



DVD DIGITAL THEATER SYSTEM

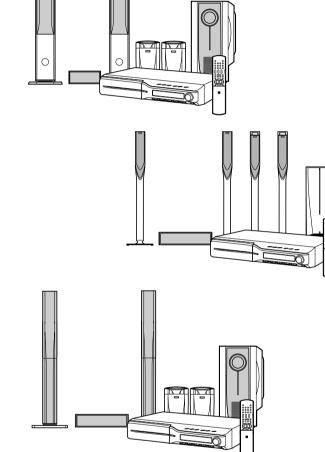
TH-C7

Consists of XV-THC7, SP-PWC7, SP-THC7F, SP-THC7C and SP-THC5S

TH-C6

Consists of XV-THC6, SP-PWC6, SP-THC6F, SP-THC6C and SP-THC6S

TH-C5 Consists of XV-THC5, SP-PWC5, SP-THC5F, SP-THC5C and SP-THC5S



TH-C4/TH-C3

Consists of XV-THC4, SP-PWC4, SP-THC4F, SP-THC4C and SP-THC4S Consists of XV-THC3, SP-PWC3, SP-THC3F, SP-THC3C and SP-THC3S





INSTRUCTIONS







AV COMPU LINK

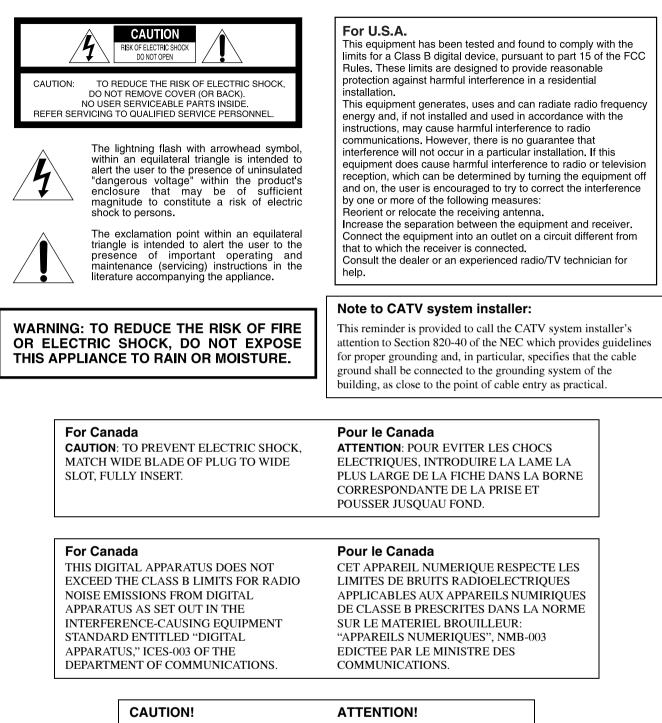
For Customer Use:

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

Model No.

Serial No.

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



To avoid personal injury or accidentally dropping the unit, have two persons unpack, carry, and install the unit. Pour éviter toute blessure personnelle ou toute chute accidentelle de l'appareil, celui-ci doit être déballé, transporté et installé par deux personnes.



SP-THC7: 45 kg/100 lbs TH-C6: 38 kg/84 lbs TH-C5: 39 kg/86 lbs TH-C4: 23.5 kg/52 lbs TH-C3: 23.5 kg/52 lbs SP-THC7: 45 kg/100 lbs TH-C6: 38 kg/84 lbs TH-C5: 39 kg/86 lbs TH-C4: 23.5 kg/52 lbs TH-C3: 23.5 kg/52 lbs

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 THE UNIT.

IMPORTANT POUR PRODUITS LASER

- 1. PRODUIT LASER CLASSE 1
- ATTENTION: N'ouvrez pas le couvercle supérieur. Il n'y a aucune pièce réparable par l'utilisateur à l'intérieur de l'appareil; confiez toute réparation à un personnel qualifié.
- 3. **ATTENTION**: Risque de radiations laser visible et invisible quand l'appareil est ouvert et que le système de verrouillage ne fonctionne pas ou a été mis hors service. Évitez toute exposition directe au rayon.
- 4. REPRODUCTION DE L'ÉTIQUETTE: ÉTIQUETTE DE PRÉCAUTION PLACÉE À L'INTERIEUR DE L'APPAREIL.

			VARO : Avattaessa ja suojalukitus
			ohitettuna tai viallisena olet alttiina
interlock failed or defeated.	åben eller interlocken fejler.	den öppnas och spärren är	näkyvälle ja näkymättömälle
AVOID DIRECT EXPOSURE TO	Undgå direkte eksponering til	urkopplad. Betrakta ej	lasersäteilylle. Vältä säteen
BEAM. (e)	stråling. (d)	strålen. (s)	kohdistumista suoraan itseesi. (f)

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 — 아/ button! (XV-THC7/XV-THC6/XV-THC5/XV-THC4/XV-THC3)

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

- When the system is on standby, the STANDBY lamp lights red.
- When the system is turned on, the STANDBY lamp goes off.
- The power can be remote controlled.

ATTENTION

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

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

ATTENTION — Touche 아// (XV-THC7/XV-THC6/XV-THC5/XV-THC4/XV-THC3)

Déconnectez la fiche d'alimentation secteur pour couper l'alimentation complètement (le témoin STANDBY s'éteint).

La touche O/I, dans n'importe quelle position, ne déconnecte pas le système du secteur.

- Quand le système est en attente, le témoin STANDBY est allumé en rouge.
- Quand le système est sous tension, le témoin STANDBY s'éteint.
- L'alimentation ne peut pas être télécommandée.

CAUTION (SP-PWC7/SP-PWC6/SP-PWC5/SP-PWC4/SP-PWC3)

The power supply to the subwoofer is linked to the center unit. The POWER ON lamp on the subwoofer lights green when the power is turned on.

ATTENTION (SP-PWC7/SP-PWC6/SP-PWC5/SP-PWC4/SP-PWC3)

L'alimentation au caisson d'extrêmes graves passe par l'unité centrale. Le témoin POWER ON vert sur le caisson d'extrêmes graves s'allume quand le système est allumé.

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AV COMPU LINK remote control

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Notes on handling

Important cautions

Installation of the system

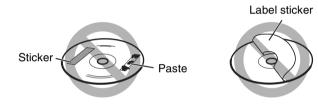
- Select a place which is level, dry and neither too hot nor too cold; between 5°C and 35°C.
- Leave sufficient distance between the system and the TV.
- Do not use the system in a place subject to vibration.

Power cord

- Do not handle the power cord with wet hands!
- A small amount of power is always consumed while the power cord is connected to the wall outlet (center unit only).
- When unplugging the power cord from the wall outlet, always pull on the plug, not the power cord.

To prevent malfunctions of the system

- There are no user-serviceable parts inside. If anything goes wrong, unplug the power cord and consult your dealer.
- Do not insert any metallic object into the system.
- Do not use any non-standard shape disc (like a heart, flower or credit card, etc.) available on the market, because it may damage the system.
- Do not use a disc with tape, stickers, or paste on it, because it may damage the system.



Note about copyright laws

Check the copyright laws in your country before recording from the discs. Recording of copyrighted material may infringe copyright laws.

Note about copyguard system

The discs are protected by copyguard system. When you connect the system to your VCR directly, the copyguard system activates and the picture may not be played back correctly.

Safety precautions

Avoid moisture, water and dust

Do not place the system in moist or dusty places.

Avoid high temperatures

Do not expose the system to direct sunlight and do not place it near a heating device.

When you are away

When away on travel or for other reasons for an extended period of time, disconnect the power cord plugs from the wall outlet.

Do not block the vents

Blocking the vents may damage the system.

Care of the cabinet

When cleaning the system, use a soft cloth and follow the relevant instructions on the use of chemically-coated cloths. Do not use benzene, thinner or other organic solvents including disinfectants. These may cause deformation or discoloring.

If water gets inside the system

Turn the system off and disconnect the power cord plug from the wall outlet, then call the store where you made your purchase. Using the system in this condition may cause fire or electrical shock.

Supplied accessories

Check to be sure you have all of the supplied accessories. The number in parentheses is the quantity of the pieces supplied. If anything is missing, contact your dealer immediately.

- Remote control (1)
- Batteries (2)
- FM antenna (1)
- AM loop antenna (1)
- Power cord (1)
- System cord (1)
- Composite video cord (1)
- Speaker cords (except for TH-C3) For satellite (front left/right) and center speakers (3) For satellite speakers (surround left/right) (2)
- Screws

TH-C7 (for satellite speakers): M4 x 35 mm (8) TH-C6 (for satellite speakers): M5 x 25 mm (4) M4 x 55 mm (12) TH-C5 (for satellite speakers): M4 x 40 mm (6)

• Bottom covers (for TH-C6 only) For satellite speakers (front and surround) (4)

Playable disc types

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



- DVD Logo is a trademark of DVD Format/Logo Licensing Corporation.
- 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.
- This system accommodates the NTSC system, and also can play discs recorded with PAL system. Note that the PAL video signal on a disc is converted to an NTSC signal and output.
- On some DVD VIDEOs, DVD AUDIOs, VCDs or SVCDs, their actual operation may be different from what is explained in this manual. This is due to the disc programming and disc structure, not a malfunction of this system.
- Before playing back discs, read their instructions or cautions carefully.

Region code of DVD VIDEO

This system can play back DVD VIDEO discs whose Region Code numbers include the system's Region Code, which is indicated on the rear panel.

Example of playable DVD:



If a DVD with an improper Region Code number is loaded, "REGION CODE ERROR!" appears on the TV screen and playback cannot start.

Notes on DVD-R, DVD-RW and DVD-RAM

- This system can also play finalized DVD-Rs or DVD-RWs recorded in DVD VIDEO format and DVD-RWs or DVD-RAMs recorded in DVD VR format.
- This system can also play DVD-Rs or DVD-RWs if MP3, WMA, and JPEG files are recorded on them with UDF Bridge format. This system does not support "multi-border" discs.

Notes on CD-R and CD-RW

- This system can also play CD-Rs or CD-RWs if MP3, WMA and JPEG files are recorded on them with ISO 9660 format.
- This system supports "multi-session" discs (up to 20 sessions).
- This system cannot play "packet write" discs.

Some discs may not be played back because of their disc characteristics, recording conditions, or damage or stain on them.

Unplayable discs:

SACD, CD-I (CD-I Ready), Photo CD, etc. Playing back these discs will generate noise and damage the speakers.

Notes on file types

For all playable files

- The system can only recognize and play files with one of the following extensions, which can be in any combination of upper and lower case;
 - MP3: ".MP3", ".mp3"
 - WMA: ".WMA", ".wma"
 - JPEG: ".JPG", ".JPEG", ".jpg", ".jpeg"
- The system recognizes up to 150 tracks (files) per group, 99 groups per disc, and the total number of the tracks (files) that the
- system can play is 4000.Some files may not be played back normally because of their disc characteristics or recording conditions.

For MP3/WMA files

- The system supports MP3/WMA files recorded with a bit rate of 32 320 kbps and a sampling frequency of 16 kHz, 22.05 kHz, 24 kHz*, 32 kHz, 44.1 kHz, or 48 kHz.
- If the tag information (album name, artist, and track title, etc.) is recorded on a disc, it appears in the file control display on the TV screen. (IF pg. 28)
- We recommend to record each piece of material (song) at a sample rate of 44.1 kHz and at a data transfer rate of 128 (96*) kbps.
 * For WMA only

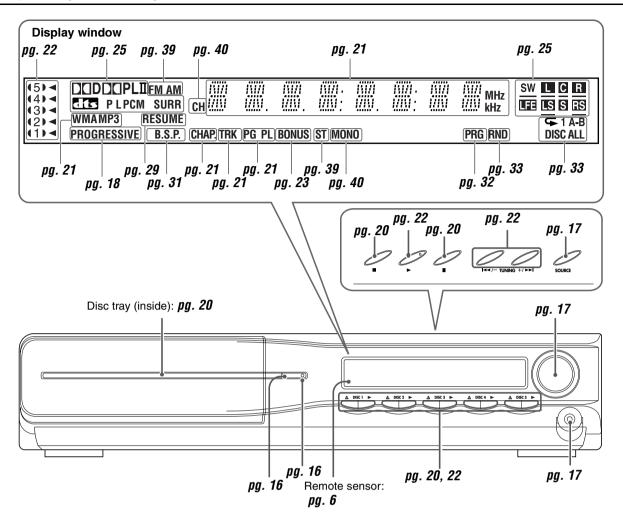
For JPEG files

- We recommend to record a file at 640 x 480 resolution.
- This system can only play baseline JPEG files.

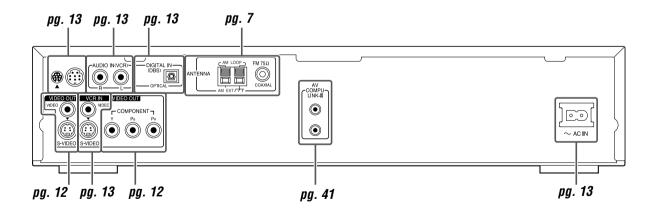
This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by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

Description of parts and controls

Front panel (center unit)



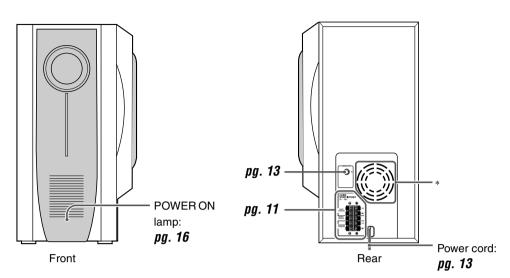
Rear panel (center unit)



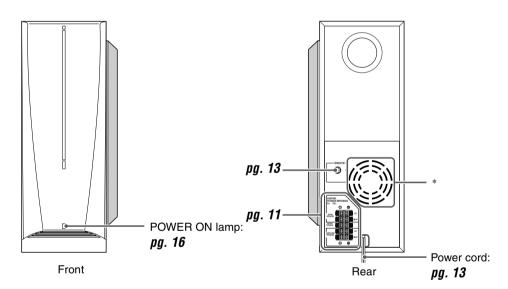
Powered subwoofer

SP-PWC7/SP-PWC5

Note that the illustration below is for SP-PWC5.

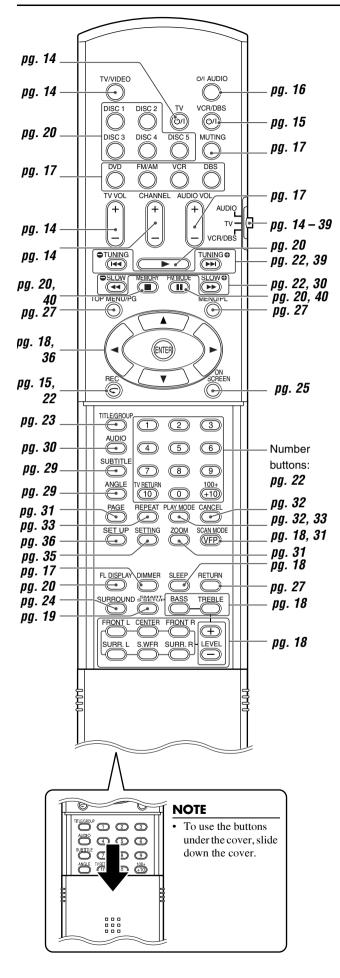


SP-PWC6/SP-PWC4/SP-PWC3

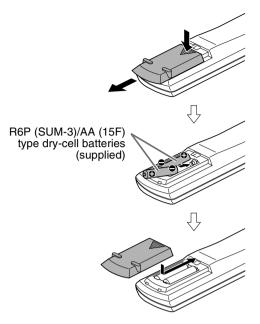


- For safety reasons, always ensure that there is sufficient space behind the powered subwoofer.
- * Do not block the ventilation openings.

Remote control



Putting batteries in the remote control



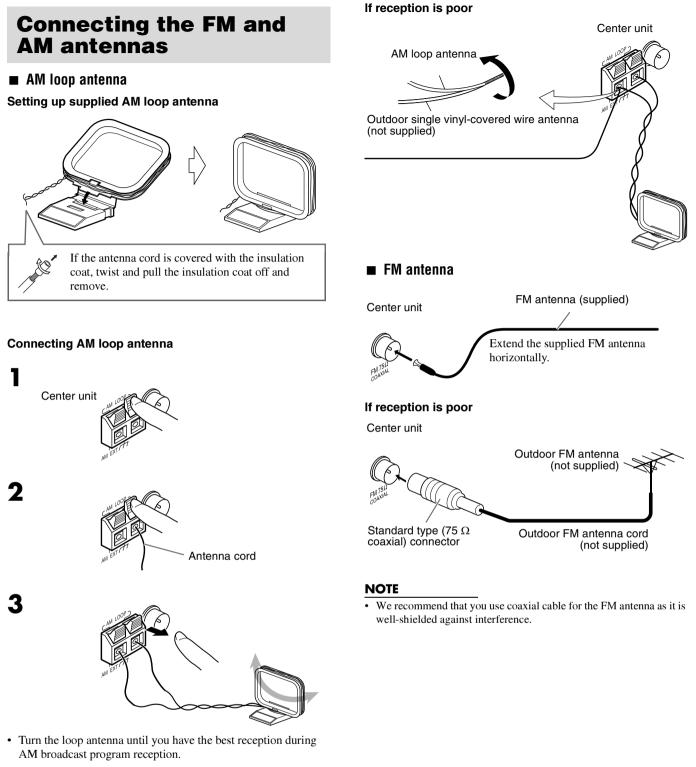
If the range or effectiveness of the remote control decreases, replace both batteries.

CAUTION

• Do not expose batteries to heat or flame.

Operating the system from the remote control

Aim the remote control directly to the front panel of the center unit. • Do not hide the remote sensor.



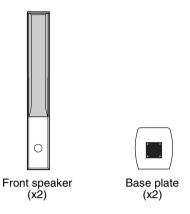
NOTE

• Make sure the antenna conductors do not touch any other terminals, connecting cords and power cords. This could cause poor reception.

Connecting the satellite (front, center, surround) speakers

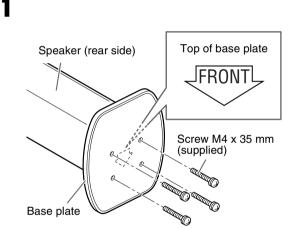
■ The front speakers — TH-C7

For the surround speakers of TH-C7, see "The surround speakers — Except for TH-C6" (IF pg. 10)



Before assembling —

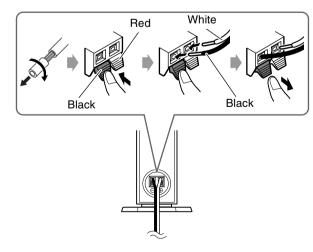
- Prepare a Phillips screwdriver (not supplied).
- Take care not to drop any component part while assembling; otherwise, it may cause damage to the floor or injury.



CAUTION

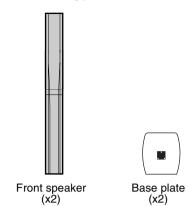
• NEVER insert your finger in between the speaker and the base plate, as it may get hurt.

2



■ The front speakers — TH-C5

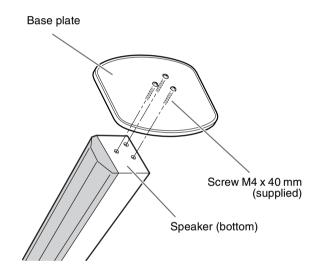
For the surround speakers of TH-C5, see "The surround speakers — Except for TH-C6" (IF pg. 10)



Before assembling —

- Prepare a Phillips screwdriver (not supplied).
- Take care not to drop any component part while assembling; otherwise, it may cause damage to the floor or injury.

1



CAUTION

• NEVER insert your finger in between the speaker and the base plate, as it may get hurt.

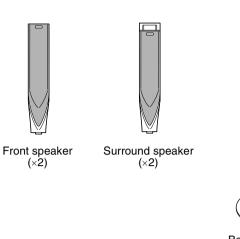


Red White Black Black

Connections

■ The front and surround speakers — TH-C6

The following procedure explains the front speaker assembly. The assembly of both the front and surround speakers are done in the same manner.



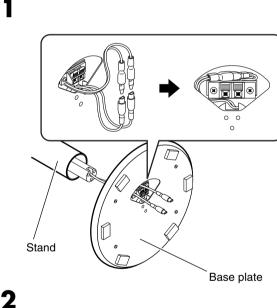
Base plate (×4)

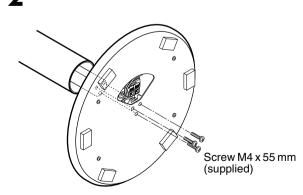
Stand

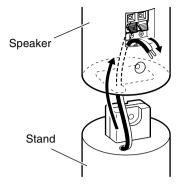
(×4)

Before assembling —

- Prepare a Phillips screwdriver (not supplied).
- Take care not to drop any component part while assembling; otherwise, it may cause damage to the floor or injury.

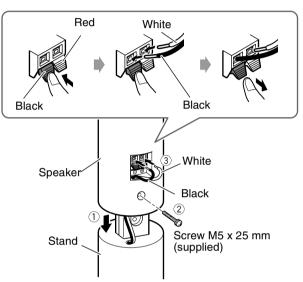






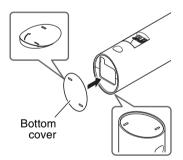


3



When installing the front and surround speakers on the wall;

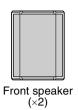
• Attach the supplied bottom cover on the bottom of each speakers as illustrated.



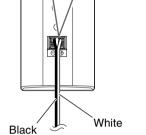
- Be sure to have them installed on the wall by a qualified personnel.
- DO NOT install the satellite speakers on the wall by yourself to avoid unexpected damage from their falling off the wall due to incorrect installation or weakness in wall structure.
- Care must be taken in selecting a location for speaker installation on a wall. Injury to personnel or damage to equipment may result if the speakers installed interfere with daily activities.
- If attaching the stand to the speaker, remove the bottom cover by inserting a flat-pointed tool into the hole of the bottom cover.



■ The front speakers — TH-C4



Red White Black Black



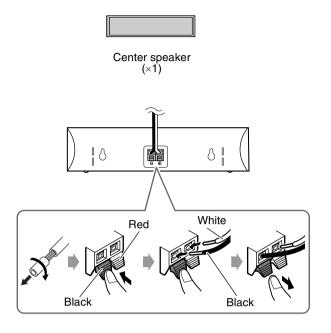
■ The surround speakers — Except for TH-C6

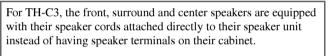


1



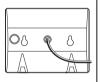
The following procedure explains SP-THC5C assembly. The assembly of other center speakers is done in the same manner.







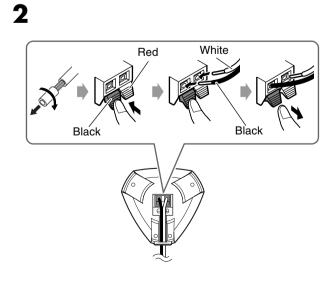




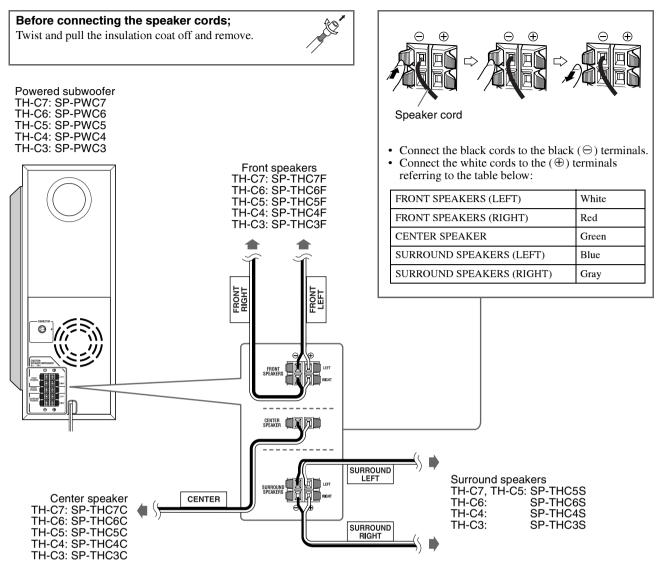
Front speaker

Surround speaker

Center speaker



Speaker (bottom) Note that the illustration below is for SP-PWC6.



CAUTION

- When you connect speakers other than the supplied ones, use speakers of the same speaker impedance (SPEAKER IMPEDANCE) indicated near the speaker terminals on the rear of the powered subwoofer.
- · DO NOT connect more than one speaker to one speaker terminal.

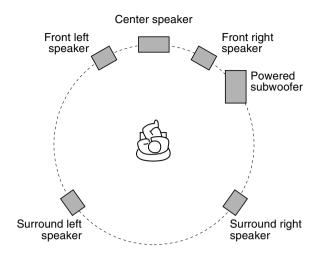
Precautions for daily use

- When moving the speakers, do not pull the speaker cords; otherwise, the speakers may fall over, causing damage or injury.
- Do not reproduce sounds at so high a volume that they are distorted; otherwise, the speakers may be damaged by internal heat buildup.

(For TH-C7, TH-C6 and TH-C5)

- When holding a speaker, always grasp the lower portion.
- Do not lean against the speakers, as the speakers could fall down or break, possibly causing an injury. Especially be careful that children do not lean against them.

Speaker layout



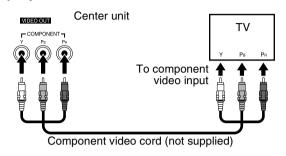
- Place the satellite speakers on a flat and level surface.
- The front and center speakers are magnetically shielded to avoid color distortions on TVs. However, if not installed properly, they may cause color distortions. So, pay attention to the following when installing the speakers.
 - When placing the speakers near a TV set, turn off the TV's main power switch or unplug it before installing the speakers. Then wait at least 30 minutes before turning on the TV's main power switch again.

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

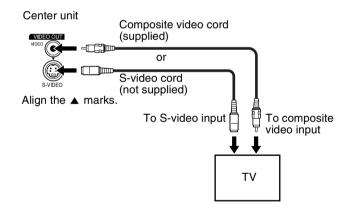
- The surround speakers are not magnetically shielded. If it is located nearby the TV or monitor, it will probably cause color distortion on the screen. To avoid this, do not place the speaker nearby the TV or monitor.
- Be sure to place the powered subwoofer to the TV's right. If you place the powered subwoofer to the TV's left, keep sufficient distance between them to prevent the TV screen from appearing mottled.

Connecting a TV

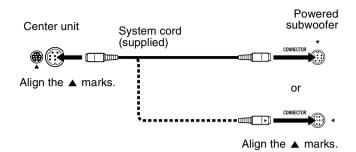
- You can get better picture quality in the order Component video > S-video > Composite video.
- Distortion of picture may occur when connecting to the TV via a VCR, or to a TV with a built-in VCR.
- You need to set "MONITOR TYPE" in the PICTURE menu correctly according to the aspect ratio of your TV. (IF pg. 37)
- To connect a TV equipped with the component video input jacks



- If your TV supports progressive video input, you can enjoy a high quality picture by setting the progressive scan mode to active.
 (IP pg. 18)
- If the component video input jacks of your TV are of the BNC type, use a plug adapter (not supplied) to convert the pin plugs to BNC plugs.
- The component video signals can be output only when you select "DVD" as the source to play. (IF pg. 17)
- To connect a TV equipped with the composite or Svideo jacks





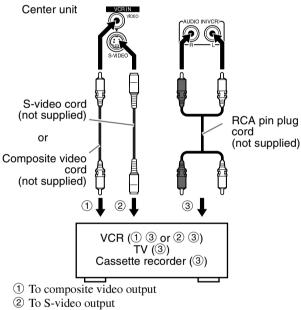


NOTE

The way of connecting the system cord varies depending on the type of the powered subwoofer.

Connecting to an analog component

You can enjoy the sound of an analog component.



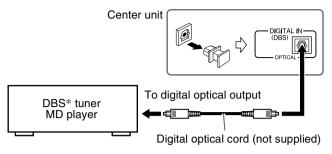
- 3 To audio output

NOTE

The signals input to the VIDEO jack of the VCR IN jacks will be output only from the VIDEO jack of the VIDEO OUT jacks, not from the S-VIDEO jack of the VIDEO OUT jacks.

Connecting to a digital component

You can enjoy the sound of a digital component.



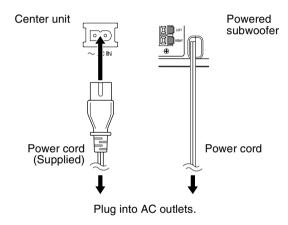
* DBS = Direct Broadcasting Satellite

NOTE

Only digital audio signals can be input when selecting "DBS" as the source to play. (B) pg. 17) When connecting a video component such as a DBS tuner, operate this system to listen to the sound.

Connecting the power cord

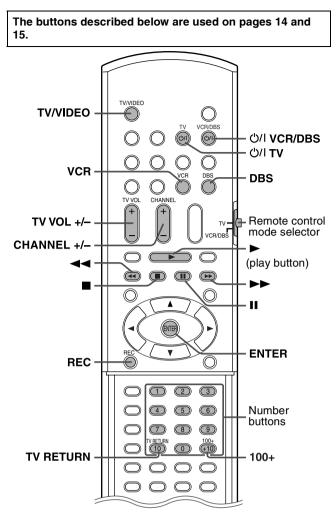
Make sure that all other connections have been completed.



CAUTION

- Disconnect the power cord before cleaning or moving the system.
- Do not pull on the power cord to unplug the cord. When unplugging the cord, always grasp and pull the plug so as not to damage the cord.

Operating external components with the remote control



NOTE

- Manufacturers' codes are subject to change without notice.
- Set the codes again after replacing the batteries of the remote control.

Operating the TV

To set the manufacturer's code

You can operate a JVC TV without setting the manufacturer's code.

- Slide the remote control mode selector to TV.
- Press and hold of TV.

Keep the button pressed until step 4 is finished.

Press ENTER.

4 Press number buttons (1-9, 0) to enter the manufacturer's code (2 digits).

Examples: For a Hitachi TV: Press 1, then 0. For a Toshiba TV:

Press 0, then 8.

Manufacturer	Code	Manufacturer	Code
JVC	01	Samsung	12
Hitachi	10	Sharp	06
Magnavox	02	Sony	07
Mitsubishi	03	Toshiba	08
Panasonic	04, 11	Zenith	09
RCA	05		

5 Release on TV.

If there is more than one code listed for corresponding brand, try each one until you enter the correct one.

Operation

Aim the remote control at the TV.

IMPORTANT

Before using the remote control to operate a TV; Set the remote control mode selector to TV.

The following buttons are available:

The following buttons	s are available.	
ው/I TV:	Turns TV on and off.	i U
TV VOL +/:	Adjusts the volume.	
TV/VIDEO:	Selects the input mode (either TV	or
	VIDEO).	
CHANNEL +/-:	Changes the channels.	
1-10, 0, +10 (100+):	Selects the channel.	
TV RETURN:	Alternates between the previously	selected
	channel and the current channel.	

Operating the DBS tuner or CATV converter

- To set the manufacturer's code
- 1 Slide the remote control mode selector to VCR/DBS.
- Press DBS.
- Press and hold U/I VCR/DBS.

Keep the button pressed until step 5 is finished.

Press ENTER.

5 Press number buttons (1-9, 0) to enter the manufacturer's code (2 digits).

Examples: For a GI Jerrold product: Press 0, then 1. For a Sony product: Press 2, then 0.

Manufacturer	Code
Echostar	21
GI Jerrold	01, 02, 03, 04, 05, 06, 07, 08
Hamlin	15, 16, 17, 18
Pioneer	13, 14
RCA	19
Scientific Atlanta	09, 10
Sony	20
Zenith	11, 12

O Release ⊕/I VCR/DBS.

If there is more than one code listed for your brand, try each one until you enter the correct one.

Operation

Aim the remote control at the DBS tuner or CATV converter.

IMPORTANT

Before using the remote control to operate a DBS tuner or CATV converter:

- Set the remote control mode selector to VCR/DBS.
- 2 Press DBS.

The following buttons are available:

ර/I VCR/DBS: Turns DBS tuner or CATV converter on and off

CHANNEL +/--: Changes the channels. 1-10, 0, +10 (100+): Selects the channel.

Operating the VCR

- To set the manufacturer's code
- Slide the remote control mode selector to VCR/DBS.
- **2** Press VCR.
- Press and hold U/I VCR/DBS. Keep the button pressed until step 5 is finished.
- Press ENTER.

5 Press number buttons (1-9, 0) to enter the manufacturer's code (2 digits).

Examples: For a Philips VCR: Press 0, then 9. For an NEC VCR: Press 2, then 5.

Manufacturer	Code	Manufacturer	Code
JVC	01, 02, 03	Philips	09
Emerson	11, 26	RCA	05, 06
Fisher	29	Samsung	24
Funai	10, 14, 15, 16	Sanyo	21, 22, 23
Gold Star	12	Sharp	27, 28
Hitachi	04	Shintom	30
Mitsubishi	13	Sony	18, 19, 20
NEC	25	Zenith	08
Panasonic	07, 17		•

O Release O/I VCR/DBS.

If there is more than one code listed for your brand, try each one until you enter the correct one.

Operation

Aim the remote control at the VCR.

IMPORTANT

Before using the remote control to operate a VCR;

- Set the remote control mode selector to 1 VCR/DBS
- 2 Press VCR.

The following buttons are available: nd off.

Ċ	/1 '	VC	R/DB	S:	Turns	VC	R	on	an

► (play button): Starts playback.

■ :	Stops operation.
II :	Pauses playback.
▶▶ :	Fast forwards video tape.

- 44 Rewinds video tape.
- REC: Press this button together with \blacktriangleright (play button) to start recording or together with II to pause recording.

CHANNEL +/-: Changes the TV channels on the VCR.

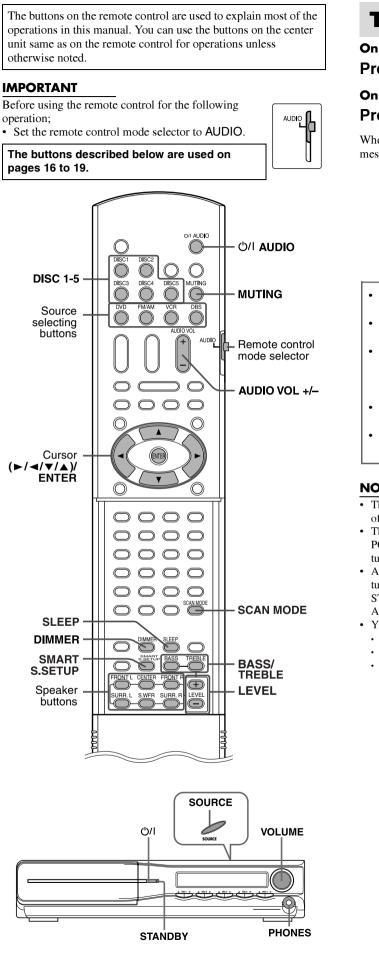
NOTE

When operating a VCR or DBS tuner/CATV converter;

The source setting of VCR or DBS remains after you have changed the remote control mode selector to AUDIO or TV. When operating VCR or DBS tuner/CATV converter again, it is not necessary to press VCR or DBS after setting the remote control mode selector.



Basic operations



Turning the system on/off

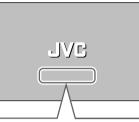
On the remote control:

Press O/I AUDIO.

On the center unit:

Press o/l.

When DVD is selected as the source (r pg. 17), the following messages will appear on the TV screen.



- "OPEN"/"CLOSE":
- Appears when opening or closing the disc tray.
- "NOW READING":
- Appears when the system is reading the disc information. "REGION CODE ERROR!":
- Appears when the Region Code of the DVD VIDEO does not match the code the system supports. The disc cannot be played back.
- "NO DISC":
- Appears when no disc is loaded.
- "CANNOT PLAY THIS DISC":
- Appears when unplayable disc is loaded.

- The STANDBY lamp turns on when the power is turned off and turns off when the power is turned on.
- The power supply to the subwoofer is linked to the center unit. The POWER ON lamp on the subwoofer lights green when the power is turned on.
- A small amount of the power is consumed even when the power is turned off (center unit only). This is called standby mode and the STANDBY lamp lights in this mode. Unplug the power cord from the AC outlet to turn the power off completely.
- You can also turn on the system by pressing the following buttons;
 - One of \blacktriangle buttons on the center unit
 - One of the source selecting buttons on the remote control
- One of the DISC (1-5) buttons or \blacktriangleright on the center unit You can use the same buttons on the remote control.

Selecting the source to play

On the remote control:

Press one of the source selecting buttons (DVD, FM/AM, VCR or DBS).

- DVD: To play back a disc (DVD VIDEO, VCD etc.). (IF pg. 20) FM/AM: To tune in an FM or AM station. (IF pg. 39)
- Each time you press the button, the band alternates between FM and AM.
- VCR: To select the source from a component connected to the VCR IN jacks and AUDIO IN (VCR) jacks. (IF pg. 13)
- DBS: To select the source from a component connected to the DIGITAL IN (DBS) jack. (IF pg. 13)

On the center unit:

Press SOURCE repeatedly until the source name you want appears on the display window.

NOTE

- When AM, FM or DBS is selected, this system does not output video signals.
- It may take time to change the source.

Adjusting the volume [VOLUME]

CAUTION

• Always set the volume to minimum level before starting any source. If the volume is set at its high level, the sudden blast of sound could permanently damage your hearing and/or blow out the speakers.

On the remote control: Press AUDIO VOL +/-.

On the center unit: Turn VOLUME.

Listening with headphones (not supplied)

CAUTION

- Be sure to turn down the volume;
- Before connecting or putting on headphones as high volume may damage both the headphones and your hearing.
- Before disconnecting headphones as high volume may be suddenly output from the speakers.

While connecting a pair of headphones to the PHONES jack on the center unit, the system automatically cancels the surround mode (IF pg. 24) currently selected, deactivates the speakers, turns the subwoofer's power off, and activates the headphone mode. "H. PHONE" appears on the display window.

Headphone mode

When using the headphones, the following signals are output regardless of your speaker setting;

- For 2 channel sources, the front left and right channel signals are output from the headphones.
- Multi-channel signals are down-mixed and output from the headphones.
- (For DVD AUDIO) When the disc prohibits down-mixing, only the front left and right channels are output from the headphones. In this case, "LR ONLY" appears on the display window for a few seconds.

Turning off the sound temporarily [MUTING]

Press MUTING.

To restore the sound

Perform one on the following:

- Press MUTING again.
- Press AUDIO VOL +/- (or turn VOLUME on the center unit).

Adjusting the brightness of the indications [DIMMER]

Press DIMMER.

Each time you press the button, the brightness level changes.

Sleep Timer [SLEEP]

The system turns off automatically when the specified period of time has passed.

Press SLEEP.

Each time you press the button, the shut-off time changes. Example:



To check the remaining time Press SLEEP once.

To change the remaining time

Press SLEEP repeatedly.

To cancel

Press SLEEP repeatedly until "SLEEP – –" appears. • Turning off the power also cancels the Sleep Timer.

Adjusting the output level of the subwoofer and speakers

Press each speaker button you want to adjust the output level and then LEVEL +/-.

- FRONT L: Front Left speaker
- FRONT R: Front Right speaker
- SURR. L: Surround Left speaker
- SURR. R: Surround Right speaker
- CENTER:
- S.WFR:

NOTE

• You can also make adjustments by using the setup menu shown on the TV screen. (IF pg. 37)

Center speaker

Subwoofer

• The adjustments take effect for all sources.

Adjusting the treble sound [TREBLE]

Press TREBLE and then LEVEL +/-.

NOTE

• The adjustments take effect for all sources.

Adjusting the bass sound [BASS]

Press BASS and then LEVEL +/-.

NOTE

• The adjustments take effect for all sources.

Changing the scan mode

The system can be accommodated to your TV's scan mode.

NOTE

- To use the system in PROGRESSIVE mode, it is required that the center unit is connected to the TV by using a component video cord (not supplied). (IF pg. 12)
- While DVD is selected as the source and stopped

Press and hold SCAN MODE for 2 seconds.

"INT-LACE" or "PROGRESS" appears on the display window.

2 Press Cursor ►/◄ to select the desired mode.

- INT-LACE:
 - E: Select this when your TV supports the interlaced video input only.
- PROGRESS: Select this when your TV equipped with component jacks supports the progressive video input.

You can get better picture quality in PROGRESSIVE mode than in INTERLACE mode.

3 Press ENTER while the selected mode is displayed.

When "PROGRESS" is selected, the PROGRESSIVE indicator lights on the display window.

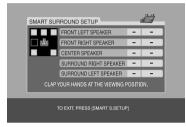
- Although the picture may be distorted when you press ENTER, this is not a malfunction of the system.
- There are some progressive TVs and High-Definition TVs that are not fully compatible with this system, resulting in an unnatural picture when playing back a DVD VIDEO in the progressive scan mode. In such a case, change the scan mode to "INT-LACE". To check the compatibility of your TV, contact your local JVC customer service center.
- All JVC progressive TVs and High-Definition TVs are fully compatible with this system.

Optimizing the speaker settings [Smart Surround Setup]

NOTE

- When you change the positioning of the speakers or listener, or replace the supplied speakers with other ones, perform Smart Surround Setup again.
- While DVD is selected as the source and stopped
- Take your position where you listen to the sound.

2 Press and hold SMART S. SETUP.



"SETTING" appears on the display window.

3 Clap your hands over your head once. 4 Make sure that "COMPLETED !" appears on the TV screen, then press SMART S. SETUP.

The system detects your clapping sound through the satellite speakers, then automatically makes the best settings for each speaker. "COMPLETED !" appears on the TV screen when Smart Surround Setup completes.

When "FAILED !" appears on the TV screen

The system could not detect the clapping sound correctly. In such a case, follow the instructions that appear on the TV screen.

• When the system detects the clapping sound as "FAILED !" three times, set the delay time (DELAY) and the output level (LEVEL) manually. (IFP pg. 37)

To cancel

Press SMART S. SETUP.

- You need to set the subwoofer's output level (LEVEL) manually. (EF pg. 18)
- In step 2, "SW ERROR" appears on the display window if the center unit and the powered subwoofer are not connected correctly by using the supplied system cord.

Playback

• The icon such as we shows the disc formats or file types the operation is available for.

IMPORTANT

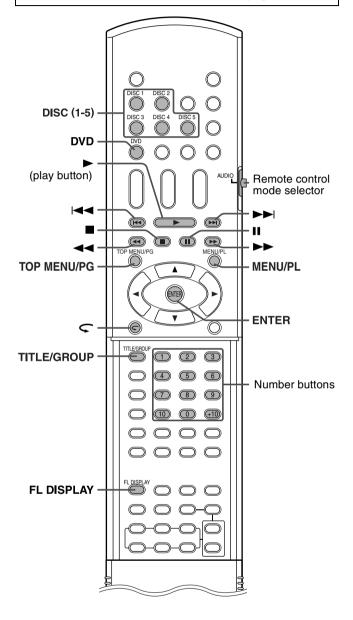
Before using the remote control for the following operation;

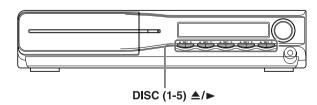
- Set the remote control mode selector to 1 AUDIO.
- 2 Press DVD.

The buttons described below are used on pages 20 to 23.

AUDIO

(





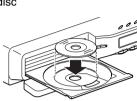
Basic playback

Press the desired DISC (1-5) \blacktriangle on the center unit.

- The system turns on and the disc tray comes out.
- **2** Place a disc.

Label side up





3 Press DISC (1-5).

For MP3/WMA files

The file control display (IF pg. 28) appears on the TV screen.

For JPEG files

Each file (still pictures) is shown on the TV screen for about 3 seconds (slide-show). When stopping playback, the file control display (IF pg. 28) appears on the TV screen.

For DVD VR disc

Pressing TOP MENU/PG or MENU/PL shows the control display on the TV screen. (EF pg. 23)

To pause playback

Press II.

To return to playback, press \blacktriangleright (play button).

To stop

Press ■.

On-screen quide icons

During DVD VIDEO playback, the following guide icons may appear for a while on the TV screen;

- : appears at the beginning of a scene containing multi-• subtitle languages.
- (): appears at the beginning of a scene containing multi-audio languages.
- **E**: appears at the beginning of a scene containing multi-angle views.
- (Play), (Pause), (Pause) / **(**Fast forward/ / (fast-reverse), (Slow-motion forward/ reverse): appears when you perform each operation.
- \bigotimes : the disc cannot accept an operation you have tried to do.





Playback

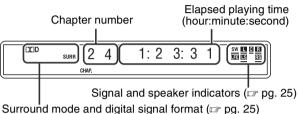
NOTE

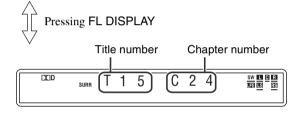
- Up to 5 discs can be loaded.
- You can also start playback by pressing ► (play button) or DVD.
- The system plays back available discs sequentially until you stop playback or until the disc loaded on the DISC 5 tray reaches to the end. However, when DVD VIDEO or DVD AUDIO is loaded in the system, playback of the disc next to the DVD VIDEO or DVD AUDIO will not start.
- (For JPEG) The system cannot accept operations even though you press any buttons before the entire picture appears on the TV screen.
 If you do not want the on-screen guide icons to appear, see page 38.

Playback information on the display window DVD VIDEO

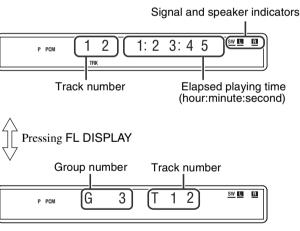
Example:

When a DVD VIDEO encoded with Dolby Digital 5.1ch is played





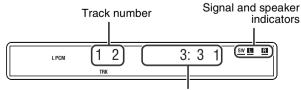
DVD AUDIO



VCD/SVCD/CD

Example:

When a CD is played back



Elapsed playing time (minute:second)

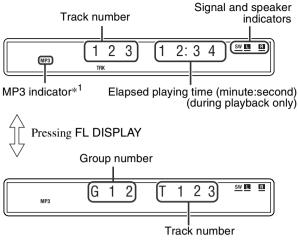
NOTE

• When a VCD or SVCD with PBC function is played, the elapsed playing time does not appear, but "PBC" appears.

MP3/WMA file

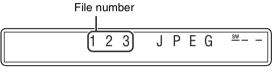
Example:

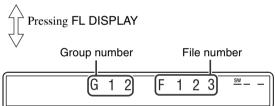
When an MP3 is played back



^{*1} WMA indicator lights for WMA disc.

JPEG file

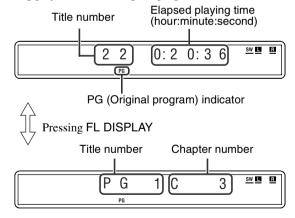




DVD VR disc

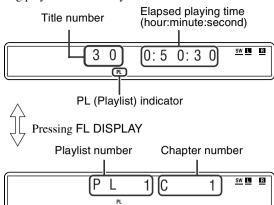
Example:

During playback on the Original program*



Example:

During playback on the Playlist*



* Pressing TOP MENU/PG or MENU/PL, you can change the play mode. (IF pg. 23)

NOTE

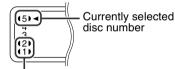
- You can change the time information mode (except for MP3/WMA/ JPEG). (IFP pg. 26)
- You can also check the playback information on the TV screen. (IP pg. 25)

Disc information on the display window

The disc indicators on the display window show the current status of the corresponding disc tray.

Example:

When the discs are loaded to disc trays 1, 2 and 5, and the disc in the disc tray 5 is selected.



Currently loaded disc number

Screen saver

A TV screen may burn out if a static picture is displayed for a long time. To prevent this, the system automatically dims the screen if a static picture is displayed for over 5 minutes (the screen saver function).

• Pressing any button will cancel the screen saver function.

• If you do not want to use the screen saver function, see page 37.

One Touch Replay

You can move back the playback position by 10 seconds from the current position.

During playback

On the remote control:

Press ⊂.

NOTE

- This function works in the same title.
- · This function is not available during the repeat playback.
- This feature may not work for some discs.

Fast-forward/fast-reverse search

During playback

On the remote control:

Press ►► or ◄◄.

Each time you press the button, the search speed changes.

To return to normal speed playback Press \blacktriangleright (play button).

Base of the state of the state

Press and hold $\rightarrow \rightarrow$ or $| \blacktriangleleft \triangleleft$.

Continuously pressing ►►I or I◄◄ increases the fast-forward/ reverse search speed.

NOTE

- The operation with ►► or I ◄ above is available for a disc other than MP3 and WMA.
- When a DVD VIDEO, DVD VR, VCD and SVCD is played back, no sound comes out during fast-forward/reverse search.
- When a DVD AUDIO or CD is played back, sound is intermittent and low during fast-forward/reverse search.
- This feature may not work for some discs.

Skip to the beginning of a desired selection

■ Using ►►I/I◄◄ buttons

■ For DVD VIDEO/DVD VR (chapter): During playback

For VCD/SVCD (track): During playback without PBC function For DVD AUDIO/CD/MP3/WMA/JPEG (track/file): During playback or while stopped

Press ►► or I repeatedly.

NOTE

- When playing back an MP3/JPEG file, you can make operations using the file control display. (IF pg. 28)
- This feature may not work for some discs.

Using number buttons on the remote control

 For DVD VIDEO/DVD VR (title, chapter): While stopped, the title number is selected. During playback, the chapter number is selected.
 For DVD AUDIO (track): During playback or while stopped
 For VCD/SVCD (track): During playback without PBC function
 For CD/MP3/WMA/JPEG (track/file): During playback or while stopped

Press number buttons (0-10, +10) to select the desired number.

• For details on using the number buttons, see "How to use the number buttons" below.

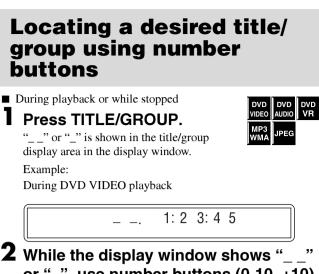
How to use the number buttons

To select 3:	Press 3.
To select 14:	Press +10, then 4.
To select 24:	Press +10 twice, then 4.
To select 40:	Press +10 three times, then 10.
	Or press +10 four times, then 0.



CD

/CE



or "_", use number buttons (0-10, +10) to enter the desired title or group number.

The system starts playback from the first chapter/track/file of the selected title/group.

• For details on using the number buttons, see "How to use the number buttons" (IF pg. 22).

NOTE

• This feature may not work for some discs.

Playing back a bonus group

Some DVD AUDIOs have a special group called "bonus group" whose contents are not open to the public. The bonus group is always assigned to the last group of a disc. To play back a bonus group, you have to enter the specific "key number" (a password). The way of getting the key number depends on the disc. After getting the key number, you can play back the bonus group by following the procedure below.

■ While the BONUS indicator lights up on the display window

Select the bonus group.

For selecting the group, see "Locating a desired title/group using number buttons" described above.

The key number entry indication appears.

On the TV



On the display window



2 Press number buttons (0-9) to enter the key number, then press ENTER.

When you enter the correct key number, playback starts and the BONUS indicator goes off.

• If you enter the wrong number, reenter the correct number.

To clear the key number entry

- Perform whichever one of the following:
- Open the disc tray.
- Turn off the system.

NOTE

• In Random Playback, tracks in the bonus group are not played back.

Selecting the desired title/playlist from the control display

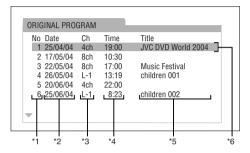
■ During playback or while stopped.

Press TOP MENU/PG or MENU/PL

The control display is shown on the TV screen, and the system starts playback of the first title/playlist.

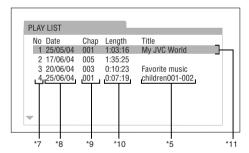
• The PLAY LIST is shown only when the playlist is on the DVD VR disc.

TOP MENU/PG: shows the ORIGINAL PROGRAM. Example:



- *1: Title 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 original program/playlist (The title may not be displayed depending on the recording equipment.)
- *6: Current title

MENU/PL: shows the PLAY LIST. Example:



- *7: Playlist number
- *8: Creating date of playlists
- *9: Number of chapters
- *10: Total playing time
- *11: Current playlist

2 Press ▼/▲ to select the desired title/ playlist.

The system starts playback of the selected title/playlist.

To clear the control display

Press ENTER.

About the play mode on a DVD VR disc

- Original program (ORIGINAL PROGRAM):
- The system can play back the original picture in the recorded order.Playlist (PLAY LIST):
- The system can play back the playlist edited by the recording equipment.



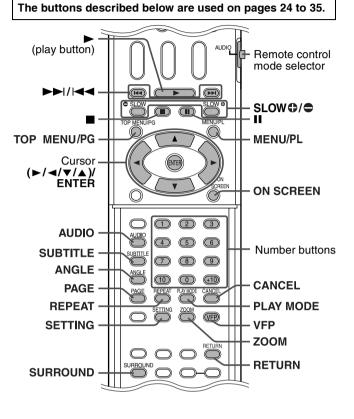
Advanced operations

• The icon such as by shows the disc formats or file types the operation is available for.

IMPORTANT

Before using the remote control for the following operation;

- Set the remote control mode selector to AUDIO.
- There are exceptions in the operation mentioned above. In such a case, follow each instruction.



Using the surround mode

Auto Surround (AUTO SUR)

Used to reproduce the sound as it is recorded without any conversion (downmixing or simulation, etc.). For example, a multichannel source is automatically reproduced in multichannel audio.

Dolby Surround

Π

Dolby Pro Logic II*1

Dolby Pro Logic II has a newly developed multichannel playback format to decode all 2 channel sources — stereo source and Dolby Surround encoded source — into a 5.1 channel.

Dolby Pro Logic II has two modes — Movie mode and Music mode:

• Pro Logic II Movie (MOVIE)

Suitable for reproduction of Dolby Surround encoded sources bearing the mark DCIDOLBY SURROUND.

• Pro Logic II Music (MUSIC)

Suitable for reproduction of any 2 channel stereo music sources.

Dolby Digital*1

■ DTS Digital Surround*²

Used to reproduce multichannel soundtracks of the software encoded with DTS Digital Surround (

DTS Digital Surround (DTS) is another discrete multichannel digital audio format available on CD and DVD software.

Available Surround modes for each input signal

The $\sqrt{\text{marks show available surround modes.}}$

Mode	Surround off	Auto Surround	Dol	by Surrou	nd	DTS Digital Surround	Linear PCM	Packed PCM	DSP	*
Signal	SURR OFF	AUTO SUR	MOVIE*3	MUSIC*3	DOLBY D	DTS	LPCM	PPCM	ALL ST*3	
Dolby D (Multichannel)	\checkmark	\checkmark	—	—	\checkmark	—	—	—	_	
Dolby D (2 channel)	\checkmark	\checkmark	\checkmark	\checkmark	_	—	—	_	\checkmark	
DTS Digital Surround (Multichannel)	\checkmark	\checkmark	_	_	_	\checkmark	_	_	_	*
DTS Digital Surround (2 channel)	\checkmark	\checkmark	\checkmark	\checkmark	_	_	_	_	\checkmark	*
Analog (VCR) or Linear/Packed PCM (2 channel)	\checkmark	\checkmark	\checkmark	\checkmark	_	_	_	_	\checkmark	
Linear/Packed PCM (Multichannel)	\checkmark	\checkmark	_	_	_	_	\checkmark	\checkmark	_	

- ¹ Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", "MLP Lossless", and the double-D symbol are trademarks of Dolby Laboratories.
- ² "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.
- ³ You can select these modes by pressing SURROUND. (IF pg. 25)

All Channel Stereo (ALL ST) mode can reproduce a larger stereo sound field using all the connected (and activated) speakers. All Channel Stereo can be used while reproducing 2 channel stereo source.

Normal stereo sound

All Channel Stereo





Indicators on the display window

Digital signal format indicators

PPCM, SURR:	Lights when DVD AUDIO packed PCM signals
	comes in.
LPCM, SURR:	Lights when Linear PCM signal comes in.
DD, SURR:	Lights when Dolby D signals come in.
dts, SURR:	Lights when DTS Digital (Surround) signals
	come in.
No indication:	No digital signal indicator lights when analog
	signals come in.

Dolby Surround/DSP mode indicators

- DCI PLII, SURR:Lights when Dolby Pro Logic II mode is
activated.SURR:Lights when All Channel Stereo mode is
- SURR: Lights when All Channel Stereo mode is activated.

Source signal indicators, etc.

- Light to indicate the incoming signals.
- Lights when the left channel signal comes in.
- **C**: Lights when the center channel signal comes in.
- **B**: Lights when the right channel signal comes in.
- **Lights when the LFE channel signal comes in.**
- **L**: Lights when the surround left channel signal comes in.
- **ES**: Lights when the surround right channel signal comes in.
- S: Lights when the monaural surround channel signal or 2
- channel Dolby Surround signal comes in. SW : Always lights.

The channel with "—" shows that the corresponding speakers are reproducing the channels' sound.

If the channels' sound decoded into 5.1 channel is reproduced, only "—" lights.

Selecting the surround mode

The system is set up to automatically select the optimal surround mode for input signal from digital multichannel software. When playing back 2 channel source, you can select the desired surround mode manually.

IMPORTANT

Before using the remote control for the following operation;

• Set the remote control mode selector to AUDIO.



When playing back digital multichannel software (except during SURR OFF mode)

The appropriate multichannel surround mode (Dolby D, DTS Digital Surround or Linear/Packed PCM) is automatically selected.

When playing back 2 channel source

You can select either mode of Dolby Pro Logic II (MOVIE/ MUSIC) or the DSP (ALL ST) mode.

Press SURROUND repeatedly to select the desired mode.

The surround mode is turned on and the current surround mode appears on the display window.

Each time you press the button, the surround mode changes. For details on each mode, see page 24.

To turn off the surround mode

Press SURROUND repeatedly until SURR OFF appears on the display window.

Storing adjustments — auto memory

When you turn the power off, the system memorizes the current surround mode. The memorized mode is automatically recalled when you turn the power on.

NOTE

- When FM or AM is selected as the source, you can select All Channel Stereo (ALL ST) and SURR OFF mode.
- For a down-mixing prohibited DVD AUDIO disc, the system continues to output multi-channel signals with "MULTI CH" shown on the display window even if the surround mode is turned off during playback. On the other hand, the system outputs only the front left and right channel signals with "LR ONLY" shown on the display window when you start playback with the surround mode having been set to "SURR OFF" or "H. PHONE".

Using the on-screen bar

You can check disc information and you can use some functions using the on-screen bar.

Showing the on-screen bar

Whenever a disc is loaded

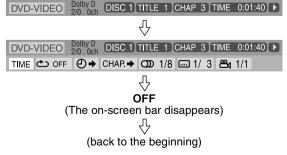


Press ON SCREEN.

Each time you press the button, the on-screen bar changes as follows on the TV screen.

Example:

During DVD VIDEO playback



• The currently selected item shows green.



■ Contents of the on-screen bar during playback DVD VIDEO

1 DVD-VIDEO	2 Dolby D 2/0 . Och	3 DISC 1	4 TITLE 1	5 CHAP 3	6 TIME 0:01	7 :40 ▶
TIME COFF	∂ → 10	CHAP.→	(D) 1/8	1/ 3	3 🕰 1/1 14	

DVD AUDIO

1	2	3	4	5	6	7
DVD-AUDIO	2/0 . Och	DISC 1 C	ROUP 1	FRACK 1 TIM	E 0:01:	40 🕨
	∂⇒	TRACK→	တာ 1/1	PAGE 5/12		

8 9 10 11 12 15

VCD

1 VCD		6 GRAM		3 DISC 3	5 TRACK 14	TIME	6 0:04:58	7
	DOFF	∂ → 10	CDD ST					

SVCD

1 SVCD		6 GRAM		3 DISC	5 3 TRACI	(14) TIME	6 0:04:58	7
	DOFF	∂ → 10	CDD ST1	 1;	1/4			

CD

1	16	3 5	6 7
CD	PROGRAM	DISC 3 TRACK 14 TH	ME 0:04:58
	⊃OFF ⊕→		
8	9 10		

DVD VR disc

1 DVD-VR	2 Dolby D 2/0 . Och	3 DISC 1	4 PG 1	5 CHAP 3 T	6 I OTAL 0:00:3	7
	F ∂ →	CHAP 🔶	CDD_ST	ON ON		
8 9	10	11	12	13		

1 Shows disc type.

- 2 Shows audio information.
- 3 Shows disc number.
- 4 Shows current title (for DVD VIDEO), group (for DVD AUDIO) number or play mode (for DVD VR).
- 5 Shows current chapter number (for DVD VIDEO and DVD VR) or track number (for other type of discs).
- 6 Shows time information. See "Changing the time information".

7 Shows playback status.

- **:** appears during playback.
- ▶ / **(**: appears during fast forward/reverse.
- ▶ / ①: appears during playback in forward slow-motion/ reverse slow-motion.
- appears when paused.
- **(**): appears when stopped.
- 8 Select this to change time information (6). See "Changing the time information" below.
- 9 Select this for Repeat Playback. (IF pg. 33)
- 10 Select this for time search function. (IF pg. 28)
- Select this for chapter (for DVD VIDEO and DVD VR) or track (for DVD AUDIO) search function. (IF pg. 27)
- 12 Select this to change audio language, channel, or stream. (EF pg. 30)
- 13 Select this to change subtitle language and subpicture. (IF pg. 29)
- 14 Select this to change view angle. (IF pg. 29)
- 15 Select this to change the page. (IF pg. 31)
- 16 Shows Playback Mode status. PROGRAM: appears during Program Playback. (IF pg. 32) RANDOM: appears during Random Playback. (IF pg. 33)

Changing the time information

You can change the time information in the onscreen bar on the TV screen and the display window of the center unit.

During playback

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

- Press Cursor ►/◄ to highlight TIME .
 Press ENTER repeatedly to select the
 - desired information.

Example:

When elapsed playing time of disc is selected.

TOTAL 1:25:58

- VCD/SVCD/CD
- TIME: Elapsed playing time of current track
- REM: Remaining time of current track
- TOTAL: Elapsed time of disc
- T. REM: Remaining time of disc
- DVD VIDEO/DVD AUDIO/DVD VR
- TIME: Elapsed playing time of current chapter/track
- REM: Remaining time of current chapter/track
- TOTAL: Elapsed time of Title/Group/Program
- T. REM: Remaining time of Title/Group/Program

4 Press ON SCREEN.

The on-screen bar disappears.

NOTE

• When playing back DVD VR, "TIME" and "REM" cannot be shown.

Playing from a specified position on a disc

You can start playing a title, chapter or track you specify. You can also play a disc from specified time.

Locating a desired scene from the DVD menu

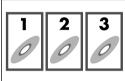
DVD VIDEOs generally have their own menus which show
disc contents and you can display them on the TV screen.DVD
VDEOYou can locate a desired scene by using these menus.DVD
VDEO

■ Whenever a DVD VIDEO is loaded

Press TOP MENU/PG or MENU/PL.

The menu appears on the TV screen.

Example:



Normally, a DVD VIDEO which contains more than one title will have a "top" menu which lists the titles. Press TOP MENU/PG to show the title menu.

OP MENU/PG to snow the title menu.

Some DVD VIDEO may also have a different menu which is shown by pressing MENU/PL.

See the instructions for each DVD VIDEO regarding its particular menu.

2 Use Cursor ►/◄/▼/▲ to select a desired item.

3 Press ENTER.

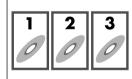
• With some discs, you can also select items by entering the corresponding number using number buttons.

Locating a desired scene using a VCD/ SVCD menu with PBC

A VCD or SVCD recorded with PBC has its own menus such as a list of contained songs. You can locate a specific scene by using these menus.

- During playback with PBC function
- Press RETURN repeatedly until the menu appears on the TV screen.

Example:



2 Press number buttons (1-10, +10) to select the number of the desired item.

• For details on using the number buttons, see "How to use the number buttons" (IF pg. 22).

To return to the menu Press RETURN.

When "NEXT" or "PREVIOUS" is shown on the TV screen:

- To go to the next page, press ►►.
- To return to the previous page, press I◄◄.

NOTE

- If you want to play a PBC-compatible VCD/SVCD without using the PBC function, perform any of the following:
 - · Start playback by pressing number buttons while stopped.
 - Press ▶ repeatedly until the desired track number is displayed, then start playback by pressing ▶ (play button). The track number appears on the display window instead of "PBC".
- To activate the PBC function when playing a PBC-compatible VCD/ SVCD without using the PBC function, perform any of the following:
 - Press TOP MENU/PG or MENU/PL.
 - Press \blacksquare twice to stop playback, then press \blacktriangleright (play button).

Locating a desired chapter/track using the on-screen bar

- During playback
- Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

2 Press Cursor ►/◄ to highlight CHAP.→/ TRACK→.

3 Press ENTER.

Example: During DVD VIDEO playback

DVD-VIDEO Dolby D 2/0.0ch DISC 1 TITLE 1 CHAP 3 TIME 0:01:40 ► TIME C OFF O → CHAP. → OD 1/8 1/ 3 🕰 1/1

CHAPTER _

4 Press number buttons (0-9) to enter the desired chapter number.

Example:	
To select 8:	Press 8.
To select 10:	Press 1, then 0.
To select 20:	Press 2, then 0.
To select 37:	Press 3, then 7.

To correct a misentry

Repeat step 4.

5 Press ENTER.

O Press ON SCREEN.

The on-screen bar disappears.

NOTE

SVCD

VCD

• You can select up to the 99th chapter/track.

Locating a desired position by specifying the time

- For DVD VIDEO/DVD AUDIO/DVD VR: During playback
 For VCD/SVCD: While stopped or during playback without PBC
 function
 For CD: During playback or while stopped
- When specifying the elapsed playing time from the beginning of the disc

Perform the following procedure while stopped.

When specifying the elapsed playing time from the beginning of the current title/track

Perform the following procedure during playback.

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

2 Press Cursor ►/◄ to highlight 🕑 +.

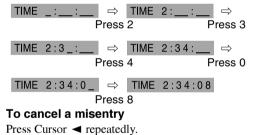
3 Press ENTER.



4 Use number buttons (0-9) to enter the time.

Example:

To play back from a point 2 (hours): 34 (minutes): 08 (seconds) elapsed



5 Press ENTER.

D Press ON SCREEN.

The on-screen bar disappears.

NOTE

 You can specify time in hours/minutes/seconds for DVD VIDEO/ DVD AUDIO/DVD VR and in minutes/seconds for VCD/SVCD/CD.

Using the file control display

You can search and play desired groups and tracks/files using the file control display on the TV screen. Current group/total group Playback mode (PROG

CD

number

even

MP3 WMA

up Playback mode (PROGRAM, RANDOM, REPEAT)

Tag information (for MP3/ WMA only)		Elapsed playing time of current track (for MP3/WMA only)		
FILE	PROGRAM REPEAT STEP Time 00:02:15			
Group : 3 / 3 Blue Red Green Track Information Title Weather Artist Earth Album Nature		Track: 10 / 30 (Total 1000) 1. Cloudy.mp3 2. Fair.mp3 3. Fog.mp3 4. Hail.mp3 5. Indian summer.mp3 6. Rain.mp3 7. Shower.mp3 8. Snow.mp3 9. Thunder.mp3 10. Typhoon.mp3 11. Wind.mp3 12. Winter sky.r 1p3		
Current group		Current track (file)		
L I Current track (file) / total track Total track (file) (file) number on current group number on disc				

Playback status

The file control display appears automatically during playback (MP3/WMA) or while stopped.

■ For MP3/WMA:

During playback or while stopped For JPEG: While stopped

Press Cursor ►/◄/▼/▲ to select the desired group/track/file.

• For MP3/WMA, playback starts from the selected track.

2 Press ► (play button) or ENTER.

- Track playback/slide-show starts from the selected track/ file.
- When you press ENTER for JPEG, only the selected file is played back.

- (For MP3/WMA) During playback, you can locate the desired track/ file by pressing ►►I/I◄◄ or Cursor ▲/▼.
- You can also check playback information on the display window. (IP pg. 21)
- Some group, track and file names may not be displayed correctly depending on recording conditions.
- The order of groups, tracks and files may be displayed differently from the order displayed on your personal computer.

Resume Playback

When Resume Playback is set to "ON" (IF pg. 38) and you stop playback by the following operations, the position where playback has been stopped is stored. ("RESUME" appears on the display window.)



- Turning off the power (□ pg. 16)
 Pressing once
- Changing the source (EF pg. 17)

To start playback from the stored position

Press \blacktriangleright (play button) or DVD.

• There may be a case where ► (play button) does not work after changing the source.

To clear the stored position

Press \blacksquare again or open the disc tray with the playback disc.

Selecting a view angle

During playback of a disc containing multi-view angles

DVD DVD VIDEO AUDIO

When using the ANGLE button:

Press ANGLE.

Example:

The first view angle is selected out of 3 view angles recorded.



2 Press ANGLE repeatedly or press Cursor ▼/▲ to select the desired view angle.

When using the on-screen bar:

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

- 2 Press Cursor ►/◀ to highlight ఊ1/3.
- **3** Press ENTER.



4 Press Cursor ▼/▲ to select the desired view angle.

5 Press ENTER.

6 Press ON SCREEN.

The on-screen bar disappears.

NOTE

• During DVD AUDIO playback, this feature is available only for the video part.

Selecting the subtitle

During playback of a disc containing subtitles in several languages

When using the SUBTITLE button:

Press SUBTITLE.

Example (DVD VIDEO):

"ENGLISH" is selected out of 3 subtitle languages recorded.

ENGLISH

2 Press Cursor ▼/▲ to select the desired subtitle.

For DVD VR

• Pressing SUBTITLE activates the subtitles (subpictures) regardless of whether the subtitles are recorded or not. (subpictures will not change if no subpictures is recorded.)

For SVCD

• An SVCD can contain up to four subtitles. Pressing SUBTITLE changes the subtitles regardless of whether the subtitles are recorded or not. (Subtitles will not change if no subtitle is recorded.)

NOTE

• To clear the subtitle, press SUBTITLE. Each time you press SUBTITLE, subtitle appears and disappears alternately.

When using the on-screen bar:

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

- **2** Press Cursor $\blacktriangleright/\blacktriangleleft$ to highlight 💷 1/3.
- **3** Press ENTER.

DVD-VIDEO DOBY D 2/0.0ch DISC 1 TITLE 1 CHAP 3 TIME 0:01:40 ► TIME C→ OFF O→ CHAP.→ OD 1/8 III 1/3 CH 1/1 ENGLISH

- 4 Press Cursor ▼/▲ repeatedly to select the desired subtitle.
- **5** Press ENTER.

6 Press ON SCREEN.

The on-screen bar disappears.

NOTE

- To clear the subtitle, press SUBTITLE. Each time you press SUBTITLE, subtitle appears and disappears alternately.
- Some subtitle or audio languages are abbreviated in the pop-up window. See "The language codes list" (IP pg. 36).
- During DVD AUDIO playback, this feature is available only for the video part.



DVD DVD DVD VIDEO AUDIO VR

VCD SVCI

Selecting the audio

During playback of a disc containing audio in several languages

When using the AUDIO button:

Press AUDIO.

Example (DVD VIDEO):

"ENGLISH" is selected out of 3 audio languages recorded.

OD 1/3
ENGLISH
_

2 Press AUDIO repeatedly or press Cursor ▼/▲ to select the desired audio.

When using the on-screen bar:

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

2 Press Cursor $\blacktriangleright/\blacktriangleleft$ to highlight \bigcirc 1/3.

3 Press ENTER.

 DVD-VIDEO
 Dolby D 2/0.0ch
 DISC 1 TITLE 1 CHAP 3 TIME 0:01:40 ▶

 TIME
 CO OFF
 ① → CHAP. → CO 1/3 □ 1/3 □ 1/3 □ 4/1

ENGLISH

4 Press Cursor ▼/▲ to select the desired audio.

5 Press ENTER.

6 Press ON SCREEN.

The on-screen bar disappears.

NOTE

- Some subtitle or audio languages are abbreviated in the pop-up window. See "The language codes list" (IP pg. 36).
- "ST", "L" or "R" is displayed when playing a VCD, SVCD or DVD VR respectively representing "stereo", "left sound" and "right sound".

Special picture playback

Frame-by-frame playback

During playback

Press II repeatedly.

Each time you press the button, the still picture advances by one frame.

To return to normal playback

Press \blacktriangleright (play button).

Playing back in slow-motion

During playback

Press II at the point where you want to start playback in slow-motion from.

The system pauses playback.

2 Press SLOW **♀**.

• Playback in forward slow-motion starts.

For DVD VIDEO/DVD AUDIO only:

• To play back in reverse slow-motion, press SLOW \bigcirc .

Each time you press the button, the playback speed become faster.

Example: On the TV

▶ 1/32

To return to normal playback

Press \blacktriangleright (play button).

- Sound cannot be heard during slow-motion playback.
- During DVD AUDIO playback, this feature is available only for the video part.

Selecting browsable still picture recorded on DVD AUDIO

Most DVD AUDIOs include browsable still pictures (B.S.P.), which usually appear by turns automatically during playback according to the playback sequence. You can change the picture (turn the page) manually when the current group/track has selectable pictures (pages).

During playback and while the B.S.P. indicator lights up on the display window

When using the PAGE button:

Press PAGE repeatedly to select a desired still picture.

When using the on-screen bar:

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

2 Press Cursor ►/◄ to highlight PAGE

Press ENTER.

DVD-AUDIO Dolby D DISC 1 GROUP 1 TRACK 1 TIME 0:01:40 TIME ↔ OFF ↔ TRACK → OD 1/1 PAGE 5/12

4 Press Cursor $\blacktriangle/\checkmark$ to select the desired still picture.

- **5** Press ENTER.
- **6** Press ON SCREEN.

The on-screen bar disappears.

Zooming in

■ During playback or while paused

1 Press ZOOM.

VCD

Each time you press ZOOM, scene magnification changes.

While zoomed in, press Cursor $\blacktriangleright/\langle \langle \vee \rangle$ ▲ to move zoom-in area.

To return to normal playback

Press ZOOM repeatedly to select ZOOM OFF.

NOTE

- The number of the magnification steps varies depending on the disc type.
- During slide-show playback of JPEG, zooming in is not available. In such a case, press II to pause slide-show playback, then zoom in.
- During DVD AUDIO playback, this feature is available only for the video part.
- During playback, there may be a case where $Cursor(\blacktriangleright/\blacktriangleleft/\blacktriangledown/\bigstar)$ does not work in step 2 above.

Changing the VFP setting

The VFP (Video Fine Processor) function enables you to adjust the picture character according to the type of programming, picture tone or personal preference.



During playback

Example:

Press VFP.

The current VFP settings appear on the TV screen.

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

2 Press Cursor ►/◄ repeatedly to select the VFP mode.

- NORMAL: Normally select this.
- CINEMA: Suitable for movies.
- When you select "NORMAL" or "CINEMA", press VFP to complete the setting.
- USER 1 and USER 2:
 - You can adjust parameters that affect picture appearance.

Only when selecting "USER 1" or "USER 2" in step 2, proceed to perform the following operation;

3 Press Cursor ▼/▲ repeatedly to select a parameter you want to adjust.

Adjust gradually and confirm picture appearance results are as preferred.

• GAMMA:

Controls brightness of neutral tints while maintaining brightness of dark and bright portions.

- BRIGHTNESS:
- Controls screen brightness.
- CONTRAST: Controls screen contrast.
- SATURATION:
 - Controls screen color depth.
- TINT:
 - Controls screen tint.
- SHARPNESS:
 - Controls screen sharpness.

Advanced operations

4 Press ENTER.

Example:

GAMMA 0

5 Press Cursor ▼/▲ to change the setting.

6 Press ENTER.

The current VFP settings appear again.

Repeat steps 3 to 6 to adjust other parameters.

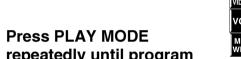
8 Press VFP.

NOTE

• Although the setting display disappears in the middle of the procedure, the setting at that time will be stored.

Program Playback

While stopped



CD

repeatedly until program window appears on the TV screen.

PROGRAM				
PROGRAM No. 1 2 3 3 4 5 6 6 7 8	Disc	Group/Title	Track/Chapter	
9 10				

USE NUMERIC KEYS TO PROGRAM TRACKS. USE CANCEL TO DELETE THE PROGRAM.

2 Follow the instructions that appear on the TV screen to program the desired chapters/tracks.

- For details on using the number buttons, see "How to use the number buttons" (IF pg. 22).
- The content's numbers that you have to specify for programming varies depending on the disc type:
 DVD VIDEO: Titles and chapters
- DVD VIDEO: Titles and c
 VCD, SVCD, CD: Tracks
- VCD, SVCD, CD: TrackDVD AUDIO, MP3, WMA:
 - Groups and tracks
- Before you program the tracks in bonus group on a DVD AUDIO, perform the procedure of "Playing back a bonus group" (IF pg. 23) to turn off the BONUS indicator on the display window.
- You can specify the chapters/tracks whose number is up to 99.
- There may be a case that the group or title number can be entered even for discs that contain no groups or titles. In such a case, press ENTER to proceed to the Track/Chapter column.
- When you press ENTER instead of the number buttons in the Track/Chapter column, "ALL" appears and all the tracks or chapters on the selected group or title are programmed as a step.

To clear the programs one by one from the last entered number

Press CANCEL repeatedly.

To clear all programs

Press ∎.

You can also clear the program by turning off the system.

3 Press ► (play button).

If all of the programmed tracks/files have been played back, playback stops and the program window appears again. Note that program setting remains.

To check the program contents

During playback, press \blacksquare . Playback stops and the program window appears.

To quit the Program mode

While stopped, press PLAY MODE repeatedly until both program window and RANDOM disappear from the TV screen.

- There may be a case where bonus group on a DVD AUDIO cannot be played.
- The Resume function cannot be used with Program Playback.
- Program Playback may not work for some discs.

Random Playback

You can play titles or tracks on a disc in random order.

- While stopped
- Press PLAY MODE repeatedly until RANDOM appears on the TV scre

VCD SVCD CD

appears on the TV screen.

2 Press ► (play button).

• When more than one discs are loaded, the system starts Random Playback of the next disc after completing current disc playback.

To quit Random mode

While stopped, press PLAY MODE repeatedly until both program window and RANDOM disappear from the TV screen. You can also clear the Random mode by turning off the system.

NOTE

• The same title/track will not be played back more than once during Random Playback.

Repeat Playback

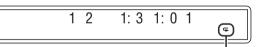
Repeating the current selection or all discs

 For DVD VIDEO/DVD VR: During playback
 For VCD/SVCD: During playback without PBC function or stopped
 For DVD AUDIO/CD/MP3/JPEG:



For DVD AUDIO/CD/MP3/JPEG: During playback or stopped

When using the REPEAT button: Press REPEAT.



Repeat mode indicator

Each time you press REPEAT, the Repeat mode changes.

Display window	TV screen	Meanings		
	GROUP	Repeats the current group for		
ų	REPEAT GROUP	DVD AUDIO/MP3/WMA/ JPEG.		
	CTITLE	Repeats the current title for DVD VIDEO.		
	℃ PG	(For DVD VR) Repeats the current title for Original program.		
	C PL	(For DVD VR) Repeats the current playlist for Playlist.		
G DISC	එDISC	Repeats all titles and tracks on the current disc for DVD VR/ VCD/SVCD/CD/MP3/WMA/ JPEG.		
	ڪALL	Repeats all the available discs.		
G ALL	REPEAT ALL			
G 1	さTRACK , さSTEP	Repeats the current track for DVD AUDIO/VCD/SVCD/ CD/MP3/WMA.		
	REPEAT TRACK, REPEAT STEP			
	CHAP, CHAP	Repeats the current chapter for DVD VIDEO/DVD VR.		
	REPEAT STEP			
No indication	CFF	Repeat mode is off. The system plays back the disc normally.		

NOTE

- When DVD VIDEO or DVD AUDIO is loaded in the system, playback of the disc next to the DVD VIDEO or DVD AUDIO will not start, although CALL /REPEAT ALL on the TV screen or ALL in the display window is shown.
- For DVD VIDEO and DVD AUDIO, REPEAT ALL and REPEAT DISC may not be available depending on the disc.

When using the on-screen bar (except for MP3/ WMA/JPEG):

Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

- **2** Press Cursor $\blacktriangleright/\blacktriangleleft$ to highlight rightright .
- **3** Press ENTER.

 DVD-VIDEO
 Dolby D 2/0. Och
 DISC 1 TITLE 1 CHAP 3 TOTAL 1:01:40 ▶

 TIME
 COFF
 ① → CHAP. → ① 1/8
 1/ 3
 🕰 1/1

 OFF
 ○
 ○
 ○
 ○
 ○
 ○

- 4 Press Cursor ▼/▲ repeatedly to select the Repeat mode.
- **5** Press ENTER.
- 6 Press ON SCREEN.

The on-screen bar disappears.

To cancel Repeat Playback Select "OFF" in step 4.

Repeating a desired part [A-B Repeat]

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

DVD	DVD	dvd
VIDEO	AUDIO	VR
VCD	SVCD	CD

- During playback
- Press ON SCREEN twice.

The on-screen bar appears on the TV screen.

2 Press Cursor $\blacktriangleright/\blacktriangleleft$ to highlight rightarrow 0 or rightarrow 0.

3 Press ENTER.

 DVD-VIDEO
 Dolby D 2/0. 0ch
 DISC 1 TITLE 1 CHAP 3 TOTAL 1:01:40 ▶

 TIME
 COFF
 ① → CHAP. → OD 1/8 cm 1/ 3 🕰 1/1

 OFF
 ○

- 4 Press Cursor ▼/▲ repeatedly to select "A-B".
- **5** Press ENTER at the beginning of the part you want to repeat (point A).

 DVD-VIDEO
 Dolby D 2/0.0ch
 DISC 1 TITLE 1 CHAP 3 TOTAL 1:01:40 ▶

 TIME
 ▲ A ④ →
 CHAP. →
 OD 1/8
 □□1 / 3
 🗠 1/1

• Press ENTER at the end of the part you want to repeat (point B).

A-B Repeat Playback starts.

7 Press ON SCREEN.

The on-screen bar disappears.

To cancel

Select "OFF" in step 4, then press ENTER.

NOTE

- When playing back a DVD VIDEO/DVD VR, A-B Repeat Playback is possible only within the same title.
- "A-B" cannot be selected during Program and Random Playback.

Tray lock

You can lock the tray and prohibit the unwanted disc ejection.

On the center unit ONLY:

While the system is turned off



Press and hold

- The system turns on and "LOCKED" appears on the display window.
- If you try to eject the disc, "LOCKED" appears to indicate that the tray is locked.

To cancel

Carry out the same operation again.

• The system turns on and "UNLOCKED" appears on the display window.

Sound and other settings

IMPORTANT

Before using the remote control for the following operation;

• Set the remote control mode selector to AUDIO.

NOTE

Before you start operation;

• There is a time limit when doing the following steps. If the setting is cancelled before you finish, start from step 1 again.

Press SETTING.

Example:



2 Press Cursor ▼/▲ to select the item you want to set.

• DEC (Decode):

When you play an external source (DBS is selected as a source) that was encoded with Dolby D or DTS Digital Surround, the following symptoms may occur;

- No sound comes out at the beginning of playback.
- Noise comes out while searching for or skipping chapters or tracks.

A/PCM (Auto/PCM):

Normally select this. The system automatically detects the incoming signals.

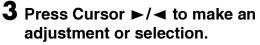
- DD: Select this if the symptoms above occur when playing a disc (or software) encoded with Dolby D.
- DTS: Select this if the symptoms above occur when playing a disc (or software) encoded with DTS Digital Surround.
- MON (Monitor Out):

Select the video output jack type by which you watch DVD playback after connecting your TV. (IF pg. 12) Set the video output to use AV COMPU LINK remote control system. (IF pg. 41)

VIDEO: To watch DVD playback via the VIDEO jack.

S: To watch DVD playback via the S-VIDEO jack. COMP (Component):

To watch DVD playback via the COMPONENT VIDEO OUT jacks.



Example:



The adjustment is set and the display automatically disappears a few seconds later.

NOTE

 When "DD" or "DTS" is selected, if a signal encoded with another digital format comes in, you cannot listen to the sound. (The DIDIGITAL or Els indicator flashes.)

Using the setup menus

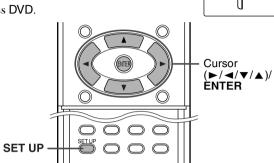
• You can change the language used in the setup menus. See "Menu description" below.

Basic operation on the setup menus

IMPORTANT

Before using the remote control for the following operation;

- 1 Set the remote control mode selector to AUDIO.
- 2 Press DVD.



■ While stopped

Press SET UP.



2 Follow the instructions that appear on the TV screen.

Menu description

\land : Language menu (LANGUAGE)

MENU LANGUAGE

Some DVDs have their own menus in multiple languages.Select the initial language*.

AUDIO LANGUAGE

Some DVDs have multiple audio languages.Select the initial audio language*.

SUBTITLE

Some DVDs have multiple subtitle languages.

• Select the initial subtitle language*.

ON SCREEN LANGUAGE

- Select the language shown on the TV screen when operating this system.
- * When the language you have selected is not recorded to a disc, the original language is automatically used as the initial language.

NOTE

DVD

• See the following "The language codes list" for the code of each language, such as "AA", etc.

The language codes list

ABAbkhazianINIndonesianRORumanianAFAfrikaansISIcelandicRURussianAMAmeharicIWHebrewRWKinyarwandaARArabicJIYiddishSASanskritASAssameseJWJavaneseSDSindhiAYAymaraKAGeorgianSCSanghoAZAzerbaijaniKKKazakhSHSerbo-CroatianBABashkirKLGreenlandicSISinghaleseBEByelorussianKMCambodianSKSlovakBGBulgarianKNKannadaSLSlovenianBHBihariKOKorean (KOR)SMSamoanBIBislamaKSKashmiriSNShonaBNBengali, BanglaKUKurdishSOSomaliBOTibetanKYKirghizSQAlbanianBRBretonLALatinSRSerbianCOCorsicanLOLaothianSTSecothoCSZechLTLituvaina, LettishSVSwedishDADanishMGMalagaySWSwahiliDZBhutaniMIMacedonianTETeluguECEsperantoMLMalayalamTGTajikETEstonianMNMongolianTHThaiEUBasqueMOMoldavianTITigrinya	AA	Afar	IK	Inupiak	RN	Kirundi
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GLGalicianNONorwegianTWTwiGNGuaraniOCOccitanUKUkrainianGUGujaratiOM(Afan) OromoURUrduHAHausaOROriyaUZUzbekHIHindiPAPanjabiVIVietnameseHRCroatianPLPolishWOWolofHUHungarianPSPashto, PushtoVOVolapukHYArmenianPTPortugueseXHXhosaIAInterlinguaQUQuechuaYOYoruba	GA	Irish	NE	Nepali	TS	Tsonga
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HUHungarianPSPashto, PushtoVOVolapukHYArmenianPTPortugueseXHXhosaIAInterlinguaQUQuechuaYOYoruba			PL	Polish	WO	Wolof
HYArmenianPTPortugueseXHXhosaIAInterlinguaQUQuechuaYOYoruba						
IA Interlingua QU Quechua YO Yoruba						*
				-		
	IE	Interlingue	RM	Rhaeto-Romance	ZU	Zulu

: Picture menu (PICTURE)

MONITOR TYPE

You can select the monitor type to match your TV when you play DVDs recorded in the picture's height/width ratio of 16:9.

• 16:9 (Wide television conversion) Select this when the aspect ratio of your TV is fixed on 16:9 (wide TV).

When you play DVDs recorded in the picture's height/width ratio of 4:3, the system adjust the ratio of output signal automatically.

• 4:3 LB (Letter Box conversion) Select this when the aspect ratio of your TV is 4:3

(conventional TV). While viewing a wide screen picture, the black bars appear on the top and the bottom of the screen.4:3 PS (Pan Scan conversion)

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



NOTE

• Even if "4:3 PS" is selected, the screen size may become "4:3 LB" with some DVDs. This depends on how DVDs are recorded.

■ PICTURE SOURCE

When you set the scan mode to "PROGRESS" (🖙 pg. 18), you can obtain optimal picture quality by selecting whether the content on the disc is processed by frame (film source) or by field (video source).

- Normally set to "AUTO".
 - AUTO

Used to play a disc containing both video and film source materials.

This system recognizes the source type (video or film) of the current disc according to the disc information.

- If the playback picture is unclear or noisy, or the oblique
- lines of the picture are rough, try to change to other modes. \bullet FILM
- Suitable for playing back a film source disc.
- VIDEO

Suitable for playing back a video source disc.

■ SCREEN SAVER (IF pg. 22)

You can activate or deactivate Screen Saver function.

■ FILE TYPE

When several types of files are recorded on a disc, you can select which files to play.

- AUDIO
- Select this to play MP3/WMA files.

• STILL PICTURE Select this to play JPEG files.

🖤: Audio menu (AUDIO)

D. RANGE COMPRESSION

(Dynamic range compression)

You can enjoy low level recorded sound clearly at night even at a low volume when listening to the sound with Dolby Digital.

• AUTO

Select this when you want to enjoy surround sound with its full dynamic range (no effect applied).

• ON

Select this when you want to fully apply the compression effect (useful at midnight).

NOTE

• When you play a multichannel Dolby Digital source with the surround mode is off, the setting of D. RANGE COMPRESSION is set to ON automatically.

Speaker setting menu (SPK. SETTING)

■ Level menu (LEVEL)

FRONT LEFT SPEAKER/FRONT RIGHT SPEAKER/ CENTER SPEAKER/SURROUND RIGHT SPEAKER/ SURROUND LEFT SPEAKER

While monitoring the test tone, adjust the center and surround speakers volume as much as that of the front speakers.

TEST TONE*

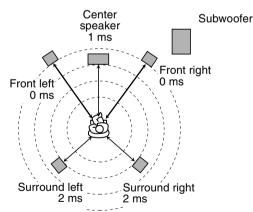
Outputs the test tone.

* The test tone comes out of all of the activated speakers in the following sequence:

 $\Rightarrow \text{ Front left speaker} \Rightarrow \text{Center speaker} \Rightarrow \text{Front right}$ speaker $\Rightarrow \text{ Surround right speaker} \Rightarrow \text{ Surround left}$ speaker $\Rightarrow \text{ (back to the beginning)}$

Delay menu (DELAY)





In this case, set the delay time of each speaker as follows;

- Delay time of front speakers: 0 ms
- Delay time of center speaker: 1 ms
- Delay time of surround speakers: 2 ms

FRONT LEFT SPEAKER/FRONT RIGHT SPEAKER/ CENTER SPEAKER/SURROUND RIGHT SPEAKER/ SURROUND LEFT SPEAKER

Adjust the distance from the listening position to the speakers. Within the range from 0 ms to 15 ms. (by 1 ms)

Subwoofer menu (SUBWOOFER)

LEVEL

You can set the output level of the subwoofer in the -6 dB to +6 dB range.

CROSS OVER

The signals below the preset frequency level will be sent to and be reproduced by the subwoofer.

Select one of the cross over frequency levels according to the bass sound quality from the front/center/surround speakers.

🎾 : Other setting menu (OTHERS)

■ RESUME

You can activate or deactivate Resume Playback function. (\mathbb{LF} pg. 29)

ON SCREEN GUIDE

You can activate or deactivate the on-screen guide icons. (LF pg. 20)

Tuner operations

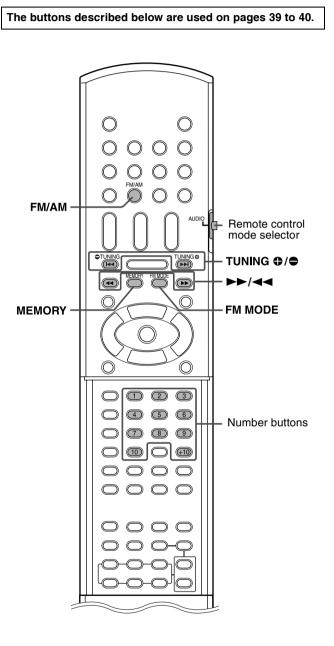
IMPORTANT

Before using the remote control for the following operation;

- 1 Set the remote control mode selector to AUDIO.
- 2 Press FM/AM.

NOTE

• When FM or AM is selected as the source, you can select All Channel Stereo (ALL ST) and SURR OFF mode.



Manual tuning

Press FM/AM repeatedly to select the band.

Example:

FM/AM

When the system is tuned in to 810 kHz.

АМ	8 1 0 _{kHz}

2 Press TUNING ⊕/⊕ repeatedly until you find the frequency you want.

When you hold down the button until the system starts searching for stations and then release it, the system stops searching automatically when a station of sufficient signal strength is tuned in to.

NOTE

• When an FM stereo program is received, the ST indicator lights on the display window.

Preset tuning

Once a station is assigned to a channel number, the station can be quickly tuned in. You can preset 30 FM and 15 AM stations.

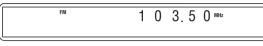
To preset the stations

1 Tune in the station you want to preset.

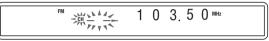
• If you want to store the FM reception mode for an FM station, select the reception mode you want. See "Selecting the FM reception mode" below.

Example:

When the system is tuned in to 103.5 MHz.



2 Press MEMORY.



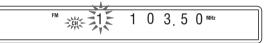
While "CH" and "--" are flashing:

3 Press number button(s) (1-10, +10) to select a preset number you want.

• For details on using the number buttons, see "How to use the number buttons" (IF pg. 22).

Example:

When the preset channel 1 is selected.



If the setting is cancelled before you finish, start from step 2 again.

While the selected number is flashing:

4 Press MEMORY.

The selected number stops flashing.

The station is assigned to the selected preset number. If the setting is cancelled before you finish, start from step 2 again.

5 Repeat steps 1 to 4.

• Storing a new station to a used number erases the previously stored one.

■ To tune in to a preset station

Press FM/AM repeatedly to select FM or AM.

2 Press number button(s) (1-10, +10) to select a preset number.

• For details on using the number buttons, see "How to use the number buttons" (IF pg. 22).

NOTE

You can also select a preset number by pressing ►►/◄◄.

Selecting the FM reception mode

When the stereo FM program currently tuned in is noisy, you can change the FM reception mode to improve the reception.

■ While listening to an FM station

Press FM MODE.

The FM reception mode appears on the display window. Each time you press the button, the FM reception mode changes.

• AUTO:

When a program is broadcast in stereo, you will hear stereo sound. (The ST indicator lights on the display window.) When in monaural, you will hear monaural sound. This mode is also useful to suppress static noise between stations.

• MONO:

Reception will be improved although you will lose the stereo effect. (The MONO indicator lights on the display window.) In this mode, you will hear noise until you are tuned in to a station.

Reducing the noise of AM broadcast

When listening to an AM broadcast with a lot of noise interference, you can change the Beat Cut mode to reduce the noise.

■ While listening to an AM station

Press FM MODE.

The current Beat Cut mode appears on the display window. Each time you press the button, the Beat Cut mode changes.

• Choose "BEATCUT1" or "BEATCUT2" according to which gives clearer sound.

AV COMPU LINK remote control system

The AV COMPU LINK remote control system allows you to operate JVC TVs and VCRs through the cent



JVC TVs and VCRs through the center unit. This system is equipped with the AV COMPU LINK-III, which adds a function to operate JVC's video components via the video components terminals. To use this remote control system, you need to connect the video components you want to operate as follows.

• Refer also to the manuals supplied with your TV and video components.

Connecting a TV and VCR

CAUTION

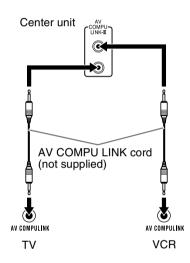
Before connecting;

• If you have already plugged your VCR, TV and the center unit into the AC outlets, unplug their AC power cords first.

Connect the center unit to a TV and VCR.

• For details, see page 12 and 13.

2 Connect the center unit to a TV and VCR using the optional AV COMPU LINK cords.



3 Plug the AC power cords of the VCR, TV and the center unit into the AC outlets.

4 Turn on the connected components first, then turn on the center unit.

- When turning on the TV for the first time after the AV COMPU LINK connection, turn the TV volume to minimum using the TV volume control on the TV.
- When turning on the VCR, use the remote control supplied with this system. (Press O/I VCR/DBS.)

NOTE

• To correctly use the automatic selection of TV input mode, select the correct "MON" (Monitor Out) setting. (IF pg. 35)

Available functions

The AV COMPU LINK remote control system allows you to use the functions listed following.

One-touch video play

Simply by inserting a video cassette without its safety tab into the VCR, you can enjoy video playback without manually setting other switches. This system automatically turns on and changes the source to VCR.

The TV automatically turns on and changes the input mode to the appropriate position so that you can view the playback picture. When you insert a video cassette with its safety tab in place, press the play (\blacktriangleright) button on the VCR or on the remote control to get the same result.

One-touch DVD play

Simply by starting playback on the built-in DVD player, you can enjoy playback without manually setting other switches. The TV automatically turns on and changes the input mode to the appropriate position so that you can view the playback picture.

Automatic selection of TV input mode

When you select DVD or VCR as the source to play on the system, the TV automatically changes the input mode to the appropriate position so that you can view the playback picture.

Automatic Power On/Off

The TV and VCR turn on and off along with the system.

- When you turn on the system;If the previously selected source is "DVD", only the TV will turn
- on automatically.If the previously selected source is "VCR", the TV and VCR will turn on automatically.

When you turn off the system, the TV and VCR will turn off.

NOTE

• If you turn off the system while recording on the VCR, the VCR will not turn off and will continue recording.

Maintenance

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.

 DO NOT use any solvent — such as conventional record cleaner, spray, thinner or benzine — to clean the disc.

Cleaning the system

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

PROBLEM	POSSIBLE CAUSE	SOLUTION
Power does not come on.	The power cord and/or system cord is not connected.	Connect the power cord and system cord correctly. (IF pg. 13)
The remote control does	The batteries are exhausted.	Replace the batteries. (IF pg. 6)
not work.	Sunlight is falling directly on the remote sensor.	Hide the remote sensor from direct sunlight.
No sound.	The system cord and/or speaker cord is not connected.	Check the connection.
	The audio cord is not connected to AUDIO IN (VCR) and/or DIGITAL IN (DBS) correctly.	Connect the cord correctly. (17 pg. 13)
	An incorrect source has been selected.	Select the correct source. (IF pg. 17)
	The decode mode is not set correctly.	Select the proper decode mode. (EF pg. 35)
No picture is displayed	The video cord is not connected correctly.	Connect the cord correctly. (IF pg. 12)
on the TV screen.	The disc is not playable.	Use a playable disc. (IF pg. 3)
No picture is displayed on the TV screen, the picture is blurred, or the picture is divided into two parts.	The scan mode is set to "PROGRESS" though the center unit is connected to the TV which does not support the progressive video input such as a conventional TV.	Change the scan mode to "INT-LACE". (IF pg. 18)
Video and audio are	The disc is scratched or dirty.	Replace or clean the disc.
distorted.	A VCR is connected between the center unit and the TV.	Connect the center unit and TV directly. (EF pg. 12)
The picture does not fit the TV screen.	The monitor type is not set correctly.	Set "MONITOR TYPE" properly. (IF pg. 37)
Hard to listen to broadcast because of noise.	Antennas are disconnected.	Reconnect the antennas correctly and securely. (IF pg. 7)

Troubleshooting

Specifications

-	
•	THC5/XV-THC4/XV-THC3)
Audio section	
Total Harmonic Distortion	
NOTE: This value is measur reference. Digital input ^{*1} :	ed at System cord CONNECTOR for
	-21 dBm to -15 dBm
(OPTICAL)	$(660 \text{ nm} \pm 30 \text{ nm})$
	CM, Dolby Digital, and DTS Digital frequency — 32 kHz, 44.1 kHz, 48 kHz)
Video section	
Video System:	NTSC
Horizontal Resolution:	500 lines
Signal-to-Noise Ratio:	64 dB
Video output level	
Composite:	1.0 V(p-p)/75 Ω
S-video-Y:	1.0 V(p-p)/75 Ω
S-video-C:	0.286 V(p-p)/75 Ω
Component-Y:	1.0 V(p-p)/75 Ω
Component-PB/PR:	0.7 V(p-p)/75 Ω
Video input sensitivity/Imp	
Composite:	1.0 V(p-p)/75 Ω
S-video-Y:	1.0 V(p-p)/75 Ω
S-video-C:	0.286 V(p-p)/75 Ω
Tuner section	
Tuning Range	
FM:	87.5 MHz to 108.0 MHz
AM:	530 kHz to 1 710 kHz
General	
Power Requirements:	AC 120 V \sim , 60 Hz
Power Consumption:	16 W (at operation)
r ower consumption.	1.3 W (in standby mode)
Dimensions (W \times H \times D	
	$400 \text{ mm} \times 85 \text{ mm} \times 399 \text{ mm}$
	$(15-3/4 \text{ inches } \times 3-3/8 \text{ inches } \times$
	15-3/4 inches)
Mass:	4.2 kg (9.3 lbs)
Iviass.	4.2 kg (9.5 108)
■ Subwoofer (SP-PW	IC7)
Amplifier section	
Front/Center/Surround:	167 W per channel, RMS at 3 Ω at 1
	kHz, with 10 % total harmonic
	distortion.
Subwoofer:	167 W, RMS at 3 Ω at 100 Hz, with
	10 % total harmonic distortion.
Speaker section	
Speaker unit:	25 cm (9-7/8 inches) Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	25 Hz to 200 Hz
General	
Power Requirements:	AC 120 V \sim , 60 Hz
Power Consumption:	160 W (at operation)
1	0 W (in standby mode)
Dimensions (W \times H \times D	
×	$264 \text{ mm} \times 481 \text{ mm} \times 459 \text{ mm}$
	$(10-7/16 \text{ inches} \times 18-15/16 \text{ inches} \times$
	18-1/8 inches)
Mass:	16.5 kg (37 lbs)

Subwoofer (SP-PWC6) Amplifier section

Subwooter (SP-PW	(66)
Amplifier section	
Front/Center/Surround:	167 W per channel, RMS at 3 Ω at 1 kHz, with 10 % total harmonic distortion.
Subwoofer:	167 W, RMS at 3 Ω at 100 Hz, with 10 % total harmonic distortion.
Speaker section	
Speaker unit:	16 cm (6-5/16 inches) Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	30 Hz to 200 Hz
General	
Power Requirements:	AC 120 V \sim , 60 Hz
Power Consumption:	160 W (at operation) 0 W (in standby mode)
Dimensions (W \times H \times D):
	$169 \text{ mm} \times 411 \text{ mm} \times 451 \text{ mm}$
	(6-11/16 inches × 16-3/16 inches ×
м	17-13/16 inches)
Mass:	11.5 kg (25.4 lbs)
Subwoofer (SP-PW)	(C5)
Amplifier section Front/Center/Surround:	167 W man abannal DMS at 2 O at 1
Front/Center/Surround:	167 W per channel, RMS at 3 Ω at 1 kHz, with 10 % total harmonic distortion.
Subwoofer:	167 W, RMS at 3 Ω at 100 Hz, with
	10 % total harmonic distortion.
Speaker section	
Speaker unit:	25 cm (9-7/8 inches) Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3Ω
Frequency Range:	25 Hz to 200 Hz
General	
Power Requirements:	AC 120 V \sim , 60 Hz
Power Consumption:	160 W (at operation)
Ĩ	0 W (in standby mode)
Dimensions (W \times H \times D):
	$264 \text{ mm} \times 481 \text{ mm} \times 459 \text{ mm}$
	$(10-7/16 \text{ inches} \times 18-15/16 \text{ inches} \times$
	18-1/8 inches)
Mass:	16.5 kg (37 lbs)
Subwoofer (SP-PW)	(C4)
Amplifier section	
Front/Center/Surround:	167 W per channel, RMS at 3 Ω at 1
	kHz, with 10 % total harmonic
	distortion.
Subwoofer:	167 W, RMS at 3 Ω at 100 Hz, with
	10 % total harmonic distortion.
Speaker section	
Speaker unit:	16 cm (6-5/16 inches) Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	25 Hz to 200 Hz
General	
Power Requirements:	AC 120 V \sim , 60 Hz
Power Consumption:	160 W (at operation)
	0 W (in standby mode)
Dimensions (W \times H \times D	
	169 mm × 411 mm × 451 mm
	$(6-11/16 \text{ inches} \times 16-3/16 \text{ inches} \times 17, 13/16 \text{ inches})$
Mass:	17-13/16 inches) 11.5 kg (25.4 lbs)
111033.	11.5 kg (25.4 lbs)

References

■ Subwoofer (SP-PWC3)

Amplifier section

Front:

1 kHz, with 10 % total harmonic distortion. Center/Surround: 130W per channel, RMS at 4 Ω at

140W per channel, RMS at 4 Ω at

1 kHz, with 10 % total harmonic

16 cm (6-5/16 inches) Bass-reflex

169 mm × 411 mm × 451 mm (6-11/16 inches \times 16-3/16 inches \times

% total harmonic distortion.

140 W, RMS at 4 Ω at 100 Hz, with 10

distortion.

 4Ω

30 Hz to 200 Hz

AC 120 V \sim , 60 Hz

135 W (at operation) 0 W (in standby mode)

17-13/16 inches)

11.5 kg (25.4 lbs)

Subwoofer:

Speaker section

Speaker unit: Power Handling Capacity: 140 W Impedance: Frequency Range:

General

Power Requirements: Power Consumption:

Dimensions (W \times H \times D):

Mass:

■ Satellite Speakers — SP-XTHC7

Front speakers (SP-THC7F)

Speaker unit:	
Woofer:	$10 \text{ cm} (3-15/16 \text{ inches}) \times 4$
Tweeter:	4 cm (1-5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	60 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	$270 \text{ mm} \times 1.085 \text{ mm} \times 310 \text{ mm}$
	(10-11/16 inches \times 42-3/4 inches \times
	12-1/4 inches)
Mass:	8.8 kg (19.4 lbs) each

Center speaker (SP-THC7C)

• •	,
Speaker unit:	
Woofer:	$10 \text{ cm} (3-15/16 \text{ inches}) \times 2$
Tweeter:	4 cm (1-5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	65 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	380 mm × 141 mm × 163 mm
	(15 inches \times 4-9/16 inches \times 6-7/16
	inches)
Mass:	3.4 kg (7.5 lbs)
Current an alkara (CD	TUOFO

Surround speakers (SP-THC5S) Speaker unit: 8.0 cm (3-3/16 inches) Bass-reflex Power Handling Capacity: 170 W Impedance: 3Ω Frequency Range: 80 Hz to 20 kHz Dimensions ($W \times H \times D$): 111.5 mm × 148 mm × 106.5 mm (4-7/16 inches \times 5-7/8 inches \times 4-1/4 inches) 0.44 kg (0.97 lbs) each Mass:

Satellite Sneakers — SP-XTHC6

Saterine Speakers	- 3P-XIHU0
Front speakers (SP-TH	C6F)
Speaker unit:	$5.5 \text{ cm} (2-3/16 \text{ inches}) \times 2$
	1.5 cm (5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	90 Hz to 20 kHz
Dimensions (W \times H \times D)):
	$250 \text{ mm} \times 1104 \text{ mm} \times 250 \text{ mm}$
	(9-7/8 inches \times 43-1/2 inches \times
	9-7/8 inches)
Mass:	2.6 kg (5.8 lbs) each
Center speaker (SP-TH	C6C)
Speaker unit:	5.5 cm (2-3/16 inches) \times 2
	1.5 cm (5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	90 Hz to 20 kHz
Dimensions (W \times H \times D)	
	$320 \text{ mm} \times 75 \text{ mm} \times 92 \text{ mm}$
	$(12-5/8 \text{ inches} \times 3 \text{ inches} \times 3-5/8)$
14	inches)
Mass:	0.9 kg (2.0 lbs)
Surround speakers (SP	P-THC6S)
Speaker unit:	5.5 cm (2-3/16 inches) \times 2
	1.5 cm (5/8 inches)
	Bass-reflex
Power Handling Capacity:	170 W

Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	90 Hz to 20 kHz
Dimensions (W \times H \times D):
	$250 \text{ mm} \times 1142 \text{ mm} \times 250 \text{ mm}$
	$(9-7/8 \text{ inches} \times 45 \text{ inches} \times 9-7/8$
	inches)
Mass:	2.6 kg (5.8 lbs) each

References

■ Satellite Speakers — SP-XTHC5

Front speakers (SP-TH	C5F)
Speaker unit:	5.5 cm (2-3/16 inches) \times 2
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	95 Hz to 20 kHz
Dimensions (W \times H \times D):
	$230 \text{ mm} \times 1\ 103.5 \text{ mm} \times 285 \text{ mm}$
	(9-1/16 inches \times 43-1/2 inches \times
	11-5/16 inches)
Mass:	3.5 kg (7.8 lbs) each
Center speaker (SP-TH	C5C)
Speaker unit:	5.5 cm (2-3/16 inches) \times 2

Speaker unit.	$3.5 \text{ cm} (2-3/10 \text{ menes}) \times 2$
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	90 Hz to 20 kHz
Dimensions ($W \times H \times D$)	$320 \text{ mm} \times 75 \text{ mm} \times 92 \text{ mm}$
	$(12-5/8 \text{ inches} \times 3 \text{ inches} \times 3-5/8)$
	inches)
Mass:	0.90 kg (2.0 lbs)

Surround speakers (SP-THC5S)

Speaker unit:	8.0 cm (3-3/16 inches)
	Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	80 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	111.5 mm × 148 mm × 106.5 mm
	(4-7/16 inches \times 5-7/8 inches \times
	4-1/4 inches)
Mass:	0.44 kg (0.97 lbs) each

■ Satellite Speakers — SP-XTHC4

Front speakers (SP-THC4F)

Speaker unit:	8.0 cm (3-3/16 inches)
	1.5 cm (5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	80 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	104.5 mm × 139 mm × 101 mm
	(4-1/8 inches \times 5-1/2 inches \times 4
	inches)
Mass:	0.56 kg (1.3 lbs) each

Center speaker (SP-THC4C)

Surround speakers (SP-THC4S)

	•
Speaker unit:	8.0 cm (3-3/16 inches)
	Bass-reflex
Power Handling Capacity:	170 W
Impedance:	3 Ω
Frequency Range:	80 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	111.5 mm × 148 mm × 106.5 mm
	(4-7/16 inches \times 5-7/8 inches \times
	4-1/4 inches)
Mass:	0.56 kg (1.3 lbs) each

■ Satellite Speakers — SP-XTHC3

Front speakers (SP-TH	C3F)
Speaker unit:	8.0 cm (3-3/16 inches)
	1.5 cm (5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	140 W
Impedance:	4 Ω
Frequency Range:	80 Hz to 20 kHz
Dimensions ($W \times H \times D$)):
	104.5 mm × 139 mm × 101 mm
	$(4-1/8 \text{ inches} \times 5-1/2 \text{ inches} \times 4$
	inches)
Mass:	0.56 kg (1.3 lbs) each
Center speaker (SP-TH	C3C)
Speaker unit:	8.0 cm (3-3/16 inches)
	1.5 cm (5/8 inches)
	Bass-reflex, Magnetically Shielded
Power Handling Capacity:	140 W
Impedance:	4 Ω
English and Domagn	90 Ha to 20 kHa

impedancei	
Frequency Range:	80 Hz to 20 kHz
Dimensions ($W \times H \times D$):
	$137 \text{ mm} \times 105 \text{ mm} \times 104.5 \text{ mm}$
	$(5-7/16 \text{ inches} \times 4-3/16 \text{ inches} \times$
	4-1/8 inches)
Mass:	0.57 kg (1.3 lbs)

Surround speakers (SP-THC3S)

Speaker unit:	8.0 cm (3-3/16 inches)
	Bass-reflex
Power Handling Capacity:	140 W
Impedance:	4 Ω
Frequency Range:	80 Hz to 20 kHz
Dimensions (W \times H \times D):
	111.5 mm × 148 mm × 106.5 mm
	(4-7/16 inches \times 5-7/8 inches \times
	4-1/4 inches)
Mass:	0.56 kg (1.3 lbs) each

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