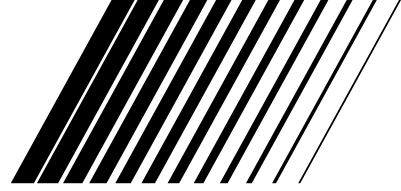


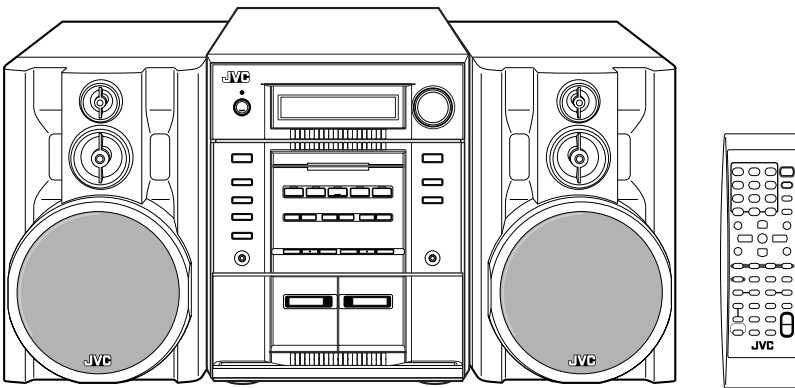
JVC



COMPACT COMPONENT SYSTEM

MX-JE3

—Consists of CA-MXJE3 and SP-MXJE3



ACTIVE BASS EXTENSION

INSTRUCTIONS

Warnings, Cautions and Others

Caution— \odot /I (STANDBY/ON) button!

Disconnect the mains plug to shut the power off completely. The \odot /I (STANDBY/ON) button in any position does not disconnect the mains line. 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
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.

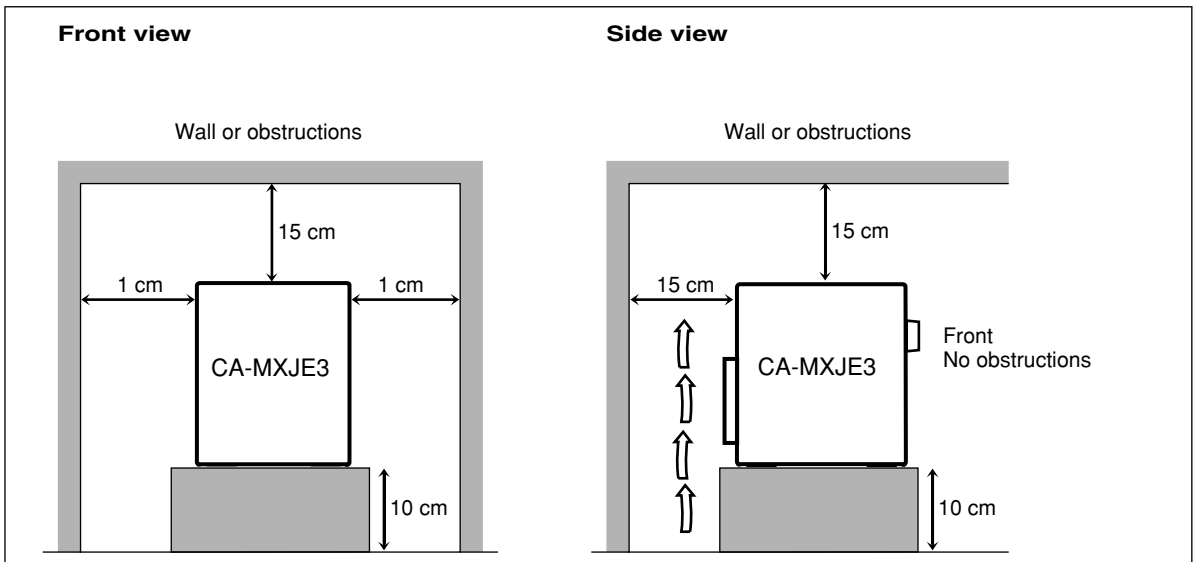
CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM.	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	VARNING : Synlig og osynlig laserstråling når den åppnes og spærren er urkopplad. Betrakta strålen.	VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.
(e)	(e)	(d)	(s)

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.

The minimal clearance is shown as below:



Introduction

Precautions

Installation

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



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

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

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



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

Others

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



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

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

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

Contents

Connections	3
Display Indication	6
Daily Operations—Playback	7
Daily Operations—Sound&Other Adjustments	12
Adjusting the Volume	12
Reinforcing the Bass Sound	12
Selecting the Sound Modes	12
Creating Your Own Sound Modes—User Mode	13
Creating 3-dimensional Sound Field—3D Phonic	13
Presetting Automatic DVD Video Sound Increase Level	14
Changing the Picture Tone	14
Changing the Display Brightness	14
Setting the Clock	15
Turning Off the Power Automatically	15
Unique DVD/VCD Operations	16
Selecting the Sound Track	16
Selecting the Subtitle Language	17
Selecting the View Angle	17
Special Picture Playback	17
Advanced Disc Operations	19
Programming the Playing Order—Program Play	19
Playing at Random—Random Play	20
Playing Repeatedly	21
Prohibiting Disc Ejection—Child Lock	21
On-Screen Disc Operations	22
Recording Operations	27
Timer Operations	29
Setup Menu Operations	31
Operating the TV	33
Additional Information	34
Troubleshooting	37
Specifications	39
Parts Index	41

Playable Disc Types

INFO



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

- CD-R/RW: Recorded in the Audio CD, Video CD, SVCD, MP3, WMA, and JPEG formats.
- DVD-R/-RW: Recorded in the DVD Video format.

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

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

About color system

This System accommodates both NTSC and PAL system and can play back discs recorded with either system. To change the color system, see page 4.

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” for Turkey or “4” for Central and South America. For your available Region Code, check the rear panel of your main unit.
EX.:



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

The System can play back the following digital audio formats.

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

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.

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 31.

If “” 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.

How to Read This Manual

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

	Indicates that you press the button briefly .
	Indicates that you press the button briefly and repeatedly until an option you want is selected.
	Indicates that you press one of the buttons.
	Indicates that you press and hold the button for a specified period. The number inside the arrow indicates the period of press (in the example, 2 seconds).
	Indicates that you turn the control toward the specified direction(s).
	Indicates that this operation is only possible using the remote control.
	Indicates that this operation is only possible using the buttons and controls on the main unit.

Connections

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

- Connect VIDEO OUT directly to the video input of your TV. Connecting VIDEO OUT to a TV via a VCR may cause a monitor problem when playing back a copy-protected disc. You may also have a monitor problem when connecting the player to an integrated TV/Video system.

1 From AM/FM antenna
See page 4.

2 From the digital input of digital audio component such as CD recorder, etc.
See page 4.

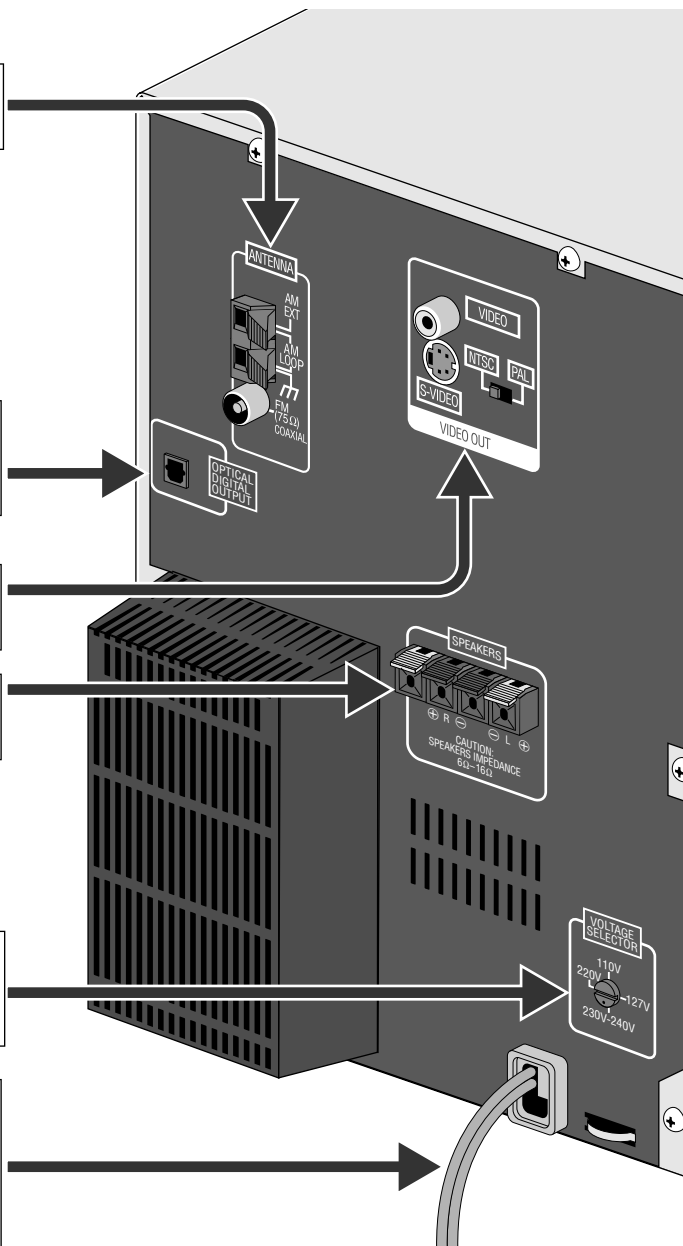
3 From the video input of TV/monitor
See page 4.

4 From front speakers
See page 5.

5 Voltage Selector
Before plugging in, confirm the position the voltage selector points at. See page 5.

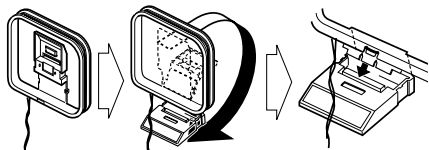
6 From a wall outlet
Plug the AC power cord only after all connections are complete.

- Before plugging in, confirm the position the voltage selector points at. See page 5 and the back cover.
- If the wall outlet does not match the AC plug, use the supplied AC plug adaptor.

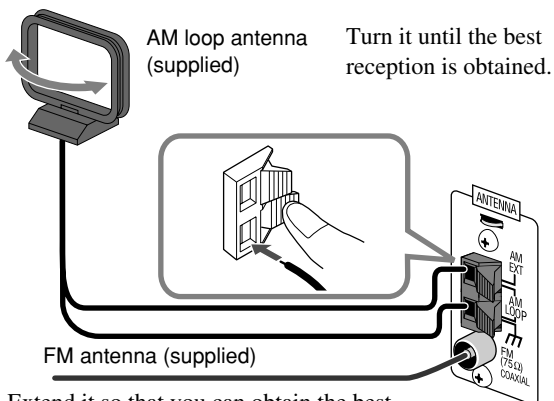


1 AM/FM antenna

To assemble the AM loop antenna

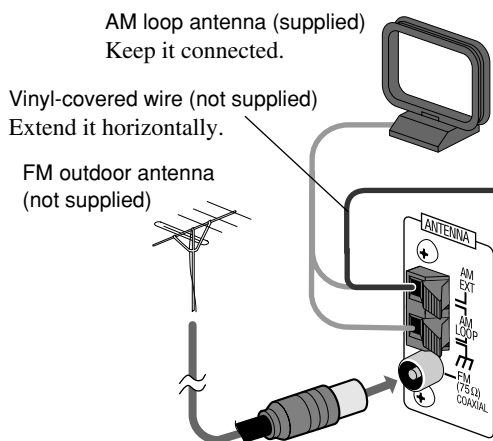


To connect AM/FM antenna



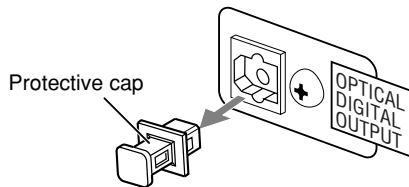
Extend it so that you can obtain the best reception.

For better AM/FM reception



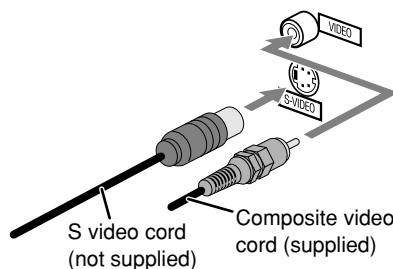
- Disconnect the supplied FM antenna, and connect to an outdoor FM antenna using a 75 Ω wire with coaxial type connector (IEC or DIN45325).
- Make sure the antenna conductors do not touch any other terminals, connecting cords and power cord. Also, keep the antennas away from metallic parts of the System,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

2 Digital audio component



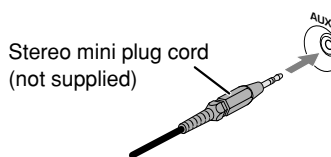
- Set “DIGITAL AUDIO OUTPUT” in the “AUDIO” preference display correctly according to the connected digital audio equipment (see page 32). If setting is incorrect, loud noise may be generated causing damage to the speakers.

3 TV/monitor



- Connect the VIDEO jack or S-VIDEO jack whichever you want to use.

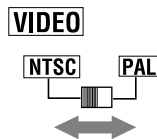
When connecting the auxiliary equipment (AUX)



- The AUX jack is located on the front panel.

To set the video output selector

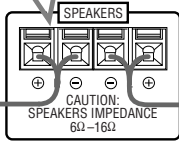
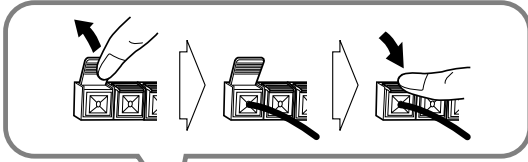
You can select the video output to match it to the color system of your TV.



NTSC: For an NTSC TV.
PAL: For a PAL TV.
 For a multi-color TV, you can select either one.

4 Front speakers

- When connecting the speaker cords, match the polarity of the speaker terminals: (+) to (+) and (-) to (-).



From right front main speaker

From left front main speaker

- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.
- The speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.
 - When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.
 - Then wait at least 30 minutes before turning on the TV's main power switch again.

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

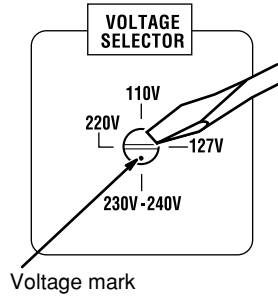


- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

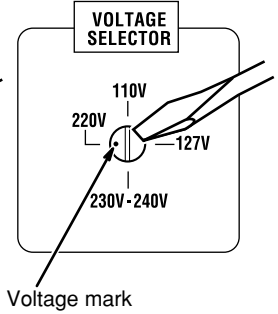
5 Voltage Selector

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

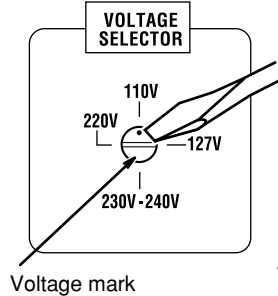
When your mains lead (AC) line voltage is 230-240 V



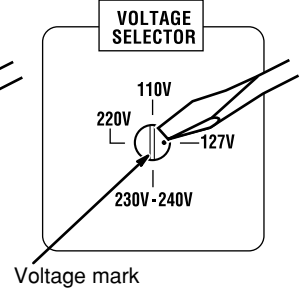
When your mains lead (AC) line voltage is 220 V



When your mains lead (AC) line voltage is 110 V

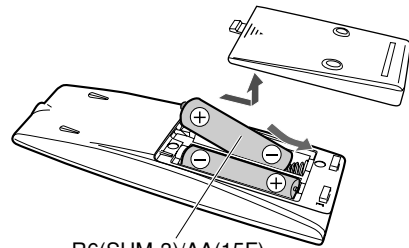


When your mains lead (AC) line voltage is 127 V



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

Preparing the Remote Control



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

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

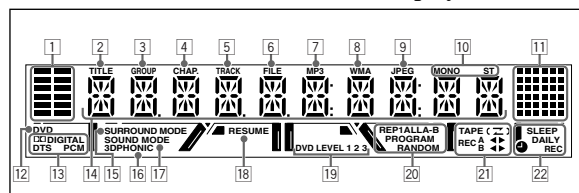
When using the remote control

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

Display Indication

This indications on the display teach you a lot of things while you are operating the system.

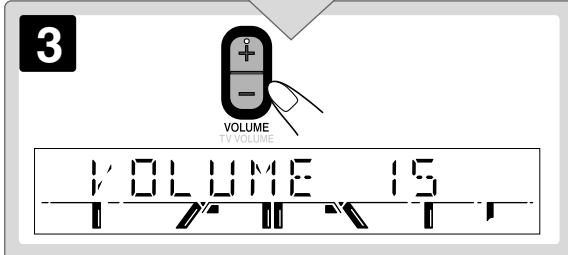
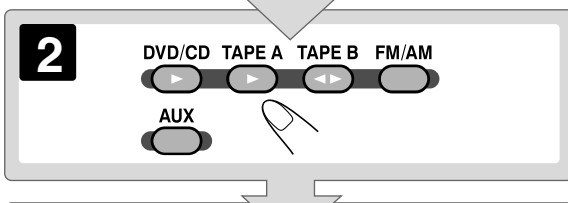
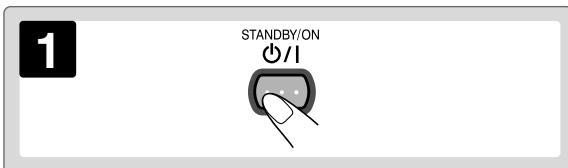
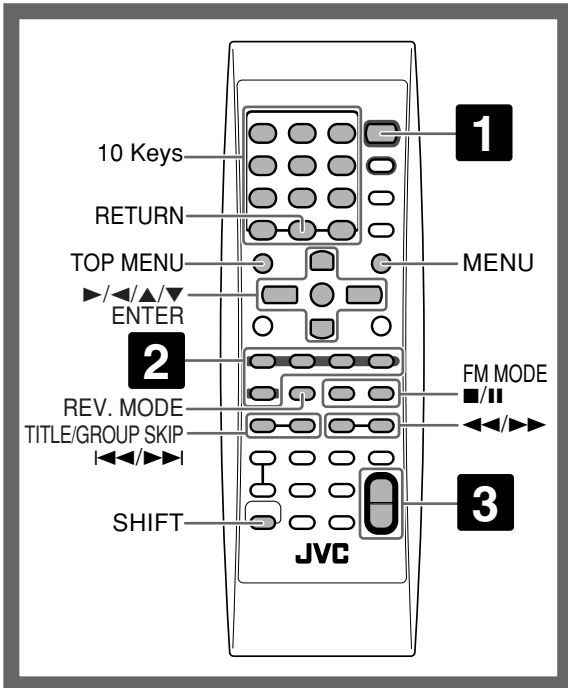
Before operating the System, be familiar with when and how the indicator illuminates on the display.



- 1 Level indicator
- 2 TITLE indicator
 - Lights to indicate the title number.
 - Lights to indicate the group title or track title.
- 3 GROUP indicator
 - Lights to indicate the group number.
- 4 CHAP. indicator
 - Lights to indicate the chapter number.
- 5 TRACK indicator
 - Lights to indicate the track number.
- 6 FILE indicator
 - Lights to indicate the file number.
- 7 MP3 indicator
 - Lights while playing back an MP3 track.
- 8 WMA indicator
 - Lights while playing back a WMA track.
- 9 JPEG indicator
 - Lights while playing back a JPEG file.
- 10 FM reception indicators
 - MONO: lights while receiving an FM stereo station in monaural.
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
- 11 Animation indicator
- 12 DVD indicator
 - Lights when DVD Video is detected.
- 13 Source signal indicators
 - DIGITAL: lights when a source signal is Dolby Digital.
 - DTS: lights when a source signal is DTS.
 - PCM: lights when a source signal is linear PCM.
- 14 Main display
- 15 SURROUND MODE indicator
 - Lights when Surround mode is activated (see page 13).
- 16 3D PHONIC indicator
 - Lights when 3D Phonic is activated (see page 13).
- 17 SOUND MODE indicator
 - Lights when SEA mode or USER mode is activated (see page 13).
- 18 RESUME indicator
 - Lights when the Resume function is activated (see page 9).
- 19 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD increase level.
- 20 Disc operation indicators
 - REP: lights when Repeat Play mode is activated.
 - 1: lights when One Track/Chapter/Step Repeat is activated.
 - ALL: lights when All Disc Repeat is activated.
 - A-B: lights when A-B Repeat is activated.
 - PROGRAM: lights when Program Play mode is activated.
 - RANDOM: lights when Random Play is activated.
- 21 Tape operation indicators
 - TAPE: lights when a tape is loaded in either A or B.
 - (reverse mode):
 - : tape play continues endlessly.
 - : tape automatically reverses once.
 - : tape play stops at the end of one side.
 - REC: lights while recording.
 - A: lights when a tape is loaded in the deck A.
 - B: lights when a tape is loaded in the deck B.
 - (tape direction):
 - Lights to indicate the current tape running direction.
 - Flashes slowly during playback and recording.
 - Flashes quickly while rewinding a tape.
- 22 Timer indicators
 - : lights when Sleep Timer is working or Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: flashes when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.

Daily Operations—Playback

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



1 Turn on the power.

The STANDBY lamp on the main unit goes off.

- Without pressing $\odot/|$ (STANDBY/ON), the System also turns on by pressing one of the source select buttons in the next step.

2 Select the source.

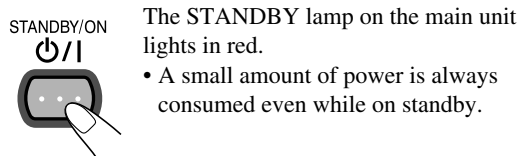
Playback automatically starts if the selected source is ready to start playback.

- If you press AUX, start playback source on the external component.

3 Adjust the volume.

4 Operate the target source as explained later.

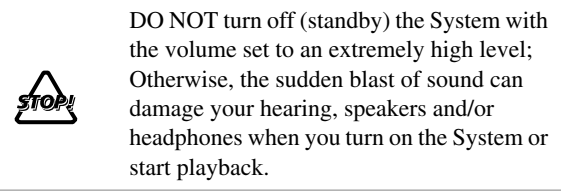
To turn off (stand by) the system



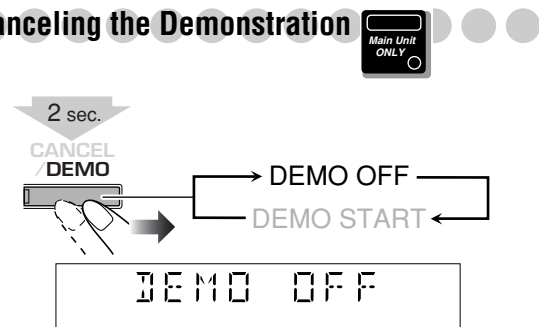
For private listening

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

- Disconnecting the headphones will activate the speakers again.



Canceling the Demonstration

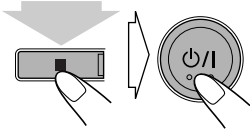


To start the demonstration, select DEMO START.

Listening to the Radio INFO

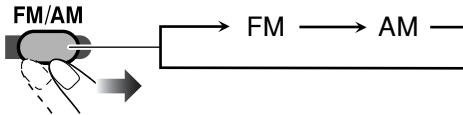
To select the AM tuner interval spacing

Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing. You can change the AM tuner intervals during the unit is on standby mode.



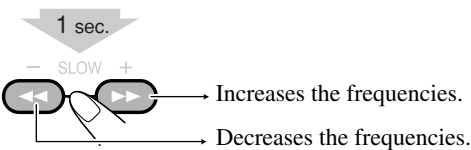
(holding then...)

To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



Frequency starts changing on the display. When a station (frequency) with sufficient signal strength is tuned in, the frequency search stops.

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

To stop searching manually, press either button.

If the received FM station is hard to listen



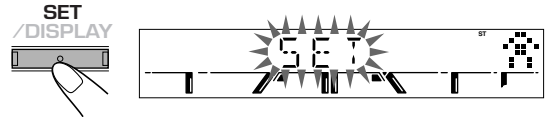
The MONO indicator lights on the display. Reception will improve though stereo effect is lost—monaural reception mode. **To restore the stereo effect,** press the button again (the MONO indicator goes off).

To preset Stations

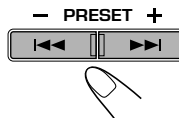


You can preset 30 FM and 15 AM stations.

1 Tune in to a station you want to preset.



2 Select a preset number.

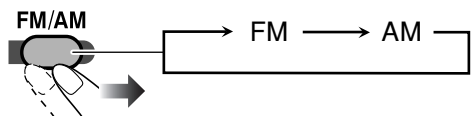


3 Store the station.



To tune in to a Preset Station

1 Select the band (FM or AM).



2 Select a preset number for the station you store.



Examples:

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

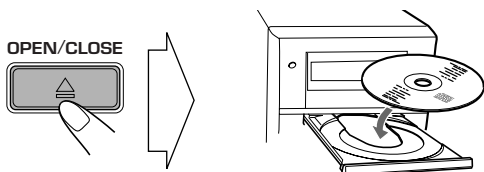
- You can also use buttons on the remote control or the PRESET +/- buttons on the main unit.

Playing Back a Disc ●●●●●●●●●● INFO

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

- DVD Video comprises of “Titles” which includes “Chapters,” MP3/WMA comprise of “Groups” which includes “Tracks,” JPEG comprises of “Groups” which includes “Files,” and CD/SVCD/VCD comprise of only “Tracks.”
- For JPEG playback, see “Operations on the CONTROL Screen” on page 25.

To insert discs



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

To close the disc tray, press OPEN/CLOSE ▲ again. If you press DVD/CD ►, disc tray closes automatically and playback starts.

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

While playing DVD/SVCD/VCD: This System can store the stop point, and when you start playback again by pressing DVD/CD ► (even while on standby), 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 is activated, press ■ twice. (To cancel Resume, see “RESUME” on page 32.)

On-screen guide icons

- During disc playback, the following icons may appear for a while on the TV screen:

Appears at the beginning of a scene containing multi-angle views.

Appears at the beginning of a scene containing multi-audio languages.

Appears at the beginning of a scene containing multi-subtitle languages.

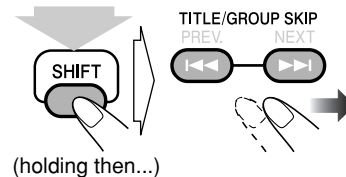
- The following icons will be also shown on the TV screen to indicate your current operation.



- To deactivate the on-screen guide icons, see “ON SCREEN GUIDE” on page 32.

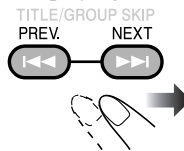
To select a title/group Remote ONLY >>>

While playing a disc...



To select a chapter/track

While playing a disc...



To locate a particular portion

While playing a disc except MP3/WMA...



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

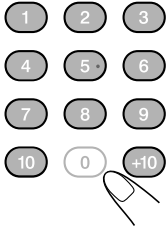
To return to normal playback, press DVD/CD ►.

To select an item directly



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

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



Examples:

To select number 5, press 5.

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

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

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



Examples:

To select number 5, press 5.

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

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

To play back by using the disc menu

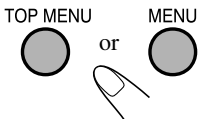


You can operate the disc play—DVD and SVCD/VCD with Playback Control (PBC)—using the disc menu shown on the TV screen.

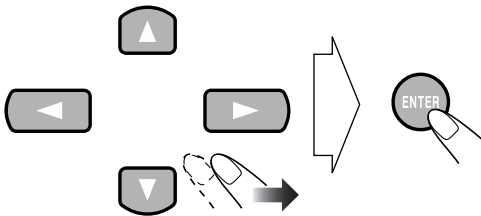
- When an SVCD or VCD with PBC is detected, “PBC” appears on the display instead of the playing time.

■ For DVD Video:

1 Show the disc menu.



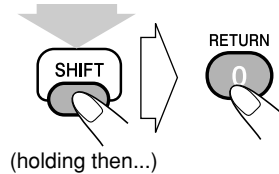
2 Select an item on the disc menu.



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



To return to the previous menu:



To cancel PBC



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

To reactivate PBC, press ■, then press ◀◀.

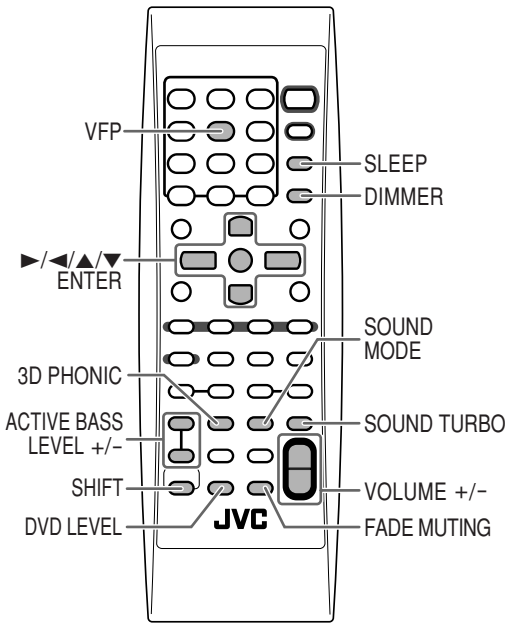
- With some discs, you can also select items by entering the number using the 10 keys.

■ For SVCD/VCD with PBC:

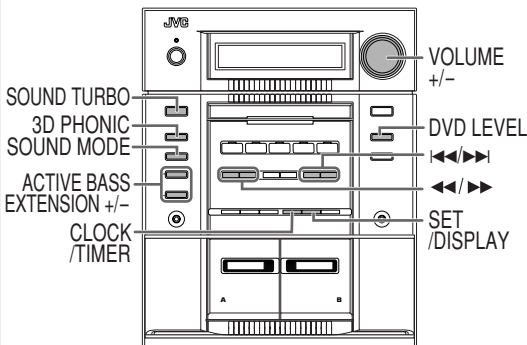
While playing a disc with PBC, “PBC” appears on the display.

Daily Operations—Sound&Other Adjustments

Remote Control



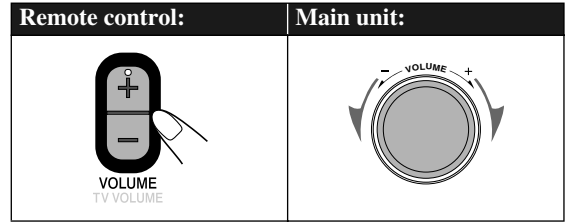
Main unit



Adjusting the Volume

INFO

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



To drop the volume in a moment



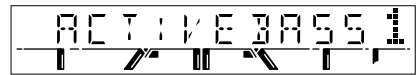
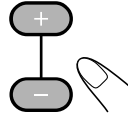
To restore the volume, press again, or adjust the volume level.

Reinforcing the Bass Sound

To adjust the bass level gradually

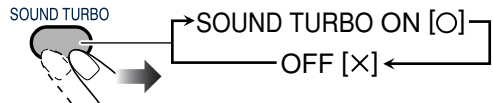
You can select the bass level from level 0 (minimum) to level 2 (maximum).

ACTIVE BASS LEVEL



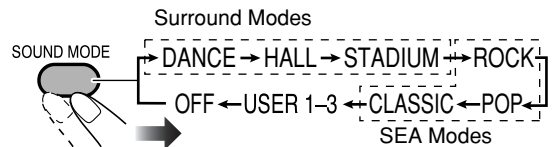
To reinforce the Heavy Sound—SOUND TURBO

You can boost the low and high frequency sound.



Selecting the Sound Modes

You can select one of the preset Sound Modes.



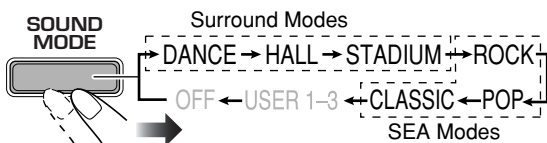
Surround Modes*	
DANCE	Increases resonance and bass.
HALL	Adds depth and brilliance to the sound.
STADIUM	Adds clarity and spreads the sound, as in an outdoor stadium.
SEA (Sound Effect Amplifier) modes	
ROCK	Boosts low and high frequency. Good for acoustic music.
POP	Good for vocal music.
CLASSIC	Good for classical music.
User Modes	
USER 1/2/3	Your individual mode stored in memory. See the next column “Creating Your Own Sound Modes—User Mode.”
OFF	No Sound Mode effect.

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

Creating Your Own Sound Modes—User Mode

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

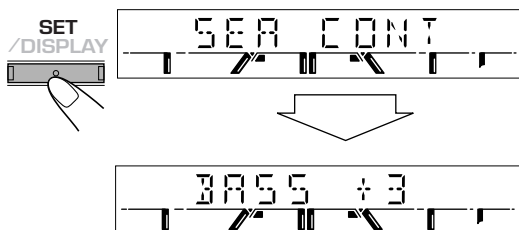
1 Select one of the preset Sound Modes.



• If you want to add surround elements into your Sound Mode, select one of the Surround Modes.

2 Enter into the SEA Control Mode.

• You can enter the SEA Control Mode only while the Sound Mode name is shown on the display.



3 Adjust the SEA pattern.

① Select one of the tone—BASS or TRE (treble).



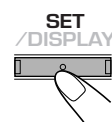
② Adjust the level of the selected tone.

• You can adjust the bass and treble level from -3 to $+3$.

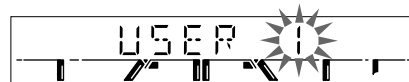
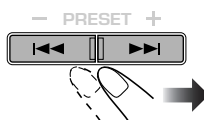


③ Repeat steps ① and ② to adjust the level of the other tone.

④ Finish the SEA pattern setting.



4 Select one of the User Modes.

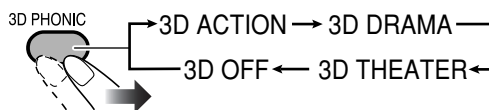


5 Store the setting.



Creating 3-dimensional Sound Field—3D Phonic

While playing a disc...



3D PHONIC ACTION

On the TV screen

3D ACTION Suitable for action movies and sports programs.

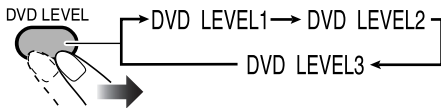
3D DRAMA Creates natural and warm sound. Enjoy movies in a relaxed mood.

3D THEATER Enjoy sound effects like in a major theater.

Presetting Automatic DVD Video Sound

Increase Level

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



As the number increases, sound level also increases.

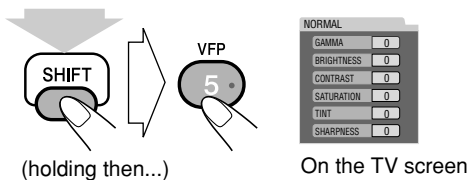
Changing the Picture Tone



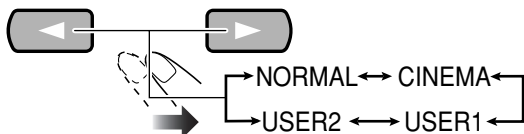
While showing a playback picture on the TV, you can select the preset picture tone, or adjust it and store your own taste.

To select a preset picture tone

1 While playing, display VFP setting screen.



2 Select a preset picture tone.



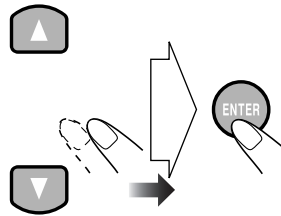
NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

To adjust the picture tone

1 Select "USER1" or "USER2."

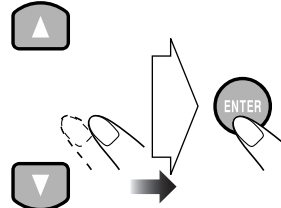
- Follow steps 1 and 2 explained above.

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 picture is bright or dark as a whole (-8 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.



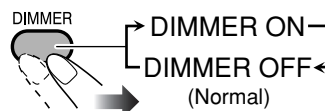
4 Repeat steps 2 to 3 to adjust other parameters.

To erase the screen, while holding down SHIFT, press VFP again. The screen will automatically be erased after 9 seconds even if you do not press VFP.

Changing the Display Brightness



You can dim the display window.



Setting the Clock

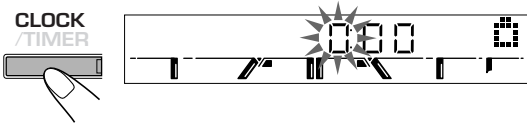


INFO

Without setting the built-in clock, you cannot use Daily/Recording Timers (see page 29) and Sleep Timer (see below).

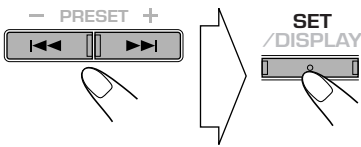
- To exit from the clock setting, press CLOCK/TIMER as required.
- To go back to the previous step, press CANCEL/DEMO.

1 Activate clock setting mode.



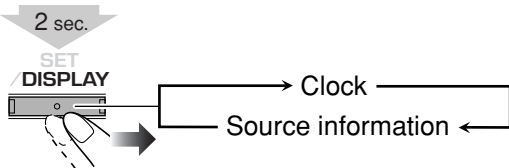
- If you have already adjusted the clock before, press the button repeatedly until the clock time starts flashing.

2 Adjust the hour, then minute.



Now the built-in clock starts working.

To check the current time when the System is turned on

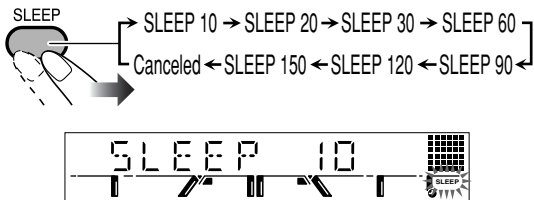


Turning Off the Power Automatically



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

1 Specify the time (in minutes).



2 Wait until the set time goes off.

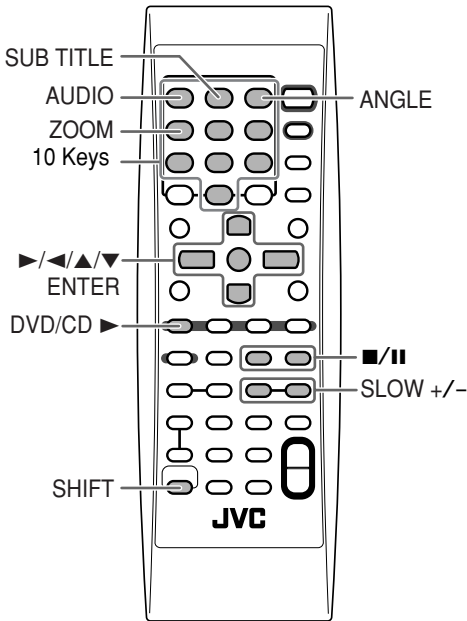
To check the time remaining until the shut-off time



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

Unique DVD/VCD Operations

Remote Control



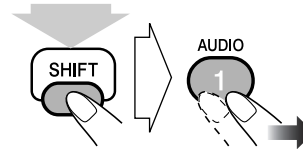
Selecting the Sound Track

For DVD Video: While playing back a chapter containing audio languages, you can select the language to listen to.

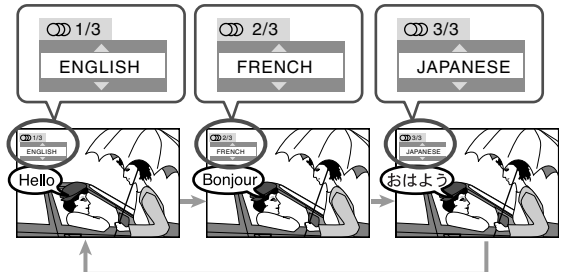
For SVCD/VCD: When playing back a track, you can select the audio channel to play.

- You can also select the audio track using the on-screen bar (see page 22).

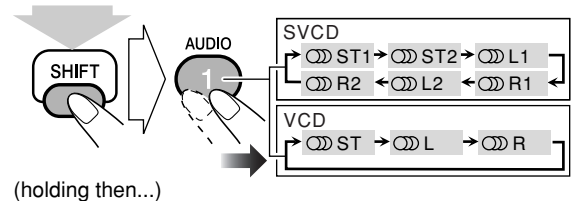
While playing a DVD Video...



Ex.:



While playing an SVCD or VCD...



ST1/ST2/ST To listen to normal stereo (2 channel) playback.

L1/L2/L To listen to the left audio channel.

R1/R2/R To listen to the right audio channel.

- SVCD can have 4 audio channels.

Selecting the Subtitle Language

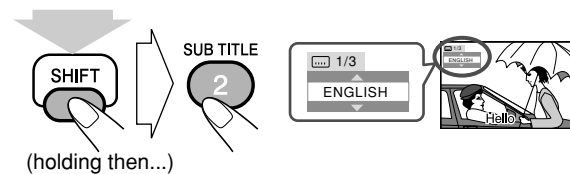
For DVD Video: While playing back a chapter containing subtitles in different languages, you can select the subtitle language to display on the TV screen.

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

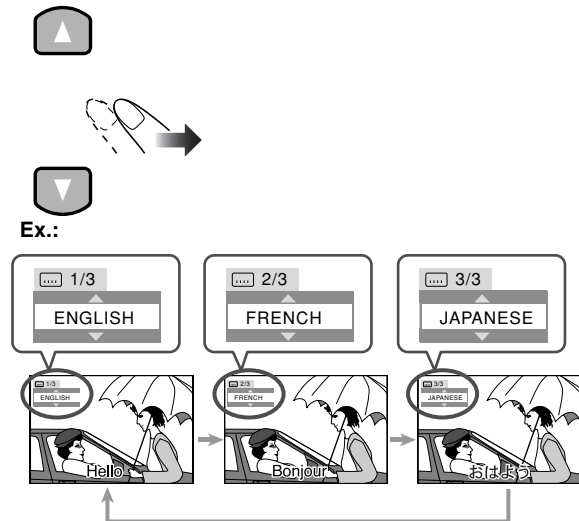
- You can also select the subtitle language using the on-screen bar (see page 22).

While playing a DVD Video...

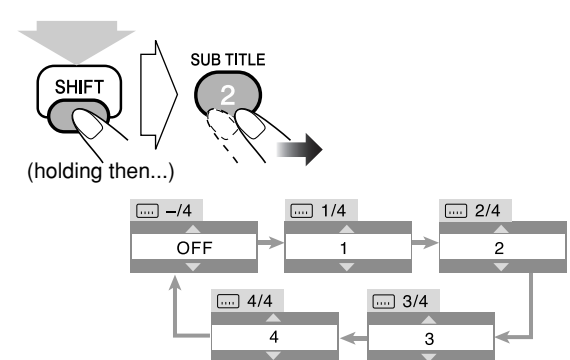
1 Display the subtitle selection window.



2 Select the subtitle language.



While playing an SVCD...

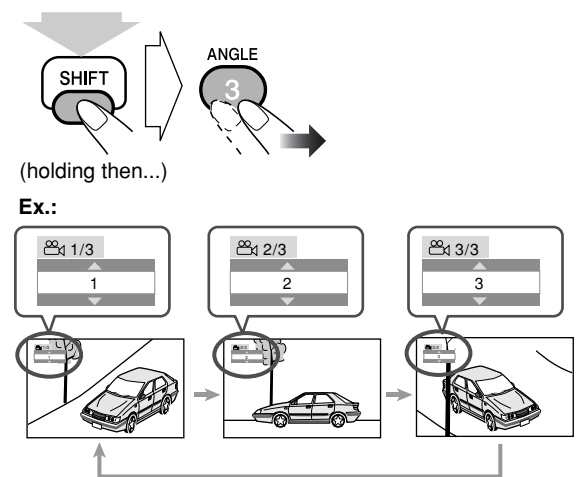


Selecting the View Angle

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



- You can also select the view angle using the on-screen bar (see page 22).

While playing back...



Special Picture Playback

Still picture playback

To start still picture playback:	To resume normal playback:
While playing... FM MODE 	DVD/CD 

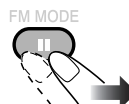
Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ►.

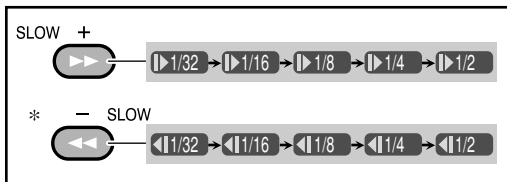
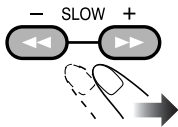
Slow-motion playback

1 While playing...



Still picture playback starts.

2 Select slow motion speed.

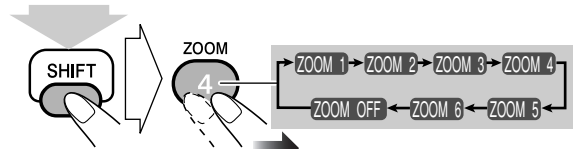


*Not available for SVCD/VCD.

To resume normal playback, press DVD/CD ►.

Zoom

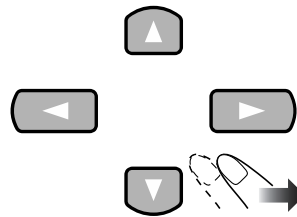
1 While playing back...



(holding then...)

As the number increases, magnification also increases.

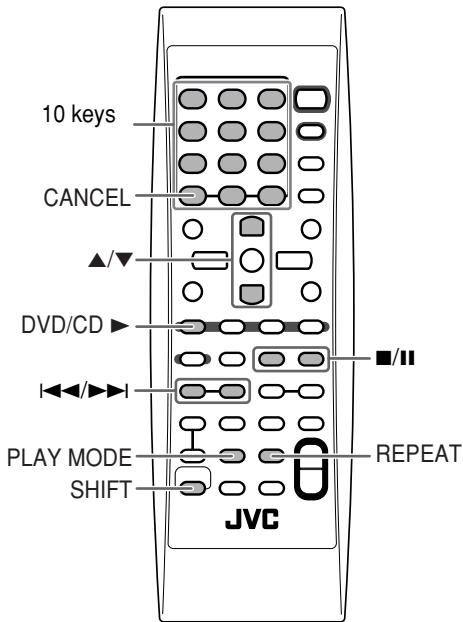
2 Move the zoomed-in position.



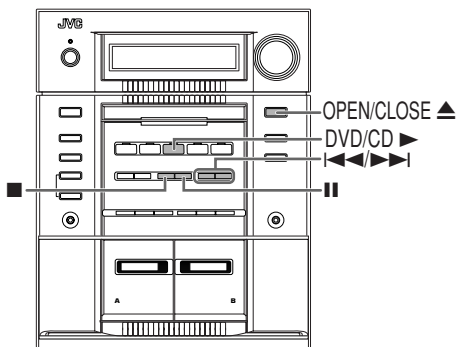
To cancel zoom, while holding down SHIFT, press ZOOM repeatedly until "ZOOM OFF" appears on the TV.

Advanced Disc Operations

Remote Control



Main unit

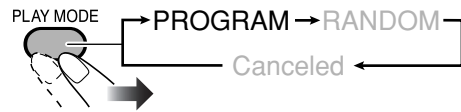


Programming the Playing Order

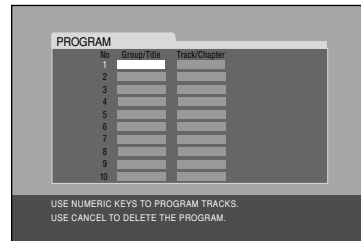
—Program Play

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 display



On the TV

2 Select chapters or tracks you want for Program Play.

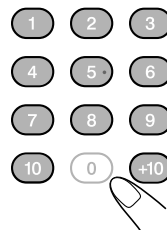
• For DVD/MP3/WMA:

- ① Select a title or group number.
- ② Select a chapter or track number.

• For SVCD/VCD/CD:

- ① Select a track number.

To enter the numbers:



Examples:

To enter number 5, press 5.

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

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

3 Repeat the above step 2 until you finish what you want to program.

4 Start playback.

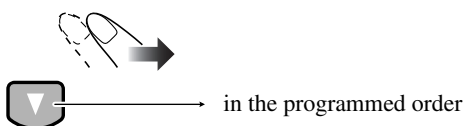
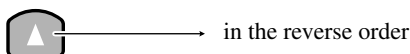


Playback starts in the order you have programmed.

To skip a track:	To pause:	To stop:
TITLE/GROUP SKIP PREV. NEXT 	FM MODE To release, press DVD/ CD ►.	

To check the programmed contents

Before or after playback...



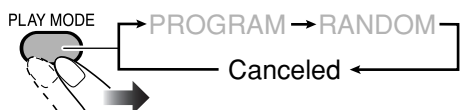
To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
 (holding then...)	 You can also use ■ button on the unit.
To add steps in the program: Repeat step 2 on page 19.	

To exit from Program Play

Before or after playback...

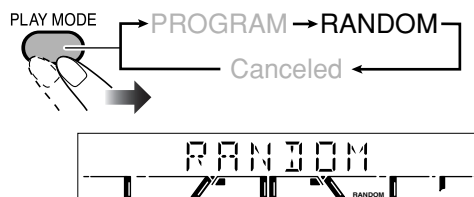


Playing at Random—Random Play

You can play the contents of all tracks at random.

- Random play cannot be used for some DVDs.

1 Before starting playback, activate Random Play.



2 Start playback.



Playback starts in a random order. Random Play ends when all chapters/tracks are played.

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

To exit from Random Play

Before or after playback...



Playing Repeatedly



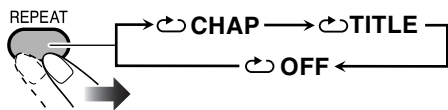
- You can also select the repeat mode using the on-screen bar (see page 22).

Repeat Play

You can repeat playback.

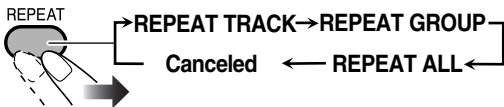
• For DVD Video:

While playing...



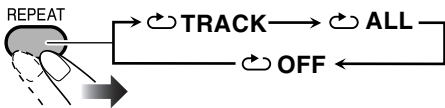
• For MP3/WMA:

While playing or before playback...



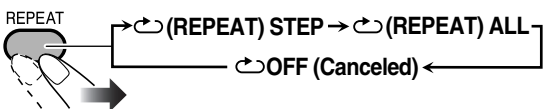
• For CD/SVCD/VCD:

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



• For Program Play/Random Play mode:

While playing or before playback...



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

Prohibiting Disc Ejection

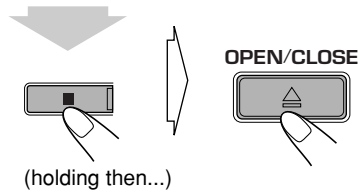


—Child Lock

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

- This is possible while the System is on standby.

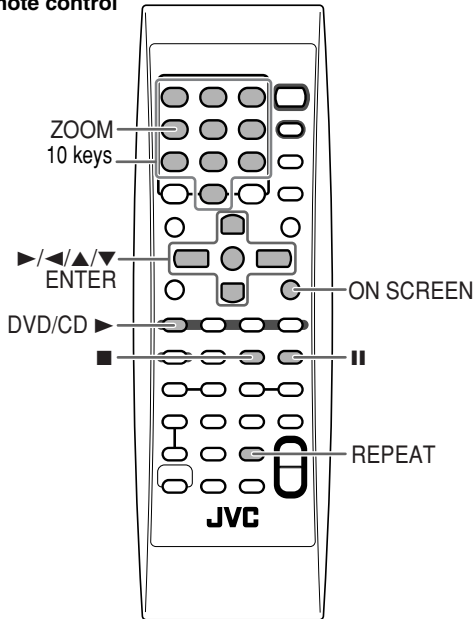
While the disc tray is closed...



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

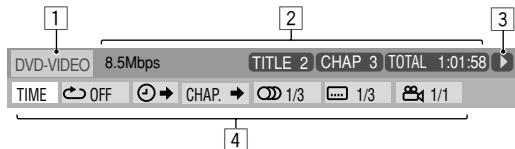
On-Screen Disc Operations

Remote control

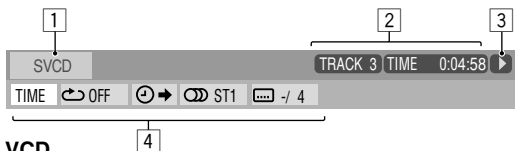


On-screen bars

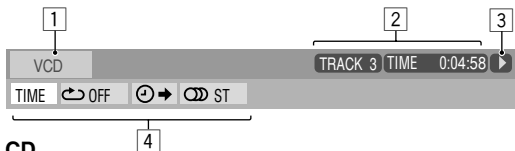
DVD Video



SVCD



VCD



CD



On-screen Bar Information INFO

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

1 Disc type

2 Playback information

Indication	Meanings
Mbps	Current transfer rate (Megabits per second)
TITLE 2	Current title
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
TOTAL 1:25:58	Time indications

3 Playback conditions

Indication	Meanings
▶	Playback
▶▶/◀◀	Forward/Reverse search
▶▶/◀◀	Forward/Reverse slow-motion
⏸	Pause
■	Stop

4 Operation icons (on the pull-down menu)

Indication	Meanings
TIME	Select to change the time indication (see also page 23).
↺	Select to repeat playback (see also pages 21, 23, and 24).
⌚	Select for time search (see also page 24).
CHAP. →	Select for chapter search (see also page 25).
TRACK →	Select for track search (see also page 25).
🗣 1/3	Select to change the audio language or channel (see also page 16).
📄 1/3	Select to change subtitle language (see also page 17).
👁 1/3	Select to change the view angle (see also page 17).

Operations Using the On-screen Bar



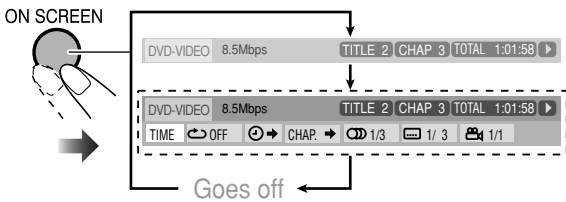
INFO

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

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

While a disc is selected as the source...

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



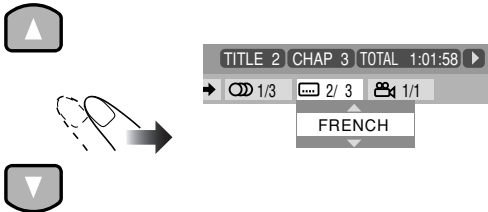
2 Select (highlight) the item you want.



3 Display the pop-up window.



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

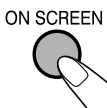


5 Finish the setting.



Pop-up window goes off.

To erase the on-screen bar



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

To change the time information

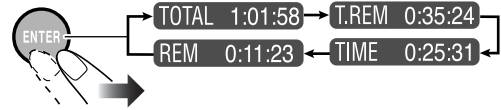
You can change the time information in the on-screen bar and the display window on the main unit.

1 While playing, 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

ON SCREEN



Repeat Play

• See also page 21.

1 While playing a disc (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.

• Repeat play can be selected before starting playback, except for DVD Video.

2 Select [REPEAT].

3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats the disc (except for DVD).
A-B	Repeats a desired portion (see below).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
OFF	Cancels Repeat Play.

* During Program Play or Random Play, "STEP" appears.

5 Finish the setting.



Pop-up window goes off.

A-B Repeat

1 While playing, display the on-screen bar with the pull-down menu.

2 Select .

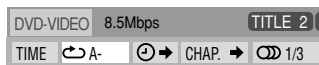
3 Display the pop-up window.




4 Select "A-B".



5 Select the start point (A).



- Before pressing ENTER, you can search for the end point using .

6 Select the end point (B).



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

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

To erase the on-screen bar

ON SCREEN



Time Search

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

1 While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.

- Time Search can be used before starting playback, except for DVD.

2 Select .

3 Display the pop-up window.



4 Enter the time.


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



Examples:

To move to a point of 1 (hours): 02 (minutes): 00 (seconds), press 1, 0, 2, 0, then 0.

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

- It is always required to enter the hour digit (even "0" hour), but it is not required to enter trailing zeros (the last two digits in the examples above).
- To correct a misentry, press cursor  to erase the last entry.

5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar

ON SCREEN



Chapter/Track Search

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

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



- 4 Enter the desired chapter/track number.



Examples:

To select chapter/track 5, press 5.

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

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

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

- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar

ON SCREEN



Operations on the CONTROL



Screen

INFO

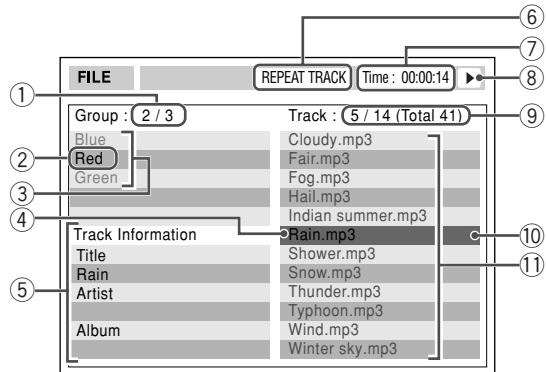
The CONTROL screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

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

- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 32).

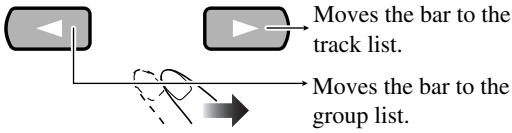
CONTROL screen

Ex.: When the MP3 disc is loaded.

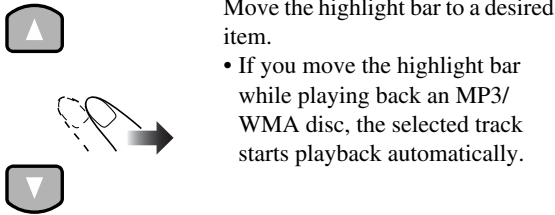


- 1 Current group number/total group number
- 2 Current group
- 3 Group list
- 4 Current track
- 5 Track information (ID3 Tag Version 1.0: only for MP3/WMA)
- 6 Repeat Play setting
- 7 Elapsed playing time of the current track (only for MP3/WMA)
- 8 Operation mode icon
- 9 Current track number/total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

To move the highlight bar between group list and track list



To select a group/track in the list



To start playback

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

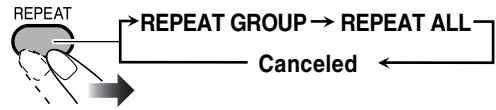
- Once you start playing back a JPEG track, the CONTROL screen goes off.
- To cancel slide-show, and display the current still picture, press **II**.

To stop playback



To repeat slide-show for JPEG

Before starting playback...

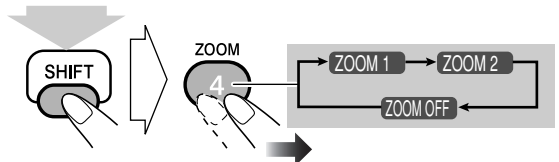


GROUP	Repeats the current group.
ALL	Repeats all disc.

- For Repeat Play of MP3/WMA, see pages 21 and 23.

To zoom in the still picture

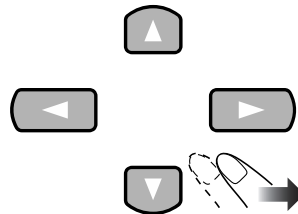
1 During playback is paused...



(holding then...)

As the number increases, magnification also increases.

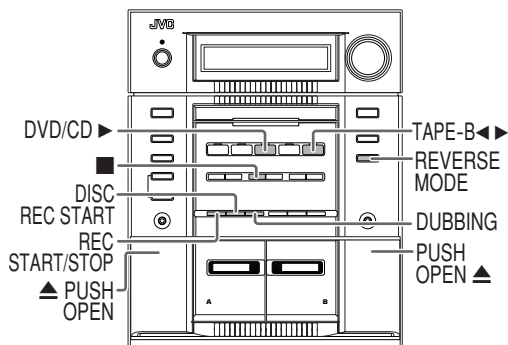
2 Move the zoomed-in position.



To cancel zoom, while holding down SHIFT, press ZOOM repeatedly until “ZOOM OFF” appears on the TV.

Recording Operations

Main unit



IMPORTANT

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

Recording on a Tape

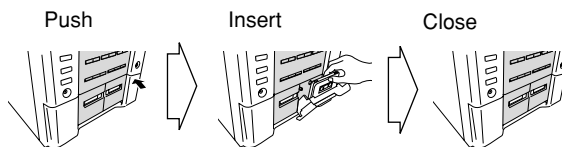


INFO

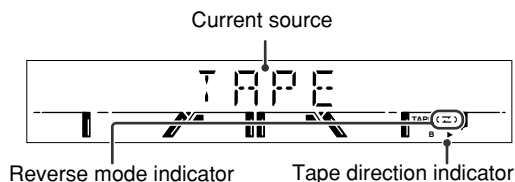
You can use type I tapes for recording.

- To play a tape, see page 11.

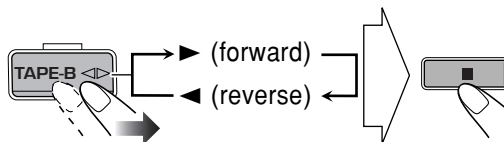
1 Insert a recordable cassette in deck B.



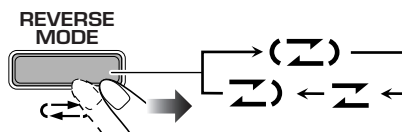
2 Check the tape running direction and Reverse Mode settings on the display.



To change the direction



Change the Reverse mode if necessary



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

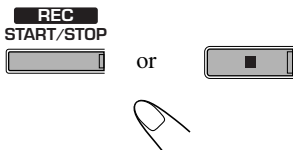
3 Start playing the source—"FM," "AM," "DVD/CD," "TAPE-A" or "AUX."

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

4 Start recording.



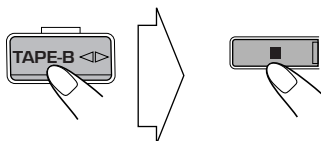
To stop recording



Dubbing Tapes



1 Change the source to TAPE.

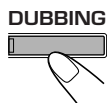


2 Insert the source cassette in deck A, and a recordable cassette in deck B.

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

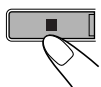
See step 2 of "Recording on a Tape" on page 27.

4 Start dubbing.



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

To stop dubbing



Synchronized Disc Recording



INFO

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

1 Load a disc and insert a recordable cassette.

- If the current playing source is not the disc 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 27.

For recording desired tracks on discs:

You can program tracks to record with your preferred order.

- Select Program Play (and make a program: see page 19) without starting playback.

3 Start recording.



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

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

To record without creating a 4-second blank

- 1 Press DVD/CD ►, then press II.
- 2 Press ◀◀ to go back to the beginning of the track.
- 3 Press DISC REC START to start recording.

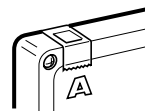
To protect your recording

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

To protect your recording, remove these tabs.

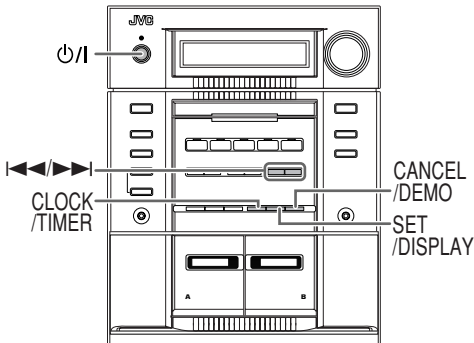


To re-record on a protected tape, cover the holes with adhesive tape.



Timer Operations

Main unit



Setting the Timer

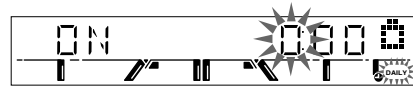
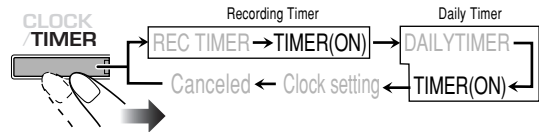


INFO

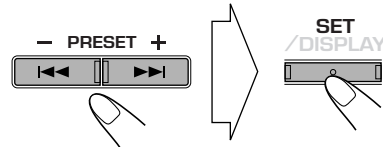
Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- To correct a misentry during the process, press CANCEL/DEMO. You can return to the previous step.

1 Select one of the timer setting modes—TIMER(ON) for Daily Timer or Recording Timer.



2 Make the timer setting as you want.



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

- ① Set the hour then minute for on-time.
- ② Set the hour then minute for off-time.
- ③ For Daily Timers: Select the playback source—“TUNER FM,” “TUNER AM,” “DISC,” “TAPE-A,” “TAPE-B” or “AUX.”

For Recording Timer: Select the playback source—“TUNER FM” or “TUNER AM.”



EX.: When “TUNER FM” is selected for Daily Timer.

- ④ Select a preset station for “TUNER FM” and “TUNER AM,” or select a group and track number for “DISC.”
- ⑤ For Daily Timers: Select the volume level.
 - You can select the volume level (“VOLUME 5,” “VOLUME 10,” “VOLUME 15” and “VOLUME --”). If you select “VOLUME --,” the volume is set to the last level when the system has been turned off.

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



How Daily Timer actually works

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

When the on-time comes

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

When the off-time comes

The System stops playback, and turns off (standby).
 • The timer setting remains in memory until you change it.

How Recording Timer actually works

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

When the on-time comes

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

When the off-time comes

The System stops recording, and turns off (standby).
 • The timer setting remains in memory until you change it.

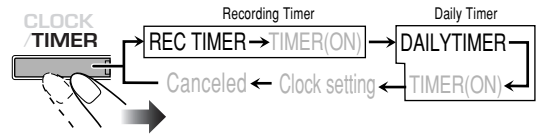
Recording Timer will start working even if the System has been turned on.

To turn off the Timer after the setting is done

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

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

1 Select the timer you want to cancel (DAILYTIMER or REC TIMER) you want to cancel.

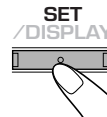


2 Turn off the selected timer.



- The timer (⏰) indicator goes off.

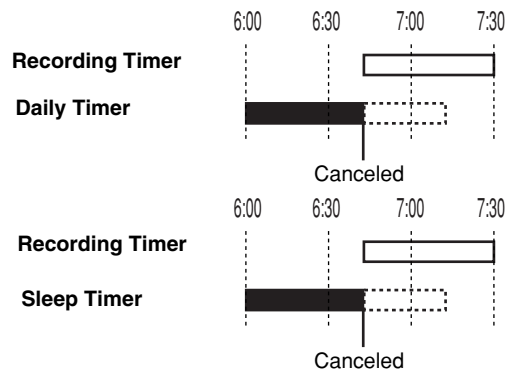
To turn on the timer again, repeat the step **1** and press SET/DISPLAY in step **2**.



Timer Priority INFO

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

- Recording Timer has priority over the Daily Timer and Sleep Timer (see page 15).

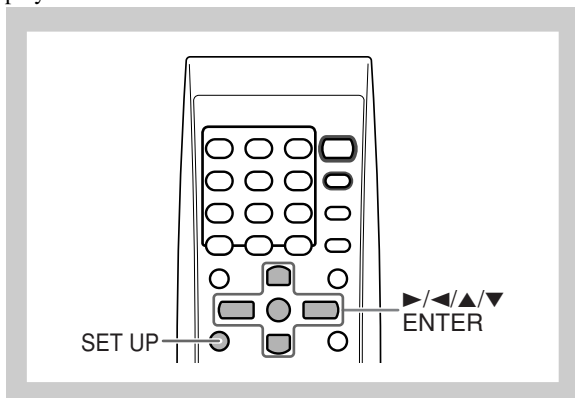


Setup Menu Operations

Initial Settings

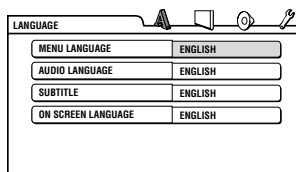
INFO

Some items in the menus cannot be changed during playback.



How to set the Initial settings

1 Press SET UP.



2 Press ► (or ◀) to select the menu.

3 Press ▼ (or ▲) to move to select the item.

4 Press ENTER.

5 Press ▼ (or ▲) to select the options, then press ENTER.

- For settings of the LANGUAGE menu, see also “Language Code List” on page 38 or the PARENTAL LOCK menu, see also “Country/Area codes list for Parental Lock” on page 38.

To erase a preference display

Press SET UP.





LANGUAGE menu

Item	Contents
MENU LANGUAGE	You can select the initial menu language of DVD Video. See page 38.
AUDIO LANGUAGE	You can select the initial audio language of DVD Video. See page 38.
SUBTITLE	You can select the initial subtitle language of DVD Video. See page 38.
ON SCREEN LANGUAGE	You can select “ENGLISH,” “CHINESE,” or “SPANISH” as the on-screen language.



PICTURE menu

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



Item	Contents
FILE TYPE	You can select the file type to play. AUDIO: To play MP3/WMA files. STILL PICTURE: To play JPEG files.



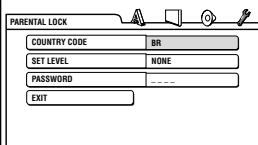
AUDIO menu

Item	Contents
DIGITAL AUDIO OUTPUT	Set this item correctly when using the OPTICAL DIGITAL OUTPUT terminal on the rear. PCM ONLY: When connecting to audio equipment which can decode only linear PCM signals. DOLBY DIGITAL/PCM: When connecting to a Dolby Digital decoder or an amplifier with a built-in Dolby Digital decoder. STREAM/PCM: When connecting to a DTS decoder or an amplifier with a built-in DTS, MPEG Multichannel or Dolby Digital decoder.
DOWN MIX	This setting is effective for digital audio output if “DIGITAL AUDIO OUTPUT” is set to “PCM ONLY.” DOLBY SURROUND: Select this when connecting to a surround decoder. STEREO: Select this when connecting to a stereo receiver, MD player, TV, etc.
D. RANGE COMPRESSION	Set this item to listen to DVD Video recorded in Dolby Digital format at low middle volume. AUTO: You can enjoy powerful playback sound. ON: Select this if the sound level of DVD Video is lower than the one of TV program to make the sound at a lower volume clear.



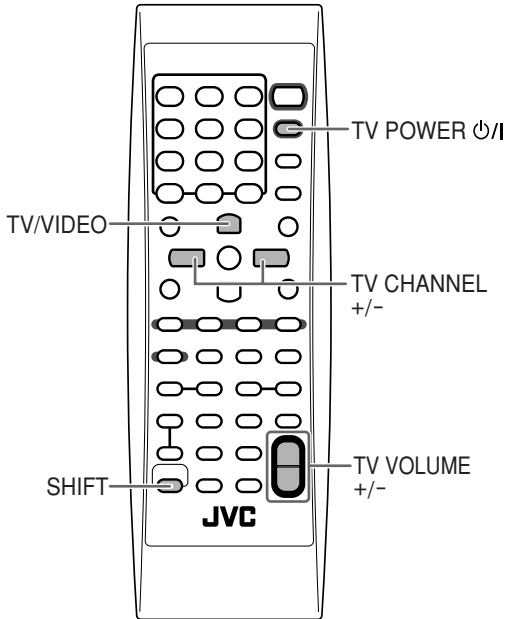
OTHERS menu

Item	Contents
RESUME	You can select the Resume. ON: The System resumes playback from the position where playback has been stopped if the disc is still in the disc tray. OFF: Resume is deactivated.
ON SCREEN GUIDE	Activate or deactivate the on-screen guide. ON: To activate the on-screen guide. OFF: To deactivate the on-screen guide.
PARENTAL LOCK	Select this item, then press ENTER to show the PARENTAL LOCK menu for limiting playback by children. Scenes which are limited by this function are not played or replaced with other scenes. COUNTRY CODE: Select the code of your country/area (see page 38). SET LEVEL: Select the level of restriction. (“1” is the strictest.) PASSWORD: Enter your password by pressing the 10 keys (0 to 9). EXIT: Select this and press ENTER to go back to the OTHERS menu. <ul style="list-style-type: none"> Some DVD Videos cannot be played by this function. If you try to play such a disc, the PARENTAL LOCK menu appears on the TV and asks whether you want to release the lock or not. To release the lock and play, select “TEMPORARY RELEASE,” press ENTER, then enter your password. Otherwise, eject the disc. To change the setting of the limitation, enter your password.



Operating the TV

Remote control



Operating TV

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

To operate the TV

To turn on or off the TV:	To select the input mode (either TV or VIDEO):
<p>TV POWER</p>	<p>SHIFT</p> <p>TV/VIDEO</p> <p>(holding then...)</p>
To adjust TV volume:	
<p>SHIFT</p> <p>(holding then...)</p>	<p>VOLUME TV VOLUME</p>
To select the TV channel:	
<p>SHIFT</p> <p>(holding then...)</p>	<p>- TV CHANNEL</p> <p>ENTER</p> <p>TV CHANNEL +</p>

Additional Information

Learning More about This System ● ● ●

Introduction (see pages 1 and 2)

Playable Disc Types:

- If you play back an NTSC disc with the video output selector set to “PAL,” you can watch the playback pictures (the disc will be reproduced using “PAL 60” format), but the TV screen may roll over upward and downward rapidly.
- If you play back a PAL disc with the video output selector set to “NTSC,” you can watch the playback pictures, but the following symptoms may occur:
 - The items on the disc menu will be blurred, and be shown slightly shifted when highlighted.
 - The aspect ratio of the picture may differ from the original aspect ratio.
 - The picture movement is not smooth.
- **About audio format**
 - **Linear PCM:** Uncompressed digital audio, the same format used for CDs and most studio masters.
 - **Dolby Digital:** Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create the realistic surround sound.
 - **DTS (Digital Theater Systems):** Compressed digital audio, developed by Digital Theater Systems, Inc., which enables multi-channel like Dolby Digital. As the compression ratio is lower than for Dolby Digital, it provides wider dynamic range and better separation.

Daily Operations—Playback (see pages 7 to 11)

Listening to the Radio:

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

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- For MP3/WMA playback...
 - MP3 discs are required a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This system can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).

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

Playing Back a Tape:

- In Relay Play, if the playing time of the tape in deck A is less than 12 seconds, the System rewinds the tape and plays back again.

Daily Operations—Sound&Other Adjustments (see pages 12 to 15)

Creating Your Own Sound Modes—User Mode:

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

Creating 3-dimensional Sound Field—3D Phonic:

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

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 DVD/VCD Operations (see pages 16 to 17)

Selecting the Sound Track:

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

Special Picture Playback:

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

Advanced Disc Operations (see pages 19 to 21)

Programming the Playing Order—Program Play:

- While programming steps...
 - Your entry will be ignored if you have tried to program an item number that does not exist on the disc (for example, selecting track 14 on a disc that only has 12 tracks).
- You cannot use Program Play and Random Play for JPEG discs.

On-Screen Disc Operations (see pages 22 to 26)

Operations Using the On-screen Bar:

A-B Repeat:

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

Operations on the CONTROL Screen:

- For JPEG files playback...
 - It is recommended that you record a file at 640 x 480 resolution. (If a file has been recorded at a resolution of more than 640 x 480, it will take a long time to be shown.)
 - This System can play only baseline JPEG files*. Progressive JPEG files* or lossless JPEG files* cannot be played.
 - * Baseline JPEG format: Used for digital cameras, web, etc.
 - Progressive JPEG format: Used for web.
 - Lossless JPEG format: An old type and rarely used now.
- This system can play back JPEG files with the extension code <.jpg> or <.jpeg> (regardless of the letter case-upper/lower).
- This system may not play back JPEG files properly if they are recorded on the devices other than digital still camera.
- During slide-show playback, zoom cannot be operated.

Recording Operations (see pages 27 to 28)

Recording on a Tape:

- The recording level is automatically set correctly. Thus, you can adjust the sound you are actually listening to without affecting the recording level.
- There is leader tape which cannot be recorded onto at the start and the end of cassette tapes. Thus, when recording discs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If no cassette is inserted, “NO TAPE” appears on the display. If a protected tape has been inserted, “NO REC” appears on the display.
- When using Reverse Mode for recording, start recording in the forward (▶) direction first; otherwise, recording will stop when only one side (reverse) of the tape is recorded.
- You cannot change the source during recording.

Synchronized Disc Recording:

- While recording, you cannot use ▶▶/|◀◀, ▶▶/◀◀, DVD LEVEL, 3D PHONIC and source buttons.
- You can adjust volume control and sound setting (Active Bass Extension, Sound Turbo), sound mode but the settings do not affect the recording sound.
- Everything on the disc goes onto the tape in the order on the disc, or according to the order you have made for Program Play.
- You cannot use Repeat Play while synchronized recording (Repeat Play will be canceled).
- When recording starts, “DISC REC” appears on the display and the REC (recording) lamp flashes.
- When the tape reaches its end in the forward direction (▶) during recording, the last song will be re-recorded at the beginning of the reverse side (◀).

- When the tape reaches its end in the reverse side (◀) during recording, recording stops even though the disc is not entirely recorded.

Timer Operations (see pages 29 to 30)

Setting the Timer:

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

Timer Priority:

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

Setup Menu Operations (see pages 31 to 32)

General:

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

LANGUAGE menu:

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

PICTURE menu—MONITOR TYPE:

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

AUDIO menu—DOWN MIX:

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

OTHERS menu—ON SCREEN GUIDE:

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

Maintenance

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

Handling discs

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

To clean the disc:

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

Handling cassette tapes

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

To keep the best recording and playback sound quality:

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

Cleaning the System

- Stains should be wiped off with a soft cloth. If the System is heavily stained, wipe it with a cloth soaked in 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 strong.
 - DO NOT wipe it with thinner or benzine.
 - DO NOT apply any volatile substance such as insecticides to it.
 - DO NOT allow any rubber or plastic to remain in contact for a long time.

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 procedure again.

Operations are disabled.

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

Unable to operate the System from the remote control.

⇒ The path between the remote control and the remote sensor on the System is blocked.

⇒ The batteries are exhausted.

No sound is heard.

⇒ Speaker connections are incorrect or loose.

⇒ Headphones are connected.

No picture appears on the screen.

⇒ The video cord connections are incorrect or loose.

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

⇒ Incorrect color system is selected (see “To set the video output selector” on page 4).

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 31).

Radio Operations:

Hard to listen to broadcasts because of noise.

⇒ Antennas connections are incorrect or loose.

⇒ The AM loop antenna is too close to the System.

⇒ The FM antenna is not properly extended and positioned.

Disc Operations:

The disc does not play.

⇒ The disc is placed upside down. Place the disc with the label side up.

⇒ Parental Lock is in use (see page 32).

ID3 Tag on an MP3 disc cannot be shown.

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

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

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

MP3/WMA or JPEG files are not played back.

⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the “FILE TYPE setting (see page 32).

⇒ You have changed the “FILE TYPE” (see page 32) setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

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

⇒ Some DVDs are programmed to always display no subtitle initially. If this happens, press SUB TITLE after starting play (see page 17).

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 16).

The disc tray does not open or close.

⇒ The AC power cord is not plugged in.

⇒ Child Lock is in use. “LOCKED” appears in the display window (see page 21).

Tape Operations:

The cassette holder cannot be opened.

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

Recording Operations:

Impossible to record.

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

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:

When you forget your password for Parental Lock.

⇒ Enter “8888.”

Language Code List

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

Country/Area codes list for Parental Lock

AD	Andorra	CZ	Czech Republic	IL	Israel	MU	Mauritius	SN	Senegal
AE	United Arab Emirates	DE	Germany	IN	India	MV	Maldives	SO	Somalia
AF	Afghanistan	DJ	Djibouti	IO	British Indian Ocean Territory	MW	Malawi	SR	Suriname
AG	Antigua and Barbuda	DK	Denmark			MX	Mexico	ST	Sao Tome and Principe
AI	Anguilla	DM	Dominica	IQ	Iraq	MY	Malaysia	SV	El Salvador
AL	Albania	DO	Dominican Republic	IR	Iran (Islamic Republic of)	MZ	Mozambique	SY	Syrian Arab Republic
AM	Armenia	DZ	Algeria	IS	Iceland	NA	Namibia	SZ	Swaziland
AN	Netherlands Antilles	EC	Ecuador	IT	Italy	NC	New Caledonia	TC	Turks and Caicos Islands
AO	Angola	EE	Estonia	JM	Jamaica	NE	Niger	TD	Chad
AQ	Antarctica	EG	Egypt	JO	Jordan	NF	Norfolk Island	TF	French Southern Territories
AR	Argentina	EH	Western Sahara	JP	Japan	NG	Nigeria		
AS	American Samoa	ER	Eritrea	KE	Kenya	NI	Nicaragua	TG	Togo
AT	Austria	ES	Spain	KG	Kyrgyzstan	NL	Netherlands	TH	Thailand
AU	Australia	ET	Ethiopia	KH	Cambodia	NO	Norway	TJ	Tajikistan
AW	Aruba	FI	Finland	KI	Kiribati	NP	Nepal	TK	Tokelau
AZ	Azerbaijan	FJ	Fiji	KM	Comoros	NR	Nauru	TM	Turkmenistan
BA	Bosnia and Herzegovina	FK	Falkland Islands (Malvinas)	KN	Saint Kitts and Nevis	NU	Niue	TN	Tunisia
BB	Barbados	FM	Micronesia (Federated States of)	KP	Korea, Democratic	NZ	New Zealand	TO	Tonga
BD	Bangladesh					OM	Oman	TP	East Timor
BE	Belgium			KR	Korea, Republic of	PA	Panama	TR	Turkey
BF	Burkina Faso	FO	Faroe Islands	KW	Kuwait	PE	Peru	TT	Trinidad and Tobago
BG	Bulgaria	FR	France	KY	Cayman Islands	PF	French Polynesia	TV	Tuvalu
BH	Bahrain	FX	France, Metropolitan	KZ	Kazakhstan	PG	Papua New Guinea	TW	Taiwan
BI	Burundi	GA	Gabon	LA	Lao People's Democratic Republic	PH	Philippines	TZ	Tanzania, United Republic of
BJ	Benin	GB	United Kingdom			PK	Pakistan	UA	Ukraine
BM	Bermuda	GD	Grenada	LB	Lebanon	PL	Poland	UG	Uganda
BN	Brunei Darussalam	GE	Georgia	LC	Saint Lucia	PM	Saint Pierre and Miquelon	UM	United States Minor Outlying Islands
BO	Bolivia	GF	French Guiana	LI	Liechtenstein			US	United States
BR	Brazil	GH	Ghana	LK	Sri Lanka	PN	Puerto Rico	UY	Uruguay
BS	Bahamas	GI	Gibraltar	LR	Liberia	PT	Portugal	UZ	Uzbekistan
BT	Bhutan	GL	Greenland	LS	Lesotho	PW	Palau	VA	Vatican City State (Holy See)
BV	Bouvet Island	GM	Gambia	LT	Lithuania	PY	Paraguay	VC	Saint Vincent and the Grenadines
BW	Botswana	GN	Guinea	LU	Luxembourg	QA	Qatar		
BY	Belarus	GP	Guadeloupe	LV	Latvia	RE	Réunion	RO	Romania
BZ	Belize	GQ	Equatorial Guinea	LY	Libyan Arab Jamahiriya			RU	Russian Federation
CA	Canada	GR	Greece	MA	Morocco	RW	Rwanda		
CC	Cocos (Keeling) Islands	GS	South Georgia and the South Sandwich	MC	Monaco	SA	Saudi Arabia	VN	Vietnam
CF	Central African Republic	GT	Guatemala	MD	Moldova, Republic of	SB	Solomon Islands	VU	Vanuatu
CG	Congo	GU	Guam	MG	Madagascar	SC	Seychelles	WF	Wallis and Futuna Islands
CH	Switzerland	GW	Guinea-Bissau	MH	Marshall Islands	SD	Sudan	WS	Samoa
CI	Côte d'Ivoire	GY	Guyana	ML	Mali	SE	Sweden	YE	Yemen
CK	Cook Islands	HK	Hong Kong	MM	Myanmar	SG	Singapore	YT	Mayotte
CL	Chile	HM	Heard Island and McDonald Islands	MN	Mongolia	SH	Saint Helena		
CM	Cameroon			MO	Macau	SI	Slovenia	YU	Yugoslavia
CN	China	HN	Honduras	MP	Northern Mariana Islands	SJ	Svalbard and Jan Mayen	ZA	South Africa
CO	Colombia	HR	Croatia			SK	Slovakia	ZM	Zambia
CR	Costa Rica	HT	Haiti	MQ	Martinique	SL	Sierra Leone	ZR	Zaire
CU	Cuba	HU	Hungary	MR	Mauritania	SM	San Marino	ZW	Zimbabwe
CV	Cape Verde	ID	Indonesia	MS	Montserrat				
CX	Christmas Island	IE	Ireland	MT	Malta				
CY	Cyprus								

Specifications

Amplifier section

Output Power: 80 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

Digital output:

OPTICAL DIGITAL OUTPUT:

-21 dBm to -15 dBm (660 nm \pm 30 nm)

Audio input sensitivity/Impedance

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

AUX: 300 mV/47 k Ω

VIDEO OUT:

Color system:NTSC/PAL selectable

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

Speaker Terminals:6 Ω – 16 Ω (Main speakers)

Tuner section

FM tuning range: 87.50 MHz – 108.00 MHz

AM (MW) 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/CD/VCD/SVCD

CD-R/CD-RW (recorded in Audio CD/ Video CD/

Super Video CD/ MP3/ WMA/ JPEG format)

DVD-R/DVD-RW (recorded in video format)

Dynamic range: 90 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

Normal (type I): 50 Hz – 14 000 Hz

Wow and flutter: 0.15% (WRMS)

General

Power requirement: AC 110 V / AC 127 V / AC 220 V / AC 230 V – AC 240 V \sim , (adjustable with the voltage selector), 50 Hz / 60 Hz

Power consumption: 125 W (at operation)
17 W (on standby)

Dimensions (approx.): 265 mm x 335 mm x 352 mm
(W/H/D)

Mass (approx.): 8.0 kg

Supplied Accessories

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

If any item is missing, consult your dealer immediately.

Speakers

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

Speakers: Woofer: 15 cm cone x 1
Midrange: 5 cm cone x 1
Tweeter: 2 cm dome x 1

Power handling capacity: 80 W

Impedance: 6 Ω

Frequency range: 42 Hz – 29 000 Hz

Sound pressure level: 83 dB/W•m

Dimensions (approx.): 205 mm x 335 mm x

232 mm (W/H/D)

Mass (approx.): 3.5 kg each

Design and specifications are subject to change without notice.

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.”

OPTICAL DIGITAL OUTPUT Signals

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

- For a DVD VIDEO without content protection set, there is a 20 bit or 24 bit output at the digital audio output terminal.

Parts Index

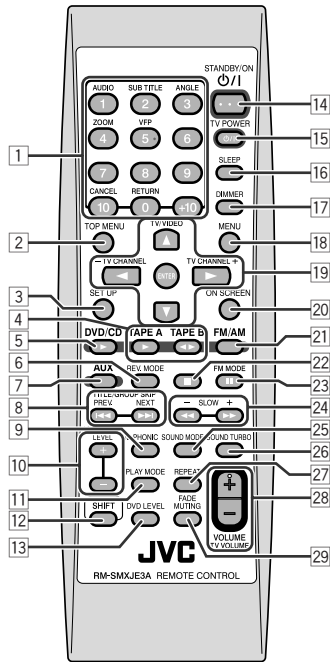
Remote control

Button	Page
▲/◀▶/▼/ENTER	19, 10, 14, 20, 23, 24, 26, 31, 32, 33
◀◀▶▶	8, 10, 13, 15, 20
◀▶▶▶	8, 9, 11
■	9, 10, 11, 20
	9, 17, 20, 26
3D PHONIC	13
10 keys	8, 10, 19, 24, 25, 32
ACTIVE BASS LEVEL +/-	12
ANGLE	17
AUDIO	16
AUX	7
CANCEL	1, 20
DIMMER	17, 14
DVD LEVEL	13, 14
DVD/CD ▶	9, 17, 19, 20, 26
FADE MUTING	29, 12
FM MODE	23, 8
FM/AM	21, 8
MENU	18, 10
ON SCREEN	20, 23, 24, 25
PLAY MODE	11, 19, 20
PREV./NEXT	8, 9, 10, 20
REPEAT	27, 21, 26
RETURN	1, 10
REV. MODE	6, 11
SET UP	3, 31
SHIFT	12, 9, 10, 16, 17, 18, 20, 26, 33
SLEEP	16, 15
SLOW +/-	24, 18
SOUND MODE	25, 12
SOUND TURBO	26, 12
STANDBY/ON Ⓞ/I	14, 7
SUB TITLE	1, 17
TAPE A ▶	4, 11
TAPE B ◀▶	4, 11
TITLE/GROUP SKIP	8, 9
TOP MENU	2, 10
TV CHANNEL +/-	19, 33
TV POWER	15, 33
TV VOLUME	28, 33
TV/VIDEO	19, 33
VFP	1, 14
VOLUME	28, 12
ZOOM	1, 18, 26

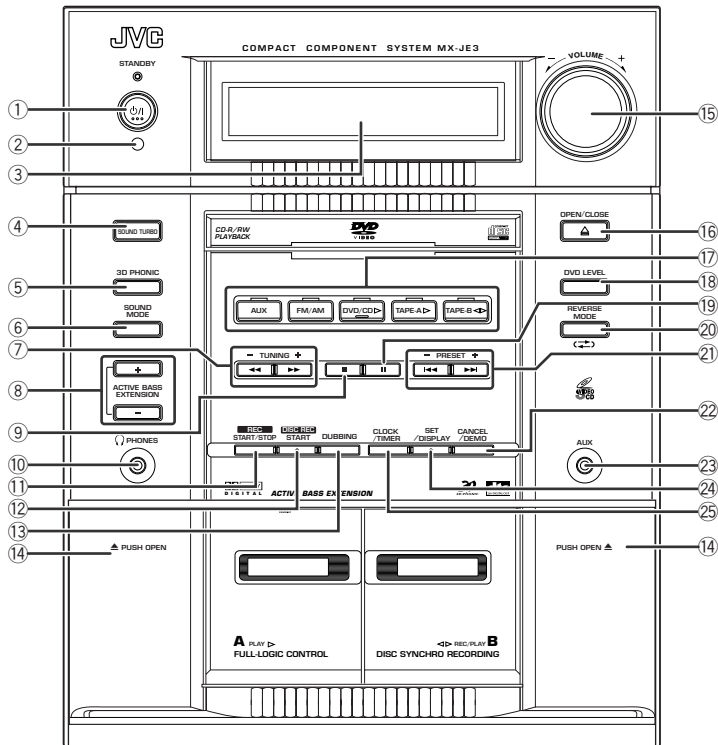
Main unit

Button	Page
Ⓞ/I	① 7, 8, 30
◀◀▶▶	⑦ 8, 9, 11, 13
◀▶▶▶	⑳ 8, 9, 10, 13, 15, 20
■	⑨ 8, 9, 10, 11, 20, 21, 27, 28
	⑲ 9, 17, 20, 26
▲ OPEN/CLOSE	⑰ 9, 21
▲ PUSH OPEN	⑭ 11, 27
Ⓞ PHONES jack	⑩ 7
3D PHONIC	⑤ 13
ACTIVE BASS EXTENSION	⑧ 12
AUX	⑰ 7
AUX jack	⑳ 4
CANCEL/DEMO	⑳ 7, 30
CLOCK/TIMER	⑵ 15, 29, 30
DISC REC START	⑫ 28
Display	③ 6
DVD LEVEL	⑱ 14
DUBBING	⑬ 28
DVD/CD ▶	⑰ 9, 17, 19, 20, 26
FM/AM	⑰ 8
PRESET +/-	⑳ 29
REC START/STOP	⑪ 28
Remote sensor	② 5
REVERSE MODE	⑳ 11, 27
SET/DISPLAY	⑳ 8, 13, 15, 29, 30
SOUND MODE	⑥ 13
SOUND TURBO	④ 12
TAPE A ▷	⑰ 11
TAPE B ◀▶	⑰ 11, 27, 28
TUNING +/-	⑦ 8
VOLUME	⑮ 12

Remote control



Main unit



MEMO



A series of horizontal dashed lines for writing, spanning the width of the page.

MEMO



A series of horizontal dashed lines for writing, spanning the width of the page below the header.

MEMO

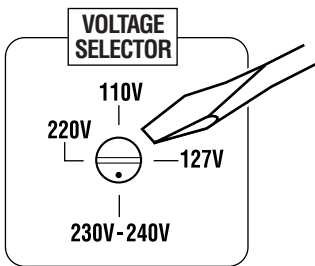


A series of horizontal dashed lines providing a template for writing a memo.

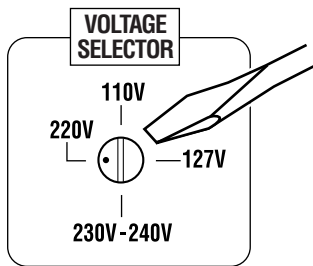
Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, Australia, and U.K.)

CAUTION for mains (AC) line

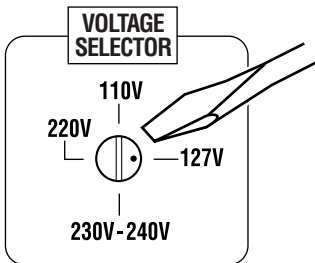
BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.



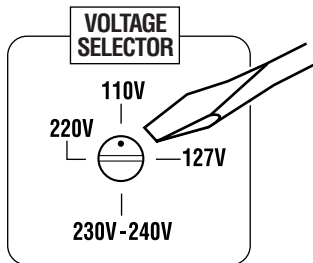
When your mains (AC) line voltage is 230-240 V



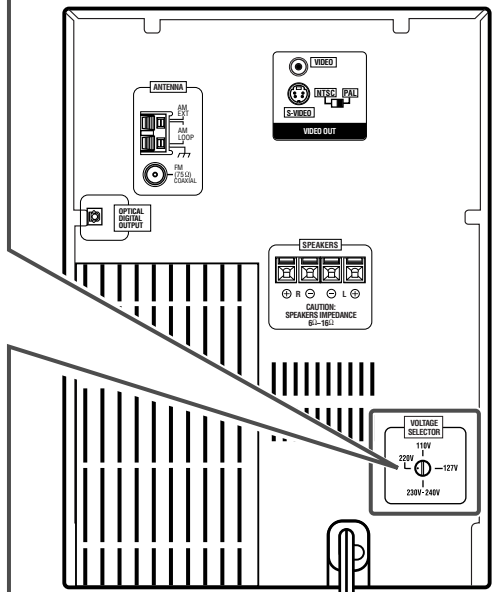
When your mains (AC) line voltage is 220 V



When your mains (AC) line voltage is 127 V



When your mains (AC) line voltage is 110 V



JVC