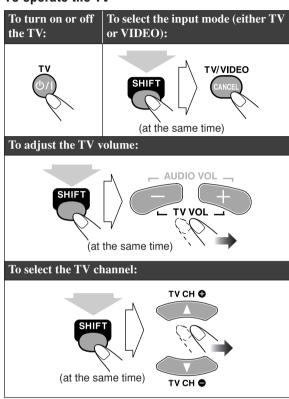






You can operate the JVC's TV using this remote control.

To operate the TV



Additional Information

Learning More about This System





Getting Started (see pages 3 to 6)

Changing the Scanning Mode:

• To enjoy the progressive video picture, connect a TV with the progressive video input using component video cord.

Daily Operations—Playback (see pages 10 to 15)

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:

- When using an 8 cm disc, place it on the inner circle of the
- 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 malfunction of this System.
- When discs* in more than one tray are loaded on the disc trays, they are played in sequence as follows. (When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, playback of the disc next to these discs will not start.):

Ex.: When DISC 2 is selected:

DISC 2⇒DISC 3⇒DISC 4⇒DISC 5⇒DISC 1⇒ (then stops)

- * When no disc is loaded on the disc tray, that disc number is skipped.
- You can exchange discs while playing or selecting another
- Some DVD Audio discs prohibit downmixed output. 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.
- 3D Phonic setting is also applied to the optical digital output signals through the OPTICAL DIGITAL OUT terminal.
- For DVD-VR playback...
 - When making a disc, use the UDF-Bridge format.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
 - If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.
 - You cannot use reverse slow motion, Program Play, and Random Play.
- For MP3/JPEG playback...
 - This System cannot play "packet write" discs.
- MP3/JPEG discs require a longer readout time than regular CDs. (It depends on the complexity of the group/ file configuration.)

- Some MP3/JPEG files cannot be played back and will be skipped. This results from their recording processes and conditions.
- When making MP3 discs, use ISO 9660 Level 1 or Level 2 for the disc format.
- This System can play back MP3/JPEG files with the extension code <.mp3> or <.jpg> (regardless of the letter case-upper/lower).
- It is recommended that you make each MP3 file at a sampling rate of 44.1 kHz and at a bit rate of 128 kbps.
- This System can recognize the total of 1000 tracks and of 99 groups (each group can contain up to 150 tracks). Those exceeding the maximum number cannot be recognized.
- This System can show up to 23 characters of the file (track) names (except for extension) and 30 characters of the ID3 tags on the display and the TV screen.
- Some characters or symbols will not be shown (and will be blanked) on the display.
- When using Resume on SVCD or VCD with PBC, the playback might start on a position slightly different from where you have stopped.
- You can use Resume only for the DVD/SVCD/VCD except for some discs-depending how the disc is programmed.

Playing Back a Tape:

- It is not recommended to use the C-120 or longer tapes. These tapes easily jams in the pinch rollers and capstans, and may cause characteristic deterioration.
- When you open the cassette holder, the reverse mode is set

Daily Operations—Sound&Other Adjustments (see pages 16 to 19)

Adjusting the Volume:

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

Adjusting the Sound:

• This function also affects the sound through the headphones.

Setting the clock:

- "0:00" will flash on the display until you set the clock.
- The clock may gain or lose 1 to 2 minutes per month. If this happens, reset the clock.

Unique Disc Operations (see pages 20 to 22)

- · During slow-motion playback, no sound will be reproduced.
- One touch replay function works only within the same title/ playlist, though it works between chapters.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 23 to 25)

Programming the Playing Order—Program Play:

- If you try to program a 100th track, "MEM FULL (memory full)" appears on the display.
- 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).
- You cannot use Program Play for JPEG or DVD-VR discs.
- You cannot eject tray while in Program Play.

Playing at Random—Random Play:

- The I◄◀ button does not work for skipping chapters or tracks, but only work for going back to the beginning of the current chapter or track.
- You cannot use Random Play for JPEG or DVD-VR discs.

On-Screen Disc Operations (see pages 26 to 30)

- 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 longer time to be shown.)
- This System can play only baseline JPEG files.
 Progressive or lossless JPEG files cannot be played.

Baseline JPEG format: Used for digital cameras,

web, etc.

Progressive JPEG format: Used for web.

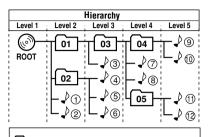
Lossless JPEG format: An old type and rarely used

now.

- This System may not play back JPEG files properly which are not recorded by digital still cameras.
- If progressive or lossless JPEG files are played back, a black screen appears. In this case, stop playback and select a baseline JPEG file. Note that it may take a long time to select another file.

MP3/JPEG groups/tracks configuration

This System plays back the tracks as follows.



01 Group with its play order

♪
⑤ Track with its play order

Advanced Tape Operations (see pages 31 and 32)

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 end of cassette tapes. Thus, when recording CDs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If you start recording with no cassette or 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 can also change Reverse mode setting (→) and →)
 after starting recording.
- You cannot open or close the disc tray while recording.

Synchronized Disc Recording:

When the tape reaches its end in the forward direction (>) during recording with Reverse mode set to >> , the last tune will be re-recorded at the beginning of the reverse side.

Timer Operations (see pages 33 and 34)

- 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.
- If you set the Sleep Timer after Daily Timer starts playing the selected source, Daily Timer is canceled.
- 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.
- You cannot use the SLEEP timer while activating the Recording timer.

Setup Menu Operations (see pages 35 to 38)

LANGUAGE Setup 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 Setup Menu—MONITOR TYPE:

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

AUDIO Setup Menu—DOWN MIX:

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

OTHERS Setup Menu—ON SCREEN GUIDE:

 Setup Menus 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 and mechanism clean.

Handling discs

- When removing the disc from its case, hold 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.
- 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.

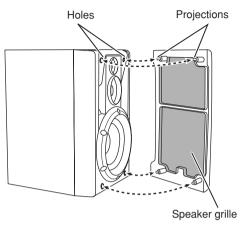
To keep the best recording and playback sound quality:

- 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 water-diluted 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 strongly.
- 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.

To remove the speaker grilles





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 you finish.

⇒ There is a time limit. Repeat the 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.
- \Rightarrow Point it at the remote sensor on the front panel.
- ⇒ Signals cannot reach the remote sensor. More closer to the System.
- ⇒ The batteries are exhausted.

No sound is heard from the speakers.

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

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

- ⇒ The video cord connections are incorrect or loose.
- ⇒ The System is connected to a TV which does not support progressive scanning.

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

⇒ Select "4:3 LB/4:3 MULTI LB" for "MONITOR TYPE" (see page 36).

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.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can show ID3 Tag Version 2.4 or earlier.

MP3/JPEG 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/JPEG tracks are not played back.

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

"NO AUDIO" appears.

⇒ This System cannot play back illegally produced DVD Audio discs.

"LR ONLY" appears.

⇒ Some DVD Audio discs prohibit downmixed output. When you play back such a disc, this System plays back the left front and right front signals only.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- \Rightarrow Child Lock is in use (see page 25).

Tape Operations:

The cassette holder cannot be opened.

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

Impossible to record.

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape (see page 32).

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.

Setup Menu Operations:

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 SUBTITLE after starting play (see page 21).

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 20).

Language Code List

AA	Afar
AB	Abkhazian
AF	Afrikaans
AM	Ameharic
AR	Arabic
AS	Assamese
AY	Aymara
AZ	Azerbaijani
BA	Bashkir
BE	Byelorussian
BG	Bulgarian
ВН	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

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
TO	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

OPTICAL DIGITAL OUT Signals

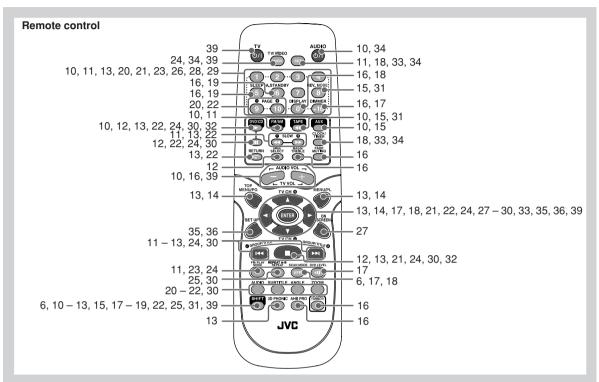
DIGITAL AUDIO OUTPUT	Output Signals			
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY	
DVD Video				
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹			
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM			
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM	
with DTS	DTS bitstream	48 kHz, 16 bit	48 kHz, 16 bit Linear PCM	
DVD Audio				
with 48/96/192 kHz, 16/20/24 bit Linear PCM	No output* ²			
with 44.1/88.2/176.4 kHz, 16/20/24 bit Linear PCM	No output* ³			
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM	
with DTS	DTS bitstream	48 kHz, 16 bit	Linear PCM	
DVD-RW/RAM/ROM in DVD-VR format	48 kHz, 16 bit Linear PCM			
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM/48 kHz, 16 bit Linear PCM		Linear PCM	
CD with DTS	DTS bitstream	44.1 kHz, 16 bi	t Linear PCM	
MP3 disc	32/44.1/48 kHz, 16 bit Linear PCM			

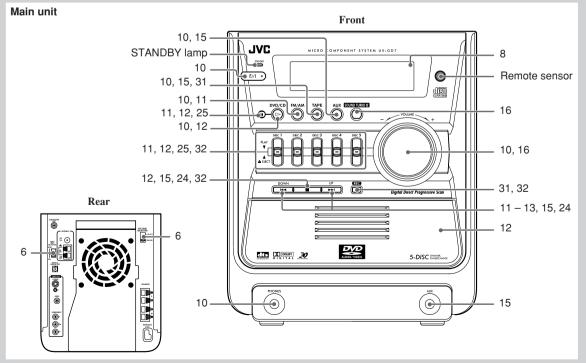
^{*1} While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUT terminal if the discs are not copy-protected.

^{*2} When the disc is not copyright protected, "48 kHz, 16 bit Linear PCM" signal is output. *3 When the disc is not copyright protected, "44.1 kHz, 16 bit Linear PCM" signal is output.

Parts Index

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







Amplifier section

Output Power: 140 W (70 W+70 W) at 6 Ω (10% THD)

Analog input:

AUX: Sensitivity/Impedance (at 1 kHz)

 $400 \text{ mV}/47 \text{ k}\Omega$

Digital output:

OPTICAL DIGITAL OUT:

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

VIDEO OUT:

NTSC or PAL selectable Color system: VIDEO (composite): 1 V(p-p)/75 Ω S-VIDEO: Y (luminance) 1 V(p-p)/75 Ω

C (chrominance, burst)

0.286 V(p-p)/75 Ω

1 V(p-p)/75 Ω COMPONENT: (Y) (P_B/P_R) $0.7 \text{ V(p-p)/}75 \Omega$

Tuner section

Speaker terminals: Impedance

FM tuning range: 87.50 MHz – 108.00 MHz AM tuning range: 531 kHz – 1 710 kHz (at 9 kHz)

530 kHz – 1 710 kHz (at 10 kHz)

 $6\Omega - 16\Omega$

For Saudi Arabia only

531 kHz – 1 602 kHz (at 9 kHz) 530 kHz – 1 600 kHz (at 10 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/JPEG

format)

DVD-R (recorded in video/MP3/JPEG

DVD-RW/DVD-RAM (recorded in video/

DVD-VR/MP3/JPEG format)

Horizontal resolution: 500 lines Wow and flutter: Immeasurable

General

Power requirement: AC 110 – 127 / 220 – 240 V \sim

(adjustable with the voltage selector),

50 Hz/60 Hz

Power consumption: 160 W (at operation)

1.3 W (on standby)

Dimensions (approx.): 189 mm x 224 mm x 406 mm

(W/H/D)

Mass (approx.): 6.5 kg

Speakers

Type: 3-way Bass-reflex type

Magnetically shielded Woofer: 12 cm cone x 1

Speaker systems: Squawker: 4 cm cone x 1

Tweeter: 1.5 cm dome x 1

Power handling capacity: 70 W Impedance: 6.0

Frequency range: $45 \text{ Hz} - 20\ 000 \text{ Hz}$

Sound pressure level: 84 dB/W•m

Dimensions (approx.): 165 mm x 286 mm x 237 mm

(W/H/D)

2.8 kg each Mass (approx.):

Supplied Accessories

See page 3.

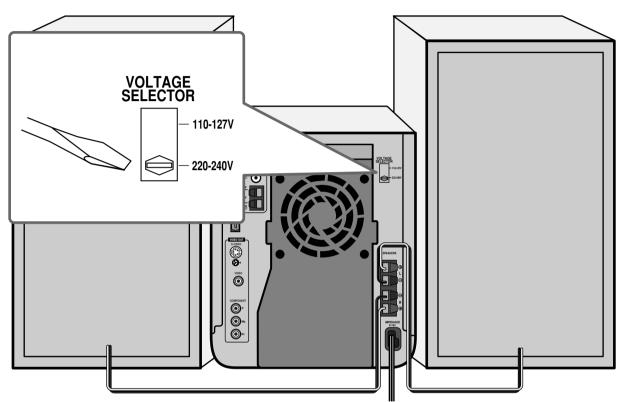
• This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized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

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

Design and specifications are subject to change without notice.

Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia, and U.K.)

ت خط التيار الكهربائي المتردد الرئيسي (المتردد) (لا تنطبق على هونج كونج واوروبا والولايات المتحدة بة وكندا واستراليا والمملكة المتحدة)



CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

هام من اجل خط التيار الكهربائي الرئيسي الرئيسي (المتردد) قبل ادخال قابس الطاقة الكهربائية، تأكد من تطابق منتخب فولطية التيار الكهربائي في بلدك. في حالة خلفية الجهاز مع فولطية التيار الكهربائي في بلدك. في حالة عدم التطابق، اعد ضبط مفتاح منتخب الفولطية على فولطية التيار الكهربائي في بلدك. عدم عمل ذلك، يمكن ان يؤدي التيار الكهربائي في بلدك. عدم عمل ذلك، يمكن ان يؤدي الى حصول ضرر او حريق او صدمة كهربائية.

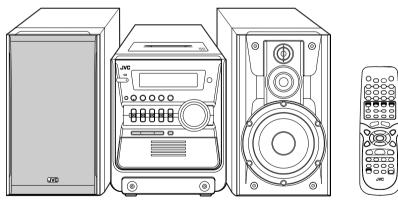


JVC



MICRO COMPONENT SYSTEM

UX-GD7 —Consists of CA-UXGD7 and SP-UXGD7















Digital Direct Progressive Scan



Warnings, Cautions and Others

CAUTION— O/I (standby/on) button!

Disconnect the mains plug to shut the power off completely (all lamps and indications go off). The **७/।** button in any position does not disconnect the mains line.

- When the unit is on standby, the STANDBY lamp lights in red.
- When the unit is turned on, the STANDBY lamp lights goes off.

The power can be remote controlled.

CAUTION

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

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

CAUTION

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

IMPORTANT FOR LASER PRODUCTS

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

CAUTION: Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)

ADVARSEL: Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)

VARO: Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)

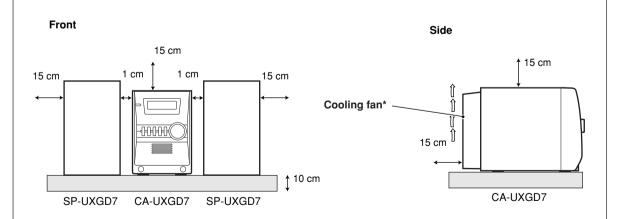
Caution: Proper Ventilation

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

1. Front: No obstructions and open spacing.

2. Sides/ Top/ Back: No obstructions should be placed in the areas shown by the dimensions below.

3. Bottom: Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.



* About the cooling fan

A cooling fan is mounted on the rear panel of the unit to prevent abnormal temperature inside the unit, thus assuring normal operation of theunit. The cooling fan automatically starts rotating to intake external cool air when the volume is increased up to more than a certain level.

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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 and 35°C.
- Install the System in a location with adequate ventilation to prevent internal heat buildup inside 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

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 main unit (see page G-2).

For safety, observe the following carefully:



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

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

How to Read This Manual

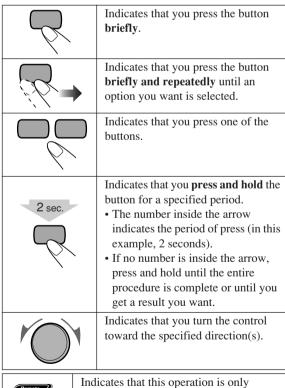






To make in this manual as simple and easy-to-understand as possible, we have adapted the following methods:

- 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" (on pages 40 to 42) and "Troubleshooting" (on page 44), but not in the same section explaining the operations. If you want to know more about the functions, or if you have a doubt about the functions, go to these sections and you will find the answers.





possible using the remote control.



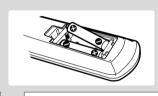
Indicates that this operation is only possible using the buttons and controls on the main unit.

Getting Started

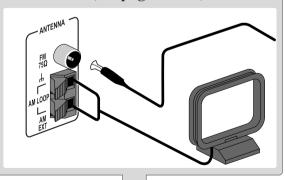
Step 1: Unpack the package and check the accessories.



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 the System.



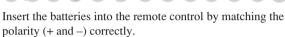
After unpacking, check to be sure that you have all the following items. The number in parentheses indicates the quantity of each piece supplied.

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

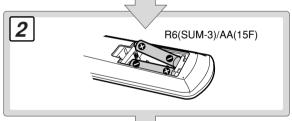
If any item is missing, consult your dealer immediately.

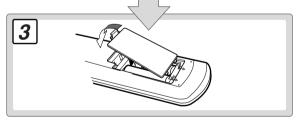
Step 2: Prepare the Remote Control











- DO NOT use an old battery together with a
- 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.

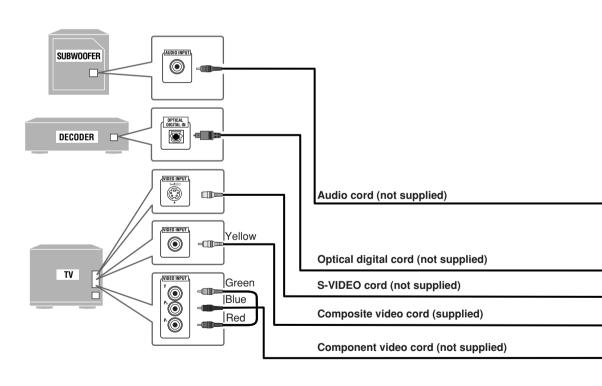
Illustrations of the input/output terminals below are typical examples.

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

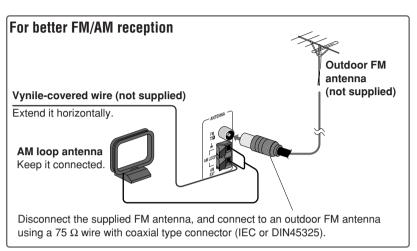
Turn off all components before connections.

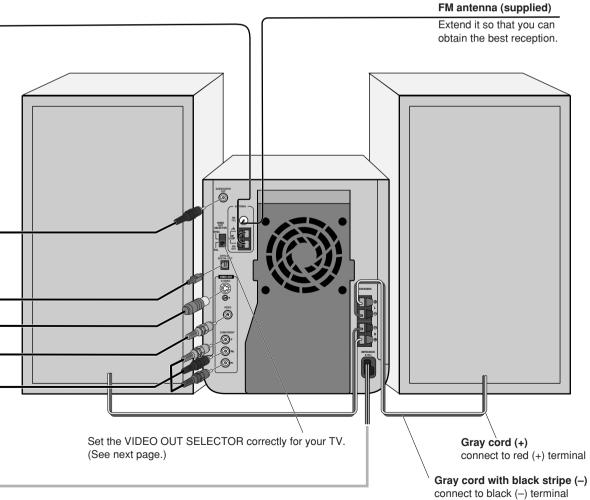
AM loop antenna (supplied)
Turn it until the best reception is obtained.



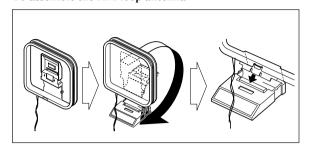


To a wall outlet Plug the AC power cord only after all connections are complete.

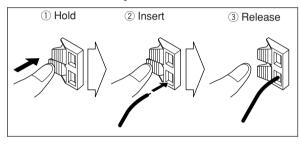




To assemble and connect the AM loop antenna To assemble the AM loop antenna



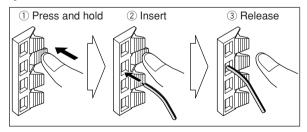
To connect the AM loop antenna



- 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 reception.

To connect the speaker cords

Connect the right speaker to the R terminals, and the left speaker to the L terminals.



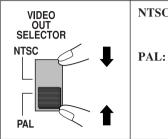
When connecting the speaker cords, match the polarity of the speaker terminals: gray cord (+) to red (+) and gray cord with black stripe (-) to black (-).



- DO NOT connect more than one speaker to each terminal.
- DO NOT allow the conductor of the speaker cords to be in touch with the metallic parts of the System.

To set the video output selector

You can select the video output to match it to the color system of your TV.



NTSC: For an NTSC TV or Multi-color system

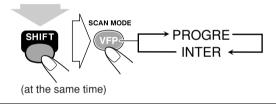
PAL: For a PAL TV or Multi-color system

Changing the Scanning Mode (BOLLY) »>



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 progressive mode.



PROGRE (Progressive)	Progressive scanning. For a progressive TV. The PROGRESSIVE indicator lights.
INTER (Interlaced)	Interlaced scanning. For a conventional TV.

Before Operating the System

Playable Disc Types



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

Disc Type	Mark (Logo)	Video Format	Region Code* Number
DVD Video	VIDEO N VIDEO N		4 or
DVD Audio	AUDIO/VIDEO AUDIO	NTSC	ALL
Video CD (VCD)	OSCITAL VIDEO CD	or PAL	
Super Video CD (SVCD)	SUPER VECO WIDEO		
Audio CD	COMPACT COM		
CD-R	Recorded in the Audio CD	, VCD, SV	CD, MP3
CD-RW	or JPEG format.		
DVD-R	Recorded in the DVD Vide format.	eo, MP3 or	JPEG
DVD-RW	Recorded in the DVD Vide	eo, MP3, JI	PEG or
DVD-RAM	DVD-VR (video recording	g) format.	

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

- It is possible to play back finalized +R/+RW (DVD video format only) discs. "DVD" appears to the display when a +R/ +RW disc is loaded.
- The following discs cannot be played back:
 CD-I (CD-I Ready), CD-ROM, Photo CD, SACD, etc.
 Playing back these discs will generate noise and damage the speakers.
- DVD Video/DVD-VR comprises "Titles/Playlists" which includes "Chapters." DVD Audio/MP3/JPEG comprises "Groups/Folders" which includes "Tracks/Files." CD/ SVCD/VCD comprises only "Tracks."
- In this manual, "file" and "track" are interchangeably used for MP3/JPEG operations.

* Note on Region Code

DVD players and DVDs have their own Region Code numbers. This System can play back only DVDs recorded with the NTSC or PAL color system whose Region Code numbers including "4."

Ex.:









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

Caution for DualDisc playback:

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

DVD Video—digital audio formats

The System can play back the following digital audio formats.

- 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 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 digital output terminal on the rear.

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

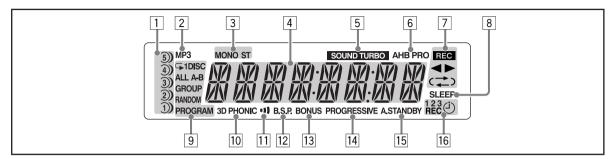
- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays on the TV screen.
- For disc playback, you can change the initial setting to your preference. See "Setup Menu Operations" on page 35.

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.

"DVD Logo" is a trademark of DVD Format/Logo Licensing Corporation registered in the US, Japan and other countries.

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 tray indicators

- 1-5: Disc tray number indicators
-) (tray indicator):
 - -Lights when the disc is detected.
- -Blinking while playing back a disc.
- -Goes off when there is no disc in the tray.
- (disc indicator): Lights when the disc in the tray is currently selected.

2 MP3 indicator

• Lights when the current track is recorded in MP3 format.

3 FM reception indicators

- MONO: Lights when FM reception mode is monaural.
- ST (stereo): Lights while an FM stereo station with sufficient signal strength is tuned in.

4 Main display

- While listening to radio; band (or preset number) and station frequency appear.
- While playing a disc; see "Indications on the main display while operating a disc" on page 9.
- While inserted a tape; "TAPE" appears.
- While not inserted a tape; "NO TAPE" appears.
- While selecting "AUX"; "AUX" appears.

5 SOUND TURBO indicator

 Lights when SOUND TURBO II is activated (see page 16).

6 AHB (active hyper bass) PRO indicator

• Lights when AHB PRO is activated (see page 16).

7 Tape operation indicators

- REC indicator
 - -Lights while recording.
- **◄** ► (tape direction):
 - -Lights to indicate the current tape running direction.
 - -Flashes slowly during playback and recording.
 - -Flashes quickly while rewinding a tape.
- (Reverse mode):
- (→): Tape play continues endlessly.
- − → : Tape automatically reverses once.
- → : Tape play stops at the end of one side.

8 SLEEP indicator

• Lights when the Sleep Timer is activated (see page 19).

9 Disc operation indicators

- 🔾 : Lights when Repeat mode is activated.
- 1: Lights when One Track Repeat is activated.
- 1DISC: Lights when One Disc Repeat is activated.
- ALL: Lights when All Disc Repeat is activated.
- A-B: Lights when A-B Repeat is activated.
- GROUP: Lights when Group Repeat is activated.
- RANDOM: Lights when Random Play mode is activated.
- PROGRAM: Lights when Program Play mode is activated.

10 3D PHONIC indicator

• Lights when 3D PHONIC is activated (see page 13).

11 Clear Voice indicator

• Lights when Clear Voice function is activated (see page 17).

12 B.S.P. indicator

• Lights when the current disc is DVD Audio with browsable still picture (see page 22).

13 BONUS indicator

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

14 PROGRESSIVE indicator

 Lights when progressive scanning mode is selected (see page 6).

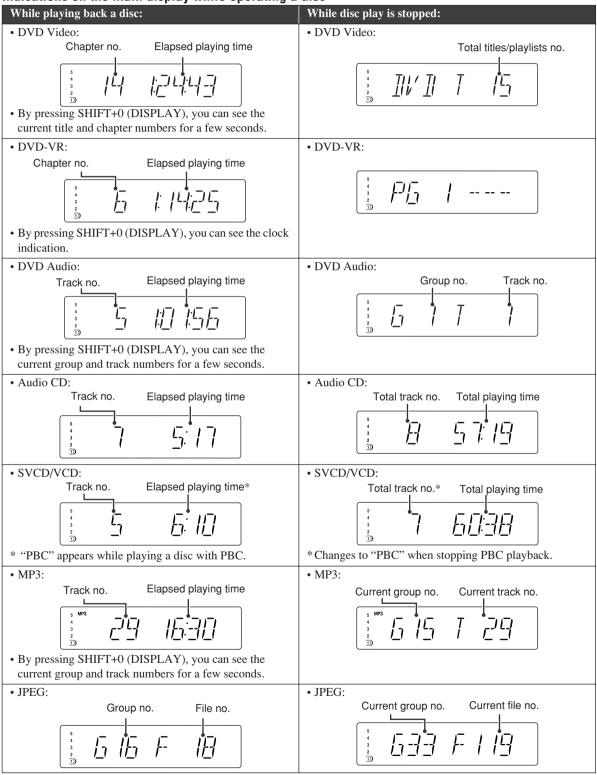
15 A. (auto) STANDBY indicator (see page 19)

- Lights when Auto Standby is activated.
- Flashes when disc playback stops with Auto Standby activated.

16 Timer indicators (see pages 33 and 34)

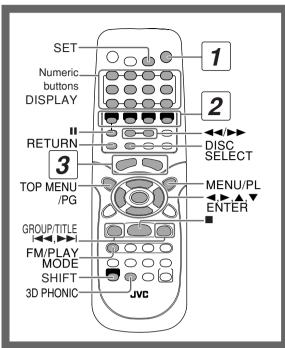
- REC: Lights when the Recording Timer stands by; flashes while setting or working.
- ②: Lights when Daily Timer or Recording Timer stands by; flashes while working.
- 1/2/3: Lights up when a Daily Timer (1, 2, or 3) stands by; flashes while setting or working.

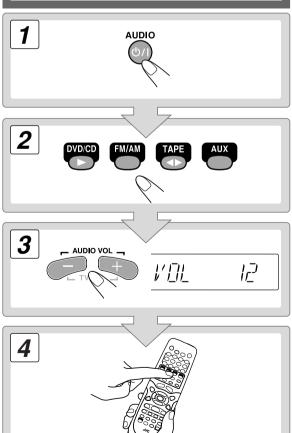
Indications on the main display while operating a disc



[•] If "RESUME" is "ON" (see page 38), "RESUME" appears when you stop playback (except for Audio CD and MP3/JPEG discs).

Daily Operations—Playback





1 Turn on the power.

The STANDBY lamp on the main unit turns off.

- Without pressing AUDIO **O/I**, the System turns on by pressing one of the source selecting buttons in the next step.
- 2 Select the source.

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

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

To turn off (standby) the System



The STANDBY lamp on the main unit lights up.

• 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 on the headphones.

• Disconnecting the headphones will activate the speakers again.

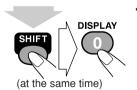


DO NOT turn off (standby) the System with the volume set to an extremely high level; otherwise, the sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the System or start playback.

To turn off the clock indication



While the System is turned off...

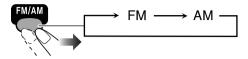


 Press the button again, to display the clock indication.

Listening to the Radio

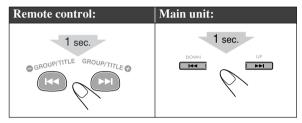


To select the band (FM or AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display.

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

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

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 the stations Remote (NLY)



You can preset 30 FM and 15 AM stations.

1 Tune in to a station you want to preset.

- You can also store the monaural reception mode for FM preset stations if selected.
- **2** Activate the preset number entry mode.





- Finish the following process while the indication on the display is flashing (5 seconds).
- **3** Select a preset number for the station.



Ex.:

To select preset number 5, press 5.

To select preset number 15, press +10, then 5. To select preset number 30, press +10, +10, then 10.



4 Store the station.



To tune in to a preset station



1 Select a band—FM or AM.



2 Select a preset number you have stored.



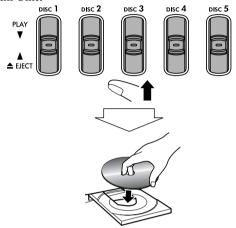
• You can also use the **◄◄/▶▶** to select a preset station.

Playing Back a Disc

• For MP3/JPEG playback, see "Operations on the CONTROL Screen" on page 29.

To insert a disc

You can insert a disc while playing another source. **Main Unit:**



To close the disc tray and start playback, press down the same lever again.

- When current selected disc tray open, you can use DVD/CD ► to close the disc tray and start playback (depending on how the disc is programmed internally).

To start:	To pause:	To stop:
OVD/CD or	To release, 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" appears on the display when you stop playback.)

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

 When operating the System, the on-screen guide icon (see the following table) appears on the TV screen.
 To deactivate the on-screen guide icons, see "ON SCREEN GUIDE" on page 38.

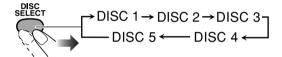
On-screen guide icons

- During playback, the following icons may appear on the TV screen:
 - At the beginning of a scene containing multiangle views.
 - At the beginning of a scene containing multiaudio sounds.
 - At the beginning of a scene containing multisubtitles.
- The following icons will be also shown on the TV screen to indicate your current operation (for more details, see page 26).



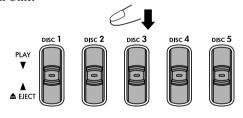
To select a disc

Remote Control:

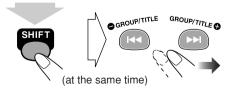


 When current source is not disc, press DVD/CD ► to select the disc player as the source during "PLAY" flashing on the display.

Main Unit:



To select a title/group (Source 1) While playing DVD or MP3...



- Group name appears on the display for MP3.
- This feature may not work for some discs.

To select a chapter/track

While playing a disc except SVCD/VCD with PBC...



• First time you press |◄◄, you can go back to the beginning of the current chapter/track.

To locate a particular portion (Source) (Source)



While playing a disc except MP3/JPEG...



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

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

To locate an item directly (SOULY N)



You can select a title/playlist/chapter/track directly and start playback with the numeric buttons.

• For DVD Video/DVD-VR, you can select a title/playlist/ track before starting playback, a chapter after starting playback.

Ex.:

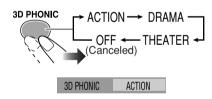
To select number 5, press 5. To select number 15, press +10, then 5.

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

To use 3D PHONIC



While playing...



On the TV screen

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

• 3D PHONIC indicator also lights up.

To play back using the disc menu



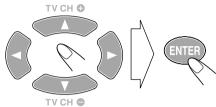
You can operate a disc-DVD Video/DVD Audio/DVD-VR, SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

■ For DVD Video/DVD Audio:

1 Show the disc menu.



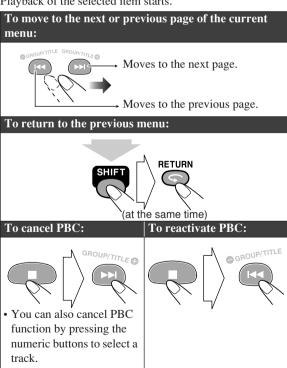
2 Select an item on the disc menu.



- You cannot use this function while displaying the pull-down menu (see page 27).
- With some discs, you can also select items by entering the number using the numeric buttons.

■ 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 with the numeric buttons (see "To locate an item directly" on the left for how to use the numeric buttons). Playback of the selected item starts.

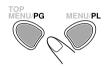


■ For DVD-VR:

DVD-VR format has the following two ways of playing.

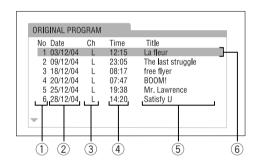
- Original program (ORIGINAL PROGRAM): The System can play back items in a DVD-VR disc in the recorded order conventionally.
- Playlist (PLAY LIST):
 The System can play back the playlist edited with the DVD recording equipment.

1 Show the ORIGINAL PROGRAM or PLAY LIST.

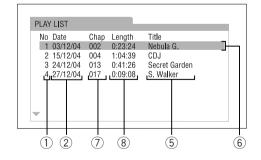


TOP MENU/**PG:** shows the ORIGINAL PROGRAM. MENU/**PL:** shows the PLAY LIST. (The playlist appears only when the playlist is on the DVD-VR disc.)

Ex.: ORIGINAL PROGRAM:

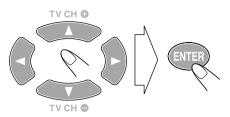


Ex.: PLAY LIST:



- (1) Listed number
- ② Recording date
- ③ Recorded channel
- 4 Recording time
- 5 Title/Playlist
- 6 Highlight bar (current selection)
- 7 Chapters included
- 8 Playback time

2 Select an item on the disc menu.



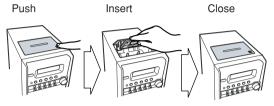
• You cannot use this function while **displaying the pull-down menu** (see page 26).

With some discs, you can also select items by entering the number using the numeric buttons.

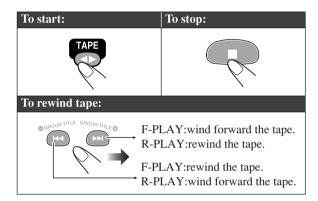
Playing Back a Tape

To insert a tape

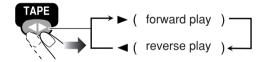
You can play back type I tapes.



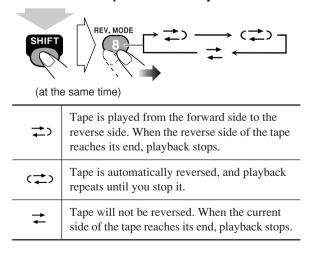
With the tape side facing backside



To change the tape running direction



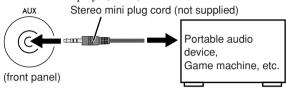
To reverse the tape automatically



Playing Back from Other Equipment

To connect other equipment

By using a stereo mini plug cord (not supplied), you can connect other 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.

• Refer to the manuals supplied with the other equipment.

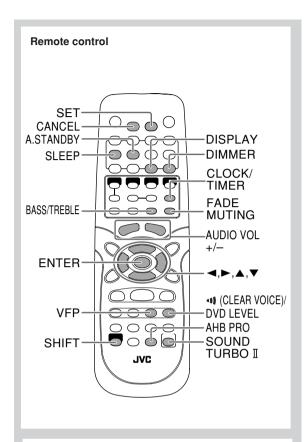
IMPORTANT

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

To select other equipment for the source



Daily Operations—Sound&Other Adjustments

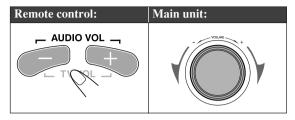




Adjusting the Volume



You can adjust the volume level from level 0 (VOL MIN) to level 31 (VOL MAX).



To drop the volume in a moment





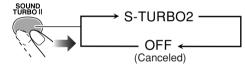
To restore the volume, press again, or adjust the volume level.

Adjusting the Sound



To emphasize the sound—SOUND TURBO II

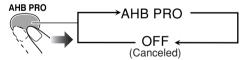
This function emphasizes the sound.



To emphasize heavy bass sound—AHB PRO



This function dynamically enhances bass response.



To adjust the tone—BASS/TREBLE



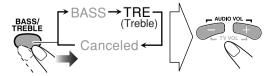
You can adjust the bass and treble level from 0 to +5.

• When you adjust this setting, the SOUND TURBO II is canceled automatically.

To adjust the bass



To adjust the treble



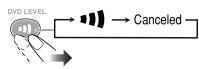
Making DVD Voice Clear—CLEAR VOICE





This function allows you to easily understand the dialog of DVD even with the volume turned down.

• This function only works for center-channel signal encoded multi-channel disc.

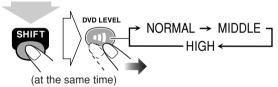


Presetting Automatic DVD Sound Increase





Some DVD Videos/DVD Audios are recorded at a lower sound volume level than that of other discs or sources. You can increase the level for the currently loaded DVD Video/ DVD Audio.



NORMAL	Original recording level.
MIDDLE	Output level is increased (less than "HIGH").
HIGH	Output level is increased (more than "MIDDLE").

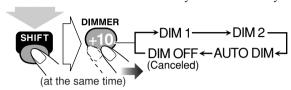
• Once the current DVD Video/DVD Audio is ejected, this setting is canceled and set automatically to "NORMAL."

Changing the Display Brightness—DIMMER



You can dim the display window.

• This function cannot use when the System is on standby.



DIM 1	Dims the display.
DIM 2	Erases the display illumination.
AUTO DIM	Erase the display illumination when playback starts. This function works only when playing DVD/VCD/SVCD or JPEG files. The display illuminates when playback stops.

Changing the Picture Tone-VFP (Video









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

To select a preset picture tone

1 Activate VFP.



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

On the TV screen

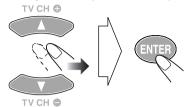
2 Select a preset picture tone.



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

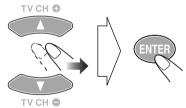
To adjust the picture tone

- 1 Select "USER1" or "USER2."
 - Follow steps 1 and 2 explained on page 17.
- **2** Select a parameter you want to adjust.



GAMMA	Adjust if the neutral color is bright or dark $(-3 \text{ to } +3)$.
BRIGHTNESS	Adjust if the entire picture is bright or dark $(-8 \text{ to } +8)$.
CONTRAST	Adjust if the far and near positions are unnatural (–7 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.

To erase the screen, press VFP again.

Setting the Clock (Remote)»)







Without setting the built-in clock, you cannot use the Daily Timer or Recording Timer (see page 33), and Sleep Timer (see next page).

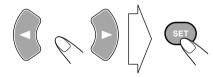
- To exit from the clock setting, press CLOCK/TIMER as required.
- To go back to the previous step, press CANCEL.

1 Activate the clock setting mode.



• If you have already adjusted the clock before, press the button repeatedly until the clock setting mode is selected (see page 33).

2 Adjust the hour.

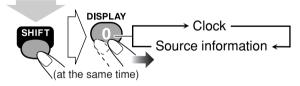


3 Adjust the minute.



Now the built-in clock starts working.

To check the current clock time during play

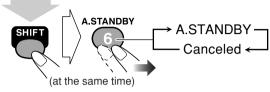


• While playing a DVD or MP3, you cannot check the current clock time (see page 9).

Turning Off the Power



To turn off the System after playback is over-**Auto Standby**

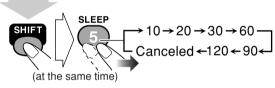


When Auto Standby is in use, the A.STANDBY indicator lights on the display. When the disc play stops, the A.STANDBY indicator starts flashing. If no operation is done for about 3 minutes while the indicator is flashing, the System turns off (in standby) automatically.

• Auto Standby does not work while you are listening to radio (FM/AM) and the external component (AUX).

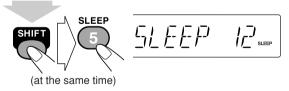
To turn off the System after a certain period of time—Sleep Timer

1 Specify the time (in minutes).



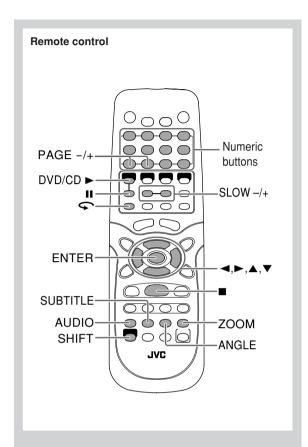
- SLEEP indicator also lights up on the display.
- **2** Wait until the set time goes off.

To check the time remaining until the shut-off time



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

Unique Disc Operations



Selecting the Sound Track (Remote NLY)





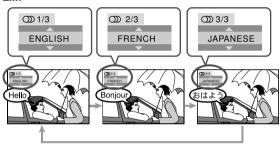
For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to. For DVD Audio: While playing back a track containing audio channels, you can select the audio channel to listen to. For SVCD/VCD/DVD-VR: While playing back a track, you can select the audio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

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



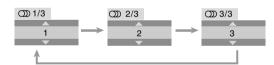
While playing a DVD Video...

Ex.:

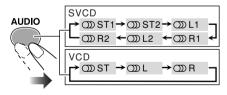


While playing a DVD Audio...

Ex.:



While playing an SVCD/VCD/DVD-VR...



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

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

Selecting the Subtitle Language (Bendle)»)



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

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

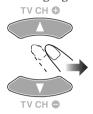
• You can also select the subtitle language using the onscreen bar (see page 26).

While playing a DVD Video...

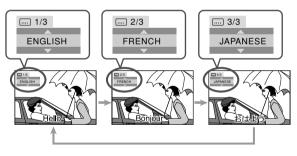
1 Display the subtitle selection window.



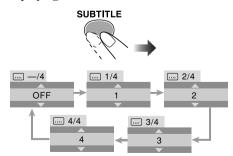
2 Select the subtitle language.



Ex.:



While playing an SVCD...



Selecting the View Angle (Remote ONLY)

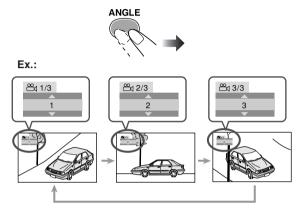




While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- This function is only used while playing DVD Video.
- You can also select the multi-view angles using the onscreen bar (see page 26).

While playing...



Playing Back a Bonus Group (Remote only)»)





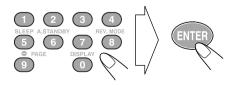
Some DVD Audios have a special group called "bonus group" whose contents are not open to the public.

- This function is only used while playing 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).
- When the bonus group is detected, BONUS indicator lights up.
- For how to select the group, see "To select a title/group" on page 12.

$m{2}$ Enter the key number.



 $oldsymbol{3}$ Follow the interactive instructions shown on the TV screen.

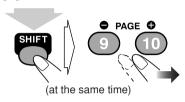
To cancel the key number entry, press ■.

Selecting Browsable Still Pictures (Remote only)



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

- This function is only used while playing DVD Audio.
- When a DVD Audio with browsable still pictures is detected, B.S.P. indicator lights up.
- 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 26).



Special Effect Playback (Remote ONLY)»)





Still picture playback

To start still picture playback:	To resume normal playback:
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 ▶.

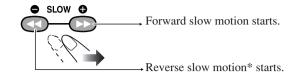
Slow-motion playback

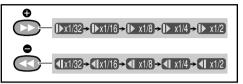
1 While playing...



Still picture playback starts.

2 Select slow-motion speed.





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

To resume normal playback, press DVD/CD ▶.

To replay the previous scenes (One touch replay function) Remote (%)

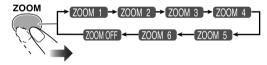
• This function is used while playing DVD Video/DVD-VR.

RETURN

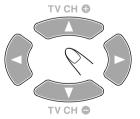
The playback position moves back about 10 seconds before the current position (only within the same title/playlist).

Zoom Remote ONLY

1 While playing...



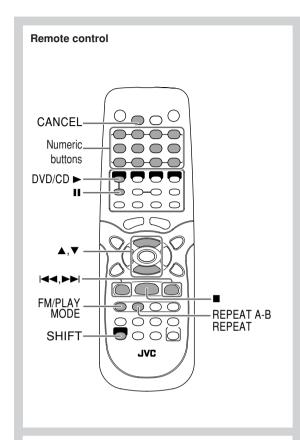
- As the number increases, magnification also increases.
- **2** Move the zoomed-in position.



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

To use this function for JPEG (still pictures), see "To zoom in the still picture" on page 30.

Advanced Disc Operations





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

1 Before starting playback, activate Program Play.







On the TV screen

- **2** Select chapters/tracks you want to program with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - For DVD Video/MP3:
 - ① Select a disc number on "Disc" column.
 - 2 Select a group/title number on "Group/Title" column.
 - 3 Select a track/chapter number on "Track/Chapter" column.

• For SVCD/VCD/CD:

- ① Select a disc number on "Disc" column.
- 2 Select a track number on "Track/Chapter" column.
- Even if the disc is not in the selected tray, the System may prompt for the group number entry as well, however, during playback, the System will ignore these entries.
- If you have programmed a group/title number for SVCD/VCD/CD, the System will ignore the group/title number and play the track number you have programmed.
- **3** If you want to program another chapters or tracks, repeat the step 2 above.

to be continued...

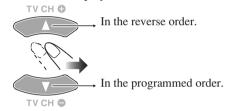
4 Start playback.



Playback starts in the order you have programmed.

To skip a step:	To pause:	To stop:
● GROUP/TITLE GROUP/TITLE ●	To release, press DVD/CD ▶.	

To check the programmed contents Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
TV/VIDEO CANCEL	
To add steps in the program: Repeat step 2 on page 23.	

To exit from Program Play Before or after playback...



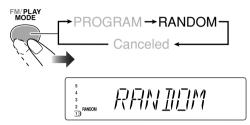
Playing at Random—Random Play Remote (SNLY)



You can play the chapters or tracks of all loaded discs at random.

• Random Play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in random order. Random Play continues to the disc on the next tray when all the chapters or tracks in the current disc are played once (when Repeat Play is not activated).

• Playback ends when all the discs are played once (when Repeat Play is not activated).

To skip a chapter/ track:	To pause:	To stop:
To skip to the beginning of the current track.	To release, press	
press I◀◀.	2,2,02,	

• During Random Play, you cannot select the disc to play by using DISC SELECT.

To exit from Random Play Before or after playback...





• You can also select the repeat mode using the on-screen bar (see page 27).

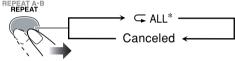
Repeat Play

• For DVD Video/DVD-VR:

During playing...



Before playback...



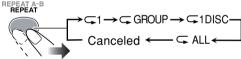
• For DVD Audio:

During or before playback...



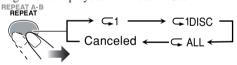
• For MP3:

During or before playback...

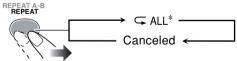


• For CD/SVCD/VCD:

During or before playback without PBC...

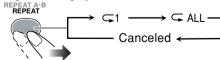


During playback with PBC...



• For Program Play:

During or before playback...



• For Random Play:

During or before playback...



→ ALL*	Repeats the discs in all tray or all programmed tracks.
5 1	Repeats the current chapter/track.
Ģ GROUP	Repeats the current title/group/playlist.
→ 1DISC	Repeats the current disc.
Canceled	Cancels Repeat Play mode.

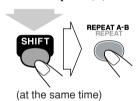
^{*} When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, this function may not work correctly.

A-B Repeat

You can repeat playback of a desired portion by specifying the beginning (point A) and the ending (point B).

- A-B Repeat cannot be used for MP3 or for some DVDs.
- A-B Repeat can be used within the same title/playlist while playing a DVD Video/DVD-VR, and within the same track for the other discs.

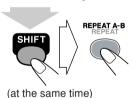
7 While playing (without PBC for SVCD/VCD), select the start point (A).



► A- lights on the display.

• 🖒 A- appears on the TV screen if the TV is turned on.

2 Select the end point (B).



• ► A-B appears on the TV screen and A-B Repeat

 You can search for the end point using ▶►.

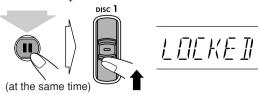
To cancel A-B Repeat, press REPEAT A-B again while holding SHIFT.

Prohibiting Disc Ejection—Child Lock

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

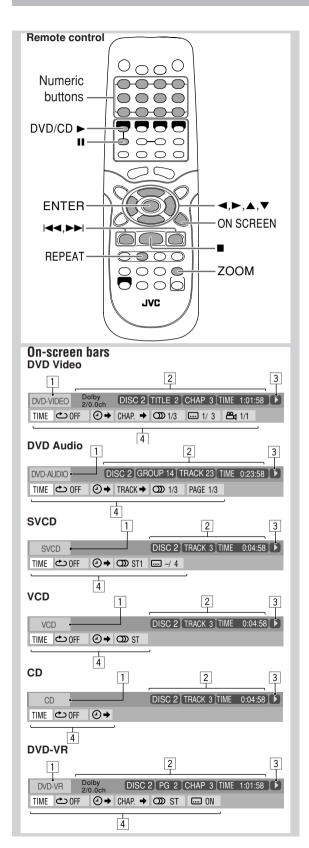
• This is possible while the System is on standby and the clock indication is turned on (see page 10).

While the disc trays are closed...



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

On-Screen Disc Operations



On-screen Bar Information



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

1 Disc type	
2 Playback info	ormation
Indication	Meanings
Dolby 2	Audio format
0.0ch	Channel number
(DISC 2)	Current disc
(IIILE 2)	Current title/program list/playlist (for DVD-VR; "PG" or "PL" appears instead of "TITLE").
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
(TIME 1:25:58)	Time indications
3 Operation mo	odes
Indication	Meanings
	Playback
>> / <	Forward/Reverse search
	Forward/Reverse slow-motion
	Pause
	Stop
4 Function icor	ns (on the pull-down menu)
Indication	Meanings
TIME	Select to change the time indication.
₾ OFF	Select to repeat playback.
⊙ →	Select for time search.
CHAP. →	Select for chapter search.
TRACK→	Select for track search.
(CDD) 1/3	Select to change the audio language or channel (see also page 20).
1/3	Select to change subtitle language (see also page 21).
2 1/3	Select to change the view angle (see also page 21).
PAGE 1/5	Select to change the page (see also page 22).

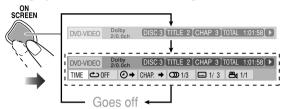
 You cannot use ◄, ►, ▲, and ▼ buttons to select the disc menu while displaying the pull-down menu.

Operations Using the On-screen Bar (South South)

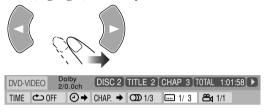


Ex.: Selecting a subtitle (French) for DVD Video: While a disc is selected as the source...

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



For detailed operations of the following functions, see also "Operations Using the On-screen Bar" on the left.

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

To erase the on-screen bar



Repeat Play

- See also page 25.
- **1** While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
- 2 Select OFF.
- **3** Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks (not for some DVD Videos).
A-B	Repeats a desired portion (see next column).
TITLE	Repeats the current title*.
GROUP	Repeats the current group.
DISC	Repeats the current disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK**	Repeats the current track.
OFF	Cancels Repeat Play.

- * During playing DVD-VR, "PG" (Program List) or "PL" (Play List) appears.
- ** During Program Play and Random Play, "STEP" appears.

5 Finish the setting.



A-B Repeat

- See also page 25.
- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select COFF.
- **3** Display the pop-up window.



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.

For DVD Video/DVD Audio/DVD-VR:

You can specify the elapsed time for the current title/playlist.

For CD/SVCD/VCD:

- While playing back, you can specify the elapsed time for the current track except for SVCD/VCD with PBC.
- While stopped, you can specify the elapsed time for the disc except for SVCD/VCD with PBC.
- 1 Display the on-screen bar with the pull-down menu.
- **2** Select **③** → .
- **3** Display the pop-up window.



4 Enter the time.

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



Ex.:

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 the disc from the selected playing time.

Chapter/Track Search

You can search for the chapter (DVD Video/DVD-VR) 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 with the numeric buttons (see "To locate an item directly" on page 13 for how to use the numeric buttons).
 - To correct a misentry, press the numeric buttons until the desired number shown in the pop-up window.
- **5** Finish the setting.



The System starts playing the searched chapter or track.

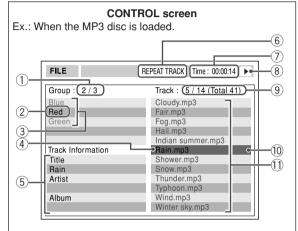
Operations on the CONTROL Screen (South 1987)



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

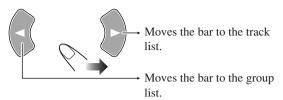
You can search for and play the desired tracks through the CONTROL screen.

• If both types of files (MP3 and JPEG) are recorded on a disc, select the file type to play (see page 37).

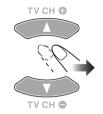


- (1) Current group number/total group number
- (2) Current group
- 3 Group list
- 4 Current track (in blue)
- 5 Track information (ID3 Tag Version 1.0: only for MP3)
- 6 Repeat Play setting
- 7 Elapsed playing time of the current track (only for MP3)
- (8) Operation mode icon
- (9) Current track number/total number of tracks in the current group (total number of tracks on the disc)
- (10) Highlight (green) bar
- (1) Track list

To move the highlight bar between group list and track 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 disc, the selected track starts playback automatically.

To start playback



Playback starts with the selected track.

Pressing DVD/CD ► also starts playback.

If the track is JPEG, selected still picture is displayed until you change it.

Unique JPEG Operations



You can enjoy the Slide-show playback for JPEG files. Each track (still picture) on the disc is shown on the screen for few seconds, then changes one after another.

To start the Slide-show while the CONTROL screen is on the $TV\ screen$



- Once the Slide-show starts, the CONTROL screen goes off
- Some discs automatically start the Slide-show.

To cancel the Slide-show and display the current still picture



To skip a track:	To pause:	To stop playback:
GROUP/TITLE GROUP/TITLE G	To release, press DVD/CD ▶.	

To repeat Slide-show

During or before playback...



GROUP	Repeats the current group.
→ 1DISC	Repeats the current disc.
→ ALL	Repeats all discs.

To zoom in the still picture

• You cannot zoom in the still picture during the Slide-show.

1 While playing...



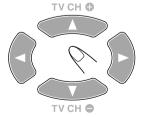


2 Change the magnification.



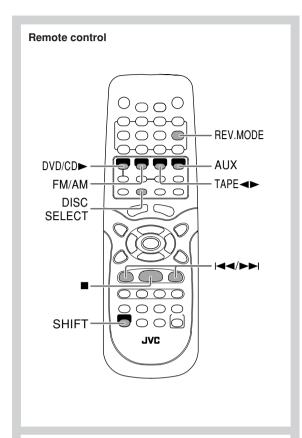
As the number increases, magnification also increases.

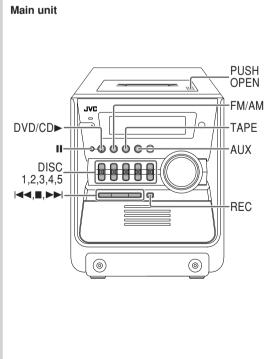
3 Move the zoomed-in position.



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.

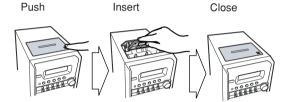
Recording on a Tape



You can use type I tapes for recording.

• To play a tape, see page 15.

1 Insert a recordable cassette.

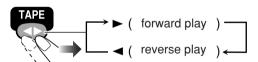


With the tape side facing backside

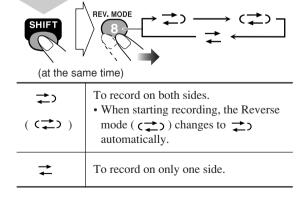
2 Check the tape running direction and Reverse mode settings on the display.



To change the direction



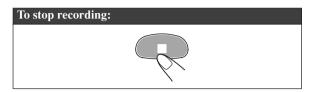
To change the Reverse mode if necessary



- 3 Select and start playing the source—"FM," "AM," "DVD/CD," or "AUX IN."
 - When recording a disc, you can also use "Synchronized Disc Recording" (see next page). to be continued...

4 Start recording.





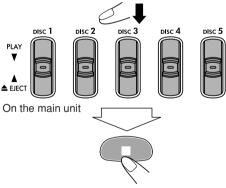
Synchronized Disc Recording



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

To record the entire disc

- **1** Load a disc and insert a recordable cassette.
 - If the current playing source is not the CD player, press DVD/CD ▶, then ■.
- **2** Check the tape running direction and Reverse mode settings on the display.
 - See step 2 of "Recording on a Tape" on page 31.
- **3** Select the disc number you want to start recording from.



4 Start recording.



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

On the main unit

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

To record a "Live" disc

It will not be desirable to put 4-second blank portions between the tunes recorded on the tape.

To record the entire disc without any interruption recorded, start playing the disc (press DVD/CD ►), then pause the disc play (press ■) and go back to the beginning of the current chapter/track (press ◄◄) before pressing REC.

To record Program Play or Random Play

- 1 Select Program Play (and make a program) or Random Play, but do not start playback.
- 2 Press REC to start recording.

To record only your favorite track

You can specify tracks to be recorded on the tape while listening to a disc.

- This function is not available for DVD Video.
- 1 Start playing a disc.



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



On the main unit

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

3 Repeat steps 1 and 2 to record other tracks you want.

• You can exchange the discs if necessary.

To protect your recording

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

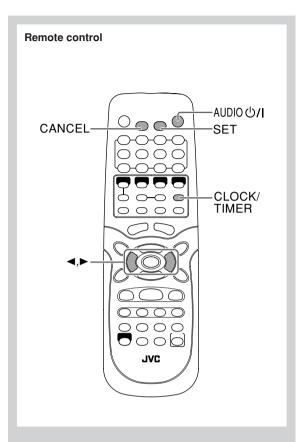
To protect your recording, remove these tabs.



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



Timer Operations



Setting the Timer (Remote)»)

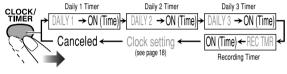






Using Daily Timer, you can wake up with your favorite music. You can store three Daily Timer and one Recording Timer settings; however, you can activate only one of the timers at a time.

- To exit from the timer setting, press CLOCK/TIMER as
- To correct a misentry during the process, press CANCEL. You can return to the previous step.
- 1 Select one of the timer setting modes you want to set— Daily 1 ON time, Daily 2 ON time, Daily 3 ON time, or Recording ON time.



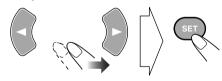


Ex.: When Daily Timer 1 setting mode is selected

- · When the clock has not been adjusted, pressing CLOCK/TIMER makes the System enter the clock setting mode (see page 18).
- $m{2}$ Make the timer setting as you want.

Repeat the following operations until you finish setting in the following order-

For Daily Timers:



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



- 4 For "TUNER FM" and "TUNER AM": Select a preset channel (see page 11).
 - Select "FM --" or "AM --" for the last selected

For "DISC": Select the disc number, title/group/ playlist number, then the chapter/track number (see page 12).

• Select "DISC -" for the last selected disc tray number.

For "AUX": Connect the other equipment (see page 15).

to be continued...

(5) Select the volume level.

You can select the volume level ("1" to "MAX" and "VOL --"). If you select "VOL --," the volume is set to the last level when the System has been turned off.

Once settings are complete, the Timer setting information appears in sequence.

For Recording Timer:

- 1) Set the hour then the minute for on-time.
- ② Set the hour then the minute for off-time.
- 3 Select "TUNER FM" or "TUNER AM."
- **4** Select a preset channel.
- (5) Select the volume level.
- **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 (②) indicator and timer number indicator (1/2/3) 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) or another timer is activated.

When the on-time comes

The System turns on, tunes in to the specified station or start playing the loaded disc with the specified track, and sets the volume level gently to the preset level.

- You cannot start the specified title/playlist/chapter/ track of DVD Video/DVD-VR/SVCD/VCD, though you can select it at the timer setting.
 - DVD Video/DVD-VR/SVCD/VCD starts playback from the beginning.
- While Daily Timer is working, the timer (②) indicator and timer number indicator (1/2/3) flash on the display.

When the off-time comes

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

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

How Recording Timer actually works

When Recording Timer has been set, the timer (\bigcirc) 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 gently to preset level, and starts recording.

When the off-time comes

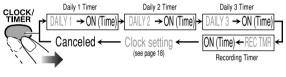
The System stops recording, and turns off (stands by).

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

To turn off the Timer after its setting is done

Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.

1 Select the Timer you want to cancel.





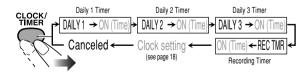
Ex.: To cancel Daily Timer 1

2 Turn off the selected Timer.



To turn on the Timer

1 Select the Timer (DAILY 1, DAILY 2, DAILY 3, or REC) you want to activate.



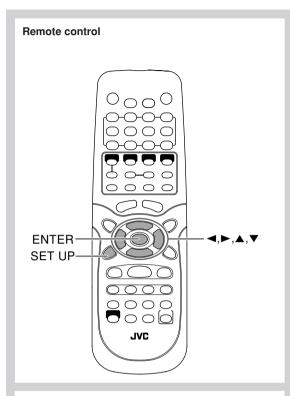


Ex.: When Daily Timer 1 is selected

2 Activate the selected Timer.



Setup Menu Operations

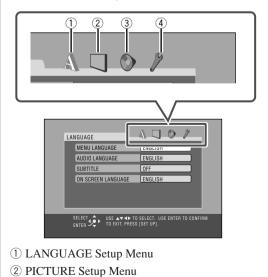


Setup Menu Icons

3 AUDIO Setup Menu 4 OTHERS Setup Menu

The icon for the selected Setup Menu will be highlighted.

Ex.: LANGUAGE Setup Menu is selected.



Operating Procedure Personal Service (Source Control of the Contro







You can use the Setup 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 Display the Setup Menu.



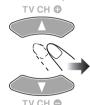


2 Select one of the Setup Menus.





${\it 3}$ Select the item you want to adjust.



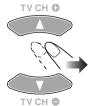


4 Display the pop-up window.





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





to be continued...

6 Finish the setting.



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

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

To exit from the Setup Menu



■ LANGUAGE Setup Menu

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, RUSSIAN, 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, RUSSIAN, 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, RUSSIAN, 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 screen from—ENGLISH, CHINESE and SPANISH.

■ PICTURE Setup Menu

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



MONITOR TYPE

Select the monitor type of your TV to play DVD Video/DVD-VR recorded with aspect ratio of 16:9.

For the multi-color system TV

When you use a multi-color system TV, you can change the color system of the System automatically by selecting "MULTI" options as the monitor type. In this case, the color system of the System is changed to match the color system of the loaded disc regardless the VIDEO OUT SELECT or setting for better picture quality (see "To set the video output selector" on page 6).

Select one of the following:

16:9 / 16:9 MULTI (Wide television conversion):

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

4:3 LB (Letter Box) / 4:3 MULTI LB:

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

4:3 PS (Pan Scan) / 4:3 MULTI PS:

Select when the aspect ratio of your TV is 4:3. 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.: 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 picture on the TV screen becomes dark when no operation is done for about 5 minutes.
OFF:	To cancel the screen saver.

FILE TYPE

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

Select one of the following:

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

■ AUDIO Setup 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:

PCM ONLY:	To connect to a linear PCM digital equipment.	
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 OUT Signals" on page 46.

DOWN MIX

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

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

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 recorder, etc.

D. (Dynamic) 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 apply the compression effect to the downmixed multi-channel sound.
ON:	To always apply the compression effect for all Dolby Digital software. Loud sound will become low and vice versa.

■ OTHERS Setup Menu

You can change some other convenient functions.



RESUME

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

Select one of the following:

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

ON SCREEN GUIDE

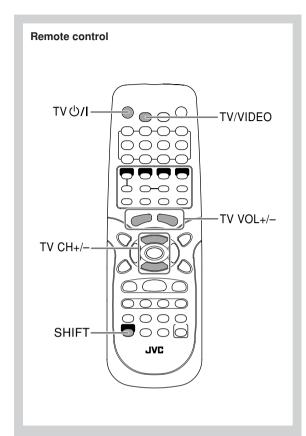
You can activate or deactivate the on-screen guide icons (see pages 12 and 26).

• 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.

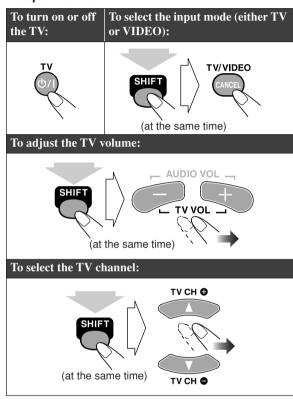
Operating the TV





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

To operate the TV



Additional Information

Learning More about This System





Getting Started (see pages 3 to 6)

Changing the Scanning Mode:

• To enjoy the progressive video picture, connect a TV with the progressive video input using component video cord.

Daily Operations—Playback (see pages 10 to 15)

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:

- When using an 8 cm disc, place it on the inner circle of the
- 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 malfunction of this System.
- When discs* in more than one tray are loaded on the disc trays, they are played in sequence as follows. (When DVD Video, DVD Audio or SVCD/VCD with PBC is loaded in the System, playback of the disc next to these discs will not start.):

Ex.: When DISC 2 is selected:

DISC 2⇒DISC 3⇒DISC 4⇒DISC 5⇒DISC 1⇒ (then stops)

- * When no disc is loaded on the disc tray, that disc number is skipped.
- You can exchange discs while playing or selecting another
- Some DVD Audio discs prohibit downmixed output. 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.
- 3D Phonic setting is also applied to the optical digital output signals through the OPTICAL DIGITAL OUT terminal.
- For DVD-VR playback...
 - When making a disc, use the UDF-Bridge format.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
 - If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.
 - You cannot use reverse slow motion, Program Play, and Random Play.
- For MP3/JPEG playback...
- This System cannot play "packet write" discs.
- MP3/JPEG discs require a longer readout time than regular CDs. (It depends on the complexity of the group/ file configuration.)

- Some MP3/JPEG files cannot be played back and will be skipped. This results from their recording processes and conditions.
- When making MP3 discs, use ISO 9660 Level 1 or Level 2 for the disc format.
- This System can play back MP3/JPEG files with the extension code <.mp3> or <.jpg> (regardless of the letter case-upper/lower).
- It is recommended that you make each MP3 file at a sampling rate of 44.1 kHz and at a bit rate of 128 kbps.
- This System can recognize the total of 1000 tracks and of 99 groups (each group can contain up to 150 tracks). Those exceeding the maximum number cannot be recognized.
- This System can show up to 23 characters of the file (track) names (except for extension) and 30 characters of the ID3 tags on the display and the TV screen.
- Some characters or symbols will not be shown (and will be blanked) on the display.
- When using Resume on SVCD or VCD with PBC, the playback might start on a position slightly different from where you have stopped.
- You can use Resume only for the DVD/SVCD/VCD except for some discs-depending how the disc is programmed.

Playing Back a Tape:

- It is not recommended to use the C-120 or longer tapes. These tapes easily jams in the pinch rollers and capstans, and may cause characteristic deterioration.
- When you open the cassette holder, the reverse mode is set to ⇒∋.

Daily Operations—Sound&Other Adjustments (see pages 16 to 19)

Adjusting the Volume:

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

Adjusting the Sound:

• This function also affects the sound through the headphones.

Setting the clock:

- "0:00" will flash on the display until you set the clock.
- The clock may gain or lose 1 to 2 minutes per month. If this happens, reset the clock.

Unique Disc Operations (see pages 20 to 22)

- During slow-motion playback, no sound will be reproduced.
- One touch replay function works only within the same title/ playlist, though it works between chapters.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 23 to 25)

Programming the Playing Order—Program Play:

- If you try to program a 100th track, "MEM FULL (memory full)" appears on the display.
- 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).
- You cannot use Program Play for JPEG or DVD-VR discs.
- You cannot eject tray while in Program Play.

Playing at Random—Random Play:

- You cannot use Random Play for JPEG or DVD-VR discs.

On-Screen Disc Operations (see pages 26 to 30)

- 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 longer time to be shown.)
- This System can play only baseline JPEG files.
 Progressive or lossless JPEG files cannot be played.

Baseline JPEG format: Used for digital cameras,

web, etc.

Progressive JPEG format: Used for web.

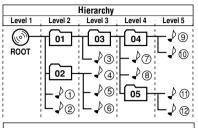
Lossless JPEG format: An old type and rarely used

now.

- This System may not play back JPEG files properly which are not recorded by digital still cameras.
- If progressive or lossless JPEG files are played back, a black screen appears. In this case, stop playback and select a baseline JPEG file. Note that it may take a long time to select another file.

MP3/JPEG groups/tracks configuration

This System plays back the tracks as follows.



01 Group with its play order

♪
① Track with its play order

Advanced Tape Operations (see pages 31 and 32)

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 end of cassette tapes. Thus, when recording CDs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If you start recording with no cassette or 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 can also change Reverse mode setting (→) and →)
 after starting recording.
- You cannot open or close the disc tray while recording.

Synchronized Disc Recording:

When the tape reaches its end in the forward direction (>) during recording with Reverse mode set to (>), the last tune will be re-recorded at the beginning of the reverse side.

Timer Operations (see pages 33 and 34)

- 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.
- If you set the Sleep Timer after Daily Timer starts playing the selected source, Daily Timer is canceled.
- 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.
- You cannot use the SLEEP timer while activating the Recording timer.

Setup Menu Operations (see pages 35 to 38)

LANGUAGE Setup 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 Setup Menu—MONITOR TYPE:

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

AUDIO Setup Menu—DOWN MIX:

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

OTHERS Setup Menu—ON SCREEN GUIDE:

 Setup Menus 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 and mechanism clean.

Handling discs

- When removing the disc from its case, hold 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.
- 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.

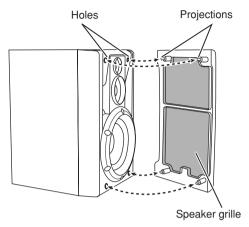
To keep the best recording and playback sound quality:

- 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 strongly.
- 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.

To remove the speaker grilles





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 you finish.

⇒ There is a time limit. Repeat the 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.
- \Rightarrow Point it at the remote sensor on the front panel.
- ⇒ Signals cannot reach the remote sensor. More closer to the System.
- ⇒ The batteries are exhausted.

No sound is heard from the speakers.

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

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

- ⇒ The video cord connections are incorrect or loose.
- ⇒ The System is connected to a TV which does not support progressive scanning.

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

⇒ Select "4:3 LB/4:3 MULTI LB" for "MONITOR TYPE" (see page 36).

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.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can show ID3 Tag Version 2.4 or earlier.

MP3/JPEG 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/JPEG tracks are not played back.

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

"NO AUDIO" appears.

⇒ This System cannot play back illegally produced DVD Audio discs.

"LR ONLY" appears.

⇒ Some DVD Audio discs prohibit downmixed output. When you play back such a disc, this System plays back the left front and right front signals only.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- \Rightarrow Child Lock is in use (see page 25).

Tape Operations:

The cassette holder cannot be opened.

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

Impossible to record.

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape (see page 32).

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.

Setup Menu Operations:

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 SUBTITLE after starting play (see page 21).

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 20).

Language Code List

AA	Afar
AB	Abkhazian
AF	Afrikaans
AM	Ameharic
AR	Arabic
AS	Assamese
AY	Aymara
AZ	Azerbaijani
BA	Bashkir
BE	Byelorussian
BG	Bulgarian
ВН	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
TO	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

OPTICAL DIGITAL OUT Signals

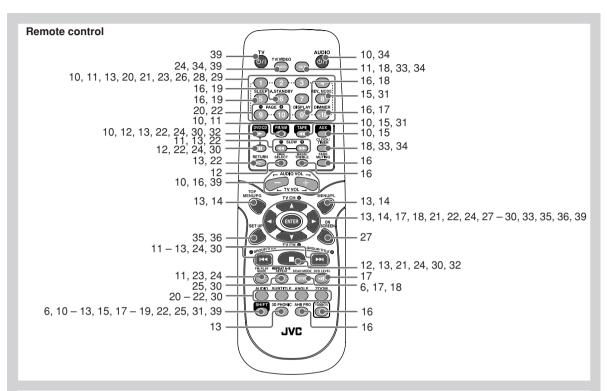
DIGITAL AUDIO OUTPUT	Output Signals		
Playback disc	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
DVD Video			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹		
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream 48 kHz, 16 bit Linear PCM		Linear PCM
DVD Audio			
with 48/96/192 kHz, 16/20/24 bit Linear PCM	No output*2		
with 44.1/88.2/176.4 kHz, 16/20/24 bit Linear PCM	No output*3		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream 48 kHz, 16 bit Linear PCM		Linear PCM
DVD-RW/RAM/ROM in DVD-VR format	48 kHz, 16 bit Linear PCM		
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM/48 kHz, 16 bit Linear PCM		
CD with DTS	DTS bitstream 44.1 kHz, 16 bit Linear PCM		
MP3 disc	32/44.1/48 kHz, 16 bit Linear PCM		

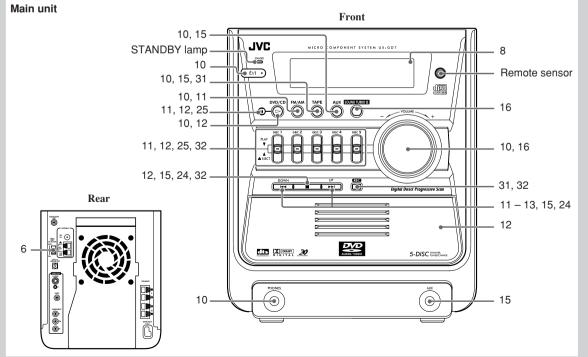
^{*1} While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUT terminal if the discs are not copy-protected.

^{*2} When the disc is not copyright protected, "48 kHz, 16 bit Linear PCM" signal is output. *3 When the disc is not copyright protected, "44.1 kHz, 16 bit Linear PCM" signal is output.

Parts Index

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







Amplifier section

Output Power: 140 W (70 W+70 W) at 6 Ω (10% THD)

Analog input:

AUX: Sensitivity/Impedance (at 1 kHz)

 $400 \text{ mV}/47 \text{ k}\Omega$

Digital output:

OPTICAL DIGITAL OUT:

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

VIDEO OUT:

NTSC or PAL selectable Color system: VIDEO (composite): 1 V(p-p)/75 Ω S-VIDEO: Y (luminance) 1 V(p-p)/75 Ω

C (chrominance, burst)

0.286 V(p-p)/75 Ω

1 V(p-p)/75 Ω COMPONENT: (Y)

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

Speaker terminals: Impedance $6\Omega - 16\Omega$

Tuner section

FM tuning range: 87.50 MHz - 108.00 MHz AM tuning range: 522 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/JPEG

format)

DVD-R (recorded in video/MP3/JPEG

format)

DVD-RW/DVD-RAM (recorded in video/

DVD-VR/MP3/JPEG format)

Horizontal resolution: 500 lines Wow and flutter: Immeasurable General

Power requirement: AC 240 V \sim , 50 Hz Power consumption: 160 W (at operation)

1.3 W (on standby)

Dimensions (approx.): 189 mm x 224 mm x 406 mm

(W/H/D)

Mass (approx.): 6.5 kg

Speakers

Type: 3-way Bass-reflex type

Magnetically shielded Speaker systems: Woofer: 12 cm cone x 1

Squawker: 4 cm cone x 1

Tweeter: 1.5 cm dome x 1

Power handling capacity: 70 W Impedance: 6Ω

Frequency range: 45 Hz - 20 000 Hz

84 dB/W•m Sound pressure level:

Dimensions (approx.): 165 mm x 286 mm x 237 mm

(W/H/D)

Mass (approx.): 2.8 kg each

Supplied Accessories

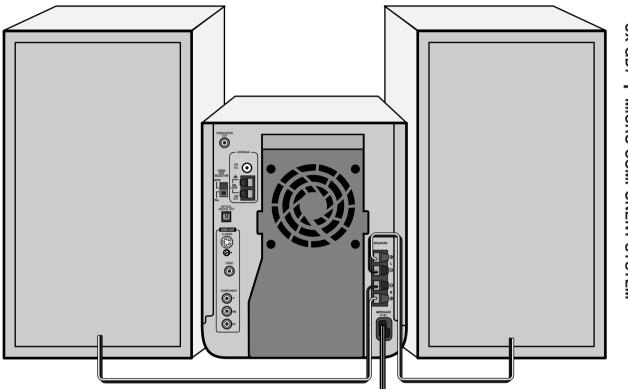
See page 3.

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

"CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE 'STANDARD DEFINITION' OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER."

Design and specifications are subject to change without notice.

Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia, and U.K.)



CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

