



SC-VK950

Operating Instructions DVD Stereo System

Model No. **SC-VK950**
SC-VK850
SC-VK750

SC-VK950 is used in the illustrations unless otherwise indicated.

Before connecting, operating or adjusting this product, please read these instructions completely. Please keep this manual for future reference.

Region number

The player plays DVD-Video marked with labels containing region number or "ALL".

Region	Number
Southeast Asia	3
Australia and N.Z.	4

Example: **For Southeast Asia**



GCS GCT GN

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Dear customer

Thank you for purchasing this product.
For optimum performance and safety, please read these instructions carefully.

- VK950** : indicates features applicable to SC-VK950 only
- VK850** : SC-VK850 only
- VK750** : SC-VK750 only

System	SC-VK950	SC-VK850	SC-VK750
Main unit	SA-VK950 (1 unit)	SA-VK850 (1 unit)	SA-VK750 (1 unit)
Front speakers	SB-VK950 (2 units)	SB-VK850 (2 units)	SB-VK750 (2 units)
Center speaker	SB-PC950 (1 unit)	SB-PC850 (1 unit)	SB-PC750 (1 unit)
Surround speakers	SB-PS950 (2 units)	SB-PS850 (2 units)	SB-PS750 (2 units)
Subwoofer(s)	SB-WVK950 (2 units)	SB-WVK850 (1 unit)	----

CAUTION!

- DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.
- DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.
- DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.
- DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.

CAUTION!

THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

The socket outlet shall be installed near the equipment and easily accessible or the mains plug or an appliance coupler shall remain readily operable.

This product may receive radio interference caused by mobile telephones during use. If such interference is apparent, please increase separation between the product and the mobile telephone.

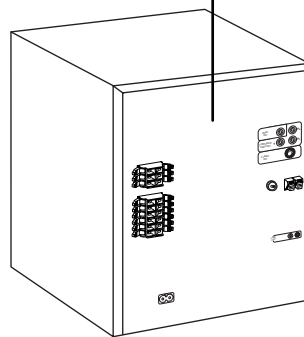
For Southeast Asia

THIS UNIT IS INTENDED FOR USE IN TROPICAL CLIMATES.

For Australia and N.Z.

THIS UNIT IS INTENDED FOR USE IN MODERATE CLIMATES.

Operations in these instructions are described mainly for the remote control, but you can do the operations on the main unit if the controls are the same



CAUTION	- LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM. FDA 21 CFR / Class II
CAUTION	- CLASS 1M VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS. IEC60825-1 +A21 Class 1M
WARNING	- KLASS 1M SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. BETRÄKTA EJ STRÅLEN DIREKT GENOM OPTISKT INSTRUMENT.
FORSIGTIG	- SYNLIG OG OSYNLIG LASERSTRÅLING KLASSE 1M. NÅR LÅGET ER ÅBENT, UNDGÅ AT SE LIGE PÅ MED OPTISKE INSTRUMENTER.
VARO!	- AVATTRESSA OLEI AILTINNA LUKKAN YMINÄKYYRÄ JA RAKAVÄÄNTÄ. LASERSTRÄLÄÄ, ÄLÄ KATSO OPTISELLÄ LAITTEELLA SUORAAN SÄTEESEEN.
VORSICHT	- SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG KLASSE 1M. NENNABDECKUNG BESONNEN. NICHT DIREKT MIT OPTISCHEN INSTRUMENTEN BETRACHTEN.
ATTENTION	- RAYONNEMENT LASER VISIBLE ET INVISIBLE. CLASSE 1M. EN CAS D'OUVERTURE, NE PAS REGARDER DIRECTEMENT À LAIDE D'INSTRUMENTS D'OPTIQUE.
注意	- ここを開くと可視及び不可視レーザー光が出ます。 ビームを見たり、触れたりしないでください。
注意	- 打开时有可见及不可见激光辐射。避免光束照射。 GB7245.1-2001/GB 美 BQLX050075-J

(Inside of product)

- If you see this symbol-

Information on Disposal in other Countries outside the European Union



This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Accessories



Please check and identify the supplied accessories.

- 1 Remote control** [⇒ page 4]

For Southeast Asia

VK950 **VK850** (EUR7662YH0)

VK750 (EUR7662YF0)

For Australia and N.Z.

(EUR7662YG0)

- AC power supply cord** [⇒ page 8]

- 1 Video cable** [⇒ page 8]

- 1 AM loop antenna** [⇒ page 8]

- 1 FM indoor antenna** [⇒ page 8]

- 2 Batteries** [⇒ page 4]

- The included AC power supply cord is for use with this unit only. Do not use it with other equipment.
- Do not use an AC power supply cord from other equipment.

For areas except Australia and N.Z.

CAUTION:

The AC voltage is different according to the area.
Be sure to set the proper voltage in your area before use.
(For details, please refer to page 9.)

Safety precautions

Placement

Set the unit up on an even surface away from direct sunlight, high temperature, high humidity, and excessive vibration. These conditions can damage the cabinet and other components, thereby shortening the unit's service life.

Do not place heavy items on the unit.

Voltage

Do not use high voltage power sources. This can overload the unit and cause a fire.

Do not use a DC power source. Check the source carefully when setting the unit up on a ship or other place where DC is used.

AC power supply cord protection

Ensure the AC power cord is connected correctly and not damaged. Poor connection and lead damage can cause fire or electric shock. Do not pull, bend, or place heavy items on the lead.

Grasp the plug firmly when unplugging the lead. Pulling the AC power cord can cause electric shock.

Do not handle the plug with wet hands. This can cause electric shock.

Foreign matter

Do not let metal objects fall inside the unit. This can cause electric shock or malfunction.

Do not let liquids get into the unit. This can cause electric shock or malfunction. If this occurs, immediately disconnect the unit from the power supply and contact your dealer.

Do not spray insecticides onto or into the unit. They contain flammable gases which can ignite if sprayed into the unit.

Service

Do not attempt to repair this unit by yourself. If sound is interrupted, indicators fail to light, smoke appears, or any other problem that is not covered in these instructions occurs, disconnect the AC power cord and contact your dealer or an authorized service center. Electric shock or damage to the unit can occur if the unit is repaired, disassembled or reconstructed by unqualified persons.

Extend operating life by disconnecting the unit from the power source if it is not to be used for a long time.

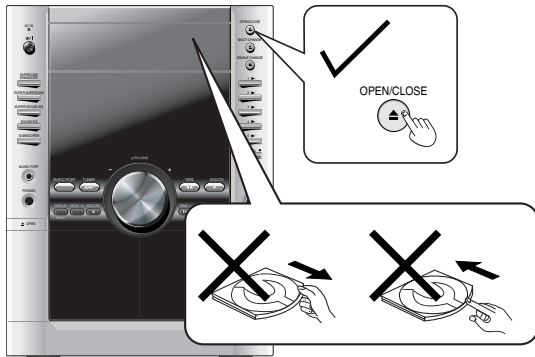
Tray/disc handling procedure

Adhere to the following to avoid problems.

Removing the power plug

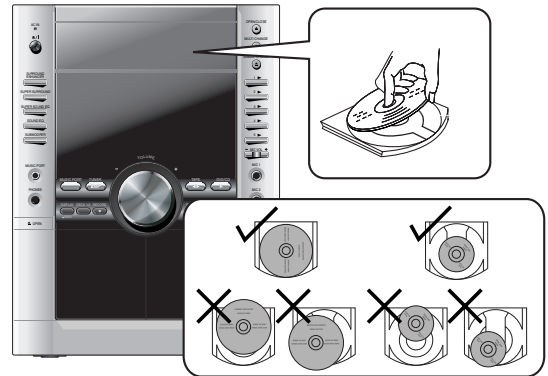
- Press [⏻] to turn off the unit and remove the power plug only after all the displays have disappeared.

Tray caution



- Always press [▲, OPEN/CLOSE] to insert or remove a disc.
- Do not push or pull out the tray by hand as this will cause an accident.

Inserting a disc



- Place the disc label up in the center of the tray.
- Insert only one disc into each tray.

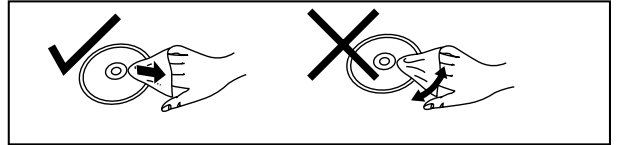
Disc handling precautions

- Do not attach labels or stickers to discs (This may cause disc warping, rendering it unusable).
- Do not write on the label side with a ball-point pen or other hard writing instrument.
- Do not use record cleaning sprays, benzine, thinner, static electricity prevention liquids or any other solvent.
- Do not use scratch-proof protectors or covers.
- Do not use the following discs:
 - Discs with exposed adhesive from removed stickers or labels (rented discs, etc).
 - Discs that are badly warped or cracked.
 - Irregularly shaped discs, such as heart shapes.

Cleaning discs

DVD-V **VCD** **CD**

Wipe with a damp cloth and then wipe dry.



DVD-VR and other recordable formats

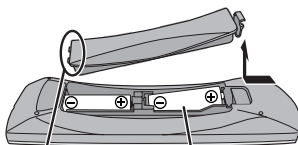
- Clean with an optional DVD-RAM/PD disc cleaner (LF-K200DCA1, where available).
- Never use cloths or cleaners for CDs, etc.

The remote control

Remote control



Batteries



Press on the tab to open

R6/LR6, AA

- Insert so the poles (+ and -) match those in the remote control.
- Do not use rechargeable type batteries.

Insert this side first when closing

■ Do not:

- mix old and new batteries.
- use different types at the same time.
- heat or expose to flame.
- take apart or short circuit.
- attempt to recharge alkaline or manganese batteries.
- use batteries if the covering has been peeled off.

Mishandling of batteries can cause electrolyte leakage which can damage items the fluid contacts and may cause a fire. Remove if the remote control is not going to be used for a long period of time. Store batteries in a cool, dark place.

■ Use

Aim at the sensor, avoiding obstacles, at a maximum range of 7 m directly in front of the unit.

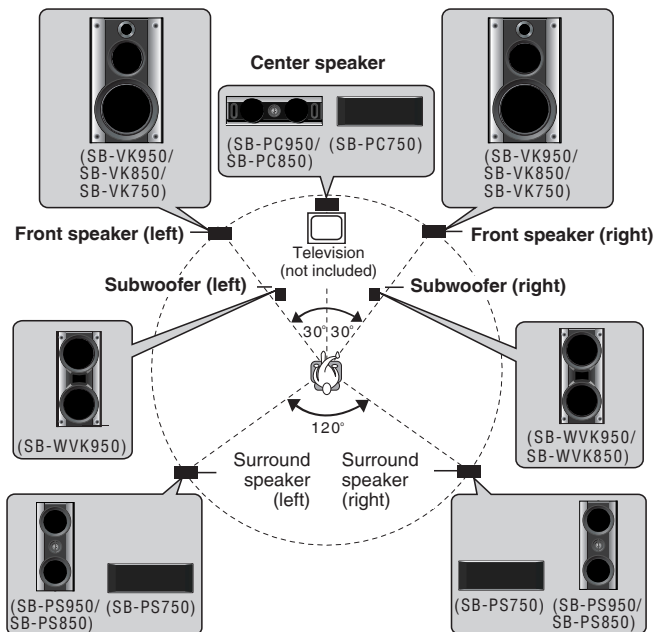
Simple setup

Cables and equipment are sold separately unless otherwise indicated.

STEP 1

Positioning and connecting the speakers

Positioning



Place the front, center, and surround speakers at approximately the same distance from the seating position.

Front speakers

Speakers are designed identically so that no left or right channel orientation is necessary.

Center speaker

Do not place the center speaker directly on the television as vibration may cause it to fall or disrupt the picture.

Place it on a rack or shelf.

Surround speakers

Place on the side of or slightly behind the seating area, higher than ear level.

Subwoofer(s) **VK950** **VK850**

Place on either side of the television, on the floor or a sturdy shelf to reduce vibration.

Leave 10 cm at the rear for ventilation.

Positioning for best effect

How you set up your speakers can affect the bass and the sound field. Note the following points.

- Place speakers on flat secure bases.
- Placing speakers too close to floors, walls, and corners can result in excessive bass. Cover walls and windows with a thick curtain.
- Keep your speakers at least 10 mm away from the system for proper ventilation.
- The angles in the diagrams are approximate.

Use only the supplied speakers

- Using other speakers can damage the unit and sound quality will be negatively affected.
- Set the speakers up on an even surface to prevent them from falling. Take proper precautions to prevent the speakers from falling if you cannot set them up on an even surface.

Note

- You can damage your speakers and shorten their useful life if you play sound at high levels over extended periods.
- Reduce the volume in the following cases to avoid damage.
 - When playing distorted sound.
 - When the speakers emit strange noise (howling) from a record player, noise from FM broadcasts, or continuous signals from an oscillator, test disc, or electronic instrument.
 - When adjusting the sound quality.
 - When turning the unit on or off.

If irregular coloring occurs on your television

The supplied speakers are designed to be used close to a television, but the picture may be affected with some televisions and setup combinations.

If this occurs, turn the television off for about 30 minutes.

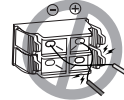
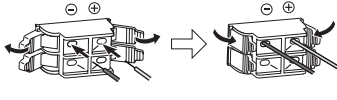
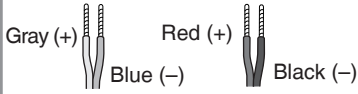
The television's demagnetizing function should correct the problem.

If it persists, move the speakers further away from the television.

Caution

- Use the speakers only with the recommended system. Failure to do so can damage the main unit and speakers, and can cause fire. Consult a qualified service person if damage occurs or if a sudden change in performance is apparent.
- Do not attempt to attach these speakers to walls using methods other than those described in this manual.

Connecting

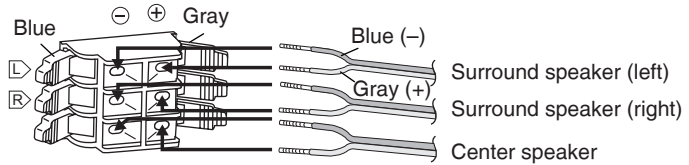


Note

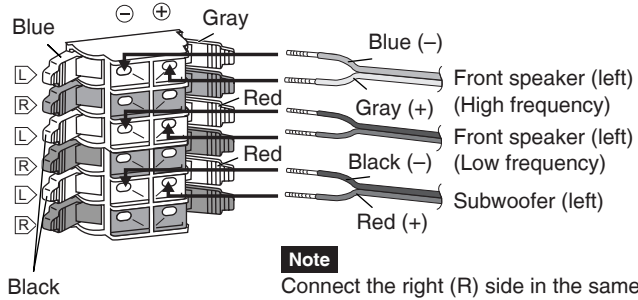
- Never short-circuit positive (+) and negative (-) speaker wires. Incorrect connection can damage the speakers.

VK950

Connecting center and surround speakers

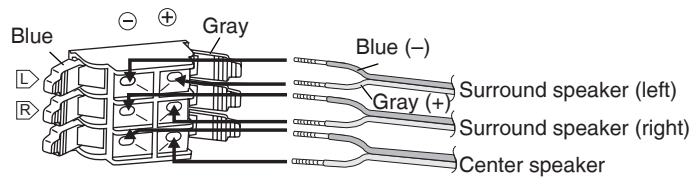


Connecting front speakers and subwoofers

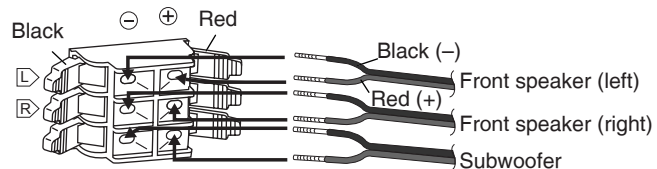


VK850

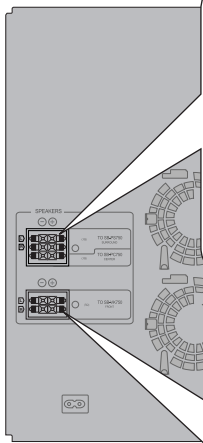
Connecting center and surround speakers



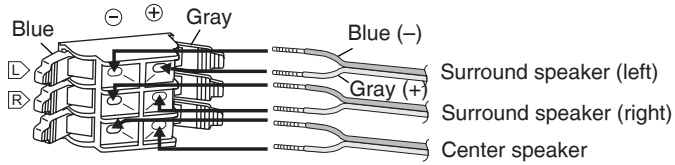
Connecting front speakers and subwoofers



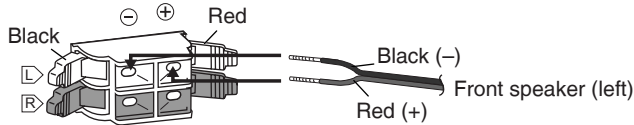
VK750



Connecting center and surround speakers



Connecting front speakers



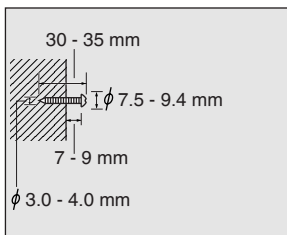
Note

Connect the right (R) side in the same way.

Other speaker setup options – attaching to a wall

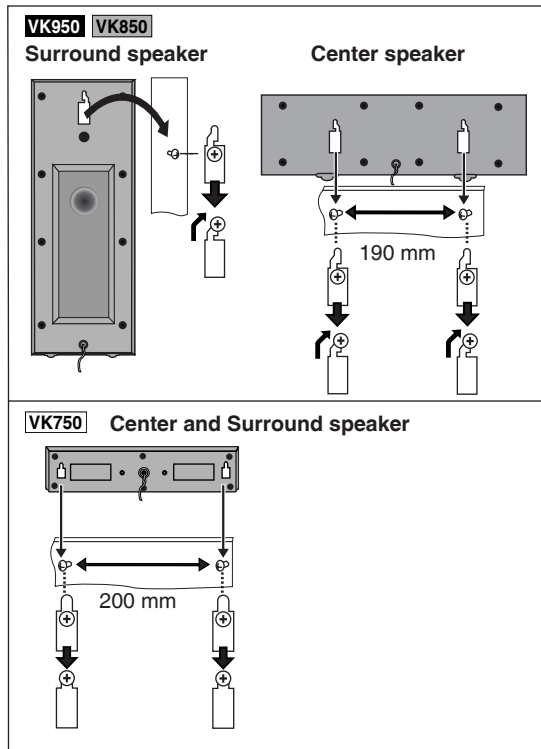
You can attach the surround and center speakers to a wall.

1 Drive a screw (not included) into the wall.



2 Fit the hole securely onto the screw(s).

The wall or pillar on which the speakers are to be attached should be capable of supporting 10 kg per screw. Consult a qualified building contractor when attaching the speakers to a wall. Improper attachment may result in damage to the wall and speakers.



STEP 2

Connecting a television, the antennas and the AC power supply cord

Simple setup
Step 2 : Connecting a television, the antennas and the AC power supply cord

Supplied accessories

AM loop antenna



FM indoor antenna

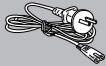


AC power supply cord

For Southeast Asia



For Australia and N.Z.



Video cable



Other accessories (not included)

Component video cable



S video cable

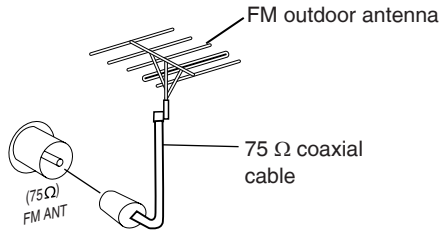


Use outdoor antennas if radio reception is poor.

Note

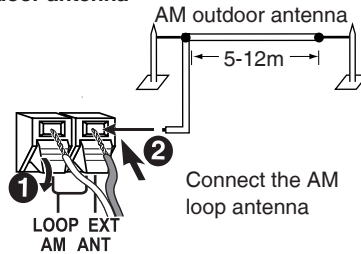
Disconnect the outdoor antenna when the unit is not in use.
Do not use the outdoor antenna during a lightning storm.

FM outdoor antenna (using a television antenna)



- Disconnect the FM indoor antenna.
- The antenna should be installed by a competent technician.

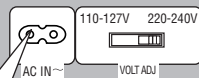
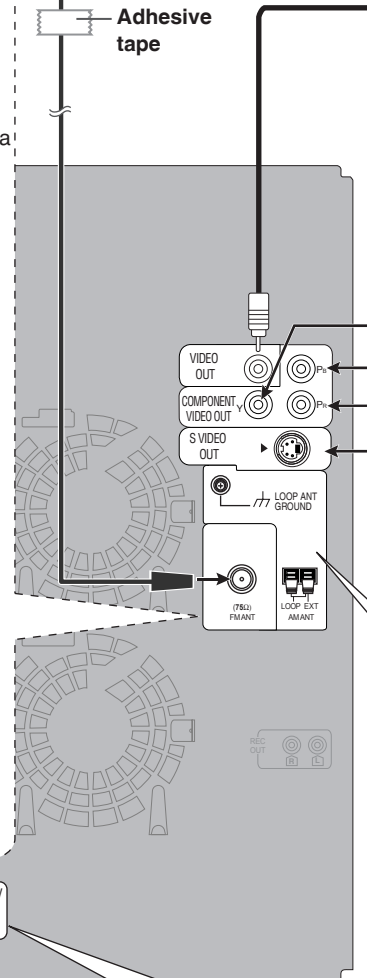
AM outdoor antenna



- Run a piece of vinyl wire horizontally across a window or other convenient location.
- Leave the loop antenna connected.

FM indoor antenna
Fix the other end of the antenna where reception is best.

Adhesive tape



Connect the AC power supply cord after all other connections are complete.

AC power supply cord

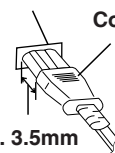
To household AC socket

Insertion of Connector

Even when the connector is perfectly inserted, depending on the type of inlet used, the front part of the connector may jut out as shown in the drawing. However there is no problem using the unit.

Appliance inlet

Connector



Approx. 3.5mm

Conserving power

The unit consumes a small amount of power (approx. 0.9 W) even when it is turned off with [⏻]. To save power when the unit is not to be used for a long time, unplug it from the household AC socket. You will need to reset some memory items after plugging in the unit.

Video cable

Television
VIDEO IN

■ Connecting a television with a VIDEO IN terminal

VIDEO OUT terminal

Do not connect the unit through a video cassette recorder, because the picture may not be displayed correctly due to the copy guard protection.

Component video cable

Television
COMPONENT
VIDEO IN

■ Connecting a television with COMPONENT VIDEO IN terminals

COMPONENT VIDEO OUT terminals

These terminals can be used for either interlace or progressive output and provide a purer picture than the S VIDEO OUT terminal. Connection using these terminals outputs the color difference signals (P_B/P_R) and luminance signal (Y) separately in order to achieve high fidelity in reproducing colors. The description of the component video input terminals depends on the television or monitor (e.g. Y/P_B/P_R, Y/B-Y/R-Y, Y/C_B/C_R). Connect to terminals of the same color.

To enjoy progressive video

1. Connect to the component video input terminals on a 480p or 576p compatible television. (Video will not be displayed correctly if connected to an incompatible television.)
2. Select "480p" or "576p" for Video Output Mode (Picture Menu, ➔ page 19).

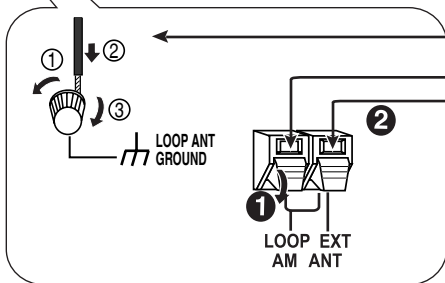
S video cable

Television
S-VIDEO
IN

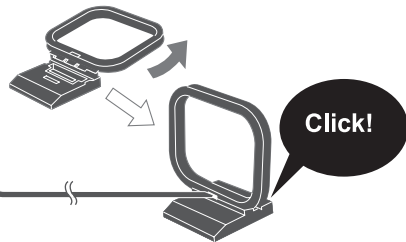
■ Connecting a television with an S VIDEO IN terminal

S VIDEO OUT terminal

The S VIDEO terminal achieves a more vivid picture than the VIDEO OUT terminal by separating the chrominance (C) and luminance (Y) signals. (Actual results depend on the television.)



Black
White
Red



AM loop antenna

Stand the antenna up on its base.

Keep loose antenna cord away from other wires and cords.

For Southeast Asia

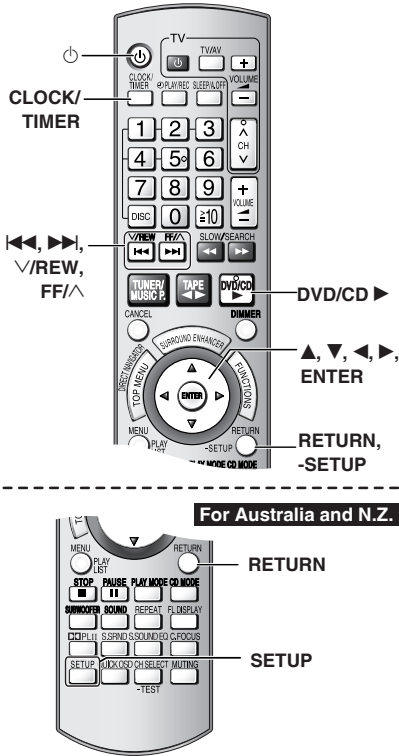
Before connecting the AC power supply cord, set the voltage.




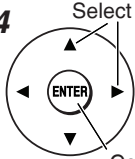


Voltage Selector

Use a flat-head screwdriver to set the voltage selector on the rear panel to the appropriate position for the area in which this system is used.


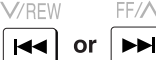

STEP 3 QUICK SETUP

Turn on the television and select the appropriate video input on the television to suit the connection for the unit.



<p>1</p>  <p>Power ON.</p>	<p>2</p>  <p>Select "DVD/CD".</p>	<p>3</p>  <p>Press and hold to show the QUICK SETUP screen.</p> <p style="text-align: right;">For Australia and N.Z.</p>
<p>4</p>  <p>Select the option from the screen.</p>	<p>5</p>  <p>Press to finish QUICK SETUP.</p>	<p>6</p>  <p>Press to exit.</p> <p style="text-align: right;">For Australia and N.Z.</p>

STEP 4 Setting the time

<p>1</p>  <p>Press to select "CLOCK".</p>	<p>2</p>  <p>Set the time (press within 6 seconds or so).</p>	<p>3</p>  <p>Press [CLOCK/TIMER] to finish setting the time.</p>
--	--	---

This is a 24-hour clock.

- Press [CLOCK/TIMER] when the unit is on to display the time.
- Reset the clock regularly to maintain accuracy.

DEMO function



When the unit is first plugged in, a demonstration of its functions may be shown on the display.

If the demo setting is off, you can see a demonstration by turning on the demo.

The display changes each time the button is held down.







DEMO ON ↔ DEMO OFF

You can reduce the power consumed in standby mode by turning the demonstration off.

Disc information

Discs that can be played

Operations you can perform depend on the disc format. The following table shows the formats you can use and the indications used in these operating instructions. (e.g. **DVD-V**)

	DVD-V DVD-V —
	Video CD VCD • Including SVCD (Conforming to IEC62107).
	DVD-RAM DVD-VR MP3 JPEG MPEG4 DivX #3, #4 • DVD-VR Recorded with devices using Version 1.1 of the Video Recording Format (a unified video recording standard), such as DVD video recorders, DVD video cameras and personal computers. • JPEG Recorded with Panasonic SD multi cameras or DVD video recorders using the DCF (Design rule for Camera File system) Standard Version 1.0. • MPEG4 Recorded with the Panasonic SD multi cameras or DVD video recorders (conforming to SD VIDEO specifications (ASF standard)/MPEG (Simple Profile) video system/G.726 audio system).
 	DVD-R (DVD-Video)#1 / DVD-RW (DVD-Video) DVD-V • Discs recorded and finalized#2 on DVD video recorders or DVD video cameras. DVD-R (VR)#1 / DV-RW (VR) DVD-VR • Discs recorded and finalized#2 on DVD video recorders or DVD video cameras using Version 1.1 or 1.2 (DVD-R only) of the Video Recording Format (a unified video recording standard). DVD-R / DVD-RW MP3 JPEG • Finalize#2 the disc after recording. DVD-R (DivX Video) / DVD-RW (DivX Video) DivX #3, #4 • Finalize#2 the disc after recording.
—	+R (Video)#1 / +RW (Video) DVD-V • Discs recorded and finalized#2 on DVD video recorders or DVD video cameras.
	CD CD WMA MP3 JPEG VCD MPEG4 DivX #3, #4 • This unit can play CD-R/RW recorded with the above formats. Close the sessions or finalize#2 the disc after recording. • CD This unit is compatible with HDCD, but does not support the Peak Extend function (a function which expands the dynamic range of high level signals). HDCD-encoded CDs are encoded with 20 bits and sound better than CDs encoded with 16 bits. • WMA MP3 JPEG This unit also plays HighMAT discs. • WMA This unit does not support Multiple Bit Rate (MBR: an encoding process for audio content that produces an audio file encoded at several different bit rates).

#1 Includes single-sided, dual layer discs.

#2 A process that allows play on compatible equipment.

#3 Functions added with DivX Ultra are not supported.

#4 Plays all versions of DivX® video (including DivX®6) with standard playback of DivX® media files. Certified to the DivX Home Theater Profile. GMC (Global Motion Compensation) is not supported.

• It may not be possible to play the above discs in all cases due to the type of disc or condition of the recording.

Discs that cannot be played

DVD-RW version 1.0, DVD-Audio, DVD-ROM, CD-ROM, CDV, CD-G, SACD, Photo CD, DVD-RAM that cannot be removed from their cartridges, 2.6-GB and 5.2-GB DVD-RAM, and “Chaoji VCD” available on the market including CVD, DVCD and SVCD that do not conform to IEC62107.

Note about using a DualDisc

- Do not use a DualDisc in this unit as it may not be possible to insert it correctly and it may get scratched or scraped.
- The “CD” sides of DualDisc do not meet the CD-DA standard so it may not be possible to play them on this unit.

Video systems

- This unit can play PAL and NTSC, but your television must match the system used on the disc.
- PAL discs cannot be correctly viewed on an NTSC television.
- This unit can convert NTSC signals to PAL 60 for viewing on a PAL television (⇒ “Video” tab—NTSC Disc Output, page 21).

Playing DVDs and Video CDs

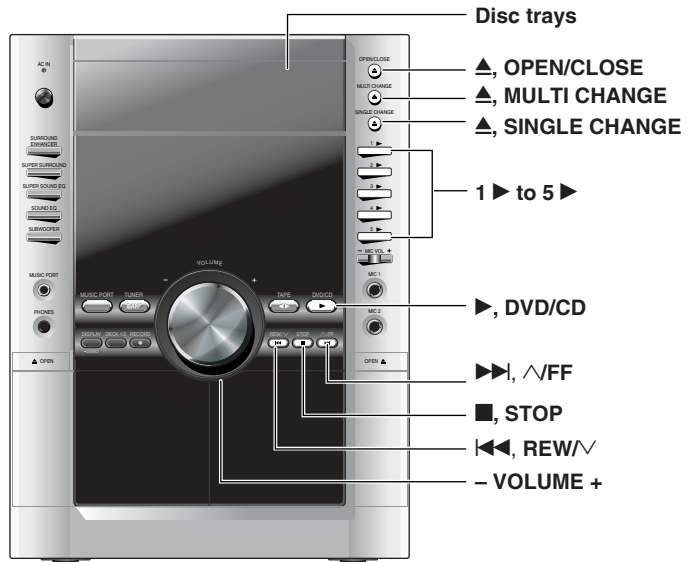
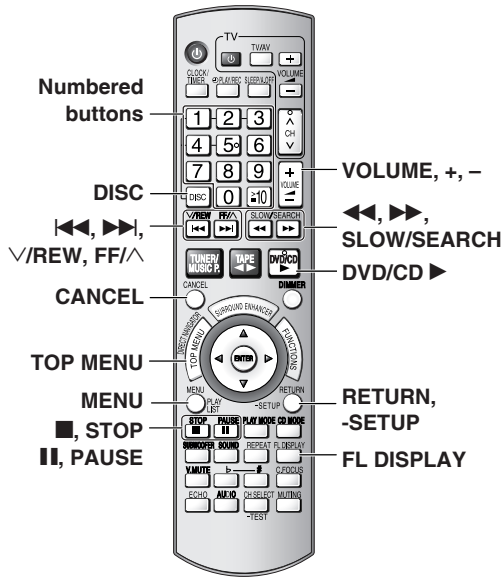
The producer of these discs can control how they are played so you may not always be able to control play as described in these operating instructions (for example if the play time is not displayed or if a Video CD has menus).
Read the disc’s instructions carefully.

Audio format of DVDs

- This unit automatically recognizes and decodes discs with these symbols.



Discs — Basic play



1

OPEN/CLOSE

Open the disc tray.

- The unit turns on automatically and a tray opens.

2

Place disc.

Label must face upward.

Disc tray **Tray number**

- Load double-sided discs so the label for the side you want to play is facing up. (⇒ Tray/disc handling procedure, page 4)

DVD-VR

- Remove TYPE 2 and 4 discs from their cartridges before use. Read the instructions for the disc carefully.

3

OPEN/CLOSE

Close the disc tray.

4

Start play.

- It may take some time for play to start but this is normal.

Using the main unit

Changing a disc in the desired tray

SINGLE CHANGE

Press [▲, SINGLE CHANGE] again to close the tray.

- You can also remove a disc while another is playing (except in CD mode).
- You cannot remove a disc in CD mode Program or Random play, or during recording.

Changing multiple discs

MULTI CHANGE

Press the button repeatedly to check and change multiple discs.

- The tray with a disc being played will not open.
- If the player is stopped, all trays will open.
- To close the remaining trays simultaneously, press [▲, OPEN/CLOSE].

- Note**
- Discs continue to rotate while menus are displayed. Press [■, STOP] when you finish to preserve the unit's motor and your television screen.
 - The total number of titles may not be displayed properly on +R/+RW.

Using the remote control

Volume adjustment

Stop

The stopped play position is memorized when "RESUME" is displayed.

- Press [DVD/CD ▶] to resume play.
- Press [■, STOP] to clear the position.

Pause

- Press [DVD/CD ▶] to continue normal play.

Skip

WMA MP3 JPEG
MPEG4 DivX

Search (during play)

- Play speed increases up to 5 steps.
- Press [DVD/CD ▶] to continue normal play.

Slow-motion

- Up to 5 steps.
- Press [DVD/CD ▶] to continue normal play.
- VCD Forward direction only.

Frame-by-frame

DVD-V DVD-VR VCD

- VCD Forward direction only.
- Pressing [||, PAUSE] also activates forward direction.
- Press [DVD/CD ▶] to continue normal play.

Displaying current playback condition (QUICK OSD)

Press [QUICK OSD]. The current playback condition is displayed. Each time you press the button: Basic → Details → Off

■ **Basic**
e.g. DVD-V

For Australia and N.Z.

Selecting a disc

- Disc information screen is displayed.

Enter number

DVD-V (while stopped)
DVD-VR VCD CD

Example: To select 12:
[1] → [2] → [ENTER]

VCD with playback control

- Press [■, STOP] then press the numbered buttons.

WMA MP3 JPEG MPEG4 DivX

Example: To select 123:
[1] → [2] → [3] → [ENTER]

- Press [CANCEL] to cancel the number(s).

CANCEL

Disc menu

DVD-V Shows a disc top menu.
DVD-VR Shows the programs.

DVD-V MPEG4 DivX Shows a disc menu.
DVD-VR Shows a playlist.

VCD with playback control (PBC) Shows a disc menu.

On-screen item select

Return to previous screen

Main unit display

Press to change display.

DVD-V DVD-VR WMA MP3 MPEG4 DivX

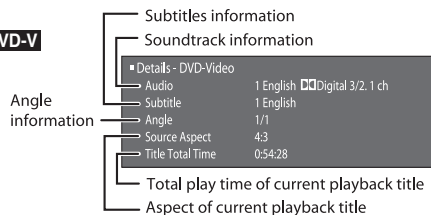
Time display ↔ Information display
JPEG

When Slideshow is on (→ page 18)
SLIDE ↔ Information display

When Slideshow is off (→ page 18)
PLAY ↔ Information display

Details

e.g. DVD-V



To exit the screen

- Press [QUICK OSD].
- CD MP3 WMA The QUICK OSD screen will appear automatically.
- MPEG4 DivX Video and audio information is not displayed during search.

CD MODE

All CDs play

VCD CD WMA MP3

This function allows you to play all loaded CDs in order and skips DVD, JPEG, MPEG4 and DivX discs.

While stopped with a CD in the current disc tray

- 1 Press [CD MODE].
- 2 Press [DVD/CD ▶].

- **To cancel**
Press [CD MODE] while stopped.
(The function also cancels when you open the current disc tray, switch the unit to standby or select another source.)

Note

- You cannot change the mode during play, or while in program or random mode.
- HighMAT menus and Video CD playback control are disabled.

REPEAT

Repeat play

(Only when the elapsed play time can be displayed
JPEG: Works with all JPEG contents.)

During play
Press [REPEAT] to select an item to be repeated.

Single disc play

DVD-VR
PG REPEAT^{#1} → DISC REPEAT → REPEAT OFF
• During playlist play:
SCENE REPEAT → PL REPEAT^{#2} → REPEAT OFF

DVD-V
CHAPTER REPEAT → TITLE REPEAT^{#3} → REPEAT OFF

VCD CD
TRACK REPEAT → DISC REPEAT^{#3} → REPEAT OFF
WMA MP3 MPEG4 DivX
CONTENT REPEAT → GROUP REPEAT^{#3} → REPEAT OFF

JPEG
GROUP REPEAT^{#3} → REPEAT OFF
• You can also repeat play of content and group on HighMAT discs.

All CDs play (➔ above)

VCD CD
TRACK REPEAT → DISC REPEAT → ALL CD'S REPEAT → REPEAT OFF
WMA MP3
CONTENT REPEAT → GROUP REPEAT → ALL CD'S REPEAT → REPEAT OFF

- **To repeat only your favorite tracks, contents or chapters**
Start program play (➔ Program play, right) and press [REPEAT] to select the repeat mode.

^{#1} Program repeat (➔ Playing DVD-VR discs, page 16).

^{#2} Play list repeat (➔ Playing DVD-VR discs, page 16).

^{#3} **During program and random play**

“ALL” is displayed.

PLAY MODE

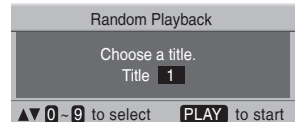
Random play

DVD-V VCD CD WMA MP3 JPEG MPEG4 DivX

While stopped

- 1 Press [PLAY MODE] to select “Random”.
Every time you press the button:
Program → Random → off (Normal play)
- 2 **DVD-V WMA MP3 JPEG MPEG4 DivX** Press the numbered buttons to select a group (WMA MP3 JPEG MPEG4 DivX) then press [ENTER] or a title.

Example: **DVD-V**



- 3 Press [DVD/CD ▶].

When CD mode is on

VCD CD WMA MP3

All the items on all discs play in random order.

PLAY MODE

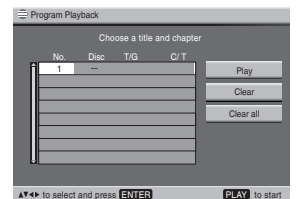
Program play (up to 32 items)

DVD-V VCD CD WMA MP3 JPEG MPEG4 DivX

While stopped

- 1 Press [PLAY MODE] to select “Program”.
(➔ see above)
- 2 Press the numbered buttons to select the items (WMA MP3 JPEG MPEG4 DivX) then press [ENTER].
 - Repeat this step to program other items.
 - **To select items using the cursor buttons**
Press [ENTER] and [▲, ▼] to select an item, then press [ENTER] again to confirm the number.

Example: **DVD-V**



- 3 Press [DVD/CD ▶].

When CD mode is on

VCD CD WMA MP3

You can program all the items on all the discs.

Follow the steps above. (Select the discs in step 2.)

- **To exit the program mode**
Press [PLAY MODE] to select “off”.
- **To return to your program**
Press [PLAY MODE] again.
- **To add or change the program**
Press [▲, ▼] to select an available item, then repeat step 2.
- **To clear the whole program**
Select “Clear all” and press [ENTER].
- **To clear an item**
Press [CANCEL], or select “Clear” and press [ENTER].

Note

- Clear the existing program before creating a new program.
- The program is cleared when you switch the unit to standby, select another source, turn CD mode on or off, or remove the disc from the current disc tray.
- For HighMAT discs, select “Play as Data Disc” (➔ Other Menu, page 20) to use random play or program play.

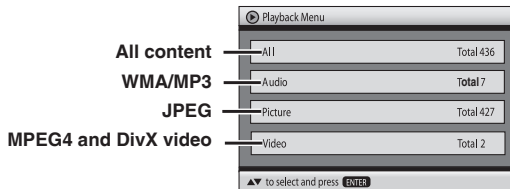
Playing data discs

WMA MP3 JPEG MPEG4 DivX CD

- You can play JPEG, MPEG4 and DivX video content on DVD-RAM or play HighMAT discs without using the HighMAT function (→ Other Menu, page 20).
- CD Only a content list appears when playing CDs, but information for CD-Text discs is correctly displayed.



1 Press [TOP MENU].



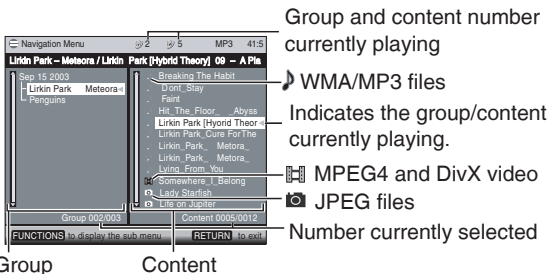
2 Press [▲, ▼] to select “All”, “Audio”, “Picture” or “Video” and press [ENTER].

- To exit the screen**
Press [TOP MENU] or [RETURN].



- Press [MENU, PLAYLIST].
- Press [▲, ▼, ◀, ▶] to select the group or audio/picture/video content and press [ENTER].
- To play content in the group in order
Press [ENTER].
To start play from the selected content
Press [▲, ▼] and then [ENTER].

Example: WMA MP3 JPEG



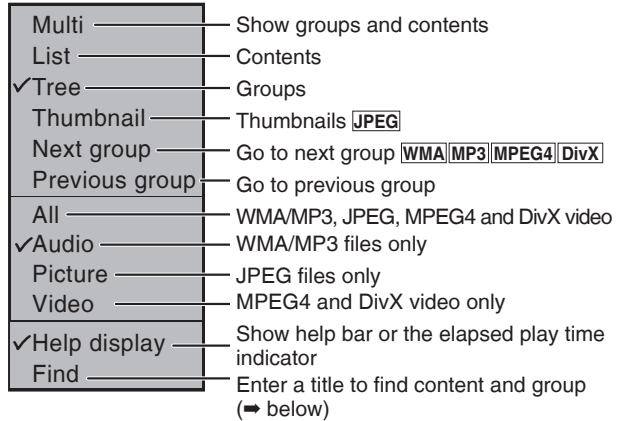
- To play WMA/MP3 while showing JPEG image**
First select the JPEG file you want to show, then select the WMA/MP3 file(s).
- To exit the screen**
Press [MENU, PLAYLIST] or [RETURN].

Using the submenu

1 Press [FUNCTIONS] while the navigation menu is displayed.

Actual items depend on the disc.

Example:



2 Press [▲, ▼] to select the item and press [ENTER].

- To return to the menu**
Press [RETURN].

Searching by content or group title

To find a group: highlight one of the group names

To find content: highlight an item in the content column

1 Select “Find” in the submenu.



2 Press [▲, ▼] to select a character and press [ENTER].

- Repeat to enter other characters.
- Lower case is also searched.
- Press [◀, ▶] to skip between A, E, I, O, and U.
- Press [⏪] to erase a character.
- Leave the asterisk (★) to search for the titles including the character you enter.
- Erase the asterisk (★) to search only for the titles starting with the character you enter. To add the asterisk (★) again, display the submenu again and select “Find”.

3 Press [▶] to select “Find” and press [ENTER]. The search results screen appears.

4 Press [▲, ▼] to select the content or group and press [ENTER].


Playing HighMAT discs


WMA MP3 JPEG

A menu appears when you select the disc.

Press **[▲, ▼, ◀, ▶]** to select then press **[ENTER]**.

When you press **[ENTER]**:

 **Menu:** Takes you to the next menu which shows play lists or another menu.

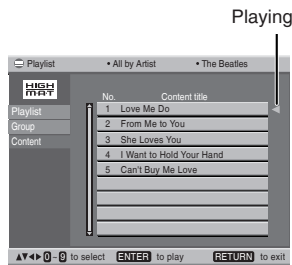
 **Playlist:** Play starts.

- **To display the screen**
Press **[TOP MENU, DIRECT NAVIGATOR]**.
- **To return to the menu above the current one**
Press **[RETURN]**.
- **To change the menu background**
Press **[FUNCTIONS]**.
The background changes to the one recorded on the disc.
- **To exit the screen**
Press **[■, STOP]**.



During play

- 1 Press **[MENU, PLAYLIST]**.
- 2 Press **[◀]** then **[▲, ▼]** to switch between the play list, group and content lists.
- 3 Press **[▶]** then **[▲, ▼]** to select an item and press **[ENTER]**.



- **To exit the list screen**
Press **[MENU, PLAYLIST]** or **[RETURN]**.

Playing DVD-VR discs

DVD-VR

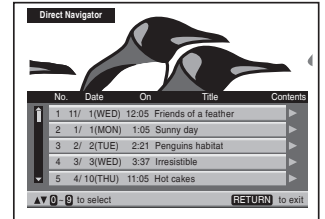
- Titles appear only if the titles are recorded on the disc.
- You cannot edit programs, playlists and disc titles.



- 1 Press **[TOP MENU, DIRECT NAVIGATOR]**.

- 2 Press **[▲, ▼]** or the numbered buttons to select the item.

The selected program plays in the background.



- 3 Press **[ENTER]** to confirm.

- Press **[▶]** to show the contents of the program.

Indication on the unit's display.

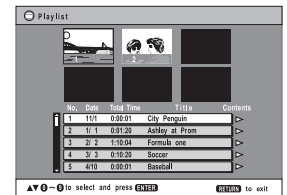
PG: Program number

- **To exit the list screen**
Press **[TOP MENU, DIRECT NAVIGATOR]** or **[RETURN]**.



You can play the groups of scenes (playlists) created on DVD video recording equipment.

- 1 Press **[MENU, PLAYLIST]**.
- 2 Press **[▲, ▼]** or the numbered buttons to select the item.
- 3 Press **[ENTER]** to confirm.



■ Playing scenes one by one

- 1 While the playlist menu is displayed
Press **[▶]**.
- 2 Press **[▲, ▼]** to select "Scene List" and press **[ENTER]**.
• "Contents" shows playlist information.
- 3 Press **[▲, ▼, ◀, ▶]** to select a scene and press **[ENTER]**.

Indication on the unit's display.

PL: Playlist number

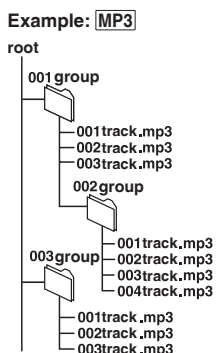
- **To exit the list screen**
Press **[MENU, PLAYLIST]** or **[RETURN]**.

Tips for making data discs

- Discs must conform to ISO9660 level 1 or 2 (except for extended formats).
- This unit supports multi-session but if there are a lot of sessions it takes more time for play to start. Keep the number of sessions to a minimum to avoid this.
- When there are more than 8 groups, the eighth group onwards will be displayed on one vertical line in the menu screen.
- There may be differences in the display order on the menu screen and computer screen.
- This unit cannot play files recorded using packet write.

Naming folders and files

At the time of recording, prefix folder and file names with 3-digit numbers in the order you want to play them (this may not work at times).



WMA

- WMA files must have the extension ".WMA" or ".wma".
- You cannot play WMA files that are copy protected.
- This unit does not support Multiple Bit Rate (MBR).

MP3

- MP3 files must have the extension ".MP3" or ".mp3".
- This unit is not compatible with ID3 tags.
- Compatible sampling rates: 8, 11.02, 12, 16, 22.05, 24, 32, 44.1 and 48 kHz.

JPEG

- JPEG files must have the extension ".JPG", ".jpg", ".JPEG" or ".jpeg".
- To view JPEG files on this unit:
 - Take them on a digital camera that meets the DCF Standard (Design rule for Camera File system) Version 1.0. Some digital cameras have functions that are not supported by the DCF Standard Version 1.0 like automatic picture rotation which may render a picture unviewable.
 - Do not alter the files in any way or save them under a different name.
- This unit cannot display motion JPEG and other such formats, still pictures other than JPEG (e.g.:TIFF) or play associated sound.

MPEG4

- MPEG4 files must have the extension ".ASF" or ".asf".
- You can play MPEG4 data [conforming to SD VIDEO specifications (ASF standard)/MPEG4 (Simple Profile) video system/G.726 audio system] recorded with Panasonic SD multi cameras or DVD video recorders with this unit.
- The recording date may differ from that of the actual date.

DivX

- DivX files must have the extension ".DIVX", ".divx", ".AVI", or ".avi".
- GMC (Global Motion Compensation) is not supported.
- DivX files greater than 2GB or with no index may not play properly on this unit.
- This unit supports all resolutions up to maximum of 720 x 480 (NTSC)/720 x 576 (PAL).
- You can select up to 8 audio soundtracks and subtitles on this unit.



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Discs — Using On-screen menus

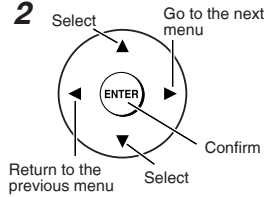
1



Show the FUNCTIONS screen.

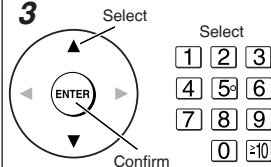
Every time you press the button:
Main menu → Basic → Details
← Off (no on-screen display) →

2



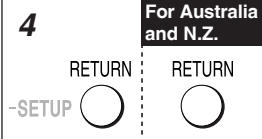
Select the menu.

3



Make the settings.

4



Press to exit.

For Australia and N.Z.

Actual items depend on the disc.

Example:

①	<p>Program, Group, Title, Track, Chapter, Playlist, Content To start from a specific item.</p>	
②	<p>Time (except +R/+RW) DVD-V DVD-VR DivX Time slip (during play) To skip the time forward or backward. 1. Press [ENTER] twice to show the Time Slip indicator. 2. Press [▲, ▼] to select the time and press [ENTER]. • Press and hold [▲, ▼] to alter faster. Time Search To start from a specific time. DVD-V DVD-VR VCD CD MPEG4 DivX Elapsed/Remaining Time To change between elapsed or remaining time display.</p>	⑤
③	<p>Video To display pixel number. MPEG4 DivX fps (frame per second) is also displayed.</p>	⑥
④	<p>Audio DVD-V DVD-VR VCD (Discs with multiple soundtracks) To select audio soundtrack. DVD-V DVD-VR To select “L”, “R” or “L R”. DivX To select “1” or “Audio LR”. DVD-V DVD-VR VCD (Karaoke disc) For Southeast Asia To select “On”, “Off”, “V1”, “V2” or “V1+V2” for vocals. • Read the disc’s instructions for details. Audio attributes LPCM/PPCM/□□Digital/DTS/MPEG: Signal type kHz: Sampling frequency kbps: Number of bits ch: Number of channels Example: 3 / 2 .1ch ├── 1: Low frequency effect (not displayed if there is no signal) ├── 0: No surround ├── 1: Mono surround ├── 2: Stereo surround (left/right) ├── 1: Center ├── 2: Front left + Front right └── 3: Front left + Front right + Center WMA MP3 To display current disc type.</p>	⑦
		⑧
		⑨
		⑩
		⑪
	<p>Subtitle DVD-V DivX (with multiple subtitles) VCD (SVCD only) To select subtitle language • On + R/+RW, a subtitle number may be shown for subtitles that are not displayed. To display/clear the subtitles Press [▲, ▼] to select “On” or “Off” and press [ENTER]. • DVD-VR DivX “On” or “Off” only appears with discs that contain subtitle on/off information (Subtitle on/off information cannot be recorded using Panasonic DVD Recorders.) • DivX DivX video files that do not display “Text” do not contain subtitles text. Subtitles text cannot be displayed.</p>	
	<p>Marker (VR) DVD-VR To recall a marker recorded on DVD-Video recorders. To recall a marker: Press [▲, ▼] → press [ENTER]</p>	
	<p>Angle DVD-V (with multiple angles) To select a video angle.</p>	
	<p>Thumbnail JPEG To show thumbnail images.</p>	
	<p>Rotate picture JPEG To rotate a picture.</p>	
	<p>Slideshow JPEG To turn slideshow on/off. To change the slideshow timing 1 (Fast) to 5 (Slow).</p>	
	<p>Other Settings—Play Speed DVD-V DVD-VR To change play speed. – from x0.6 to x1.4 (in 0.1 unit steps) • Press [DVD/CD ►] to return to normal play. • This function may not work depending on the disc’s recording.</p>	

Play Menu

Repeat

(➔ Repeat play, page 14)

A-B Repeat

Except still picture on **JPEG** **DVD-VR** **MPEG4** **DivX**

Repeat a section between points A and B within an item.

[ENTER] (start point) ➔ [ENTER] (finish point)

To cancel: [ENTER]

Marker

Except **DVD-VR**

To mark a position to play again (Marker).

- Press **[▶]** to highlight the first asterisk and press

[ENTER] again to mark a position.

You can mark up to 5 positions.

To mark another position: **[◀, ▶]** ➔ [ENTER]

To recall a marker: **[◀, ▶]** ➔ [ENTER]

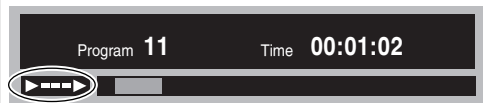
To erase a marker: **[◀, ▶]** ➔ [CANCEL]

- This feature does not work during program and random play.

Advanced Disc Review

DVD-V **DVD-VR** (except +R/+RW)

Allows you to browse the disc contents and start playing from the selected position. You can select either “Intro Mode” or “Interval Mode”. (➔ Advanced Disc Review, page 21.)



Press **[▶]**, **DVD/CD** when you find a title/program to play.

Picture Menu

Picture Mode

DVD-V **DVD-VR** **VCD** **JPEG** **MPEG4** **DivX**

(depends on disc)

Normal

Cinema1: Mellows images and enhances detail in dark scenes.

Cinema2: Sharpens images and enhances detail in dark scenes.

Animation

Dynamic

User: Enables settings you make in “Picture Adjustment”.

Picture Adjustment

Contrast **Brightness** **Sharpness** **Colour**

Gamma (Adjusts the brightness of dark parts.)

Depth Enhancer

(Reduce the rough noise in the background to give a greater feeling of depth.)

Video Output Mode

DVD-V **DVD-VR** **VCD** **JPEG** **MPEG4** **DivX**

(depends on disc)

To select suitable picture quality with your television

480p/576p^{#1} (progressive)

480i/576i^{#1} (interlace)

When you select “480p” or “576p” (progressive) and a confirmation screen appears. Select “Yes” only if connecting to a progressive output compatible television.

^{#1}The numbers displayed depend on the disc being played. One of the above numbers is displayed.

Transfer Mode

DVD-V **DVD-VR** **VCD** **JPEG** **MPEG4** **DivX**

(depends on disc)

If you have chosen “480p” or “576p” (progressive)

(➔ see above), select the method of conversion for video output to suit the type of material.

When you play NTSC disc

Auto1 (normal): Automatically detects the film and video content, and appropriately converts it.

Auto2: In addition to Auto1, automatically detects film contents with different frame rates and appropriately converts it.

Video: Select when using Auto1 and Auto2, and the video content is distorted.

When you play PAL discs, MPEG4 or DivX video

Auto: Automatically detects the film and video content, and appropriately converts it.

Video: Select when using Auto, and the content is distorted.

Cinema: Select this if the edges of the film content appear jagged or rough when Auto is selected. However, if the video content is distorted as shown in the illustration, then select Auto.



Source Select **DivX** (depends on disc)

When you select “Auto” the constructing method of the DivX contents is automatically distinguished and output. If the picture is distorted, select “I (Interlace)” or “P (Progressive)” depending on which constructing method was used when the contents were recorded to disc.

Auto, I (Interlace), P (Progressive)

13

12

14

Audio Menu**Dolby Pro Logic II** (⇒ Dolby Pro Logic II, page 28)**DVD-V** **DVD-VR** **VCD**Off (factory preset) → **Movie** → **Music****Dialogue Enhancer****DVD-V** **DVD-VR** **VCD****(Dolby Digital, DTS, MPEG4, 3-channel or over, where the dialogue is recorded in the center channel)**

This makes the dialogue in movies easier to hear.

On ↔ Off

- This does not work or has less effect with some discs.

Sound Enhancement**DVD-V** **DVD-VR** **VCD** **CD** **WMA** **MP3**

Enhances audio output to produce a warm hall-like sound.

On ↔ Off

Display Menu**Subtitle Position** **DVD-V**

0 to -60 in 2 unit steps.

Subtitle Brightness **DVD-V**

“Auto” to automatically adjust the brightness against the background, or 0 to -7.

Information **JPEG**

On ↔ Off

4:3 Aspect **DVD-V** **DVD-VR** **VCD** **JPEG** **MPEG4** **DivX****To select how to show images made for 4:3 aspect screens on a 16:9 aspect television.**

(Go to “Video” tab in the Setup menus, and select “16:9” for “TV Aspect” (⇒ page 21).)

Normal: Laterally stretches images.**Auto:** Expands 4:3 letterbox images to fill more of the screen. Other images appear in full in the center of the screen.**Shrink:** Images appear in the center of the screen.**Zoom:** Expands all images to fill the screen.

If your television has a similar feature, use it instead for a better effect.

Just Fit Zoom**DVD-VR** (motion picture parts only) **DVD-V** **VCD**

To select appropriate screen size to fit your television screen.

AUTO **American Vista****4:3 Standard** **Cinemascope2****European Vista** **Cinemascope1****16:9 Standard**

Example:

**MPEG4** **DivX****Standard** (x0.25 full-screen)**Original** (actual recorded size)**Full** (full-screen)

- This may not work depending on the discs recording.

15

Manual Zoom**DVD-VR** (For motion picture part)**DVD-V** **VCD** **MPEG4** **DivX**

To zoom in and out manually

Press [▲, ▼].

–from “x1.00” to “x1.60”: (in 0.01 units)

–from “x1.60” to “x2.00”: (in 0.02 units)

– **MPEG4** **DivX** from “x2.00” to “x4.00”: (in 0.05 units)**Bit Rate Display****DVD-VR** (Moving picture parts only)**DVD-V** **VCD** **MPEG4** **DivX**

When you select “On”:

During play:

shows the bit rate (approximate) of the video being played

During pause:

shows the data volume of the frame and type of picture (⇒ Glossary— I/P/B, page 32)

GUI See-through

Adjust the translucency of the on-screen menu.

Off, On, Auto**GUI Brightness (-3 to +3)**

To adjust the brightness of the on-screen displays.

16

Other Menu**Setup**

Open the Setup menu to change the player’s setting (⇒ page 21).

Play as DVD-VR, Play as HighMAT or Play as Data Disc

- Select “Play as Data Disc” to play JPEG, MP3, MPEG4 or DivX files on DVD-RAM or to play HighMAT disc without using the HighMAT menus.

Discs — Changing the player's settings

→ Back cover for the position of the remote control buttons.

<p>1</p> <p>For Australia and N.Z.</p> <p>Press and hold to show the setup menu.</p>	<p>2</p> <p>Select the menu tab.</p>	<p>3</p> <p>Select the item.</p>	<p>4</p> <p>Make the settings.</p>	<p>5</p> <p>For Australia and N.Z.</p> <p>Press to exit.</p>
---	---	---	---	---

- The settings remain intact even if you switch the unit to standby.
- Underlined items are the factory preset.

■ “Disc” tab

Audio Choose the audio language.	<ul style="list-style-type: none"> • <u>English</u> • Original^{#1} 	<ul style="list-style-type: none"> • (Language options) • Other★★★★^{#2} 	<p>Language options (Actual languages depend on where you bought your system.)</p> <p>For Southeast Asia</p> <ul style="list-style-type: none"> • Chinese <p>For Australia and N.Z.</p> <ul style="list-style-type: none"> • French • German • Italian • Spanish • Dutch • Portuguese • Russian
Subtitle Choose the subtitle language.	<ul style="list-style-type: none"> • <u>Automatic</u>^{#3} • (Language options) 	<ul style="list-style-type: none"> • English • Other★★★★^{#2} 	
Menus Choose the language for disc menus.	<ul style="list-style-type: none"> • <u>English</u> • Other★★★★^{#2} <p>Changing the menu language from QUICK SETUP (⇒ page 10) also changes this setting.</p>		
Advanced Disc Review Choose the mode for Advanced Disc Review (⇒ page 19).	<ul style="list-style-type: none"> • <u>Intro Mode</u>: Plays the first few seconds of each title. • Interval mode: Plays a few seconds of the disc at ten-minute intervals. 		

Ratings

Set a ratings level to limit DVD-Video play. The password screen is shown when you select levels 0 to 7.

To enter a password

1. Input a 4-digit password with the numbered buttons.
 - If you enter a wrong number, press [CANCEL] to erase it.
 - Do not forget your password.
2. Press [ENTER].
 - The lock symbol appears closed to show the rating is locked.
3. Press [ENTER] to confirm the 4 digits.

Setting ratings (When level 8 is selected)

- 8 No Limit
- 1 to 7: Prohibits play of DVD-Video with corresponding ratings recorded on them.
- 0 Lock All: To prevent play of discs without ratings levels.

Changing ratings (When level 0 – 7 is selected)

- Unlock Player
- Change Password
- Change Level
- Temporary Unlock

If you insert a DVD-Video that exceeds the ratings limit you set, a message appears on the television. Follow the on-screen instructions.

^{#1} The original language of each disc is selected.

^{#2} Input a code number with the numbered buttons (⇒ Language code list, page 33).

^{#3} If the language selected for “Audio” is not available, subtitles of that language automatically appear if available on the disc.

■ “Video” tab

TV Aspect

Choose the setting to suit your television and preference.

- Changing the TV aspect from QUICK SETUP (⇒ page 10) also changes this setting.

- 4:3 Pan&Scan:
Regular aspect television (4:3)
The sides of the widescreen picture are cut off so it fills the screen (unless prohibited by the disc).



- 4:3 Letterbox:
Regular aspect television (4:3)
Widescreen software is shown in letterbox style on a 4:3 aspect television.



- 16:9
Widescreen television (16:9)

TV Type

Select to suit the type of television.

- Changing the TV type from QUICK SETUP (⇒ page 10) also changes this setting.

- Standard (Direct View TV)
- CRT Projector
- LCD TV/Projector
- Projection TV
- Plasma TV

Time Delay

When connected with an AV amplifier and Plasma display, adjust if you notice the audio is out of sync with the video.

- 0ms
- 20ms
- 40ms
- 60ms
- 80ms
- 100ms

Still Mode

Specify the type of picture shown when paused.

- Automatic
- Field: The picture is not blurred, but picture quality is lower.
- Frame: Overall quality is high, but the picture may appear blurred.

NTSC Disc Output

Choose PAL 60 or NTSC output when playing NTSC discs (⇒ Video systems, page 11).

- PAL60: When connected to a PAL television.
- NTSC: When connected to an NTSC television (**For Southeast Asia** : “NTSC” is factory preset.)

Discs — Changing the player's settings

Picture/Video Output

Change the video signal format to be output for JPEG, MPEG4 and DivX video if picture output is not smooth during playback.

For Southeast Asia

- PAL
- NTSC/PAL60: Output will depend on "NTSC Disc Output setting" (⇒ page 21).

For Australia and N.Z.

- Automatic
- PAL
- NTSC/PAL60

■ "Audio" tab

Dynamic Range Compression

(Dolby Digital only)

- Off
- On: Adjust for clarity even when the volume is low through compressing the range of the lowest sound level and the highest sound level. Convenient for late night viewing.

Speaker Settings (⇒ see below)

Set the delay time for your center and surround speakers.

- Center (C) : 0.0/1.0/2.0/3.0/4.0/5.0 ms
- Surround (LS/RS) : 0.0/5.0/10.0/15.0 ms

■ "Display" tab

Menu Language

Choose the language for these menus and the on-screen messages.

(Actual languages depend on where you bought your system.)

For Southeast Asia

- English
- 中文

For Australia and N.Z.

- English
- Français
- Deutsch
- Italiano
- Español
- Nederlands
- Português
- Русский

On-Screen Messages

Choose whether to show on-screen messages or not.

- On
- Off

Background during Play

Select background during JPEG, MPEG4 and DivX video playback.

- Black
- Grey

■ "Others" tab

DivX Registration

Displays the unit's registration code.

You need this registration code to purchase and play DivX Video-on-Demand (VOD) content. (⇒ page 33, About DivX VOD content)

QUICK SETUP

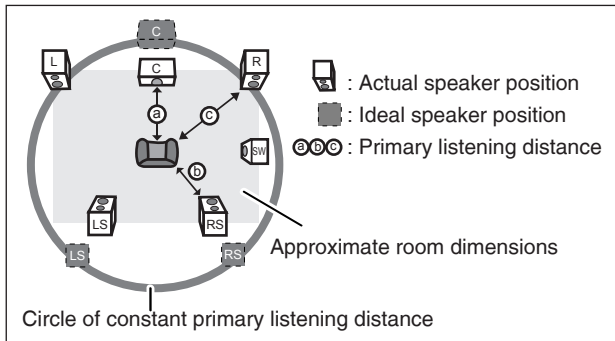
Re-initialise Setting

This returns all values in the SETUP menus to the default settings.

- Yes
- No
- Yes: The password screen is shown if "Ratings" (⇒ "Disc" tab, page 21) are set. Please enter the same password. Turn the unit off and on again.
- No

Changing the delay time (Speaker settings)

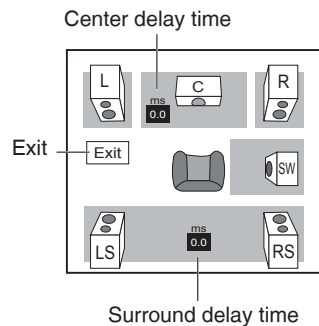
For optimum listening with 5.1 channel sound, all the speakers, except for the subwoofer, should be the same distance from the seating position. If you have to place the center or surround speakers closer to the seating position, adjust the delay time to make up for the difference.



If either distance (a) or (b) is less than (c), find the difference in the table and change to the recommended setting.

① Center speaker		② Surround speaker	
Difference (Approx.)	Setting	Difference (Approx.)	Setting
30 cm	1.0 ms	150 cm	5.0 ms
60 cm	2.0 ms	300 cm	10.0 ms
90 cm	3.0 ms	450 cm	15.0 ms
120 cm	4.0 ms		
150 cm	5.0 ms		

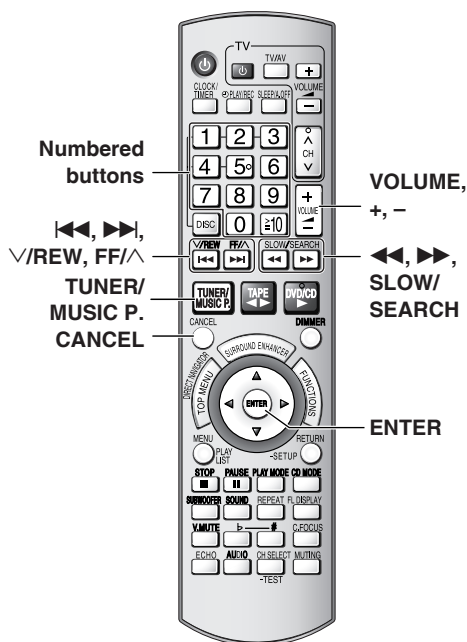
- 1 Press [▲, ▼] to select the delay time box and press [ENTER].
- 2 Press [▲, ▼] to adjust the delay time and press [ENTER].



To finish the speaker setting

Press [◀] to select "Exit" and press [ENTER].

Manual tuning



1



Select "FM" or "AM".
FM → AM → MUSIC P.

2



Select the frequency of the desired station.

3



Adjust the volume.

- Press and hold [◀] or [▶] until the frequency starts scrolling to start automatic tuning. Tuning stops when a station is found.

"ST" is displayed when a stereo FM broadcast is being received.

If noise is excessive in FM

Press [PLAY MODE] to display "MONO".

To cancel, press [PLAY MODE] again.

The mode also cancels when you change the frequency.

■ AM frequency step (main unit only) For Southeast Asia

The step is factory-set to 9 kHz, but you can change it to receive broadcasts allocated to 10 kHz steps.

1. Select "FM".

2. Press and hold [TUNER/BAND] on the main unit.

After a few seconds the display changes to show the current minimum frequency. Continue to hold the button down. The minimum frequency changes and the step is changed.

To return to the original step, repeat the above steps.

Note

Any preset stations are cleared by this procedure. Preset them again.

Preset tuning

Preset channels to make selection simpler. Up to 15 stations can each be set in the FM and AM bands.

Automatic presetting

Tune to the frequency where presetting is to begin (⇒ see above).



Press and hold.

(release when "AUTOCH1" appears)

The tuner presets the stations it can receive into the channels in ascending order.

When finished, the last station to be set is played.

Selecting channels

For the remote control only

1 Press [TUNER/MUSIC P.] to select "FM" or "AM".

2 Press the numbered buttons or [◀, V/REW] or [▶, FF/^] to select the channel.

Manual presetting

1



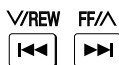
To enter manual presetting mode.
("PGM" appears)

2



Select the frequency of the desired station.

3



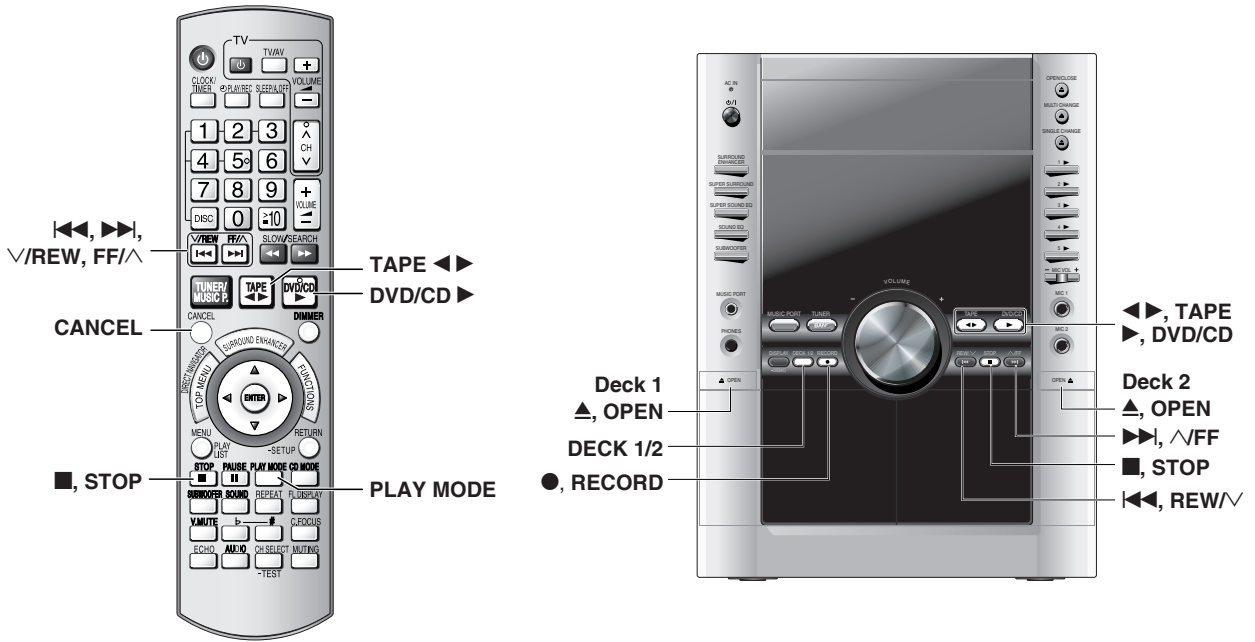
or



Press while the station is flashing to select the channel.

The station occupying a channel is erased if another station is preset in that channel.

Cassette tapes — Play and Recording



Play

You can use either deck 1 or deck 2 for tape playback.

Use normal position tapes.

High position and metal position tapes can be played, but the unit is not able to do full justice to the characteristics of these tapes.

- Tape playback is momentarily interrupted if you open the other deck.
- Tapes exceeding 100 minutes are thin and can break or get caught in the mechanism.
- Tape slack can get caught up in the mechanism and should be wound up before the tape is played.
- Endless tapes can get caught up in the deck's moving parts if used incorrectly. Use tapes appropriate to this unit's auto-reverse mechanism.

1 Press [TAPE ◀▶].

The unit comes on. If a cassette was loaded, play starts automatically (One touch play).

2 Press deck 1 [▲, OPEN] or deck 2 [▲, OPEN] on the main unit and insert the cassette.



Side to be played facing towards you

Exposed tape facing down.

Close the holder by hand.

3 Start play.



Every time you press the button:

F ▶ : Forward side is played.

R ◀ : Reverse side is played.

Stop	STOP
Reverse mode selection	<p>PLAY MODE </p> <p>Every time you press and hold the button: </p> <p>◀ → One side is played. → → Both sides are played (forward → reverse). ◀ ▶ Both sides are played repeatedly until [■, STOP] is pressed.</p> <p>To listen to 2 tapes consecutively, load a tape into each deck and select "◀ ▶". Both tapes will be played repeatedly until [■, STOP] is pressed.</p>
To select between loaded decks	PLAY MODE (main unit: [DECK 1/2]).
Fast-forward and rewind	V/REW FF/^

Recording

Use normal position tapes.

High position and metal position tapes can be used, but the unit will not be able to record or erase them correctly.

Preparation:

1. Wind up the leader tape so recording can begin immediately.
2. Press [TAPE, ◀▶] and then [■, STOP].

1 Press deck 2 [▲, OPEN] on the main unit and insert the cassette to be recorded. (⇒ page 24)

The tape direction is automatically set to F ▶.

2 Press and hold [PLAY MODE] to select the reverse mode.

- ↔ One side only records.
- ↔, ↔ Both sides record (forward → reverse)
While recording, if a track is cut off in the middle at the end of the front side, it is re-recorded from the beginning on the reverse side.
At the end of the reverse side, recording stops and the current track will be interrupted.

- “↔” automatically changes to “↔” when you start recording.

3 Select the source to be recorded.

Radio	Tune to the required station. (⇒ The radio, page 23)
Disc(s)	<ol style="list-style-type: none"> ① Insert the disc(s) you want to record. ② Press [DVD/CD ▶] and then [■, STOP] <ul style="list-style-type: none"> • Recording specific disc(s) or tracks Program the tracks (⇒ Program play, page 14)
Tape	<ol style="list-style-type: none"> ① Press [TAPE ◀▶] and then [■, STOP] ② Press deck 1 [▲, OPEN] on the main unit and insert the cassette you want to record.
Music Port	⇒ Using the Music Port, page 31

4 Press [●, RECORD] on the main unit to start recording.

• To stop recording

Press [■, STOP].

• If the tape finishes before the disc

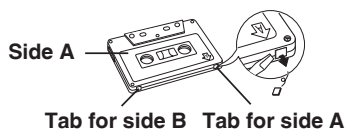
The disc continues playing. Press [■, STOP] to stop it.

Note

- Multi-channel sources are automatically down-mixed to 2 channels during recording.
- The volume, sound field and quality have no effect on recording.
- You cannot open deck 1 while recording.
- You cannot fast-forward or rewind one deck while recording with the other.

Erasure prevention

Use a screwdriver or similar object to break out the tab.

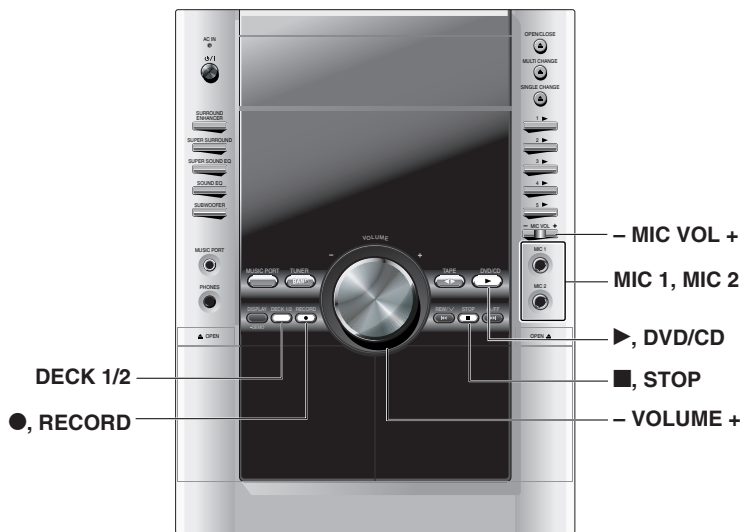
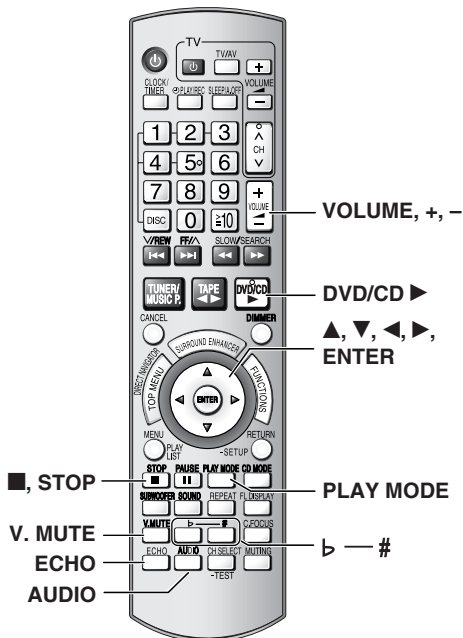


To record on the tape again, cover the hole with adhesive tape.



Erasing recordings

- 1 Press [TAPE ◀▶] and then [■, STOP].
- 2 Eject the tape (if any) from deck 1.
- 3 Insert the recorded tape into deck 2.
- 4 Press and hold [PLAY MODE] to select the reverse mode.
- 5 Press [●, RECORD] on the main unit.



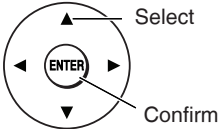


Before enjoying karaoke

- Lower the microphone volume with [- MIC VOL] on the main unit, then connect the microphone to the microphone jack "MIC".
- Use a dynamic microphone.
- Plug type: 6.3 mm monaural.
- If a strange noise (howling) is emitted during use, move the microphone away from the speakers, or turn down the microphone volume.
- When you are not using the microphone, disconnect it from the microphone jack, and turn down the microphone volume level to "MIC OFF".


Enjoying karaoke with karaoke DVD and VCD

DVD-V | VCD

<p>1</p>  <p>Start play. (⇒ page 12)</p>	<p>2</p>  <p>Show the audio menu on the television.</p>	<p>3</p>  <p>Make the selection. (⇒ Audio mode, page 27)</p>	<p>4</p> <p>Start singing. (⇒ Mic volume adjustment, page 27)</p>
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Enjoying karaoke with other sources

You can also do karaoke with discs other than those described above, and also with the radio, cassettes, and equipment connected to this unit.

<p>1</p> <p>Start play. Refer to the pages for the source</p> <ul style="list-style-type: none"> - Discs: ⇒ page 12 - Cassette tapes: ⇒ page 24 - The radio: ⇒ page 23 - Portable audio equipment: ⇒ page 31, Using the Music Port 	<p>2</p> <div style="background-color: #f0f0f0; padding: 5px; margin-bottom: 10px;"> <p>Only necessary if the vocals and melody are split between the left and right channels.</p> </div>  <p>Make the selection. (⇒ Audio mode, page 27)</p>	<p>3</p> <p>Start singing. (⇒ Mic volume adjustment, page 27)</p> <p>Even if the vocals and melody are not split, you may still be able to lower the volume of the vocals. (⇒ Vocal mute function, page 27)</p>
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Audio mode

DVD-V DVD-VR (Karaoke discs)

Solo

Off : No vocal

On : Vocal

Duet

Off : No vocal

V1+V2 : Vocal 1 and 2

V1 : Vocal 1

V2 : Vocal 2

- Choose "Off" for karaoke.
- Choose "V1" or "V2" to duet with the player.

VCD DVD-VR and other sources

Television displays are shown in parentheses ().

AUDIO L R (LR): Left channel sound is heard from the left speaker and right channel sound is heard from the right speaker — vocal and accompaniment

AUDIO L (L): Only left channel sound — no vocal

AUDIO R (R): Only right channel sound — vocal

- Select no vocal for karaoke.
- Vocal and no vocal may be reversed.

Volume adjustment



Mic volume adjustment



- MIC VOL + (on the main unit)

MIC OFF ↔ MIC 1 ↔ MIC 7

The factory setting is MIC 3.

Adding an echo effect



ECHO OFF → ECHO 1 → ECHO 2
← ECHO 4 ← ECHO 3 ←

The effect increases with the level.

Vocal mute function

V.MUTE



V.MUTE ON → V.MUTE OFF

Use this function on stereo sources to block out the vocals so you can sing along to the music.

This function is not suitable for the following sources.

- Monaural recordings
- Classical music or works performed by a limited number of instruments
- Chorus works or duets

Changing the key



(lowers the key) (raises the key)

You can choose a level between -6 and +6.

To record your karaoke performance

Prepare for recording (⇒ page 25).

Select the source and the audio mode. (⇒ see left)

1



Press [- MIC VOL +] on the main unit to adjust the mic volume.

2



Press [●, RECORD] on the main unit and then start singing.

• To record VCD with playback control

- ① Press [■, STOP]
- ② Select the track with the numbered buttons (⇒ page 13), then start recording.

You can also use the microphone without any backing music.

- 1** Press [●, RECORD] on the main unit and speak through the microphone.
- 2** Press [- MIC VOL +] on the main unit to adjust the mic volume.

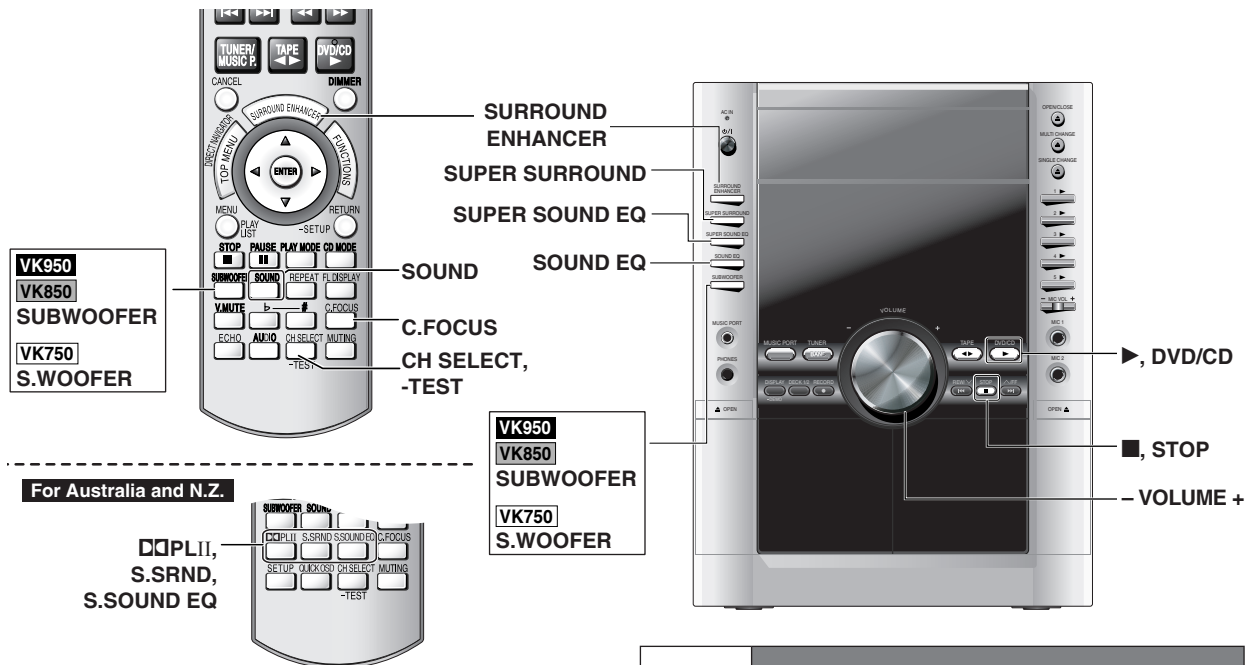
• To stop recording

Press [■, STOP].

Note

To play the recorded tape, be sure to select the "AUDIO LR" mode.

Sound field and sound quality



You cannot use Surround Enhancer, Center Focus, Super Surround, Subwoofer level and Super Woofer if you have connected headphones ("ERROR" appears on the display).

You may experience a reduction in sound quality when these sound field systems are used with some sources. If this occurs, turn the sound field system off.



Press [SOUND] to select a setting.
(main unit: [SOUND EQ])

Every time you press the button:
HEAVY → CLEAR → SOFT → DISCO → LIVE
└─ MANUAL EQ ←─ EQ OFF ←─ HALL ─┘

- HEAVY : Adds punch to rock. (factory preset)
- CLEAR : Clarifies higher sounds.
- SOFT : For background music.
- DISCO : Reverberates sound to make you feel like you are in a disco.
- LIVE : Makes vocals more alive.
- HALL : Expands sound to make you feel like you are in a hall.

- EQ-OFF : Canceled (no effect is added).
- MANUAL EQ : Create your own sound quality effects.
 - ① Press [◀] or [▶] to select the sound range.
BASS ↔ MID ↔ TREBLE
 - ② Press [▲] or [▼] to adjust the level. (-3 to +3)
 - The changes you make are stored and automatically recalled the next time you select "MANUAL EQ".
 - You cannot select "MANUAL EQ" using main unit.



Press [SURROUND ENHANCER]
(main unit: [SURROUND ENHANCER])

The "SRD ENH" indicator lights.

Every time you press the button:
SRD ENHANCER ON ↔ SRD ENHANCER OFF



Use with discs where the dialogue is recorded in the center channel.

You can make the sound of the center speaker seem like it is coming from within the television.

Press [C.FOCUS]
The "C.F" indicator lights.

Every time you press the button:
C FOCUS ON ↔ C FOCUS OFF

- This works only during 5.1 channel or when Dolby Pro Logic II is turned on.
- This does not work when Super Surround is turned on.



Dolby Pro Logic II is an advanced decoder that derives 5-channel surround (Left and Right Front, Center, Left and Right Surround) from any stereo program material, whether or not it has been specifically Dolby Surround encoded.

Press [DOLBY II]

Every time you press the button:

Movie: Movie software, recorded in Dolby Surround.

Music: Stereo sources

Off: Cancel (factory preset)

(⇒ Audio Menu, page 20)

- This works only in DVD/CD mode.
- "DOLBY II" lights when there is effect.

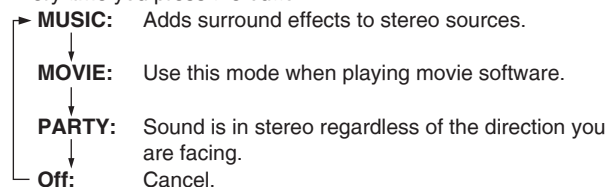
- To check the current setting
Press [SOUND] (main unit: [SOUND EQ]).
- When Sound Field Control is on, Super Sound Equalizer turns off.

S.SRND

Super Surround

Press [SUPER SURROUND] on the main unit.

Every time you press the button:



- You can adjust the volume of the surround speakers to get the best surround effect (➡ right).
- Super Surround does not work when playing a DVD recorded with 5.1 channel.
- When Super Surround is on, Dolby Pro Logic II turns off.

S.SOUNDEQ

Super Sound Equalizer

Turning on the super sound equalizer gives you a more powerful sound.

Press [SUPER SOUND EQ] on the main unit.

The "S.SOUND EQ" indicator lights.

Every time you press the button:

S. SOUND EQ ON ↔ S. SOUND EQ OFF

- To cancel**
Press [SUPER SOUND EQ] to turn off the indicator.

SUBWOOFER

Subwoofer level

VK950 VK850

Press [SUBWOOFER] to select a setting.
 (main unit: [SUBWOOFER])

Every time you press the button:

SUB W1 → SUB W2 → SUB W3 (factory preset) → SUB W4
 ↻

S.WOOFER

Super Woofer

VK750

Press [S.WOOFER] to select a setting.
 (main unit: [S.WOOFER])

Every time you press the button:

SUPER WOOFER ON ↔ SUPER WOOFER OFF

Speaker level adjustments

This is one of the ways to get appropriate surround effects.

Preparation:

Press [DVD/CD ▶] and then [■, STOP].

CH SELECT

 -TEST

Using test signals

During stop and no on-screen display is shown

1 Press and hold [CH SELECT, -TEST] to output a test signal.

TEST L : Front Left
 TEST C : Center
 TEST R : Front right
 TEST RS : Right surround
 TEST LS : Left surround

- There is no output from SW (subwoofer) channel.

2 Press [VOLUME, +, -] to set the volume level normally used for listening.

3 Press [▲] (increase) or [▼] (decrease) to adjust the speaker level for each speaker.

C, RS, LS: -6 dB to +6 dB

(L, R: Only the balance is adjustable.)

- To adjust the balance of the front speakers**

While outputting the test signal, press [◀, ▶].

- Adjust the speaker level to the same level as the front speakers.**

- To stop the test signal**

Press and hold [CH SELECT, -TEST] again or [■, STOP] (main unit: [■, STOP]).

CH SELECT

 -TEST

Adjust speaker level during play

Effective when playing multi-channel audio or Dolby Pro Logic II or Super Surround is on.

1 Press [CH SELECT, -TEST] to select the speaker.

L → C → R → RS → LS → SW
 ↑

SW: Subwoofer

- You can adjust SW only if the disc includes a subwoofer channel.
- "SW" does not appear on the display and is not adjustable when Dolby Pro Logic II is turned on.
- "S" appears on the display when "MUSIC" or "MOVIE" is selected with Super Surround (➡ left). In this case, you can adjust both surround speaker levels at the same time using [▲, ▼].
S : -6 dB to +6 dB

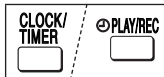
2 Press [▲] (increase) or [▼] (decrease) to adjust the speaker level for each speaker.

C, RS, LS, SW: -6 dB to +6 dB

(L, R: Only the balance is adjustable.)

- To adjust the balance of the front speakers**

While "L" or "R" is selected, press [◀, ▶].



The play/record timer

You can set the timer to come on at a certain time to wake you up (play timer) or to record a radio station or from the external source (record timer).

The play and record timers cannot be used together.

- Switch on the unit and set the clock (→ Setting the time, page 10).
- **For the play timer**, prepare the desired music source (tape, CD, radio, or external) and set the volume.
- **For the record timer**, check the cassette's erasure prevention tabs (→ Erasure prevention, page 25) and insert the tape (→ Cassette tapes, page 24). Tune to the radio station (→ The radio, page 23) or select the external source (→ Using the Music Port, page 31).

1 Press [CLOCK/TIMER] to select the timer function.

Every time you press the button:

CLOCK → →
 ↑ Previous display ↓

: to set the play timer

: to set the record timer

2 ON time setting

(Within 6 seconds or so)

- 1 Press [/REW] or [/FF/^] to set the start time.

- 2 Press [CLOCK/TIMER].

OFF time setting

Repeat step 1 and 2.

The start and finish times are now set.

3 Press [] to display the timer indicator.

→ → Off
 ↑ ↓

: to turn the play timer on

: to turn the record timer on

(The indicator doesn't appear if the start and finish times or the clock have not been set.)

4 Press [] to turn the unit off.

The unit must be off for the timers to operate.

- **Play timer:** Play will start in the set condition at the set time with volume increasing gradually to the set level.
- **Record timer:** The unit comes on 30 seconds before the set time with the volume muted.

• To cancel the timer

Press [] to clear the timer indicator from the display.

(The timer comes on at the set time everyday if the timer is on.)

To change the settings (when the unit is on)

• To change the play/record times

Do steps 1, 2 and 4.

• To change the source or volume

- 1 Press [] to clear the timer indicator from the display.
- 2 Make changes to the source or volume.
- 3 Do steps 3 to 4.

• To check the settings

Press [CLOCK/TIMER] while the unit is on to select "" or "".

The settings are shown in the following order:

Play timer: start time → finish time → source → volume

Record timer: start time → finish time → source

If you use the unit after the timers are set

After using, check that the correct tape or disc is loaded before turning the unit off.

Note

- If you turn the unit off and on again while a timer is functioning, the finish time setting will not be activated.
- If you selected external source, when the timer comes on, the unit turns on and engages "Music Port" as the source. If you want to playback or record from a connected unit, set that unit's timer to the same time. (See the connected unit's instruction manual.)

SLEEP/A.OFF



Sleep timer/Auto-off function

- Sleep timer : This timer turns the unit off after a set time.
- Auto-off function : Only when disc or tape is selected as the source. To save power, the unit turns off if it is left unused for 10 minutes.

While enjoying the desired source:

Press [SLEEP/A.OFF] to select a setting (minutes).

Every time you press the button:

SLEEP 30 → SLEEP 60 → SLEEP 90 → SLEEP 120
 ↑ SLEEP OFF ← AUTO OFF ↓

The "SLEEP" or "A.OFF" indicator lights.

• To cancel the sleep timer

Press [SLEEP/A.OFF] to select "SLEEP OFF".

• To confirm the remaining time

Press [SLEEP/A.OFF] once.

The remaining time is shown for about 5 seconds.

• To change the setting

Press [SLEEP/A.OFF] to select the new setting.

• To cancel the Auto-off function

Press [SLEEP/A.OFF] to select "AUTO OFF" again.

Note

- The sleep timer will be turned off when you start recording from a disc.
- You can use the sleep timer in combination with the play/record timer. Make sure the unit is off before the play/record timer's start time.
- The Auto-off function is maintained even if the unit is turned off.

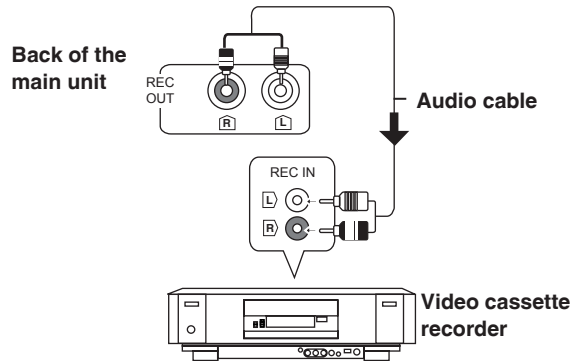
Using other equipment

- Peripheral cables and equipment are sold separately unless otherwise indicated.

Using an external unit

Before connection

- Disconnect the AC power supply cord.
- Turn off all equipment and read the appropriate operating instructions.
- The equipment connections described are examples only.



Using the Music Port

You can playback sound from portable audio equipment. Sound from the speaker may be distorted if the portable audio equipment's equalizer (if any) is turned on. Turn it off before you plug into the MUSIC PORT jack. (There is no output from REC OUT)

Preparation:

Reduce the volume of the unit and portable audio equipment before connecting.

Play

1 Connect the portable audio equipment.

Plug type: 3.5 mm stereo



Portable audio equipment

2 Press [TUNER/MUSIC P.] to select "MUSIC P." (main unit: [MUSIC PORT])

The unit comes on.

Every time you press the button:

FM → AM → MUSIC P.

3 Play the portable audio equipment.

(For details, refer to the external unit's instruction manual.)

Recording

Recording preparation (⇒ page 25).

1 Press [TUNER/MUSIC P.] to select "MUSIC P."

2 Press [●, RECORD] on the main unit to start recording.

3 Play the portable audio equipment.

Note

To avoid damage to the center speaker, do not maximize the volume level of portable audio equipment or the main unit.

DIMMER *Dimming the display*

Use this when you are going to sleep or any other time you would prefer to dim the display panel.

Press [DIMMER].

Every time you press the button:

Off → Level 1 → Level 2

To return to the original brightness, press [DIMMER] again.

MUTING *Muting the volume*

Press [MUTING].



Volume is reduced to minimum. (Output from REC OUT (⇒ right) is unaffected.)

• To cancel

Press [MUTING] again or reduce the volume to minimum, then raise it to the required level.

Muting also cancels when you switch the unit to standby.

DISPLAY -DEMO *Sound range display*

The unit's display shows the level of each sound range with the four types of display described below.

Press [DISPLAY, -DEMO] on the main unit.

Every time you press the button:

Normal display → Peak-hold display → Aurora display

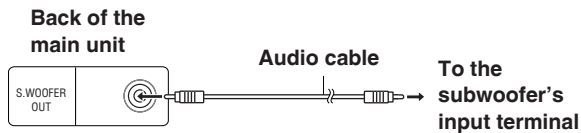
← Off ← Reflection display ←

Normal display	This display indicates the strength of the sound in each tonal range.
Peak-hold display	The peak sound value of each sound range is held on the display for about one second after it occurs.
Aurora display	The peak sound value of each sound range is displayed in inverted form.
Reflection display	The display which indicates the strength of the sound in each tonal range is displayed in inverted form.

Using other equipment

Using a subwoofer **VK750**

Connect an active subwoofer (not included).



Adjust the volume on the subwoofer to suit your preference.

Note

When using headphones, the subwoofer should be switched off.

Operating a television

Face the remote control at the television for the following operations.

Turning the television on/off



Switching the television's video input mode



Changing channels



Adjusting the volume



Note

Some models cannot be operated by this remote control.

Glossary

Decoder

A decoder restores the coded audio signals on DVDs to normal. This is called decoding.

DivX

DivX is a popular media technology created by DivX, Inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size.

Dolby Digital

This is a method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2-channel) audio, these signals can also be multi-channel audio. A large amount of audio information can be recorded on one disc using this method.

DTS (Digital Theater Systems)

This surround system is used in many movie theaters around the world. There is good separation between the channels, so realistic sound effects are possible.

Dynamic range

Dynamic range is the difference between the lowest level of sound that can be heard above the noise of the equipment and the highest level of sound before distortion occurs.

Film and video

DVD-Videos are recorded using either film or video. Usually, film is recorded at 24 frames per second, the rate movies are filmed at, while video is recorded at 30 frames per second.

Frame still and field still

Frames are the still pictures that go together to make a moving picture.

There are about 30 frames shown each second.

One frame is made up of two fields. A regular television shows these fields one after the other to create frames.

A still is shown when you pause a moving picture. A frame still is made up of two alternating fields, so the picture may appear blurred, but overall quality is high.

A field still is not blurred, but it has only half the information of a frame still so picture quality is lower.

Interlace and progressive output

The PAL video signal standard has 576 interlaced (i) scan lines, whereas progressive scanning, called 576p, uses twice the number of scan lines. For the NTSC standard, these are called 480i and 480p respectively.

Using progressive output, you can enjoy the high-resolution video recorded on media such as DVD-Video.

Your television must be compatible to enjoy progressive video.

I/P/B

MPEG 2, the video compression standard adapted for use with DVD-Video, codes frames using these 3 picture types.

I: Intra coded picture.

This picture has the best quality and is the best to use when adjusting the picture.

P: Predictive coded picture.

This picture is calculated based on past I or P-pictures.

B: Bidirectionally-predictive coded picture.

This picture is calculated by comparing past and future I and P-pictures so it has the lowest volume of information.

MPEG4

A compression system for use on mobile devices or a network, that allows highly efficient recording at a low bit rate.

Playback control (PBC)

If a Video CD has playback control, you can select scenes and information with menus.

Sampling frequency

Sampling is the process of converting the heights of sound wave (analog signal) samples taken at set periods into digits (digital encoding). Sampling frequency is the number of samples taken per second, so larger numbers mean faithful reproduction of the original sound.

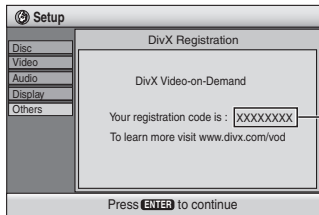
About DivX VOD content

DivX Video-on-Demand (VOD) content is encrypted for copyright protection. In order to play DivX VOD content on this unit, you first need to register the unit.

Follow the online instructions for purchasing DivX VOD content to enter the unit's registration code and register the unit. For more information about DivX VOD, visit www.divx.com/vod.

Display the unit's registration code

(⇒ "DivX Registration" in "Others" tab, page 22)



8 alphanumeric characters

- We recommend that you make a note of this code for future reference.
- After playing DivX VOD content for the first time, another registration code is then displayed in "DivX Registration". Do not use this registration code to purchase DivX VOD content. If you use this code to purchase DivX VOD content, and then play the content on this unit, you will no longer be able to play any content that you purchased using the previous code.

- If you purchase DivX VOD content using a registration code different from this unit's code, you will not be able to play this content. ("Authorization Error" is displayed.)

Regarding DivX content that can only be played a set number of times

- Some DivX VOD content can only be played a set number of times. When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ("Rented Movie Expired" is displayed.)

When playing this content

The number of remaining plays is reduced by one if

- you turn off the unit or press [-SETUP].
- you press [■, STOP]. (Press [■, PAUSE] to pause play.)
- you press [◀, ▶] or [◀, ▶] etc. and arrive at another content or the start of the content being played.
- Resume (⇒ Stop, page 13) and Marker (⇒ Play Menu, page 19) functions do not work.

Language code list

Language code list

Abkhazian: 6566	Danish: 6865	Italian: 7384	Norwegian: 7879	Swedish: 8386
Afar: 6565	Dutch: 7876	Japanese: 7465	Oriya: 7982	Tagalog: 8476
Afrikaans: 6570	English: 6978	Javanese: 7487	Pashto, Pushto: 8083	Tajik: 8471
Albanian: 8381	Esperanto: 6979	Kannada: 7578	Persian: 7065	Tamil: 8465
Ameharic: 6577	Estonian: 6984	Kashmiri: 7583	Polish: 8076	Tatar: 8484
Arabic: 6582	Faroese: 7079	Kazakh: 7575	Portuguese: 8084	Telugu: 8469
Armenian: 7289	Fiji: 7074	Kirghiz: 7589	Punjabi: 8065	Thai: 8472
Assamese: 6583	Finnish: 7073	Korean: 7579	Quechua: 8185	Tibetan: 6679
Aymara: 6589	French: 7082	Kurdish: 7585	Rhaeto-Romance: 8277	Tigrinya: 8473
Azerbaijani: 6590	Frisian: 7089	Laotian: 7679	Romanian: 8279	Tonga: 8479
Bashkir: 6665	Galician: 7176	Latin: 7665	Russian: 8285	Turkish: 8482
Basque: 6985	Georgian: 7565	Latvian, Lettish: 7686	Samoan: 8377	Turkmen: 8475
Bengali, Bangla: 6678	German: 6869	Lingala: 7678	Sanskrit: 8365	Twi: 8487
Bhutani: 6890	Greek: 6976	Lithuanian: 7684	Scots Gaelic: 7168	Ukrainian: 8575
Bihari: 6672	Greenlandic: 7576	Macedonian: 7775	Serbian: 8382	Urdu: 8582
Breton: 6682	Guarani: 7178	Malagasy: 7771	Serbo-Croatian: 8372	Uzbek: 8590
Bulgarian: 6671	Gujarati: 7185	Malay: 7783	Shona: 8378	Vietnamese: 8673
Burmese: 7789	Hausa: 7265	Malayalam: 7776	Sindhi: 8368	Volapük: 8679
Byelorussian: 6669	Hebrew: 7387	Maltese: 7784	Singhalese: 8373	Welsh: 6789
Cambodian: 7577	Hindi: 7273	Maori: 7773	Slovak: 8375	Wolof: 8779
Catalan: 6765	Hungarian: 7285	Marathi: 7782	Slovenian: 8376	Xhosa: 8872
Chinese: 9072	Icelandic: 7383	Moldavian: 7779	Somali: 8379	Yiddish: 7473
Corsican: 6779	Indonesian: 7378	Mongolian: 7778	Spanish: 6983	Yoruba: 8979
Croatian: 7282	Interlingua: 7365	Nauru: 7865	Sundanese: 8385	Zulu: 9085
Czech: 6783	Irish: 7165	Nepali: 7869	Swahili: 8387	

Troubleshooting guide

Before requesting service, make the following checks. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

Reference pages are shown in parentheses ().

Power

No power.	<ul style="list-style-type: none"> Insert the AC power supply cord securely. (8)
The unit is automatically switched to the standby mode.	<ul style="list-style-type: none"> The unit was switched to standby by the sleep timer or auto-off function. (30)

Operation

No response when any buttons are pressed.	<ul style="list-style-type: none"> Some operations may be prohibited by the disc. The unit may not be operating properly due to lightning, static electricity or some other external factor. Turn the unit OFF and then back to ON. Alternatively, press [⏻] to switch the unit to standby mode, disconnect the AC power supply cord, and then reconnect it. DivX If playing DivX VOD content, refer to the website where you purchased it. (Example: www.divx.com/vod)
No operations can be performed with the remote control.	<ul style="list-style-type: none"> Check that the batteries are installed correctly. (4) The batteries are depleted: replace them with new ones. (4) Point the remote control at the remote control sensor and operate. (39)
Cannot play DVDs.	<ul style="list-style-type: none"> CD Mode is on. Press [CD MODE] to turn CD Mode off.
Play doesn't start (or stops immediately) when you press [DVD/CD ▶].	<ul style="list-style-type: none"> Condensation has formed: wait 1 to 2 hours for it to evaporate. This unit cannot play discs other than the ones listed in these operating instructions. (11) You can only play DVD-Video if their region number is the same or includes the same region number as the unit or if the DVD-Video is marked "ALL". Confirm the region number for the unit on the rear panel. (Front cover) The disc may be dirty and may require cleaning. (4) Ensure that the disc is loaded with the label of the side to be played facing upwards. (12) Check that the DVD-RAM has something recorded on it.
It takes time before play starts. MP3 DivX	<ul style="list-style-type: none"> Play may take time to begin when an MP3 track has still picture data. Even after the track starts, the correct play time will not be displayed. This is normal on DivX video.
Cannot select random or program play.	<ul style="list-style-type: none"> You cannot select random or program play with some DVD-Video.
Folders deeper than the eighth layer on a data disc are not displayed correctly. WMA MP3 JPEG MPEG4 DivX	<ul style="list-style-type: none"> Folders deeper than the eighth layer are displayed as the eighth layer.
You have forgotten your ratings password. Reset all the Setup settings to the factory preset.	<ul style="list-style-type: none"> While stopped and "DVD/CD" is the source, press and hold [■, STOP] on the unit and [⏻] on the remote control for about 3 seconds until "Initialised" disappears from the television. Turn the unit off and on again. All settings will return to the default values.
Cannot eject disc.	<ul style="list-style-type: none"> The unit may not operate properly if the disc is damaged or dirty. Press [⏻] and after the display disappears, wait a few seconds, then press [⏻] again and eject the disc.

Menu

No menu play.	<ul style="list-style-type: none"> This function is dependent on software availability.
Playback control menu doesn't appear. VCD (with playback control)	<ul style="list-style-type: none"> Press [■, STOP] twice and then press [DVD/CD ▶].
Cannot access the Setup menu.	<ul style="list-style-type: none"> Select "DVD/CD" as the source. Cancel program and random play. (14)

Subtitle

No subtitles.	<ul style="list-style-type: none"> This function is dependent on software availability. Subtitles are cleared from the television. Turn on the subtitles. (18)
The position of the subtitles is incorrect.	<ul style="list-style-type: none"> Change the position of the subtitles with "Subtitle Position" in the Display Menu. (20)
Cannot select alternative languages.	<ul style="list-style-type: none"> This function is dependent on software availability. Try selecting from the disc's menu if one is available. (18)

Markers

Cannot add markers.	<ul style="list-style-type: none"> You cannot add markers with DVD-RAM or DVD-R/RW (DVD-VR) discs. You cannot add markers if the disc's elapsed play time doesn't appear on the unit's display.
There are already markers.	<ul style="list-style-type: none"> The unit reads and displays the markers added with a DVD video recorder. You can clear them but they will reappear when you switch the unit to standby, change the source, or open the disc tray.

Sound

No sound. Distorted sound.	<ul style="list-style-type: none"> Check the connections. (6) Turn the volume up. There may be a pause in sound when you change the play speed. DivX Audio may not be output due to how files were created.
Effects do not work.	<ul style="list-style-type: none"> Some audio effects do not work or have less effect with some discs.
Humming heard during play.	<ul style="list-style-type: none"> An AC power supply cord or fluorescent light is near the cables. Keep other appliances and cords away from this unit's cables.

Picture

Picture distorted.	<ul style="list-style-type: none"> Some distortion is normal during search. Ensure that the unit is connected directly to the television, and is not connected through a video cassette recorder. Change "Source Select" in Picture Menu. DivX (19)
No picture.	<ul style="list-style-type: none"> Check the connection. Ensure the television's video input setting (e.g., VIDEO 1) is correct.
Picture size doesn't fit the screen.	<ul style="list-style-type: none"> Change the "TV Aspect" in the "Video" tab. (21) Change the Zoom setting. (20)
The television may display incorrectly or colors appear faded.	<ul style="list-style-type: none"> The unit and television are using different video systems. <ul style="list-style-type: none"> For Southeast Asia Use the multi-system or NTSC television. For Australia and N.Z. Use the multi-system or PAL television. The system used on the disc does not match your television. <ul style="list-style-type: none"> PAL discs cannot be correctly viewed on an NTSC television. This unit can convert NTSC signals to PAL 60 for viewing on a PAL television ("NTSC Disc output" in "Video" tab.) (21) Mobile telephone chargers can cause some disturbance. If you are using a TV indoor antenna, change to an outdoor antenna. The television antenna wire is too close to the unit. Separate the antenna wire of the television from the unit.
Picture stops. DivX	<ul style="list-style-type: none"> Picture may stop if the DivX files are greater than 2GB.
Menus not displayed correctly.	<ul style="list-style-type: none"> Change the zoom ratio to "x1.00". (20) Set "Subtitle Position" in Display Menu to "0". (20) Set "4:3 Aspect" in Display Menu to "Normal". (20)
Auto zoom function does not work well.	<ul style="list-style-type: none"> Turn off TV's zoom function. Use the other preset aspect ratios or manual adjustment. Zoom function may not work well, especially in dark scenes and may not work depending on the type of disc.

Progressive video

There is ghosting when progressive output is on.	<ul style="list-style-type: none"> Change "Video Output Mode" to "480i" or "576i" so "PRG." on the display goes out. This problem is caused by the editing method or material used on DVD-Video, but should be corrected if you use interlace output. (19)
Picture not in progressive output.	<ul style="list-style-type: none"> Select "480p" or "576p" in "Video Output Mode" in Picture Menu. (19) If the unit is connected to the television through VIDEO OUT or S VIDEO OUT terminal, output will be interlace even if "PRG" is displayed. (9)

Listening to the radio

Noise is heard. "ST" flickers or doesn't light. Sound is distorted.	<ul style="list-style-type: none"> Adjust the position of the FM or AM antenna. Use an outdoor antenna. (8) Press [PLAY MODE] to select "Mono". (23)
A beat sound is heard.	<ul style="list-style-type: none"> Turn the television off or separate it from the unit.
A low hum is heard during AM broadcasts.	<ul style="list-style-type: none"> Separate the antenna from other cables and cords.

Using the cassette deck

Poor quality sound.	<ul style="list-style-type: none"> Clean the heads. (36)
Recording is not possible.	<ul style="list-style-type: none"> If the erasure prevention tabs have been removed, cover the holes with adhesive tape. (25)

Troubleshooting guide

Unit displays

Although the unit is in standby mode, the display lights up and changes continuously.	<ul style="list-style-type: none">• Turn off the demo function. (If you set the clock, the demo function turns off automatically.) (10)
“NO PLAY”	<ul style="list-style-type: none">• You inserted a disc which the unit cannot play; insert one that can. (11)• You inserted a blank disc.
“NO DISC”	<ul style="list-style-type: none">• You haven't inserted a disc; insert one.• You haven't inserted the disc correctly; insert it correctly. (4, 12)
“F61”	<ul style="list-style-type: none">• Check and correct the speaker cord connections. (6, 7) If this does not fix the problem, there is a power supply problem. Consult the dealer.
“DVD U11”	<ul style="list-style-type: none">• Disc is dirty. Wipe it clean. (4)
“ERROR”	<ul style="list-style-type: none">• Incorrect operation performed. Read the instructions and try again.
“DVD H□□” □□ stands for a number.	<ul style="list-style-type: none">• Trouble may have occurred. The number following “H” depends on the status of the unit. Reset procedure: Press [⏻] to switch the unit to standby mode and then back to ON. Alternatively, press [⏻] to switch the unit to standby mode, disconnect the AC power supply cord, and then reconnect it. If the service numbers fail to clear, note the service number and contact a qualified service person.

Television displays

“Cannot display group xx, content xx.” No on-screen display.	<ul style="list-style-type: none">• You are trying to display incompatible contents.
“⊘”	<ul style="list-style-type: none">• Go to “Display” tab in the Setup menus, and select “On” for “On-Screen Messages”. (22)
“Check the disc”	<ul style="list-style-type: none">• The operation is prohibited by the unit or disc.
“Authorization Error” [DivX]	<ul style="list-style-type: none">• The disc may be dirty.
“Rental Expired” “Rental Movie Expired” [DivX]	<ul style="list-style-type: none">• You are trying to play the DivX VOD content that was purchased with a different registration code. You cannot play the content on this unit.• The DivX VOD content has zero remaining plays. You cannot play it.

Disc trays

Disc tray(s) cannot open. “CHGR ERR” is displayed.	<ul style="list-style-type: none">• Press [⏻] to release the jammed tray(s) as the unit will switch off. Switch it on again and the tray(s) will initialize to the previous tray(s) condition. If this still does not fix the problem, please consult the dealer.
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Memory reset (Initialization)

When the following situations occur, reset the memory:

- There is no response when buttons are pressed.
- You want to clear and reset the memory contents.

1 Disconnect the AC power supply cord. (Wait at least 3 minutes before proceeding to step 2.)

2 While pressing and holding down [⏻] on the main unit, reconnect the AC power supply cord.
“-----” appears on the display.

3 Release [⏻]
All the settings are returned to the factory preset.
You will need to reset the memory items.

Maintenance

To clean this unit, wipe with a soft, dry cloth.

- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using chemically treated cloth, read the instructions that came with the cloth carefully.

For a cleaner, crisper sound (cassette deck)

Clean the heads regularly to assure good quality playback and recording. Use a cleaning tape (not included).

Specifications

■ AMPLIFIER SECTION

VK950

RMS Output Power: Dolby Digital Mode

Front – High Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Front – Low Ch	55 W per channel (6 Ω), 100 Hz, 10% THD
Surround Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Center Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Subwoofer Ch	110 W per channel (3 Ω), 100 Hz, 10% THD
Total RMS Dolby Digital mode power	880 W

PMPO output power 10000 W

VK850

RMS Output Power: Dolby Digital Mode

Front – High Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Surround Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Center Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Subwoofer Ch	110 W per channel (3 Ω), 100 Hz, 10% THD
Total RMS Dolby Digital mode power	660 W

PMPO output power **For Southeast Asia** 7000 W

VK750

RMS Output Power: Dolby Digital Mode

Front – High Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Surround Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Center Ch	110 W per channel (3 Ω), 1 kHz, 10% THD
Total RMS Dolby Digital mode power	550 W

PMPO output power 5500 W

■ FM/AM TUNER, TERMINALS SECTION

Preset stations FM 15 stations
AM 15 stations

Frequency Modulation (FM)

Frequency range	87.50 MHz to 108.00 MHz (50-kHz step)
Sensitivity	4.0 μV (IHF)
S/N 26 dB	2.2 μV
Antenna terminals	75 Ω (unbalance)

Amplitude Modulation (AM)

Frequency range	
For Southeast Asia	522 kHz to 1629 kHz (9-kHz step)
	520 kHz to 1630 kHz (10-kHz step)
For Australia and N.Z.	522 kHz to 1629 kHz (9-kHz step)
AM sensitivity S/N 20 dB at 999 kHz	1000 μV/m

Phone jack

Terminal Stereo, 3.5-mm jack

Mic jack **For Southeast Asia**

Sensitivity 0.7 mV, 600 Ω
Terminal Mono, 6.3-mm jack (2 system)

Music Port (Front)

Sensitivity 100-mV, 4.7 kΩ
Terminal Stereo, 3.5-mm jack

■ CASSETTE DECK SECTION

Type Auto Reverse

Track system 4-Track, 2 Channel

Head Record/Playback Solid Permalloy Head

Erase Double Gap Ferrite Head

Motor DC Servo Motor

Recording System AC Bias 100 kHz

Erase System AC Erase 100 kHz

Tape Speed 4.8 cm/s

Overall Frequency Response (+3, –6 dB) at DECK OUT

Normal 35 Hz to 14 kHz

S/N Ratio 50 dB (A weighted)

Wow and Flutter 0.18% (WRMS)

Fast Forward and Rewind Time

Approx. 120 seconds with C-60 cassette tape

■ DISC SECTION

Disc played (8 cm or 12 cm)

- (1) DVD (DVD-Video, DivX[®]^{#1,#2})
- (2) DVD-RAM (DVD-VR, JPEG^{#2,#3}, MP3^{#2,#4}, MPEG4^{#2,#5}, DivX^{#1,#2})
- (3) DVD-R (DVD-Video, DVD-VR, JPEG^{#2,#3}, MP3^{#2,#4}, MPEG4^{#2,#5}, DivX^{#1,#2})
- (4) DVD-R DL (DVD-Video, DVD-VR)
- (5) DVD-RW (DVD-Video, DVD-VR, JPEG^{#2,#3}, MP3^{#2,#4}, MPEG4^{#2,#5}, DivX^{#1,#2})
- (6) +R/ +RW (Video)
- (7) +R DL (Video)
- (8) CD, CD-R/RW [CD-DA, Video CD, SVCD^{#6}, MP3^{#2,#4}, WMA^{#2,#7}, JPEG^{#2,#3}, MPEG4^{#2,#5}, DivX^{#1,#2}, HighMAT Level 2 (Audio and Image)]

^{#1} Plays all versions of DivX[®] video (including DivX[®]⁶) with standard playback of DivX[®] media files. Certified to the DivX Home Theater Profile. GMC (Global Motion Compensation) is not supported.

^{#2} The total combined maximum number of recognizable audio, picture and video contents and groups: 4000 audio, picture and video contents and 400 groups.

^{#3} Exif Ver 2.1 JPEG Baseline files

Picture resolution: between 160 x 120 and 6144 x 4096 pixels (Sub sampling is 4:0:0, 4:2:0, 4:2:2 or 4:4:4). Extremely long and narrow pictures may not be displayed.

^{#4} MPEG-1 Layer 3, MPEG-2 Layer 3

^{#5} MPEG4 data recorded with the Panasonic SD multi cameras or DVD video recorders

Conforming to SD VIDEO specifications (ASF standard) / MPEG4 (Simple Profile) video system / G.726 audio system

^{#6} Conforming to IEC62107

^{#7} Windows Media Audio Ver. 9.0 L3
Not compatible with Multiple Bit Rate (MBR)

Pick up

Wavelength (DVD/CD) 662 nm/785 nm
Laser power (DVD/CD) CLASS 1/CLASS 1M

Audio output (Disc)

Number of channels (FL, FR, C, SL, SR, SW) 5.1 ch

Audio performance (measurement at: Rec out terminal)

Frequency response (CD-Audio) 4 Hz to 20 kHz

■ VIDEO SECTION

Video system

Signal system
For Southeast Asia except Thailand NTSC, PAL525/60, PAL625/50
For others PAL625/50, PAL525/60, NTSC

Composite video output

Output level 1 Vp-p (75 Ω)
Terminal Pin jack (1 system)

S-video output

Y output level 1 Vp-p (75 Ω)
C output level 0.3 Vp-p (75 Ω) (PAL)
0.286 Vp-p (75 Ω) (NTSC)
Terminal S terminal (1 system)

Component video output

[NTSC: 480p/480i, PAL: 576p/576i]
Y output level 1 Vp-p (75 Ω)
P_B output level 0.7 Vp-p (75 Ω)
P_R output level 0.7 Vp-p (75 Ω)
Terminal Pin jack (Y: green, P_B: blue, P_R: red) (1 system)

■ SPEAKER SECTION

VK950 **Front speakers SB-VK950**

Type 3 way, 3 speaker system (Bass reflex)

Speaker unit(s) Impedance High 3 Ω/Low 6 Ω

1. Super woofer 20 cm Cone type
2. Woofer 12 cm Cone type
3. Tweeter 2.5 cm Dome type

Input power (IEC) High 110 W (Max)/Low 55 W (Max)

Output sound pressure 88 dB/W (1.0 m)

Cross over frequency 160 Hz, 6 kHz

Frequency range 40 Hz to 29 kHz (–16 dB)

54 Hz to 28 kHz (–10 dB)

Dimensions (WxHxD) 250 mm x 429.5 mm x 298.5 mm

Mass 6.1 kg

Specifications

VK950	Surround speakers SB-PS950
Type	2 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	8 cm Cone type
2. Full range	8 cm Cone type
3. Super tweeter	Piezo type
Input power (IEC)	110 W (Max)
Output sound pressure	82 dB/W (1.0 m)
Cross over frequency	10 kHz
Frequency range	100 Hz to 24 kHz (-16 dB) 110 Hz to 22 kHz (-10 dB)
Dimensions (WxHxD)	140 mm x 331 mm x 146.5 mm
Mass	1.6 kg

VK950	Center speaker SB-PC950
Type	2 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	8 cm Cone type
2. Full range	8 cm Cone type
3. Super tweeter	Piezo type
Input power (IEC)	110 W (Max)
Output sound pressure	82 dB/W (1.0 m)
Cross over frequency	10 kHz
Frequency range	92 Hz to 27 kHz (-16 dB) 105 Hz to 25 kHz (-10 dB)
Dimensions (WxHxD)	330 mm x 104 mm x 94.5 mm
Mass	1.4 kg

VK950	Subwoofers SB-WVK950
Type	1 way, 2 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Woofer	16 cm Aluminum Cone type
2. Woofer	16 cm Aluminum Cone type
Input power (IEC)	110 W (Max)
Output sound pressure	86 dB/W (1.0 m)
Frequency range	26 Hz to 310 Hz (-16 dB) 30 Hz to 250 Hz (-10 dB)
Dimensions (WxHxD)	200 mm x 429.5 mm x 359 mm
Mass	6.1 kg

VK850	Front speakers SB-VK850
Type	3 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance High 3 Ω
1. Super woofer	20 cm Cone type
2. Woofer	12 cm Cone type
3. Tweeter	2.5 cm Dome type
Input power (IEC)	110 W (Max)
Output sound pressure	88 dB/W (1.0 m)
Cross over frequency	200 Hz, 6 kHz
Frequency range	40 Hz to 29 kHz (-16 dB) 54 Hz to 28 kHz (-10 dB)
Dimensions (WxHxD)	250 mm x 429.5 mm x 298.5 mm
Mass	6.1 kg

VK850	Surround speakers SB-PS850
Type	2 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	8 cm Cone type
2. Full range	8 cm Cone type
3. Super tweeter	Piezo type
Input power (IEC)	110 W (Max)
Output sound pressure	82 dB/W (1.0 m)
Cross over frequency	10 kHz
Frequency range	100 Hz to 24 kHz (-16 dB) 110 Hz to 22 kHz (-10 dB)
Dimensions (WxHxD)	140 mm x 331 mm x 146.5 mm
Mass	1.6 kg

VK850	Center speaker SB-PC850
Type	2 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	8 cm Cone type
2. Full range	8 cm Cone type
3. Super tweeter	Piezo type
Input power (IEC)	110 W (Max)
Output sound pressure	82 dB/W (1.0 m)
Cross over frequency	10 kHz
Frequency range	92 Hz to 27 kHz (-16 dB) 105 Hz to 25 kHz (-10 dB)
Dimensions (WxHxD)	330 mm x 104 mm x 94.5 mm
Mass	1.4 kg

VK850	Subwoofer SB-WVK850
Type	1 way, 2 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Woofer	16 cm Aluminum Cone type
2. Woofer	16 cm Aluminum Cone type
Input power (IEC)	110 W (Max)
Output sound pressure	86 dB/W (1.0 m)
Frequency range	26 Hz to 310 Hz (-16 dB) 30 Hz to 250 Hz (-10 dB)
Dimensions (WxHxD)	200 mm x 429.5 mm x 359 mm
Mass	6.1 kg

VK750	Front speakers SB-VK750
Type	3 way, 3 speaker system (Bass reflex)
Speaker unit(s)	Impedance High 3 Ω
1. Super woofer	20 cm Cone type
2. Woofer	12 cm Cone type
3. Tweeter	2.5 cm Dome type
Input power (IEC)	110 W (Max)
Output sound pressure	88 dB/W (1.0 m)
Cross over frequency	200 Hz, 6 kHz
Frequency range	40 Hz to 29 kHz (-16 dB) 54 Hz to 28 kHz (-10 dB)
Dimensions (WxHxD)	250 mm x 429.5 mm x 298.5 mm
Mass	6.1 kg

VK750	Surround speakers SB-PS750
Type	1 way, 1 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	6.5 cm Cone type
Input power (IEC)	110 W (Max)
Output sound pressure	80 dB/W (1.0 m)
Frequency range	95 Hz to 25 kHz (-16 dB) 110 Hz to 22 kHz (-10 dB)
Dimensions (WxHxD)	270 mm x 92 mm x 95.4 mm
Mass	0.9 kg

VK750	Center speaker SB-PC750
Type	1 way, 2 speaker system (Bass reflex)
Speaker unit(s)	Impedance 3 Ω
1. Full range	6.5 cm Cone type
2. Full range	6.5 cm Cone type
3. Super tweeter	
Input power (IEC)	110 W (Max)
Output sound pressure	85 dB/W (1.0 m)
Frequency range	100 Hz to 29 kHz (-16 dB) 110 Hz to 22 kHz (-10 dB)
Dimensions (WxHxD)	270 mm x 92 mm x 95.4 mm
Mass	1.3 kg

■ GENERAL

Power supply	
For Southeast Asia	AC 110 to 127V/220 to 240V, 50/60 Hz
For Australia and N.Z.	AC 230 to 240V, 50 Hz

Power consumption	
VK950	360 W
VK850	290 W
VK750	240 W
Dimensions (WxHxD)	250 mm x 330 mm x 334.6 mm
Mass	5.5 kg
Operating temperature range	+ 5°C to + 35°C
Operating humidity range	5% to 90% RH (no condensation)

Power consumption in standby mode:	0.9 W (approximate)
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Note

- Specifications are subject to change without notice. Mass and dimensions are approximate.
- Total harmonic distortion is measured by the digital spectrum analyzer.

Control guide: main unit

AC IN (AC supply indicator)

This indicator lights when the unit is connected to the AC mains supply.

⏻/⏻ (Standby/on switch)

Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.

SURROUND ENHANCER (⇒ 28)

SUPER SURROUND (⇒ 29)

SUPER SOUND EQ (⇒ 29)

SOUND EQ (⇒ 28)

VK950 VK850 SUBWOOFER (⇒ 29)

VK750 S.WOOFER (⇒ 29)

MUSIC PORT jack (⇒ 31)

PHONES

Headphone jack
Reduce the volume level and connect the headphones.
Headphones plug type:
3.5 mm stereo.
Avoid listening for prolonged periods of time to prevent hearing damage.

Deck 1 open button (⇒ 24)

Disc trays (⇒ 4, 12)

▲, OPEN/CLOSE (⇒ 4, 12)

▲, MULTI CHANGE (⇒ 12)

▲, SINGLE CHANGE (⇒ 12)

1 ▶ to 5 ▶ (disc direct play buttons) (⇒ 12)

For Southeast Asia - MIC VOL + (⇒ 27)

Remote control signal sensor

For Southeast Asia

MIC 1, MIC 2 (⇒ 26)

Deck 2 open button (⇒ 24)

Deck 1 cassette holder (⇒ 24)

Deck 2 cassette holder (⇒ 24)

BAND, TUNER (⇒ 23)

MUSIC PORT (⇒ 31)

DISPLAY, -DEMO (⇒ 10, 31)

DECK 1/2 selection button (⇒ 24)

●, RECORD (⇒ 25, 31)

◀▶, TAPE (⇒ 24)

▶, DVD/CD (⇒ 10, 12, 26)

■, STOP (⇒ 13)

◀◀, REW/∨, ▶▶, ∧/FF (Disc skip/search/slow-motion play, tape fast-forward/rewind, tune, time adjust buttons) (⇒ 10, 13, 24, 30)

- VOLUME + (⇒ 13, 26)

Control guide: remote control

