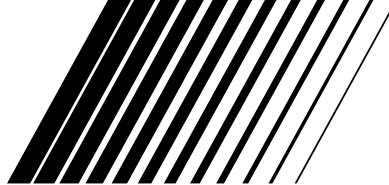


JVC



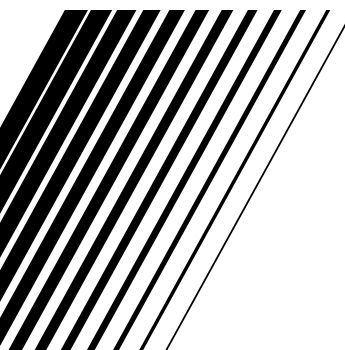
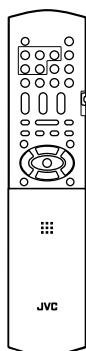
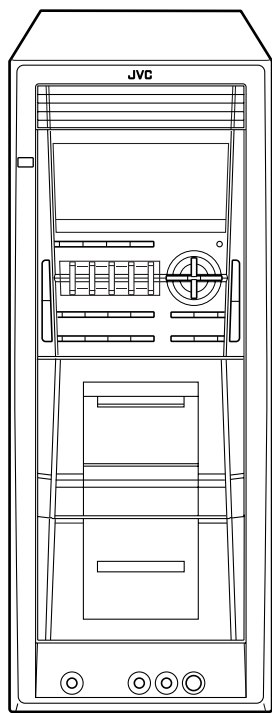
English

中文

COMPACT COMPONENT SYSTEM

组合音响系统

CA-DXT9 CA-DXT7




INSTRUCTIONS 使用说明书

GVT0147-001A
[US, UN]

Warnings, Cautions and Others

警告，注意及其他须知事项

Caution— button!

Disconnect the mains plug to shut the power off completely. The  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.

注意— 开关！

无论  开关在任何位置，电源线的电源还是没有被切断，若要将电源完全关闭，应将电源插头拔离插座。电源可用遥控器控制。

注意

为了减少触电，火灾等危险：

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

注意

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

Caution: Proper Ventilation

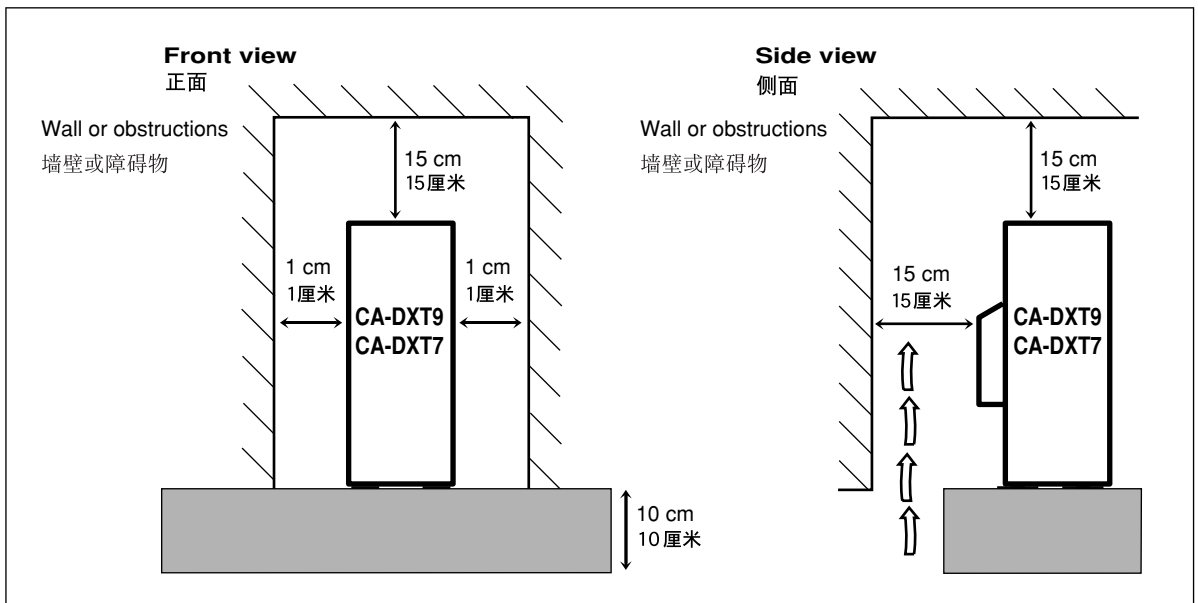
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

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

注意：正确通风

为免发生触电和火警的危险，及防止本机受损，请将本机如下放置：

1. 前面：没有障碍物及地方开阔。
2. 侧面 / 顶面 / 背面：在图中所示范围中，不应放置任何障碍物。
3. 底部：放置在水平面上。放置在一个高 10 厘米或以上的台上，以保持足够的通风道。



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.

镭射产品的重要说明

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

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)	VARNING : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)	VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
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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.
–A cooling fan is inside the unit to prevent heat buildup.



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

Others

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



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

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

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

Contents

Connections	3
Display Indication	8
Daily Operations—Playback	9
Canceling the Demonstration	9
Listening to the Radio	10
Playing Back a Disc	11
Playing Back a Tape.....	13
Daily Operations—Sound&Other Adjustments	14
Adjusting the Volume	14
Adjusting the Speaker Output Level	14
Reinforcing the Bass Sound	15
Selecting the Sound Modes	15
Creating Your Own Sound Modes—User Mode	15
Selecting the Surround Modes	16
Presetting Automatic DVD Video	
Sound Increase Level	16
Changing the Color System and Scanning Mode.....	17
Changing the Picture Tone.....	17
Changing the Display Brightness	18
Setting the Clock	18
Turning Off the Power Automatically	18
Unique DVD/VCD Operations	19
Selecting the Sound Track.....	19
Selecting the Subtitle Language.....	20
Selecting the View Angle.....	20
Reviewing the Playback Quickly	20
Selecting Browsable Still Pictures	20
Playing Back Bonus Group	21
Special Picture Playback	21
Advanced Disc Operations	22
Programming the Playing Order—Program Play	22
Playing at Random—Random Play.....	23
Playing Repeatedly—Repeat Play	24
Prohibiting Disc Ejection—Child Lock	24
On-Screen Disc Operations	25
On-screen Bar Information.....	25
Operations Using the On-screen Bar.....	26
Operations on the Control Screen	29
Recording Operations	32
Enjoying Karaoke	34
Singing Along (Karaoke)	34
Reducing the Lead Vocal—Vocal Masking.....	35
Scoring Your Karaoke Skill	35
Reserving Karaoke Songs—Karaoke Program Play	36
Timer Operations	37
Setup Menu Operations	39
Operating the TV	41
Additional Information	42
Troubleshooting	45
Specifications	47
Parts Index	50

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

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

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

Caution for DualDisc playback:

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

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 17.

Note on Region Code

This System can play back only DVD Videos whose Region Code numbers include “3.”

EX.:




Audio formats

The System can play back the following digital audio formats.

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








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

- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays.
- For disc playback, you can change the initial setting to your preference. See “Setup Menu Operations” on page 39.

If “” appears on the TV screen when you press a **button**, the disc cannot accept the operation you have tried to do.

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 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 interfere with your viewing when playing back a copy-protected disc. Your viewing may be interfered when connecting VIDEO OUT to an integrated TV/VCR system.

Supplied accessories

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

If any item is missing, consult your dealer immediately.

CA-DXT9

1 From the video input of TV/monitor
See page 5.

2 From the digital input of digital audio component such as CD recorder
See page 5.

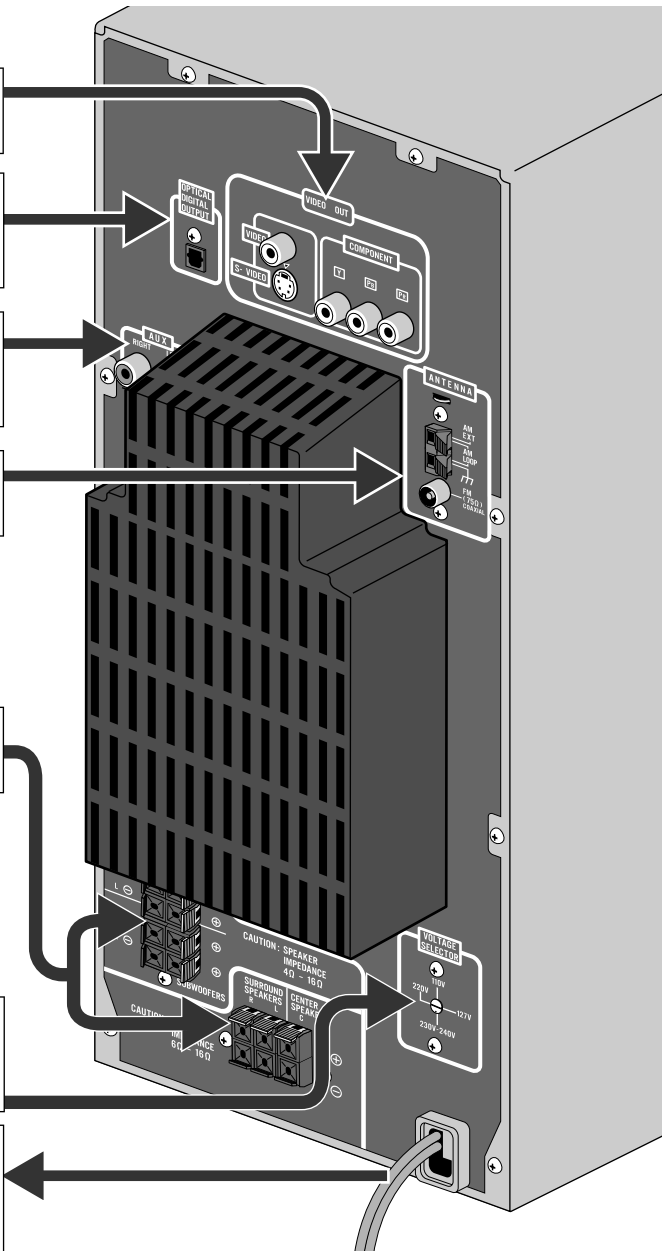
3 From the analog audio output of auxiliary equipment (VCR, etc.)
See page 5.

4 From AM/FM antenna
See page 5.

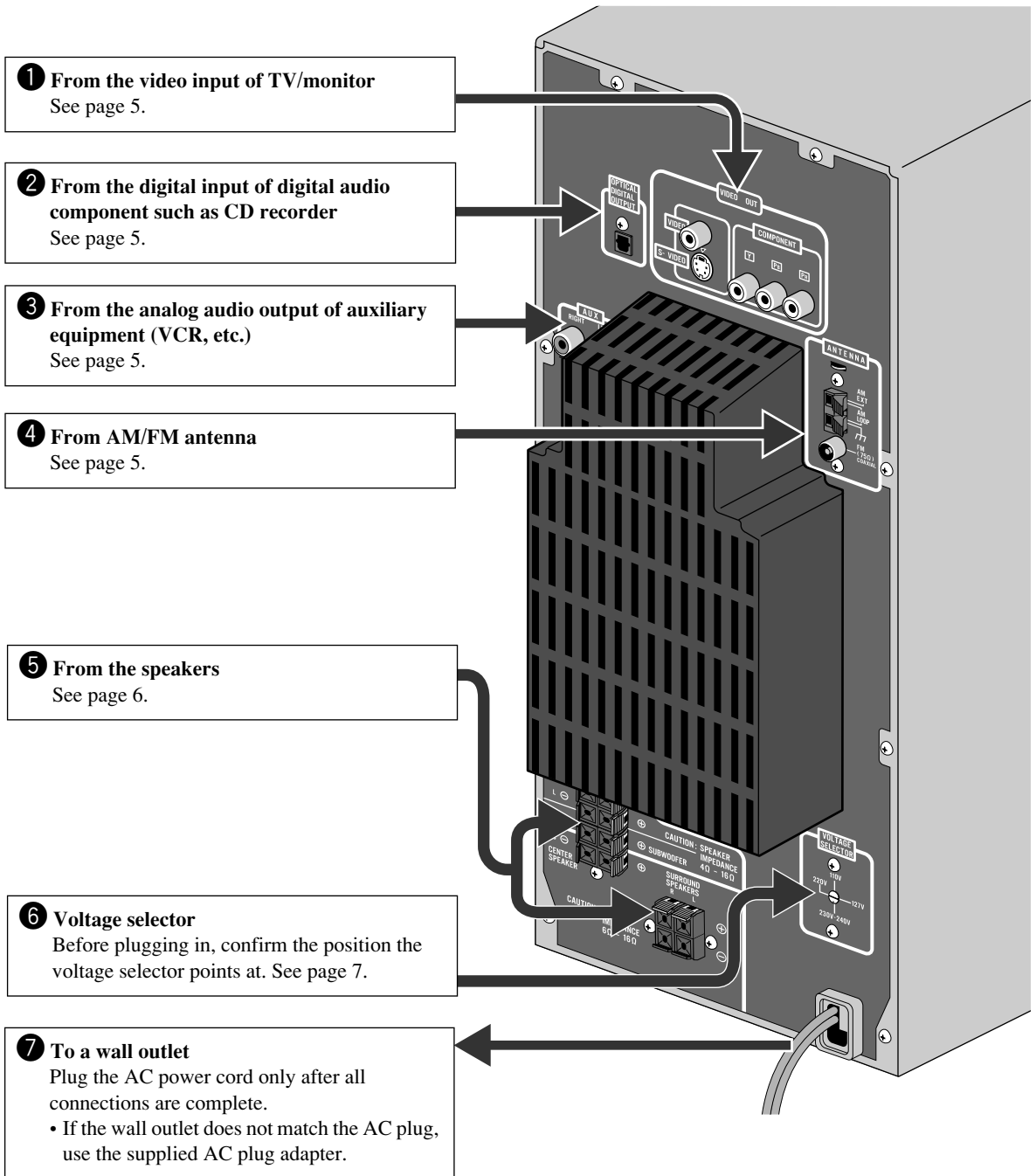
5 From the speakers
See page 6.

6 Voltage selector
Before plugging in, confirm the position the voltage selector points at. See page 7.

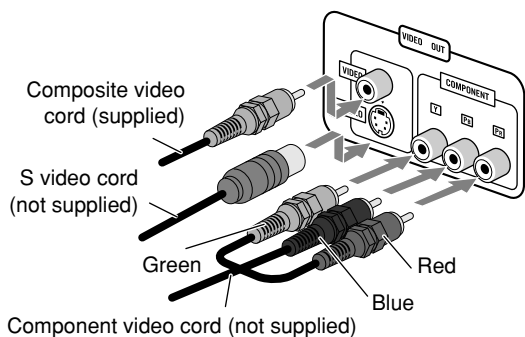
7 To a wall outlet
Plug the AC power cord only after all connections are complete.
• If the wall outlet does not match the AC plug, use the supplied AC plug adapter.



CA-DXT7

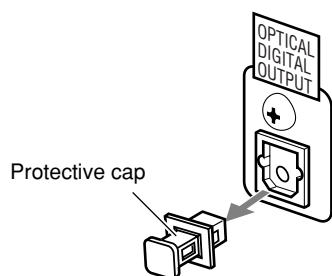


1 TV/monitor



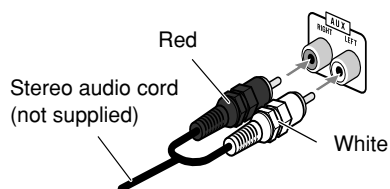
- To select progressive scanning mode (see page 17), use COMPONENT jacks.
- Connect the VIDEO jack, S-VIDEO jack, or COMPONENT jacks whichever you want to use.

2 Digital audio component



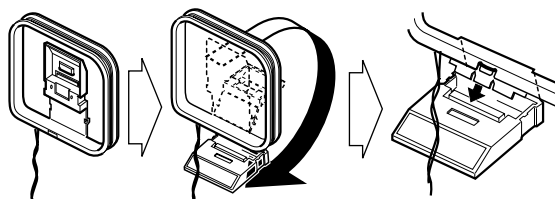
- Set "DIGITAL AUDIO OUTPUT" in the "AUDIO" menu correctly according to the connected digital audio equipment (see page 40). If setting is incorrect, loud noise may be generated causing damage to the speakers.

3 Auxiliary equipment

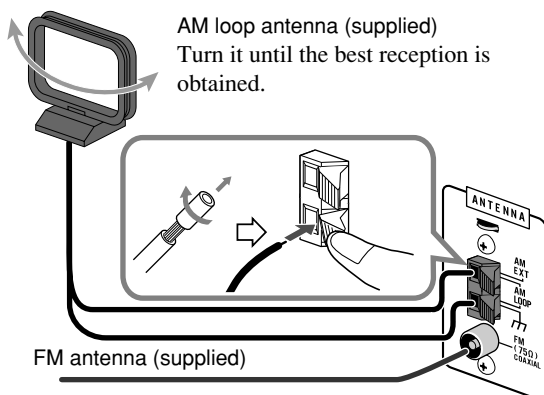


4 AM/FM antenna

To assemble the AM loop antenna



To connect AM/FM antenna

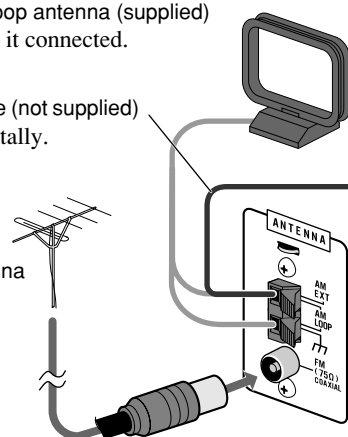


For better AM/FM reception

AM loop antenna (supplied)
Keep it connected.

Vinyl-covered wire (not supplied)
Extend it horizontally.

FM outdoor antenna (not supplied)



- 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.

5 Speakers

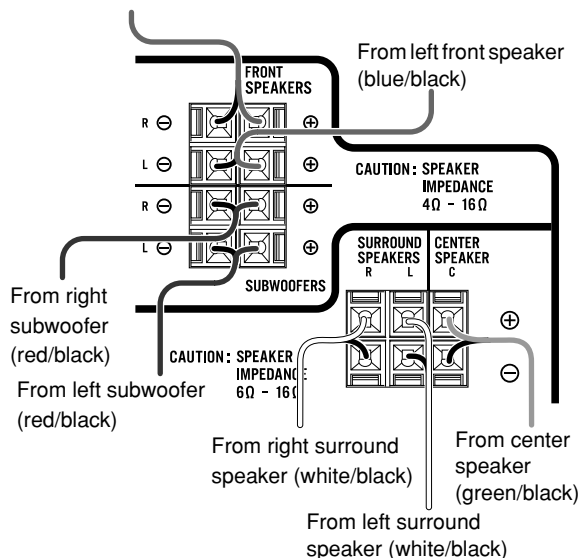
To connect the speaker cords



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

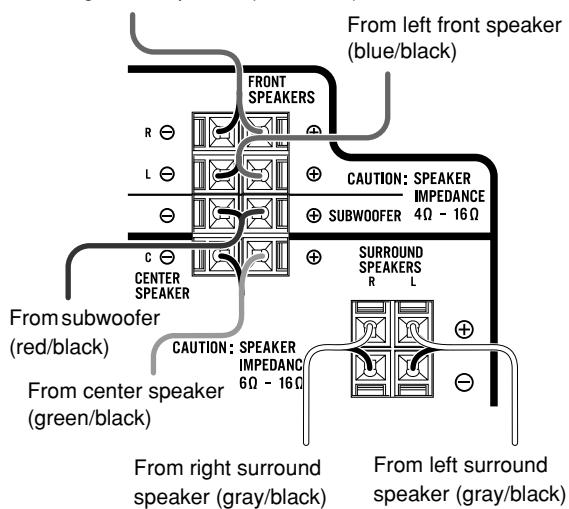
For CA-DXT9

From right front speaker (blue/black)



For CA-DXT7

From right front speaker (blue/black)



- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the System.
- The front and center speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.

- When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.

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

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

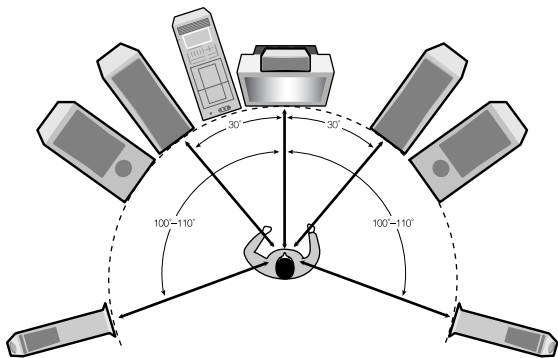


- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

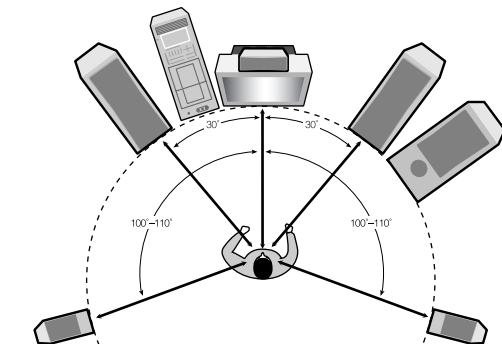
Speaker layout

To enjoy multi-channel sound, locate the speakers as follows. If you cannot locate like this, adjust the speaker setting by using the Setup menu (see page 40).

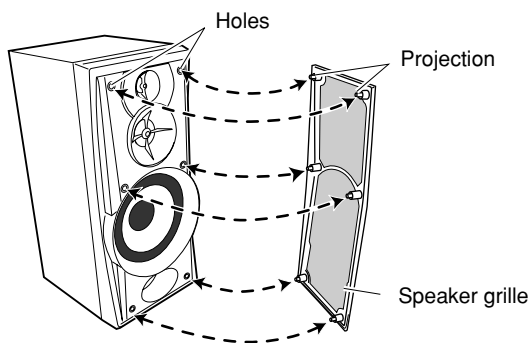
For CA-DXT9



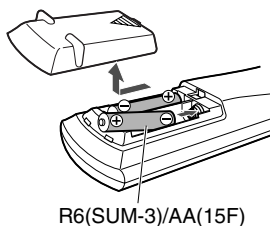
For CA-DXT7



To remove the speaker grilles of the front speakers



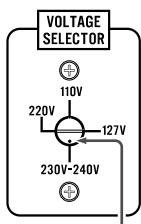
Preparing the remote control



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

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

6 To adjust the voltage selector



Voltage mark

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.)



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

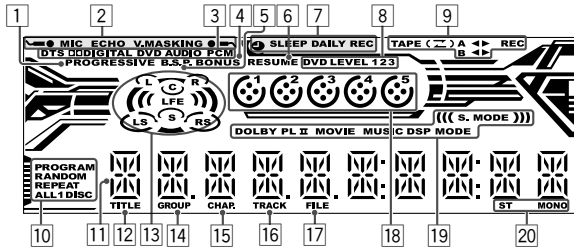


DO NOT plug in before setting the voltage selector and all connection procedures are complete.

Display Indication

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

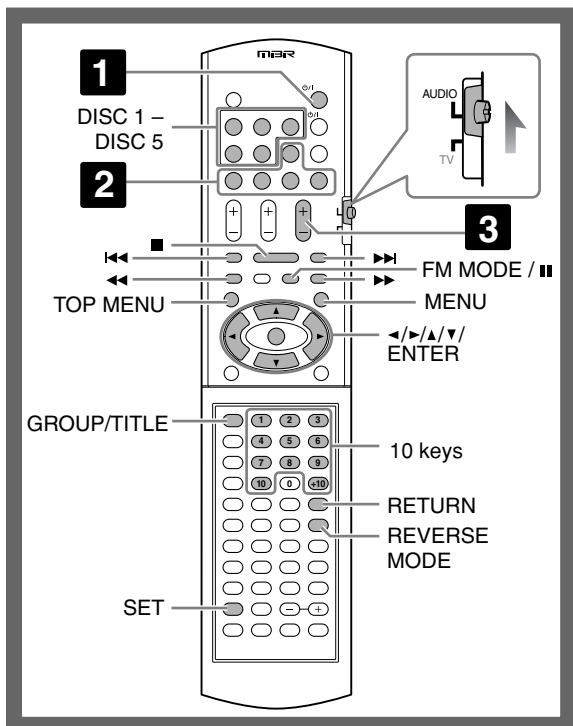
Before operating the System, be familiar with when and how the indicator illuminates on the display.



- 1 PROGRESSIVE indicator
 - Lights when the progressive scanning mode is selected.
- 2 Karaoke operation indicators (see pages 34 to 36)
 - : lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - MIC: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - ECHO: lights when the echo effect is activated.
 - V.MASKING: lights when the Vocal Masking Mode is activated.
- 3 Source signal indicators
 - DTS: lights when a source signal is DTS.
 - DIGITAL: lights when a source signal is Dolby Digital.
 - DVD: lights when DVD Video is detected.
 - DVD AUDIO: lights when DVD Audio is detected.
 - PCM: lights when a source signal is linear PCM.
- 4 BONUS indicator
 - Lights when DVD Audio with bonus group is detected (see page 21).
- 5 B.S.P. indicator
 - Lights when browsable still pictures on DVD Audio are available (see page 20).
- 6 RESUME indicator
 - Lights when Resume is activated (see page 40).
- 7 Timer indicators
 - : lights when Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: lights when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.
- 8 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD Video increase level.
- 9 Tape operation indicators
 - TAPE: lights when a tape is loaded in either deck A or B.
 - (Reverse Mode): lights to indicate the current Reverse Mode (see page 13).
 - A: lights when a tape is in the deck A.
 - B: lights when a tape is 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.
 - REC: lights while recording.
- 10 Disc operation indicators
 - PROGRAM: lights when Program Play is activated.
 - RANDOM: lights when Random Play is activated.
 - REPEAT: lights when Repeat Play is activated.
 - ALL DISC: lights when All Disc Repeat is activated.
 - 1 DISC: lights when One Disc Repeat is activated.
 - 1: lights when One Track/Chapter/Step Repeat is activated.
- 11 Main display
- 12 TITLE indicator
 - Lights to indicate the title number for DVD Video.
- 13 Audio signal indicators
 - L/R/C/LS/RS/LFE: Lights to indicate the incoming audio channel signals.
 - : Lights to indicate the speakers from which sound is emitted.
- 14 GROUP indicator
 - Lights to indicate the group number.
- 15 CHAP. indicator
 - Lights to indicate the chapter number.
- 16 TRACK indicator
 - Lights to indicate the track number.
- 17 FILE indicator
 - Lights to indicate the file number.
- 18 Disc indicators
 - 1 – 5: lights to indicate the current disc tray.
 - : lights when a disc is detected on the disc tray; rotates during playback or paused.
- 19 Sound Mode/Surround Mode indicators (see page 15)
 - DOLBY PL II MOVIE/MUSIC: lights when Dolby Pro Logic Modes (Movie or Music) is activated.
 - S.MODE: lights when one of the Sound Modes/Surround Modes is activated.
 - DSP MODE: lights when one of the DSP Modes is activated.
- 20 FM reception indicators
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
 - MONO: lights while receiving an FM stereo station in monaural.

Daily Operations—Playback

In this manual, the 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 PH/ AUDIO, the System also turns on by pressing one of the source select buttons in the next step.

2 Select the source.

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

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

3 Adjust the volume.

4 Operate the target source as explained later.

To turn off (stand by) the system

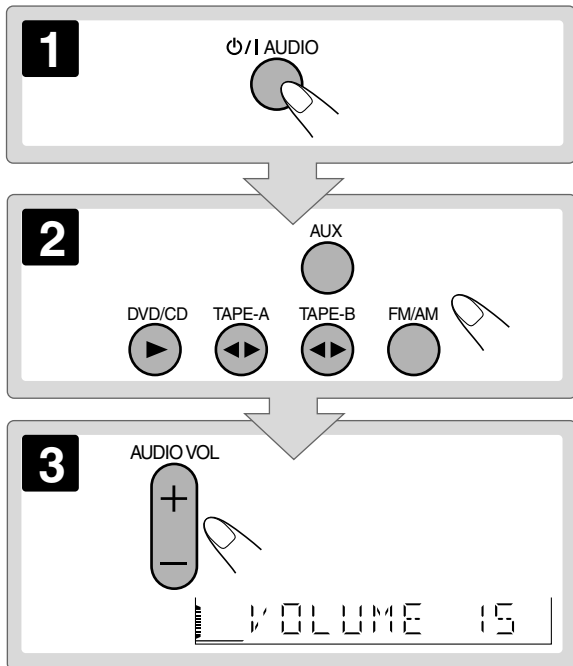
- PH/ AUDIO
- The STANDBY lamp on the main unit lights in red.
- A small amount of power is always consumed even while on standby.

For private listening

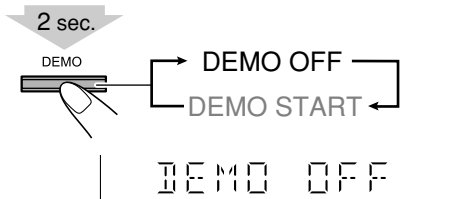
Connect a pair of headphones to the PHONES jack on the main unit. The sound will no longer come out of the speakers. **Be sure to turn down the volume before connecting or putting the headphones.**

- Disconnecting the headphones will activate the speakers again.

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



Canceling the Demonstration



To start the demonstration, select DEMO START.

Listening to the Radio

To select the AM tuner interval spacing



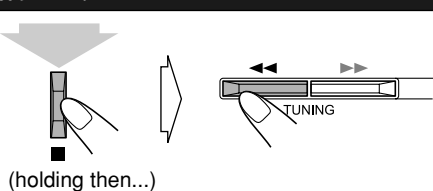
Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

1 Select “AM,” then turn off (stand by) the System.

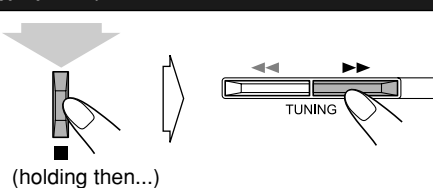


2 Select the AM tuner interval spacing.

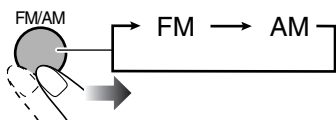
To select 9 kHz:



To select 10 kHz:

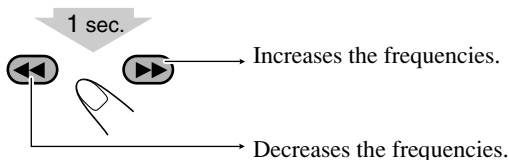


To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



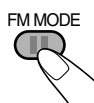
Frequency starts changing on the display.

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



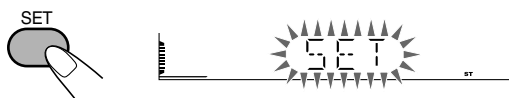
You can preset 30 FM and 15 AM stations.

- To cancel the operation during procedure, press CANCEL.

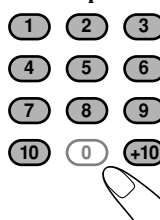
1 Tune in to a station you want to preset.

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

2 Start presetting.



3 Select a preset number.



Examples:

To select preset number 5, press 5.

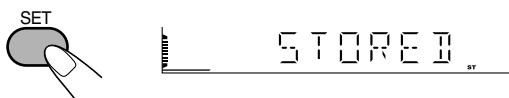
To select preset number 15, press +10, then 5.

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

- You can also use +/- buttons.

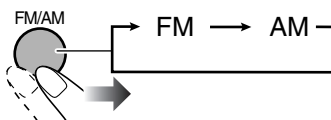


4 Store the station.

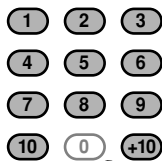


To tune in to a preset station

1 Select the band (FM or AM).



2 Select a preset number.



Examples:

To select preset number 5, press 5.

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

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

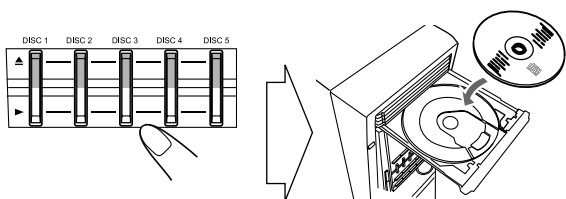
- You can also use buttons on the remote control or PRESET +/- buttons on the main unit.

Playing Back a Disc

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

- DVD Video comprises of “Titles” which includes “Chapters,” DVD Audio/MP3/WMA comprise of “Groups” which includes “Tracks,” JPEG comprises of “Groups” which includes “Files,” and CD/SVCD/VCD comprise of only “Tracks.”
- For JPEG playback, see page 30.

To insert discs



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

To close the disc tray, press the same again.

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

To start:	To pause:	To stop:
<p>Playback of the current disc starts.</p>	<p>To release it, press DVD/CD .</p>	

While playing DVD/SVCD/VCD/MP3: This System can store the stop point, and when you start playback again by pressing DVD/CD , it starts from the position where you have stopped—Resume Play. (RESUME indicator lights up when you stop playback.)

To stop completely while Resume is activated, press twice. (To cancel Resume, see “RESUME” on page 40.)

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.

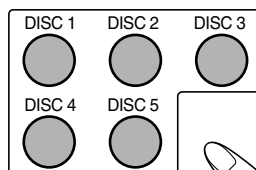
Appears at the beginning of a scene containing multi-subtitle languages.

- 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 40.

To select a disc

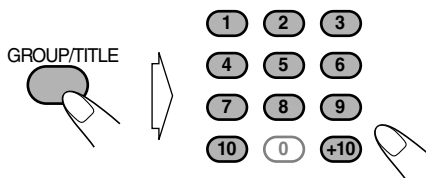


Playback starts.

To select a title/group

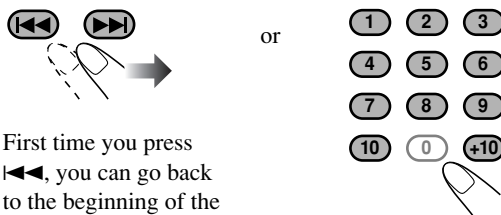


While playing a disc...



To select a chapter/track

While playing a disc...



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

To locate a particular portion

While playing a disc except MP3/WMA...



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

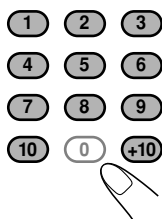
To return to normal playback, press DVD/CD ►.

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.

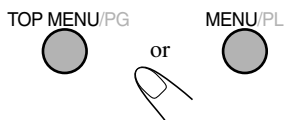
To play back by using the disc menu



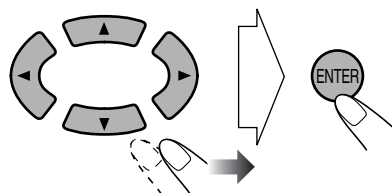
You can operate the disc play using the disc menu.

■ For DVD Video/DVD Audio

1 Show the disc menu.



2 Select an item on the disc menu.

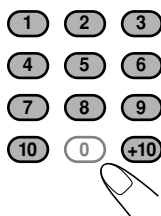


- On some discs, you can also select items by entering the number using the 10 keys.

■ For SVCD/VCD with PBC

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

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

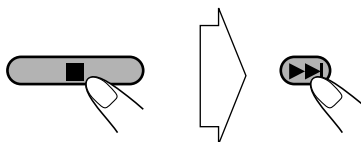


Examples:

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

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

To cancel PBC



You can also cancel PBC by pressing the 10 keys to start playback when disc menu is not shown on the TV screen.

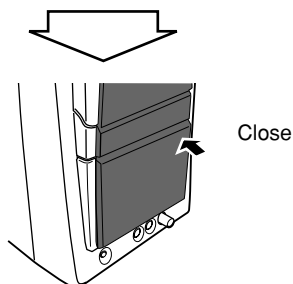
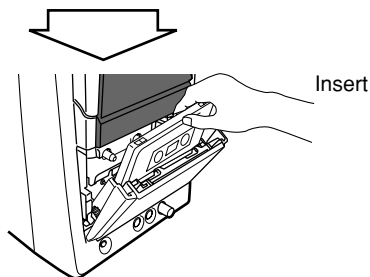
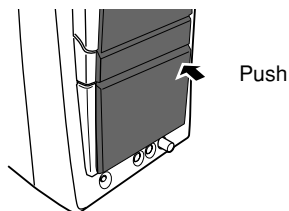
To reactivate PBC, press ■, then press ◀◀.

Playing Back a Tape

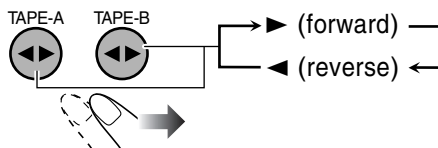
To insert a tape

You can play back type I tapes.

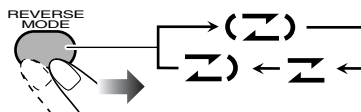
- The use of C-120 or longer tape is not recommended.



To change the tape running direction



To reverse the tape automatically



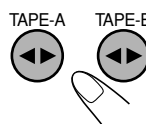
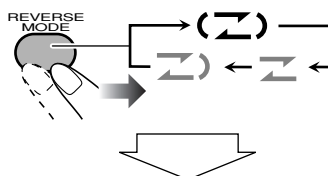
- Tape is reversed, and playback repeats until you stop it.

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

- Tape is reversed once.

To playback the both decks A and B continuously —Relay Play

When the cassettes are set in the both decks...

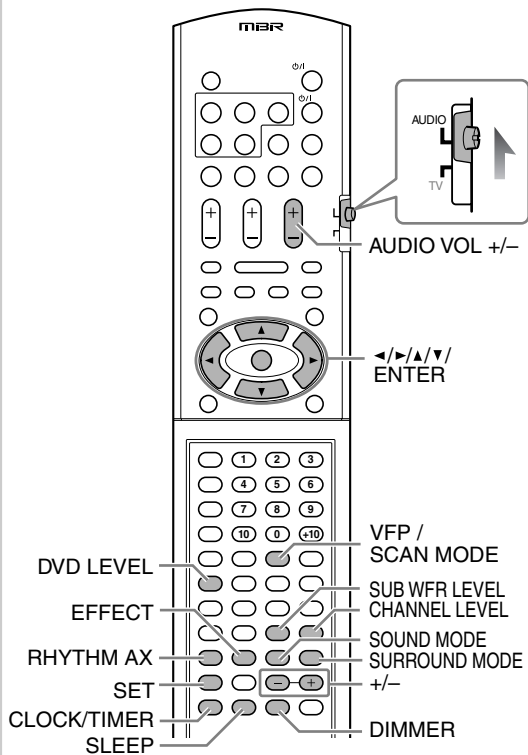


You can start playback of either deck A or B.

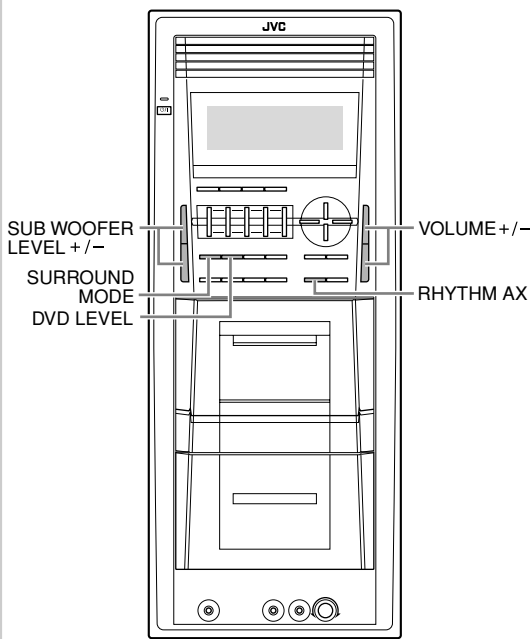
To start:	To stop:
To rewind tape:	

Daily Operations—Sound&Other Adjustments

Remote Control

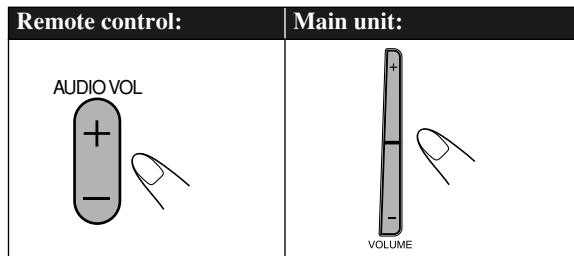


Main unit



Adjusting the Volume

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



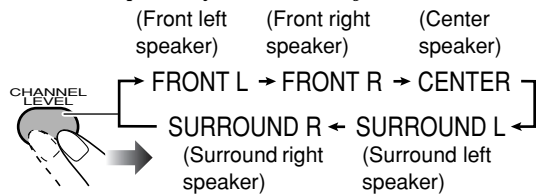
Adjusting the Speaker Output Level

Level

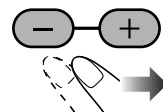
You can adjust the speaker output level from -6 (dB) to +6 (dB).

- You can also use the setup menu to adjust the speaker output level (see page 40).

1 Select the speaker you want to adjust.



2 Adjust the output level.



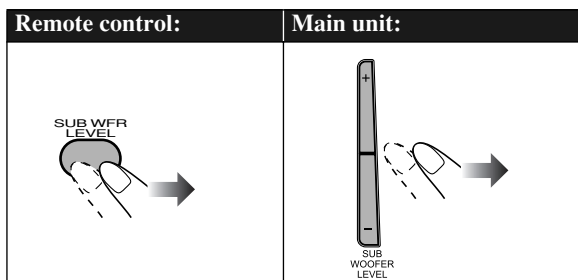
3 Repeat steps 1 and 2 to adjust other speakers.

Reinforcing the Bass Sound

To adjust the bass level gradually

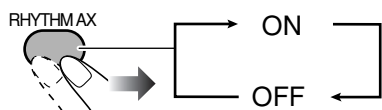
You can select the subwoofer level from level 0 (minimum) to level 4 (maximum).

INFO



To emphasize rhythmical feeling—RHYTHM AX

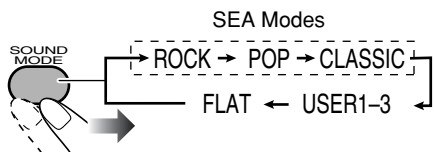
This function emphasizes bass attack feeling.



Selecting the Sound Modes

Remote ONLY

You can select one of the preset Sound Modes.



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

To cancel the Sound Mode, select “FLAT.”

Creating Your Own Sound Modes

Remote ONLY

INFO

Modes—User Mode

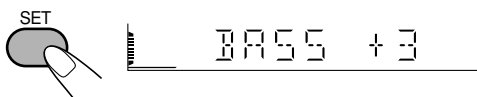
You can adjust the preset Sound Modes to create your own Sound Modes which suit your taste. The changed settings can be stored as the USER1, USER2 and USER3 Modes.

While the Sound Mode name is shown on the display...

1 Enter the SEA Control Mode.

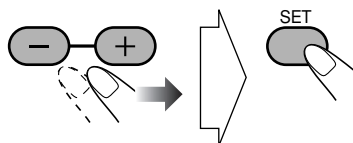


2



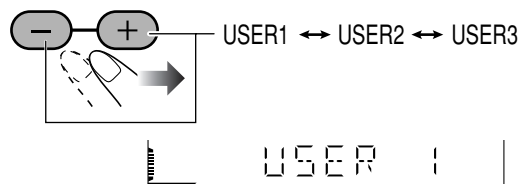
3 Adjust the SEA pattern.

- ① Adjust BASS.
- ② Adjust TREBLE.



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

4 Select one of the User Modes.



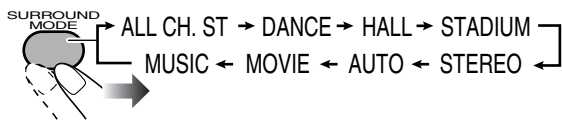
5 Store the setting.



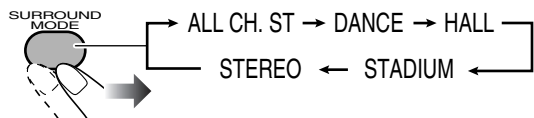
- The Sound Mode changes to the one you have stored.

Selecting the Surround Modes INFO

• For DVD/CD, TAPE-A, TAPE-B, AUX:



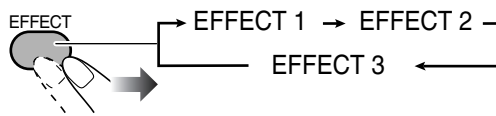
• For FM/AM:



DSP Modes	
ALL CH. ST	All Channel Stereo; Creates larger stereo sound field using all the connected speakers (initial setting).
DANCE	Increases resonance and bass.
HALL	Adds depth and brilliance to the sound.
STADIUM	Adds clarity and spreads the sound, as in an outdoor stadium.
Stereo Mode	
STEREO	Canceles the Surround Mode.
Auto Surround Mode	
AUTO	<ul style="list-style-type: none"> • When multi-channel surround signal comes in, multi-channel surround mode is activated. • When Dolby Surround signal comes in, MOVIE (Dolby Pro Logic II Movie) mode is selected. • When 2-channel signal comes in, STEREO mode is selected.
Dolby Pro Logic II Modes	
MOVIE	Creates 5.1-channel surround field from 2-ch source (suitable for movie source).
MUSIC	Creates 5.1-channel surround field from 2-ch source (suitable for music source).

To adjust the DSP effect level Remote ONLY >>>

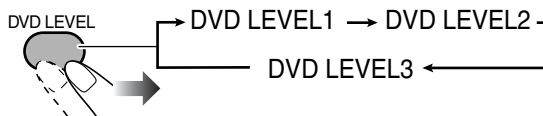
When one of the DSP Modes (except for "ALL CH. ST") is selected...



• The initial setting is "EFFECT3."

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.

• The initial setting is "DVD LEVEL3."

Changing the Color System and

Scanning Mode

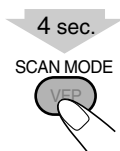


INFO

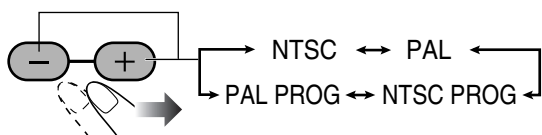
You can select the video output to match it to the color system of your TV (NTSC or PAL).

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

1 Enter the color system setting mode.

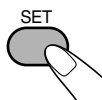


2 Select the color system and scanning mode.



NTSC / PAL	NTSC or PAL Interlaced scanning. For a conventional PAL or NTSC TV.
NTSC / PAL PROG	NTSC or PAL Progressive scanning. For a progressive NTSC or PAL TV.

3 Store the setting.



Changing the Picture Tone



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

To select a preset picture tone

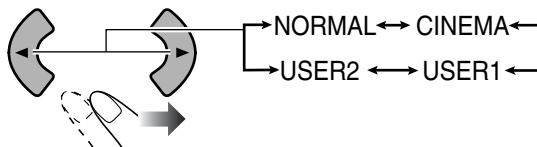
1 While playing, display VFP setting screen.



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

On the TV screen

2 Select a preset picture tone.



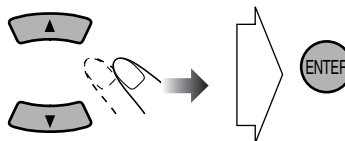
NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

To adjust the picture tone

1 Select "USER1" or "USER2."

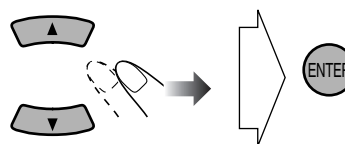
- Follow steps 1 and 2 above.

2 Select a parameter you want to adjust.



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

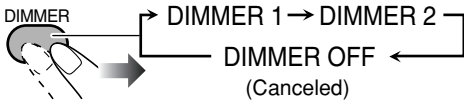
3 Adjust the parameter.



4 Repeat steps 2 to 3 to adjust other parameters.

To erase the VFP screen, press VFP again.

Changing the Display Brightness



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

* Except for the RHYTHM AX and KARAOKE SCORING lamps.

Setting the Clock

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

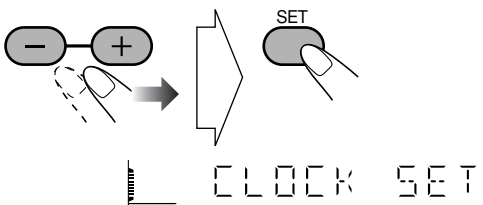
- To exit from the clock setting, press CLOCK/TIMER as required.
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

1 Activate clock setting mode.



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

2 Adjust the hour, then minute.

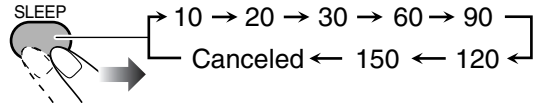


Now the built-in clock starts working.

Turning Off the Power Automatically

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

1 Specify the time (in minutes).



2 Wait until the set time goes off.

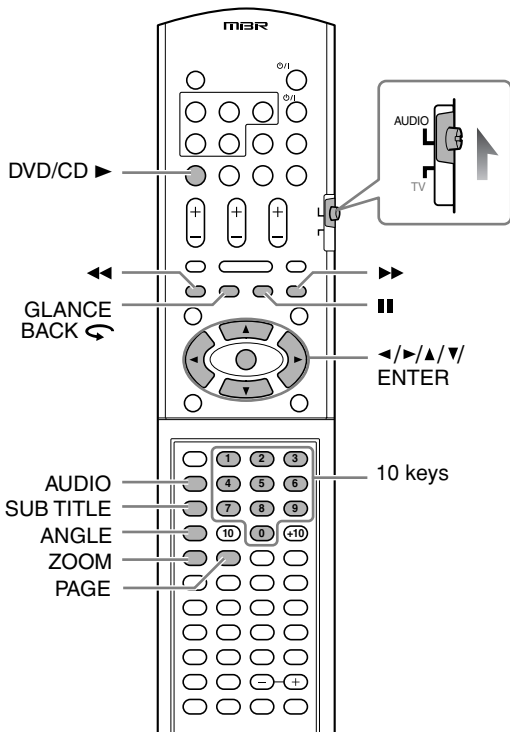
To check the time remaining until the shut-off time



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

Unique DVD/VCD Operations

Remote Control



Selecting the Sound Track

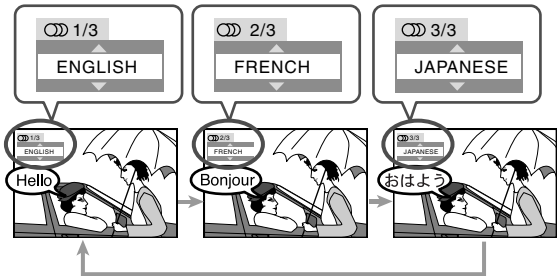


- For DVD Video:** While playing back a chapter containing audio languages, you can select the language to listen to.
 - For DVD Audio:** While playing back a track containing audio channels, you can select the audio channel to listen to.
 - For DVD-VR/Karaoke SVCD/VCD:** When playing back a track, you can select the audio channel to play.
- You can also select the audio track using the on-screen bar (see page 26).

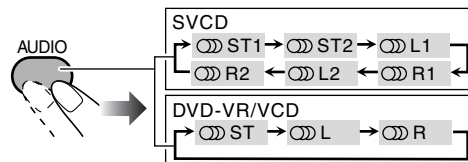
While playing DVD Video...



Ex.:



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



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

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

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

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

Selecting the Subtitle Language

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

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

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

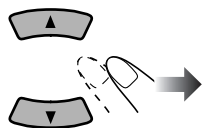
- You can also select the subtitle language using the on-screen bar (see page 26).

While playing a DVD Video...

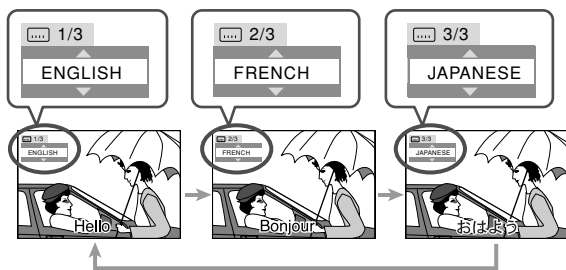
1 Display the subtitle selection window.



2 Select the subtitle language.



Ex.:



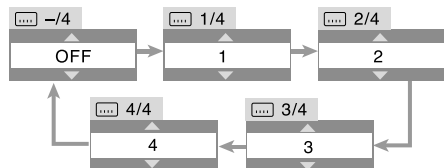
While playing a DVD-VR...

SUBTITLE



While playing an SVCD...

SUBTITLE

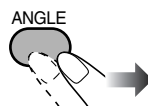


Selecting the View Angle

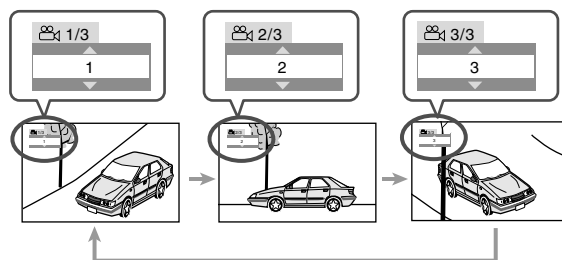
For DVD Video only: While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- You can also select the view angle using the on-screen bar (see page 26).

While playing back...



Ex.:



Reviewing the Playback Quickly

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

While playing back...

GLANCE BACK



Selecting Browsable Still Pictures

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

- If a track is linked to browsable still pictures (B.S.P.), they are usually shown in turn automatically during playback.
- You can also select the page using the on-screen bar (see page 26).



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

Playing Back Bonus Group

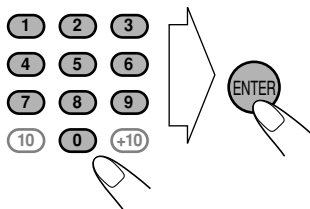
For DVD Audio only: Some DVD Audios have a special group called “bonus group” whose contents are not open to the public.

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

1 Select the bonus group.

- The bonus group is usually recorded as the last group (for example, if a disc contains 4 groups including a bonus group, “group 4” is the bonus group).
- For how to select the group, see “To select a title/group” on page 11.

2 Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■.

Special Picture Playback

Still picture playback

While playing...



Still picture playback starts.

To resume normal playback, press DVD/CD ►.

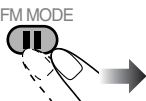
Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ►.

Slow-motion playback

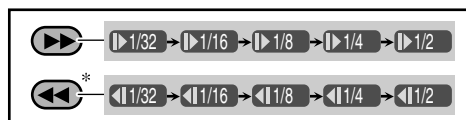
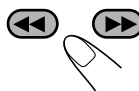
1 While playing...

FM MODE



Still picture playback starts.

2 Select slow motion speed.

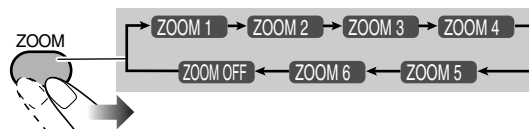


* Not available for DVD-VR/SVCD/VCD.

To resume normal playback, press DVD/CD ►.

Zoom

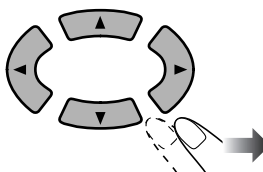
1 While playing...



As the number increases, magnification also increases.

- For JPEG, see page 31.

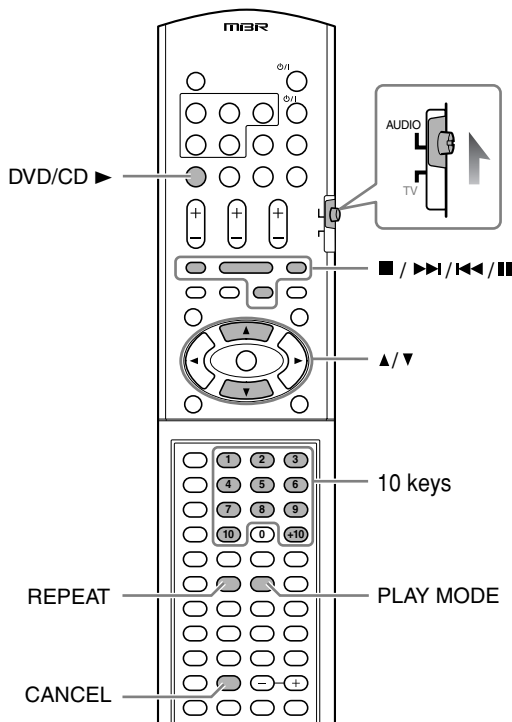
2 Move the zoomed-in position.



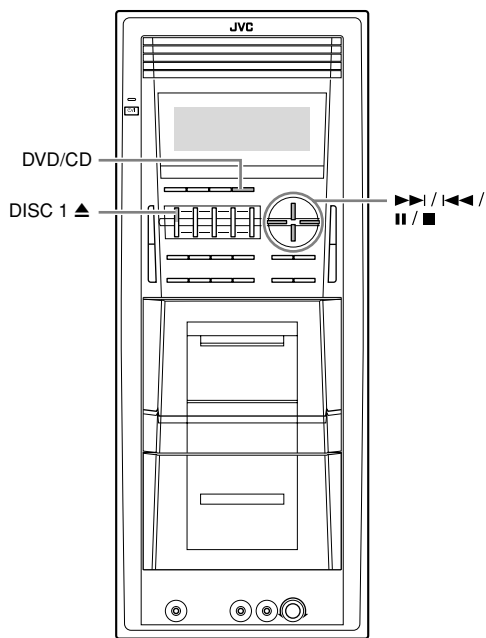
To resume normal playback, press ZOOM repeatedly until “ZOOM OFF” appears on the TV screen.

Advanced Disc Operations

Remote Control



Main unit

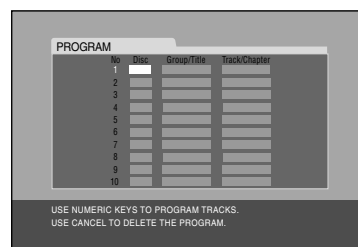
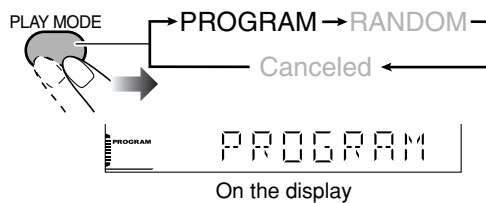


Programming the Playing Order

—Program Play

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

1 Before starting playback, activate Program Play.

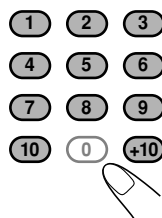


On the TV screen

2 Select chapters or tracks you want for Program Play.

- ① Select a disc number.
- ② Select a title or group number.
- ③ Select a chapter or track number.

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.

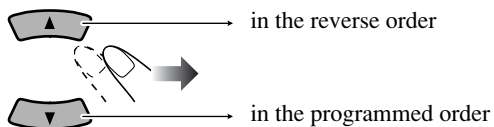
To skip a track:	To pause:	To stop*:
	<p>FM MODE</p> <p>To release, press DVD/CD ►.</p>	

* Resume does not work for Program Play.

To check the programmed contents



Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
<p>To add steps in the program: Repeat step 2 on page 22.</p>	

To exit from Program Play

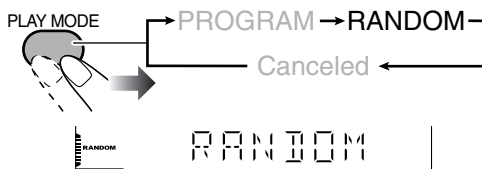
Before or after playback...



Playing at Random—Random Play

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

1 Before starting playback, activate Random Play.



2 Start playback.



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

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

To exit from Random Play

Before or after playback...



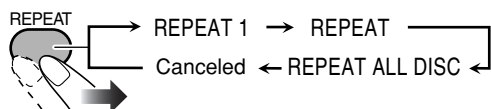
Playing Repeatedly—Repeat Play

You can repeat playback.

- You can also select the repeat mode using the on-screen bar (see page 26).
- The indicator(s) lights on the display as follows to indicate the current repeat mode.

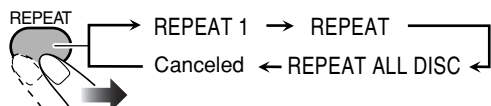
• For DVD Video:

While playing...



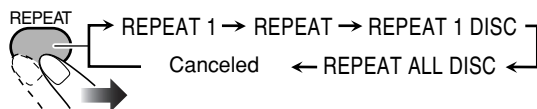
• For DVD Audio:

While playing or before playback...



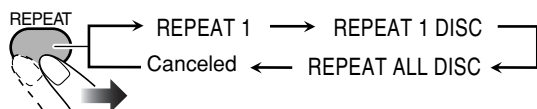
• For MP3/WMA:

While playing or before playback...



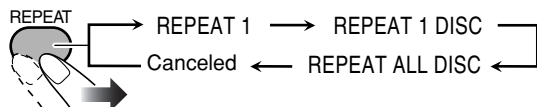
• For CD/SVCD/VCD:

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



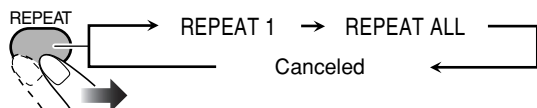
• For Random Play:

While playing or before playback...



• For Program Play:

While playing or before playback...



REPEAT 1 Repeats the current chapter/track.

REPEAT Repeats the current title/group.

REPEAT 1 DISC* Repeats the current disc.

REPEAT ALL DISC* Repeats all discs.

REPEAT ALL Repeats all programmed tracks.

*These modes may not work correctly for DVD Video.

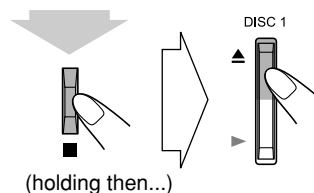
Prohibiting Disc Ejection

—Child Lock

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

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

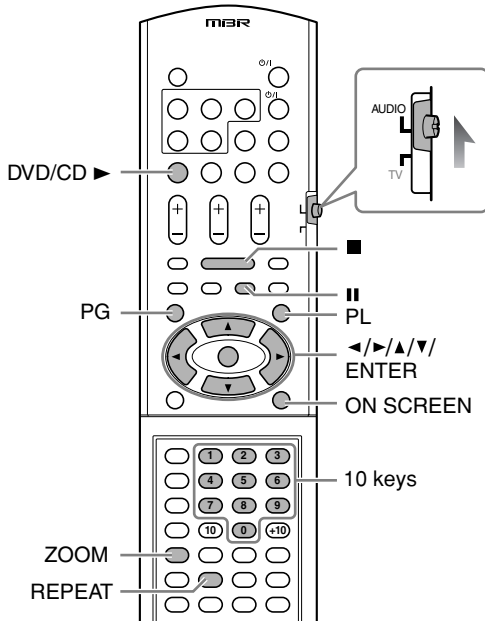
While in standby mode...



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

On-Screen Disc Operations

Remote control

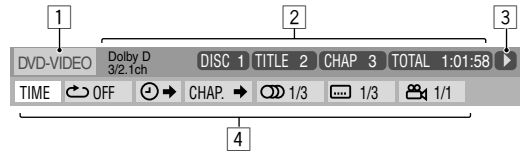


On-screen Bar Information

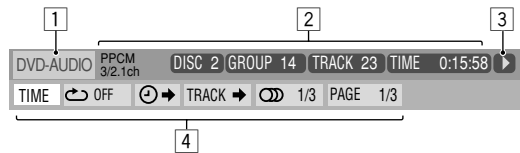
You can check the information on disc (except for MP3/WMA/JPEG disc) and use some functions through the on-screen bar.

On-screen bars

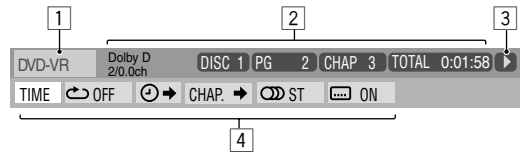
DVD Video



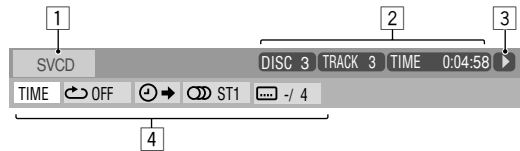
DVD Audio



DVD-VR



SVCD



VCD



CD



1 Disc type

2 Playback information

Indication	Meanings
Dolby D/ PPCM	Audio format
3/2.1 ch/ 2.0/0 ch	Channel number
DISC 1	Current disc
TITLE 2	Current title
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
PG 2	Current title
PL 2	Current play list
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
	Select to change the time indication (see also page 27).
	Select to repeat playback (see also pages 24, 27 and 28).
	Select for time search (see also page 28).
	Select for chapter search (see also page 29).
	Select for track search (see also page 29).
	Select to change the audio language or channel (see also page 19).
	Select to change subtitle language (see also page 20).
	Select to change view angle (see also page 20).
	Select to change the page (see also page 20).

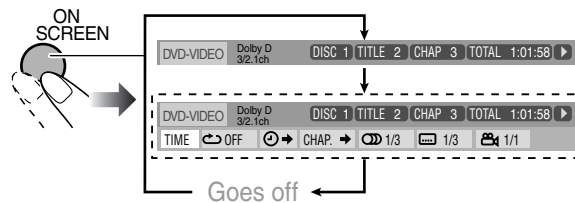
Operations Using the On-screen Bar

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

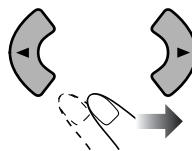
Ex.: Selecting a subtitle (French) for DVD Video:

While a disc is selected as the source...

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



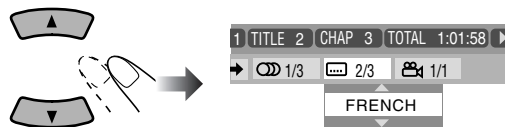
2 Select (highlight) the item you want.



3 Display the pop-up window.



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



5 Finish the setting.

Pop-up window goes off.



To erase the on-screen bar



To change the time information

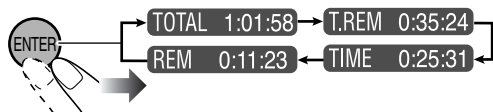
You can change the time information in the on-screen bar and the display window on the main unit.

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



2 Make sure **TIME** is selected (highlighted).

3 Change the time indication.



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

* Not available for DVD-VR.

To erase the on-screen bar



Repeat Play

• See also page 24.

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

• Except for DVD Video: Repeat Play can be selected before starting playback.

2 Select .

3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks.
A-B	Repeats a desired portion (see the next page).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
PG	Repeats the current title (for DVD-VR only). See also page 31.
PL	Repeats the current play list (for DVD-VR only). See also page 31.
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).



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

- 6 Select the end point (B).



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


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

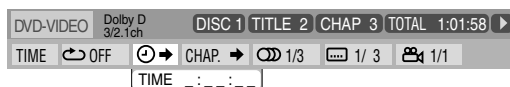
To erase the on-screen bar



Time Search

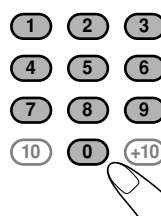
You can move to a particular point by specifying the elapsed playing time from the beginning.

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



- 4 Enter the time.


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



Examples:

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

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

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

- 5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar



Chapter/Track Search

You can search for the number of the item to play.

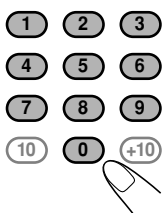
For DVD Video/DVD-VR: Chapter

For DVD Audio: Track

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



- 4 Enter the desired chapter/track number.



Examples:

To select chapter/track 5, press 5.

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

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

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

- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar



Operations on the Control



Screen



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

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

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

To select playback type



When Original Program is selected.

ORIGINAL PROGRAM				
No	Date	Ch	Time	Title
1	25/04/04	4ch	19:00	JVC DVD World 2004
2	17/05/04	8ch	10:30	
3	22/05/04	8ch	17:00	Music Festival
4	26/05/04	L-1	13:19	children 001
5	20/06/04	4ch	22:00	
6	25/06/04	L-1	8:23	children 002

When Play List is selected.

PLAY LIST				
No	Date	Chap	Length	Title
1	25/05/04	001	1:03:16	My JVC World
2	17/06/04	005	1:35:25	
3	20/06/04	003	0:10:23	Favorite music
4	25/06/04	001	0:07:19	children001-002

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

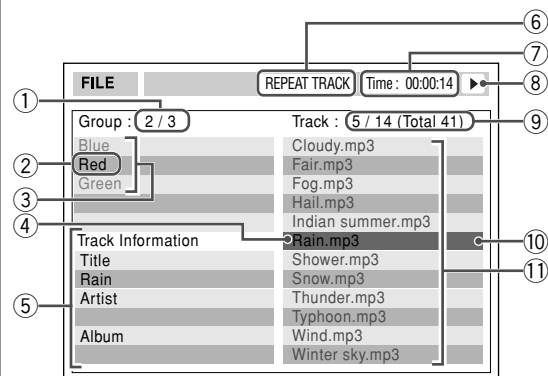
*The title of the original program or play list may not be displayed depending on the recording equipment.

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

Control screen for MP3/WMA/JPEG disc

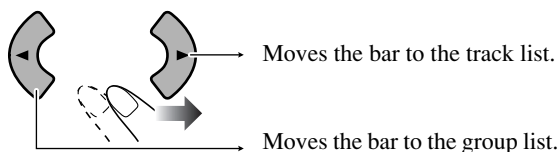
The control screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

Ex.: When the MP3 disc is loaded.

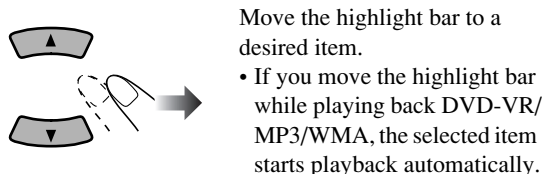


- ① Current group number/total group number
 - ② Current group
 - ③ Group list
 - ④ Current track
 - ⑤ Track information (ID3 Tag Version 1.0: only for MP3/WMA)
 - ⑥ Repeat Play setting
 - ⑦ Elapsed playing time of the current track (only for MP3/WMA)
 - ⑧ Operation mode icon
 - ⑨ Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
 - ⑩ Highlight bar
 - ⑪ Track list
- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 39).

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



To select an item in the list:



To start playback

For DVD-VR/MP3/WMA:



Playback starts with the selected chapter/track.

- Pressing DVD/CD ► also starts playback.

For JPEG:



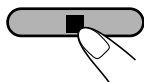
The selected track (still picture) is displayed until you change it.



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**.

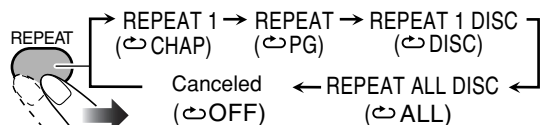
To stop playback



To repeat title/play list for DVD-VR

While playing or before starting playback...

For Original Program



For Play List



REPEAT 1* Repeats the current chapter.

REPEAT* Repeats the current title/play list.

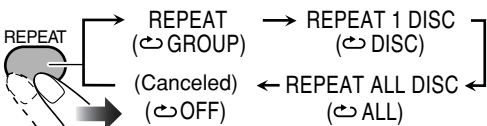
REPEAT 1 DISC* Repeats all titles on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

* Not available before starting playback.

To repeat slide-show for JPEG

While playing or before starting playback...



REPEAT Repeats the current group.

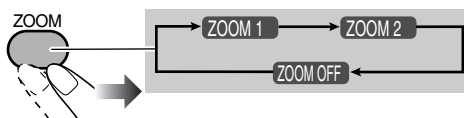
REPEAT 1 DISC Repeats all files on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

• For Repeat Play of MP3/WMA, see pages 24 and 27.

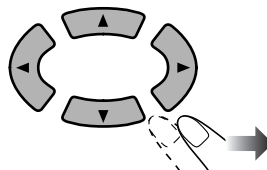
To zoom in the still picture (for JPEG)

1 During being paused...



As the number increases, magnification also increases.

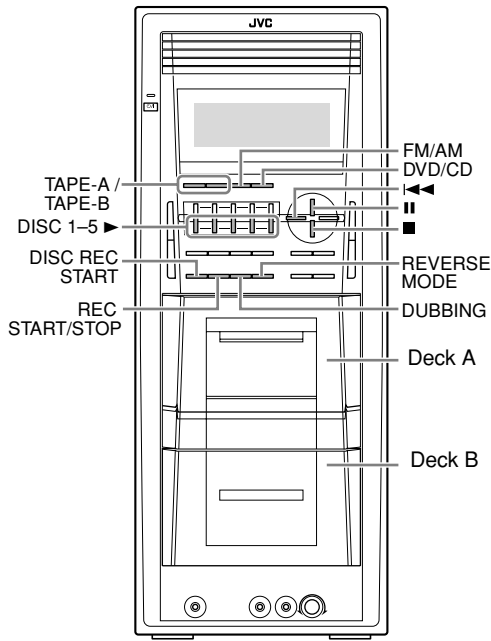
2 Move the zoomed-in position.



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

Recording Operations

Main unit



IMPORTANT

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

Before recording, select the Stereo Mode (“STEREO”—see page 16) for DVD Video to downmix its multichannel sound into 2 channel; otherwise, you can only record the front left/right sound onto a tape.

Recording on a Tape

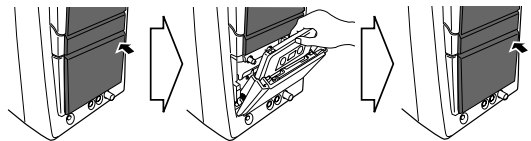


You can use type I tapes for recording.

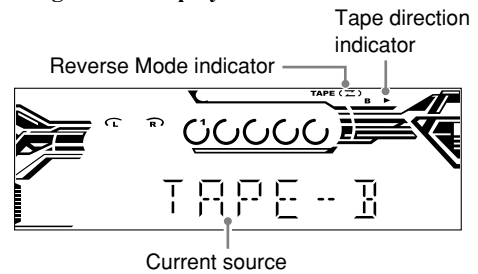
- To play a tape, see page 13.

1 Insert a recordable cassette in deck B.

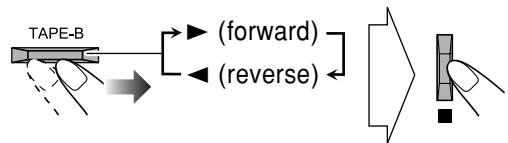
Push Insert Close



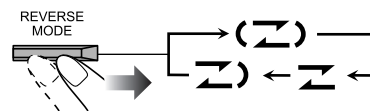
2 Check the tape running direction and Reverse Mode settings on the display.



To change the direction



Change the Reverse Mode if necessary



	To record on both sides. • When using Reverse Mode, start recording in the forward (▶) direction.
	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).
- When recording from deck A, you can also use "Dubbing" (see below).

4 Start recording.



To stop recording



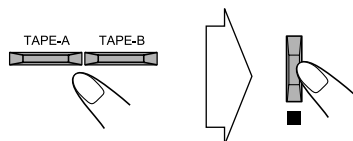
OR



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 32.

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

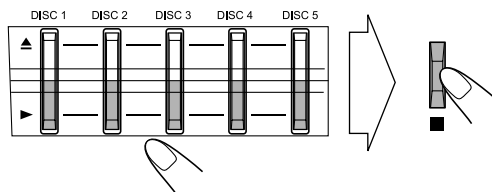
You can start and stop both disc play and tape recording at the same time.

1 Load a disc and insert a recordable cassette.

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

- See step 2 of "Recording on a Tape" on page 32.

3 Select the disc number you want to start recording from.



For recording desired tracks on discs:

You can program tracks to record in your preferred order.

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

4 Start recording.



The disc playback and recording start from the first track.

- 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 only your favorite track—One Track Recording

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

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



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

To cancel while recording

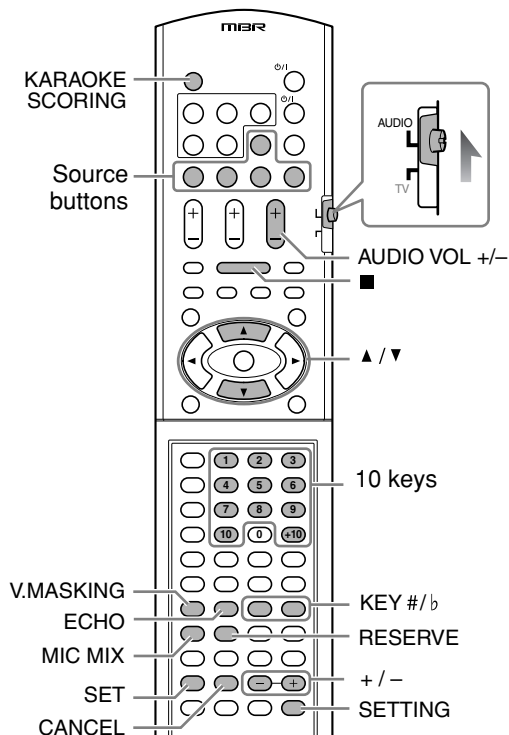


OR

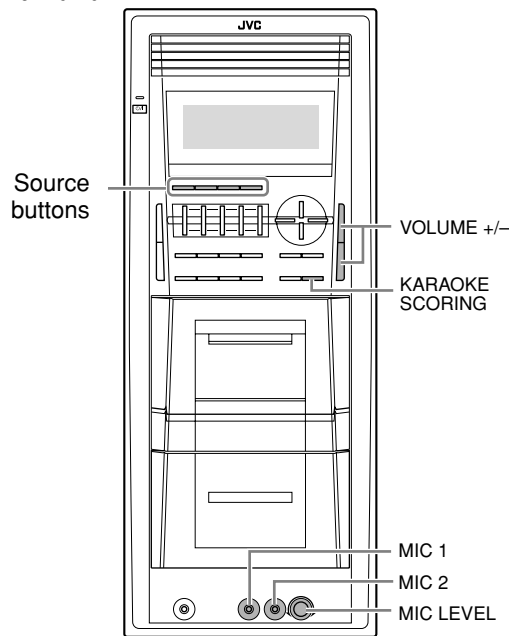


Enjoying Karaoke

Remote control



Main unit



DO NOT keep the microphones connected while they are not in use.

- For DVD Audio/DVD-VR: The functions described in this section are not available.
 - When you activate the Mic Mixing Mode or Voice Masking Mode, multi-channel sounds are downmixed into 2 channel. The multi-channel surround mode (“ALL CH. ST,” “MOVIE,” “MUSIC,” or “AUTO” for multi-channel surround signals—see page 16) is changed to “STEREO” temporarily* (and restored when the Mic Mixing Mode or Voice Masking Mode is deactivated).
- *The indicator remains on the display.

IMPORTANT

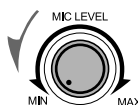
- Always set MIC LEVEL to MIN when connecting or disconnecting the microphone.
- MIC LEVEL adjustment is valid for both microphones connected to the MIC 1 and MIC 2 jacks.

Singing Along (Karaoke) INFO

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

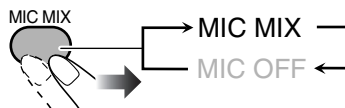
- By pressing REC START/STOP, you can record your singing-along.

1 Turn MIC LEVEL to MIN.



2 Connect the microphone(s) (not supplied) to the MIC 1 and/or MIC 2 jack.

3 Activate the Mic Mixing Mode.

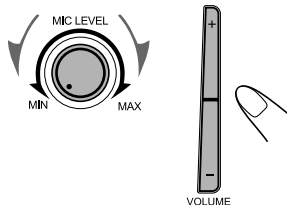


4 Start playing a source—“FM,” “AM,” DVD/CD,” “TAPE,” or “AUX.”

- For Karaoke SVCD/VCD: Select a desired audio channel. See “Selecting the Sound Track” on page 19.

5 Sing into the microphone.

6 Adjust the MIC LEVEL and VOLUME.

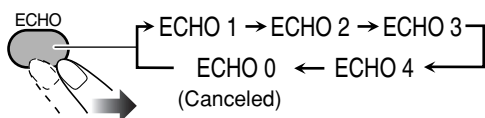


To cancel from the Mic Mixing Mode, select “MIC OFF” in step 3.

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

To apply an echo to your voice

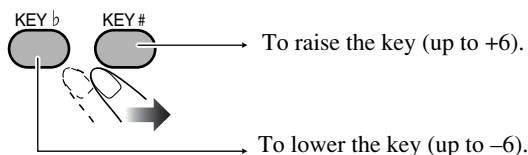
While the Mic Mix Mode is activated...



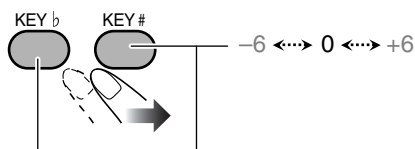
- As the number increases, echo level also increases.

To adjust the Key (disc playback only)

While playing back...



To cancel the Key Control

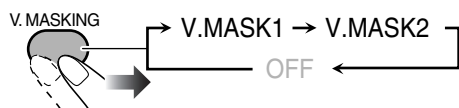


- Key Control is also canceled when you deactivate the Mic Mixing Mode, or select another track or disc.

Reducing the Lead Vocal

—Vocal Masking

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



V.MASK1 Cancels vocal on stereo sources.

V.MASK2 Cancels the right audio channel.

To sing into microphone(s), activate the Mic Mixing Mode (follow steps **1** to **3** and **6** on page 34).

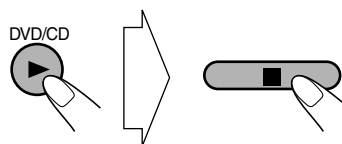
To cancel from the Vocal Masking Mode, select “OFF.”

Scoring Your Karaoke Skill

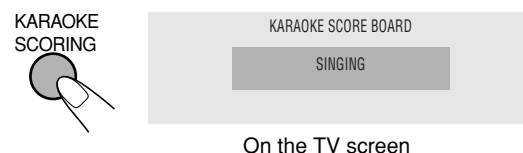
This System can score your Karaoke skill by comparing your singing along with the vocal on the playback disc.

- This function is for disc playback only.
- It is recommended to select the sound track as follows (see page 19):
For DVD Video: Select the sound track with vocal.
For SVCD/VCD: Select “ST,” “ST1,” or “ST2.”
- It is recommended to sing for more than **one and a half minutes** to make the scoring function work properly.

1 Select “DVD/CD” as the source.



2 Activate the scoring function.



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

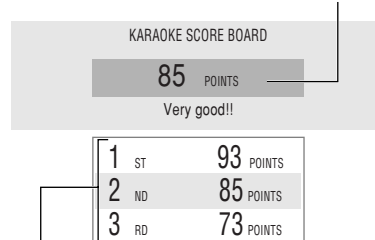
3 Sing into the microphone.

See steps **1**, **2**, and **6** on page 34.

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

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

Ex.: Your score



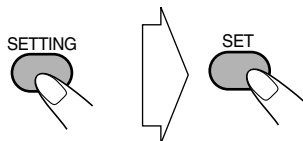
The latest top 3

To stop the playback in the middle of the song, press **■**. The scoring function is not canceled and your singing along is scored if the playback time is more than one minute.

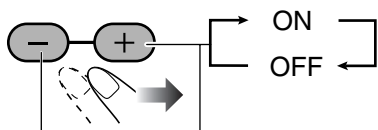
To cancel the scoring function, press KARAOKE SCORING. The screen on the TV disappears. (The Mic Mixing Mode remains activated.)

To turn on/off the fanfare

1 Enter the fanfare setting mode.



2 Select the fanfare setting.

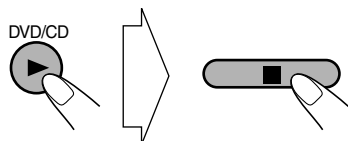


Reserving Karaoke Songs

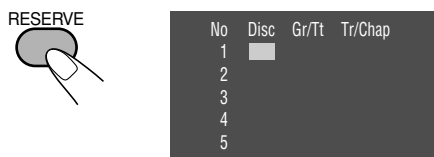
—Karaoke Program Play

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

1 Change the source to “DVD/CD.”



2 Activate Karaoke Program Play.



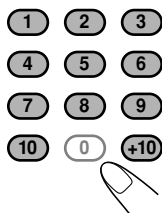
On the TV screen

• PROGRAM indicator flashes during this mode.

3 Select songs you want for Karaoke Program Play.

Press the number buttons to select a song in the following order.

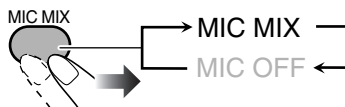
- ① Select a disc.
- ② Select a title/group.
- ③ Select a chapter/track.





Examples:

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

4 Activate the Mic Mixing Mode.



5 Start playback.

To start Karaoke Program Play:	To start Karaoke Program Play with the scoring function:
	

Playback starts in the order you have programmed.

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

To check the programmed contents



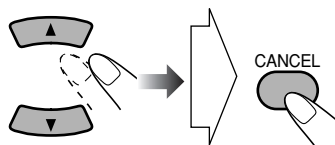
The Karaoke reserve screen appears.

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

To modify the program

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

To erase the unwanted step:



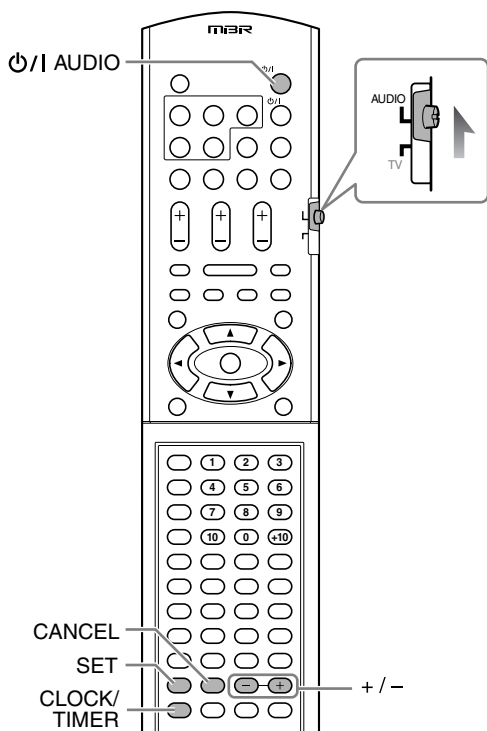
To erase the entire program, repeat the procedure.

To add steps in the program:

Repeat step 3.

Timer Operations

Remote control

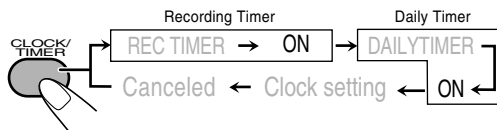


Setting the Timer Remote ONLY INFO

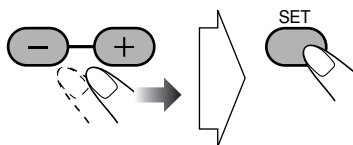
Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- You cannot activate Daily Timer and Recording Timer at a time. (Activating either timer deactivates the other timer.)
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

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



2 Make the timer setting as you want.



Repeat the procedure 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 Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM,"
For Daily Timer: Select the playback source—"TUNER-FM," "TUNER-AM," "DISC," "TAPE-A," "TAPE-B" or "AUX IN."



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

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

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



How Daily Timer 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).

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

When the on-time comes

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

When the off-time comes

- The 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.

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

When the on-time comes

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

When the off-time comes

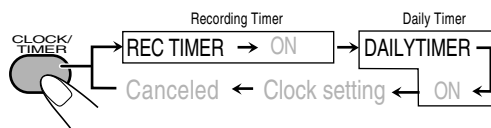
- The timer setting remains in memory until you change it.

To turn off the Timer after the setting is done

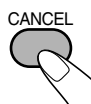
You can turn off the timer after it has been set.

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

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



- 2 Turn off the selected timer.**



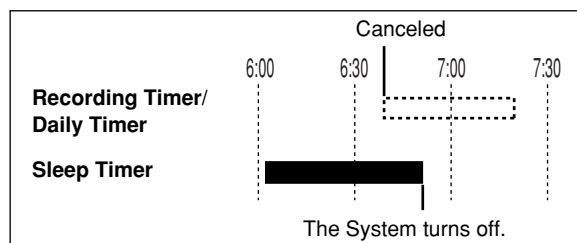
- The timer (🕒) indicator goes off.

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

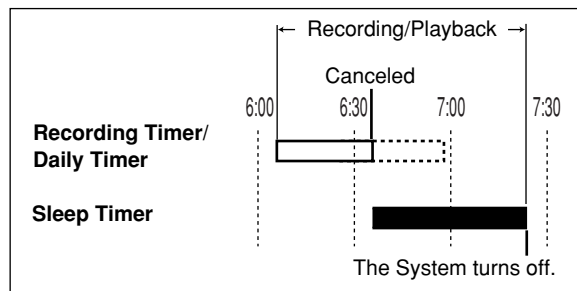
Timer Priority

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

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

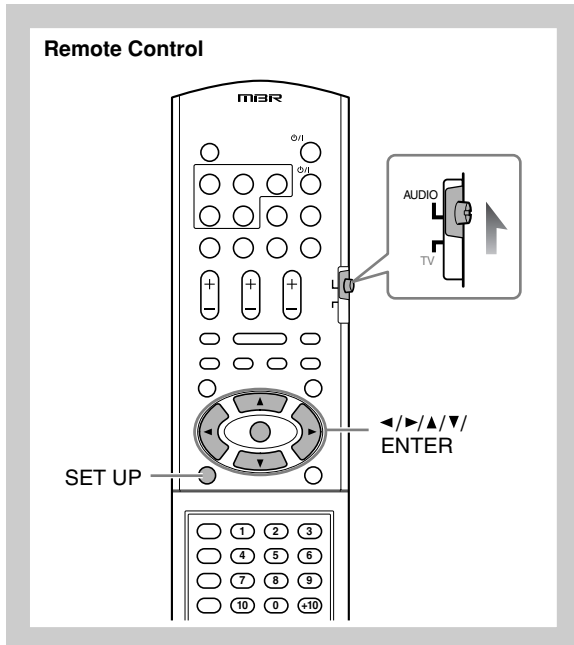


- In this case, Recording Timer/Daily Timer does not work.



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

Setup Menu Operations

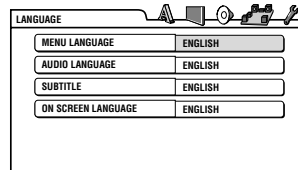


Initial settings

INFO

Some items in the menus cannot be changed during playback.

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.

To erase a preference display

Press SET UP.

A LANGUAGE menu

Item	Contents
MENU LANGUAGE	You can select the initial menu language of DVD Video (see page 46).
AUDIO LANGUAGE	You can select the initial audio language of DVD Video (see page 46).
SUBTITLE	You can select the initial subtitle language of DVD Video (see page 46).
ON SCREEN LANGUAGE	You can select "ENGLISH," "CHINESE," or "SPANISH" as the on-screen language.

PICTURE menu

Item	Contents
MONITOR TYPE 	You can select the monitor type to match your TV when you play back DVD Video discs recorded for wide-screen televisions. 16:9/16:9 MULTI (Wide television screen): For a wide-screen (16:9) TV. 4:3 LB/4:3 MULTI 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/4:3 MULTI 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. <ul style="list-style-type: none"> By selecting "MULTI" mode, the color system of the System changes automatically to match the color system of the loaded disc. For the color system setting, see page 17.
PICTURE SOURCE	You can obtain optimal picture quality by selecting the source type of the disc contents. AUTO: Normally, select this option. The System recognizes the picture type (film or video source) of the current disc according to the disc information. FILM: For a film source disc. VIDEO: For a video source disc.
SCREEN SAVER	You can set the screen saver function to ON or OFF . ON: The on-screen display becomes dark when no operation is done for about 5 minutes. OFF: To cancel the screen saver.
FILE TYPE	You can select a file type to play. AUDIO: To play MP3/WMA files. STILL PICTURE: To play JPEG files.

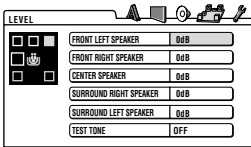
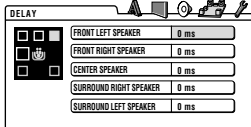


AUDIO menu

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



SPK. SETTING menu

Item	Contents
LEVEL 	Select this item, then press ENTER to show the LEVEL submenu for adjusting the speaker output level. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND LEFT/RIGHT SPEAKER: Select the speaker, then adjust the output level (-6 dB to +6 dB in 1 dB steps). TEST TONE: Turns on/off the test tone. <ul style="list-style-type: none"> Select "ALL CH. ST," "MUSIC," or "MOVIE" (see page 16) to adjust the output level for all speakers with the test tone.
DELAY 	Select this item, then press ENTER to show the DELAY submenu for adjusting the speaker delay time. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND LEFT/RIGHT SPEAKER: Select the speaker, then adjust the delay time (0 ms to 15 ms in 1 ms steps). <ul style="list-style-type: none"> Set one speaker to "0 ms," then set other speakers so that the sound from all speakers can reach you at the same time.

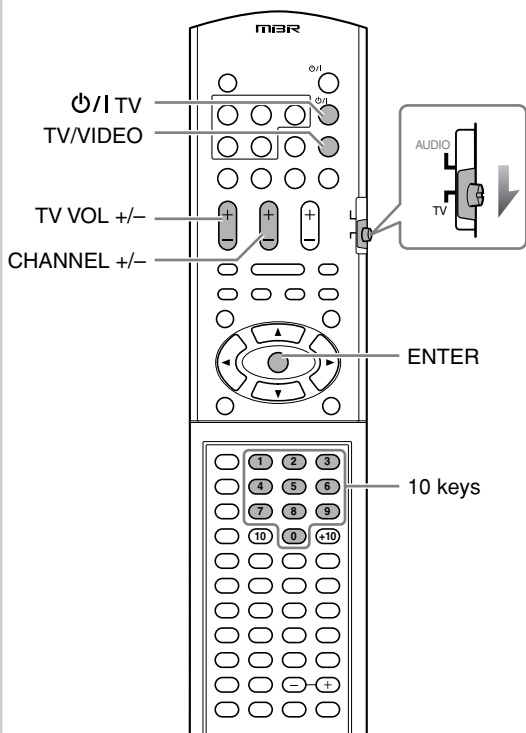


OTHERS menu

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

Operating the TV

Remote control

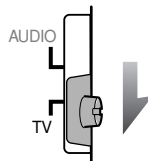


Manufacture's code	
Manufacture	Code number
JVC	01
Hitachi	10
Magnavox	02
Mitsubishi	03
Panasonic	04, 11
Philips	15
RCA	05
Samsung	12
Sanyo	13, 14
Sharp	06
Sony	07
Toshiba	08
Zenith	09

Operating TV

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

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



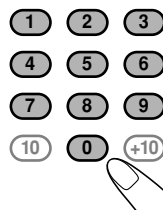
2 Press and hold until the following steps are complete.



3



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



5 Release Power/TV.

To operate the TV

To turn on or off the TV:	To select the input mode (either TV or VIDEO):	To adjust TV volume:
To select the TV channel:		

Additional Information

Learning More about This System ● ● ●

Introduction (see pages 1 to 2)

Playable Disc Types:

• About audio format

- **Linear PCM:** Uncompressed digital audio, the same format used for CDs and most studio masters.
- **Dolby Digital:** Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create 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.
- If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.

Daily Operations—Playback (see pages 9 to 13)

Listening to the Radio:

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

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- When playing back a DVD Audio disc recorded in MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals are recognized as the linear PCM signals, however, no indicator lights up on the display.
- For MP3/WMA playback...
 - MP3/WMA discs require a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This System can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - It is recommended that you make each MP3/WMA file at a sampling rate of 44.1 kHz and at bit rate of 128 kbps. This System cannot play back files made at bit rate of less than 64 kbps.

Daily Operations—Sound&Other Adjustments (see pages 14 to 18)

Reinforcing the Bass Sound:

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

Creating Your Own Sound Modes—User Mode:

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

Selecting the Surround Modes:

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

Changing the Color System and Scanning Mode:

- If you play back an NTSC disc with the color system set to “PAL (PROG),” the disc will be reproduced using “PAL 60” format, however, if the TV does not support this format, the screen may roll over upward and downward rapidly.
- If you play back a PAL disc with the color system set to “NTSC (PROG),” 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.
- You cannot change the scanning mode to progressive in the following cases:
 - When your TV does not support the progressive video input.
 - When you have not connected your TV to the unit using a component video cord.
- When you play back an NTSC disc in progressive scanning mode, the System outputs the NTSC signal regardless of the color system settings.

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 19 to 21)

Selecting the Sound Track:

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

Playing Back Bonus Group:

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

Special Picture Playback:

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

Advanced Disc Operations (see pages 22 to 24)

Programming the Playing Order—Program Play:

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

On-Screen Disc Operations (see pages 25 to 31)

Operations Using the On-screen Bar:

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

Operations on the Control Screen:

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

- This System can play only baseline JPEG files*. Progressive JPEG files* or lossless JPEG files* cannot be played.

* Baseline JPEG format: Used for digital cameras, web, etc.

Progressive JPEG format: Used for web.

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

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

Recording Operations (see pages 32 to 33)

General:

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

Recording on a Tape:

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

Synchronized Disc Recording:

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

Enjoying Karaoke (see pages 34 to 36)

General:

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

Reducing the Lead Vocal—Vocal Masking:

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

Scoring Your Karaoke Skill:

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

Reserving Karaoke Songs—Karaoke Program Play:

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

Timer Operations (see pages 37 to 38)

Setting the Timer:

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

Setup Menu Operations (see pages 39 to 40)

General:

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

LANGUAGE menu:

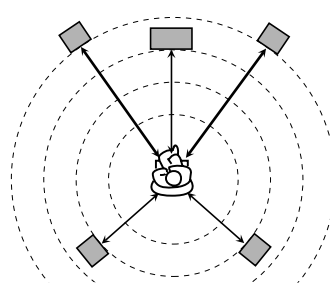
- When the language you have selected for MENU LANGUAGE, AUDIO LANGUAGE, or SUBTITLE is not recorded on a disc, the original language is used as the initial language.

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.

SPK. SETTING menu—DELAY:

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



Front speakers:

0 ms

Center speaker:

1 ms

Surround speakers:

2 ms

OTHERS menu—ON SCREEN GUIDE:

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

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

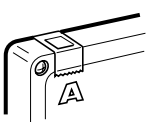
- Use a cotton swab moistened with alcohol to clean the heads, capstans, and pinch rollers.
- Use a head demagnetizer (available at electronics and audio shops) to demagnetize the heads (when the System turned off).



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.

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.

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

⇒ Incorrect color system is selected (see page 17).

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

⇒ Select "4:3 LB (MULTI)" for "MONITOR TYPE" (see page 39).

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.

- ⇒ You have inserted a disc whose Region Code is not “3.” (“REGION ERR” appears on the display.)
- ⇒ The disc is placed upside down. Place the disc with the label side up.

ID3 Tag on an MP3 disc cannot be shown.

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

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

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

MP3/WMA or JPEG files are not played back.

- ⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the “FILE TYPE” setting (see page 39).
- ⇒ You have changed the “FILE TYPE” setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

- ⇒ The disc is scratched or dirty.

The disc playback sounds strange.

- ⇒ Cancel Key Control (see page 35).

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

- ⇒ Some DVDs are programmed to always display no subtitle initially. If this happens, press SUB TITLE after starting play (see page 20).

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

- ⇒ Some DVDs are programmed to always use the original language initially. If this happens, press AUDIO after starting play (see page 19).

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- ⇒ Child Lock is in use. “LOCKED” appears in the display window (see page 24).
- ⇒ The Program Play is in use. Cancel the Program Play (see page 23).

Tape Operations:

The cassette holder cannot be opened.

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

Recording Operations:

Impossible to record.

- ⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape.
- ⇒ The Karaoke scoring function is in use. Cancel the scoring function (see page 35).

Karaoke Operations:

Cannot activate the scoring function.

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

Scoring result seems wrong (or “-” appears).

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

Timer Operations:

Daily Timer or Recording Timer does not work.

- ⇒ The System has been turned on when the on-time comes. Timer starts working only when the System is turned off.

Language Code List

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

Specifications

CA-DXT9

Amplifier section

Output Power:

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

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

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

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

Digital output:

OPTICAL DIGITAL OUTPUT:
-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):
(Y) 1 V(p-p)/75 Ω
(Pb/Pr) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω – 16 Ω (front speakers/subwoofers)
6 Ω – 16 Ω (surround/center speakers)

Tuner section

FM tuning range: 87.50 MHz – 108.00 MHz

AM (MW) tuning range: 531 kHz – 1 602 kHz (at 9 kHz)
530 kHz – 1 600 kHz (at 10 kHz)

Disc player section

Playable disc: DVD Video/DVD Audio/CD/VCD/SVCD
CD-R/CD-RW (recorded in Audio CD/Video CD/
Super Video CD formats and MP3/WMA/JPEG
files)
DVD-R (recorded in DVD Video format)
DVD-RW (recorded in DVD Video format or DVD-
VR format)
DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response
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: 335 W (at operation)
29 W (on standby)

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

Mass (approx.): 11.4 kg

Design and specifications are subject to change without notice.

CA-DXT7

Amplifier section

Output Power:

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

CENTER SPEAKER: 50 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

SURROUND SPEAKERS: 50 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

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

Digital output:

OPTICAL DIGITAL OUTPUT:

-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):

(Y) 1 V(p-p)/75 Ω

(PB/PR) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω – 16 Ω (front speakers/subwoofer)

6 Ω – 16 Ω (surround/center speakers)

Tuner section

FM tuning range: 87.50 MHz – 108.00 MHz

AM (MW) tuning range: 531 kHz – 1 602 kHz (at 9 kHz)

530 kHz – 1 600 kHz (at 10 kHz)

Disc player section

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

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

DVD-R (recorded in DVD Video format)

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

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

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: 270 W (at operation)
25 W (on standby)

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

Mass (approx.): 11.4 kg

Design and specifications are subject to change without notice.

- 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.
- 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

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

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

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

Parts Index

Remote control

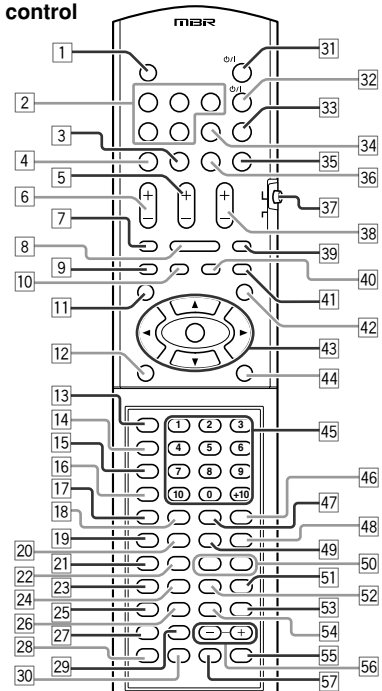
Button	Page	Button	Page
⏪/I AUDIO	31	9	
⏪/I TV	32	41	
■	8	11 – 13, 23	
▶▶/◀◀	9 41	10, 12, 13, 21	
▶▶/◀◀	7 39	11	
	40	11, 21	
▲/▼/▶/◀/ ENTER	43	12, 17, 20, 21, 26 – 31, 39, 41	
+/-	56	14, 15, 17, 18, 36, 37	
10 keys	45	10 – 12, 21, 22, 28, 36, 41	
ANGLE	16	20	
AUDIO	14	19	
AUDIO/TV selector	37	9, 41	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

Main unit

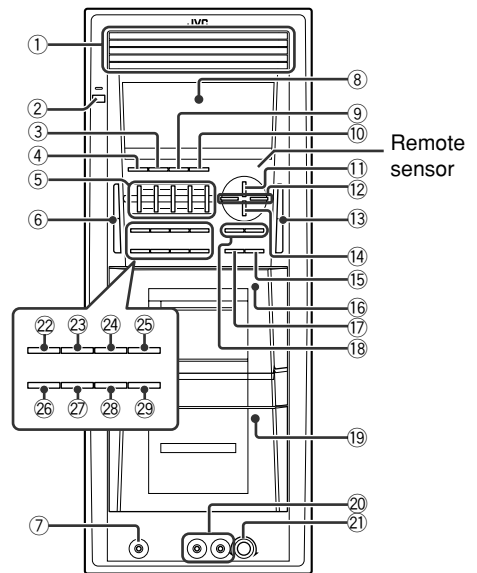
Button	Page	Button	Page
⏪/I	2	9	
Display	8	8	
■	14	10 – 13, 23, 24	
▶▶/◀◀	18	10, 12, 13, 21	
▶▶/◀◀	12	11	
	11	11, 21	
AUX	25	9	
DEMO	24	9	
Disc trays	1	11	
DISC1-5 ▶▶/▲	5	11, 24, 33	
DISC REC START	26	33	
DUBBING	28	33	
DVD/CD	10	9, 11	
DVD LEVEL	23	16	
FM/AM	9	9, 10	
KARAOKE SCORING	15	35	
MIC 1 / MIC 2	20	34	
MIC LEVEL	21	34	
PHONES	7	9	
PRESET +/-	12	11	
PUSH-OPEN ▲	16 19	13, 32	
REC START/ STOP	27	33	
RHYTHM AX	17	15	

Button	Page	Button	Page
REVERSE MODE	29	13, 32	
SUBWOOFER LEVEL +/-	6	15	
SURROUND MODE	22	16	
TAPE-A	4	9, 13, 33	
TAPE-B	3	9, 13, 32, 33	
TUNING	18	10	
VOLUME +/-	13	9, 14, 34	

Remote control

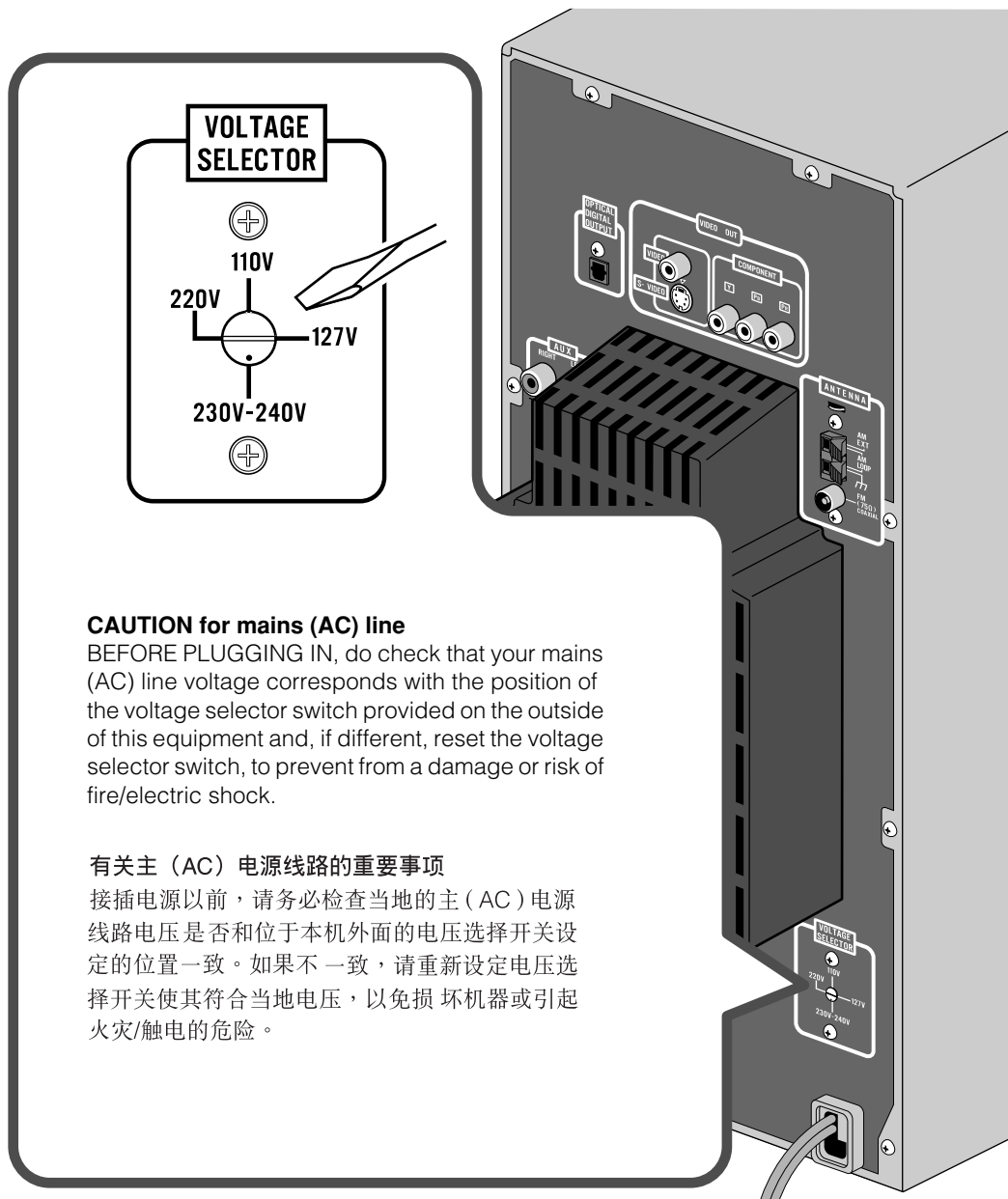


Main unit



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

主 (AC) 电源线路说明 (不适用于香港、欧洲、美国、加拿大及英国型号)



CAUTION for mains (AC) line

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

有关主 (AC) 电源线路的重要事项

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

JVC

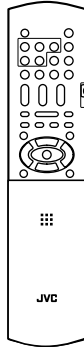
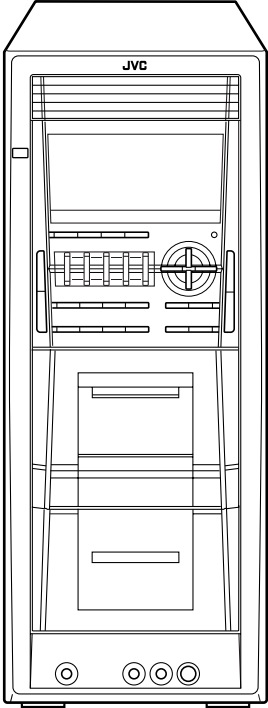


JVC

COMPACT COMPONENT SYSTEM

نظام اجهزة صوتية مركبة
سيستم دستگاه كامپكت

CA-DXT9 CA-DXT7



INSTRUCTIONS

كتيب تعليمات التشغيل
دستور العمل ها

GVT0147-002A
[UG, UX]

English

عربي

فارسی

Warnings, Cautions and Others

تذيرات ، تنبيهات و اشياء اخرى

هشدارها، احتياطاتها و موارد ديگر

Caution—⏻/I button!

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

تذير — ⏻/I الطاقة!

انزع قابس الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كليا. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع ⏻/I الطاقة الكهربائية عن الجهاز. يمكن التحكم عن بعد بالطاقة الكهربائية.

احتياط — دكمه ⏻/I

برای قطع برق بطور کامل دوشاخه را از برق خارج کنید. دكمه ⏻/I در هر وضعی برق اصلی دستگاه را قطع نمی کند. برق دستگاه را نمی توان از راه دور کنترل کرد.

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.

تذير

لتجنب خطر الحريق، الصدمات الكهربائية، الخ.:

1. لا تفك البراغي او الاغطية او الخزائن.
2. لا تعرض هذا الجهاز للمطر او للرطوبة.

احتياط

برای کاهش خطر شوک الکتریکی، آتش سوزی و غیره:

1. پیچها، جلدها یا جعبه را باز نکنید.
2. این دستگاه را در معرض باران یا رطوبت قرار ندهید.

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.

تذير

- لا تغلق فتحات التهوية او الثقوب. (في حالة اغلاق فتحات التهوية او الثقوب بواسطة ورق الصحف او القماش، الخ، فانه يمكن ان لا تخرج الحرارة للخارج.)
- لا تضع اية مصادر حرارية مكشوفة، مثل الشموع المضيئة، على الجهاز.
- عند اتلاف البطاريات، يجب اخذ مشاكل البيئية بعين الاعتبار ويجب التقيد بالانظمة المحلية او القوانين التي تحكم اتلاف هذه البطاريات بصورة دقيقة.
- لا تعرض هذا الجهاز للمطر، او الرطوبة، او تنقيط الماء، او رشق الماء ولا تضع اي اوعية مملوءة بالماء او السوائل مثل مزهريات الورد على هذا الجهاز.

احتياط

- محفظه ها و سوراخهای تهویه را مسدود نکنید. (اگر محفظه ها یا سوراخهای تهویه با ورق روزنامه یا پارچه و غیره مسدود شوند، حرارت ممکن است نتواند خارج گردد.)
- هیچ گونه شعله بدون حفاظی مانند شمعهای روشن را روی دستگاه قرار ندهید.
- وقتی که باتریها را دور می اندازید، مسائل زیست محیطی باید در نظر گرفته شوند و از قوانین و مقررات محلی در مورد این باتریها باید کاملا پیروی کرد.
- این دستگاه را در معرض باران، مایعات ریخته شده و مایعاتی که تراوش می شوند قرار ندهید و اشیائی که با مایعات پر شده اند مانند گلدان را روی دستگاه نگذارید.

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.

تحذير: التهوية الصحيحة

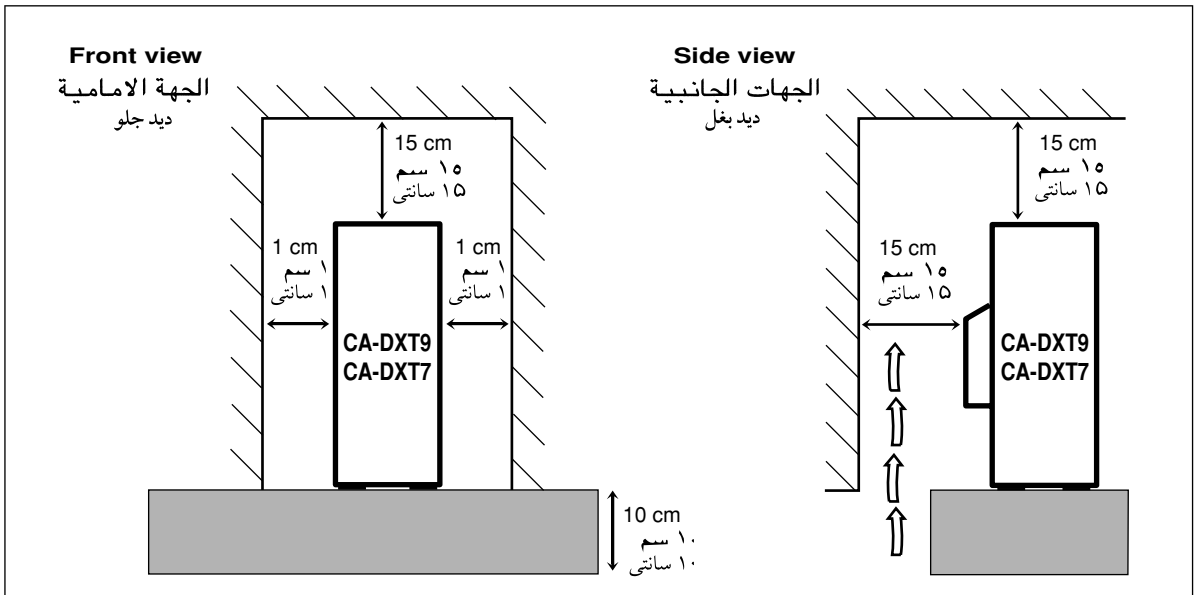
لتجنب حصول صدمات كهربائية واطار الحريق ومنع حصول تلف وضرر للجهاز، ركب الجهاز كما يلي:
١. الجهة الامامية: يجب ان لا يكون هنالك عوائق ويجب ان تكون المنطقة مفتوحة امام الجهاز.
٢. الجهات الجانبية / العلوية / الخلفية: يجب عدم وضع عوائق في المناطق المبينة بالابعاد في الاسفل.
٣. القاعدة: يجب وضع الجهاز على سطح منبسط. اترك مسافة كافية من اجل التهوية بواسطة وضع الجهاز على حامل بار تفاع ١٠ سم او اكثر.

احتياط: تهويه مناسب

برای اجتناب از شوک الکتریکی و آتش سوزی و جلوگیری از بروز خسارت دستگاه را به روش زیر قرار دهید:
١. جلو: بدون مانع و فضای باز.

٢. صرفین/ بالا/ پشت: هیچ مانعی نباید در مناطقی با فواصل نایش داده شده قرار داده شود.

٣. ته: دستگاه را روی سطح تراز قرار دهید. مسیر هوای مناسبی را برای تهویه با گذردن دستگاه روی یک پایه ١٠ سانتی متری یا بیشتر تعبیه کنید.



IMPORTANT FOR LASER PRODUCTS

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

مهم للمنتجات الليزرية

١. صنف ١ منتج ليزري
٢. **تحذير:** لا تفتح الغطاء العلوي لا يوجد اجزاء داخل الجهاز يستطيع المستخدم صيانتها؛ اترك جميع اعمال الصيانة مهما كانت للاشخاص المؤهلين والمختصين بالصيانة.
٣. **تحذير:** هناك اشعة ليزرية مرئية وغير مرئية عند الفتح والعبث بالاجزاء الداخلية او تعطيل اقفال الامان. تجنّب التعرض المباشر للاشعة.
٤. ملصق تحذير المنتج: ملصق التحذير CAUTION LABEL، موجود داخل الجهاز.

برای محصولات لیزری مهم است

١. محصول لیزر درجه ١
٢. احتیاط: پوشش بالایی را باز نکنید، قطعه ای که کاربر بتواند آن را تعمیر کنید در داخل وجود ندارد؛ کلیه تعمیرات را به متخصصین تعمیر مجرب محول کنید.
٣. احتیاط: هنگامی که در حالت باز است و قفل از کار می افتد و یا خنثی می شود، اشعه نامرئی لیزر ساطع می شود. از تماس مستقیم با اشعه اجتناب کنید.
٤. تولید مجدد برچسب: برچسب احتیاط، بیرون دستگاه قرار گرفته است.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)	VARNING : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)	VARO : Avtattensa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
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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.
–A cooling fan is inside the unit to prevent heat buildup.



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

Others

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



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

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

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

Contents

Connections	3
Display Indication	8
Daily Operations—Playback	9
Canceling the Demonstration	9
Listening to the Radio	10
Playing Back a Disc	11
Playing Back a Tape.....	13
Daily Operations—Sound&Other Adjustments	14
Adjusting the Volume	14
Adjusting the Speaker Output Level	14
Reinforcing the Bass Sound	15
Selecting the Sound Modes	15
Creating Your Own Sound Modes—User Mode	15
Selecting the Surround Modes	16
Presetting Automatic DVD Video	
Sound Increase Level	16
Changing the Color System and Scanning Mode.....	17
Changing the Picture Tone.....	17
Changing the Display Brightness	18
Setting the Clock	18
Turning Off the Power Automatically	18
Unique DVD/VCD Operations	19
Selecting the Sound Track.....	19
Selecting the Subtitle Language.....	20
Selecting the View Angle.....	20
Reviewing the Playback Quickly	20
Selecting Browsable Still Pictures	20
Playing Back Bonus Group	21
Special Picture Playback	21
Advanced Disc Operations	22
Programming the Playing Order—Program Play	22
Playing at Random—Random Play.....	23
Playing Repeatedly—Repeat Play	24
Prohibiting Disc Ejection—Child Lock	24
On-Screen Disc Operations	25
On-screen Bar Information.....	25
Operations Using the On-screen Bar.....	26
Operations on the Control Screen	29
Recording Operations	32
Enjoying Karaoke	34
Singing Along (Karaoke)	34
Reducing the Lead Vocal—Vocal Masking.....	35
Scoring Your Karaoke Skill	35
Reserving Karaoke Songs—Karaoke Program Play	36
Timer Operations	37
Setup Menu Operations	39
Operating the TV	41
Additional Information	42
Troubleshooting	45
Specifications	47
Parts Index	50

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

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

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

Caution for DualDisc playback:

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

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 17.

Note on Region Code

This System can play back only DVD Videos whose Region Code numbers include “2.”

EX.:



Audio formats

The System can play back the following digital audio formats.

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

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

- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays.
- For disc playback, you can change the initial setting to your preference. See “Setup Menu Operations” on page 39.

If “” appears on the TV screen when you press a button, the disc cannot accept the operation you have tried to do.

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 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 interfere with your viewing when playing back a copy-protected disc. Your viewing may be interfered when connecting VIDEO OUT to an integrated TV/VCR system.

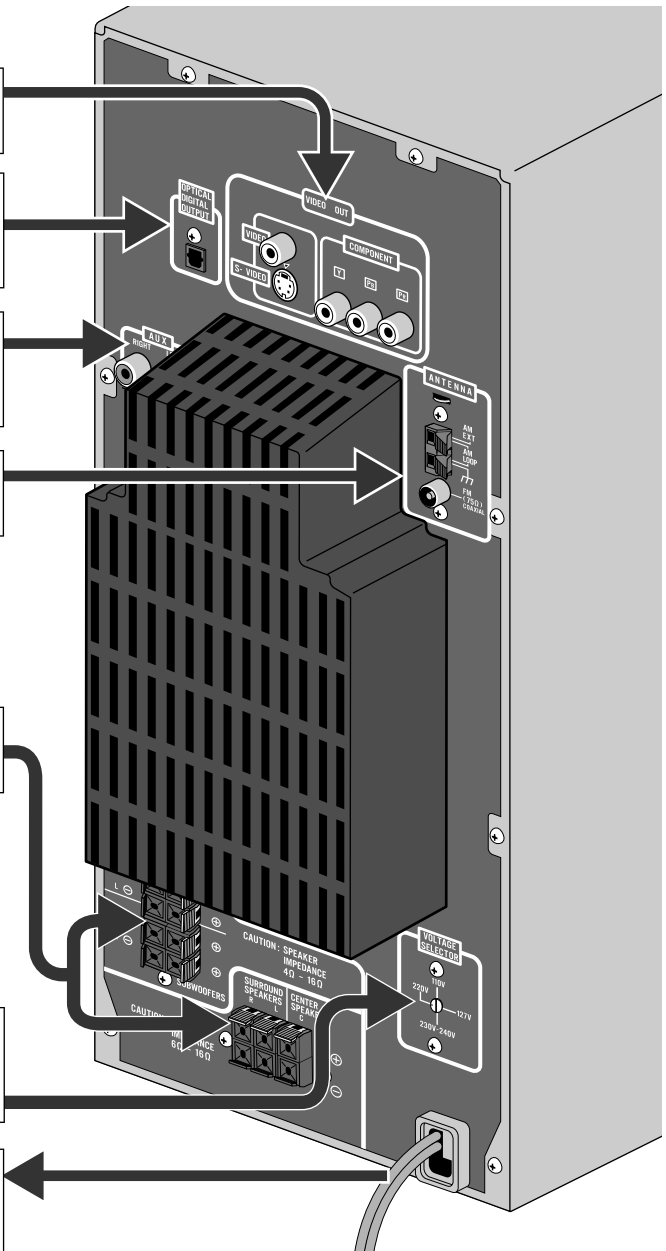
Supplied accessories

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

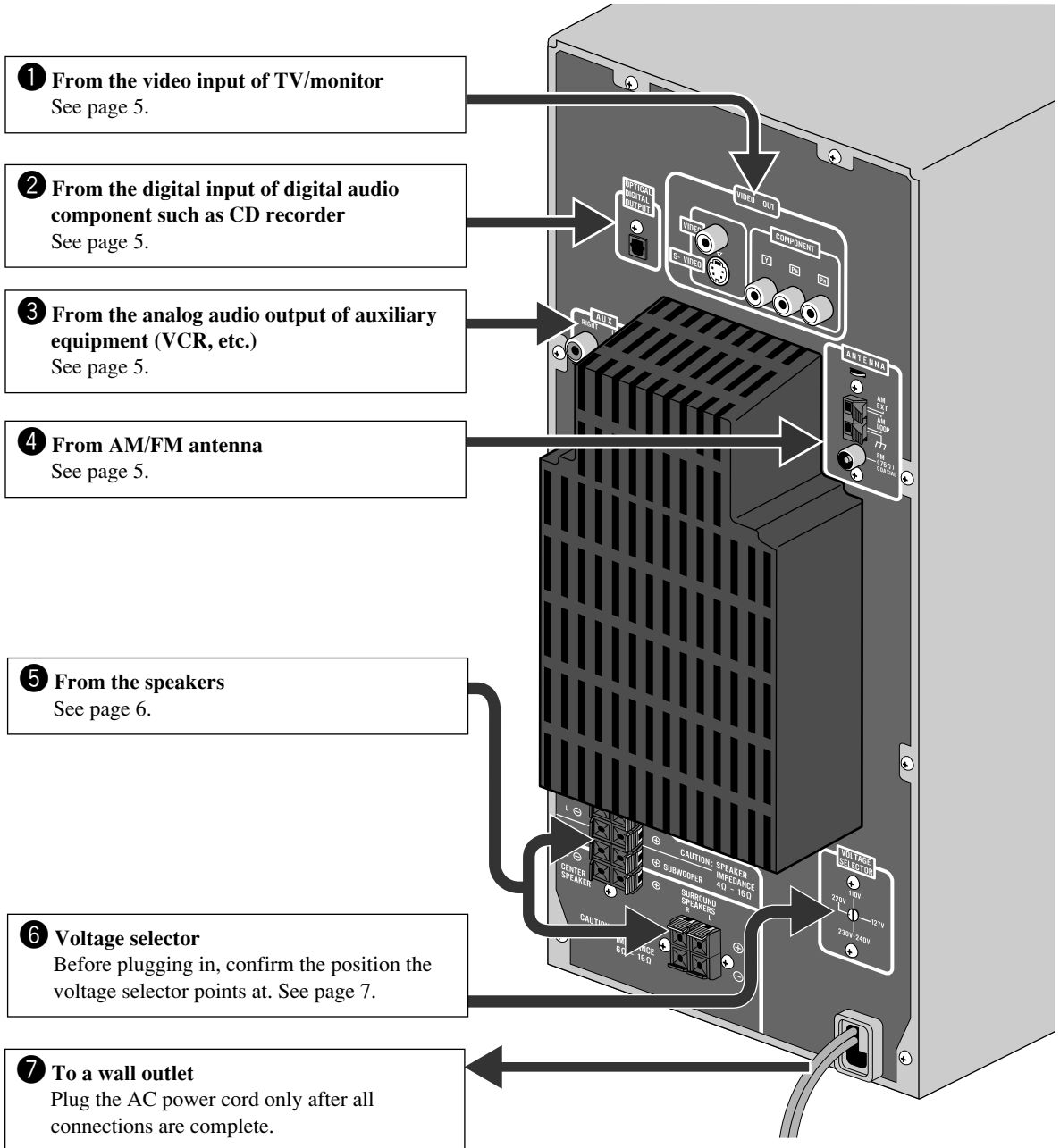
If any item is missing, consult your dealer immediately.

CA-DXT9

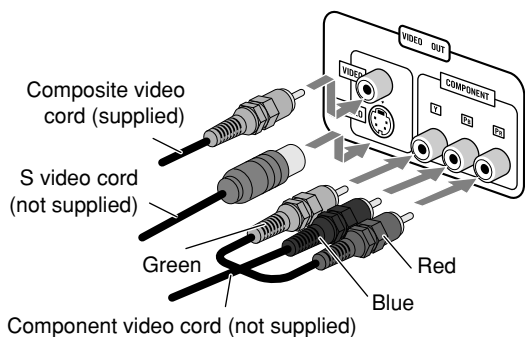
- 1 From the video input of TV/monitor**
See page 5.
- 2 From the digital input of digital audio component such as CD recorder**
See page 5.
- 3 From the analog audio output of auxiliary equipment (VCR, etc.)**
See page 5.
- 4 From AM/FM antenna**
See page 5.
- 5 From the speakers**
See page 6.
- 6 Voltage selector**
Before plugging in, confirm the position the voltage selector points at. See page 7.
- 7 To a wall outlet**
Plug the AC power cord only after all connections are complete.



CA-DXT7

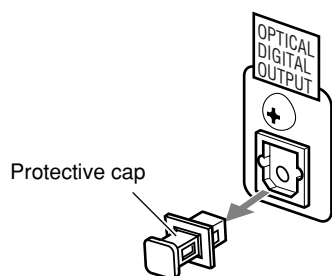


1 TV/monitor



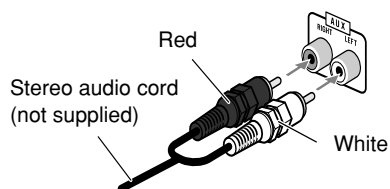
- To select progressive scanning mode (see page 17), use COMPONENT jacks.
- Connect the VIDEO jack, S-VIDEO jack, or COMPONENT jacks whichever you want to use.

2 Digital audio component



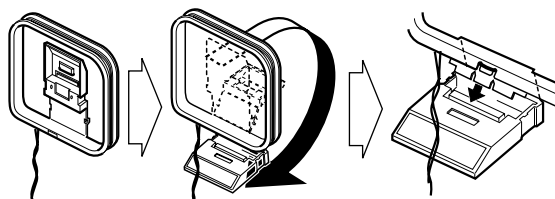
- Set "DIGITAL AUDIO OUTPUT" in the "AUDIO" menu correctly according to the connected digital audio equipment (see page 40). If setting is incorrect, loud noise may be generated causing damage to the speakers.

3 Auxiliary equipment

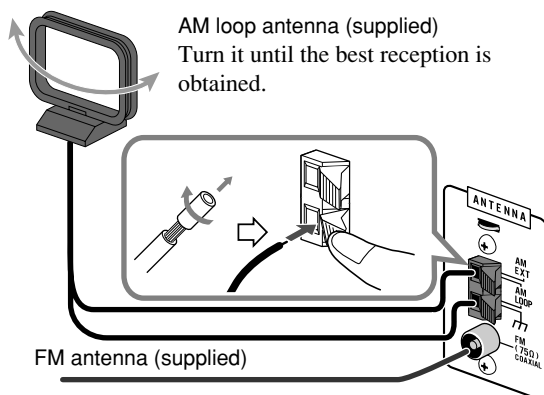


4 AM/FM antenna

To assemble the AM loop antenna



To connect AM/FM antenna



AM loop antenna (supplied)

Turn it until the best reception is obtained.

FM antenna (supplied)

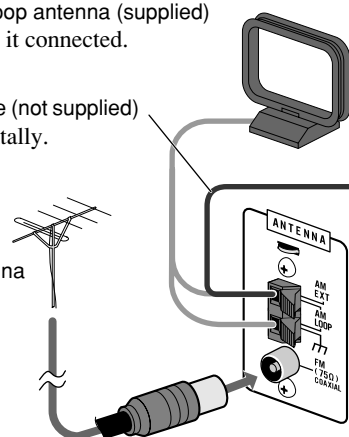
Extend it so that you can obtain the best reception.

For better AM/FM reception

AM loop antenna (supplied)
Keep it connected.

Vinyl-covered wire (not supplied)
Extend it horizontally.

FM outdoor antenna
(not supplied)



- 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.

5 Speakers

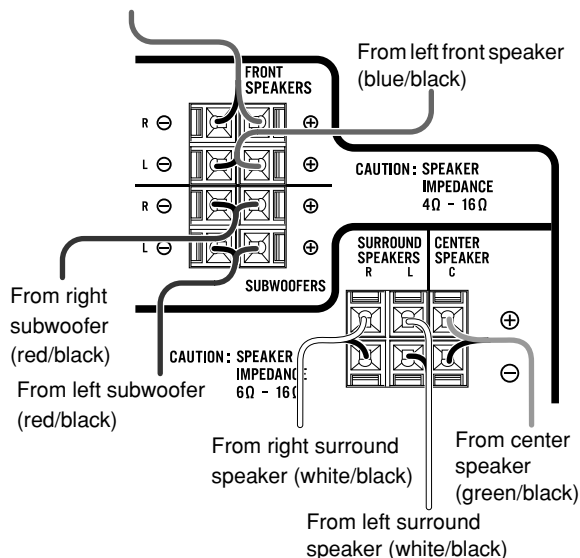
To connect the speaker cords



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

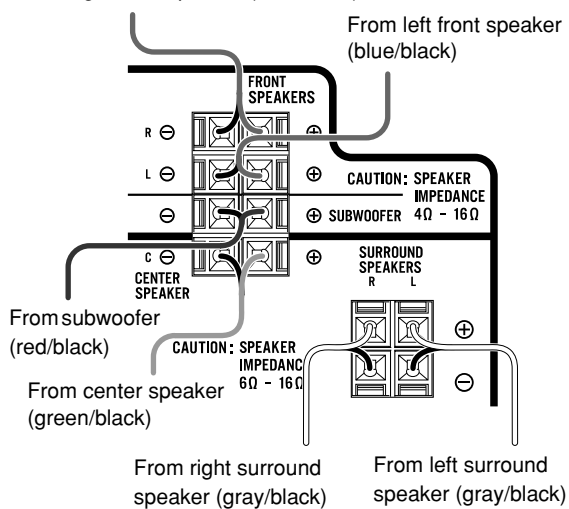
For CA-DXT9

From right front speaker (blue/black)



For CA-DXT7

From right front speaker (blue/black)



- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the System.
- The front and center speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.

- When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.

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

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

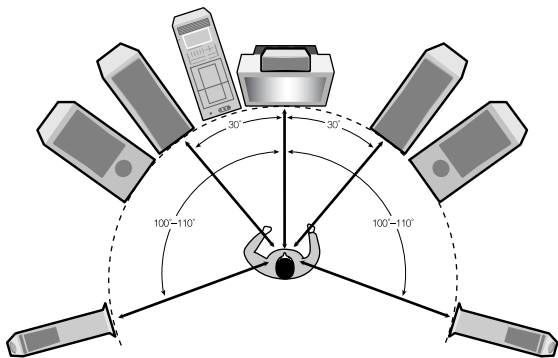


- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

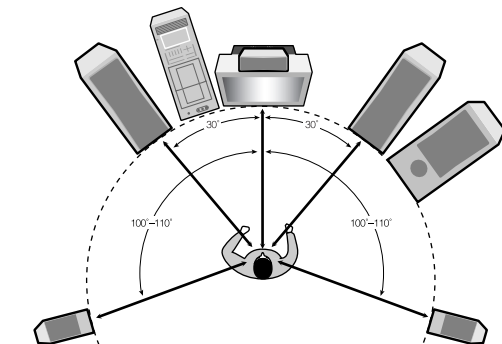
Speaker layout

To enjoy multi-channel sound, locate the speakers as follows. If you cannot locate like this, adjust the speaker setting by using the Setup menu (see page 40).

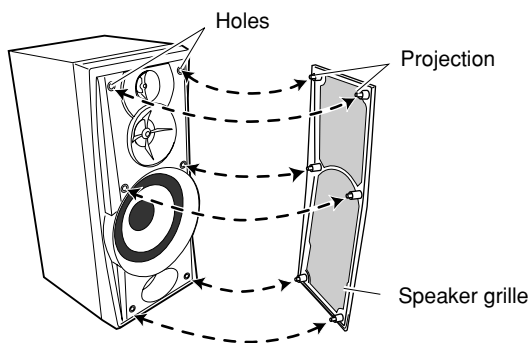
For CA-DXT9



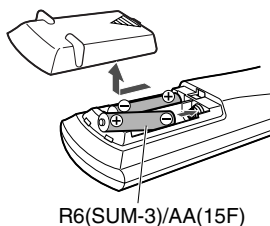
For CA-DXT7



To remove the speaker grilles of the front speakers



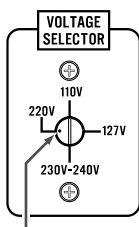
Preparing the remote control



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

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

6 To adjust the voltage selector



Voltage mark

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.)



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

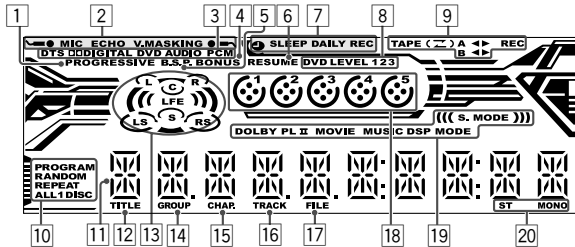


DO NOT plug in before setting the voltage selector and all connection procedures are complete.

Display Indication

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

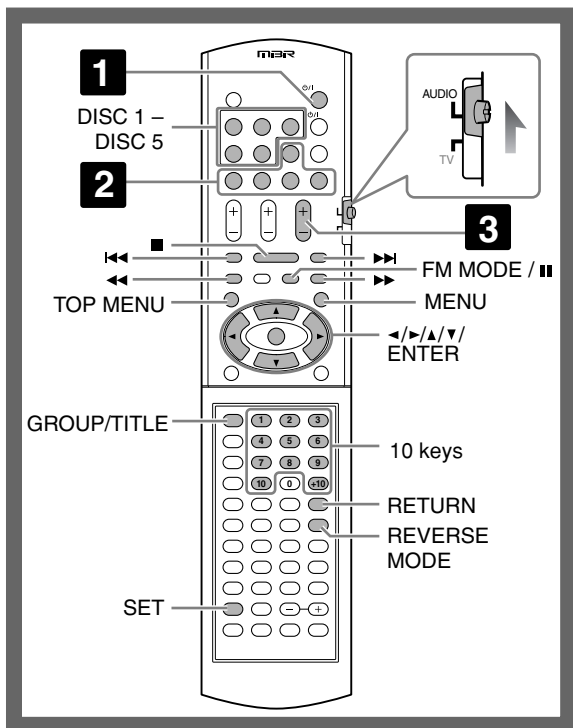
Before operating the System, be familiar with when and how the indicator illuminates on the display.



- 1 PROGRESSIVE indicator
 - Lights when the progressive scanning mode is selected.
- 2 Karaoke operation indicators (see pages 34 to 36)
 - : lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - MIC: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - ECHO: lights when the echo effect is activated.
 - V.MASKING: lights when the Vocal Masking Mode is activated.
- 3 Source signal indicators
 - DTS: lights when a source signal is DTS.
 - DIGITAL: lights when a source signal is Dolby Digital.
 - DVD: lights when DVD Video is detected.
 - DVD AUDIO: lights when DVD Audio is detected.
 - PCM: lights when a source signal is linear PCM.
- 4 BONUS indicator
 - Lights when DVD Audio with bonus group is detected (see page 21).
- 5 B.S.P. indicator
 - Lights when browsable still pictures on DVD Audio are available (see page 20).
- 6 RESUME indicator
 - Lights when Resume is activated (see page 40).
- 7 Timer indicators
 - : lights when Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: lights when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.
- 8 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD Video increase level.
- 9 Tape operation indicators
 - TAPE: lights when a tape is loaded in either deck A or B.
 - (Reverse Mode): lights to indicate the current Reverse Mode (see page 13).
 - A: lights when a tape is in the deck A.
 - B: lights when a tape is 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.
 - REC: lights while recording.
- 10 Disc operation indicators
 - PROGRAM: lights when Program Play is activated.
 - RANDOM: lights when Random Play is activated.
 - REPEAT: lights when Repeat Play is activated.
 - ALL DISC: lights when All Disc Repeat is activated.
 - 1 DISC: lights when One Disc Repeat is activated.
 - 1: lights when One Track/Chapter/Step Repeat is activated.
- 11 Main display
- 12 TITLE indicator
 - Lights to indicate the title number for DVD Video.
- 13 Audio signal indicators
 - L/R/C/LS/RS/LFE: Lights to indicate the incoming audio channel signals.
 - : Lights to indicate the speakers from which sound is emitted.
- 14 GROUP indicator
 - Lights to indicate the group number.
- 15 CHAP. indicator
 - Lights to indicate the chapter number.
- 16 TRACK indicator
 - Lights to indicate the track number.
- 17 FILE indicator
 - Lights to indicate the file number.
- 18 Disc indicators
 - 1 – 5: lights to indicate the current disc tray.
 - : lights when a disc is detected on the disc tray; rotates during playback or paused.
- 19 Sound Mode/Surround Mode indicators (see page 15)
 - DOLBY PL II MOVIE/MUSIC: lights when Dolby Pro Logic Modes (Movie or Music) is activated.
 - S.MODE: lights when one of the Sound Modes/Surround Modes is activated.
 - DSP MODE: lights when one of the DSP Modes is activated.
- 20 FM reception indicators
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
 - MONO: lights while receiving an FM stereo station in monaural.

Daily Operations—Playback

In this manual, the 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 PH/AUDIO, the System also turns on by pressing one of the source select buttons in the next step.

2 Select the source.

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

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

3 Adjust the volume.

4 Operate the target source as explained later.

To turn off (stand by) the system

- The STANDBY lamp on the main unit lights in red.
- A small amount of power is always consumed even while on standby.

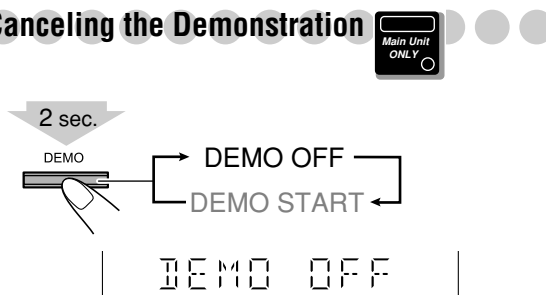
For private listening

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

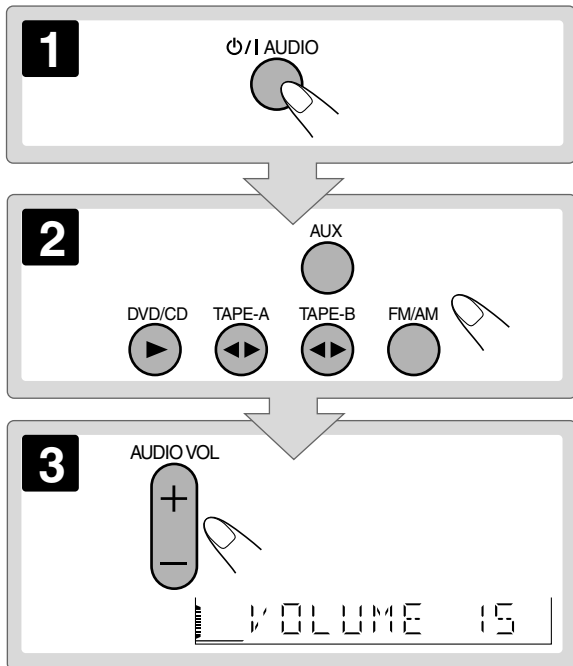
- Disconnecting the headphones will activate the speakers again.

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

Canceling the Demonstration



To start the demonstration, select DEMO START.



Listening to the Radio

To select the AM tuner interval spacing



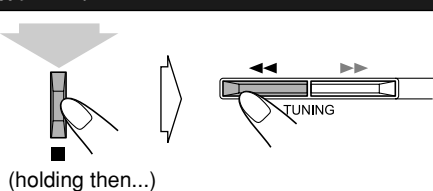
Some countries space AM stations 9 kHz apart, and other countries use 10 kHz spacing.

1 Select “AM,” then turn off (stand by) the System.

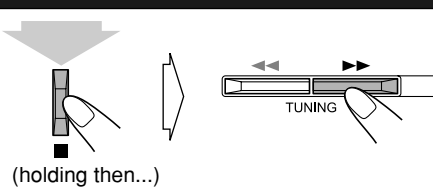


2 Select the AM tuner interval spacing.

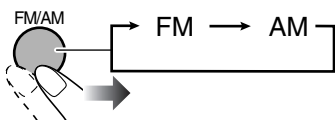
To select 9 kHz:



To select 10 kHz:

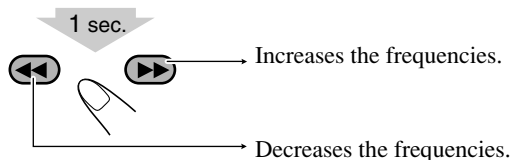


To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



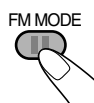
Frequency starts changing on the display.

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



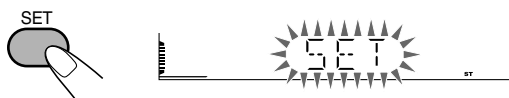
You can preset 30 FM and 15 AM stations.

- To cancel the operation during procedure, press CANCEL.

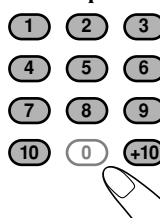
1 Tune in to a station you want to preset.

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

2 Start presetting.



3 Select a preset number.



Examples:

To select preset number 5, press 5.

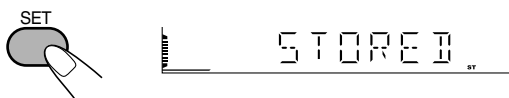
To select preset number 15, press +10, then 5.

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

- You can also use +/- buttons.

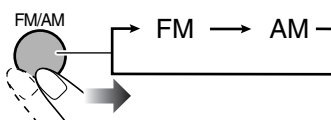


4 Store the station.

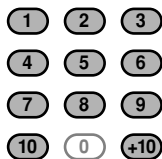


To tune in to a preset station

1 Select the band (FM or AM).



2 Select a preset number.



Examples:

To select preset number 5, press 5.

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

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

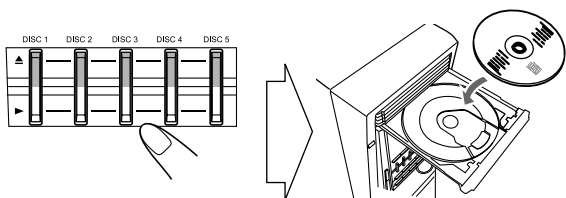
- You can also use buttons on the remote control or PRESET +/- buttons on the main unit.

Playing Back a Disc

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

- DVD Video comprises of “Titles” which includes “Chapters,” DVD Audio/MP3/WMA comprise of “Groups” which includes “Tracks,” JPEG comprises of “Groups” which includes “Files,” and CD/SVCD/VCD comprise of only “Tracks.”
- For JPEG playback, see page 30.

To insert discs



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

To close the disc tray, press the same again.

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

To start:	To pause:	To stop:
<p>Playback of the current disc starts.</p>	<p>To release it, press DVD/CD .</p>	

While playing DVD/SVCD/VCD/MP3: This System can store the stop point, and when you start playback again by pressing DVD/CD , it starts from the position where you have stopped—Resume Play. (RESUME indicator lights up when you stop playback.)

To stop completely while Resume is activated, press twice. (To cancel Resume, see “RESUME” on page 40.)

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.

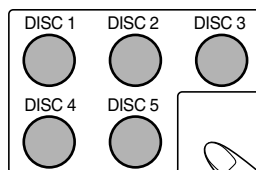
Appears at the beginning of a scene containing multi-subtitle languages.

- 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 40.

To select a disc

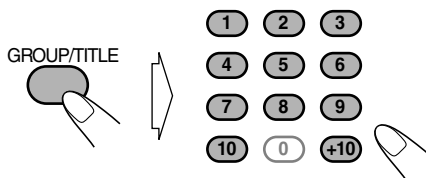


Playback starts.

To select a title/group

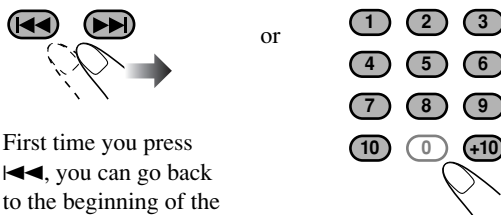


While playing a disc...



To select a chapter/track

While playing a disc...



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

To locate a particular portion

While playing a disc except MP3/WMA...



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

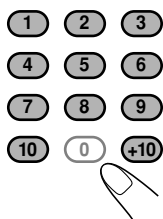
To return to normal playback, press DVD/CD ►.

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.

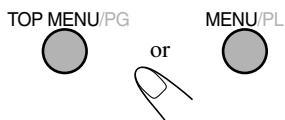
To play back by using the disc menu



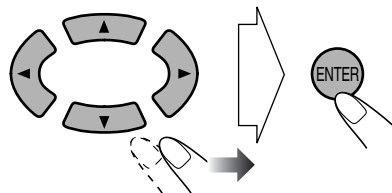
You can operate the disc play using the disc menu.

■ For DVD Video/DVD Audio

1 Show the disc menu.



2 Select an item on the disc menu.

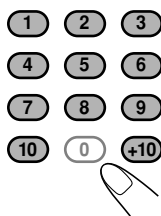


- On some discs, you can also select items by entering the number using the 10 keys.

■ For SVCD/VCD with PBC

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

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

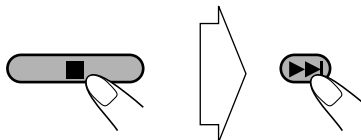


Examples:

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

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

To cancel PBC



You can also cancel PBC by pressing the 10 keys to start playback when disc menu is not shown on the TV screen.

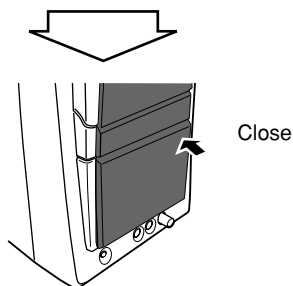
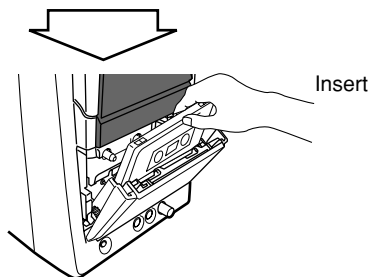
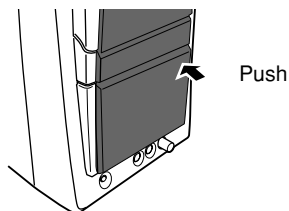
To reactivate PBC, press ■, then press ◀◀.

Playing Back a Tape

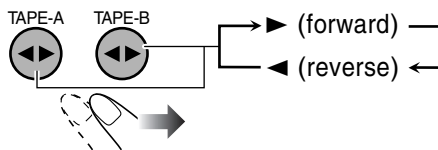
To insert a tape

You can play back type I tapes.

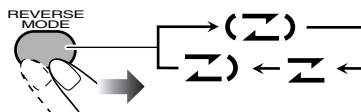
- The use of C-120 or longer tape is not recommended.






To change the tape running direction



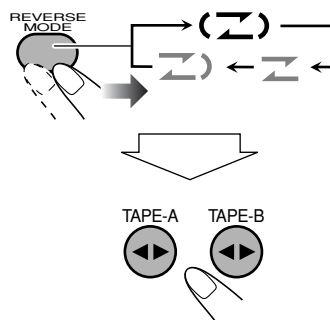
To reverse the tape automatically



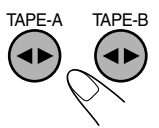
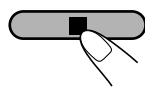
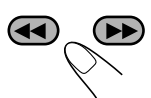
-  Tape is reversed, and playback repeats until you stop it.
-  Tape is not reversed. When the current side of the tape reaches its end, playback stops.
-  Tape is reversed once.

To playback the both decks A and B continuously —Relay Play

When the cassettes are set in the both decks...

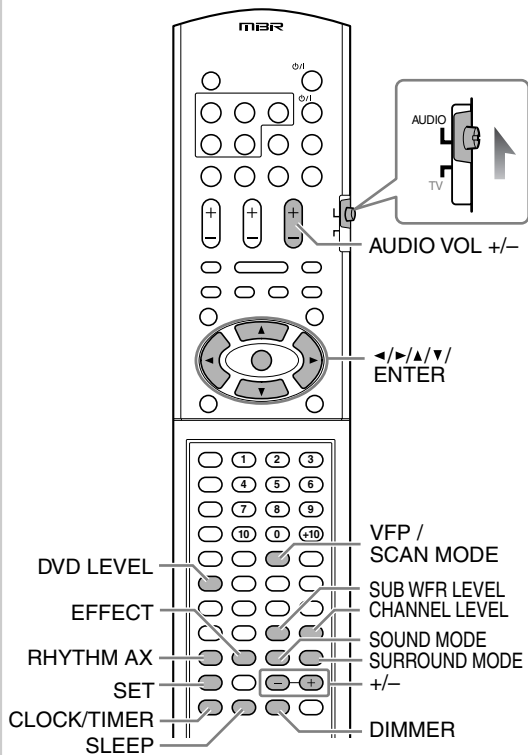


You can start playback of either deck A or B.

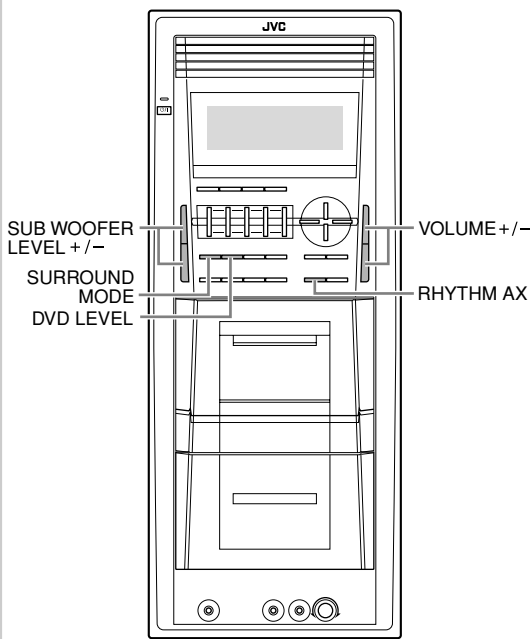
To start:	To stop:
	
To rewind tape:	
	

Daily Operations—Sound&Other Adjustments

Remote Control

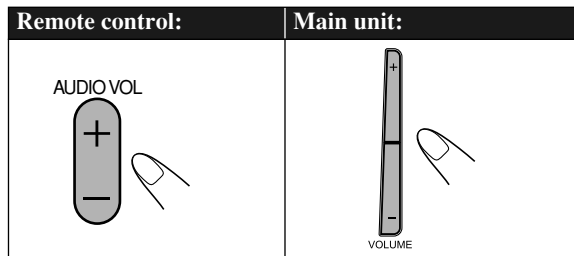


Main unit



Adjusting the Volume

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



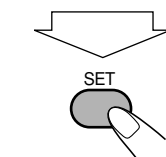
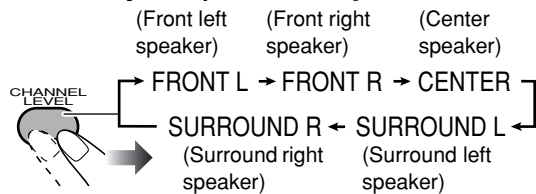
Adjusting the Speaker Output Level

Level

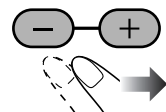
You can adjust the speaker output level from -6 (dB) to +6 (dB).

- You can also use the setup menu to adjust the speaker output level (see page 40).

1 Select the speaker you want to adjust.



2 Adjust the output level.



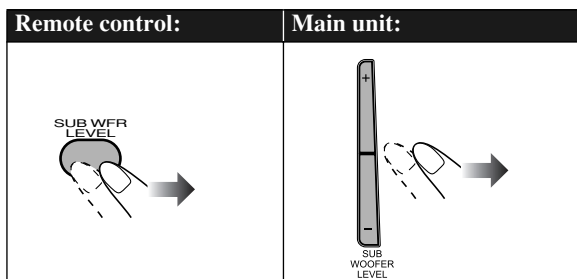
3 Repeat steps 1 and 2 to adjust other speakers.

Reinforcing the Bass Sound

To adjust the bass level gradually

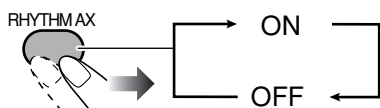
You can select the subwoofer level from level 0 (minimum) to level 4 (maximum).

INFO



To emphasize rhythmical feeling—RHYTHM AX

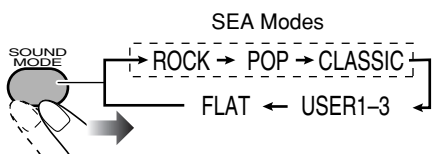
This function emphasizes bass attack feeling.



Selecting the Sound Modes

Remote ONLY

You can select one of the preset Sound Modes.



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

To cancel the Sound Mode, select “FLAT.”

Creating Your Own Sound

Remote ONLY

INFO

Modes—User Mode

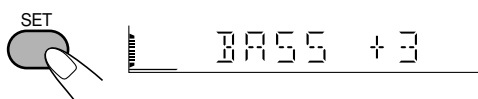
You can adjust the preset Sound Modes to create your own Sound Modes which suit your taste. The changed settings can be stored as the USER1, USER2 and USER3 Modes.

While the Sound Mode name is shown on the display...

1 Enter the SEA Control Mode.

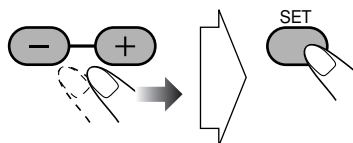


2



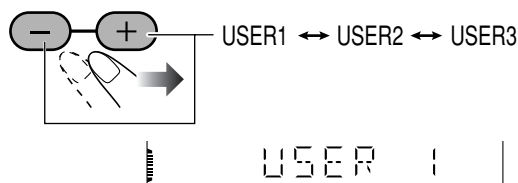
3 Adjust the SEA pattern.

- ① Adjust BASS.
- ② Adjust TREBLE.



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

4 Select one of the User Modes.



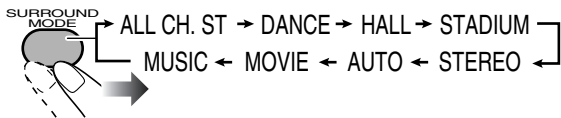
5 Store the setting.



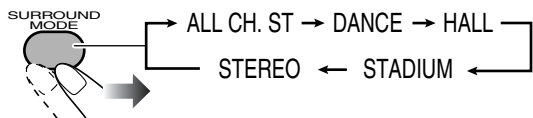
- The Sound Mode changes to the one you have stored.

Selecting the Surround Modes INFO

• For DVD/CD, TAPE-A, TAPE-B, AUX:



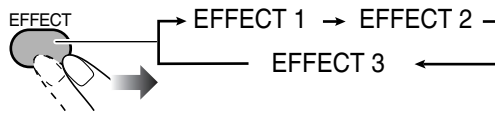
• For FM/AM:



DSP Modes	
ALL CH. ST	All Channel Stereo; Creates larger stereo sound field using all the connected speakers (initial setting).
DANCE	Increases resonance and bass.
HALL	Adds depth and brilliance to the sound.
STADIUM	Adds clarity and spreads the sound, as in an outdoor stadium.
Stereo Mode	
STEREO	Canceles the Surround Mode.
Auto Surround Mode	
AUTO	<ul style="list-style-type: none"> • When multi-channel surround signal comes in, multi-channel surround mode is activated. • When Dolby Surround signal comes in, MOVIE (Dolby Pro Logic II Movie) mode is selected. • When 2-channel signal comes in, STEREO mode is selected.
Dolby Pro Logic II Modes	
MOVIE	Creates 5.1-channel surround field from 2-ch source (suitable for movie source).
MUSIC	Creates 5.1-channel surround field from 2-ch source (suitable for music source).

To adjust the DSP effect level Remote ONLY >>>

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

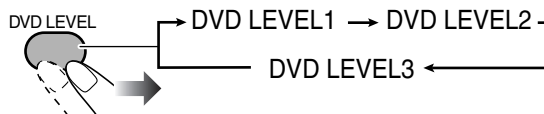


- The initial setting is "EFFECT3."

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.

- The initial setting is "DVD LEVEL3."

Changing the Color System and

Scanning Mode

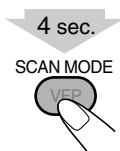


INFO

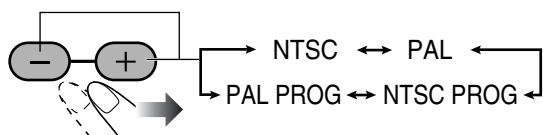
You can select the video output to match it to the color system of your TV (NTSC or PAL).

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

1 Enter the color system setting mode.

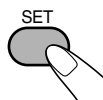


2 Select the color system and scanning mode.



NTSC / PAL	NTSC or PAL Interlaced scanning. For a conventional PAL or NTSC TV.
NTSC / PAL PROG	NTSC or PAL Progressive scanning. For a progressive NTSC or PAL TV.

3 Store the setting.



Changing the Picture Tone



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

To select a preset picture tone

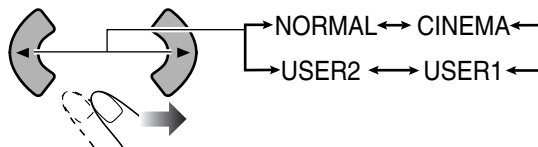
1 While playing, display VFP setting screen.



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

On the TV screen

2 Select a preset picture tone.



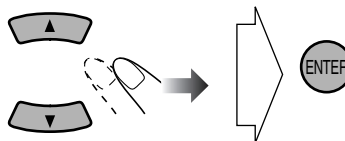
NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

To adjust the picture tone

1 Select "USER1" or "USER2."

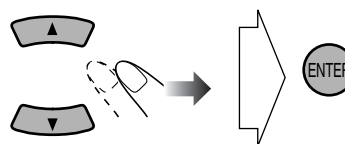
- Follow steps 1 and 2 above.

2 Select a parameter you want to adjust.



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

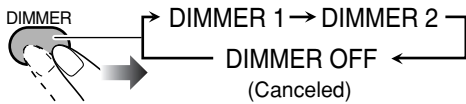
3 Adjust the parameter.



4 Repeat steps 2 to 3 to adjust other parameters.

To erase the VFP screen, press VFP again.

Changing the Display Brightness



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

* Except for the RHYTHM AX and KARAOKE SCORING lamps.

Setting the Clock

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

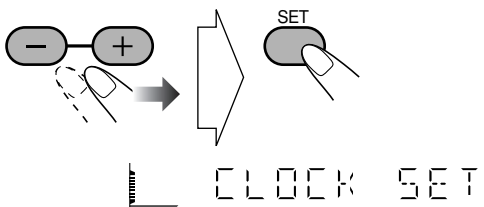
- To exit from the clock setting, press **CLOCK/TIMER** as required.
- To correct a misentry during the process, press **CANCEL**. You can return to the previous step.

1 Activate clock setting mode.



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

2 Adjust the hour, then minute.

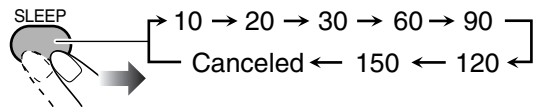


Now the built-in clock starts working.

Turning Off the Power Automatically

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

1 Specify the time (in minutes).



2 Wait until the set time goes off.

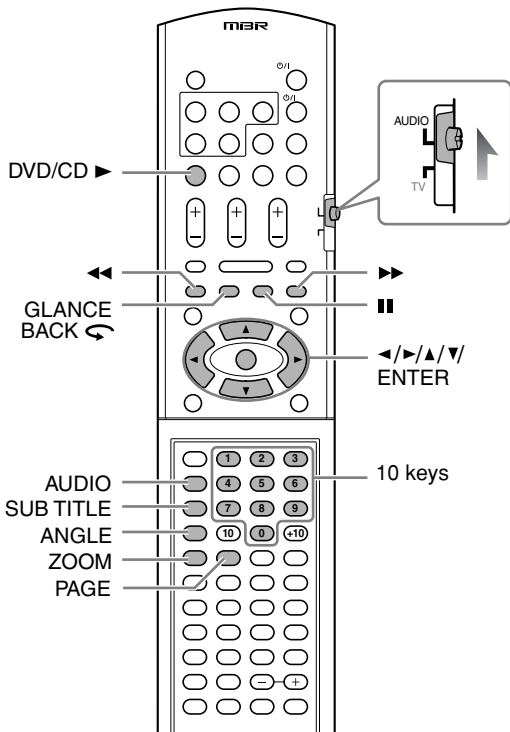
To check the time remaining until the shut-off time



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

Unique DVD/VCD Operations

Remote Control



Selecting the Sound Track

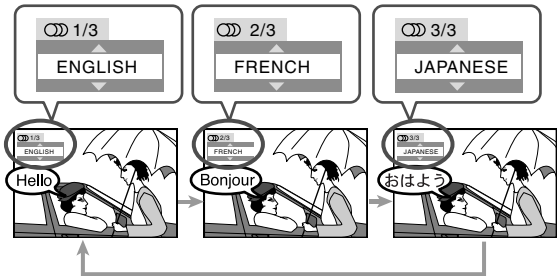


- For DVD Video:** While playing back a chapter containing audio languages, you can select the language to listen to.
 - For DVD Audio:** While playing back a track containing audio channels, you can select the audio channel to listen to.
 - For DVD-VR/Karaoke SVCD/VCD:** When playing back a track, you can select the audio channel to play.
- You can also select the audio track using the on-screen bar (see page 26).

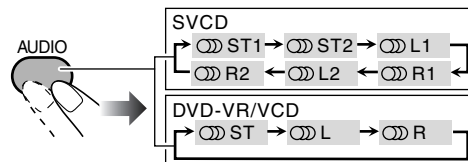
While playing DVD Video...



Ex.:



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



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

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

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

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

Selecting the Subtitle Language

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

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

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

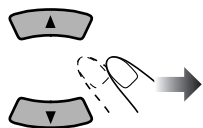
- You can also select the subtitle language using the on-screen bar (see page 26).

While playing a DVD Video...

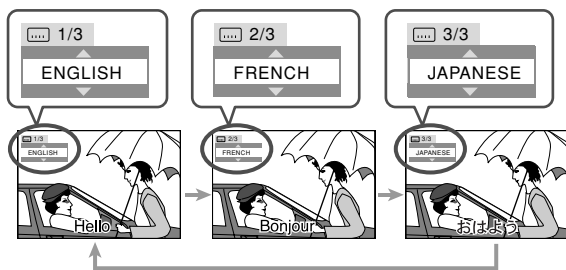
1 Display the subtitle selection window.



2 Select the subtitle language.



Ex.:



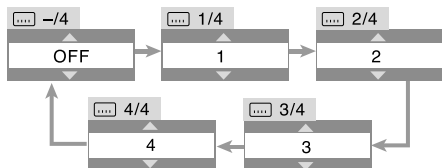
While playing a DVD-VR...

SUBTITLE



While playing an SVCD...

SUBTITLE

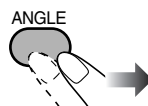


Selecting the View Angle

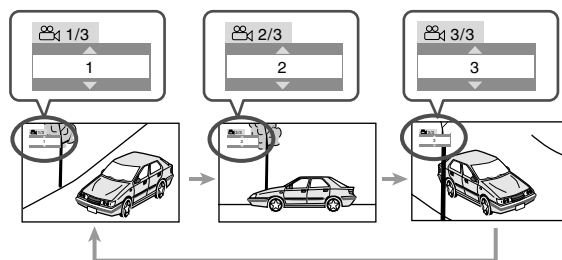
For DVD Video only: While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- You can also select the view angle using the on-screen bar (see page 26).

While playing back...



Ex.:



Reviewing the Playback Quickly

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

While playing back...

GLANCE BACK



Selecting Browseable Still Pictures

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

- If a track is linked to browsable still pictures (B.S.P.), they are usually shown in turn automatically during playback.
- You can also select the page using the on-screen bar (see page 26).



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

Playing Back Bonus Group

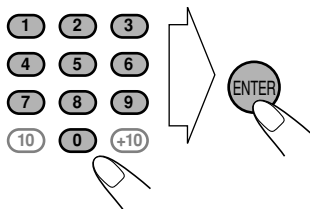
For DVD Audio only: Some DVD Audios have a special group called “bonus group” whose contents are not open to the public.

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

1 Select the bonus group.

- The bonus group is usually recorded as the last group (for example, if a disc contains 4 groups including a bonus group, “group 4” is the bonus group).
- For how to select the group, see “To select a title/group” on page 11.

2 Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■.

Special Picture Playback

Still picture playback

While playing...



Still picture playback starts.

To resume normal playback, press DVD/CD ►.

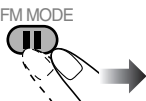
Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ►.

Slow-motion playback

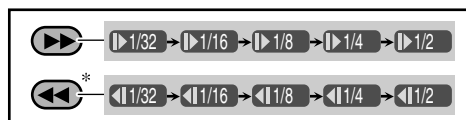
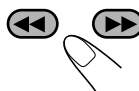
1 While playing...

FM MODE



Still picture playback starts.

2 Select slow motion speed.

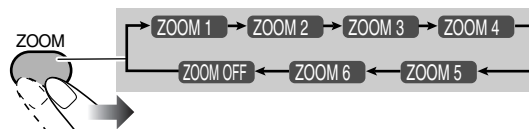


* Not available for DVD-VR/SVCD/VCD.

To resume normal playback, press DVD/CD ►.

Zoom

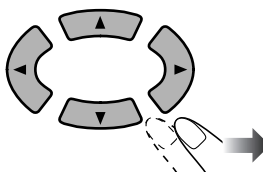
1 While playing...



As the number increases, magnification also increases.

- For JPEG, see page 31.

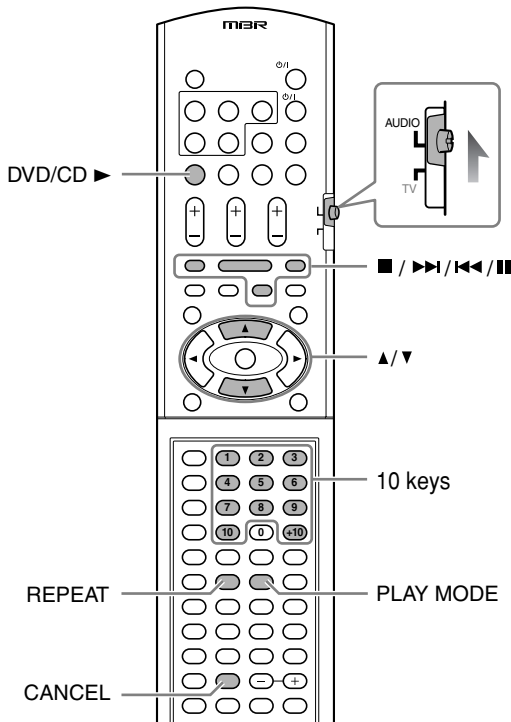
2 Move the zoomed-in position.



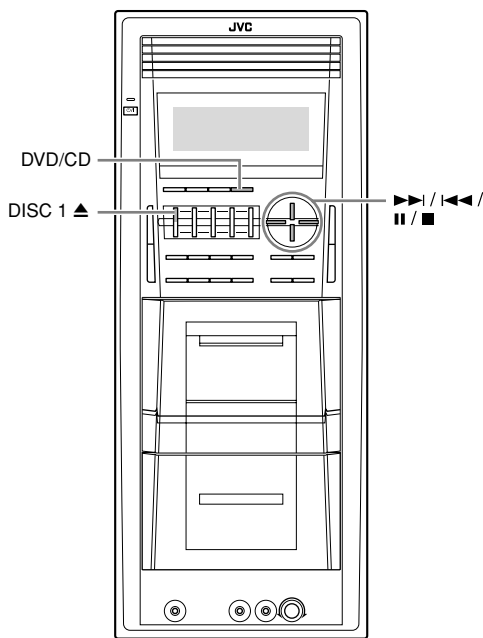
To resume normal playback, press ZOOM repeatedly until “ZOOM OFF” appears on the TV screen.

Advanced Disc Operations

Remote Control



Main unit

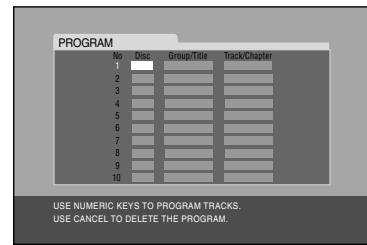
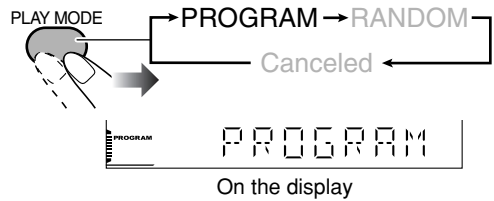


Programming the Playing Order Remote ONLY >>>

—Program Play INFO

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

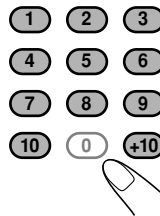
1 Before starting playback, activate Program Play.



2 Select chapters or tracks you want for Program Play.

- ① Select a disc number.
- ② Select a title or group number.
- ③ Select a chapter or track number.

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.



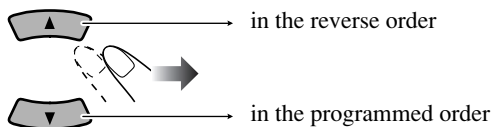
Playback starts in the order you have programmed.

To skip a track:	To pause:	To stop*:
	<p>FM MODE</p> <p>To release, press DVD/CD ►.</p>	

* Resume does not work for Program Play.

To check the programmed contents

Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
<p>To add steps in the program: Repeat step 2 on page 22.</p>	

To exit from Program Play

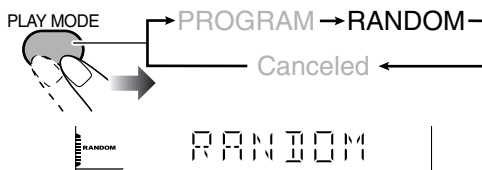
Before or after playback...



Playing at Random—Random Play

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

1 Before starting playback, activate Random Play.



2 Start playback.



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

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

To exit from Random Play

Before or after playback...



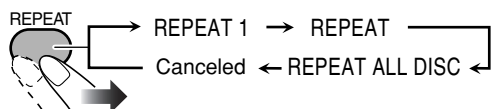
Playing Repeatedly—Repeat Play

You can repeat playback.

- You can also select the repeat mode using the on-screen bar (see page 26).
- The indicator(s) lights on the display as follows to indicate the current repeat mode.

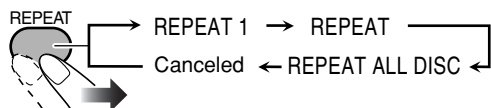
• For DVD Video:

While playing...



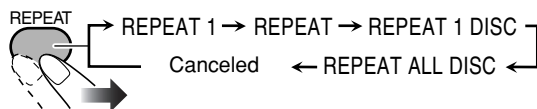
• For DVD Audio:

While playing or before playback...



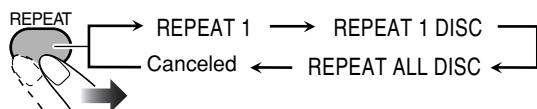
• For MP3/WMA:

While playing or before playback...



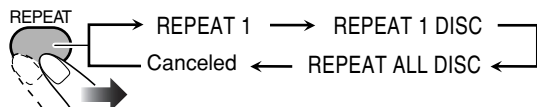
• For CD/SVCD/VCD:

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



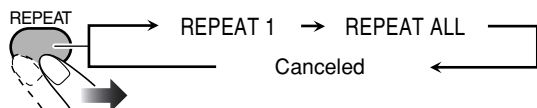
• For Random Play:

While playing or before playback...



• For Program Play:

While playing or before playback...



REPEAT 1 Repeats the current chapter/track.

REPEAT Repeats the current title/group.

REPEAT 1 DISC* Repeats the current disc.

REPEAT ALL DISC* Repeats all discs.

REPEAT ALL Repeats all programmed tracks.

*These modes may not work correctly for DVD Video.

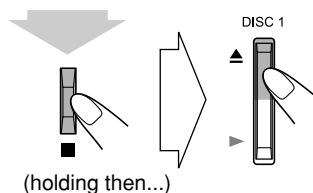
Prohibiting Disc Ejection

—Child Lock

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

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

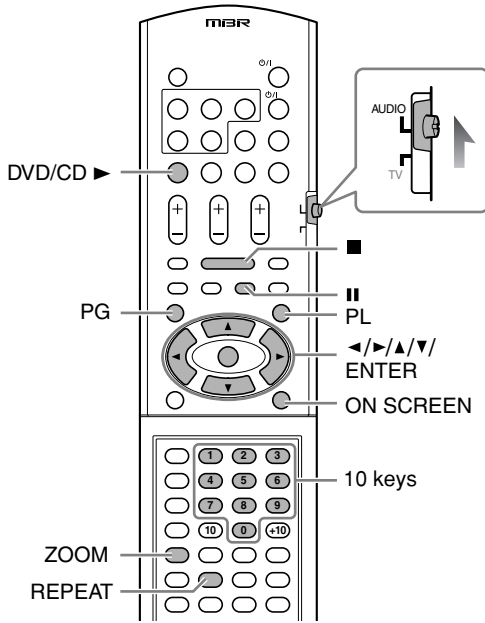
While in standby mode...



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

On-Screen Disc Operations

Remote control

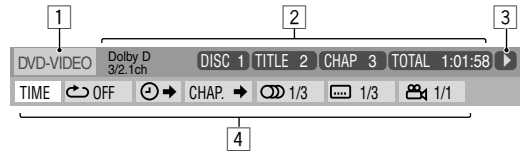


On-screen Bar Information

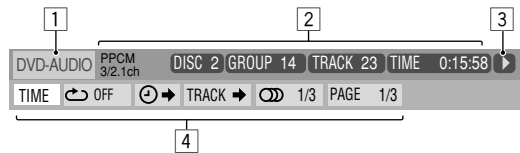
You can check the information on disc (except for MP3/WMA/JPEG disc) and use some functions through the on-screen bar.

On-screen bars

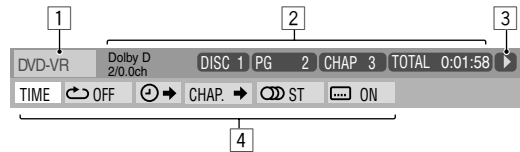
DVD Video



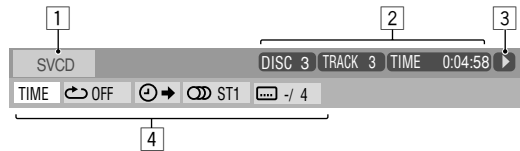
DVD Audio



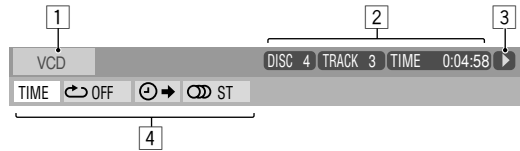
DVD-VR



SVCD



VCD



CD



1 Disc type

2 Playback information

Indication Meanings

Dolby D/ Audio format
 PPCM
 3/2.1 ch/ Channel number
 2.0/0 ch

DISC 1 Current disc
TITLE 2 Current title
CHAP 3 Current chapter
GROUP 1 Current group
TRACK 14 Current track
PG 2 Current title
PL 2 Current play list
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 27).
 Select to repeat playback (see also pages 24, 27 and 28).
 Select for time search (see also page 28).
CHAP. → Select for chapter search (see also page 29).
TRACK → Select for track search (see also page 29).
 Select to change the audio language or channel (see also page 19).
 Select to change subtitle language (see also page 20).
 Select to change view angle (see also page 20).
PAGE 1/15 Select to change the page (see also page 20).

Operations Using the



On-screen Bar

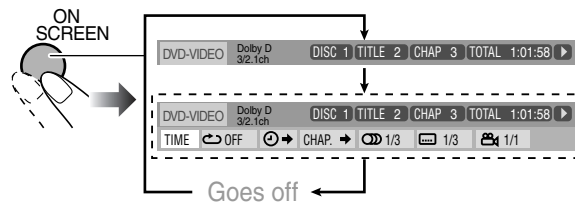


Basic operation procedure through the on-screen bar is as follows:

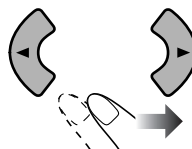
Ex.: Selecting a subtitle (French) for DVD Video:

While a disc is selected as the source...

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



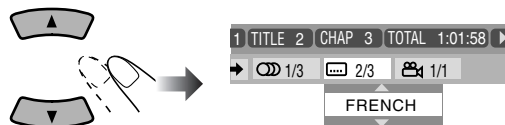
2 Select (highlight) the item you want.



3 Display the pop-up window.



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



5 Finish the setting.

Pop-up window goes off.



To erase the on-screen bar



To change the time information

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

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



2 Make sure **TIME** is selected (highlighted).

3 Change the time indication.



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

* Not available for DVD-VR.

To erase the on-screen bar



Repeat Play

• See also page 24.

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

• Except for DVD Video: Repeat Play can be selected before starting playback.

2 Select .

3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks.
A-B	Repeats a desired portion (see the next page).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
PG	Repeats the current title (for DVD-VR only). See also page 31.
PL	Repeats the current play list (for DVD-VR only). See also page 31.
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).



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

- 6 Select the end point (B).



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


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

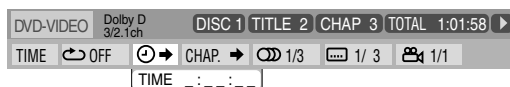
To erase the on-screen bar



Time Search

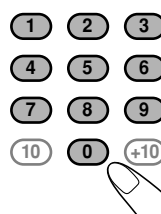
You can move to a particular point by specifying the elapsed playing time from the beginning.

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



- 4 Enter the time.


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



Examples:

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

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

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

- 5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar



Chapter/Track Search

You can search for the number of the item to play.

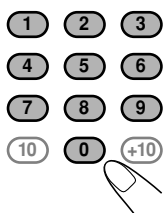
For DVD Video/DVD-VR: Chapter

For DVD Audio: Track

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



- 4 Enter the desired chapter/track number.



Examples:

To select chapter/track 5, press 5.

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

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

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

- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar



Operations on the Control



Screen



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

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

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

To select playback type

To select the Original Program:	To select the Play List:

When Original Program is selected.

ORIGINAL PROGRAM				
No	Date	Ch	Time	Title
1	25/04/04	4ch	19:00	JVC DVD World 2004
2	17/05/04	8ch	10:30	
3	22/05/04	8ch	17:00	Music Festival
4	26/05/04	L-1	13:19	children 001
5	20/06/04	4ch	22:00	
6	25/06/04	L-1	8:23	children 002

When Play List is selected.

PLAY LIST				
No	Date	Chap	Length	Title
1	25/05/04	001	1:03:16	My JVC World
2	17/06/04	005	1:35:25	
3	20/06/04	003	0:10:23	Favorite music
4	25/06/04	001	0:07:19	children001-002

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

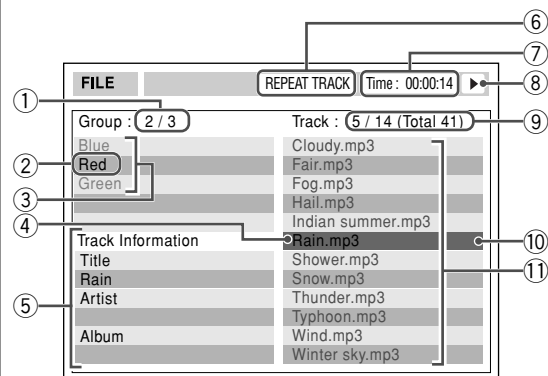
*The title of the original program or play list may not be displayed depending on the recording equipment.

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

Control screen for MP3/WMA/JPEG disc

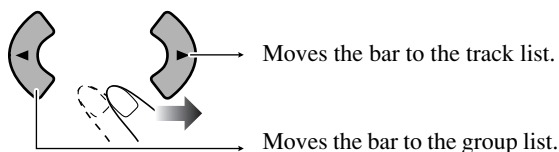
The control screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

Ex.: When the MP3 disc is loaded.

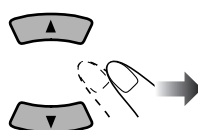


- ① Current group number/total group number
 - ② Current group
 - ③ Group list
 - ④ Current track
 - ⑤ Track information (ID3 Tag Version 1.0: only for MP3/WMA)
 - ⑥ Repeat Play setting
 - ⑦ Elapsed playing time of the current track (only for MP3/WMA)
 - ⑧ Operation mode icon
 - ⑨ Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
 - ⑩ Highlight bar
 - ⑪ Track list
- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 39).

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



To select an item in the list:



Move the highlight bar to a desired item.

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

To start playback

For DVD-VR/MP3/WMA:



Playback starts with the selected chapter/track.
 • Pressing DVD/CD ► also starts playback.

For JPEG:



The selected track (still picture) is displayed until you change it.

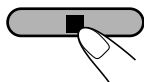
DVD/CD



Slide-show playback starts. Each track (still picture) is shown on the screen for a few seconds, then changes one after another.

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

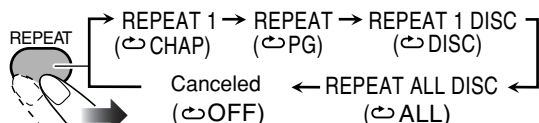
To stop playback



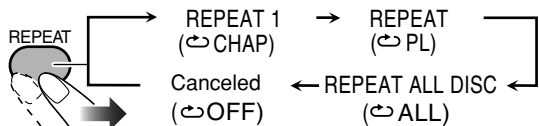
To repeat title/play list for DVD-VR

While playing or before starting playback...

For Original Program



For Play List



REPEAT 1* Repeats the current chapter.

REPEAT* Repeats the current title/play list.

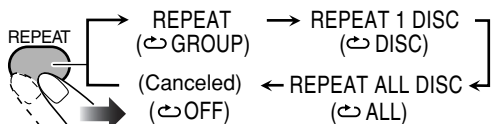
REPEAT 1 DISC* Repeats all titles on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

* Not available before starting playback.

To repeat slide-show for JPEG

While playing or before starting playback...



REPEAT Repeats the current group.

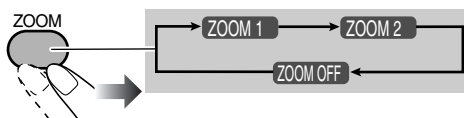
REPEAT 1 DISC Repeats all files on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

• For Repeat Play of MP3/WMA, see pages 24 and 27.

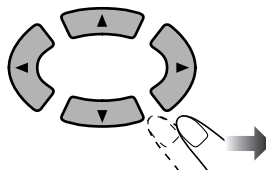
To zoom in the still picture (for JPEG)

1 During being paused...



As the number increases, magnification also increases.

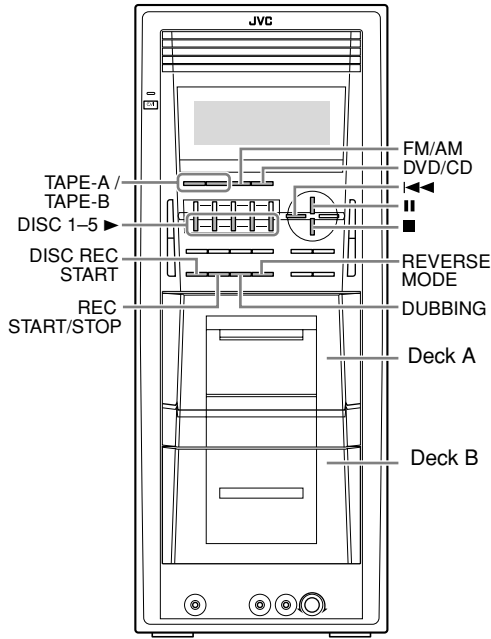
2 Move the zoomed-in position.



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

Recording Operations

Main unit



IMPORTANT

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

Before recording, select the Stereo Mode (“STEREO”—see page 16) for DVD Video to downmix its multichannel sound into 2 channel; otherwise, you can only record the front left/right sound onto a tape.

Recording on a Tape



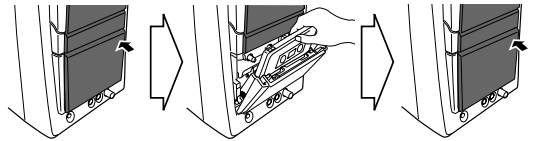
INFO

You can use type I tapes for recording.

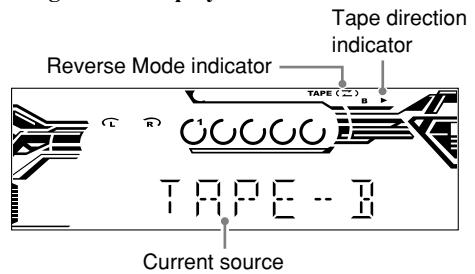
- To play a tape, see page 13.

1 Insert a recordable cassette in deck B.

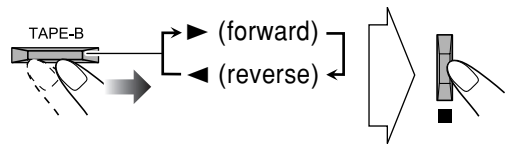
Push Insert Close



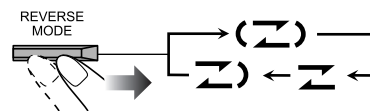
2 Check the tape running direction and Reverse Mode settings on the display.



To change the direction



Change the Reverse Mode if necessary



	To record on both sides. • When using Reverse Mode, start recording in the forward (▶) direction.
	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).
- When recording from deck A, you can also use "Dubbing" (see below).

4 Start recording.



To stop recording



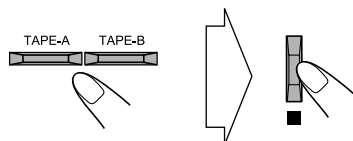
OR



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 32.

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

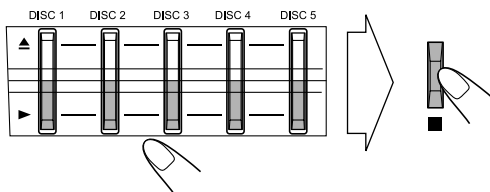
You can start and stop both disc play and tape recording at the same time.

1 Load a disc and insert a recordable cassette.

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

- See step 2 of "Recording on a Tape" on page 32.

3 Select the disc number you want to start recording from.



For recording desired tracks on discs:

You can program tracks to record in your preferred order.

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

4 Start recording.



The disc playback and recording start from the first track.

- 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 only your favorite track—One Track Recording

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

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



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

To cancel while recording

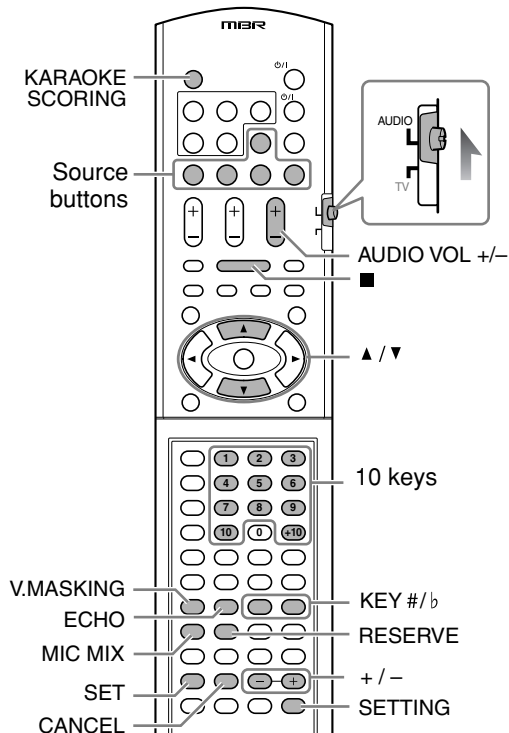


OR

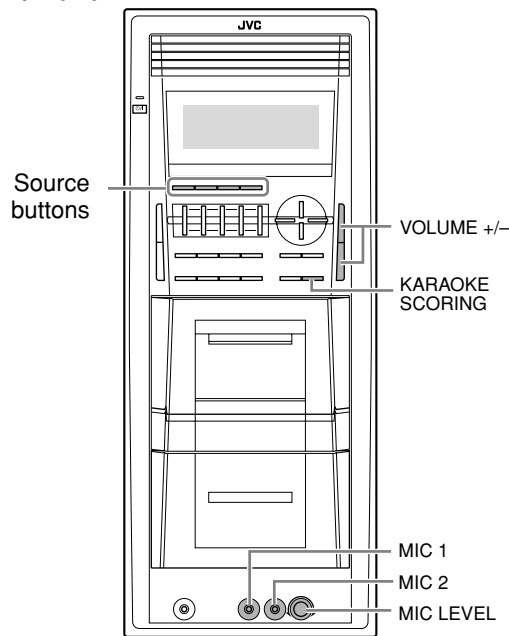


Enjoying Karaoke

Remote control



Main unit



DO NOT keep the microphones connected while they are not in use.

- **For DVD Audio/DVD-VR:** The functions described in this section are not available.
- When you activate the Mic Mixing Mode or Voice Masking Mode, multi-channel sounds are downmixed into 2 channel. The multi-channel surround mode (“ALL CH. ST,” “MOVIE,” “MUSIC,” or “AUTO” for multi-channel surround signals—see page 16) is changed to “STEREO” temporarily* (and restored when the Mic Mixing Mode or Voice Masking Mode is deactivated).
*The indicator remains on the display.

IMPORTANT

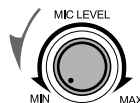
- Always set MIC LEVEL to MIN when connecting or disconnecting the microphone.
- MIC LEVEL adjustment is valid for both microphones connected to the MIC 1 and MIC 2 jacks.

Singing Along (Karaoke) INFO

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

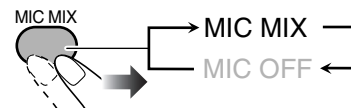
- By pressing REC START/STOP, you can record your singing-along.

1 Turn MIC LEVEL to MIN.



2 Connect the microphone(s) (not supplied) to the MIC 1 and/or MIC 2 jack.

3 Activate the Mic Mixing Mode.

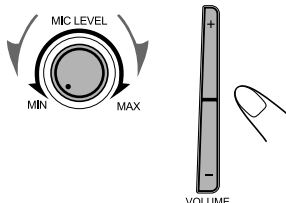


4 Start playing a source—“FM,” “AM,” DVD/CD,” “TAPE,” or “AUX.”

- **For Karaoke SVCD/VCD:** Select a desired audio channel. See “Selecting the Sound Track” on page 19.

5 Sing into the microphone.

6 Adjust the MIC LEVEL and VOLUME.

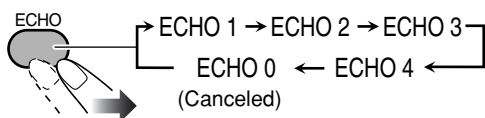


To cancel from the Mic Mixing Mode, select “MIC OFF” in step 3.

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

To apply an echo to your voice

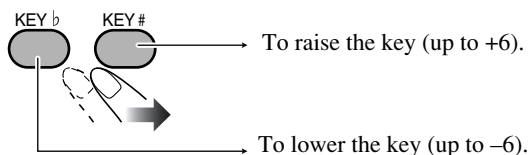
While the Mic Mix Mode is activated...



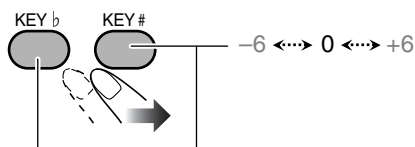
- As the number increases, echo level also increases.

To adjust the Key (disc playback only)

While playing back...



To cancel the Key Control

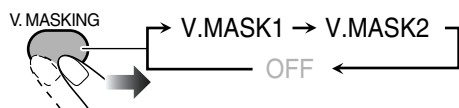


- Key Control is also canceled when you deactivate the Mic Mixing Mode, or select another track or disc.

Reducing the Lead Vocal

—Vocal Masking

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



V.MASK1 Cancels vocal on stereo sources.

V.MASK2 Cancels the right audio channel.

To sing into microphone(s), activate the Mic Mixing Mode (follow steps **1** to **3** and **6** on page 34).

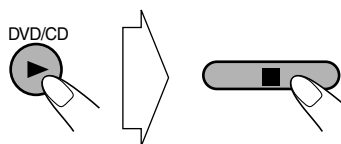
To cancel from the Vocal Masking Mode, select “OFF.”

Scoring Your Karaoke Skill

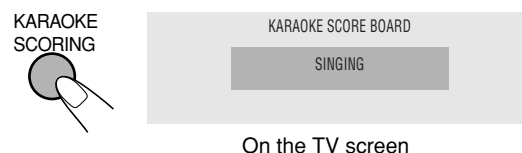
This System can score your Karaoke skill by comparing your singing along with the vocal on the playback disc.

- This function is for disc playback only.
- It is recommended to select the sound track as follows (see page 19):
For DVD Video: Select the sound track with vocal.
For SVCD/VCD: Select “ST,” “ST1,” or “ST2.”
- It is recommended to sing for more than **one and a half minutes** to make the scoring function work properly.

1 Select “DVD/CD” as the source.



2 Activate the scoring function.



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

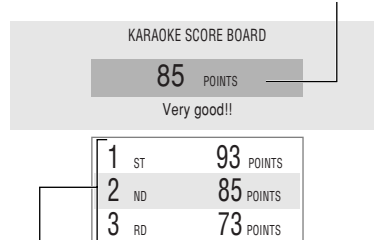
3 Sing into the microphone.

See steps **1**, **2**, and **6** on page 34.

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

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

Ex.: Your score



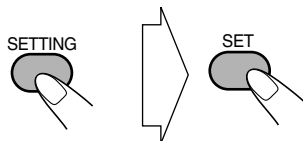
The latest top 3

To stop the playback in the middle of the song, press **■**. The scoring function is not canceled and your singing along is scored if the playback time is more than one minute.

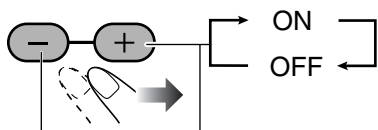
To cancel the scoring function, press KARAOKE SCORING. The screen on the TV disappears. (The Mic Mixing Mode remains activated.)

To turn on/off the fanfare

1 Enter the fanfare setting mode.



2 Select the fanfare setting.

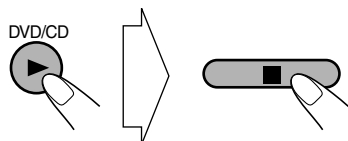


Reserving Karaoke Songs

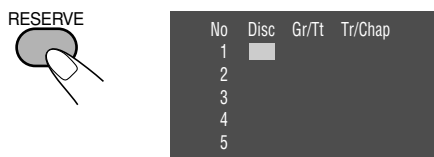
—Karaoke Program Play

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

1 Change the source to “DVD/CD.”



2 Activate Karaoke Program Play.



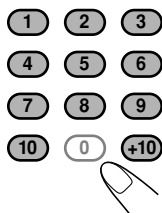
On the TV screen

• PROGRAM indicator flashes during this mode.

3 Select songs you want for Karaoke Program Play.

Press the number buttons to select a song in the following order.

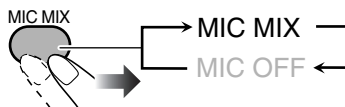
- ① Select a disc.
- ② Select a title/group.
- ③ Select a chapter/track.





Examples:

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

4 Activate the Mic Mixing Mode.



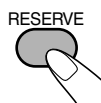
5 Start playback.

To start Karaoke Program Play:	To start Karaoke Program Play with the scoring function:
	

Playback starts in the order you have programmed.

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

To check the programmed contents



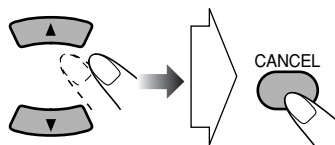
The Karaoke reserve screen appears.

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

To modify the program

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

To erase the unwanted step:



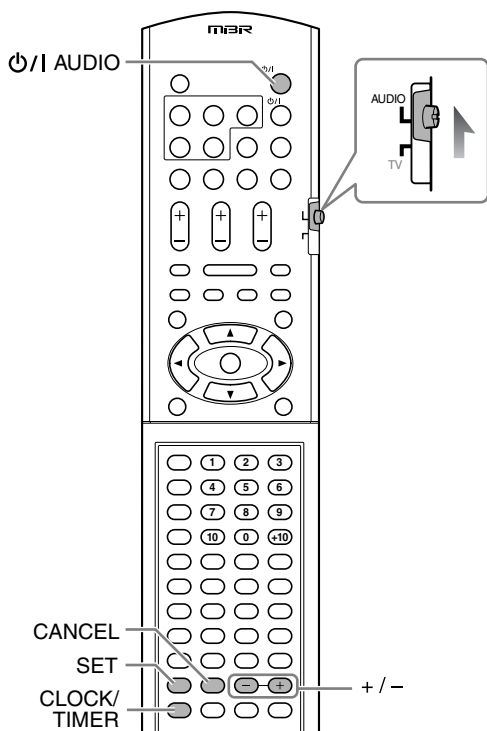
To erase the entire program, repeat the procedure.

To add steps in the program:

Repeat step 3.

Timer Operations

Remote control

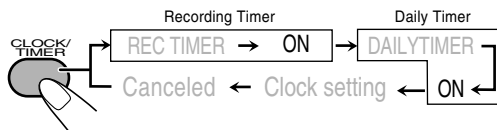


Setting the Timer Remote ONLY INFO

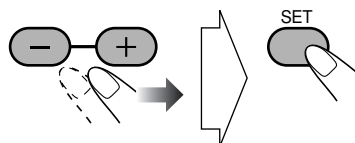
Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- You cannot activate Daily Timer and Recording Timer at a time. (Activating either timer deactivates the other timer.)
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

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



2 Make the timer setting as you want.



Repeat the procedure 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 Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM,"
For Daily Timer: Select the playback source—"TUNER-FM," "TUNER-AM," "DISC," "TAPE-A," "TAPE-B" or "AUX IN."



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

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

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



How Daily Timer 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).

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

When the on-time comes

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

When the off-time comes

- The 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.

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

When the on-time comes

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

When the off-time comes

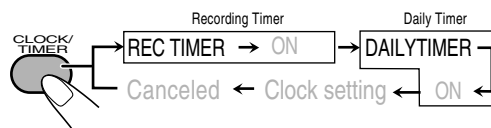
- The timer setting remains in memory until you change it.

To turn off the Timer after the setting is done

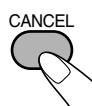
You can turn off the timer after it has been set.

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

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



- 2 Turn off the selected timer.**



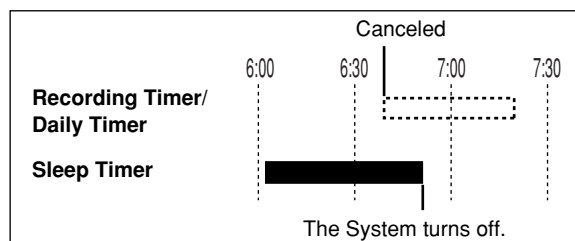
- The timer (🕒) indicator goes off.

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

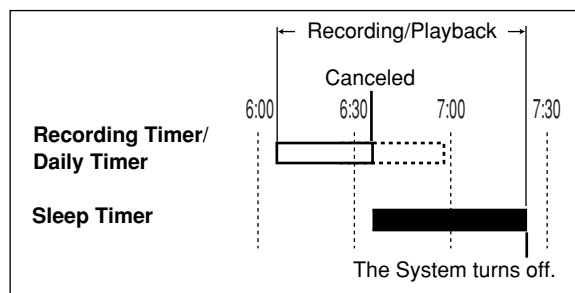
Timer Priority

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

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

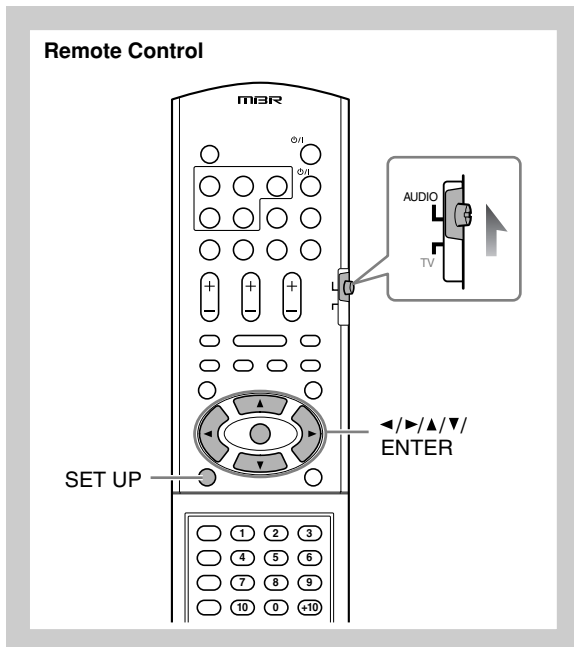


- In this case, Recording Timer/Daily Timer does not work.



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

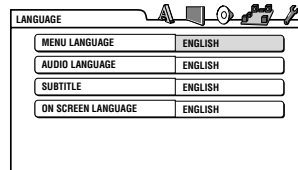
Setup Menu Operations



Initial settings INFO

Some items in the menus cannot be changed during playback.

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.

To erase a preference display

Press SET UP.

A LANGUAGE menu

Item	Contents
MENU LANGUAGE	You can select the initial menu language of DVD Video (see page 46).
AUDIO LANGUAGE	You can select the initial audio language of DVD Video (see page 46).
SUBTITLE	You can select the initial subtitle language of DVD Video (see page 46).
ON SCREEN LANGUAGE	You can select "ENGLISH," "CHINESE," or "SPANISH" as the on-screen language.

PICTURE menu

Item	Contents
MONITOR TYPE 	You can select the monitor type to match your TV when you play back DVD Video discs recorded for wide-screen televisions. 16:9/16:9 MULTI (Wide television screen): For a wide-screen (16:9) TV. 4:3 LB/4:3 MULTI 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/4:3 MULTI 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. <ul style="list-style-type: none"> By selecting "MULTI" mode, the color system of the System changes automatically to match the color system of the loaded disc. For the color system setting, see page 17.
PICTURE SOURCE	You can obtain optimal picture quality by selecting the source type of the disc contents. AUTO: Normally, select this option. The System recognizes the picture type (film or video source) of the current disc according to the disc information. FILM: For a film source disc. VIDEO: For a video source disc.
SCREEN SAVER	You can set the screen saver function to ON or OFF . ON: The on-screen display becomes dark when no operation is done for about 5 minutes. OFF: To cancel the screen saver.
FILE TYPE	You can select a file type to play. AUDIO: To play MP3/WMA files. STILL PICTURE: To play JPEG files.

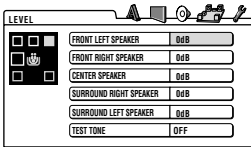
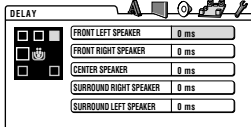


AUDIO menu

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



SPK. SETTING menu

Item	Contents
LEVEL 	Select this item, then press ENTER to show the LEVEL submenu for adjusting the speaker output level. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND LEFT/RIGHT SPEAKER: Select the speaker, then adjust the output level (-6 dB to +6 dB in 1 dB steps). TEST TONE: Turns on/off the test tone. <ul style="list-style-type: none"> Select "ALL CH. ST," "MUSIC," or "MOVIE" (see page 16) to adjust the output level for all speakers with the test tone.
DELAY 	Select this item, then press ENTER to show the DELAY submenu for adjusting the speaker delay time. FRONT LEFT/RIGHT SPEAKER, CENTER SPEAKER, SURROUND LEFT/RIGHT SPEAKER: Select the speaker, then adjust the delay time (0 ms to 15 ms in 1 ms steps). <ul style="list-style-type: none"> Set one speaker to "0 ms," then set other speakers so that the sound from all speakers can reach you at the same time.

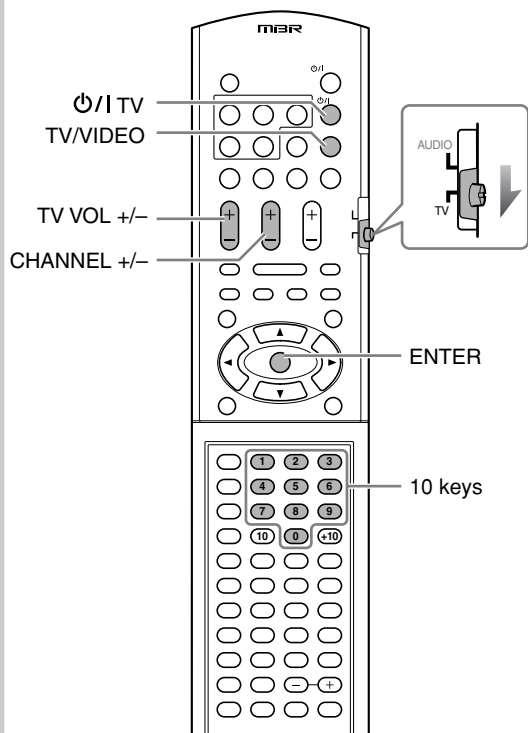


OTHERS menu

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

Operating the TV

Remote control

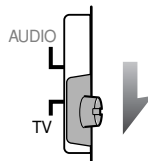


Manufacture's code	
Manufacture	Code number
JVC	01
Hitachi	10
Magnavox	02
Mitsubishi	03
Panasonic	04, 11
Philips	15
RCA	05
Samsung	12
Sanyo	13, 14
Sharp	06
Sony	07
Toshiba	08
Zenith	09

Operating TV

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

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



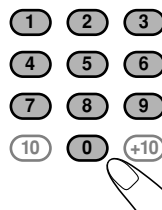
2 Press and hold until the following steps are complete.



3



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



5 Release Power/TV.

To operate the TV

To turn on or off the TV:	To select the input mode (either TV or VIDEO):	To adjust TV volume:
To select the TV channel:		
		or

Additional Information

Learning More about This System ● ● ●

Introduction (see pages 1 to 2)

Playable Disc Types:

• About audio format

- **Linear PCM:** Uncompressed digital audio, the same format used for CDs and most studio masters.
- **Dolby Digital:** Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create 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.
- If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.

Daily Operations—Playback (see pages 9 to 13)

Listening to the Radio:

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

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- When playing back a DVD Audio disc recorded in MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals are recognized as the linear PCM signals, however, no indicator lights up on the display.
- For MP3/WMA playback...
 - MP3/WMA discs require a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This System can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - It is recommended that you make each MP3/WMA file at a sampling rate of 44.1 kHz and at bit rate of 128 kbps. This System cannot play back files made at bit rate of less than 64 kbps.

Daily Operations—Sound&Other Adjustments (see pages 14 to 18)

Reinforcing the Bass Sound:

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

Creating Your Own Sound Modes—User Mode:

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

Selecting the Surround Modes:

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

Changing the Color System and Scanning Mode:

- If you play back an NTSC disc with the color system set to “PAL (PROG),” the disc will be reproduced using “PAL 60” format, however, if the TV does not support this format, the screen may roll over upward and downward rapidly.
- If you play back a PAL disc with the color system set to “NTSC (PROG),” 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.
- You cannot change the scanning mode to progressive in the following cases:
 - When your TV does not support the progressive video input.
 - When you have not connected your TV to the unit using a component video cord.
- When you play back an NTSC disc in progressive scanning mode, the System outputs the NTSC signal regardless of the color system settings.

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 19 to 21)

Selecting the Sound Track:

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

Playing Back Bonus Group:

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

Special Picture Playback:

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

Advanced Disc Operations (see pages 22 to 24)

Programming the Playing Order—Program Play:

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

On-Screen Disc Operations (see pages 25 to 31)

Operations Using the On-screen Bar:

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

Operations on the Control Screen:

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

- This System can play only baseline JPEG files*. Progressive JPEG files* or lossless JPEG files* cannot be played.

* Baseline JPEG format: Used for digital cameras, web, etc.

Progressive JPEG format: Used for web.

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

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

Recording Operations (see pages 32 to 33)

General:

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

Recording on a Tape:

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

Synchronized Disc Recording:

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

Enjoying Karaoke (see pages 34 to 36)

General:

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

Reducing the Lead Vocal—Vocal Masking:

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

Scoring Your Karaoke Skill:

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

Reserving Karaoke Songs—Karaoke Program Play:

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

Timer Operations (see pages 37 to 38)

Setting the Timer:

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

Setup Menu Operations (see pages 39 to 40)

General:

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

LANGUAGE menu:

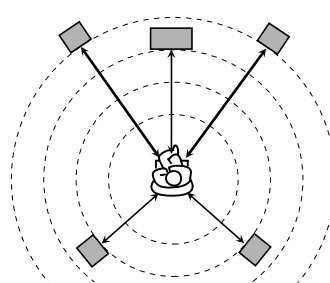
- When the language you have selected for MENU LANGUAGE, AUDIO LANGUAGE, or SUBTITLE is not recorded on a disc, the original language is used as the initial language.

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.

SPK. SETTING menu—DELAY:

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



Front speakers:

0 ms

Center speaker:

1 ms

Surround speakers:

2 ms

OTHERS menu—ON SCREEN GUIDE:

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

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

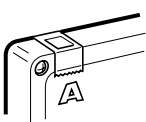
- Use a cotton swab moistened with alcohol to clean the heads, capstans, and pinch rollers.
- Use a head demagnetizer (available at electronics and audio shops) to demagnetize the heads (when the System turned off).



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.

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.

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

⇒ Incorrect color system is selected (see page 17).

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

⇒ Select "4:3 LB (MULTI)" for "MONITOR TYPE" (see page 39).

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.

- ⇒ You have inserted a disc whose Region Code is not “2.” (“REGION ERR” appears on the display.)
- ⇒ The disc is placed upside down. Place the disc with the label side up.

ID3 Tag on an MP3 disc cannot be shown.

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

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

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

MP3/WMA or JPEG files are not played back.

- ⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the “FILE TYPE” setting (see page 39).
- ⇒ You have changed the “FILE TYPE” setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

- ⇒ The disc is scratched or dirty.

The disc playback sounds strange.

- ⇒ Cancel Key Control (see page 35).

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

- ⇒ Some DVDs are programmed to always display no subtitle initially. If this happens, press SUB TITLE after starting play (see page 20).

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

- ⇒ Some DVDs are programmed to always use the original language initially. If this happens, press AUDIO after starting play (see page 19).

The disc tray does not open or close.

- ⇒ The AC power cord is not plugged in.
- ⇒ Child Lock is in use. “LOCKED” appears in the display window (see page 24).
- ⇒ The Program Play is in use. Cancel the Program Play (see page 23).

Tape Operations:

The cassette holder cannot be opened.

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

Recording Operations:

Impossible to record.

- ⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape.
- ⇒ The Karaoke scoring function is in use. Cancel the scoring function (see page 35).

Karaoke Operations:

Cannot activate the scoring function.

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

Scoring result seems wrong (or “-” appears).

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

Timer Operations:

Daily Timer or Recording Timer does not work.

- ⇒ The System has been turned on when the on-time comes. Timer starts working only when the System is turned off.

Language Code List

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

Specifications

CA-DXT9

Amplifier section

Output Power:

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

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

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

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

Digital output:

OPTICAL DIGITAL OUTPUT:
-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):
(Y) 1 V(p-p)/75 Ω
(Pb/Pr) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω – 16 Ω (front speakers/subwoofers)
6 Ω – 16 Ω (surround/center speakers)

Tuner section

FM tuning range: 87.50 MHz – 108.00 MHz

AM (MW) tuning range: 531 kHz – 1 602 kHz (at 9 kHz)
530 kHz – 1 600 kHz (at 10 kHz)

Disc player section

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

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

DVD-R (recorded in DVD Video format)

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

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

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: 335 W (at operation)
29 W (on standby)

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

Mass (approx.): 11.4 kg

Design and specifications are subject to change without notice.

CA-DXT7

Amplifier section

Output Power:

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

CENTER SPEAKER: 50 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

SURROUND SPEAKERS: 50 W per channel, min. RMS, driven into 6 Ω at 1 kHz with no more than 10% total harmonic distortion.

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

Digital output:

OPTICAL DIGITAL OUTPUT:

-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):

(Y) 1 V(p-p)/75 Ω

(PB/PR) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω - 16 Ω (front speakers/subwoofer)

6 Ω - 16 Ω (surround/center speakers)

Tuner section

FM tuning range: 87.50 MHz - 108.00 MHz

AM (MW) tuning range: 531 kHz - 1 602 kHz (at 9 kHz)

530 kHz - 1 600 kHz (at 10 kHz)

Disc player section

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

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

DVD-R (recorded in DVD Video format)

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

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

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: 270 W (at operation)
25 W (on standby)

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

Mass (approx.): 11.4 kg

Design and specifications are subject to change without notice.

- 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.
- 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

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

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

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

Parts Index

Remote control

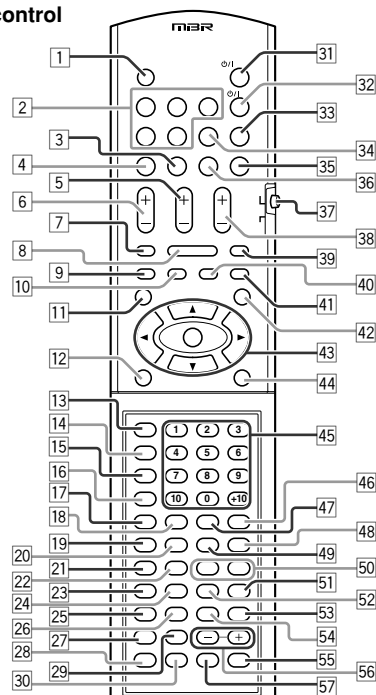
Button	Page	Button	Page
⏪/I AUDIO	31	9	
⏪/I TV	32	41	
■	8	11 – 13, 23	
▶▶/◀◀	9 41	10, 12, 13, 21	
▶▶/◀◀	7 39	11	
	40	11, 21	
▲/▼/▶/◀/ENTER	43	12, 17, 20, 21, 26 – 31, 39, 41	
+/-	56	14, 15, 17, 18, 36, 37	
10 keys	45	10 – 12, 21, 22, 28, 36, 41	
ANGLE	16	20	
AUDIO	14	19	
AUDIO/TV selector	37	9, 41	
AUDIO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

Main unit

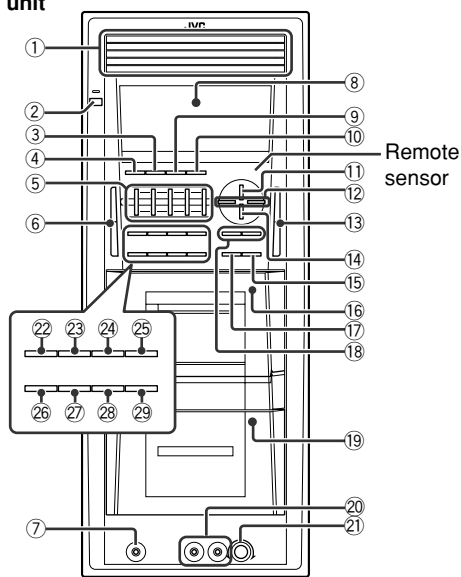
Button	Page	Button	Page
⏪/I	2	9	
Display	8	8	
■	14	10 – 13, 23, 24	
▶▶/◀◀	18	10, 12, 13, 21	
▶▶/◀◀	12	11	
	11	11, 21	
AUX	25	9	
DEMO	24	9	
Disc trays	1	11	
DISC1-5 ▶▶/▲	5	11, 24, 33	
DISC REC START	26	33	
DUBBING	28	33	
		DVD/CD	10 9, 11
		DVD LEVEL	23 16
		FM/AM	9 9, 10
		KARAOKE SCORING	15 35
		MIC 1 / MIC 2	20 34
		MIC LEVEL	21 34
		PHONES	7 9
		PRESET +/-	12 11
		PUSH-OPEN ▲	16 19 13, 32
		REC START/STOP	27 33
		RHYTHM AX	17 15

Button	Page	Button	Page
REVERSE MODE	29	13, 32	
SUBWOOFER LEVEL +/-	6	15	
SURROUND MODE	22	16	
		TAPE-A	4 9, 13, 33
		TAPE-B	3 9, 13, 32, 33
		TUNING	18 10
		VOLUME +/-	13 9, 14, 34

Remote control



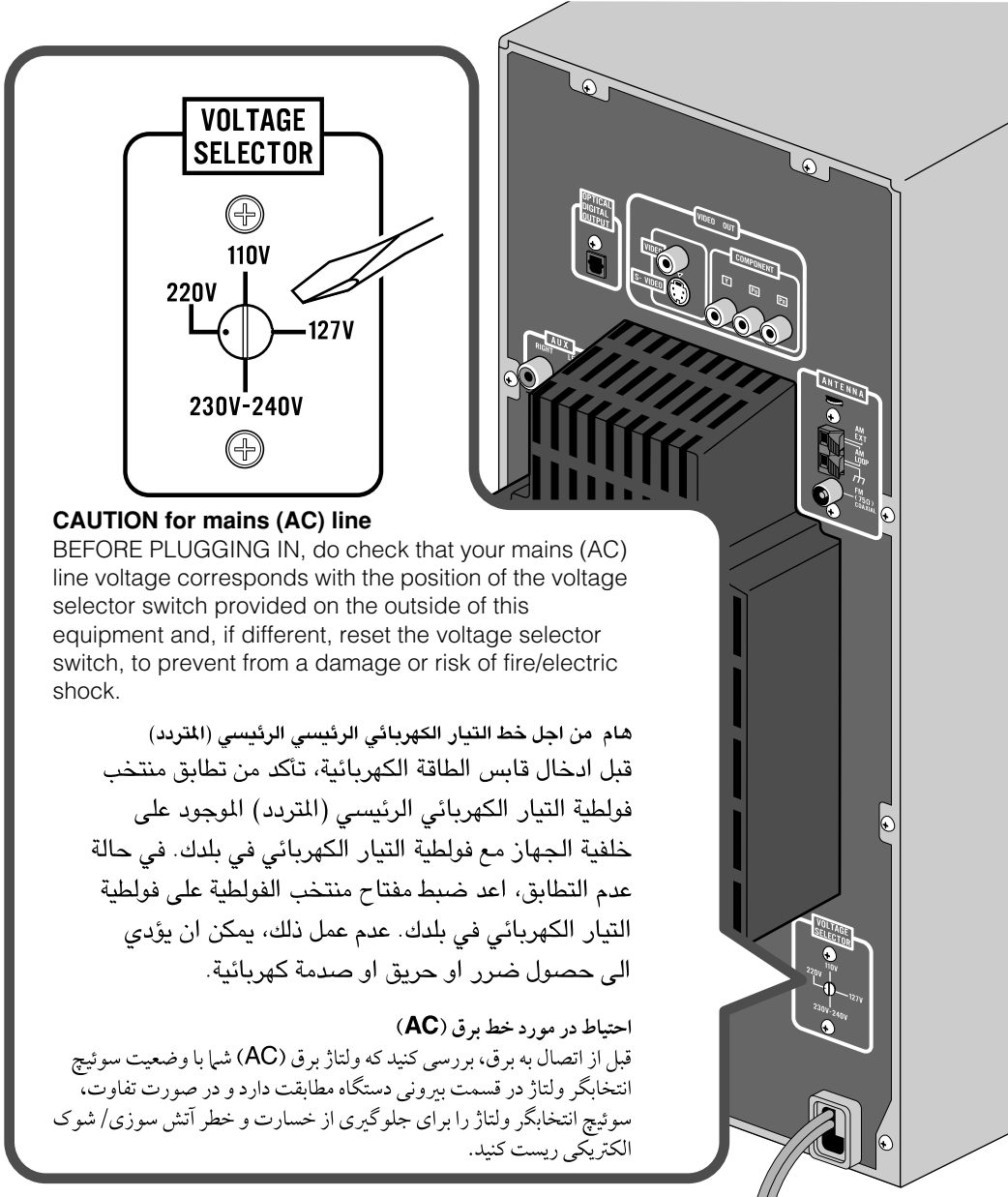
Main unit



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

تعليمات خط التيار الكهربائي المتردد الرئيسي (المتردد) (لا تنطبق على هونج كونج واوروبا والولايات المتحدة الأمريكية وكندا والمملكة المتحدة)

دستور العملهاى مربوط به برق (AC) (در مورد اروپا، أمريكا، كندا و بریتانیای کبیر کاربرد ندارد)



JVC

JVC



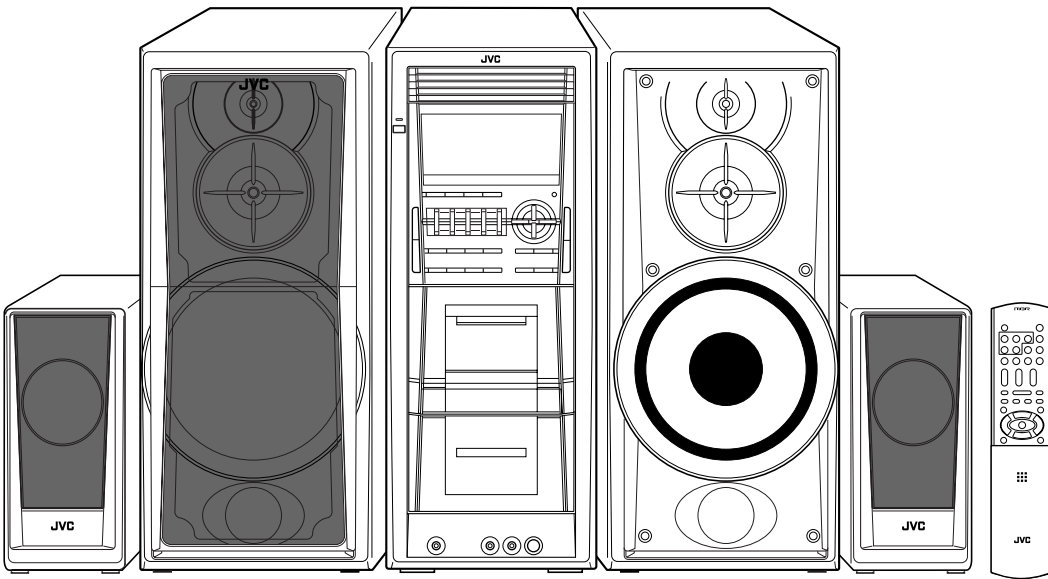
English

中文

COMPACT COMPONENT SYSTEM 组合音响系统

DX-T5

—Consists of CA-DXT5, SP-XT5 and SP-XST5
—由 CA-DXT5、SP-XT5 及 SP-XST5 组成



ACTIVE BASS EXTENSION


INSTRUCTIONS 使用说明书

GVT0146-001A
[US, UN]

Warnings, Cautions and Others

警告，注意及其他须知事项

Caution— button!

Disconnect the mains plug to shut the power off completely. The  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.

注意— 开关！

无论  开关在任何位置，电源线的电源还是没有被切断，若要将电源完全关闭，应将电源插头拔离插座。电源可用遥控器控制。

注意

为了减少触电，火灾等危险：

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

注意

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



CAUTION!

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

注意!

为避免砸伤人员或引起本机意外摔落，在进行开封、搬运和安装时需要两个人。

Caution: Proper Ventilation

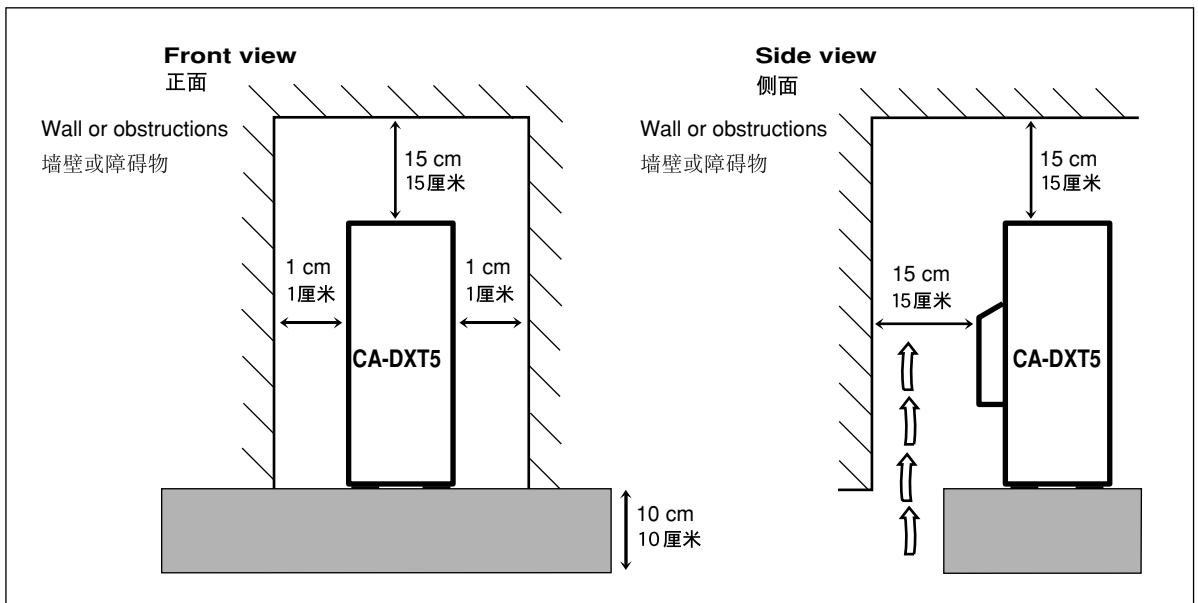
To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

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

注意：正确通风

为免发生触电和火警的危险，及防止本机受损，请将本机如下放置：

1. 前面：没有障碍物及地方开阔。
2. 侧面 / 顶面 / 背面：在图中所示范围中，不应放置任何障碍物。
3. 底部：放置在水平面上。放置在一个高 10 厘米或以上的台上，以保持足够的通风道。



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.

镭射产品的重要说明

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

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)	VARNING : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)	VARO : Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
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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.
—A cooling fan is inside the unit to prevent heat buildup.



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

Others

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



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

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

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

Contents

Connections	3
Display Indication	6
Daily Operations—Playback	7
Canceling the Demonstration	7
Listening to the Radio	8
Playing Back a Disc	9
Playing Back a Tape.....	11
Daily Operations—Sound&Other Adjustments	12
Adjusting the Volume	12
Reinforcing the Bass Sound	12
Adjusting the Output Balance	12
Selecting the Sound Modes	13
Creating Your Own Sound Modes—User Mode	13
Creating 3-dimensional Sound Field—3D Phonic	14
Presetting Automatic DVD Video Sound	
Increase Level.....	14
Changing the Color System and Scanning Mode.....	14
Changing the Picture Tone.....	14
Changing the Display Brightness	15
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
Reviewing the Playback Quickly	17
Selecting Browsable Still Pictures	17
Playing Back Bonus Group	18
Special Picture Playback	18
Advanced Disc Operations	19
Programming the Playing Order—Program Play.....	19
Playing at Random—Random Play.....	20
Playing Repeatedly—Repeat Play	21
Prohibiting Disc Ejection—Child Lock	21
On-Screen Disc Operations	22
On-screen Bar Information.....	22
Operations Using the On-screen Bar.....	23
Operations on the Control Screen	26
Recording Operations	29
Enjoying Karaoke	31
Singing Along (Karaoke)	31
Reducing the Lead Vocal—Vocal Masking.....	32
Scoring Your Karaoke Skill	32
Reserving Karaoke Songs—Karaoke Program Play	33
Timer Operations	34
Setup Menu Operations	36
Operating the TV	38
Additional Information	39
Troubleshooting	42
Specifications	44
Parts Index	46

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

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

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

Caution for DualDisc playback:

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

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 14.

Note on Region Code

This System can play back only DVD Videos whose Region Code numbers include “3.”

EX.:



Audio formats

The System can play back the following digital audio formats.

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

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

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

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

- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays.
- For disc playback, you can change the initial setting to your preference. See “Setup Menu Operations” on page 36.

If “” appears on the TV screen when you press a button, the disc cannot accept the operation you have tried to do.

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 main unit.

Connections

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

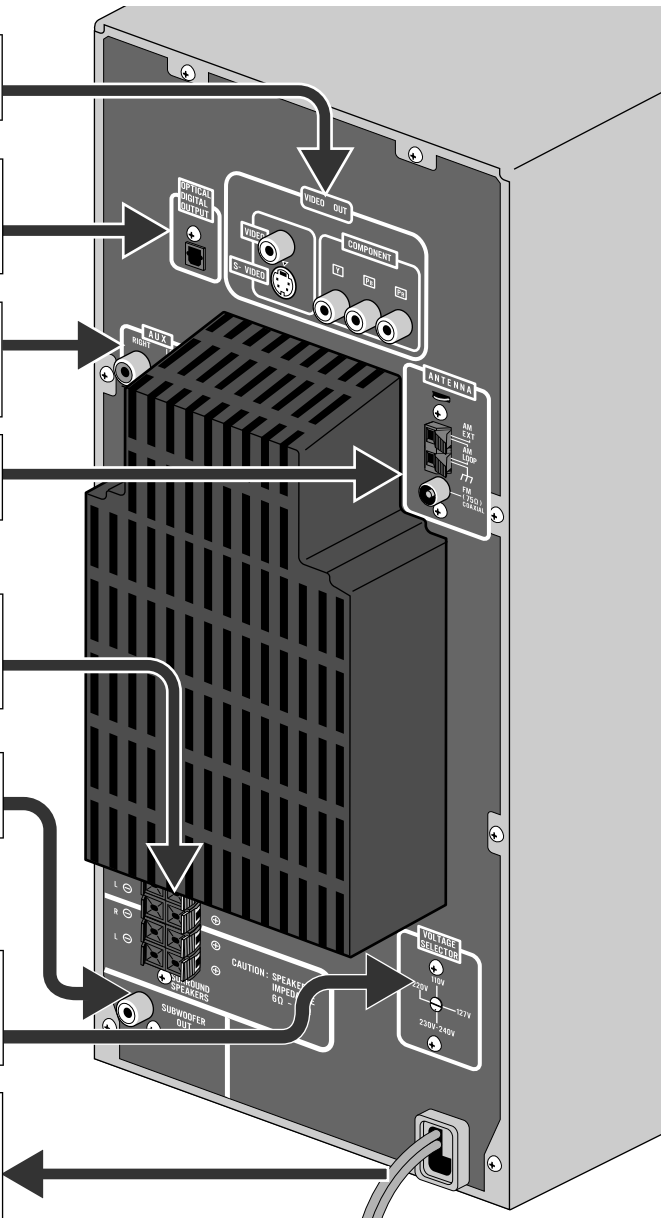
- Connect VIDEO OUT directly to the video input of your TV. Connecting VIDEO OUT to a TV via a VCR may interfere with your viewing when playing back a copy-protected disc. Your viewing may be interfered when connecting VIDEO OUT to an integrated TV/VCR system.

Supplied accessories

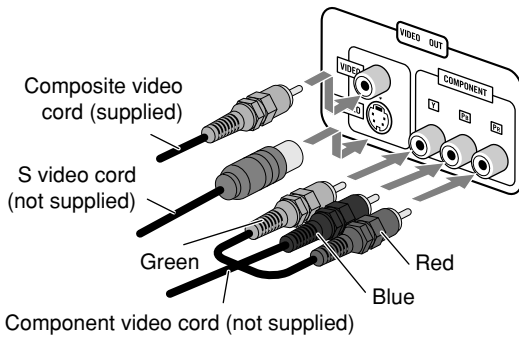
- FM antenna (x1)
- AM loop antenna (x1)
- Composite video cord (x1)
- Remote control (x1)
- Batteries (x2)
- AC plug adapter (x1)

If any item is missing, consult your dealer immediately.

- 1 From the video input of TV/monitor**
See page 4.
- 2 From the digital input of digital audio component such as CD recorder**
See page 4.
- 3 From the analog audio output of auxiliary equipment (VCR, etc.)**
See page 4.
- 4 From AM/FM antenna**
See page 4.
- 5 From the main front/matrix surround speakers**
See page 5.
- 6 From the powered subwoofer**
See page 5.
- 7 Voltage selector**
Before plugging in, confirm the position the voltage selector points at. See page 5.
- 8 To a wall outlet**
Plug the AC power cord only after all connections are complete.
 - If the wall outlet does not match the AC plug, use the supplied AC plug adapter.

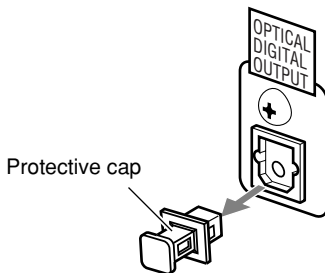


1 TV/monitor



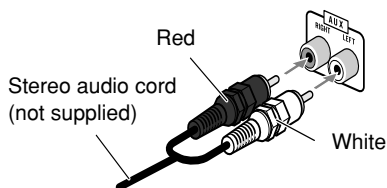
- To select progressive scanning mode (see page 14), use COMPONENT jacks.
- Connect the VIDEO jack, S-VIDEO jack, or COMPONENT jacks whichever you want to use.

2 Digital audio component



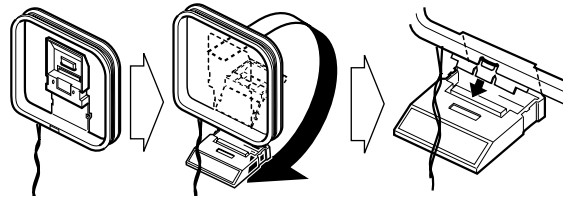
- Set "DIGITAL AUDIO OUTPUT" in the "AUDIO" menu correctly according to the connected digital audio equipment (see page 37). If setting is incorrect, loud noise may be generated causing damage to the speakers.

3 Auxiliary equipment

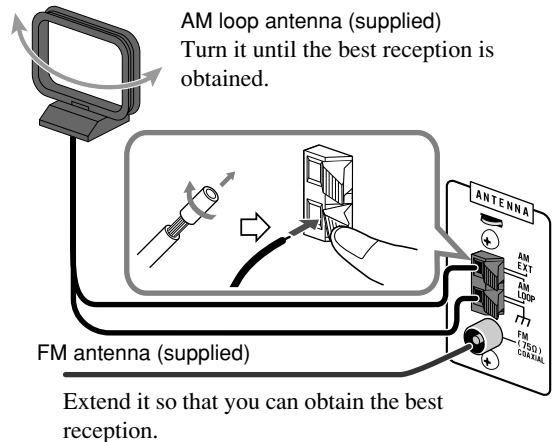


4 AM/FM antenna

To assemble the AM loop antenna



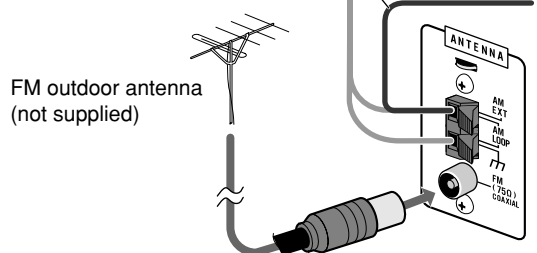
To connect AM/FM antenna



For better AM/FM reception

AM loop antenna (supplied)
Keep it connected.

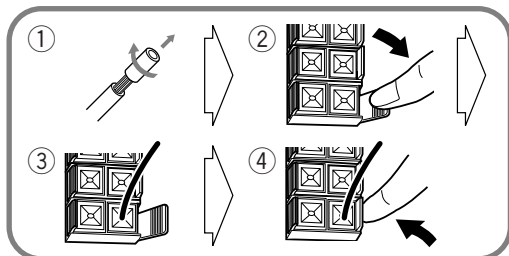
Vinyl-covered wire (not supplied)
Extend it horizontally.



- 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.

5 Front main speakers and matrix surround speakers

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



From right front main speaker

CAUTION:

IMPEDANCE
4Ω - 16Ω

MAIN
SPEAKERS

R ⊖

L ⊖

R ⊖

L ⊖

From left front
main speaker

**CAUTION: SPEAKER
IMPEDANCE
16Ω - 32Ω**

SURROUND
SPEAKERS

From right matrix
surround speaker

From left matrix
surround speaker

- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the System.
- The front main speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.

- When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.

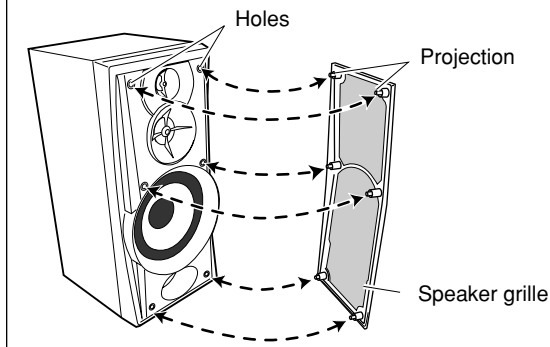
Then wait at least 30 minutes before turning on the TV's main power switch again.

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



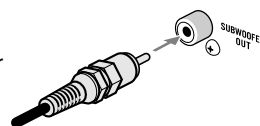
- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

To remove the speaker grilles of the main speakers

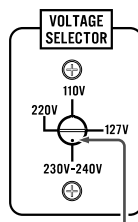


6 Powered subwoofer

From the powered subwoofer
(not supplied)



7 To adjust the voltage selector



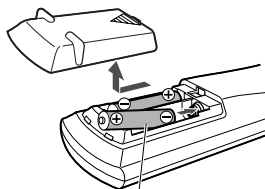
Voltage mark

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.)



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

Preparing the remote control



R6(SUM-3)/AA(15F)

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

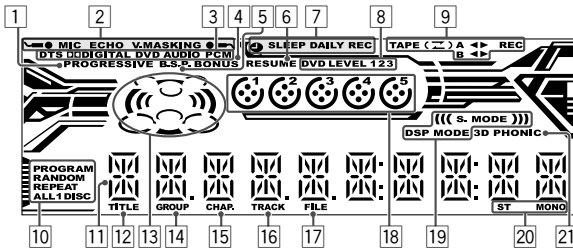
- Dispose of batteries in the proper manner, according to federal, state, and local regulations.



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

Display Indication

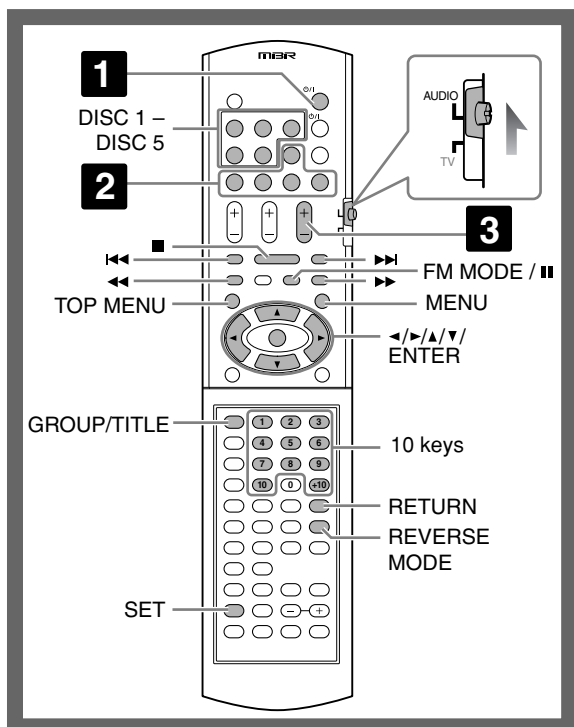
The indications on the display teach you a lot of things while you are operating the System, Before operating the System, be familiar with when and how the indicator illuminates on the display.



- 1 PROGRESSIVE indicator
 - Lights when the progressive scanning mode is selected.
- 2 Karaoke operation indicators (see pages 31 to 33)
 - : lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - MIC: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - ECHO: lights when the echo effect is activated.
 - V.MASKING: lights when the Vocal Masking Mode is activated.
- 3 Source signal indicators
 - DTS: lights when a source signal is DTS.
 - DIGITAL: lights when a source signal is Dolby Digital.
 - DVD: lights when DVD Video is detected.
 - DVD AUDIO: lights when DVD Audio is detected.
 - PCM: lights when a source signal is linear PCM.
- 4 BONUS indicator
 - Lights when DVD Audio with bonus group is detected (see page 18).
- 5 B.S.P. indicator
 - Lights when browsable still pictures on DVD Audio are available (see page 17).
- 6 RESUME indicator
 - Lights when Resume is activated (see page 37).
- 7 Timer indicators
 - : lights when Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: lights when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.
- 8 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD Video increase level.
- 9 Tape operation indicators
 - TAPE: lights when a tape is loaded in either deck A or B.
 - (Reverse Mode): lights to indicate the current Reverse Mode (see page 11).
 - A: lights when a tape is in the deck A.
 - B: lights when a tape is 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.
 - REC: lights while recording.
- 10 Disc operation indicators
 - PROGRAM: lights when Program Play is activated.
 - RANDOM: lights when Random Play is activated.
 - REPEAT: lights when Repeat Play is activated.
 - ALL DISC: lights when All Disc Repeat is activated.
 - 1 DISC: lights when One Disc Repeat is activated.
 - 1: lights when One Track/Chapter/Step Repeat is activated.
- 11 Main display
- 12 TITLE indicator
 - Lights to indicate the title number for DVD Video.
- 13 Audio signal indicators
 - Lights to indicate the incoming audio channel signals.
- 14 GROUP indicator
 - Lights to indicate the group number.
- 15 CHAP. indicator
 - Lights to indicate the chapter number.
- 16 TRACK indicator
 - Lights to indicate the track number.
- 17 FILE indicator
 - Lights to indicate the file number.
- 18 Disc indicators
 - 1 – 5: lights to indicate the current disc tray.
 - : lights when a disc is detected on the disc tray; rotates during playback or paused.
- 19 Sound Mode indicators (see page 13)
 - S.MODE: lights when one of the Sound Modes (Surround/SEA/User Modes) is activated (for Surround mode, also lights).
 - DSP MODE: lights when one of the Surround Modes is activated.
- 20 FM reception indicators
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
 - MONO: lights while receiving an FM stereo station in monaural.
- 21 3D PHONIC indicator
 - Lights when 3D Phonic is activated (see page 14).

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 AUDIO, the System also turns on by pressing one of the source select buttons in the next step.

2 Select the source.

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

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

3 Adjust the volume.

4 Operate the target source as explained later.

To turn off (stand by) the system

- AUDIO The STANDBY lamp on the main unit lights in red.
- A small amount of power is always consumed even while on standby.

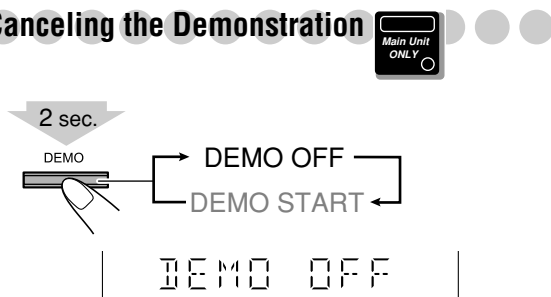
For private listening

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

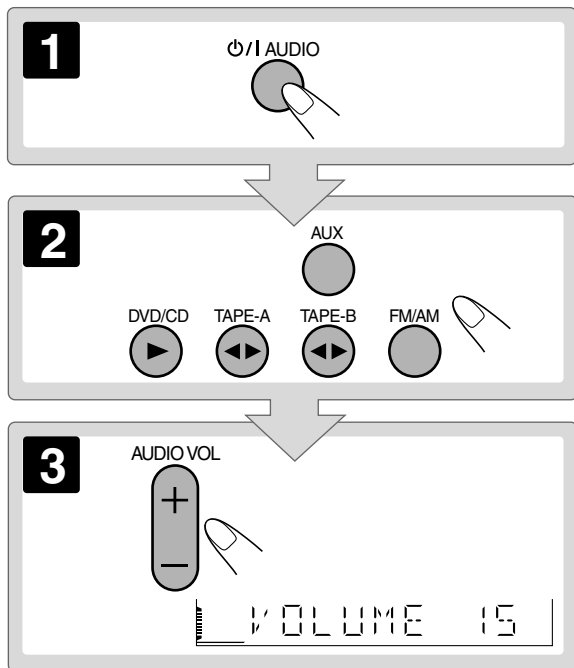
- Disconnecting the headphones will activate the speakers again.

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

Canceling the Demonstration



To start the demonstration, select DEMO START.



Listening to the Radio

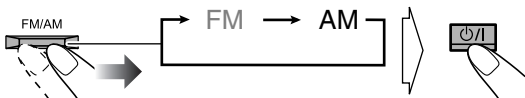
INFO

To select the AM tuner interval spacing



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

1 Select "AM," then turn off (stand by) the System.



2 Select the AM tuner interval spacing.

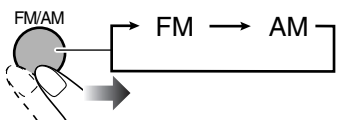
To select 9 kHz:

(holding then...)

To select 10 kHz:

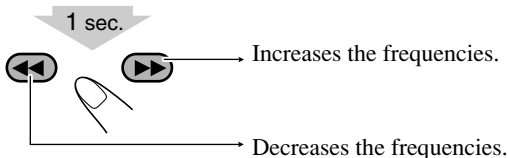
(holding then...)

To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



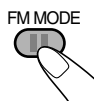
Frequency starts changing on the display.

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.

- To cancel the operation during process, press CANCEL.

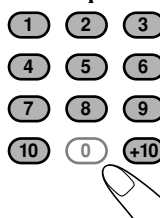
1 Tune in to a station you want to preset.

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

2 Start presetting.



3 Select a preset number.



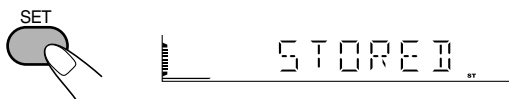
Examples:

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

- You can also use +/- buttons.

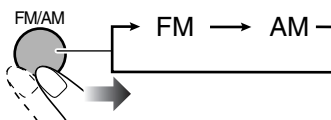


4 Store the station.

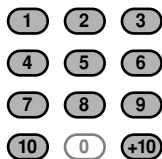


To tune in to a preset station

1 Select the band (FM or AM).



2 Select a preset number.



Examples:

To select preset number 5, press 5.

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

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

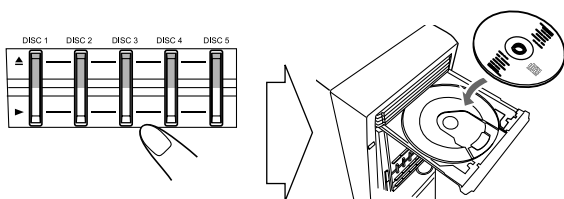
- You can also use buttons on the remote control or PRESET +/- buttons on the main unit.

Playing Back a Disc

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

- DVD Video comprises of “Titles” which includes “Chapters,” DVD Audio/MP3/WMA comprise of “Groups” which includes “Tracks,” JPEG comprises of “Groups” which includes “Files,” and CD/SVCD/VCD comprise of only “Tracks.”
- For JPEG playback, see page 27.

To insert discs



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

To close the disc tray, press the same again.

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

To start:	To pause:	To stop:
<p>Playback of the current disc starts.</p>	<p>To release it, press DVD/CD .</p>	

While playing DVD/SVCD/VCD/MP3: This System can store the stop point, and when you start playback again by pressing DVD/CD , it starts from the position where you have stopped—Resume Play. (RESUME indicator lights up when you stop playback.)

To stop completely while Resume is activated, press twice. (To cancel Resume, see “RESUME” on page 37.)

On-screen guide icons

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

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

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

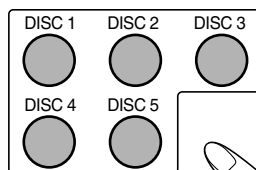
Appears at the beginning of a scene containing multi-subtitle languages.

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



- To deactivate the on-screen guide icons, see “ON SCREEN GUIDE” on page 37.

To select a disc

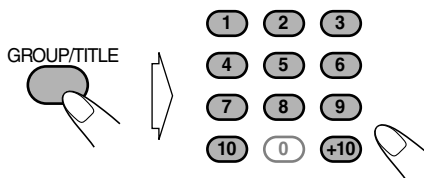


Playback starts.

To select a title/group

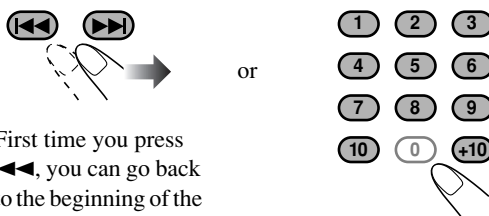


While playing a disc...



To select a chapter/track

While playing a disc...



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

To locate a particular portion

While playing a disc except MP3/WMA...



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

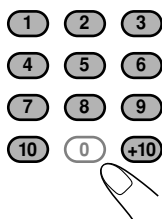
To return to normal playback, press DVD/CD ►.

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.

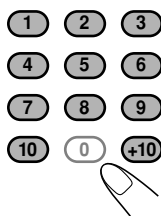
To select number 15, press +10, then 5.

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

■ For SVCD/VCD with PBC

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

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



Examples:

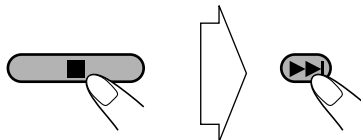
To select number 5, press 5.

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

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

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

To cancel PBC



You can also cancel PBC by pressing the 10 keys to start playback when disc menu is not shown on the TV screen.

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

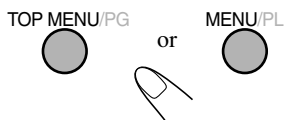
To play back by using the disc menu



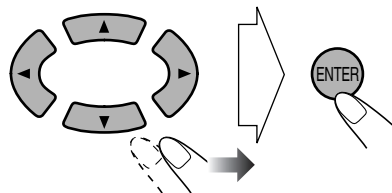
You can operate the disc play using the disc menu.

■ For DVD Video/DVD Audio

1 Show the disc menu.



2 Select an item on the disc menu.



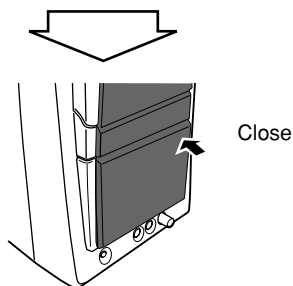
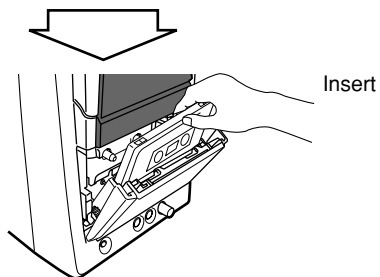
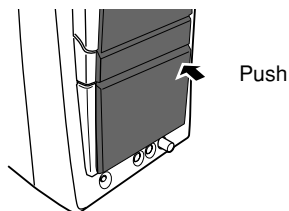
- On some discs, you can also select items by entering the number using the 10 keys.

Playing Back a Tape

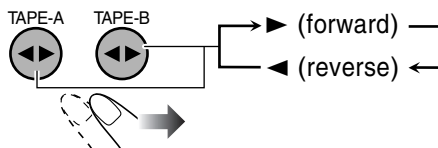
To insert a tape

You can play back type I tapes.

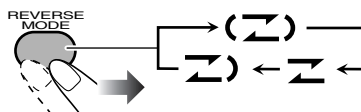
- The use of C-120 or longer tape is not recommended.



To change the tape running direction



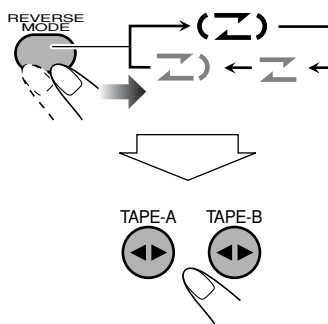
To reverse the tape automatically



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

To playback the both decks A and B continuously —Relay Play

When the cassettes are set in the both decks...

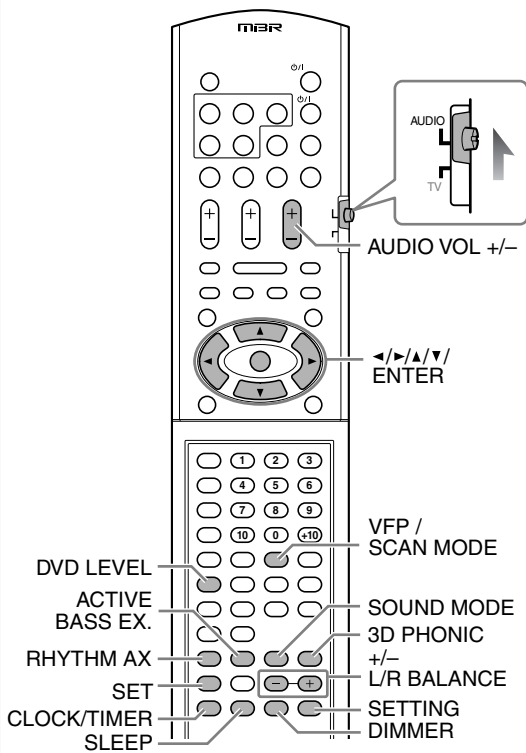


You can start playback of either deck A or B.

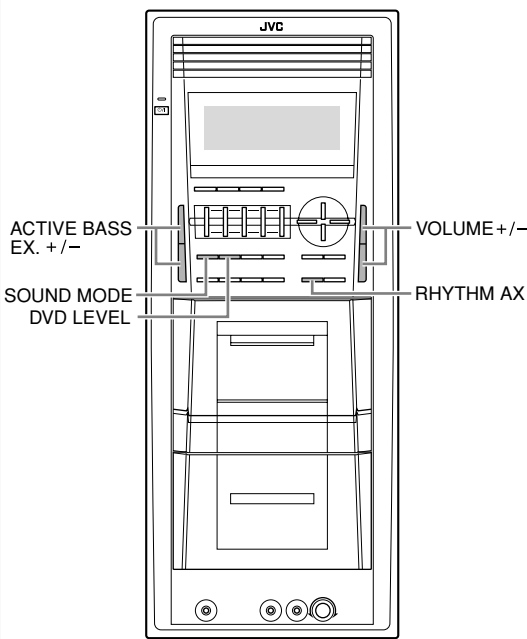
To start:	To stop:
To rewind tape:	

Daily Operations—Sound&Other Adjustments

Remote Control

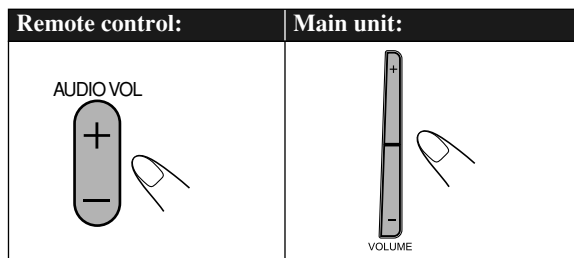


Main unit



Adjusting the Volume

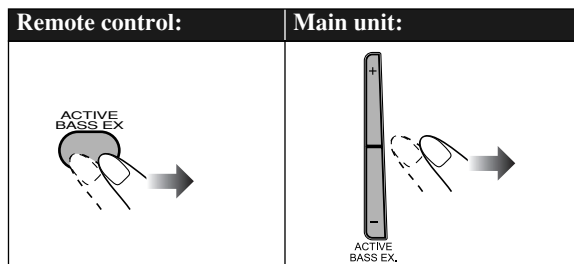
The volume level can be adjusted in 32 steps (VOLUME MIN, VOLUME 1 – VOLUME 30, and VOLUME MAX).



Reinforcing the Bass Sound

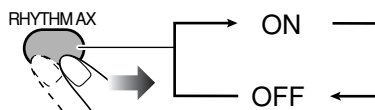
To adjust the bass level gradually—ACTIVE BASS EX.

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



To emphasize rhythmical feeling—RHYTHM AX

This function emphasizes bass attack feeling.

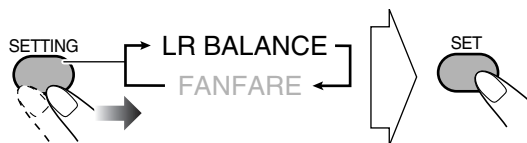


Adjusting the Output Balance

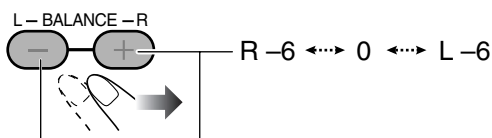


You can adjust the speaker output balance.

1 Enter the balance setting mode.

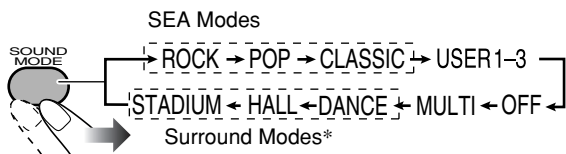


2 Adjust the balance.



Selecting the Sound Modes

You can select one of the preset Sound Modes.



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

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

To cancel the Sound Mode, select "OFF."

Creating Your Own Sound Modes—User Mode



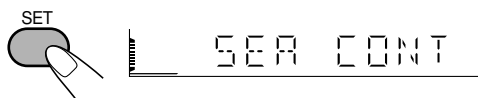
INFO

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

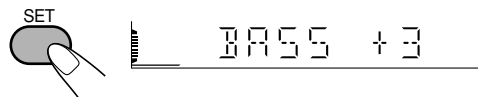
- If you want to add surround elements into your Sound Mode, select one of the Surround Modes to adjust.

While the Sound Mode name is shown on the display...

1 Enter the SEA Control Mode.

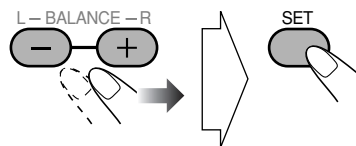


2



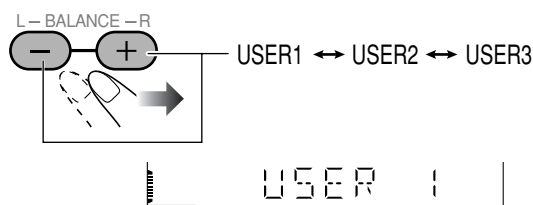
3 Adjust the SEA pattern.

- ① Adjust BASS.
- ② Adjust TREBLE.

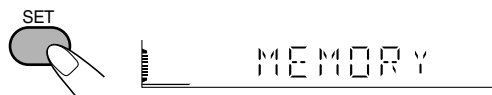


- You can adjust the bass and treble level from -5 to +5.

4 Select one of the User Modes.



5 Store the setting.

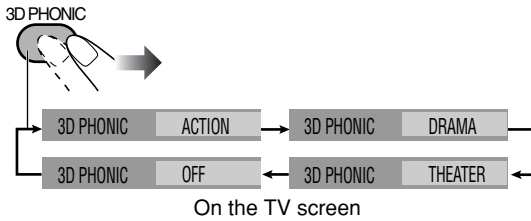


- The Sound Mode changes to the one you have stored.

Creating 3-dimensional Sound

Field—3D Phonic

While playing a disc...

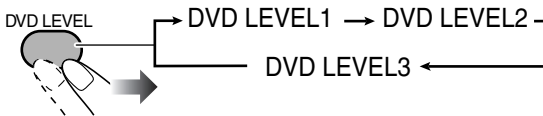


3D ACTION	Suitable for action movies and sports programs.
3D DRAMA	Creates natural and warm sound. Enjoy movies in a relaxed mood.
3D THEATER	Enjoy sound effects like in a major theater.

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.

- The initial setting is “DVD LEVEL3.”

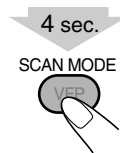
Changing the Color System and Scanning Mode

Scanning Mode

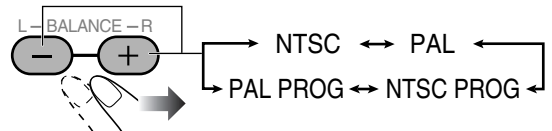
You can select the video output to match it to the color system of your TV (NTSC or PAL).

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

1 Enter the color system setting mode.

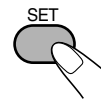


2 Select the color system and scanning mode.



NTSC / PAL	NTSC or PAL Interlaced scanning. For a conventional PAL or NTSC TV.
NTSC / PAL PROG	NTSC or PAL Progressive scanning. For a progressive NTSC or PAL TV.

3 Store the setting.



Changing the Picture Tone

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

To select a preset picture tone

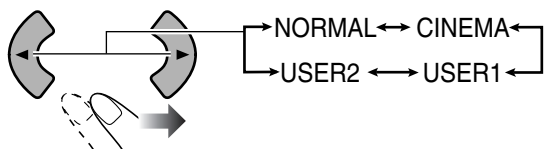
1 While playing, display VFP setting screen.



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

On the TV screen

2 Select a preset picture tone.



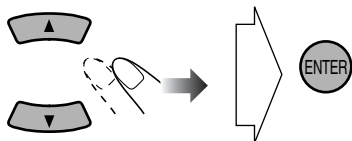
NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

To adjust the picture tone

1 Select "USER1" or "USER2."

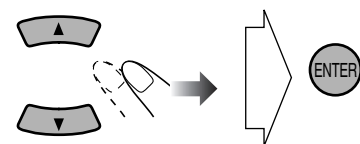
- Follow steps 1 and 2 explained on the previous page.

2 Select a parameter you want to adjust.



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

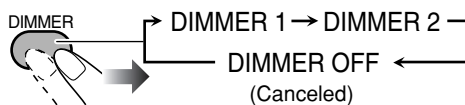
3 Adjust the parameter.



4 Repeat steps 2 to 3 to adjust other parameters.

To erase the VFP screen, press VFP again.

Changing the Display Brightness Remote ONLY >>>



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

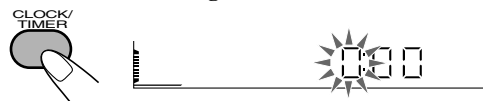
* Except for the RHYTHM AX and KARAOKE SCORING lamps.

Setting the Clock Remote ONLY >>> INFO

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

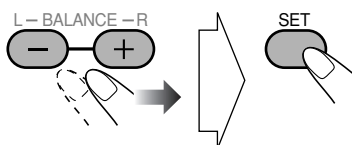
- To exit from the clock setting, press CLOCK/TIMER as required.
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

1 Activate clock setting mode.



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

2 Adjust the hour, then minute.

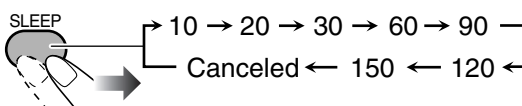


Now the built-in clock starts working.

Turning Off the Power Automatically Remote ONLY >>>

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

1 Specify the time (in minutes).



2 Wait until the set time goes off.

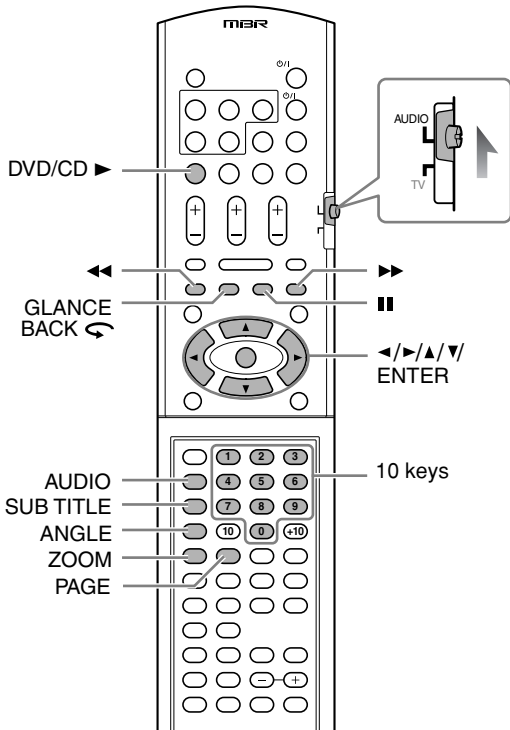
To check the time remaining until the shut-off time



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

Unique DVD/VCD Operations

Remote Control



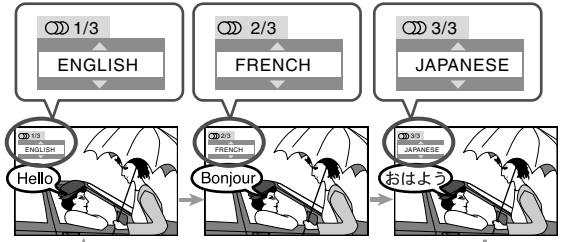
Selecting the Sound Track Remote ONLY INFO

- For DVD Video:** While playing back a chapter containing audio languages, you can select the language to listen to.
- For DVD Audio:** While playing back a track containing audio channels, you can select the audio channel to listen to.
- For DVD-VR/Karaoke SVCD/VCD:** When playing back a track, you can select the audio channel to play.
- You can also select the audio track using the on-screen bar (see page 23).

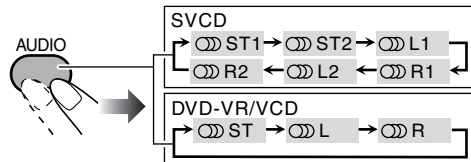
While playing DVD Video...



Ex.:



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



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

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

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

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

Selecting the Subtitle Language

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

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

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

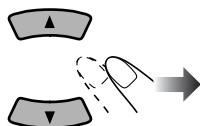
- You can also select the subtitle language using the on-screen bar (see page 23).

While playing a DVD Video...

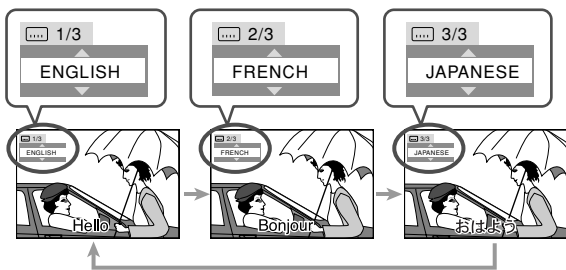
1 Display the subtitle selection window.



2 Select the subtitle language.



Ex.:



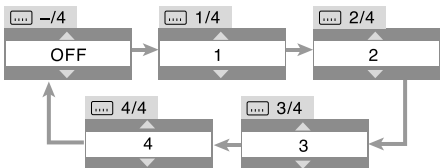
While playing a DVD-VR...

SUB TITLE



While playing an SVCD...

SUB TITLE

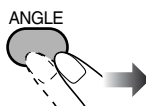


Selecting the View Angle

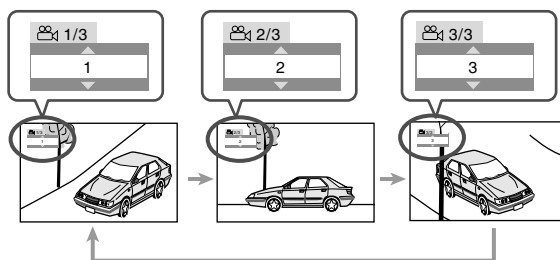
For DVD Video only: While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- You can also select the view angle using the on-screen bar (see page 23).

While playing back...



Ex.:



Reviewing the Playback Quickly

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

While playing back...

GLANCE BACK



Selecting Browsable Still Pictures

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

- If a track is linked to browsable still pictures (B.S.P.), they are usually shown in turn automatically during playback.
- You can also select the page using the on-screen bar (see page 23).



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

Playing Back Bonus Group

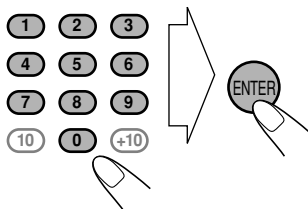
For DVD Audio only: Some DVD Audios have a special group called “bonus group” whose contents are not open to the public.

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

1 Select the bonus group.

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

2 Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■.

Special Picture Playback

Still picture playback

While playing...



Still picture playback starts.

To resume normal playback, press DVD/CD ►.

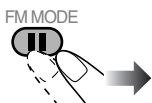
Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ►.

Slow-motion playback

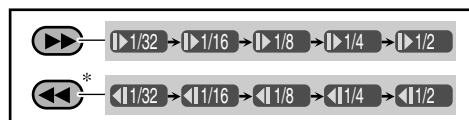
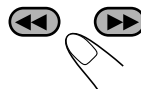
1 While playing...

FM MODE



Still picture playback starts.

2 Select slow motion speed.

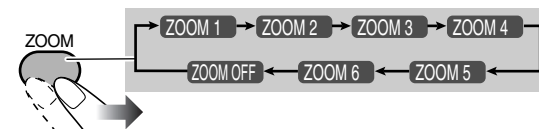


* Not available for DVD-VR/SVCD/VCD.

To resume normal playback, press DVD/CD ►.

Zoom

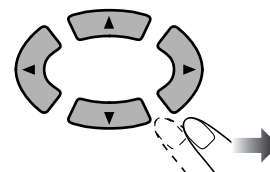
1 While playing...



As the number increases, magnification also increases.

- For JPEG, see page 28.

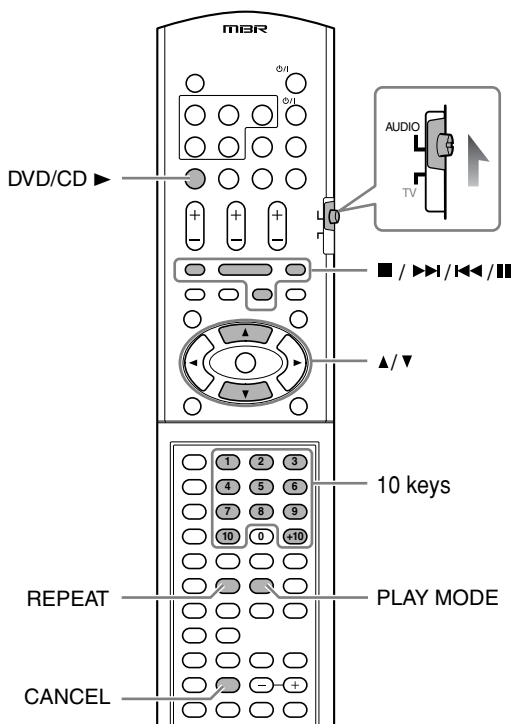
2 Move the zoomed-in position.



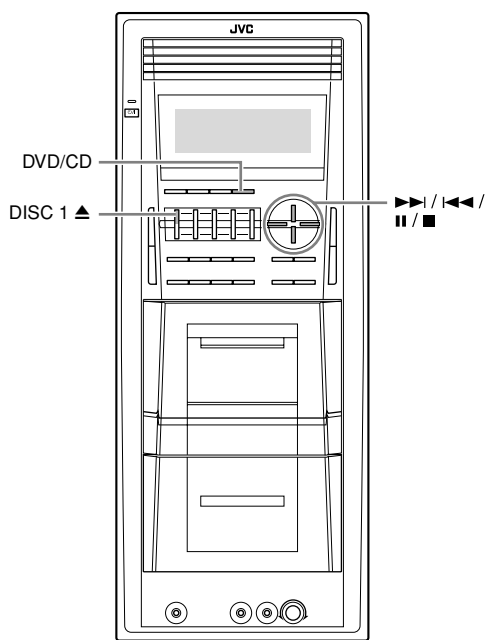
To resume normal playback, press ZOOM repeatedly until “ZOOM OFF” appears on the TV screen.

Advanced Disc Operations

Remote Control



Main unit

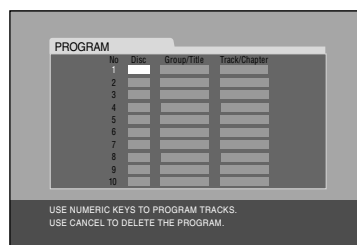
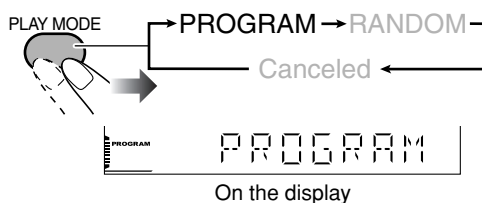


Programming the Playing Order

—Program Play

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

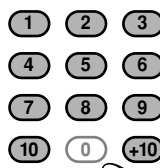
1 Before starting playback, activate Program Play.



2 Select chapters or tracks you want for Program Play.

- ① Select a disc number.
- ② Select a title or group number.
- ③ Select a chapter or track number.

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.

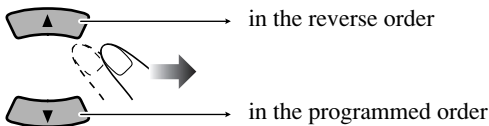
To skip a track:	To pause:	To stop*:
	 To release, press DVD/CD ►.	

*Resume does not work for Program Play.

To check the programmed contents



Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
To add steps in the program: Repeat step 2 on page 19.	

To exit from Program Play

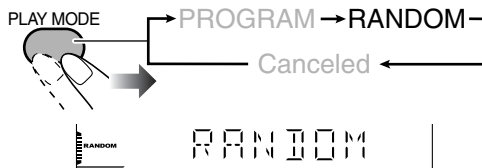
Before or after playback...



Playing at Random—Random Play

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

1 Before starting playback, activate Random Play.



2 Start playback.



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

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

To exit from Random Play

Before or after playback...



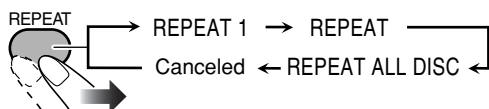
Playing Repeatedly—Repeat Play

You can repeat playback.

- You can also select the repeat mode using the on-screen bar (see page 23).
- The indicator(s) lights on the display as follows to indicate the current repeat mode.

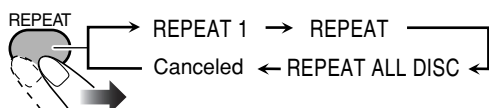
• For DVD Video:

While playing...



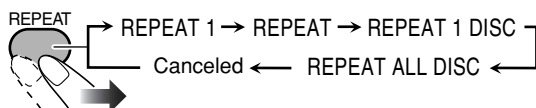
• For DVD Audio:

While playing or before playback...



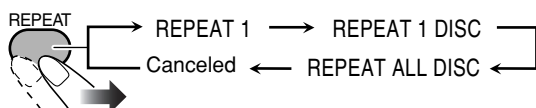
• For MP3/WMA:

While playing or before playback...



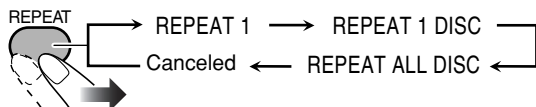
• For CD/SVCD/VCD:

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



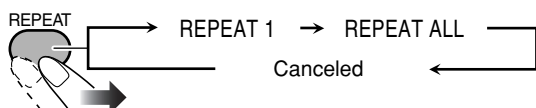
• For Random Play:

While playing or before playback...



• For Program Play:

While playing or before playback...



REPEAT 1 Repeats the current chapter/track.

REPEAT Repeats the current title/group.

REPEAT 1 DISC* Repeats the current disc.

REPEAT ALL DISC* Repeats all discs.

REPEAT ALL Repeats all programmed tracks.

*These modes may not work correctly for DVD Video.

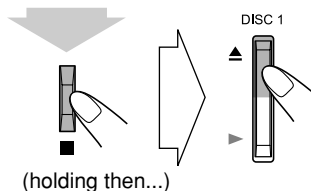
Prohibiting Disc Ejection

—Child Lock

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

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

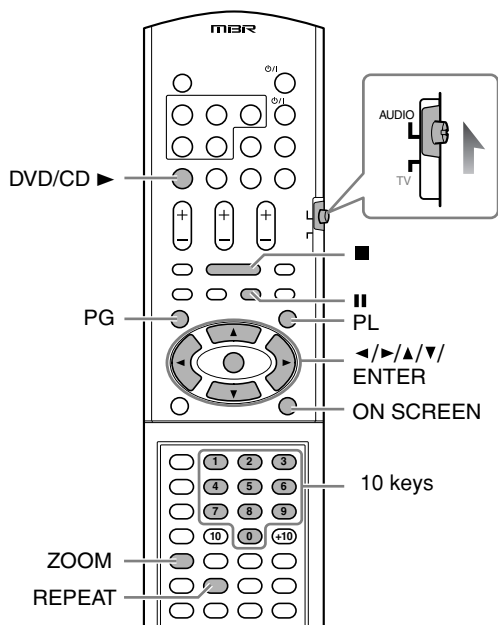
While in standby mode...



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

On-Screen Disc Operations

Remote control

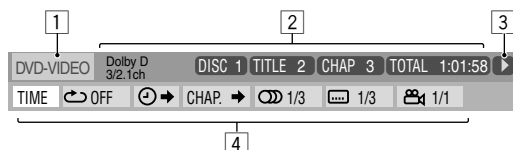


On-screen Bar Information

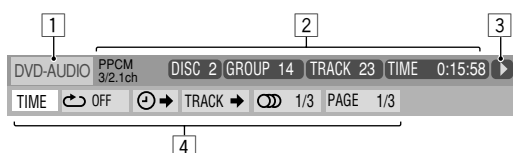
You can check the information on disc (except for MP3/WMA/JPEG disc) and use some functions through the on-screen bar.

On-screen bars

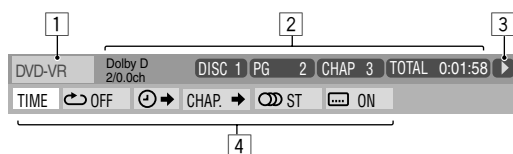
DVD Video



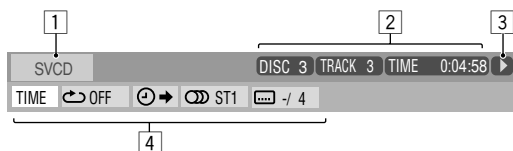
DVD Audio



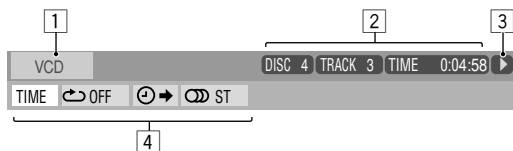
DVD-VR



SVCD



VCD



CD



1 Disc type**2 Playback information**

Indication	Meanings
Dolby D/ PPCM	Audio format
3/2.1 ch/ 2.0/0 ch	Channel number
DISC 1	Current disc
TITLE 2	Current title
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
PG 2	Current title
PL 2	Current play list
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)

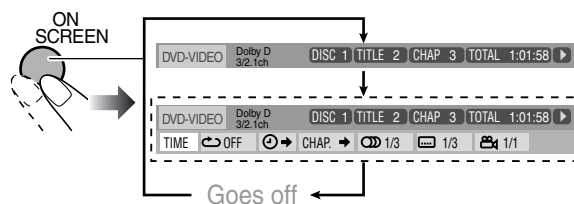
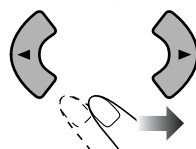
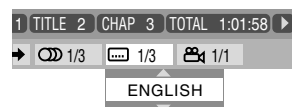
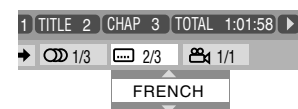
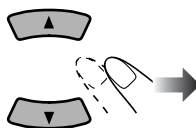
Indication	Meanings
	Select to change the time indication (see also page 24).
	Select to repeat playback (see also pages 21, 24 and 25).
	Select for time search (see also page 25).
	Select for chapter search (see also page 26).
	Select for track search (see also page 26).
	Select to change the audio language or channel (see also page 16).
	Select to change subtitle language (see also page 17).
	Select to change view angle (see also page 17).
	Select to change the page (see also page 17).

Operations Using the On-screen Bar

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

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

While a disc is selected as the source...

1 Display the on-screen bar with the pull-down menu.**2 Select (highlight) the item you want.****3 Display the pop-up window.****4 Select the desired option in the pop-up window.****5 Finish the setting.**

Pop-up window goes off.

To erase the on-screen bar



To change the time information

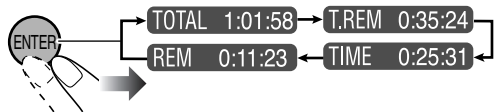
You can change the time information in the on-screen bar and the display window on the main unit.

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



2 Make sure **TIME** is selected (highlighted).

3 Change the time indication.



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

*Not available for DVD-VR.

To erase the on-screen bar



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.

• Except for DVD Video: Repeat Play can be selected before starting playback.

2 Select .

3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks.
A-B	Repeats a desired portion (see the next page).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
PG	Repeats the current title (for DVD-VR only). See also page 28.
PL	Repeats the current play list (for DVD-VR only). See also page 28.
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).



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

- 6 Select the end point (B).



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


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

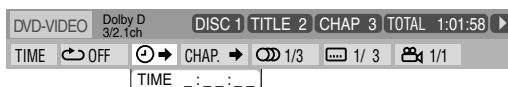
To erase the on-screen bar



Time Search

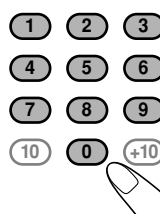
You can move to a particular point by specifying the elapsed playing time from the beginning.

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



- 4 Enter the time.


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



Examples:

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

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

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

- 5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar



Chapter/Track Search

You can search for the number of the item to play.

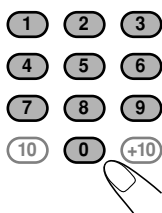
For DVD Video/DVD-VR: Chapter

For DVD Audio: Track

- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select **CHAR. →** 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 is shown in the pop-up window.

- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar



Operations on the Control



Screen

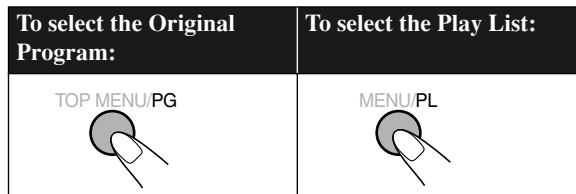
INFO

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

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

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

To select playback type



When Original Program is selected.

ORIGINAL PROGRAM				
No	Date	Ch	Time	Title
1	25/04/04	4ch	19:00	JVC DVD World 2004
2	17/05/04	8ch	10:30	
3	22/05/04	8ch	17:00	Music Festival children 001
4	26/05/04	L-1	13:19	
5	20/06/04	4ch	22:00	
6	25/06/04	L-1	8:23	children 002

① ② ③ ④ ⑤ ⑥

When Play List is selected.

PLAY LIST				
No	Date	Chap	Length	Title
1	25/05/04	001	1:03:16	My JVC World
2	17/06/04	005	1:35:25	
3	20/06/04	003	0:10:23	Favorite music
4	25/06/04	001	0:07:19	children001-002

① ⑦ ⑧ ⑨ ⑤ ⑥

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

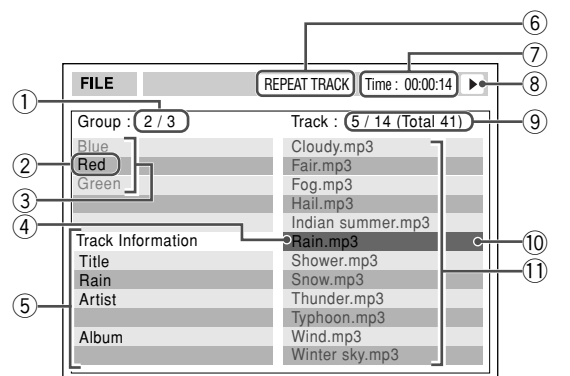
*The title of the original program or play list may not be displayed depending on the recording equipment.

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

Control screen for MP3/WMA/JPEG disc

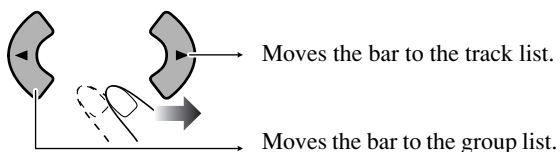
The control screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

Ex.: When the MP3 disc is loaded.

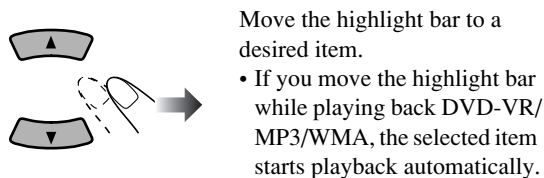


- ① Current group number/total group number
 - ② Current group
 - ③ Group list
 - ④ Current track
 - ⑤ Track information (ID3 Tag Version 1.0: only for MP3/WMA)
 - ⑥ Repeat Play setting
 - ⑦ Elapsed playing time of the current track (only for MP3/WMA)
 - ⑧ Operation mode icon
 - ⑨ Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
 - ⑩ Highlight bar
 - ⑪ Track list
- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 36).

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



To select an item in the list:



To start playback

For DVD-VR/MP3/WMA:



Playback starts with the selected chapter/track.
 • Pressing DVD/CD ► also starts playback.

For JPEG:



The selected track (still picture) is displayed until you change it.

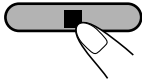
DVD/CD



Slide-show playback starts. Each track (still picture) is shown on the screen for a few seconds, then changes one after another.

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

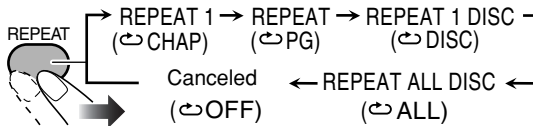
To stop playback



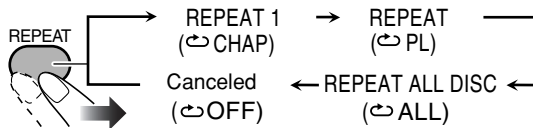
To repeat title/play list for DVD-VR

While playing or before starting playback...

For Original Program



For Play List



REPEAT 1* Repeats the current chapter.

REPEAT* Repeats the current title/play list.

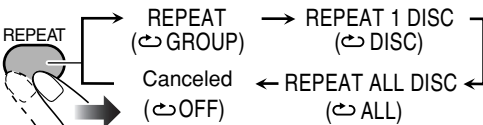
REPEAT 1 DISC* Repeats all titles on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

* Not available before starting playback.

To repeat slide-show for JPEG

While playing or before starting playback...



REPEAT Repeats the current group.

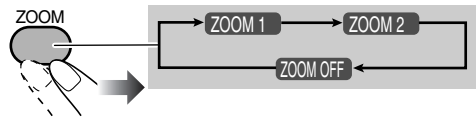
REPEAT 1 DISC Repeats all files on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

• For Repeat Play of MP3/WMA, see pages 21 and 24.

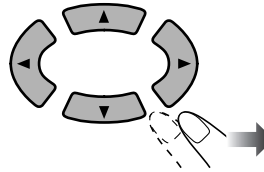
To zoom in the still picture (for JPEG)

1 During being paused...



As the number increases, magnification also increases.

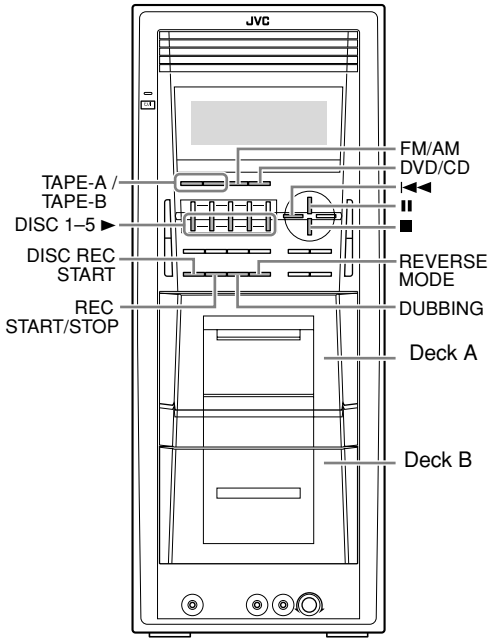
2 Move the zoomed-in position.



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

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



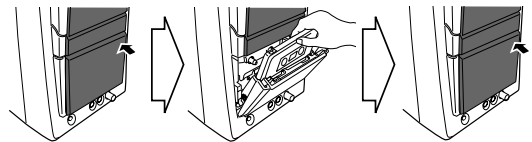
INFO

You can use type I tapes for recording.

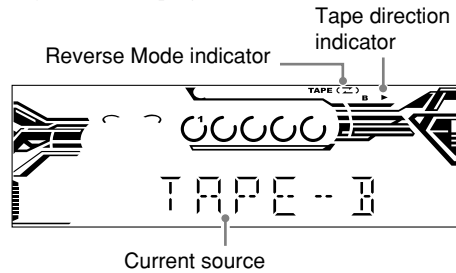
- To play a tape, see page 11.

1 Insert a recordable cassette in deck B.

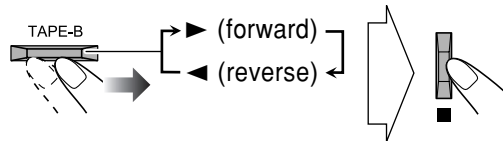
Push Insert Close



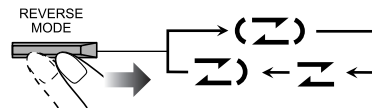
2 Check the tape running direction and Reverse Mode settings on the display.



To change the direction



Change the Reverse Mode if necessary



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

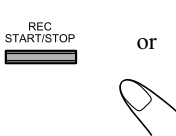
3 Start playing the source—“FM,” “AM,” “DVD/CD,” “TAPE-A” or “AUX.”

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

4 Start recording.



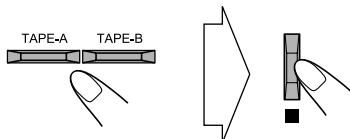
To stop recording



Dubbing Tapes



1 Change the source to TAPE.



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

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

See step 2 of “Recording on a Tape” on page 29.

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

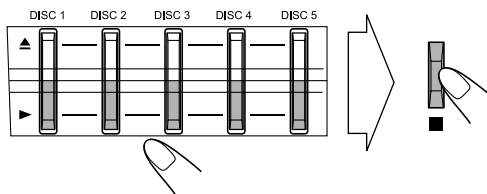
You can start and stop both disc play and tape recording at the same time.

1 Load a disc and insert a recordable cassette.

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

- See step 2 of “Recording on a Tape” on page 29.

3 Select the disc number you want to start recording from.



For recording desired tracks on discs:

You can program tracks to record in your preferred order.

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

4 Start recording.



The disc playback and recording start from the first track.

- 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 only your favorite track—One Track Recording

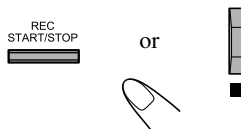
You can specify tracks to be recorded on the tape while listening to a disc (except for DVD Video).

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



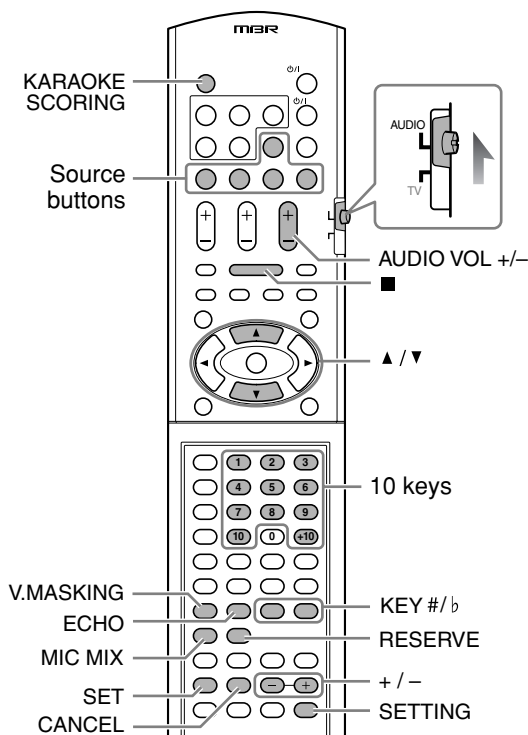
The disc player returns to the beginning of that track and the track is recorded on the tape. After recording, the disc player and cassette deck automatically stop.

To cancel while recording

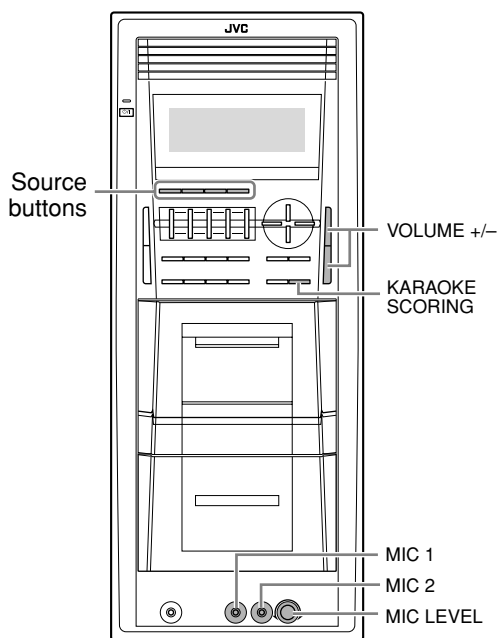


Enjoying Karaoke

Remote control



Main unit



The functions described in this section are not available for DVD Audio/DVD-VR.

IMPORTANT

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



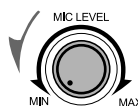
DO NOT keep the microphones connected while they are not in use.

Singing Along (Karaoke)

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

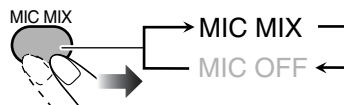
- By pressing REC START/STOP, you can record your singing-along.

1 Turn MIC LEVEL to MIN.



2 Connect the microphone(s) (not supplied) to the MIC 1 and/or MIC 2 jack.

3 Activate the Mic Mixing Mode.

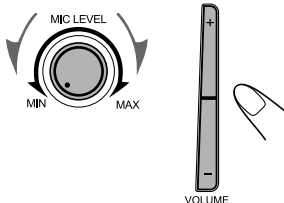


4 Start playing the source—"FM," "AM," "DVD/CD," "TAPE," or "AUX."

- For Karaoke SVCD/VCD: Select a desired audio channel. See "Selecting the Sound Track" on page 16.

5 Sing into the microphone.

6 Adjust the MIC LEVEL and VOLUME.

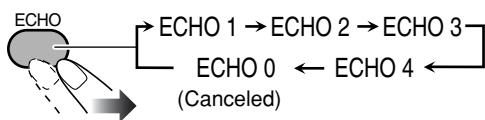


To cancel from the Mic Mixing Mode, select "MIC OFF" in step 3.

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

To apply an echo to your voice

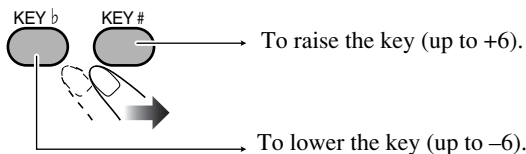
While the Mic Mixing Mode is activated...



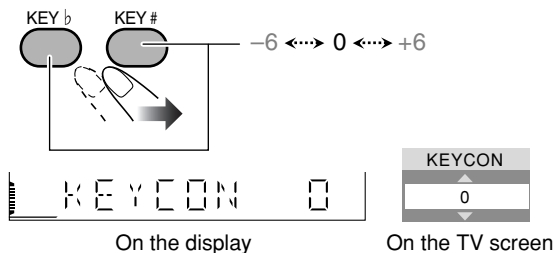
- As the number increases, echo level also increases.

To adjust the Key (disc playback only)

While playing back...



To cancel the Key Control

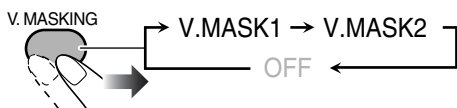


- Key Control is also canceled when you deactivate the Mic Mixing Mode, or select another track or disc.

Reducing the Lead Vocal

—Vocal Masking

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



V.MASK1	Cancels vocal on stereo sources.
V.MASK2	Cancels the right audio channel.

To sing into microphone(s), activate the Mic Mixing Mode (follow steps 1 to 3 and 6 on page 31).

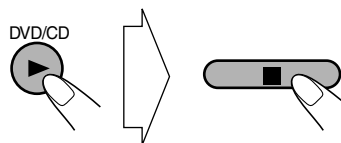
To cancel from the Vocal Masking Mode, select “OFF.”

Scoring Your Karaoke Skill

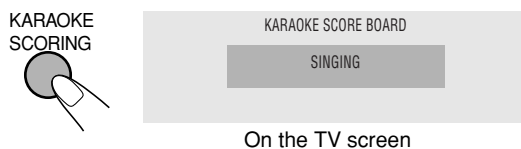
This System can score your Karaoke skill by comparing your singing along with the vocal on the playback disc.

- This function is for disc playback only.
- It is recommended to select the sound track as follows (see page 16):
For DVD Video: Select the sound track with vocal.
For SVCD/VCD: Select “ST,” “ST1,” or “ST2.”
- It is recommended to sing for more than **one and a half minutes** to make the scoring function work properly.

1 Select “DVD/CD” as the source.



2 Activate the scoring function.



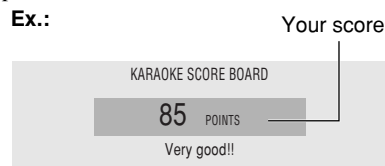
Playback of the first track starts and the Mic Mixing Mode is automatically activated (with the last adjustment for echo).

3 Sing into the microphone.

See steps 1, 2, and 6 on page 31.

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

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



1	ST	93 POINTS
2	ND	85 POINTS
3	RD	73 POINTS

The latest top 3

To stop the playback in the middle of the song, press ■. The scoring function is not canceled and your singing along is scored if the playback time is more than one minute.

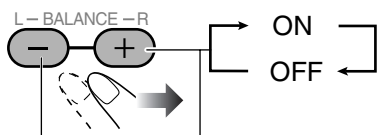
To cancel the scoring function, press KARAOKE SCORING. The screen on the TV disappears. (The Mic Mixing Mode remains activated.)

To turn on/off the fanfare

1 Enter the fanfare setting mode.



2 Select the fanfare setting.

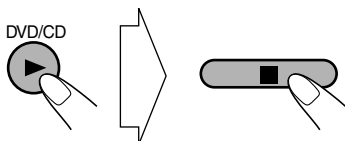


Reserving Karaoke Songs

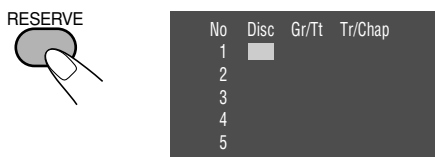
—Karaoke Program Play

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

1 Change the source to “DVD/CD.”



2 Activate Karaoke Program Play.



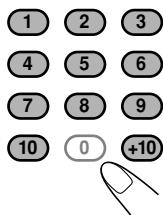
On the TV screen

• PROGRAM indicator flashes during this mode.

3 Select songs you want for Karaoke Program Play.

Press the number buttons to select a song in the following order.

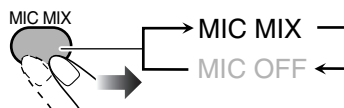
- ① Select a disc.
- ② Select a title/group.
- ③ Select a chapter/track.





Examples:

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

4 Activate the Mic Mixing Mode.



5 Start playback.

To start Karaoke Program Play:	To start Karaoke Program Play with the scoring function:
	

Playback starts in the order you have programmed.

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

To check the programmed contents



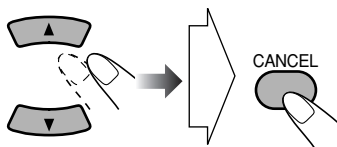
The Karaoke reserve screen appears.

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

To modify the program

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

To erase the unwanted step:



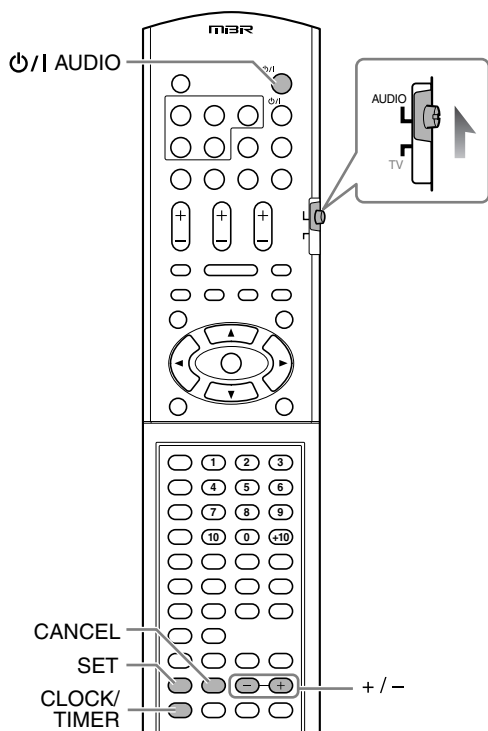
To erase the entire program, repeat the procedure.

To add steps in the program:

Repeat step 3.

Timer Operations

Remote control

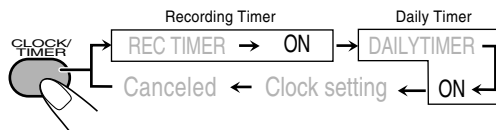


Setting the Timer

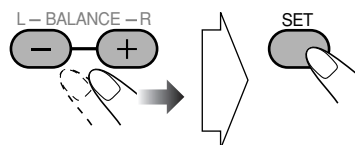
Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- You cannot activate Daily Timer and Recording Timer at a time. (Activating either timer deactivates the other timer.)
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

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



2 Make the timer setting as you want.



Repeat the procedure 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 Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM."
For Daily Timer: Select the playback source—"TUNER-FM," "TUNER-AM," "DISC," "TAPE-A," "TAPE-B" or "AUX IN."



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

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

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



How Daily Timer 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).

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

When the on-time comes

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

When the off-time comes

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

How Recording Timer actually works

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

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

When the on-time comes

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

When the off-time comes

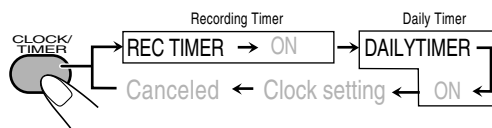
- The System stops recording, and turns off (standby).
- The timer setting remains in memory until you change it.

To turn off the Timer after the setting is done

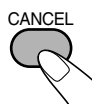
You can turn off the timer after it has been set.

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

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



- 2 Turn off the selected timer.**



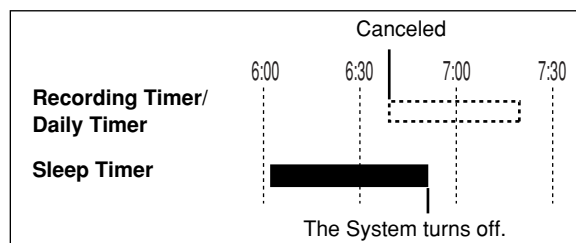
- The timer (🕒) indicator goes off.

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

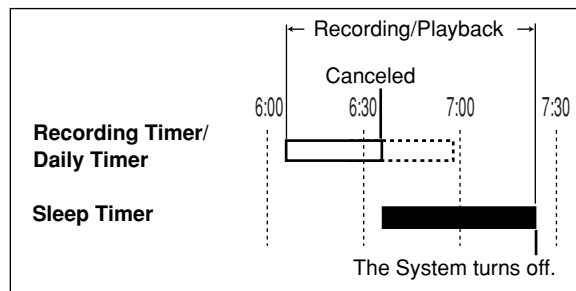
Timer Priority

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

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

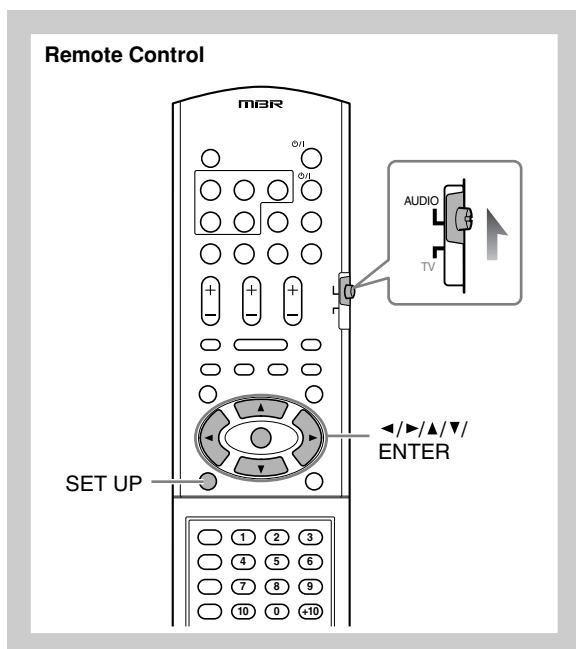


- In this case, Recording Timer/Daily Timer does not work.



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

Setup Menu Operations

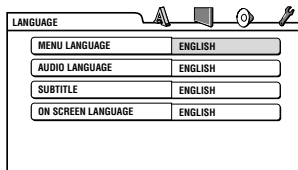


Initial settings

INFO

Some items in the menus cannot be changed during playback.

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.

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 43).
AUDIO LANGUAGE	You can select the initial audio language of DVD Video (see page 43).
SUBTITLE	You can select the initial subtitle language of DVD Video (see page 43).
ON SCREEN LANGUAGE	You can select "ENGLISH," "CHINESE," or "SPANISH" as the on-screen language.

PICTURE menu

Item	Contents
MONITOR TYPE 	You can select the monitor type to match your TV when you play back DVD Video discs recorded for wide-screen televisions. 16:9/16:9 MULTI (Wide television screen): For a wide-screen (16:9) TV. 4:3 LB/4:3 MULTI 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/4:3 MULTI 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. <ul style="list-style-type: none"> By selecting "MULTI" mode, the color system of the System changes automatically to match the color system of the loaded disc. For the color system setting, see page 14.
PICTURE SOURCE	You can obtain optimal picture quality by selecting the source type of the disc contents. AUTO: Normally, select this option. The System recognizes the picture type (film or video source) of the current disc according to the disc information. FILM: For a film source disc. VIDEO: For a video source disc.
SCREEN SAVER	You can set the screen saver function to ON or OFF . ON: The on-screen display becomes dark when no operation is done for about 5 minutes. OFF: To cancel the screen saver.
FILE TYPE	You can select a file type to play. AUDIO: To play MP3/WMA files. STILL PICTURE: To play JPEG files.


AUDIO menu

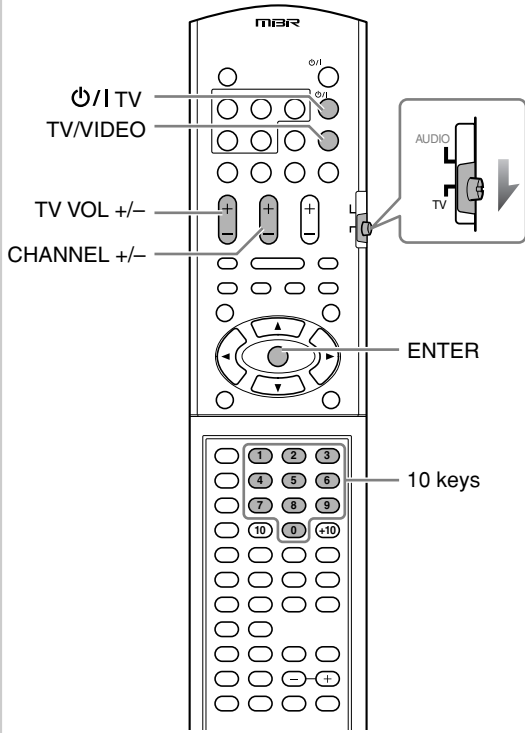
Item	Contents
DIGITAL AUDIO OUTPUT	Set this item correctly when using the OPTICAL DIGITAL OUTPUT terminal on the rear. PCM ONLY: When connecting to audio equipment which can decode only linear PCM signals. DOLBY DIGITAL/PCM: When connecting to a Dolby Digital decoder or an amplifier with a built-in Dolby Digital decoder. STREAM/PCM: When connecting to a DTS decoder or an amplifier with a built-in DTS decoder.
DOWN MIX	Set this item properly according to your digital audio connection to play sound of the surround multichannel audio on a DVD Video. <ul style="list-style-type: none"> 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 or middle volume. AUTO: You can enjoy powerful playback sound. ON: Select this if the sound level of DVD Video is lower than the one of TV program to make the sound at a lower volume clear.


OTHERS menu

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

Operating the TV

Remote control

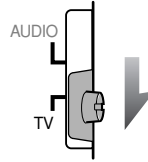


Manufacture's code	
Manufacture	Code number
JVC	01
Hitachi	10
Magnavox	02
Mitsubishi	03
Panasonic	04,11
Philips	15
RCA	05
Samsung	12
Sanyo	13, 14
Sharp	06
Sony	07
Toshiba	08
Zenith	09

Operating TV

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

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



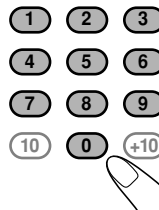
2 Press and hold until the following steps are complete.



3



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



5 Release Power/TV.

To operate the TV

To turn on or off the TV:	To select the input mode (either TV or VIDEO):	To adjust TV volume:
To select the TV channel:		
		or

Learning More about This System ● ● ●

Introduction (see pages 1 to 2)

Playable Disc Types:

• About audio format

- **Linear PCM:** Uncompressed digital audio, the same format used for CDs and most studio masters.
 - **Dolby Digital:** Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create 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.
- If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.

Daily Operations—Playback (see pages 7 to 11)

Listening to the Radio:

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

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- Some DVD Audios prohibit downmix. When you play back such a disc, “LR ONLY” appears on the display and the System plays back the left front and right front signals.
- When playing back a DVD Audio disc recorded in MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals are recognized as the linear PCM signals, however, no indicator lights up on the display.
- For MP3/WMA playback...
 - MP3/WMA discs require a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This System can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - It is recommended that you make each MP3/WMA file at a sampling rate of 44.1 kHz and at bit rate of 128 kbps. This System cannot play back files made at bit rate of less than 64 kbps.

Daily Operations—Sound&Other Adjustments

(see pages 12 to 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 Modes again.

Creating 3-dimensional Sound Field—3D Phonic:

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

Changing the Color System and Scanning Mode:

- If you play back an NTSC disc with the color system set to “PAL (PROG),” the disc will be reproduced using “PAL 60” format, however, if the TV does not support this format, the screen may roll over upward and downward rapidly.
- If you play back a PAL disc with the color system set to “NTSC (PROG),” 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.
- You cannot change the scanning mode to progressive in the following cases:
 - When your TV does not support the progressive video input.
 - When you have not connected your TV to the unit using a component video cord.
- When you play back an NTSC disc in progressive scanning mode, the System outputs the NTSC signal regardless of the color system settings.

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 18)

Selecting the Sound Track:

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

Playing Back Bonus Group:

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

Special Picture Playback:

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

Advanced Disc Operations (see pages 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).
 - For SVCD/VCD/CD loaded on the other tray than the current one, the System may prompt for the group number entry as well, however, these entries will be ignored during playback.
- You cannot use Program Play and Random Play for DVD-VR/JPEG discs.
- The programmed contents will remain until you erase it.
- While the PROGRAM indicator is on, you cannot change the disc to play. (DISC 1 – 5 on the remote control and ► on the main unit do not work.)

On-Screen Disc Operations (see pages 22 to 28)**Operations Using the On-screen Bar:**

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

Operations on the Control Screen:

- For DVD-VR playback...
 - **Original Program:** The System can play back the original picture in the recorded order.
 - **Play List:** The System can play back the play list edited by the recording equipment. The control screen for the play list appears only when the disc has the play list.
 - Resume is not available.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
- For JPEG files playback...
 - It is recommended that you record a file at 640 x 480 resolution. (If a file has been recorded at a resolution of more than 640 x 480, it will take a long time to be shown.)
 - This System can play only baseline JPEG files*. Progressive JPEG files* or lossless JPEG files* cannot be played.
 - * Baseline JPEG format: Used for digital cameras, web, etc.
 - Progressive JPEG format: Used for web.
 - Lossless JPEG format: An old type and rarely used now.

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

Recording Operations (see pages 29 to 30)**General:**

- You cannot change the source during recording.
- There is leader tape which cannot be recorded onto at the start and the end of cassette tapes. Thus, when recording discs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If no cassette is inserted or a protected tape has been inserted, “NO REC” appears on the display.
- If you select the Surround Mode (DANCE, HALL, STADIUM—see page 13), you can also record the surround elements. (Other sound adjustments do not affect the recording level.)

Recording on a Tape:

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

Synchronized Disc Recording:

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

Enjoying Karaoke (see pages 31 to 33)

Reducing the Lead Vocal—Vocal Masking:

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

Scoring Your Karaoke Skill:

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

Reserving Karaoke Songs—Karaoke Program Play:

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

Timer Operations (see pages 34 to 35)

Setting the Timer:

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

Setup Menu Operations (see pages 36 to 37)

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 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

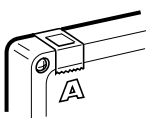
- Use a cotton swab moistened with alcohol to clean the heads, capstans, and pinch rollers.
- Use a head demagnetizer (available at electronics and audio shops) to demagnetize the heads (when the System turned off).



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.

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.

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

⇒ Incorrect color system is selected (see page 14).

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

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

Radio Operations:

Hard to listen to broadcasts because of noise.

⇒ Antennas connections are incorrect or loose.

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

⇒ The FM antenna is not properly extended and positioned.

Disc Operations:

The disc does not play.

⇒ You have inserted a disc whose Region Code is not “3.” (“REGION ERR” appears on the display.)

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

ID3 Tag on an MP3 disc cannot be shown.

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

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

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

MP3/WMA or JPEG files are not played back.

⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the "FILE TYPE" setting (see page 36).

⇒ You have changed the "FILE TYPE" setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc playback sounds strange.

⇒ Cancel Key Control (see page 32).

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).

⇒ The Program Play is in use. Cancel the Program Play (see page 20).

Tape Operations:**The cassette holder cannot be opened.**

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

Recording Operations:**Impossible to record.**

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

⇒ The Karaoke scoring function is in use. Cancel the scoring function (see page 32).

Karaoke Operations:**Cannot activate the scoring function.**

⇒ DVD Audio or DVD-VR is playing.

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

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

⇒ The playback time with the scoring function is too short. It is recommended to sing for more than one and a half minutes. (If playback time is less than one minute, the scoring is canceled.)

⇒ No input from the microphone or the input level (MIC LEVEL) is too low.

⇒ You have sung in too low voice.

Timer Operations:**Daily Timer or Recording Timer does not work.**

⇒ The System has been turned on when the on-time comes. Timer starts working only when the System is turned off.

Language Code List

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

Specifications

Amplifier section

Output Power:

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

Digital output:

OPTICAL DIGITAL OUTPUT:
-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):

(Y) 1 V(p-p)/75 Ω

(PB/PR) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω – 16 Ω (Main speakers)

16 Ω – 32 Ω (Surround 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/DVD Audio/CD/VCD/SVCD

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

DVD-R (recorded in DVD Video format)

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

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

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: 195 W (at operation)

20 W (on standby)

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

Mass (approx.): 10.9 kg

Supplied Accessories

See page 3.

Speakers

Main Speakers

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

Speaker systems: Woofer: 18 cm cone x 1
Mid: 5 cm cone x 1
Tweeter: 2 cm dome x 1

Power handling capacity: 150 W

Impedance: 4 Ω

Frequency range: 37 Hz – 31 000 Hz

Sound pressure level: 85 dB/W•m

Dimensions (W/H/D) (approx.): 204 mm x 460 mm x 271 mm

Mass (approx.): 4.6 kg each

Surround Speakers

Speaker systems: 8 cm cone x 1

Power handling capacity: 40 W

Impedance: 16 Ω

Dimensions (W/H/D) (approx.): 105 mm x 230 mm x 125 mm

Mass (approx.): 0.7 kg each

Design and specifications are subject to change without notice.

- 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.
- 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

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

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

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

Parts Index

Remote control

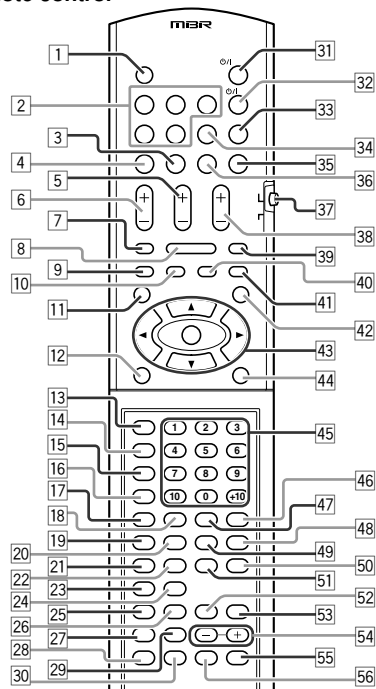
Button	Page	Button	Page
AUDIO	31	KARAOKE SCORING	1 32
	32	KEY #	50 32
	8	KEY \flat	51 32
	9 41	L/R BALANCE	54 12
	7 39	MIC MIX	23 31, 33
	40	MENU/PL	42 10, 26
	43	ON SCREEN	44 23 - 26
	54	PAGE	18 17
10 keys	45	PLAY MODE	49 19, 20
3D PHONIC	53	REPEAT	20 21, 28
ACTIVE BASS EX	26	RHYTHM AX	25 12
ANGLE	16	RESERVE	24 33
AUDIO	14	RETURN	46 10
AUDIO/TV selector	37	REVERSE MODE	48 11
AUDIO VOL +/-	38	SCAN MODE	47 14
AUX	34	SET	27 8, 12, 13, 15, 33, 34, 35
CANCEL	29	SET UP	12 36
CHANNEL +/-	5	SETTING	55 12, 33
CLOCK/TIMER	28	SLEEP	30 15
DIMMER	56	SOUND MODE	52 13
DISC 1-5	2	SUB TITLE	15 17
DVD LEVEL	19	TAPE-A \blacktriangle	3 7, 11
DVD/CD \blacktriangleright	4	TAPE-B \blacktriangleleft	36 7, 11
ECHO	22	TOP MENU/PG	11 10, 26
FM MODE	40	TV VOL +/-	6 38
FM/AM	35	TV/VIDEO	33 38
GLANCE BACK \curvearrowright	10	V.MASKING	21 32
GROUP/TITLE	13	VFP	47 14
		ZOOM	17 18, 28

Main unit

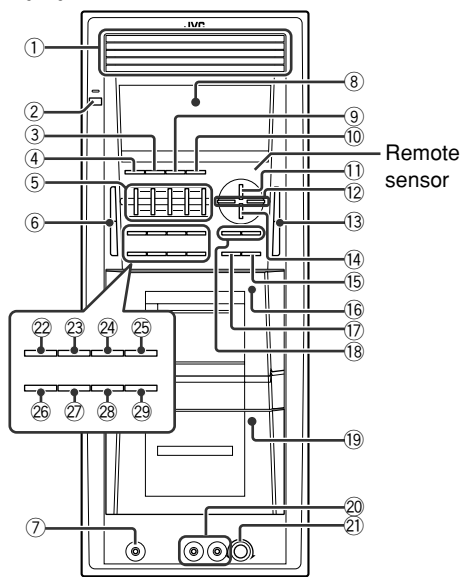
Button	Page	Button	Page
	2	DISC REC START	26 30
Display	8	DUBBING	28 30
	14	DVD/CD	10 7, 9
	18	DVD LEVEL	23 14
	12	FM/AM	9 7, 8
	11	KARAOKE SCORING	15 32
ACTIVE BASS EX. +/-	6	MIC 1 / MIC 2	20 31
AUX	25	MIC LEVEL	21 31
DEMO	24	PHONES	7 7
Disc trays	1	PRESET +/-	12 9
DISC 1-5 \blacktriangle / \blacktriangleright	5		

Button	Page	Button	Page
PUSH-OPEN \blacktriangle	16 19	SOUND MODE	22 13
REC START/STOP	27	TAPE-A	4 7, 11, 30
		TAPE-B	3 7, 11, 29, 30
REVERSE MODE	29	TUNING	18 8
		VOLUME +/-	13 7, 12, 31
RHYTHM AX	17		

Remote control



Main unit



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

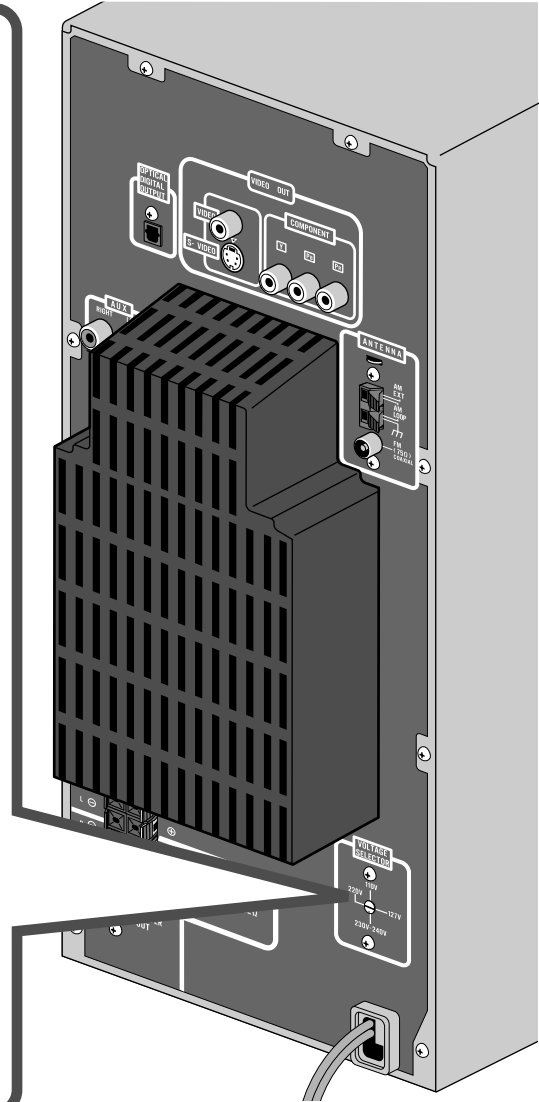
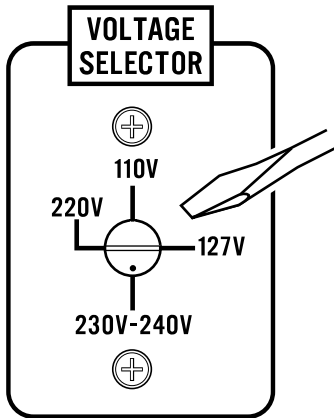
主 (AC) 电源线路说明 (不适用于香港、欧洲、美国、加拿大及英国型号)

CAUTION for mains (AC) line

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

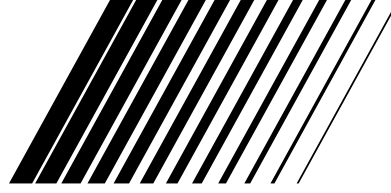
有关主 (AC) 电源线路的重要事项

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



JVC

JVC



English

عربي

فارسی

COMPACT COMPONENT SYSTEM

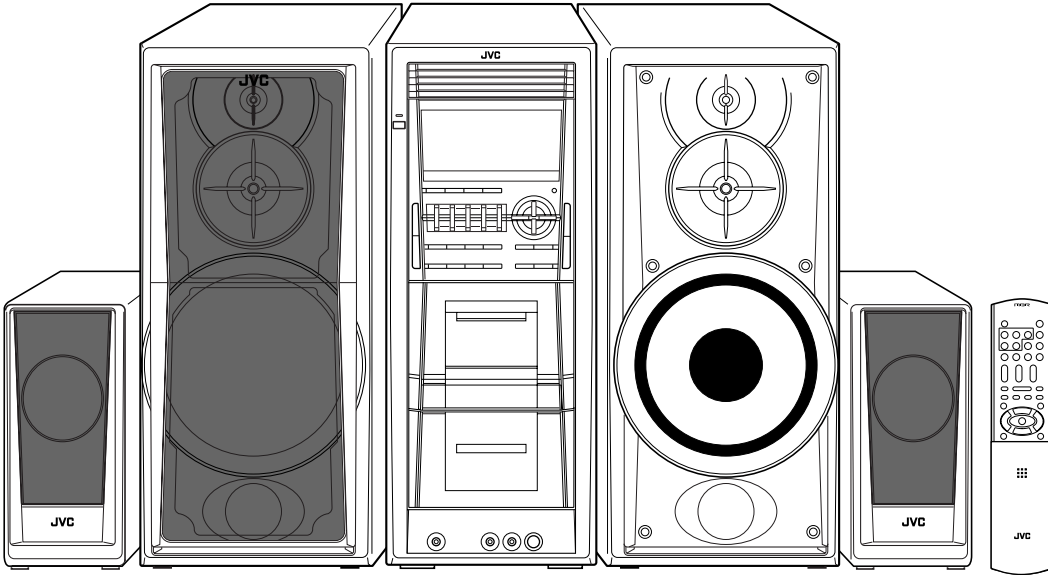
نظام اجهزة صوتية مركبة
سیستم دستگاه کامپکت

DX-T5

—Consists of CA-DXT5, SP-XT5, and SP-XST5

يتألف هذا النظام من الاجهزة **SP-XST5**، **SP-XT5**، **CA-DXT5**

متشکل از **SP-XST5** و **SP-XT5**، **CA-DXT5** می باشد



ACTIVE BASS EXTENSION

INSTRUCTIONS

کتاب تعليمات التشغيل
دستورالعمل ها

GVT0146-002A
[UG, UX]

Warnings, Cautions and Others

تحذيرات ، تنبيهات و اشياء اخرى

هشدارها، احتياطاتها و موارد ديگر

Caution—⏻ button!

Disconnect the mains plug to shut the power off completely. The ⏻ button in any position does not disconnect the mains line. The power can be remote controlled.

تحذير — ⏻ الطاقة!

انزع قابس الطاقة الكهربائية من اجل فصل الطاقة الكهربائية عن الجهاز كليا. لا يفصل مفتاح الطاقة الكهربائية عندما يكون باي وضع ⏻ الطاقة الكهربائية عن الجهاز. يمكن التحكم عن بعد بالطاقة الكهربائية.

احتياط — دکمه ⏻

برای قطع برق بطور کامل دوشاخه را از برق خارج کنید. دکمه ⏻ در هر وضعیتی برق اصلی دستگاه را قطع نمی کند. برق دستگاه را نمی توان از راه دور کنترل کرد.

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.

تحذير

لتجنب خطر الحريق، الصدمات الكهربائية، الخ:
 ۱. لا تفك البراغي او الاغطية او الخزانة.
 ۲. لا تعرض هذا الجهاز للمطر او للرطوبة.

احتياط

برای کاهش خطر شوک الکتریکی، آتش سوزی و غیره:
 ۱. پیچها، جلدها یا جعبه را باز نکنید.
 ۲. این دستگاه را در معرض باران یا رطوبت قرار ندهید.

CAUTION

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

تحذير

- لا تغلق فتحات التهوية او الثقوب. (في حالة اغلاق فتحات التهوية او الثقوب بواسطة ورق الصحف او القماش، الخ، فانه يمكن ان لا تخرج الحرارة للخارج.)
- لا تضع اية مصادر حرارية مكشوفة، مثل الشموع المضيئة، على الجهاز.
- عند اتلاف البطاريات، يجب اخذ مشاكل البيئية بعين الاعتبار ويجب التقيد بالانظمة المحلية او القوانين التي تحكم اتلاف هذه البطاريات بصورة دقيقة.
- لا تعرض هذا الجهاز للمطر، او الرطوبة، او تنقيط الماء، او رشق الماء ولا تضع اي اوعية مملوءة بالماء او السوائل مثل مزهریات الورد على هذا الجهاز.

احتياط

- محفظه ها و سوراخهای تهویه را مسدود نکنید. (اگر محفظه ها یا سوراخهای تهویه با ورق روزنامه یا پارچه و غیره مسدود شوند، حرارت ممکن است نتواند خارج گردد.)
- هیچ گونه شعله بدون حفاظی مانند شمعهای روشن را روی دستگاه قرار ندهید.
- وقتی که باتریها را دور می اندازید، مسائل زیست محیطی باید در نظر گرفته شوند و از قوانین و مقررات محلی در مورد این باتریها باید کاملاً پیروی کرد.
- این دستگاه را در معرض باران، مایعات ریخته شده و مایعاتی که تراوش می شوند قرار ندهید و اشیائی که با مایعات پر شده اند مانند گلدان را روی دستگاه نگذارید.



28 kg / 62 lbs.

۲۸ کغ
۲۸ کیلوگرم

CAUTION!

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

تحذير!

لتجنب أي أذى شخصي أو إسقاط الوحدة سهواً، اطلب من شخصين رفع الرزم وحمل الوحدة ومن ثم نصبها.

احتياط!

برای اجتناب از بروز آسیب شخصی یا انداختن تصادفی دستگاه، بسته بندی دستگاه را با کمک دو نفر باز کنید، حمل کنید و دستگاه را نصب کنید.

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.

تحذير: التهوية الصحيحة

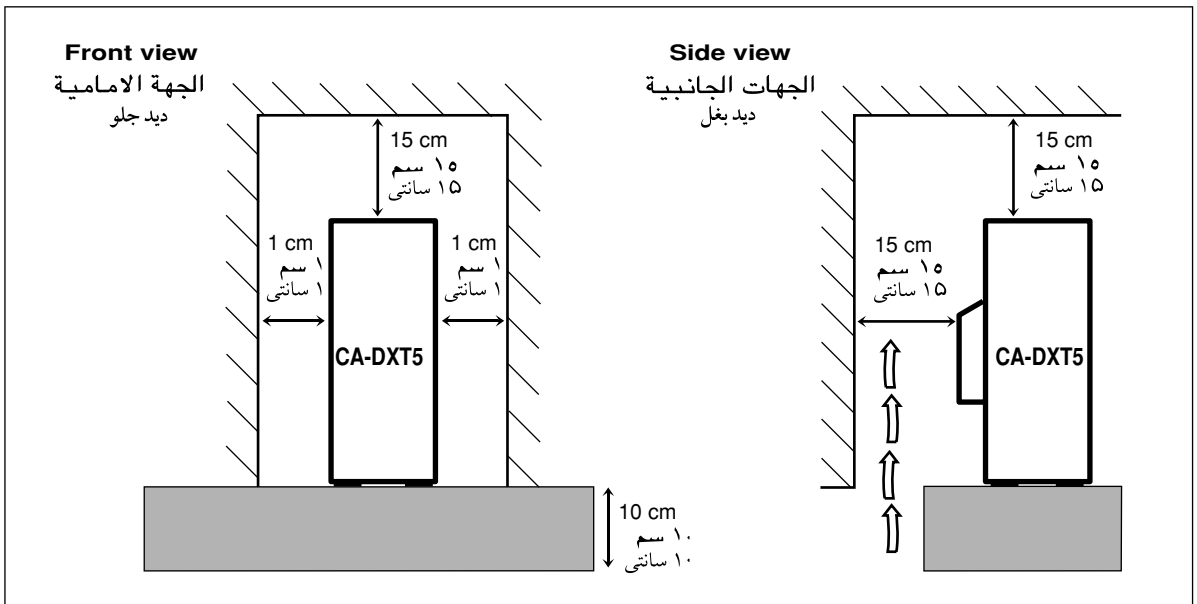
لتجنب حصول صدمات كهربائية و أخطار الحريق ومنع حصول تلف و ضرر للجهاز، ركب الجهاز كما يلي:
١. الجهة الامامية: يجب ان لا يكون هنالك عوائق ويجب ان تكون المنطقة مفتوحة امام الجهاز.
٢. الجهات الجانبية / العلوية / الخلفية: يجب عدم وضع عوائق في المناطق المبينة بالابعاد في الاسفل.
٣. القاعدة: يجب وضع الجهاز على سطح منبسط. اترك مسافة كافية من اجل التهوية بواسطة وضع الجهاز على حامل بارتفاع ١٠ سم او اكثر.

احتياطات: تهويه مناسب

برای اجتناب از شوک الکتریکی و آتش سوزی و جلوگیری از بروز خسارت دستگاه را به روش زیر قرار دهید:
١. جلو: بدون مانع و فضای باز.

٢. صرفین/ بالا/ پشت: هیچ مانعی نباید در مناطقی با فواصل ناپیش داده شده قرار داده شود.

٣. ته: دستگاه را روی سطح تراز قرار دهید. مسیر هوای مناسبی را برای تهویه با گذردن دستگاه روی یک پایه ١٠ سانتی متری یا بیشتر تعبیه کنید.



IMPORTANT FOR LASER PRODUCTS

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

مهم للمنتجات الليزرية

١. صنف ١ منتج ليزري
٢. تحذير: لا تفتح الغطاء العلوي لا يوجد اجزاء داخل الجهاز يستطيع المستخدم صيانتها؛ اترك جميع اعمال الصيانة مهما كانت للاشخاص المؤهلين والمختصين بالصيانة.
٣. تحذير: هناك اشعة ليزرية مرئية وغير مرئية عند الفتح والعبث بالاجزاء الداخلية او تعطيل اقفال الامان. تجنّب التعرض المباشر للاشعة.
٤. ملصق تحذير المنتج: ملصق التحذير CAUTION LABEL، موجود داخل الجهاز.

برای محصولات لیزری مهم است

١. محصول لیزر درجه ١
٢. احتیاط: پوشش بالایی را باز نکنید، قطعه ای که کاربر بتواند آن را تعمیر کنید در داخل وجود ندارد؛ کلیه تعمیرات را به متخصصین تعمیر مجرب محول کنید.
٣. احتیاط: هنگامی که در حالت باز است و قفل از کار می افتد و یا خنثی می شود، اشعه نامرئی لیزر ساطع می شود. از تماس مستقیم با اشعه اجتناب کنید.
٤. تولید مجدد برچسب: برچسب احتیاط، بیرون دستگاه قرار گرفته است.

CAUTION : Visible and invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)	ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling. (d)	VARNING : Synlig och osynlig laserstrålning när den öppnas och spärren är urkopplad. Betrakta ej strålen. (s)	VARO : Avtattensa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymättömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi. (f)
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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.
–A cooling fan is inside the unit to prevent heat buildup.



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

Others

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



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

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

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

Contents

Connections	3
Display Indication	6
Daily Operations—Playback	7
Canceling the Demonstration	7
Listening to the Radio	8
Playing Back a Disc	9
Playing Back a Tape.....	11
Daily Operations—Sound&Other Adjustments	12
Adjusting the Volume	12
Reinforcing the Bass Sound	12
Adjusting the Output Balance	12
Selecting the Sound Modes	13
Creating Your Own Sound Modes—User Mode	13
Creating 3-dimensional Sound Field—3D Phonic.....	14
Presetting Automatic DVD Video Sound Increase Level.....	14
Changing the Color System and Scanning Mode.....	14
Changing the Picture Tone.....	14
Changing the Display Brightness	15
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
Reviewing the Playback Quickly	17
Selecting Browsable Still Pictures	17
Playing Back Bonus Group	18
Special Picture Playback	18
Advanced Disc Operations	19
Programming the Playing Order—Program Play.....	19
Playing at Random—Random Play.....	20
Playing Repeatedly—Repeat Play	21
Prohibiting Disc Ejection—Child Lock	21
On-Screen Disc Operations	22
On-screen Bar Information.....	22
Operations Using the On-screen Bar.....	23
Operations on the Control Screen	26
Recording Operations	29
Enjoying Karaoke	31
Singing Along (Karaoke)	31
Reducing the Lead Vocal—Vocal Masking.....	32
Scoring Your Karaoke Skill	32
Reserving Karaoke Songs—Karaoke Program Play	33
Timer Operations	34
Setup Menu Operations	36
Operating the TV	38
Additional Information	39
Troubleshooting	42
Specifications	44
Parts Index	46

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

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

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

Caution for DualDisc playback:

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

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 14.

Note on Region Code

This System can play back only DVD Videos whose Region Code numbers include “2.”

EX.:



Audio formats

The System can play back the following digital audio formats.

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

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

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

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

- Turn on the TV and select an appropriate input mode on the TV to view the pictures or on-screen displays.
- For disc playback, you can change the initial setting to your preference. See “Setup Menu Operations” on page 36.

If “” appears on the TV screen when you press a button, the disc cannot accept the operation you have tried to do.

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 main unit.

Connections

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

Supplied accessories

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

If any item is missing, consult your dealer immediately.

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

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

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

3 From the analog audio output of auxiliary equipment (VCR, etc.)
See page 4.

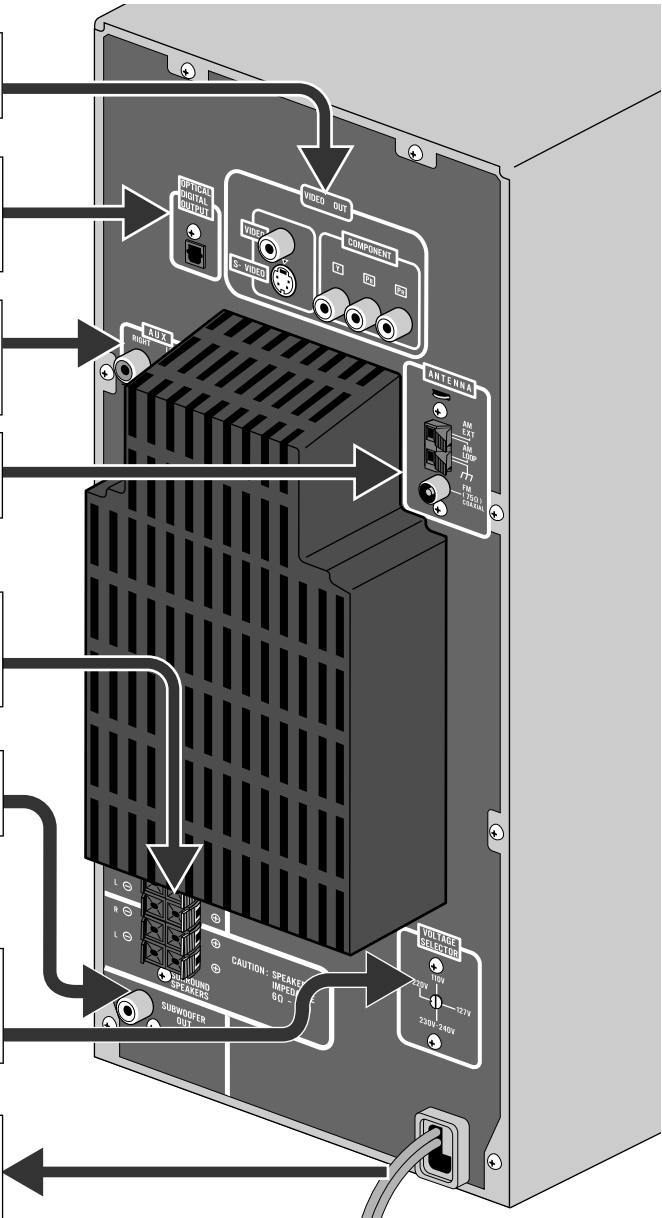
4 From AM/FM antenna
See page 4.

5 From the main front/matrix surround speakers
See page 5.

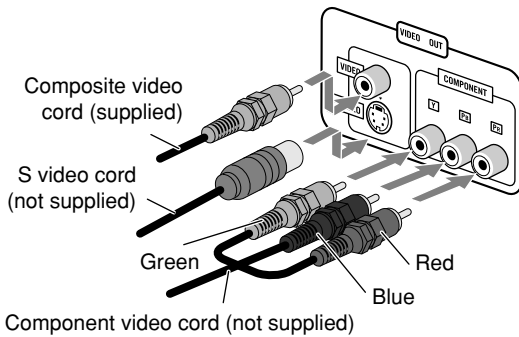
6 From the powered subwoofer
See page 5.

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

8 To a wall outlet
Plug the AC power cord only after all connections are complete.

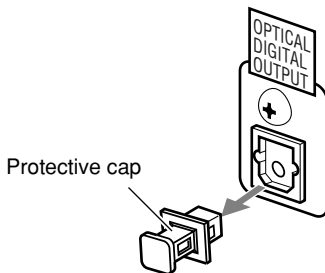


1 TV/monitor



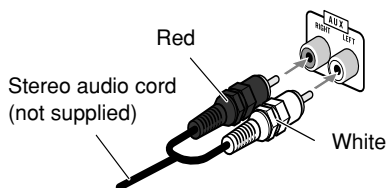
- To select progressive scanning mode (see page 14), use COMPONENT jacks.
- Connect the VIDEO jack, S-VIDEO jack, or COMPONENT jacks whichever you want to use.

2 Digital audio component



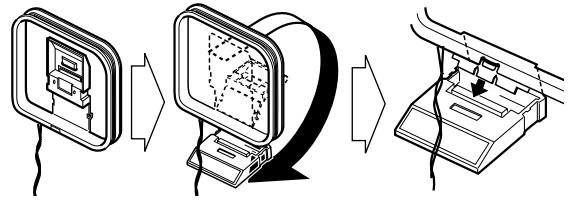
- Set "DIGITAL AUDIO OUTPUT" in the "AUDIO" menu correctly according to the connected digital audio equipment (see page 37). If setting is incorrect, loud noise may be generated causing damage to the speakers.

3 Auxiliary equipment

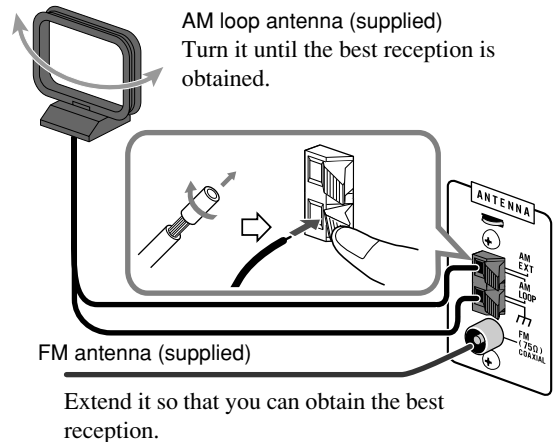


4 AM/FM antenna

To assemble the AM loop antenna



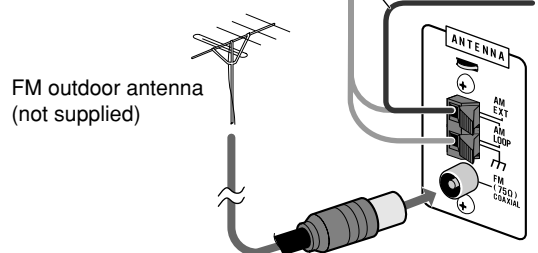
To connect AM/FM antenna



For better AM/FM reception

AM loop antenna (supplied)
Keep it connected.

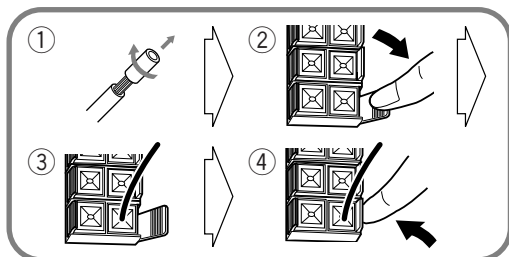
Vinyl-covered wire (not supplied)
Extend it horizontally.



- 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.

5 Front main speakers and matrix surround speakers

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



From right front main speaker

CAUTION:

IMPEDANCE
4Ω - 16Ω

MAIN
SPEAKERS

From left front
main speaker

R ⊖

L ⊖

R ⊖

L ⊖

**CAUTION: SPEAKER
IMPEDANCE
16Ω - 32Ω**

SURROUND
SPEAKERS

From right matrix
surround speaker

From left matrix
surround speaker

- Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the System.
- The front main speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, it may cause color distortions. So, pay attention to the following when installing the speakers.

- When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers.

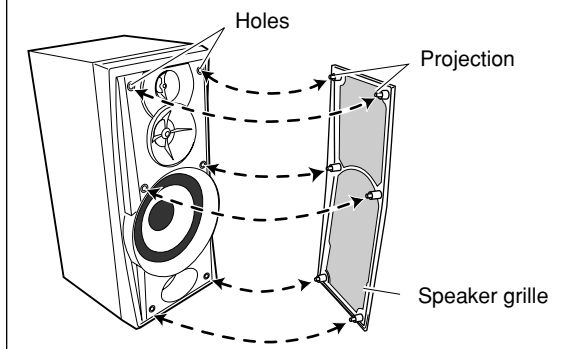
Then wait at least 30 minutes before turning on the TV's main power switch again.

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



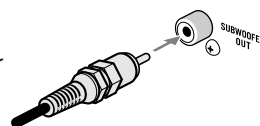
- DO NOT connect more than one speaker to each terminal.
- DO NOT push or pull the speakers as this will damage the foot spacers at the bottom of the speakers.

To remove the speaker grilles of the main speakers

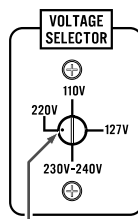


6 Powered subwoofer

From the powered subwoofer
(not supplied)



7 To adjust the voltage selector



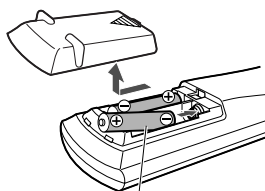
Voltage mark

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.)



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

Preparing the remote control



R6(SUM-3)/AA(15F)

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

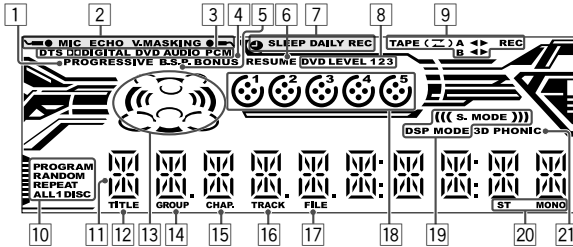
- Dispose of batteries in the proper manner, according to federal, state, and local regulations.



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

Display Indication

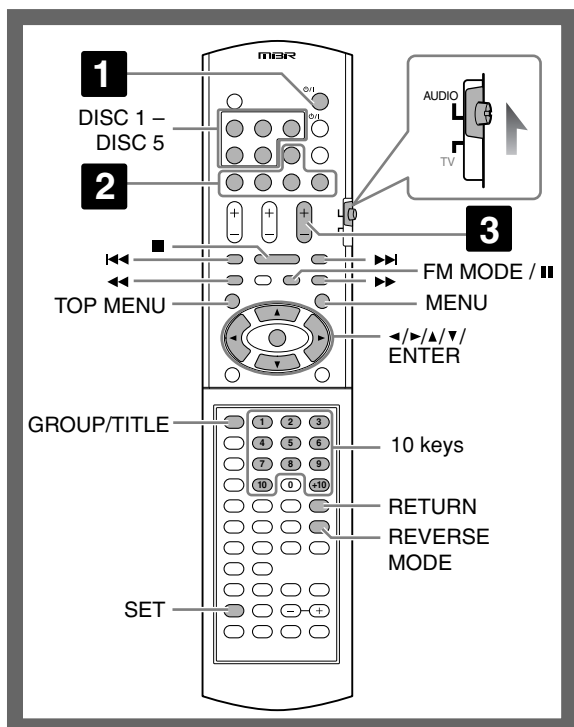
The indications on the display teach you a lot of things while you are operating the System, Before operating the System, be familiar with when and how the indicator illuminates on the display.



- 1 PROGRESSIVE indicator
 - Lights when the progressive scanning mode is selected.
- 2 Karaoke operation indicators (see pages 31 to 33)
 - : lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - MIC: lights when the Mic Mixing Mode is activated; flashes when scoring function is in use.
 - ECHO: lights when the echo effect is activated.
 - V.MASKING: lights when the Vocal Masking Mode is activated.
- 3 Source signal indicators
 - DTS: lights when a source signal is DTS.
 - DIGITAL: lights when a source signal is Dolby Digital.
 - DVD: lights when DVD Video is detected.
 - DVD AUDIO: lights when DVD Audio is detected.
 - PCM: lights when a source signal is linear PCM.
- 4 BONUS indicator
 - Lights when DVD Audio with bonus group is detected (see page 18).
- 5 B.S.P. indicator
 - Lights when browsable still pictures on DVD Audio are available (see page 17).
- 6 RESUME indicator
 - Lights when Resume is activated (see page 37).
- 7 Timer indicators
 - : lights when Daily Timer or Recording Timer stands by or is working or being set.
 - SLEEP: lights when the Sleep Timer is activated.
 - DAILY: lights when the Daily Timer stands by; flashes while working or being set.
 - REC: lights when the Recording Timer stands by; flashes while working or being set.
- 8 DVD LEVEL 1/2/3 indicators
 - Lights to indicate the DVD Video increase level.
- 9 Tape operation indicators
 - TAPE: lights when a tape is loaded in either deck A or B.
 - (Reverse Mode): lights to indicate the current Reverse Mode (see page 11).
 - A: lights when a tape is in the deck A.
 - B: lights when a tape is 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.
 - REC: lights while recording.
- 10 Disc operation indicators
 - PROGRAM: lights when Program Play is activated.
 - RANDOM: lights when Random Play is activated.
 - REPEAT: lights when Repeat Play is activated.
 - ALL DISC: lights when All Disc Repeat is activated.
 - 1 DISC: lights when One Disc Repeat is activated.
 - 1: lights when One Track/Chapter/Step Repeat is activated.
- 11 Main display
- 12 TITLE indicator
 - Lights to indicate the title number for DVD Video.
- 13 Audio signal indicators
 - Lights to indicate the incoming audio channel signals.
- 14 GROUP indicator
 - Lights to indicate the group number.
- 15 CHAP. indicator
 - Lights to indicate the chapter number.
- 16 TRACK indicator
 - Lights to indicate the track number.
- 17 FILE indicator
 - Lights to indicate the file number.
- 18 Disc indicators
 - 1 – 5: lights to indicate the current disc tray.
 - : lights when a disc is detected on the disc tray; rotates during playback or paused.
- 19 Sound Mode indicators (see page 13)
 - S.MODE: lights when one of the Sound Modes (Surround/SEA/User Modes) is activated (for Surround mode, also lights).
 - DSP MODE: lights when one of the Surround Modes is activated.
- 20 FM reception indicators
 - ST (stereo): lights while an FM stereo station with sufficient signal strength is tuned in.
 - MONO: lights while receiving an FM stereo station in monaural.
- 21 3D PHONIC indicator
 - Lights when 3D Phonic is activated (see page 14).

Daily Operations—Playback

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



1 Turn on the power.

The STANDBY lamp on the main unit goes off.

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

2 Select the source.

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

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

3 Adjust the volume.

4 Operate the target source as explained later.

To turn off (stand by) the system

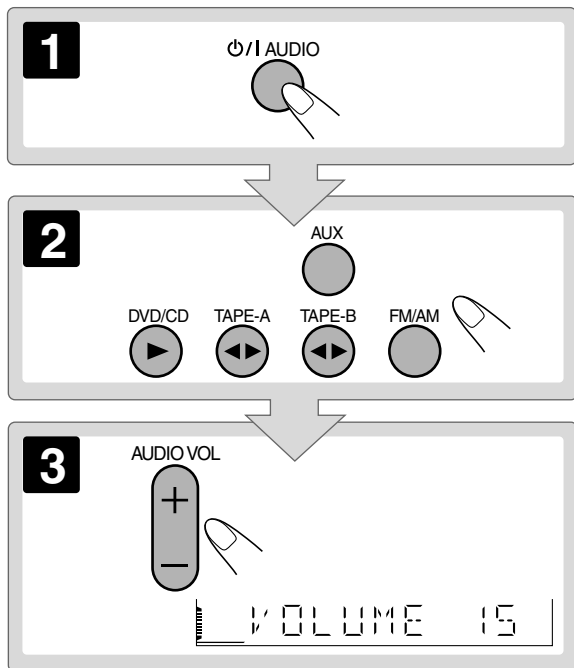
- O/I AUDIO
- The STANDBY lamp on the main unit lights in red.
- A small amount of power is always consumed even while on standby.

For private listening

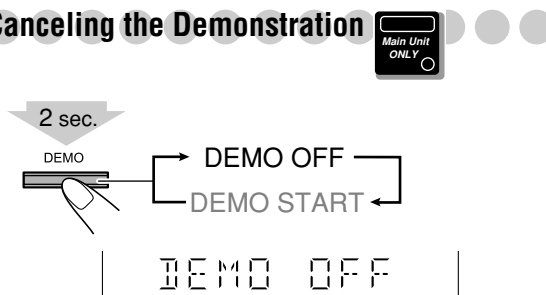
Connect a pair of headphones to the PHONES jack on the main unit. The sound will no longer come out of the speakers. **Be sure to turn down the volume before connecting or putting the headphones.**

- Disconnecting the headphones will activate the speakers again.

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



Canceling the Demonstration



To start the demonstration, select DEMO START.

Listening to the Radio

To select the AM tuner interval spacing



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

1 Select “AM,” then turn off (stand by) the System.



2 Select the AM tuner interval spacing.

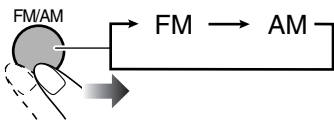
To select 9 kHz:

(holding then...)

To select 10 kHz:

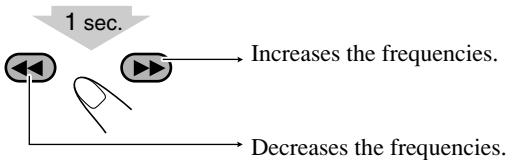
(holding then...)

To select the band (FM/AM)



To tune in to a station

While FM or AM is selected...



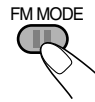
Frequency starts changing on the display.

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.

- To cancel the operation during process, press CANCEL.

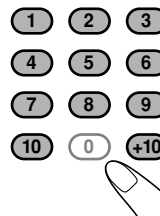
1 Tune in to a station you want to preset.

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

2 Start presetting.



3 Select a preset number.



Examples:

To select preset number 5, press 5.

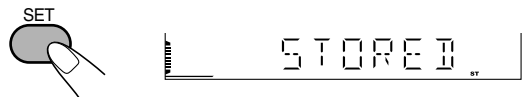
To select preset number 15, press +10, then 5.

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

- You can also use +/- buttons.

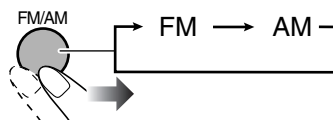


4 Store the station.

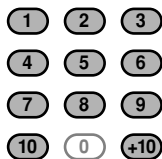


To tune in to a preset station

1 Select the band (FM or AM).



2 Select a preset number.



Examples:

To select preset number 5, press 5.

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

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

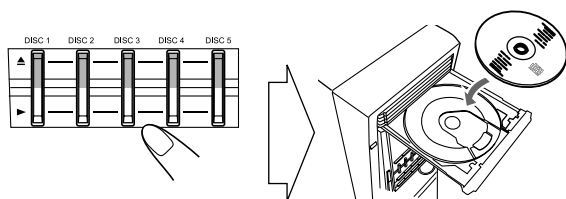
- You can also use buttons on the remote control or PRESET +/- buttons on the main unit.

Playing Back a Disc

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

- DVD Video comprises of “Titles” which includes “Chapters,” DVD Audio/MP3/WMA comprise of “Groups” which includes “Tracks,” JPEG comprises of “Groups” which includes “Files,” and CD/SVCD/VCD comprise of only “Tracks.”
- For JPEG playback, see page 27.

To insert discs



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

To close the disc tray, press the same again.

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

To start:	To pause:	To stop:
<p>Playback of the current disc starts.</p>	<p>To release it, press DVD/CD .</p>	

While playing DVD/SVCD/VCD/MP3: This System can store the stop point, and when you start playback again by pressing DVD/CD , it starts from the position where you have stopped—Resume Play. (RESUME indicator lights up when you stop playback.)

To stop completely while Resume is activated, press twice. (To cancel Resume, see “RESUME” on page 37.)

On-screen guide icons

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

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

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

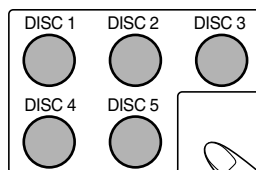
Appears at the beginning of a scene containing multi-subtitle languages.

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



- To deactivate the on-screen guide icons, see “ON SCREEN GUIDE” on page 37.

To select a disc

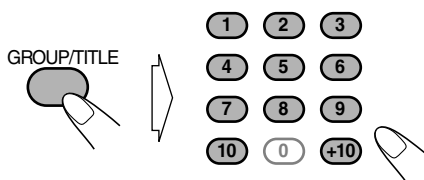


Playback starts.

To select a title/group

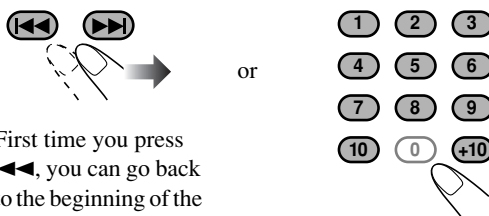


While playing a disc...



To select a chapter/track

While playing a disc...



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

To locate a particular portion

While playing a disc except MP3/WMA...



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

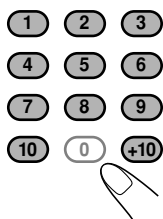
To return to normal playback, press DVD/CD ►.

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.

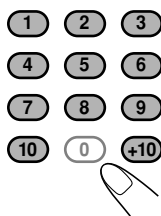
To select number 15, press +10, then 5.

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

■ For SVCD/VCD with PBC

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

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



Examples:

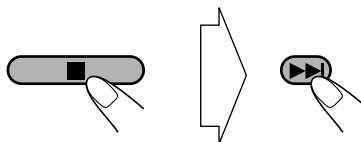
To select number 5, press 5.

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

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

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

To cancel PBC



You can also cancel PBC by pressing the 10 keys to start playback when disc menu is not shown on the TV screen.

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

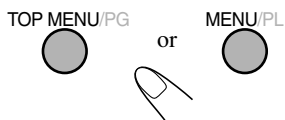
To play back by using the disc menu



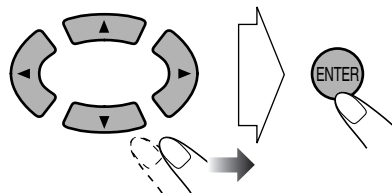
You can operate the disc play using the disc menu.

■ For DVD Video/DVD Audio

1 Show the disc menu.



2 Select an item on the disc menu.



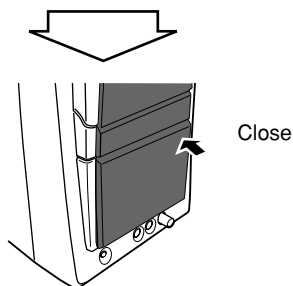
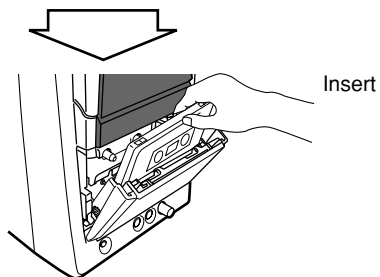
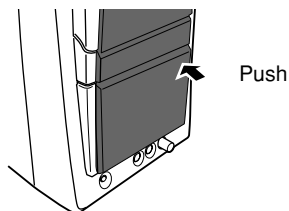
- On some discs, you can also select items by entering the number using the 10 keys.

Playing Back a Tape

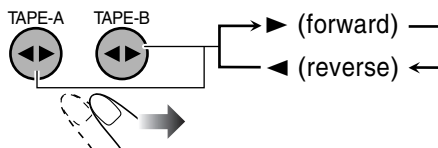
To insert a tape

You can play back type I tapes.

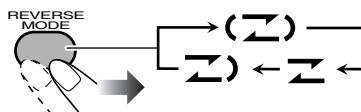
- The use of C-120 or longer tape is not recommended.



To change the tape running direction



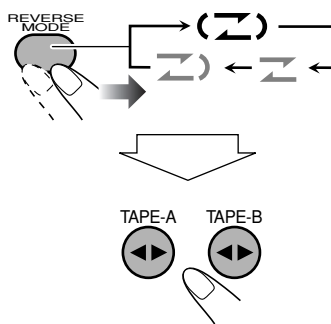
To reverse the tape automatically



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

To playback the both decks A and B continuously —Relay Play

When the cassettes are set in the both decks...

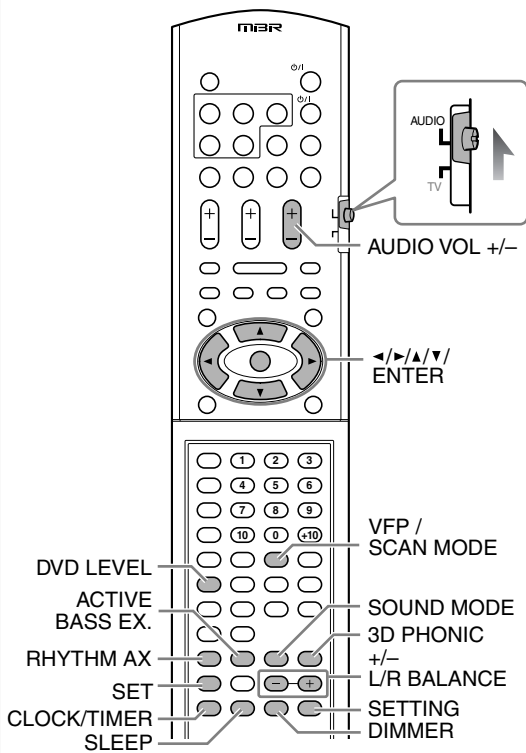


You can start playback of either deck A or B.

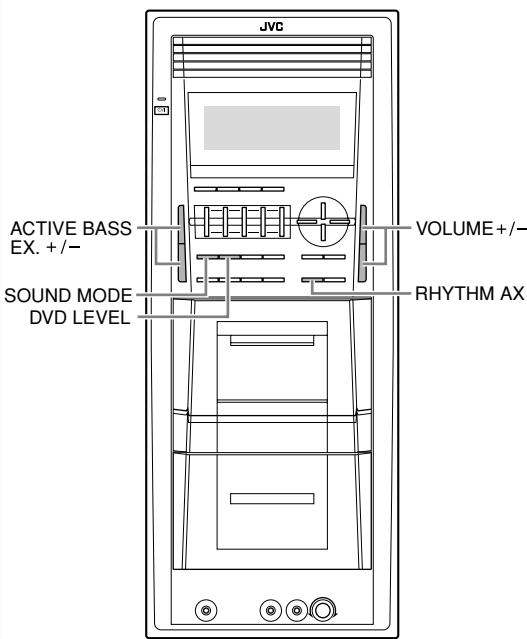
To start:	To stop:
<p>TAPE-A TAPE-B</p>	
To rewind tape:	

Daily Operations—Sound&Other Adjustments

Remote Control

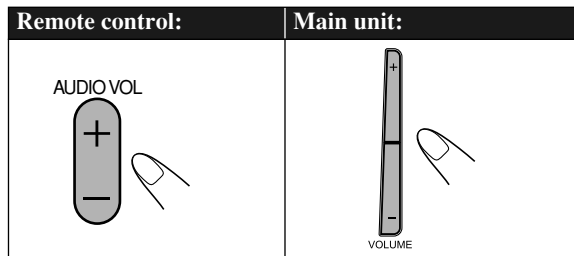


Main unit



Adjusting the Volume

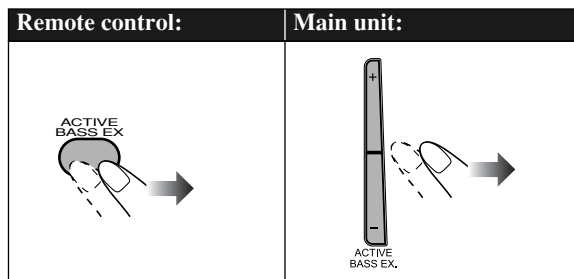
The volume level can be adjusted in 32 steps (VOLUME MIN, VOLUME 1 – VOLUME 30, and VOLUME MAX).



Reinforcing the Bass Sound

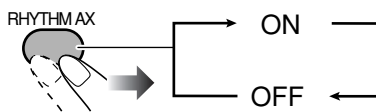
To adjust the bass level gradually—ACTIVE BASS EX.

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



To emphasize rhythmical feeling—RHYTHM AX

This function emphasizes bass attack feeling.

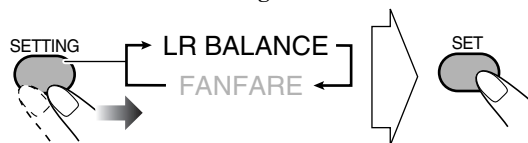


Adjusting the Output Balance

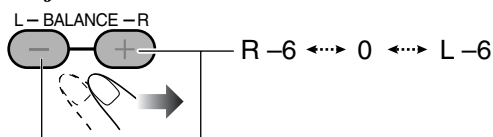


You can adjust the speaker output balance.

1 Enter the balance setting mode.

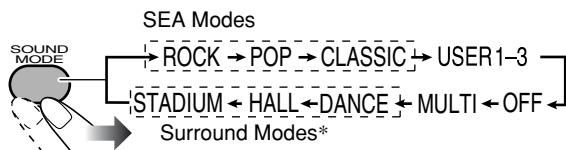


2 Adjust the balance.



Selecting the Sound Modes

You can select one of the preset Sound Modes.



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

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

To cancel the Sound Mode, select "OFF."

Creating Your Own Sound Modes—User Mode



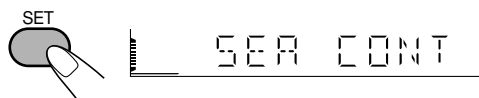
INFO

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

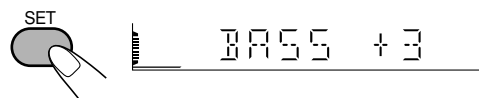
- If you want to add surround elements into your Sound Mode, select one of the Surround Modes to adjust.

While the Sound Mode name is shown on the display...

1 Enter the SEA Control Mode.

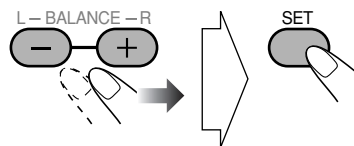


2



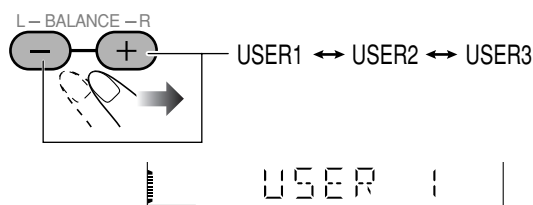
3 Adjust the SEA pattern.

- ① Adjust BASS.
- ② Adjust TREBLE.

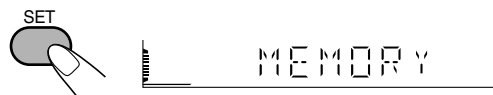


- You can adjust the bass and treble level from -5 to +5.

4 Select one of the User Modes.



5 Store the setting.

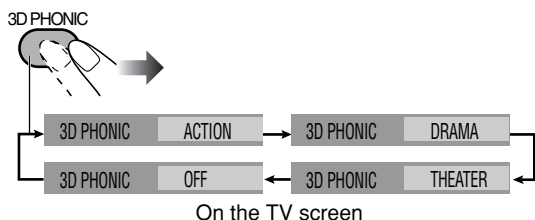


- The Sound Mode changes to the one you have stored.

Creating 3-dimensional Sound

Field—3D Phonic

While playing a disc...

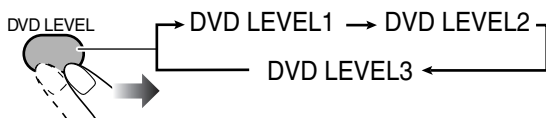


3D ACTION	Suitable for action movies and sports programs.
3D DRAMA	Creates natural and warm sound. Enjoy movies in a relaxed mood.
3D THEATER	Enjoy sound effects like in a major theater.

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.

- The initial setting is “DVD LEVEL3.”

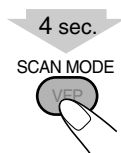
Changing the Color System and Scanning Mode

Scanning Mode

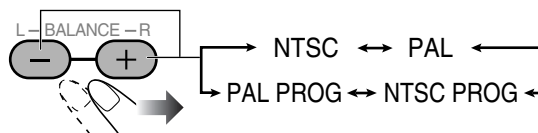
You can select the video output to match it to the color system of your TV (NTSC or PAL).

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

1 Enter the color system setting mode.

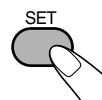


2 Select the color system and scanning mode.



NTSC / PAL	NTSC or PAL Interlaced scanning. For a conventional PAL or NTSC TV.
NTSC / PAL PROG	NTSC or PAL Progressive scanning. For a progressive NTSC or PAL TV.

3 Store the setting.

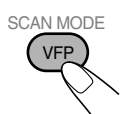


Changing the Picture Tone

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

To select a preset picture tone

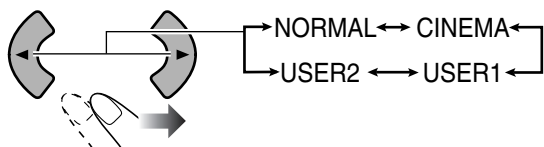
1 While playing, display VFP setting screen.



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

On the TV screen

2 Select a preset picture tone.



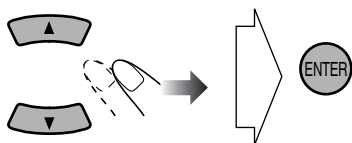
NORMAL	Normally select this.
CINEMA	Suitable for a movie source.
USER1/USER2	You can adjust parameters and can store the settings (see below).

To adjust the picture tone

1 Select "USER1" or "USER2."

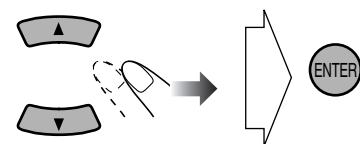
- Follow steps 1 and 2 explained on the previous page.

2 Select a parameter you want to adjust.



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

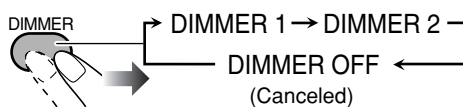
3 Adjust the parameter.



4 Repeat steps 2 to 3 to adjust other parameters.

To erase the VFP screen, press VFP again.

Changing the Display Brightness Remote ONLY >>>



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

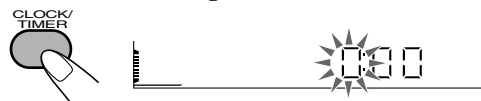
* Except for the RHYTHM AX and KARAOKE SCORING lamps.

Setting the Clock Remote ONLY >>> INFO

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

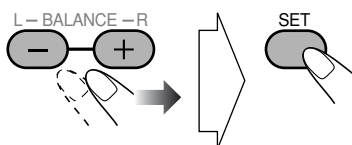
- To exit from the clock setting, press CLOCK/TIMER as required.
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

1 Activate clock setting mode.



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

2 Adjust the hour, then minute.

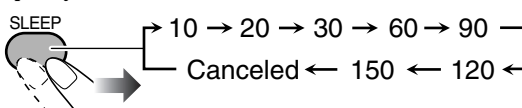


Now the built-in clock starts working.

Turning Off the Power Automatically Remote ONLY >>>

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

1 Specify the time (in minutes).



2 Wait until the set time goes off.

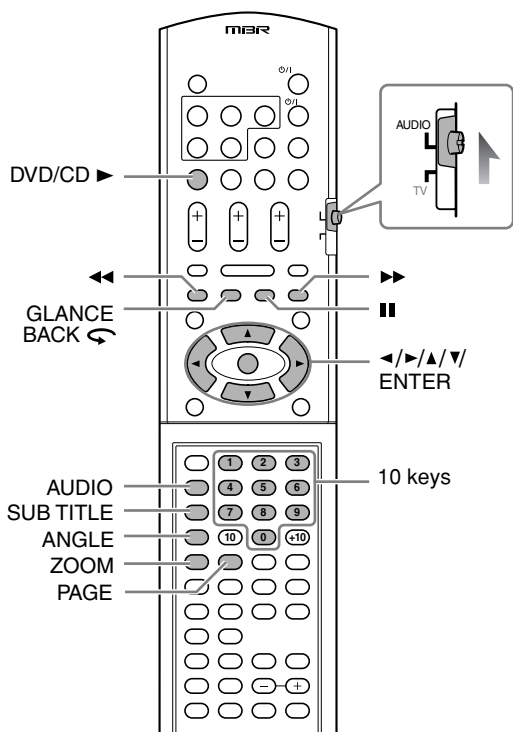
To check the time remaining until the shut-off time



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

Unique DVD/VCD Operations

Remote Control



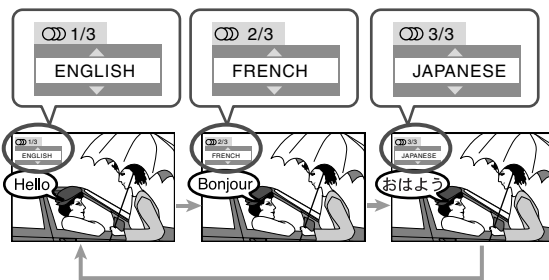
Selecting the Sound Track Remote ONLY INFO

- For DVD Video:** While playing back a chapter containing audio languages, you can select the language to listen to.
 - For DVD Audio:** While playing back a track containing audio channels, you can select the audio channel to listen to.
 - For DVD-VR/Karaoke SVCD/VCD:** When playing back a track, you can select the audio channel to play.
- You can also select the audio track using the on-screen bar (see page 23).

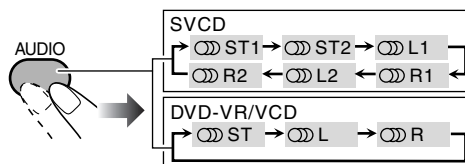
While playing DVD Video...



Ex.:



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



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

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

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

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

Selecting the Subtitle Language

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

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

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

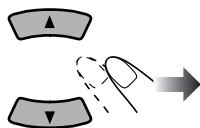
- You can also select the subtitle language using the on-screen bar (see page 23).

While playing a DVD Video...

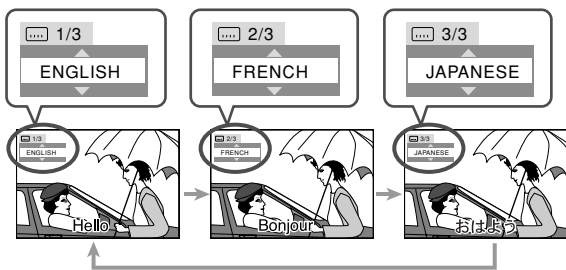
1 Display the subtitle selection window.



2 Select the subtitle language.



Ex.:



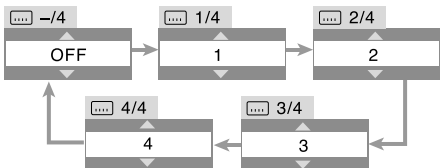
While playing a DVD-VR...

SUB TITLE



While playing an SVCD...

SUB TITLE

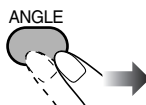


Selecting the View Angle

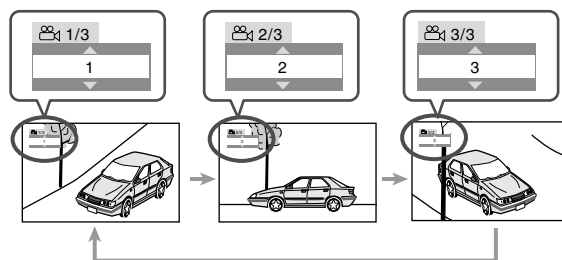
For DVD Video only: While playing back a chapter containing multi-view angles, you can view the same scene from different angles.

- You can also select the view angle using the on-screen bar (see page 23).

While playing back...



Ex.:



Reviewing the Playback Quickly

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

While playing back...

GLANCE BACK



Selecting Browsable Still Pictures

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

- If a track is linked to browsable still pictures (B.S.P.), they are usually shown in turn automatically during playback.
- You can also select the page using the on-screen bar (see page 23).



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

Playing Back Bonus Group

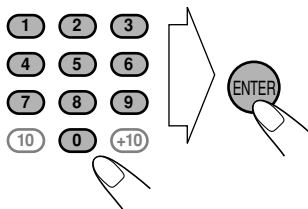
For DVD Audio only: Some DVD Audios have a special group called “bonus group” whose contents are not open to the public.

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

1 Select the bonus group.

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

2 Enter the key number.



3 Follow the interactive instruction shown on the TV screen.

To cancel the key number entry, press ■.

Special Picture Playback

Still picture playback

While playing...



Still picture playback starts.

To resume normal playback, press DVD/CD ►.

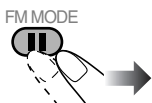
Frame-by-frame playback

1 While playing...



Still picture playback starts.

2 Advance the still picture frame by frame.



To resume normal playback, press DVD/CD ►.

Slow-motion playback

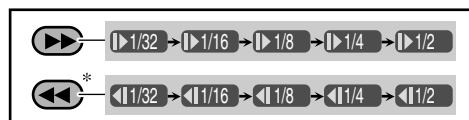
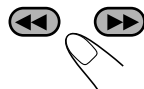
1 While playing...

FM MODE



Still picture playback starts.

2 Select slow motion speed.

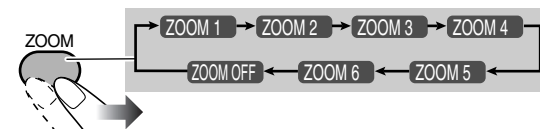


* Not available for DVD-VR/SVCD/VCD.

To resume normal playback, press DVD/CD ►.

Zoom

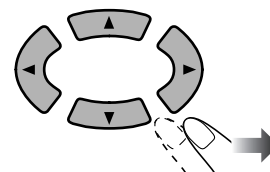
1 While playing...



As the number increases, magnification also increases.

- For JPEG, see page 28.

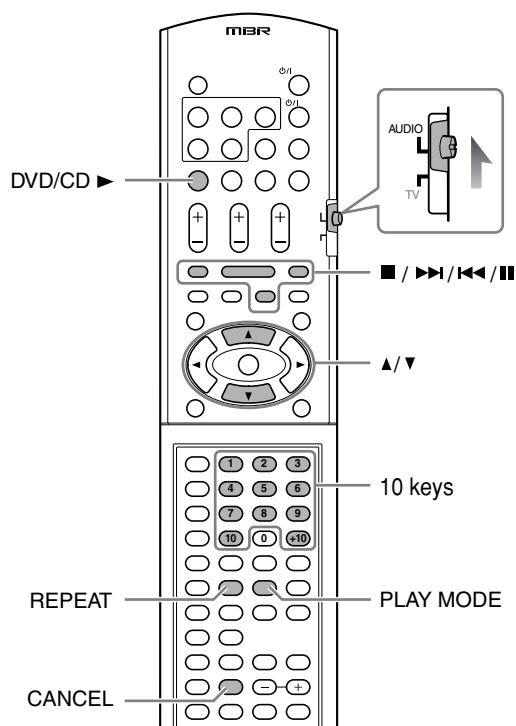
2 Move the zoomed-in position.



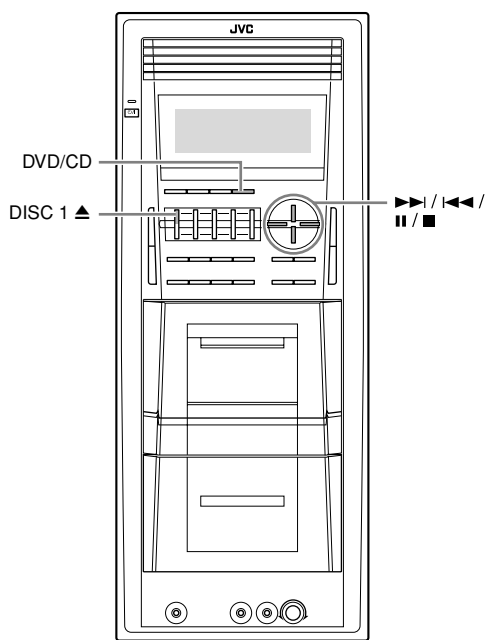
To resume normal playback, press ZOOM repeatedly until “ZOOM OFF” appears on the TV screen.

Advanced Disc Operations

Remote Control



Main unit

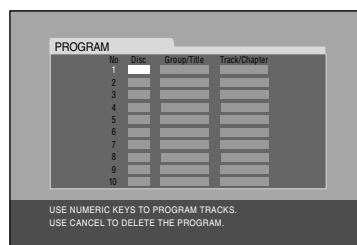
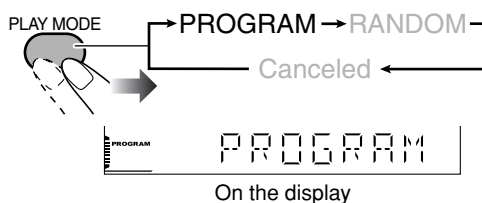


Programming the Playing Order

—Program Play

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

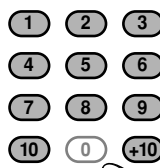
1 Before starting playback, activate Program Play.



2 Select chapters or tracks you want for Program Play.

- ① Select a disc number.
- ② Select a title or group number.
- ③ Select a chapter or track number.

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.



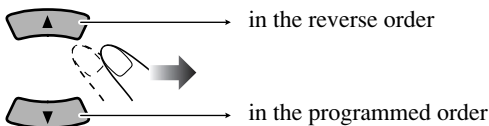
Playback starts in the order you have programmed.

To skip a track:	To pause:	To stop*:
	<p>FM MODE</p> <p>To release, press DVD/CD ►.</p>	

* Resume does not work for Program Play.

To check the programmed contents

Before or after playback...



To modify the program

Before or after playback...

To erase the last step:	To erase the entire program:
<p>To add steps in the program: Repeat step 2 on page 19.</p>	

To exit from Program Play

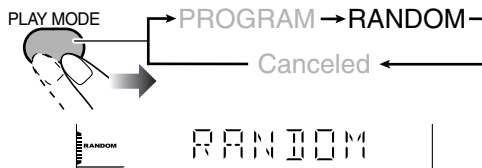
Before or after playback...



Playing at Random—Random Play

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

1 Before starting playback, activate Random Play.



2 Start playback.



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

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

To exit from Random Play

Before or after playback...



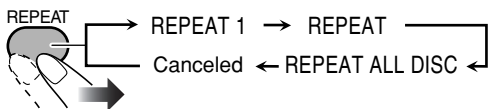
Playing Repeatedly—Repeat Play

You can repeat playback.

- You can also select the repeat mode using the on-screen bar (see page 23).
- The indicator(s) lights on the display as follows to indicate the current repeat mode.

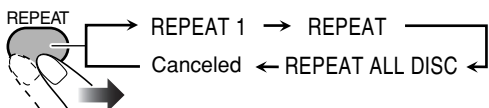
• For DVD Video:

While playing...



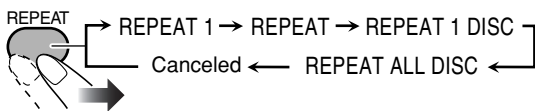
• For DVD Audio:

While playing or before playback...



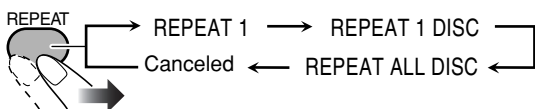
• For MP3/WMA:

While playing or before playback...



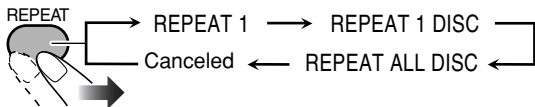
• For CD/SVCD/VCD:

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



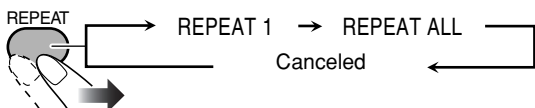
• For Random Play:

While playing or before playback...



• For Program Play:

While playing or before playback...



REPEAT 1 Repeats the current chapter/track.

REPEAT Repeats the current title/group.

REPEAT 1 DISC* Repeats the current disc.

REPEAT ALL DISC* Repeats all discs.

REPEAT ALL Repeats all programmed tracks.

*These modes may not work correctly for DVD Video.

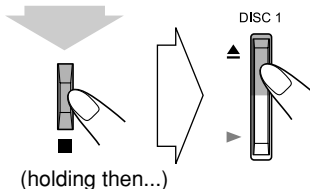
Prohibiting Disc Ejection

—Child Lock

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

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

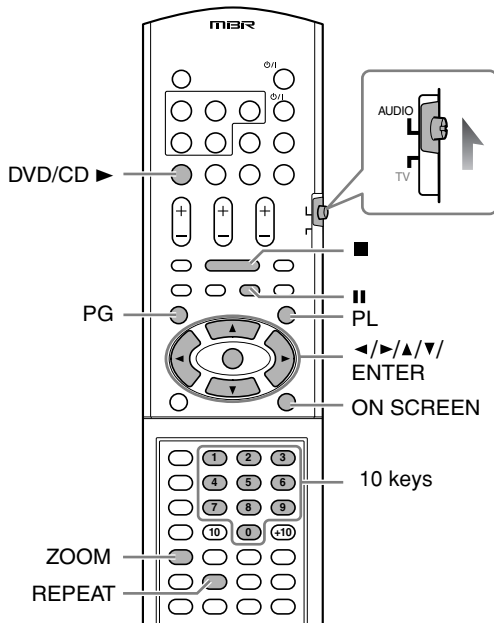
While in standby mode...



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

On-Screen Disc Operations

Remote control

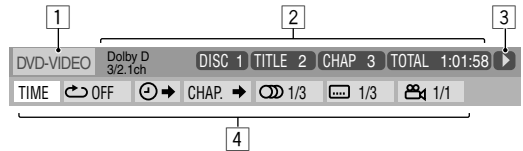


On-screen Bar Information

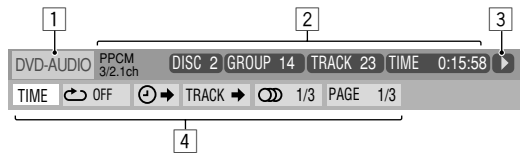
You can check the information on disc (except for MP3/WMA/JPEG disc) and use some functions through the on-screen bar.

On-screen bars

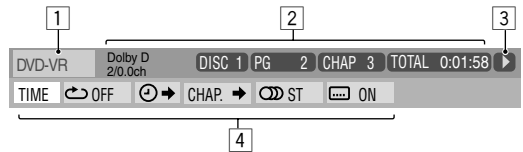
DVD Video



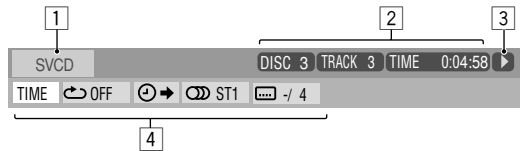
DVD Audio



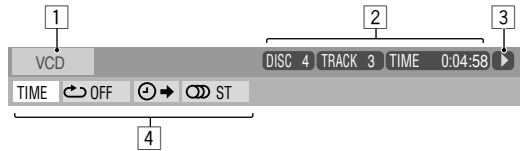
DVD-VR



SVCD



VCD



CD



1 Disc type**2 Playback information**

Indication	Meanings
Dolby D/ PPCM	Audio format
3/2.1 ch/ 2.0/0 ch	Channel number
DISC 1	Current disc
TITLE 2	Current title
CHAP 3	Current chapter
GROUP 1	Current group
TRACK 14	Current track
PG 2	Current title
PL 2	Current play list
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
	Select to change the time indication (see also page 24).
	Select to repeat playback (see also pages 21, 24 and 25).
	Select for time search (see also page 25).
	Select for chapter search (see also page 26).
	Select for track search (see also page 26).
	Select to change the audio language or channel (see also page 16).
	Select to change subtitle language (see also page 17).
	Select to change view angle (see also page 17).
	Select to change the page (see also page 17).

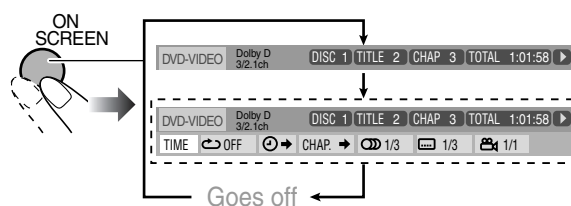
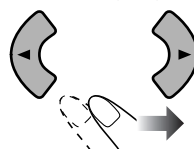
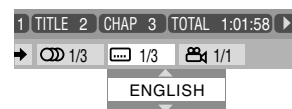
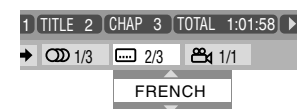
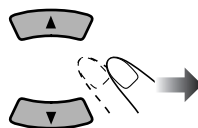
Operations Using the On-screen Bar

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



To change the time information

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

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



2 Make sure **TIME** is selected (highlighted).

3 Change the time indication.



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

*Not available for DVD-VR.

To erase the on-screen bar



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.

• Except for DVD Video: Repeat Play can be selected before starting playback.

2 Select .

3 Display the pop-up window.



4 Select the repeat mode you want.

ALL	Repeats all discs or all programmed tracks.
A-B	Repeats a desired portion (see the next page).
TITLE	Repeats the current title.
GROUP	Repeats the current group.
DISC	Repeats the disc (except for DVD).
CHAPTER	Repeats the current chapter.
TRACK*	Repeats the current track.
PG	Repeats the current title (for DVD-VR only). See also page 28.
PL	Repeats the current play list (for DVD-VR only). See also page 28.
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).



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

- 6 Select the end point (B).



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


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

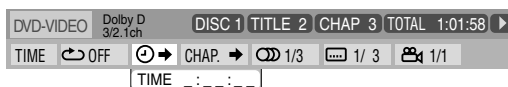
To erase the on-screen bar



Time Search

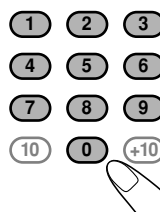
You can move to a particular point by specifying the elapsed playing time from the beginning.

- 1 While playing (without PBC for SVCD/VCD), display the on-screen bar with the pull-down menu.
 - Except for DVD: Time Search can be used before starting playback.
- 2 Select .
- 3 Display the pop-up window.



- 4 Enter the time.


You can specify the time in hours/minutes/seconds.



Examples:

To move to a point of 1 (hours): 02 (minutes): 00 (seconds), press 1, 0, 2, 0, then 0.

To move to a point of 54 (minutes): 00 (seconds), press 0, 5, 4, 0, then 0.

- It is always required to enter the hour digit (even "0" hour), but it is not required to enter trailing zeros (the last two digits in the examples above).
- To correct a misentry, press cursor  to erase the last entry.

- 5 Finish the setting.



The System starts playing from the specified time.

To erase the on-screen bar



Chapter/Track Search

You can search for the number of the item to play.

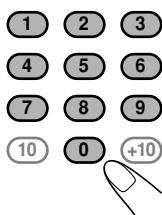
For DVD Video/DVD-VR: Chapter

For DVD Audio: Track

- 1 While playing, display the on-screen bar with the pull-down menu.
- 2 Select **CHAR. →** 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 is shown in the pop-up window.

- 5 Finish the setting.



The System starts playing the searched chapter or track.

To erase the on-screen bar



Operations on the Control



Screen

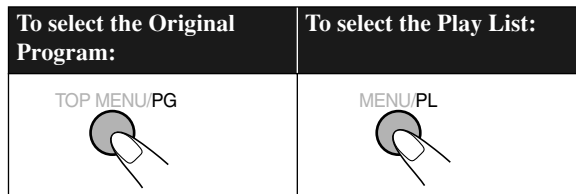


For DVD-VR/MP3/WMA/JPEG: You can search for and play the desired items through the control screen.

Control screen for DVD-RW/RAM in DVD-VR format

The control screen is superimposed on the TV screen when you call up Original Program (PG) or Play List (PL).

To select playback type



When Original Program is selected.

ORIGINAL PROGRAM				
No	Date	Ch	Time	Title
1	25/04/04	4ch	19:00	JVC DVD World 2004
2	17/05/04	8ch	10:30	
3	22/05/04	8ch	17:00	Music Festival children 001
4	26/05/04	L-1	13:19	
5	20/06/04	4ch	22:00	
6	25/06/04	L-1	8:23	children 002

① ② ③ ④ ⑤ ⑥

When Play List is selected.

PLAY LIST				
No	Date	Chap	Length	Title
1	25/05/04	001	1:03:16	My JVC World
2	17/06/04	005	1:35:25	
3	20/06/04	003	0:10:23	Favorite music
4	25/06/04	001	0:07:19	children001-002

① ⑦ ⑧ ⑨ ⑤ ⑥

- ① Title/Play list number
- ② Recording date
- ③ Recording source (TV station, the input terminal of the recording equipment, etc.)
- ④ Start time of recording
- ⑤ Title of the program/play list*
- ⑥ Highlight bar (current selection)
- ⑦ Creating date of play lists
- ⑧ Number of chapters
- ⑨ Playback time

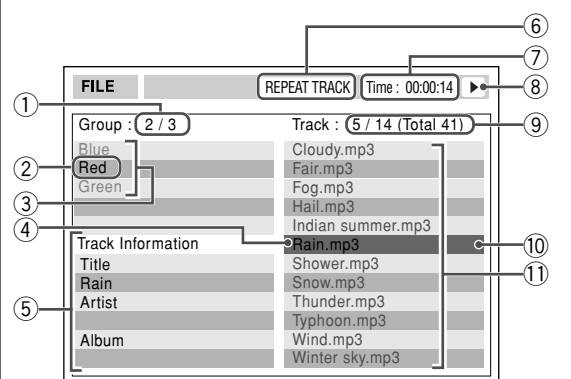
*The title of the original program or play list may not be displayed depending on the recording equipment.

To erase the control screen for DVD-VR, press ENTER.

Control screen for MP3/WMA/JPEG disc

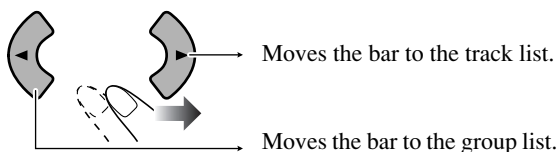
The control screen automatically appears on the TV screen when you load an MP3, WMA, or JPEG disc.

Ex.: When the MP3 disc is loaded.

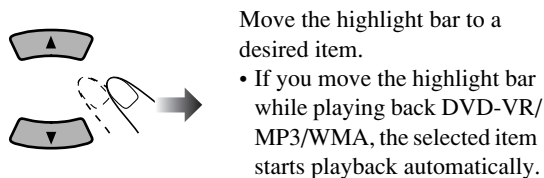


- ① Current group number/total group number
 - ② Current group
 - ③ Group list
 - ④ Current track
 - ⑤ Track information (ID3 Tag Version 1.0: only for MP3/WMA)
 - ⑥ Repeat Play setting
 - ⑦ Elapsed playing time of the current track (only for MP3/WMA)
 - ⑧ Operation mode icon
 - ⑨ Current track number/total number of tracks in the current group (total number of tracks on the loaded disc)
 - ⑩ Highlight bar
 - ⑪ Track list
- If both types of files (MP3/WMA files and JPEG files) are recorded on a disc, select the file type to play (see page 36).

To move the highlight (green) bar between group list and track list (for MP3/WMA/JPEG):



To select an item in the list:



To start playback

For DVD-VR/MP3/WMA:



Playback starts with the selected chapter/track.

- Pressing DVD/CD ► also starts playback.

For JPEG:



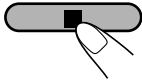
The selected track (still picture) is displayed until you change it.



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 ■.

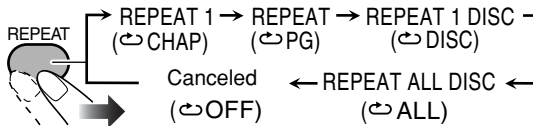
To stop playback



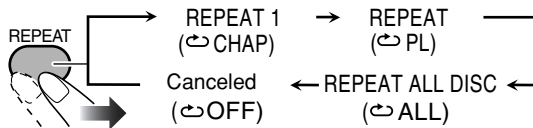
To repeat title/play list for DVD-VR

While playing or before starting playback...

For Original Program



For Play List



REPEAT 1* Repeats the current chapter.

REPEAT* Repeats the current title/play list.

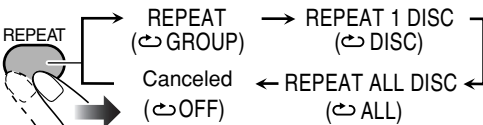
REPEAT 1 DISC* Repeats all titles on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

* Not available before starting playback.

To repeat slide-show for JPEG

While playing or before starting playback...



REPEAT Repeats the current group.

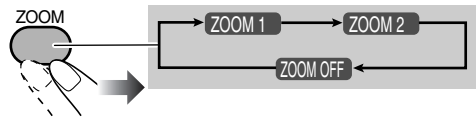
REPEAT 1 DISC Repeats all files on the current disc.

REPEAT ALL DISC Repeats all loaded discs.

• For Repeat Play of MP3/WMA, see pages 21 and 24.

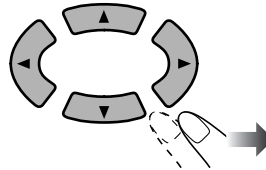
To zoom in the still picture (for JPEG)

1 During being paused...



As the number increases, magnification also increases.

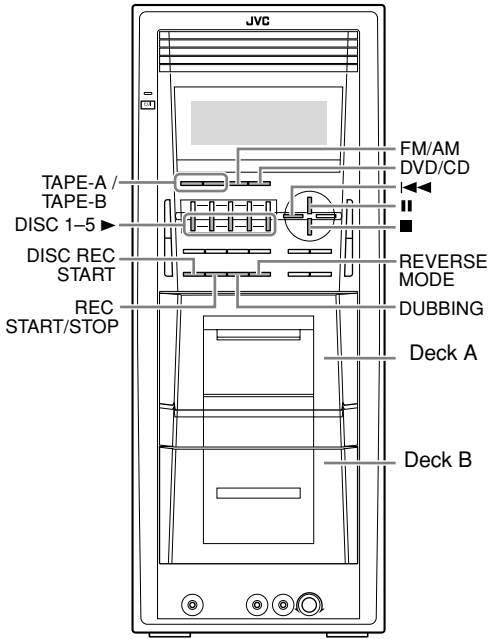
2 Move the zoomed-in position.



To cancel Zoom, press ZOOM repeatedly until "ZOOM OFF" appears on the TV screen.

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



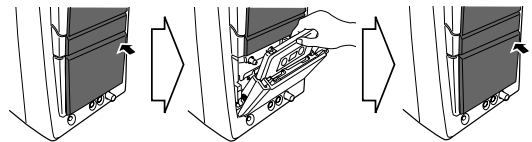
INFO

You can use type I tapes for recording.

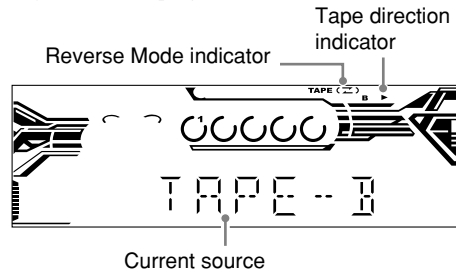
- To play a tape, see page 11.

1 Insert a recordable cassette in deck B.

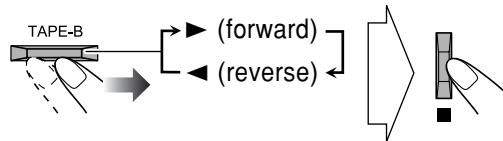
Push Insert Close



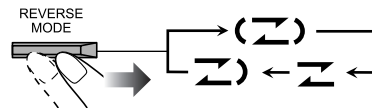
2 Check the tape running direction and Reverse Mode settings on the display.



To change the direction



Change the Reverse Mode if necessary



	To record on both sides. • When using Reverse Mode, start recording in the forward (▶) direction.
	To record on only one side.

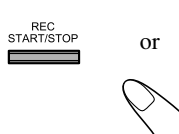
3 Start playing the source—"FM," "AM," "DVD/CD," "TAPE-A" or "AUX."

- When recording a disc, you can also use "Synchronized Disc Recording" (see the right column).
- When recording from deck A, you can also use "Dubbing" (see below).

4 Start recording.



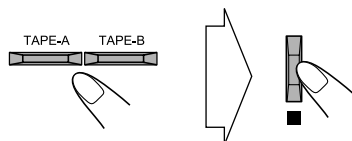
To stop recording



Dubbing Tapes



1 Change the source to TAPE.



2 Insert the source cassette in deck A, and a recordable cassette in deck B.

3 Check the tape running direction and Reverse Mode settings on the display.

See step 2 of "Recording on a Tape" on page 29.

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

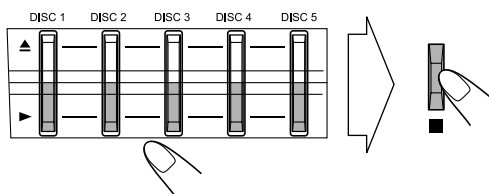
You can start and stop both disc play and tape recording at the same time.

1 Load a disc and insert a recordable cassette.

2 Check the tape running direction and Reverse Mode settings on the display.

- See step 2 of "Recording on a Tape" on page 29.

3 Select the disc number you want to start recording from.



For recording desired tracks on discs:

You can program tracks to record in your preferred order.

- Select Program Play (and make a program; see page 19) without starting playback.

4 Start recording.



The disc playback and recording start from the first track.

- 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 only your favorite track—One Track Recording

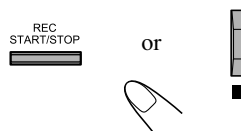
You can specify tracks to be recorded on the tape while listening to a disc (except for DVD Video).

While the track you want to record on the tape is playing...



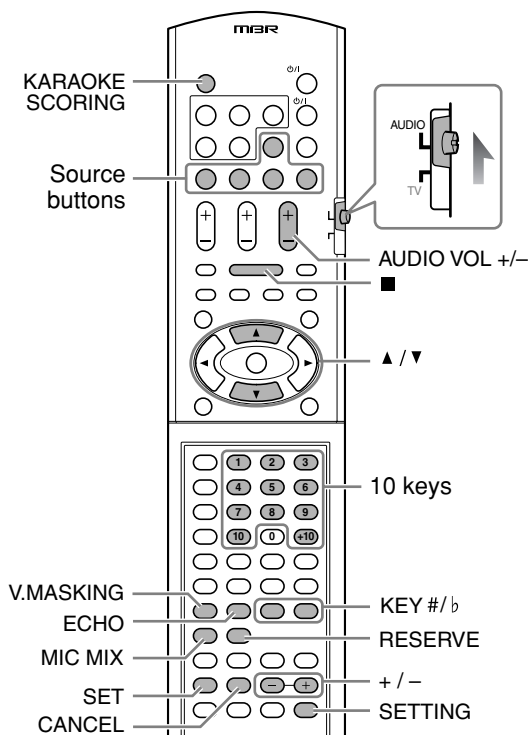
The disc player returns to the beginning of that track and the track is recorded on the tape. After recording, the disc player and cassette deck automatically stop.

To cancel while recording

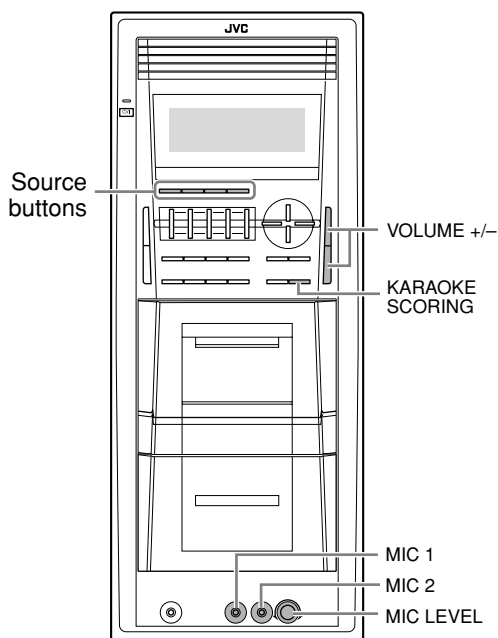


Enjoying Karaoke

Remote control



Main unit



The functions described in this section are not available for DVD Audio/DVD-VR.

IMPORTANT

- Always set MIC LEVEL to MIN when connecting or disconnecting the microphone.
- MIC LEVEL adjustment is valid for both microphones connected to the MIC 1 and MIC 2 jacks.



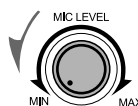
DO NOT keep the microphones connected while they are not in use.

Singing Along (Karaoke)

You can enjoy singing along (Karaoke) by using two microphones.

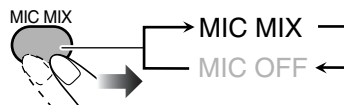
- By pressing REC START/STOP, you can record your singing-along.

1 Turn MIC LEVEL to MIN.



2 Connect the microphone(s) (not supplied) to the MIC 1 and/or MIC 2 jack.

3 Activate the Mic Mixing Mode.

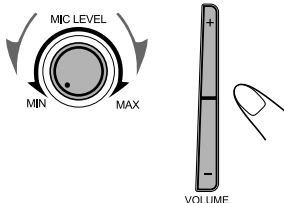


4 Start playing the source—"FM," "AM," "DVD/CD," "TAPE," or "AUX."

- For Karaoke SVCD/VCD: Select a desired audio channel. See "Selecting the Sound Track" on page 16.

5 Sing into the microphone.

6 Adjust the MIC LEVEL and VOLUME.

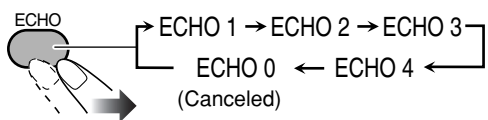


To cancel from the Mic Mixing Mode, select "MIC OFF" in step 3.

To use only microphones, select "DVD/CD" in step 4, but do not start playback.

To apply an echo to your voice

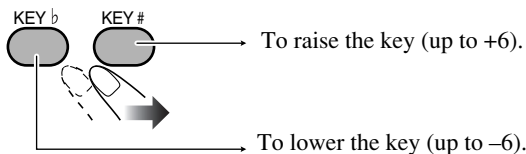
While the Mic Mixing Mode is activated...



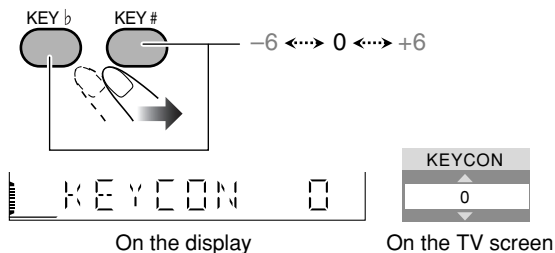
- As the number increases, echo level also increases.

To adjust the Key (disc playback only)

While playing back...



To cancel the Key Control

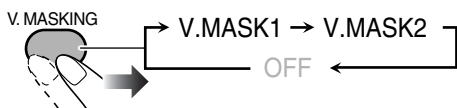


- Key Control is also canceled when you deactivate the Mic Mixing Mode, or select another track or disc.

Reducing the Lead Vocal

—Vocal Masking

If you want to reduce the lead vocal (of any source except DVD Audio/DVD-VR), you can use the Vocal Masking Mode.



V.MASK1	Cancels vocal on stereo sources.
V.MASK2	Cancels the right audio channel.

To sing into microphone(s), activate the Mic Mixing Mode (follow steps 1 to 3 and 6 on page 31).

To cancel from the Vocal Masking Mode, select “OFF.”

Scoring Your Karaoke Skill

This System can score your Karaoke skill by comparing your singing along with the vocal on the playback disc.

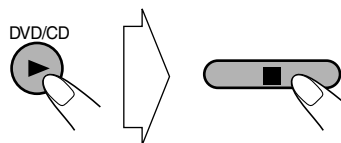
- This function is for disc playback only.
- It is recommended to select the sound track as follows (see page 16):

For DVD Video: Select the sound track with vocal.

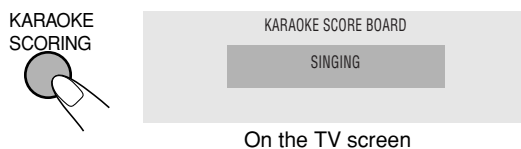
For SVCD/VCD: Select “ST,” “ST1,” or “ST2.”

- It is recommended to sing for more than **one and a half minutes** to make the scoring function work properly.

1 Select “DVD/CD” as the source.



2 Activate the scoring function.



Playback of the first track starts and the Mic Mixing Mode is automatically activated (with the last adjustment for echo).

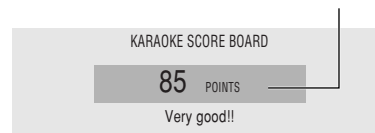
3 Sing into the microphone.

See steps 1, 2, and 6 on page 31.

- Adjust echo level and key if you want (see the left column).

After the song ends, playback stops and the score board appears on the TV screen with fanfare.

Ex.: Your score



1	ST	93 POINTS
2	ND	85 POINTS
3	RD	73 POINTS

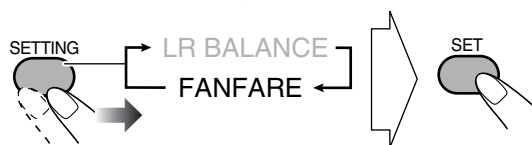
The latest top 3

To stop the playback in the middle of the song, press ■. The scoring function is not canceled and your singing along is scored if the playback time is more than one minute.

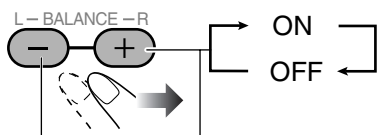
To cancel the scoring function, press KARAOKE SCORING. The screen on the TV disappears. (The Mic Mixing Mode remains activated.)

To turn on/off the fanfare

1 Enter the fanfare setting mode.



2 Select the fanfare setting.

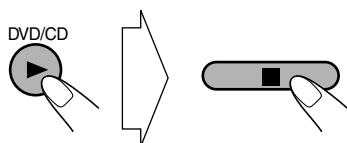


Reserving Karaoke Songs

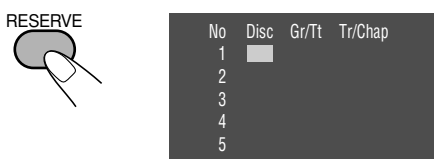
—Karaoke Program Play

You can determine the playback order of the titles or tracks on the disc player. You can program up to 12 steps.

1 Change the source to “DVD/CD.”



2 Activate Karaoke Program Play.



On the TV screen

- PROGRAM indicator flashes during this mode.

3 Select songs you want for Karaoke Program Play.

Press the number buttons to select a song in the following order.

- ① Select a disc.
- ② Select a title/group.
- ③ Select a chapter/track.

① ② ③

④ ⑤ ⑥

⑦ ⑧ ⑨

⑩ 0 +10

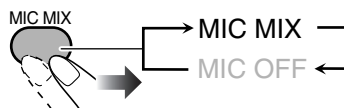
Examples:

To select number 5, press 5.



To select number 15, press +10, then 5.

To select number 30, press +10, +10, then 10.

4 Activate the Mic Mixing Mode.



5 Start playback.

To start Karaoke Program Play:	To start Karaoke Program Play with the scoring function:
	

Playback starts in the order you have programmed.

- **For the Karaoke Program Play with the scoring function:** Each time the song ends, playback stops and the score board appears. Press KARAOKE SCORING twice to start playback of the next track.

To check the programmed contents



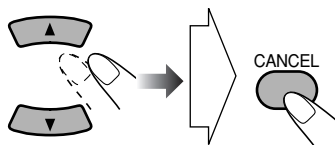
The Karaoke reserve screen appears.

- You cannot display the Karaoke reserve screen while the scoring function is in use.

To modify the program

While the Karaoke reserve screen is shown on the TV...

To erase the unwanted step:



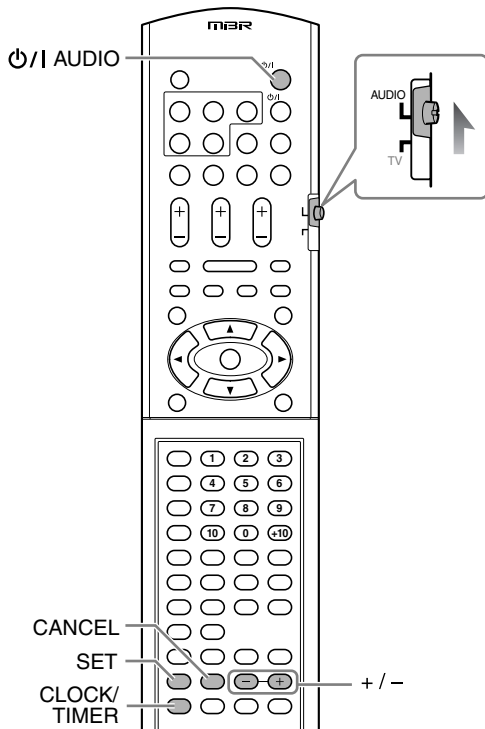
To erase the entire program, repeat the procedure.

To add steps in the program:

Repeat step 3.

Timer Operations

Remote control

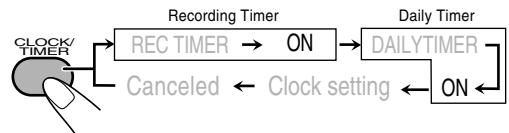


Setting the Timer

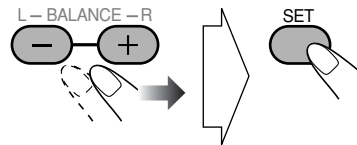
Using Daily Timer, you can wake up with your favorite song. On the other hand, with Recording Timer, you can make a tape of a radio broadcast automatically.

- You cannot activate Daily Timer and Recording Timer at a time. (Activating either timer deactivates the other timer.)
- To correct a misentry during the process, press CANCEL. You can return to the previous step.

1 Select one of the timer setting modes—ON for Daily Timer or Recording Timer.



2 Make the timer setting as you want.



Repeat the procedure 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 Recording Timer: Select the playback source—"TUNER-FM" or "TUNER-AM."
For Daily Timer: Select the playback source—"TUNER-FM," "TUNER-AM," "DISC," "TAPE-A," "TAPE-B" or "AUX IN."



EX.: When "TUNER-FM" is selected.

- ④ Select a preset station for "TUNER-FM" and "TUNER-AM," or select a disc, group, and then track number for "DISC."
- ⑤ Select the volume level.
 - You can select the volume level ("VOLUME 0" – "VOLUME 30" and "VOLUME --"). If you select "VOLUME --," the volume is set to the last level when the System has been turned off.

- 3 Turn off the System (on standby) if you have set the timer with the System turned on.**



How Daily Timer 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).

- Daily Timer starts working only when the System is turned off (on standby).

When the on-time comes

The System turns on, tunes in to the specified station or starts playing the specified source, and sets the volume level to the preset level.

When the off-time comes

- The 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.

- Recording Timer starts working only when the System is turned off (on standby).

When the on-time comes

The System turns on, tunes in to the specified station, sets the volume level to the preset level, and starts recording.

When the off-time comes

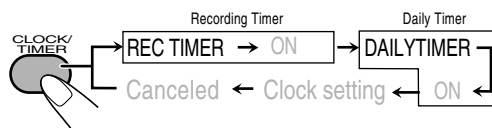
- The timer setting remains in memory until you change it.

To turn off the Timer after the setting is done

You can turn off the timer after it has been set.

- Since Daily Timer is activated at the same time everyday, you may need to cancel it on some particular days.

- 1 Select the timer you want to cancel (REC TIMER or DAILYTIMER) you want to cancel.**



- 2 Turn off the selected timer.**



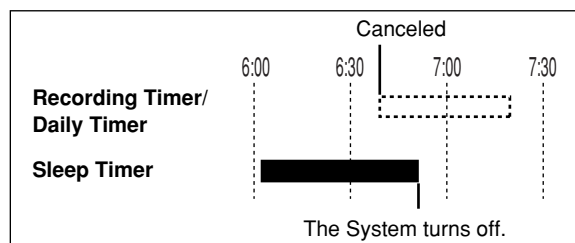
- The timer (🕒) indicator goes off.

To turn on the timer again, repeat the step **1** and press SET in step **2**.

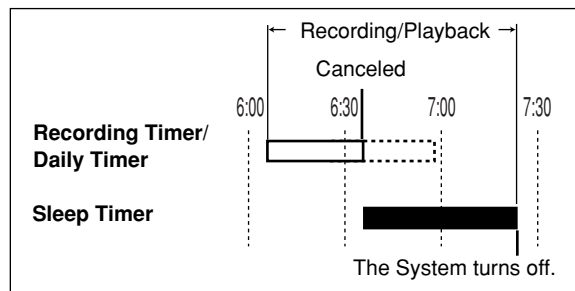
Timer Priority

If the settings for Sleep Timer and Recording Timer/Daily Timer overlap, the timers work as described below.

- Sleep Timer (see page 15) has priority over the Recording Timer and Daily Timer.

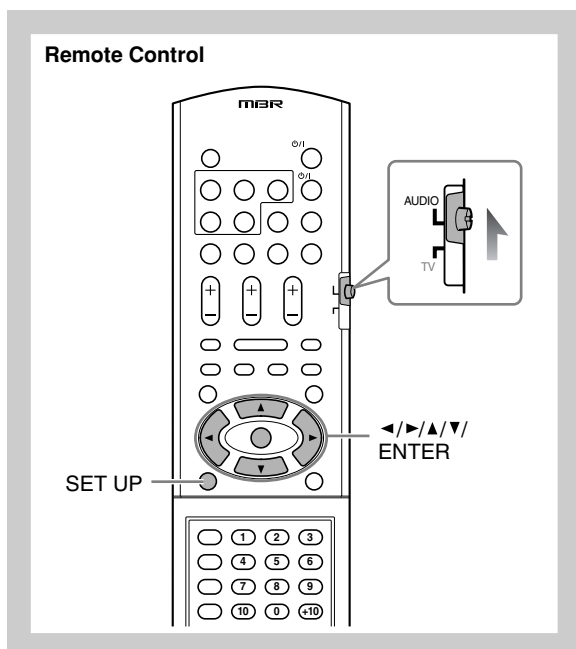


- In this case, Recording Timer/Daily Timer does not work.



- In this case, Recording Timer/Daily Timer is canceled. (If Sleep Timer shuts off the System earlier than the off time you have set for Recording Timer, recording stops when Sleep Timer shuts off the System.)

Setup Menu Operations

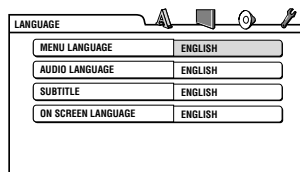


Initial settings

INFO

Some items in the menus cannot be changed during playback.

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.

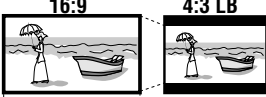

To erase a preference display

Press SET UP.

A LANGUAGE menu

Item	Contents
MENU LANGUAGE	You can select the initial menu language of DVD Video (see page 43).
AUDIO LANGUAGE	You can select the initial audio language of DVD Video (see page 43).
SUBTITLE	You can select the initial subtitle language of DVD Video (see page 43).
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 PS 	You can select the monitor type to match your TV when you play back DVD Video discs recorded for wide-screen televisions. 16:9/16:9 MULTI (Wide television screen): For a wide-screen (16:9) TV. 4:3 LB/4:3 MULTI 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/4:3 MULTI 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. • By selecting "MULTI" mode, the color system of the System changes automatically to match the color system of the loaded disc. For the color system setting, see page 14.
PICTURE SOURCE	You can obtain optimal picture quality by selecting the source type of the disc contents. AUTO: Normally, select this option. The System recognizes the picture type (film or video source) of the current disc according to the disc information. FILM: For a film source disc. VIDEO: For a video source disc.
SCREEN SAVER	You can set the screen saver function to ON or OFF . ON: The on-screen display becomes dark when no operation is done for about 5 minutes. OFF: To cancel the screen saver.
FILE TYPE	You can select a file type to play. AUDIO: To play MP3/WMA files. STILL PICTURE: To play JPEG files.


AUDIO menu

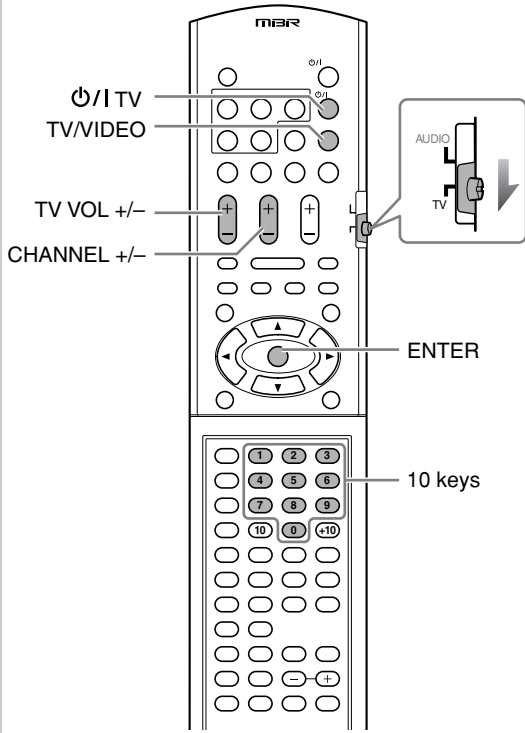
Item	Contents
DIGITAL AUDIO OUTPUT	Set this item correctly when using the OPTICAL DIGITAL OUTPUT terminal on the rear. PCM ONLY: When connecting to audio equipment which can decode only linear PCM signals. DOLBY DIGITAL/PCM: When connecting to a Dolby Digital decoder or an amplifier with a built-in Dolby Digital decoder. STREAM/PCM: When connecting to a DTS decoder or an amplifier with a built-in DTS decoder.
DOWN MIX	Set this item properly according to your digital audio connection to play sound of the surround multichannel audio on a DVD Video. <ul style="list-style-type: none"> 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 or middle volume. AUTO: You can enjoy powerful playback sound. ON: Select this if the sound level of DVD Video is lower than the one of TV program to make the sound at a lower volume clear.


OTHERS menu

Item	Contents
RESUME	You can select Resume. ON: The System resumes playback from the position where playback has been stopped if the disc is still in the disc tray. OFF: Resume is deactivated.
ON SCREEN GUIDE	Activate or deactivate the on-screen guide. ON: Activate the on-screen guide. OFF: Deactivate the on-screen guide.

Operating the TV

Remote control

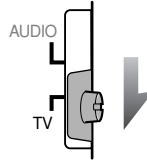


Manufacture's code	
Manufacture	Code number
JVC	01
Hitachi	10
Magnavox	02
Mitsubishi	03
Panasonic	04,11
Philips	15
RCA	05
Samsung	12
Sanyo	13, 14
Sharp	06
Sony	07
Toshiba	08
Zenith	09

Operating TV

You can operate the JVC's or other manufacturers' TV using this remote control.

1 Slide the AUDIO/TV selector to "TV."



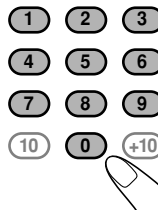
2 Press and hold until the following steps are complete.



3



4 Enter the 2-digit manufacture's code number.



5 Release ϕ /I TV.

To operate the TV

To turn on or off the TV:	To select the input mode (either TV or VIDEO):	To adjust TV volume:
To select the TV channel:		
		or

Learning More about This System ● ● ●

Introduction (see pages 1 to 2)

Playable Disc Types:

• About audio format

- **Linear PCM:** Uncompressed digital audio, the same format used for CDs and most studio masters.
 - **Dolby Digital:** Compressed digital audio, developed by Dolby Laboratories, which enables multi-channel encode to create 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.
- If you use a DVD-RAM with a cartridge, take the disc out of the cartridge before inserting.

Daily Operations—Playback (see pages 7 to 11)

Listening to the Radio:

- If you store a new station into an occupied preset number, the previously stored station in that number will be erased.
- When you unplug the AC power cord or if a power failure occurs, the preset stations will be erased in a few days. If this happens, preset the stations again.

Playing Back a Disc:

- On some DVD, SVCD, or VCD discs, the actual operations may be different from what is explained in this manual, due to the programming and disc structure; such differences are not a malfunction of this System.
- Some DVD Audios prohibit downmix. When you play back such a disc, “LR ONLY” appears on the display and the System plays back the left front and right front signals.
- When playing back a DVD Audio disc recorded in MLP (Meridian Lossless Packing; a lossless audio compression system that can completely recreate the PCM signal), the signals are recognized as the linear PCM signals, however, no indicator lights up on the display.
- For MP3/WMA playback...
 - MP3/WMA discs require a longer readout time than regular CDs. (It depends on the complexity of the group/file configuration.)
 - Some MP3/WMA files cannot be played back and will be skipped. This results from their recording processes and conditions.
 - When making MP3/WMA discs, use ISO 9660 Level 1 or Level 2 for the disc format.
 - This System can play back MP3/WMA files with the extension code <.mp3> or <.wma> (regardless of the letter case—upper/lower).
 - It is recommended that you make each MP3/WMA file at a sampling rate of 44.1 kHz and at bit rate of 128 kbps. This System cannot play back files made at bit rate of less than 64 kbps.

Daily Operations—Sound&Other Adjustments (see pages 12 to 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 Modes again.

Creating 3-dimensional Sound Field—3D Phonic:

- While you use the headphones, 3D Phonic is canceled temporarily.
- 3D Phonic is also applied to the optical digital output signals through the OPTICAL DIGITAL OUTPUT terminal.

Changing the Color System and Scanning Mode:

- If you play back an NTSC disc with the color system set to “PAL (PROG),” the disc will be reproduced using “PAL 60” format, however, if the TV does not support this format, the screen may roll over upward and downward rapidly.
- If you play back a PAL disc with the color system set to “NTSC (PROG),” 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.
- You cannot change the scanning mode to progressive in the following cases:
 - When your TV does not support the progressive video input.
 - When you have not connected your TV to the unit using a component video cord.
- When you play back an NTSC disc in progressive scanning mode, the System outputs the NTSC signal regardless of the color system settings.

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 18)

Selecting the Sound Track:

- On some DVD Videos, you cannot change audio languages while playing back.

Playing Back Bonus Group:

- You cannot select a track in the bonus group for Program Play.

Special Picture Playback:

- During slow-motion playback, no sound will be reproduced.
- You cannot use frame-by-frame playback for DVD-VR.
- While zoomed in, the picture may look coarse.

Advanced Disc Operations (see pages 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).
 - For SVCD/VCD/CD loaded on the other tray than the current one, the System may prompt for the group number entry as well, however, these entries will be ignored during playback.
- You cannot use Program Play and Random Play for DVD-VR/JPEG discs.
- The programmed contents will remain until you erase it.
- While the PROGRAM indicator is on, you cannot change the disc to play. (DISC 1 – 5 on the remote control and ► on the main unit do not work.)

On-Screen Disc Operations (see pages 22 to 28)**Operations Using the On-screen Bar:**

- A-B Repeat:
 - A-B Repeat cannot be used on some DVDs.
 - A-B Repeat is possible only within the same title or within the same track.

Operations on the Control Screen:

- For DVD-VR playback...
 - **Original Program:** The System can play back the original picture in the recorded order.
 - **Play List:** The System can play back the play list edited by the recording equipment. The control screen for the play list appears only when the disc has the play list.
 - Resume is not available.
 - For details about DVD-VR format and play list, refer to the manual of the recording equipment.
- For JPEG files playback...
 - It is recommended that you record a file at 640 x 480 resolution. (If a file has been recorded at a resolution of more than 640 x 480, it will take a long time to be shown.)
 - This System can play only baseline JPEG files*. Progressive JPEG files* or lossless JPEG files* cannot be played.
 - * Baseline JPEG format: Used for digital cameras, web, etc.
 - Progressive JPEG format: Used for web.
 - Lossless JPEG format: An old type and rarely used now.

- This System can play back JPEG files with the extension code <.jpg> or <.jpeg> (regardless of the letter case—upper/lower).
- This System may not play back JPEG files properly if they are recorded on the devices other than digital still camera.
- During slide-show playback, zoom cannot be operated.

Recording Operations (see pages 29 to 30)**General:**

- You cannot change the source during recording.
- There is leader tape which cannot be recorded onto at the start and the end of cassette tapes. Thus, when recording discs or radio broadcasts, wind the leader tape first to ensure that the recording will be made without any music part lost.
- If no cassette is inserted or a protected tape has been inserted, “NO REC” appears on the display.
- If you select the Surround Mode (DANCE, HALL, STADIUM—see page 13), you can also record the surround elements. (Other sound adjustments do not affect the recording level.)

Recording on a Tape:

- When using Reverse Mode for recording, start recording in the forward (►) direction first; otherwise, recording will stop when only one side (reverse) of the tape is recorded.

Synchronized Disc Recording:

- Recording starts from the first track even if you have selected a track by using ►►/◄◄. To specify track(s) to record, program them (or use One Track Recording).
- While recording, you cannot use disc operation buttons (except for ■) and sound setting buttons (except for volume control).
- Everything on the disc goes onto the tape in the order on the disc, or according to the order you have made for Program Play.
- You cannot use Repeat Play while synchronized recording (Repeat Play will be canceled).
- DISC REC START button does not work:
 - While playback is paused.
 - When Random Play is activated.
 - While playing back or being paused with Program Play.
- When the tape reaches its end in the forward direction (►) during recording, the last song will be re-recorded at the beginning of the reverse side (◄).
- When the tape reaches its end in the reverse side (◄) during recording, recording stops even though the disc is not entirely recorded.

Enjoying Karaoke (see pages 31 to 33)

Reducing the Lead Vocal—Vocal Masking:

- The Vocal Masking Mode setting is not applied to the optical digital output signals through the OPTICAL DIGITAL OUTPUT terminal.
- When playing a Karaoke disc in the Vocal Masking Mode, the vocal may not be reduced or the volume may be lower.
- On some music, the Vocal Masking Mode does not provide the correct effect.

Scoring Your Karaoke Skill:

- Before the scoring function is activated, you can select the track by pressing ►►/◀◀ (except for DVD Video and SVCD/VCD with PBC).
- If you press ►►/◀◀ while scoring, playback stops and scoring is canceled (but the track is not skipped).
- If you activate the scoring function while playback is stopped with Resume function, playback starts from the position you have stopped.
- You can also activate the scoring function while playing back. In this case, the scoring starts from that point.
- While the scoring function is in use, you cannot use the following buttons: V.MASKING, MIC MIX, RESERVE, and disc operation buttons (except for ►►/◀◀/■).
- Activating the scoring function cancels Repeat Play.
- You cannot use the scoring function during Program Play, Random Play, or recording.
- The ranking (top 3) is cleared when you turn off the System. (If the number of songs scored is less than 3, “0 POINT” appears.)

Reserving Karaoke Songs—Karaoke Program Play:

- If you have selected a disc tray on which DVD Audio or DVD-VR is loaded, that disc number is skipped.
- If DVD Audio or DVD-VR is loaded on the current tray, you cannot use Karaoke Program Play.
- When the track starts playback, that track number will be erased from the Karaoke reserve screen (the programmed contents will remain until you erase it).
- While the PROGRAM indicator is flashing, you cannot change the disc to play. (DISC 1 – 5 on the remote control and ► on the main unit do not work.)

Timer Operations (see pages 34 to 35)

Setting the Timer:

- If you do not specify the preset station or track number correctly while setting a timer, the currently selected station or the first track will be played when timer is activated.
- When you unplug the AC power cord or if a power failure occurs, the timer will be canceled. You need to set the clock first, then the timer again.
- Without stopping the recording, you cannot change the source after Recording Timer starts recording.
- If you set DVD Video as the source, Daily Timer will not work correctly.

Setup Menu Operations (see pages 36 to 37)

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 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

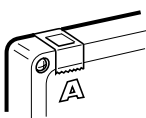
- Use a cotton swab moistened with alcohol to clean the heads, capstans, and pinch rollers.
- Use a head demagnetizer (available at electronics and audio shops) to demagnetize the heads (when the System turned off).



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.

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.

⇒ The System is connected to a TV which does not support progressive video input.

⇒ Incorrect color system is selected (see page 14).

The left and right edges of the picture are missing on the screen.

⇒ Select “4:3 LB (MULTI)” for “MONITOR TYPE” (see page 36).

Radio Operations:

Hard to listen to broadcasts because of noise.

⇒ Antennas connections are incorrect or loose.

⇒ The AM loop antenna is too close to the System.

⇒ The FM antenna is not properly extended and positioned.

Disc Operations:

The disc does not play.

⇒ You have inserted a disc whose Region Code is not “2.” (“REGION ERR” appears on the display.)

⇒ The disc is placed upside down. Place the disc with the label side up.

ID3 Tag on an MP3 disc cannot be shown.

⇒ There are two types of ID3 Tag—Version 1 and Version 2. This System can only show ID3 Tag Version 1.

MP3 groups and tracks are not played back as you expect.

⇒ The playing order is determined when the disc was recorded. It depends on the writing application.

MP3/WMA or JPEG files are not played back.

⇒ The inserted disc may include both type of tracks (MP3/WMA files and JPEG files). In this case, you can only play back the files selected by the "FILE TYPE" setting (see page 36).

⇒ You have changed the "FILE TYPE" setting after you inserted a disc. In this case, reload the disc.

The disc sound is discontinuous.

⇒ The disc is scratched or dirty.

The disc playback sounds strange.

⇒ Cancel Key Control (see page 32).

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).

⇒ The Program Play is in use. Cancel the Program Play (see page 20).

Tape Operations:**The cassette holder cannot be opened.**

⇒ Power supply from the AC power cord has been cut off while the tape was running. Turn on the System.

Recording Operations:**Impossible to record.**

⇒ Small tabs on the back of the cassette are removed. Cover the holes with adhesive tape.

⇒ The Karaoke scoring function is in use. Cancel the scoring function (see page 32).

Karaoke Operations:**Cannot activate the scoring function.**

⇒ DVD Audio or DVD-VR is playing.

⇒ You cannot use the scoring function while recording, or while the disc menu for DVD Video/SVCD/VCD is shown on the TV screen.

Scoring result seems wrong (or "–" appears).

⇒ The playback time with the scoring function is too short. It is recommended to sing for more than one and a half minutes. (If playback time is less than one minute, the scoring is canceled.)

⇒ No input from the microphone or the input level (MIC LEVEL) is too low.

⇒ You have sung in too low voice.

Timer Operations:**Daily Timer or Recording Timer does not work.**

⇒ The System has been turned on when the on-time comes. Timer starts working only when the System is turned off.

Language Code List

AA	Afar	FA	Persian	KM	Cambodian	OM	(Afan) Oromo	SU	Sundanese
AB	Abkhazian	FI	Finnish	KN	Kannada	OR	Oriya	SV	Swedish
AF	Afrikaans	FJ	Fiji	KO	Korean (KOR)	PA	Panjabi	SW	Swahili
AM	Ameharic	FO	Faroese	KS	Kashmiri	PL	Polish	TA	Tamil
AR	Arabic	FY	Frisian	KU	Kurdish	PS	Pashito, 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	Laotian	RN	Kirundi	TK	Turkmen
BE	Byelorussian	GU	Gujarati	LT	Lithuanian	RO	Rumanian	TL	Tagalog
BG	Bulgarian	HA	Hausa	LV	Latvian, Lettish	RU	Russian	TN	Setswana
BH	Bihari	HI	Hindi	MG	Malagasy	RW	Kinyarwanda	TO	Tonga
BI	Bislama	HR	Croatian	MI	Maori	SA	Sanskrit	TR	Turkish
BN	Bengali, Bangla	HU	Hungarian	MK	Macedonian	SD	Sindhi	TS	Tsonga
BO	Tibetan	HY	Armenian	ML	Malayalam	SG	Sangho	TT	Tatar
BR	Breton	IA	Interlingua	MN	Mongolian	SH	Serbo-Croatian	TW	Twi
CA	Catalan	IE	Interlingue	MO	Moldavian	SI	Singhalese	UK	Ukrainian
CO	Corsican	IK	Inupiak	MR	Marathi	SK	Slovak	UR	Urdu
CS	Czech	IN	Indonesian	MS	Malay (MAY)	SL	Slovenian	UZ	Uzbek
CY	Welsh	IS	Icelandic	MT	Maltese	SM	Samoan	VI	Vietnamese
DA	Danish	IW	Hebrew	MY	Burmese	SN	Shona	VO	Volapuk
DZ	Bhutani	JI	Yiddish	NA	Nauru	SO	Somali	WO	Wolof
EL	Greek	JW	Javanese	NE	Nepali	SQ	Albanian	XH	Xhosa
EO	Esperanto	KA	Georgian	NL	Dutch	SR	Serbian	YO	Yoruba
ET	Estonian	KK	Kazakh	NO	Norwegian	SS	Siswati	ZU	Zulu
EU	Basque	KL	Greenlandic	OC	Occitan	ST	Sesotho		

Specifications

Amplifier section

Output Power:

MAIN SPEAKERS: 150 W per channel, min. RMS, driven into 4 Ω at 1 kHz with no more than 10% total harmonic distortion.

Digital output:

OPTICAL DIGITAL OUTPUT:
-21 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

MIC 1/2: 3.0 mV/50 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

COMPONENT (Interlace/Progressive):

(Y) 1 V(p-p)/75 Ω

(PB/PR) 0.7 V(p-p)/75 Ω

Speaker Terminals: 4 Ω – 16 Ω (Main speakers)

16 Ω – 32 Ω (Surround 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)

For Saudi Arabia only

530 kHz – 1 600 kHz (at 10 kHz)

Disc player section

Playable disc: DVD Video/DVD Audio/CD/VCD/SVCD

CD-R/CD-RW (recorded in Audio CD/Video CD/
Super Video CD formats and MP3/WMA/JPEG
files)

DVD-R (recorded in DVD Video format)

DVD-RW (recorded in DVD Video format or DVD-
VR format)

DVD-RAM (recorded in DVD-VR format)

Dynamic range: 80 dB

Horizontal resolution: 500 lines

Wow and flutter: Immeasurable

Cassette deck section

Frequency response

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: 195 W (at operation)

20 W (on standby)

Dimensions (W/H/D) (approx.): 185 mm x 460 mm x 361 mm

Mass (approx.): 10.9 kg

Supplied Accessories

See page 3.

Speakers

Main Speakers

Type: 3-Way 3-Speaker Bass Reflex
(Magnetically-Shielded Type)

Speaker systems: Woofer: 18 cm cone x 1
Mid: 5 cm cone x 1
Tweeter: 2 cm dome x 1

Power handling capacity: 150 W

Impedance: 4 Ω

Frequency range: 37 Hz – 31 000 Hz

Sound pressure level: 85 dB/W•m

Dimensions (W/H/D) (approx.): 204 mm x 460 mm x 271 mm

Mass (approx.): 4.6 kg each

Surround Speakers

Speaker systems: 8 cm cone x 1

Power handling capacity: 40 W

Impedance: 16 Ω

Dimensions (W/H/D) (approx.): 105 mm x 230 mm x 125 mm

Mass (approx.): 0.7 kg each

Design and specifications are subject to change without notice.

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- 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

DIGITAL AUDIO OUTPUT Playback disc	Output Signals		
	STREAM/PCM	DOLBY DIGITAL/PCM	PCM ONLY
DVD Video			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹		
with 96 kHz, Linear PCM	48 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit Linear PCM	
DVD Audio*²			
with 48/96/192 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM		
with 44.1/88.2/176.4 kHz, 16/20/24 bit Linear PCM	44.1 kHz, 16 bit Linear PCM		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
with DTS	DTS bitstream	48 kHz, 16 bit Linear PCM	
DVD-RW/RAM in DVD-VR format			
with 48 kHz, 16/20/24 bit Linear PCM	48 kHz, 16 bit Linear PCM* ¹		
with Dolby Digital	Dolby Digital bitstream		48 kHz, 16 bit Linear PCM
SVCD, VCD, CD	44.1 kHz, 16 bit Linear PCM* ¹ /48 kHz, 16 bit Linear PCM* ¹		
CD with DTS	DTS bitstream	44.1 kHz, 16 bit Linear PCM	
MP3/WMA disc	32/44.1/48 kHz, 16 bit Linear PCM		

*1 While playing some DVDs, digital signals may be emitted at 20 bits or 24 bits (at their original bit rate) through the OPTICAL DIGITAL OUTPUT terminal if the discs are not copy-protected.

*2 There is no output for DVD Audio with content protection set.

Parts Index

Remote control

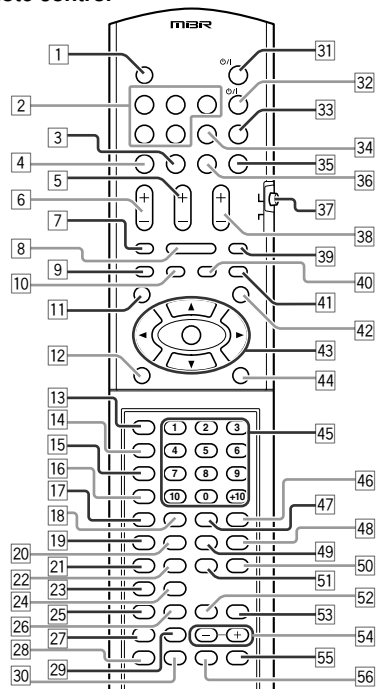
Button	Page	Button	Page
AUDIO	31	KARAOKE SCORING	1 32
	32	KEY #	50 32
	8	KEY \flat	51 32
	9 41	L / R BALANCE	54 12
	7 39	MIC MIX	23 31, 33
	40	MENU/PL	42 10, 26
	43	ON SCREEN	44 23 - 26
	23 - 28, 36, 38	PAGE	18 17
+ / -	54	PLAY MODE	49 19, 20
10 keys	45	REPEAT	20 21, 28
3D PHONIC	53	RHYTHM AX	25 12
ACTIVE BASS EX	26	RESERVE	24 33
ANGLE	16	RETURN	46 10
AUDIO	14	REVERSE MODE	48 11
AUDIO/TV selector	37	SCAN MODE	47 14
AUDIO VOL +/-	38	SET	27 8, 12, 13, 15, 33, 34, 35
AUX	34	SET UP	12 36
CANCEL	29	SETTING	55 12, 33
CHANNEL +/-	5	SLEEP	30 15
CLOCK/TIMER	28	SOUND MODE	52 13
DIMMER	56	SUB TITLE	15 17
DISC 1-5	2	TAPE-A $\blacktriangleleft\blacktriangleright$	3 7, 11
DVD LEVEL	19	TAPE-B $\blacktriangleleft\blacktriangleright$	36 7, 11
DVD/CD \blacktriangleright	4	TOP MENU/PG	11 10, 26
ECHO	22	TV VOL +/-	6 38
FM MODE	40	TV/VIDEO	33 38
FM/AM	35	V.MASKING	21 32
GLANCE BACK \curvearrowright	10	VFP	47 14
GROUP/TITLE	13	ZOOM	17 18, 28

Main unit

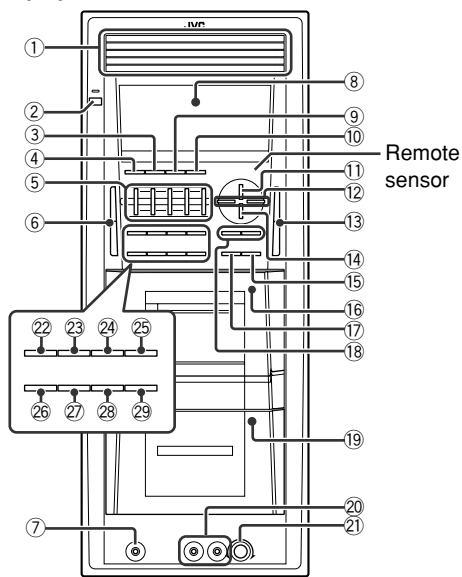
Button	Page	Button	Page
	2	DISC REC START	26 30
Display	8	DUBBING	28 30
	14	DVD/CD	10 7, 9
	18	DVD LEVEL	23 14
	12	FM/AM	9 7, 8
	11	KARAOKE SCORING	15 32
ACTIVE BASS EX. +/-	6	MIC 1 / MIC 2	20 31
AUX	25	MIC LEVEL	21 31
DEMO	24	PHONES	7 7
Disc trays	1	PRESET +/-	12 9
DISC 1-5 $\blacktriangleleft\blacktriangleright$	5		

Button	Page	Button	Page
PUSH-OPEN \blacktriangle	16 19	SOUND MODE	22 13
REC START/STOP	27	TAPE-A	4 7, 11, 30
		TAPE-B	3 7, 11, 29, 30
REVERSE MODE	29	TUNING	18 8
		VOLUME +/-	13 7, 12, 31
RHYTHM AX	17		

Remote control



Main unit



Mains (AC) Line Instruction (not applicable for Europe, U.S.A., Canada, and U.K.)

تعليمات خط التيار الكهربائي المتردد الرئيسي (المتردد) (لا تنطبق على هونج كونج واوروبا والولايات المتحدة الامريكية وكندا والمملكة المتحدة)

دستور العملهاى مربوط به برق (AC) (در مورد اروپا، آمريکا، کانادا و بریتانیای کبیر کاربرد ندارد)

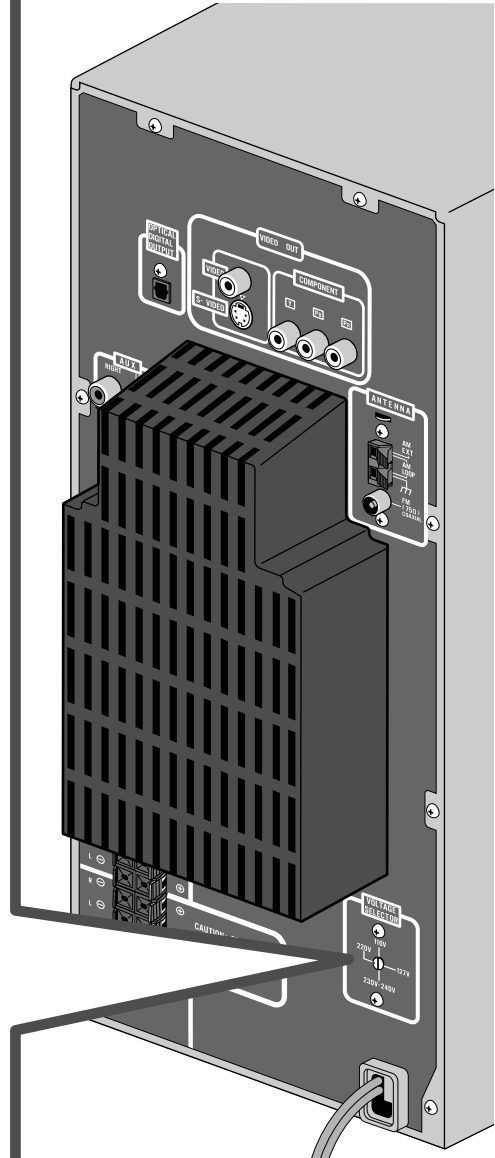
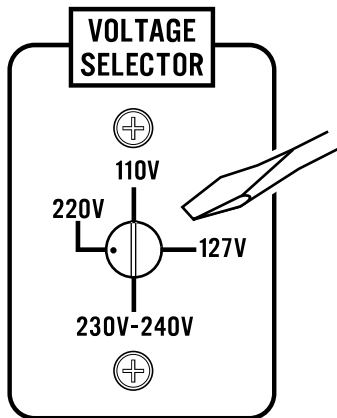
CAUTION for mains (AC) line

BEFORE PLUGGING IN, do check that your mains (AC) line voltage corresponds with the position of the voltage selector switch provided on the outside of this equipment and, if different, reset the voltage selector switch, to prevent from a damage or risk of fire/electric shock.

هام من اجل خط التيار الكهربائي الرئيسي المتردد (المتردد) قبل ادخال قابس الطاقة الكهربائية، تأكد من تطابق منتخب فولطية التيار الكهربائي الرئيسي (المتردد) الموجود على خلفية الجهاز مع فولطية التيار الكهربائي في بلدك. في حالة عدم التطابق، اعد ضبط مفتاح منتخب الفولطية على فولطية التيار الكهربائي في بلدك. عدم عمل ذلك، يمكن ان يؤدي الى حصول ضرر او حريق او صدمة كهربائية.

احتياط در مورد خط برق (AC)

قبل از اتصال به برق، بررسی کنید که ولتاژ برق (AC) شما با وضعیت سوئیچ انتخابگر ولتاژ در قسمت بیرونی دستگاه مطابقت دارد و در صورت تفاوت، سوئیچ انتخابگر ولتاژ را برای جلوگیری از خسارت و خطر آتش سوزی/ شوک الکتریکی ریست کنید.



JVC

