Panasonic

Operating Instructions
42”/50” Class 1080p Plasma HDTV
(41.6/49.9 inches measured diagonally)

Model No. **TH-42PZ80Q**
TH-50PZ80Q

Quick Start Guide

(See page 6-17)

- For assistance (U.S.A.), please call:
  1-877-95-VIERA (958-4372)
  or visit us at www.panasonic.com/contactinfo
- For assistance (Puerto Rico), please call:
  787-750-4300
  or visit us at www.panasonic.com

<tru2way> HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE HDTV SD HC VIERA Link

English

Please read these instructions before operating your set and retain them for future reference.
The images shown in this manual are for illustrative purposes only.

TQB2AA0798

Turn your own living room into a movie theater!

Experience an amazing level of multimedia excitement

This device contains a digital television tuner, so it should receive digital over the air TV programming, with a suitable antenna, after the end of full-power analog TV broadcasting in the United States (as required by law) on February 17, 2009. Some older television receivers, if they rely on a TV antenna, will need a TV Converter to receive over the air digital programming, but should continue to work as before for other purposes (e.g., for watching low-power TV stations still broadcasting in analog, watching pre-recorded movies, or playing video games). When a Converter is used with an older television receiver, a signal splitter might be necessary to continue to receive low-power analog broadcasts via an antenna. For more information, please see www.DTV.gov. For information on the TV Converter program, and on government coupons that may be used toward the purchase of one, see www.dtv2009.gov, or call the NTIA at 1-888-DTV-2009. Please check with your cable or satellite service provider if you have questions about your cable or satellite set-top box.

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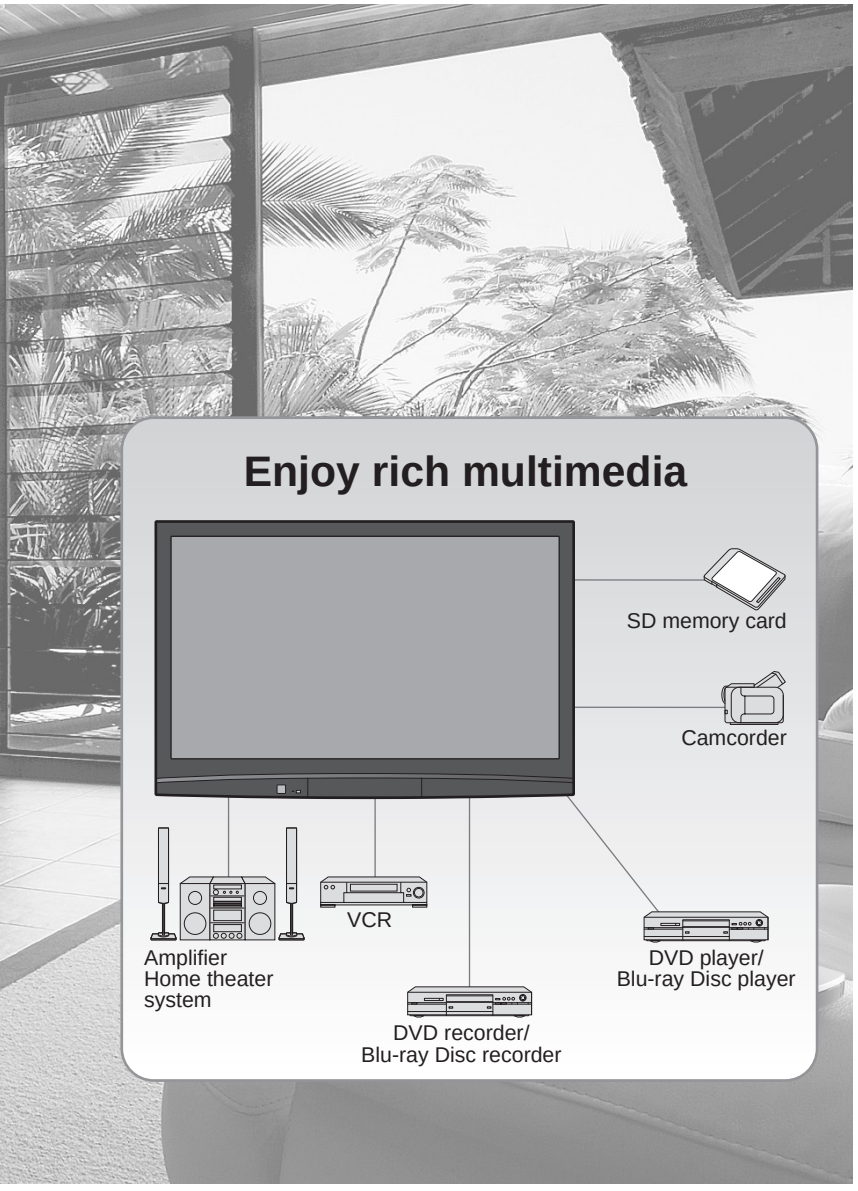
tru2way™ is a trademark of Cable Television Laboratories, Inc.

HDAVI Control™

HDAVI Control™ is a trademark of Panasonic Corporation.



HDTV

CableCARD™ is a trademark of Cable Television Laboratories, Inc.

Manufactured under license from Dolby Laboratories.
DOLBY and the double-D symbol are
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EZ Sync™

EZ Sync™ is a trademark of Panasonic Corporation.

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Enjoy your TV!

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Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

WARNING: To reduce the risk of electric shock, do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrowhead within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Do not place liquid containers (flower vase, cups, cosmetics, etc.) above the set (including on shelves above, etc.).

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments / accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for an Other Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the Panasonic Service Center or an experienced radio/TV technician for help.

FCC Caution:
To assure continued compliance, follow the attached installation instructions and use only shielded interface cables when connecting to peripheral devices. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user's authority to operate this device.

Responsible Party:	Panasonic Corporation of North America One Panasonic Way, Secaucus, NJ 07094
Contact Source:	Panasonic Consumer Electronics Company 1-877-95-VIERA (958-4372)
email:	consumerproducts@panasonic.com

WARNING/CAUTION

⚠ WARNING

Small parts can present choking hazard if accidentally swallowed.
Keep small parts away from young children.
discard unneeded small parts and other objects, including packaging materials and plastic bags/sheets to prevent them from being played with by young children, creating the potential risk of suffocation.

■ Set up

Do not place the Plasma TV on sloped or unstable surfaces.
- The Plasma TV may fall off or tip over.

Do not place any objects on top of the Plasma TV.
- If water spills onto the Plasma TV or foreign objects get inside it, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Plasma TV, please consult an Authorized Service Center.

This Plasma TV is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.
(All of the following accessories are manufactured by Panasonic Corporation.)

- Wall-hanging bracket (Vertical) TY-WK42PV3U
  TY-WK42PV4W
- Wall-hanging bracket (Angled) TY-WK42PR3U
  TY-WK42PR4W

Always be sure to ask a qualified technician to carry out set-up.
- Two or more people are required to install and remove the television. If two people are not present, the television may be dropped, and personal injury may result.

Transport only in upright position!
- Transporting the unit with its display panel facing upright or downward may cause damage to the internal circuitry.

■ AC Power Supply Cord

The Plasma TV is designed to operate on 120 V AC, 60 Hz.
Securely insert the power cord plug as far as it will go.
- If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket plate is loose, they should not be used.

The included power cord is for use with this unit only.
Do not use any power cord other than that provided with this TV.
- Doing so may cause fire or electric shocks.

Do not handle the power cord plug with wet hands.
- Doing so may cause electric shocks.

Do not do anything that might damage the power cord. When disconnecting the power cord, hold the plug, not the cord.
- Do not make any modifications to, place heavy objects on, place near hot objects, heat, bend, twist or forcefully pull the power cord. Doing so may cause damage to the power cord which can cause fire or electric shock. If damage to the cord is suspected, have it repaired at an Authorized Service Center.

■ If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odor is detected from the Plasma TV, unplug the power cord immediately.
- Continued use of the TV under these conditions might cause fire or permanent damage to the unit. Have the TV evaluated at an Authorized Service Center. Servicing of the TV by any unauthorized personnel is strongly discouraged due to its high voltage dangerous nature.

If water or foreign objects get inside the Plasma TV, if the Plasma TV is dropped, or if the cabinet becomes damaged, disconnect the power cord plug immediately.
- A short may occur, which could cause fire. Contact an Authorized Service Center for any repairs that need to be made.

⚠ CAUTION

Do not cover the ventilation holes.
- Doing so may cause the Plasma TV to overheat, which can cause fire or damage to the Plasma TV.

Leave a space of 3 15/16” (10 cm) or more at the top, left and right, and 2 3/4” (7 cm) or more at the rear.
When using the pedestal, keep the space between the bottom of the TV and the floor surface.

■ When using the Plasma TV

Be sure to disconnect all cables before moving the Plasma TV.
- Moving the TV with its cables attached might damage the cables which, in turn, can cause fire or electric shock.

Disconnect the power plug from the wall outlet as a safety precaution before carrying out any cleaning.
- Electric shocks can result if this is not done.

Clean the power cord plug regularly to prevent it from becoming dusty.
- Built-up dust on the power cord plug can increase humidity which might damage the insulation and cause fire. Unplug the cord from the wall outlet and clean it with a dry cloth.

This Plasma TV radiates infrared rays; therefore, it may affect other infrared communication equipment.
Install your infrared sensor in a place away from direct or reflected light from your Plasma TV.
Do not climb up onto the television or use it as a step. (Young children should be made particularly aware of this caution.)
- If the unit falls over or becomes damaged through misuse, injury may result.

The TV will still consume some power as long as the power cord is inserted into the wall outlet.

Notes

■ Do not display a still picture for a long time

This causes the image to remain on the plasma screen (“Image retention”). This is not considered a malfunction and is not covered by the warranty.

To prevent “Image retention”, the screen saver is automatically activated after a few minutes if no signals are sent or no operations are performed. (p. 53)

Typical still images
- Channel number and other logos
- Image displayed in 4:3 mode
- SD Card photo
- Video game
- Computer image

■ Set up

- Do not place the unit where it’s exposed to sunlight or other bright light (including reflections).
- Use of some types of fluorescent lighting may reduce the remote control’s transmission range.

Accessories/Optional Accessory

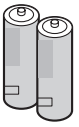
Accessories

☑ **Check you have all the items shown.**

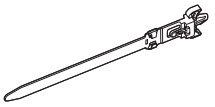
Accessories

☐ Remote Control Transmitter
- N2QAYB000294

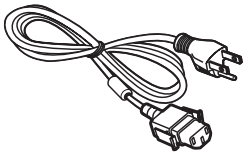
☐ Batteries for the Remote Control Transmitter (2)
- AA Battery



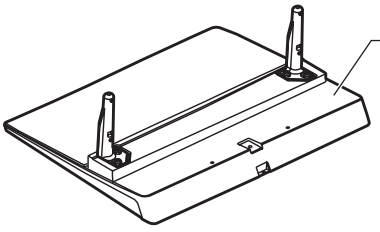
☐ Cable clamper



☐ AC cord



☐ Pedestal
- TBLX0036 (TH-42PZ80Q)
- TBLX0037 (TH-50PZ80Q)



How to assemble (p.7)

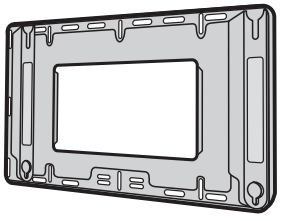
☐ Operating Instructions

☐ Quick Setup Guide (For viewing HD programming)

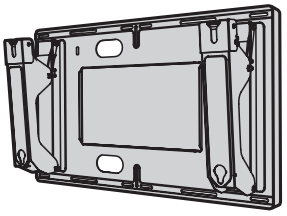
☐ Product Registration Card (U.S.A.)

☐ Customer Care Plan Card (U.S.A.)

Optional Accessory



Wall-hanging bracket (vertical)
- TY-WK42PV3U
- TY-WK42PV4W

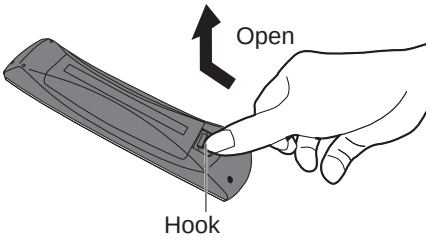


(angle)
- TY-WK42PR3U
- TY-WK42PR4W

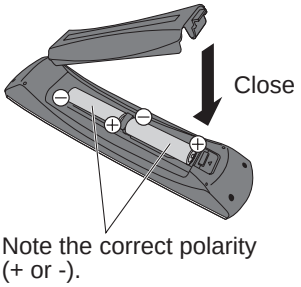
Note
- In order to maintain the TV's performance and safety, be absolutely sure to ask your dealer or a licensed contractor to secure the wall-hanging brackets.
- Carefully read the instructions accompanying the plasma TV stand or pedestal, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause its panel to crack.

Installing the remote's batteries

1



2

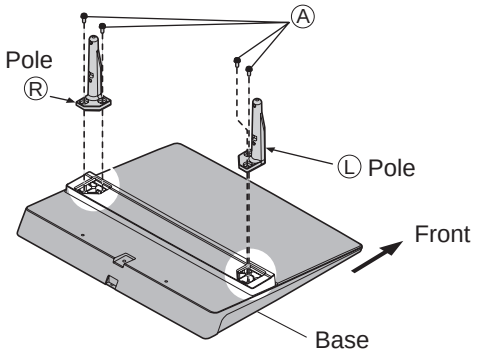


Caution
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
  - Do not mix old and new batteries.
  - Do not mix different battery types (such as alkaline and manganese batteries).
  - Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or break batteries.
- Make a note of the remote control codes before changing batteries in case the codes are reset. (p. 39)

Attaching the pedestal to TV

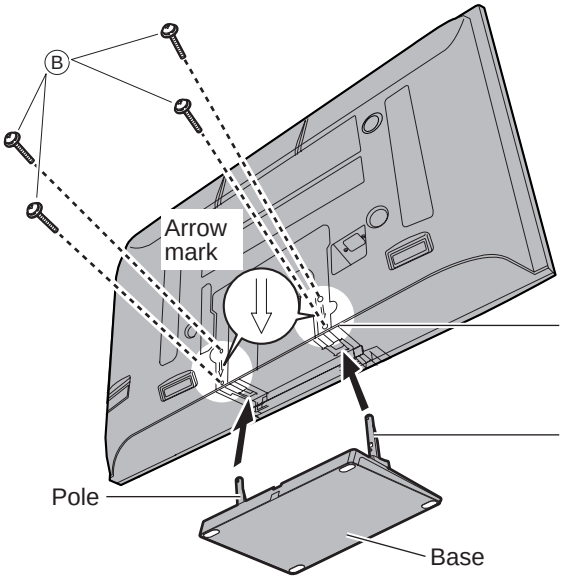
■Assembling the pedestal

- Fix securely with assembly screws Ⓐ. (Total 4 screws)
- Tighten screws firmly.



■Set-up

- Carry out work on a horizontal and level surface.
- Tighten screws firmly.



Bottom view

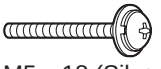
Rear side

- Fix securely with assembly screws Ⓑ. (Total 4 screws)

Accessories

Assembly screws (4 of each)

Ⓐ

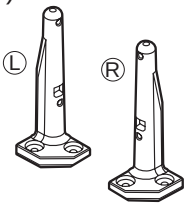


M5 x 18 (Silver)

Ⓑ

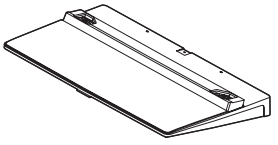
M5 x 25 (Black)

Poles (2)



- Ⓛ or Ⓡ is printed at the bottom of the poles.

Base (1)



Warning

Do not disassemble or modify the pedestal.
- Otherwise the TV may fall over and become damaged, and personal injury may result.

Caution

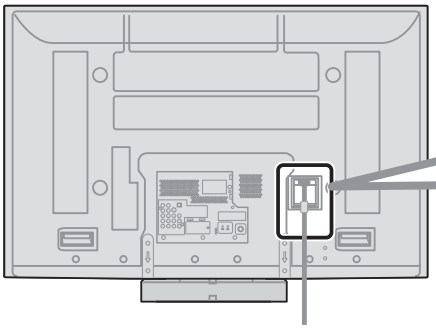
Do not use any other TV and displays.
- Otherwise the TV may fall over and become damaged, and personal injury may result.

Do not use the pedestal if it becomes warped or physically damaged.
- If you use the pedestal when it is physically damaged, personal injury may result. Contact your nearest Panasonic Dealer immediately.

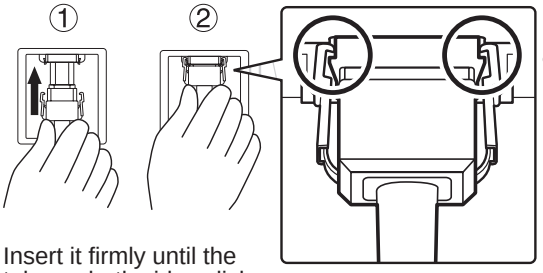
During set-up, make sure that all screws are securely tightened.
- If sufficient care is not taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

Accessories/Optional Accessory (Continued)

AC Cord Connection

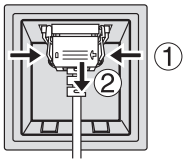


To attach



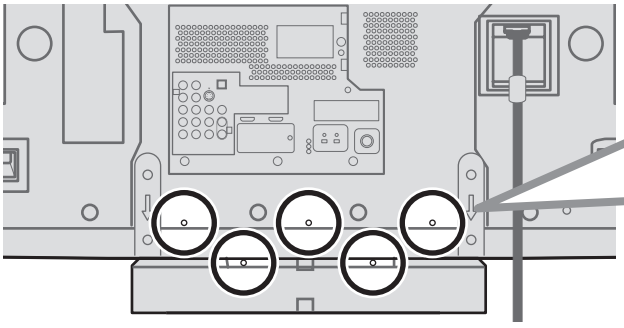
Insert it firmly until the tabs on both sides click into place.

To remove



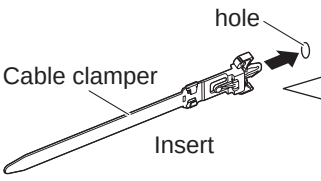
Press both tabs and pull the AC cord plug away from the TV.

Cable Binding Instructions

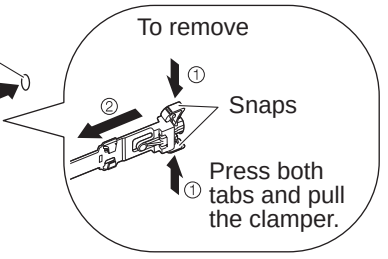


- Do not bundle the RF cable and AC cord together (could cause distorted image).
- Fasten the cables with the Cable clamper as necessary.
- When using the optional accessories, follow their assembly manuals to fix cables.

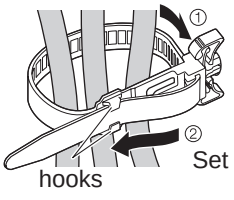
To attach



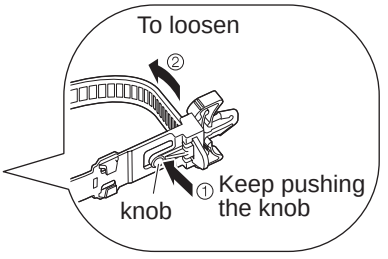
To remove



To bundle

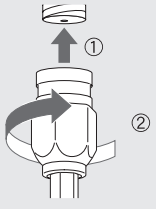


To loosen



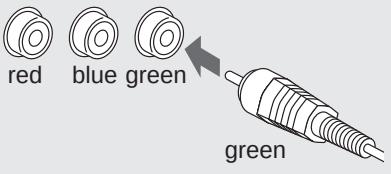
Reference of connection

Antenna terminal



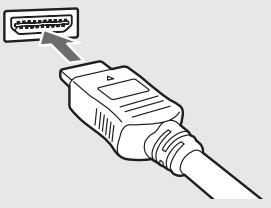
- Firmly tighten by hand.

Pin terminals



- Match colors of plugs and terminals.
- Insert firmly.

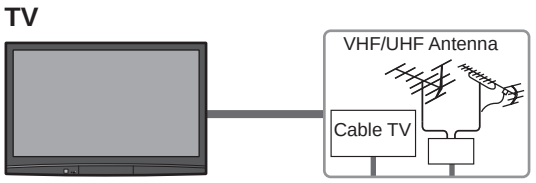
HDMI terminal



- Insert firmly.

Basic Connection

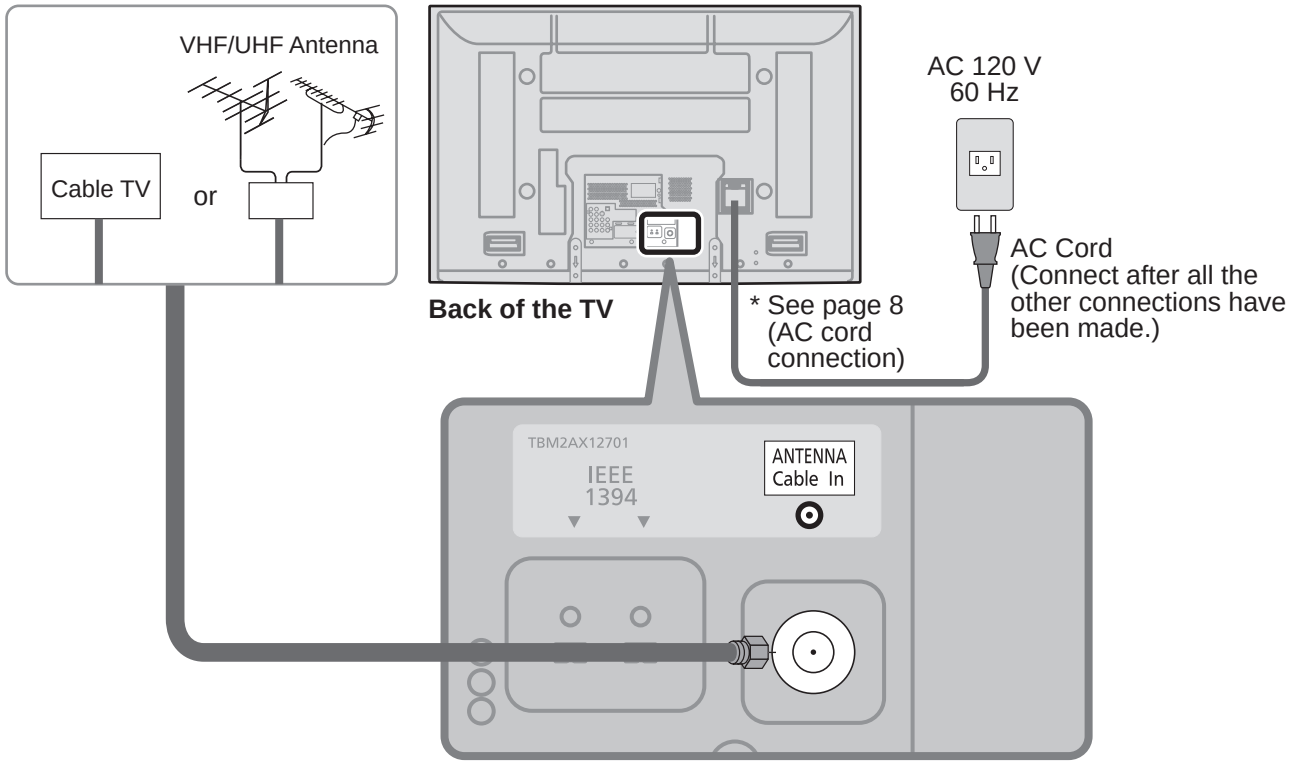
Example 1 Connecting Antenna (To watch TV)



VHF/UHF Antenna

- NTSC (National Television System Committee): Conventional broadcasting
- ATSC (Advanced Television Systems Committee): Digital TV Standards include digital high-definition television (HDTV), standard-definition television (SDTV), data broadcasting, multi-channel surround-sound audio and interactive television.

To connect the antenna terminal



- You need to subscribe to a cable TV service to enjoy viewing their programming.
- You can enjoy high-definition programming by subscribing to a high-definition cable service. The connection for high-definition can be done with the use of HDMI or Component Video cable. (p. 12)
- To view high-definition programming, select the correct video input. (p. 22)

Note

- Not all cables and external equipment shown in this book are supplied with the TV.
- For the details of the external equipment's connections, please refer to the operating manuals for the equipment.
- When disconnecting the power cord, be absolutely sure to disconnect the power cord plug from the wall outlet first.
- For additional assistance, visit us at: www.panasonic.com

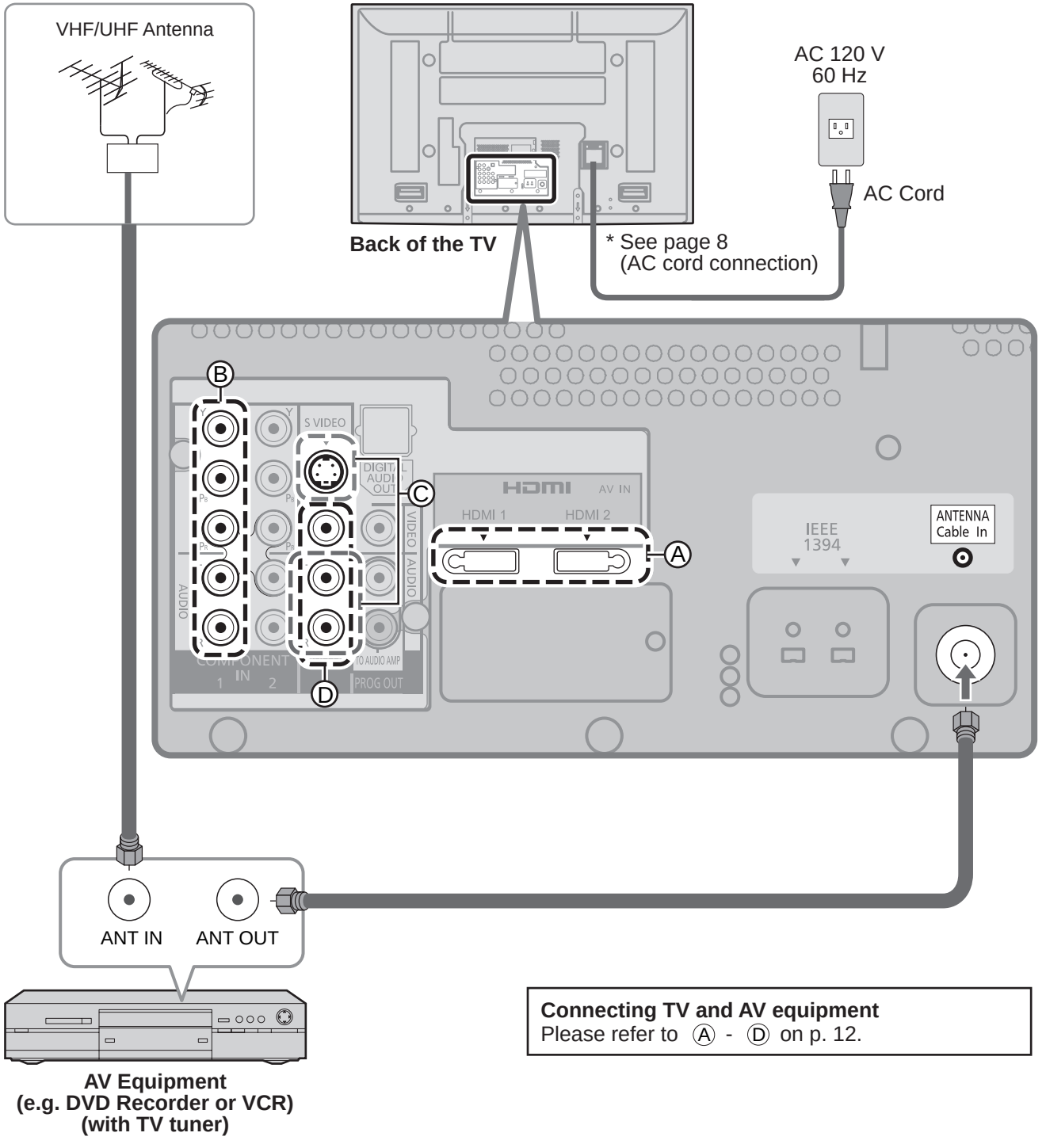
Basic Connection (Continued)

Example 2 Connecting DVD recorder (VCR) (To record/playback)

DVD Recorder
If this source has higher resolution through interlace or progressive signal, connection can be done with the use of Component Video or HDMI cable. (p. 12)

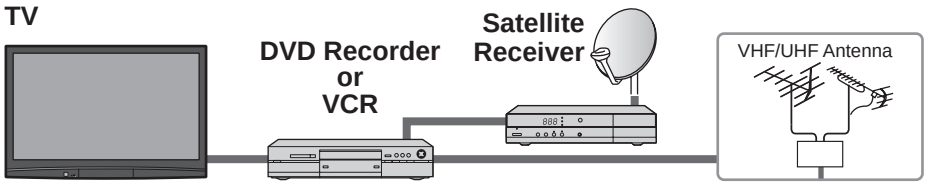
VCR
Connection can be done with the use of an RF cable and Composite Video/S Video cable. (p. 12)

To connect the antenna terminal and DVD recorder or VCR



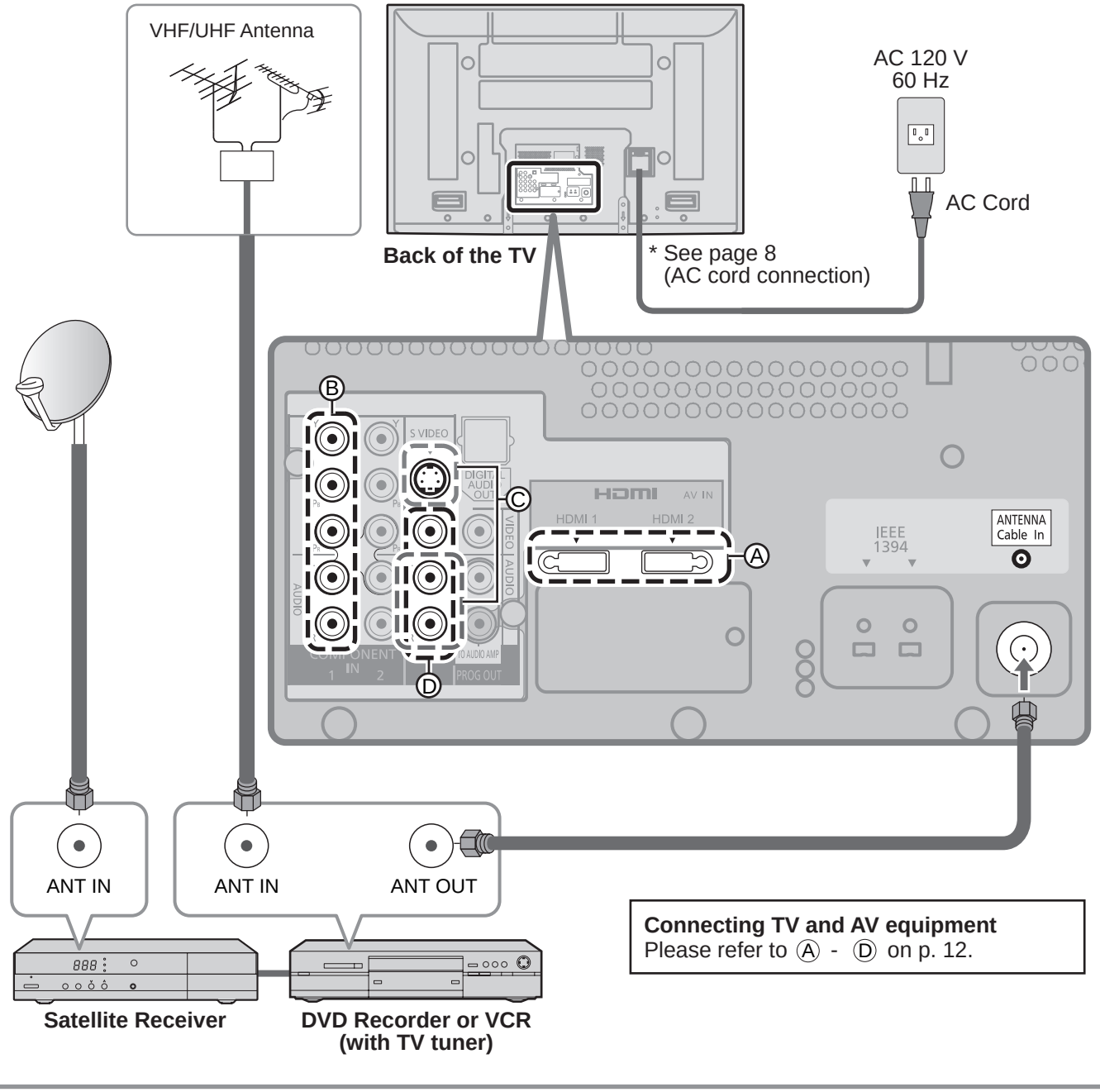
Connecting TV and AV equipment
Please refer to Ⓐ - Ⓓ on p. 12.

Example 3 Connecting DVD recorder (VCR) and satellite receiver



You can enjoy high-definition programming by subscribing to high-definition satellite service. Connection can be done with the use of HDMI or Component Video cable. (p. 12)

To connect the antenna terminal and Satellite Receiver and DVD recorder or VCR



Connecting TV and AV equipment
Please refer to Ⓐ - Ⓓ on p. 12.

Note

- For details of external equipment connections, please refer to the operating manuals for the equipment.

Basic Connection (Continued)

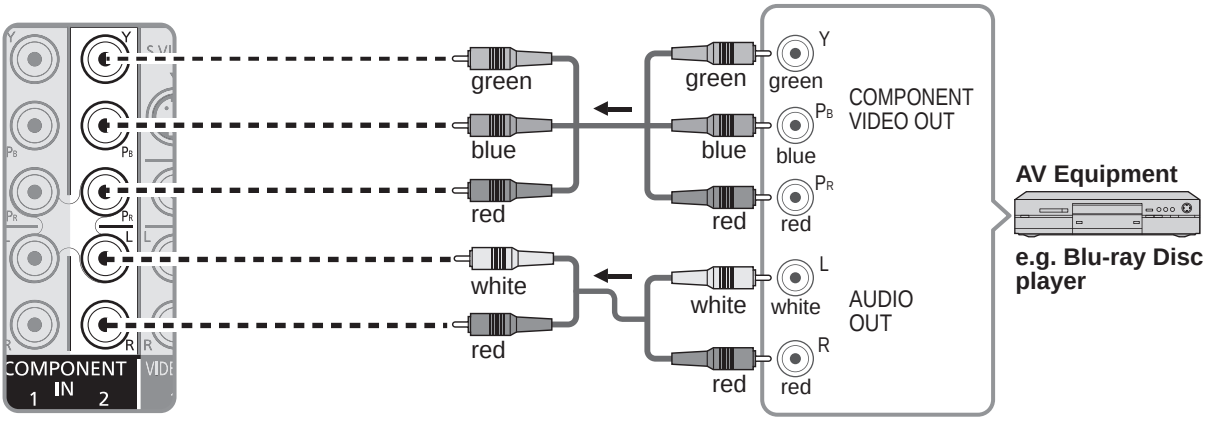
AV cable connections

High-Definition

Ⓐ To use HDMI terminals

- Connecting to HDMI terminals will enable you to enjoy high-definition digital images and high-quality sound.
- For "VIERA Link™ connections", please refer to p. 41.

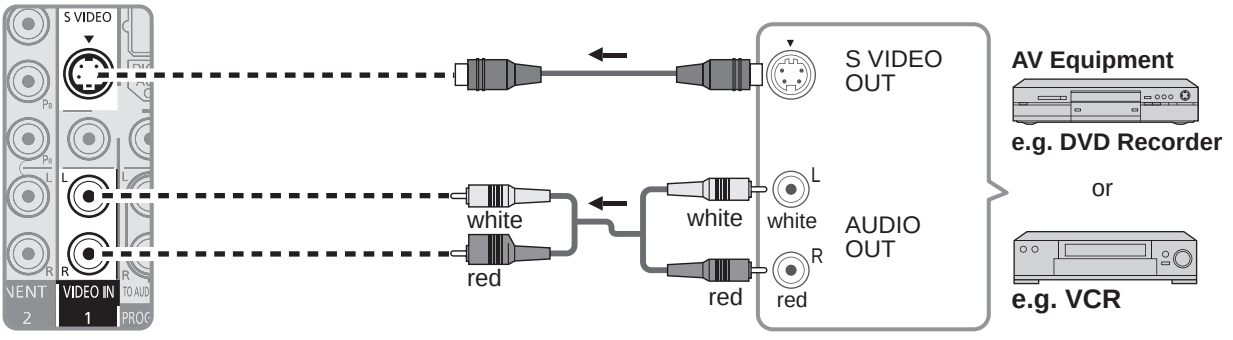
Ⓑ To use COMPONENT terminals



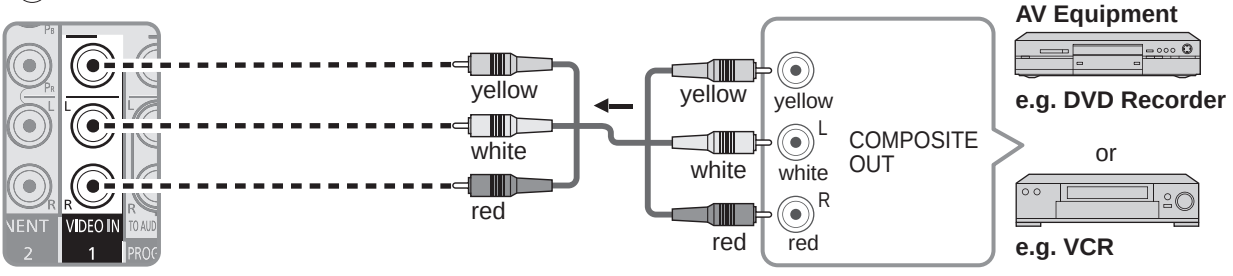
- Recorders may also be connected to COMPOSITE or S VIDEO terminals. (see below)

Standard-Definition

Ⓒ To use S VIDEO terminals



Ⓓ To use COMPOSITE terminals



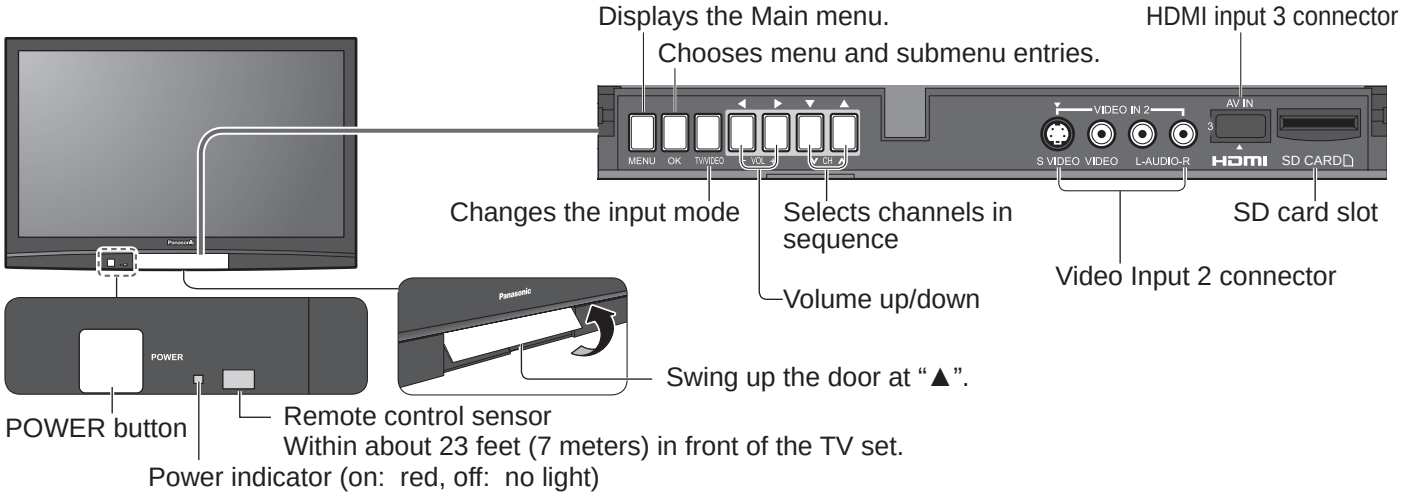
- The S Video input will override the composite video signal when S Video cable is connected. Connect either S Video or Video cable.
- Connecting to S VIDEO terminals will enable you to enjoy greater picture quality than using Composite terminals.

Note

- Some programs contain a copyright protection signal to prevent VCR recording.
- When the copyright protection program is displayed, do not connect the other TV monitor through a VCR. Video signals fed through VCRs may be affected by copyright protection systems and the picture will be distorted on the other TV monitor.
- For the details of the external equipment's connections, please refer to the operating manuals of this equipment.

Identifying Controls

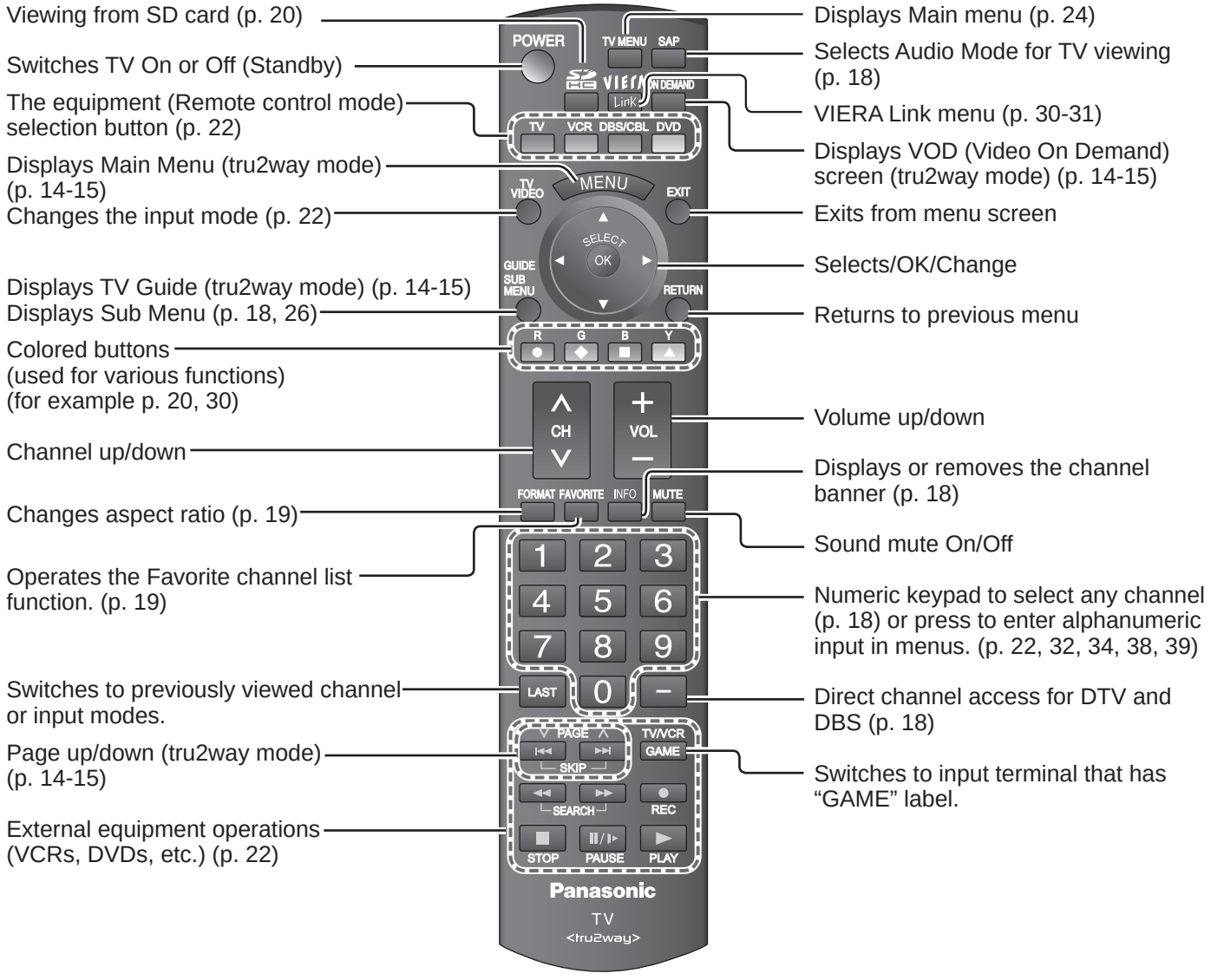
TV controls/indicators



Note

- The TV consumes a limited amount of power as long as the power cord is inserted into the wall outlet.

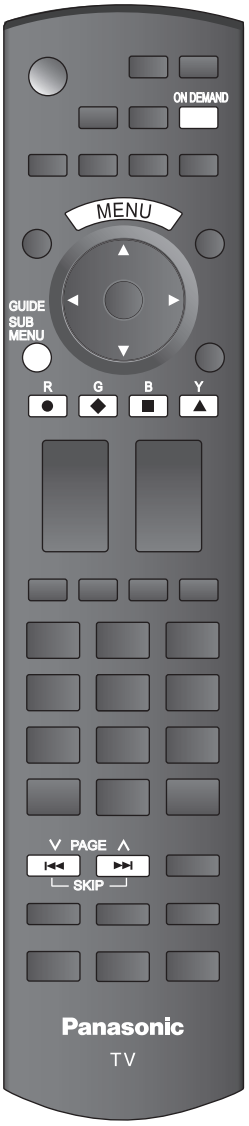
Remote control



Enjoy tru2way™ TV

You can enjoy a variety of advanced interactive, two-way services like VOD (Video on Demand), EPG (Electronic Program Guide), home banking, interactive games, as well as other e-Commerce applications on your TV with just the TV remote control.

Preparing/Switching the TV to tru2way mode



Follow steps ❶ and ❷ switch the TV to tru2way mode in order to use the service.
Steps ❶❷ are not necessary if the setup has been completed with your cable company.

❶ Insert a CableCARD™

Consult your cable company for the CableCARD connection.

❷ Switch the TV to tru2way mode by restarting

Follow the message on the screen.

- It is not possible to change the mode by just turning the TV off and on.

Note

- During initial setup and switch to tru2way mode, new application software must be downloaded from the cable company. The download time will vary based on the speed and size of the download.
- If you experience a front panel control or remote control function hang-up when using a CableCARD, unplug the TV and plug it back in and try the controls again. If this condition persists, please call Panasonic Customer Call Center for further instructions.
- Do not insert a PCMCIA card into the CableCARD slot.
  This may damage the TV.

Returning to conventional TV mode from tru2way mode

You can also use the TV conventionally in non tru2way service areas.

- Please consult your cable service company or local Panasonic dealer for this process.
- Steps ① ②are not necessary if the setup has been completed with your cable company or local Panasonic dealer.

① Remove the CableCARD

Follow the directions on the screen.

② Reboot to return to conventional TV mode

③ Using the TV in conventional mode

You can enjoy various functions in conventional TV mode with these Operating Instructions.

Using tru2way service

- Available services will vary depending on the cable service company.
- For more details about the service, please ask your cable service company.

■ Available TV's remote control buttons

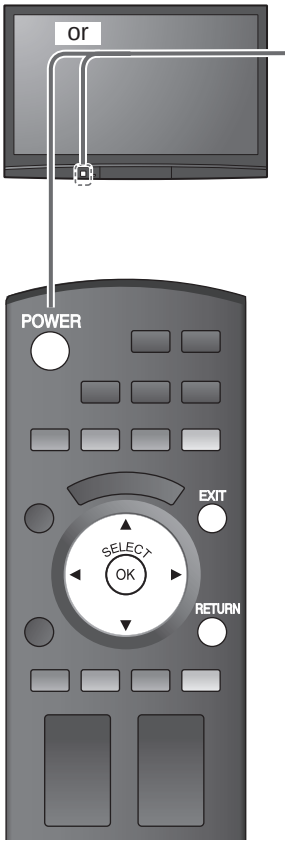
	Display Main menu
	Display VOD(Video On Demand) screen.
	Display TV Guide
	Page up/down
	Available when the function of the keys is displayed on screen

Note

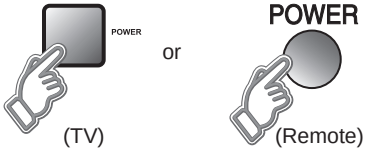
- **These Operating Instructions are described primarily for the conventional TV. For the tru2way mode, operations, menus and functions will vary depending on the cable service company.**
- IEEE1394 terminals are only available when the tru2way application supports it.

First Time Setup

"First time setup" is displayed only when the TV is turned on for the first time after the power cord is inserted into a wall outlet and when "Auto power on" (p. 26-27) is set to "No".



1 Turn the TV On with the POWER button



* This setting will be skipped next time if you select "Home".

① Select your language

② Be sure to select "Home"

- Please confirm your selection (Home) before pressing OK button.

■ If you select "Store" by mistake in ②, confirmation screen will be displayed.

- Select "No" and return to previous screen ②.
- If you select "Yes", Screen enters store demonstration mode. Displays "Please select your viewing environment" screen once again as shown below. Reselect "Home".
  - Unplug the TV and plug it again.
  - Press and hold down the front POWER button.

■ Press to exit from a menu screen

EXIT

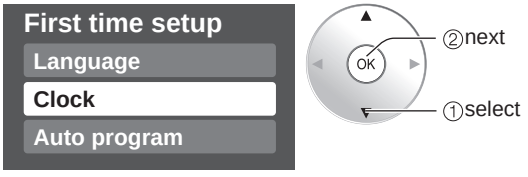
■ Press to return to the previous screen

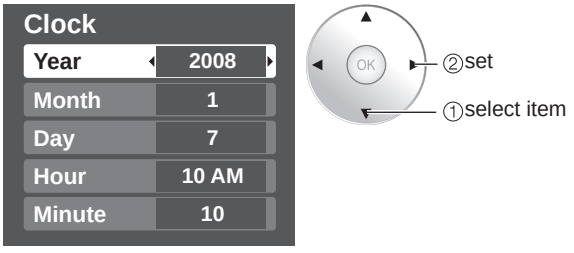
RETURN

Note

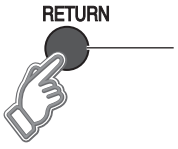
- To change setting (Language/Clock/ Auto program) later, go to Menu screen (p. 26)

2 Adjust the clock

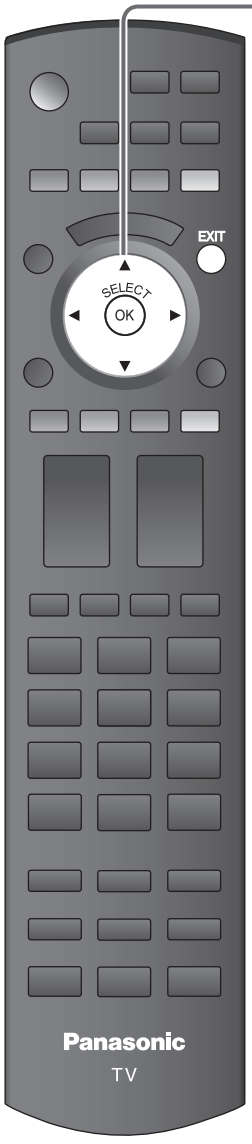




Year: Select the year
Month: Select the month
Day: Select the day
Hour: Adjust the hour
Minute: Adjust the minute



Go back to previous screen.

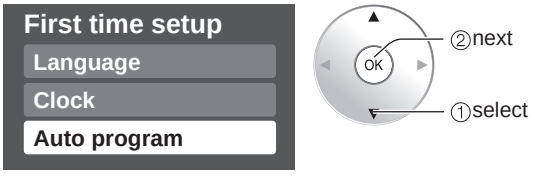


■ **Press to exit from a menu screen**

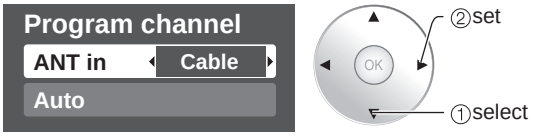
EXIT

3 Auto channel setup

① Select “Auto program”

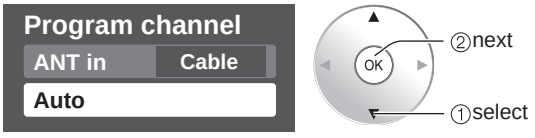


② Select “ANT in”

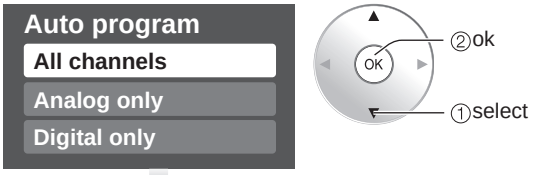


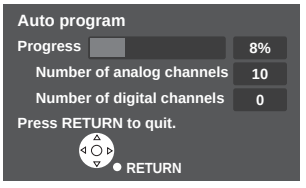
ANT in
Cable: Cable TV
Antenna: Antenna

③ Select “Auto”



④ Select scanning mode (ALL channels/Analog only/Digital only)



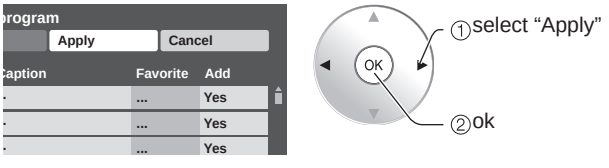


Start scanning the channels

- Available channels (analog/digital) are automatically set.

All channels: Scans digital and analog channels
Analog only: Scans Analog channels only
Digital only: Scans Digital channels only

⑤ Confirm registered channels



- If OK is not pressed after selecting “Apply”, the channels will not be saved. The channels will be saved when no operation is performed for 60 seconds and the “Manual program” menu will also exit automatically.
- If you perform scanning more than twice, previously saved channels are erased.

Note

- About broadcasting systems

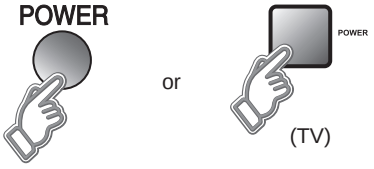
Analog (NTSC): Conventional broadcasting
Digital (ATSC): New programming that allows you to view more channels featuring high-quality video and sound

Watching TV

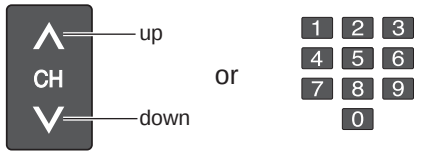
Connect the TV to a cable, satellite box, or antenna cable (p. 9-12)

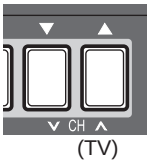
To watch TV and other functions

1 Turn power on



2 Select a channel number





Note

- If the mode is not TV, press TV VIDEO and select TV. (p. 22)

■To directly input the digital channel number

– When tuning to a digital channel, press the button to enter the minor number in a compound channel number.

example: CH15-1: 1 5 – 1

■Other Useful Functions (Operate after 2)

Listen with SAP (Secondary Audio Program)

■Select Audio Mode for watching TV

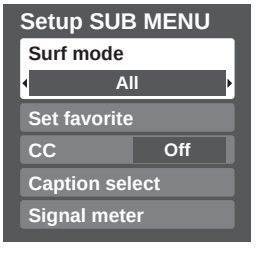
- **Digital mode**
  Press SAP to select the next audio track (if available) when receiving a digital channel.

  Audio track 1 of 2
  (English)

- **Analog mode**
  Press SAP to select the desired audio mode.
  • Each press of SAP will change the audio mode. (Stereo/SAP/Mono)

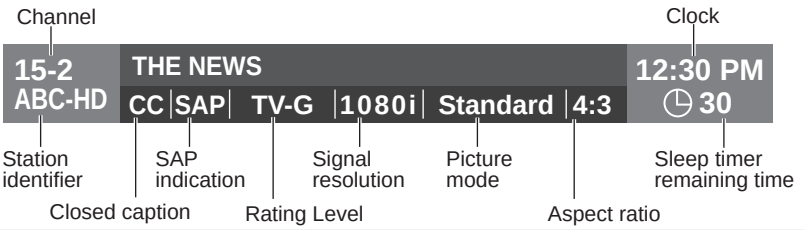
Display the SUB MENU

■Press SUB MENU to show sub menu screen. (p. 26)
This menu consists of shortcuts to convenient functions.



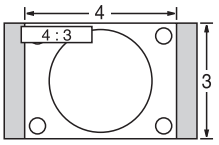
Information Recall

■Displays or removes the channel banner.



Change aspect ratio

■Press FORMAT to cycle through the aspect modes. (p. 46)



- 480i, 480p: FULL/JUST/4:3/ZOOM
- 1080p, 1080i, 720p: FULL/H-FILL/JUST/4:3/ZOOM

Call up a favorite channel

■FAVORITE

Channel numbers registered in Favorite are displayed on the favorite tune screen. Select the desired broadcast station by using the cursor or number buttons. (see below)

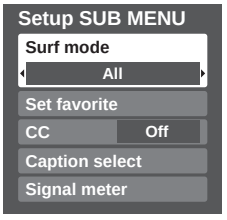
Note

- Reselect “Cable” or “Antenna” in “ANT in” of “Program channel” to switch the signal reception between cable TV and antenna. (p. 17, 35)
- The channel number and volume level remain the same even after the TV is turned off.

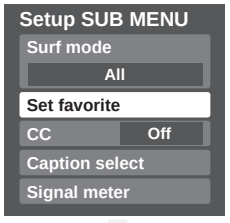
Favorite Feature

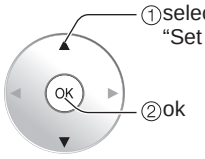
■Set Favorite Feature

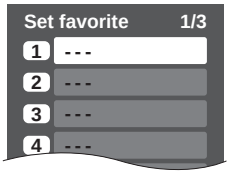
1 Display the SUB MENU.



2

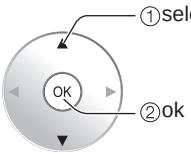




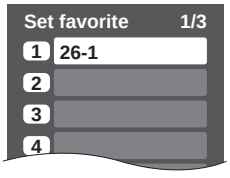


- Press FAVORITE repeatedly to change between pages (1/3, 2/3, 3/3, or exit).

3



Press ▲▼to highlight a position on the list.
Then, press OK to save the displayed channel in that position.



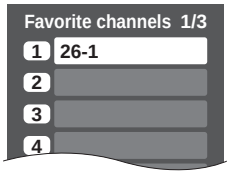
- You can also use the NUMBER buttons (1-9 and 0) to select a list number (1-9 and 0). By doing so, the displayed channel will be saved on that list number without pressing OK.

- **To delete a favorite channel**
  A saved channel can be removed from the list by holding down OK while its position is highlighted.
- **To change the page**
  Pressing ◄ changes the page backward. Pressing ► changes the page forward.

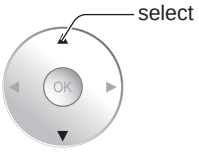
■Use Favorite Feature

1

Press FAVORITE.
- Press FAVORITE repeatedly to change between pages (1/3, 2/3, 3/3, or exit).

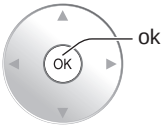


2



Press ▲▼ or a Numbered key (1-9 and 0) to highlight a channel on the list.
- Selecting a channel number from the list with the number button will display the channel directly.

3

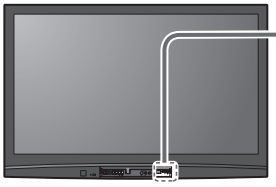


Press OK to display the highlighted channel.

Viewing from SD Card

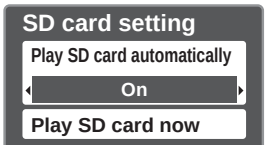
You can view photos taken with a digital camera or digital video camera and saved on an SD card.
(Media other than SD Cards may not be reproduced properly.)

Photo viewer



1 Insert the SD card and select “Play SD card now”

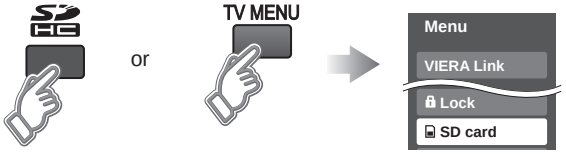
- “SD card setting” will be displayed automatically each time a SD card is inserted for the first time.

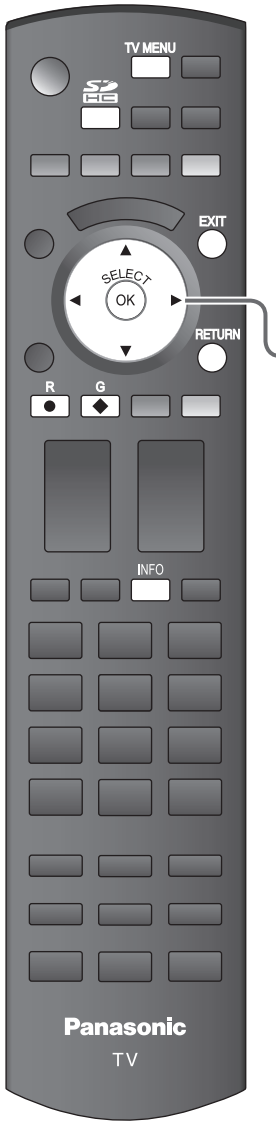


Play SD card automatically: Set it to playback the data when SD card is inserted.
On: When SD card is inserted, the data play automatically from next time.
Off: The data can be played manually.

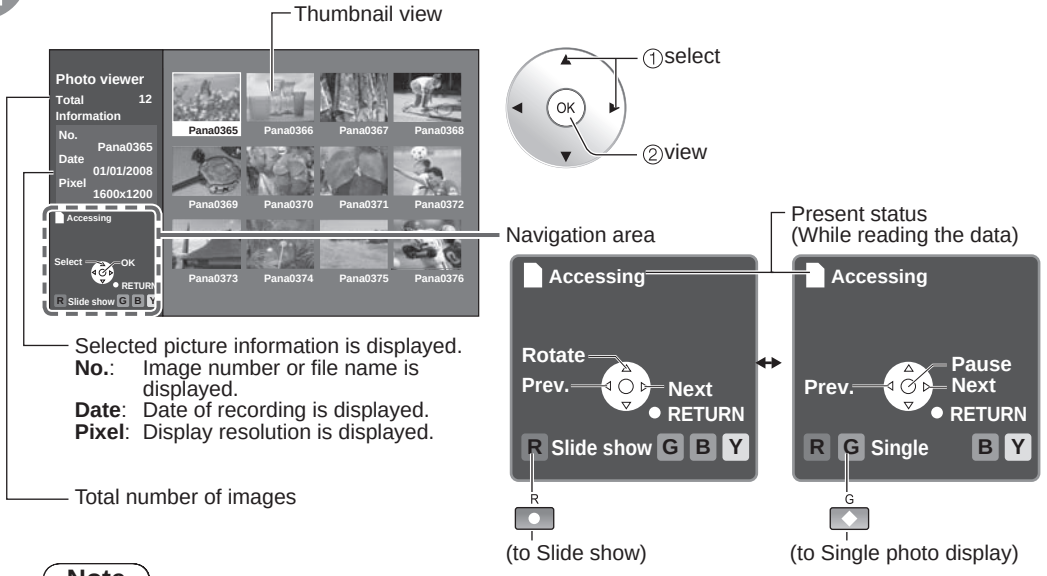
Press the SD key or select “SD card” on the Menu.

- You can skip this step when “Play SD card now” is selected or “On” is set in “Play SD card automatically” setting.





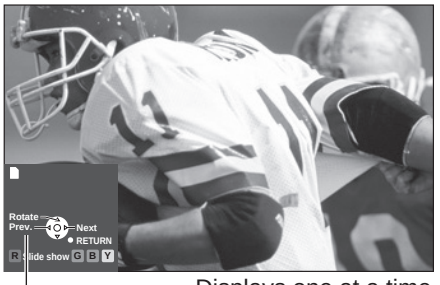
2 Select the data to be viewed

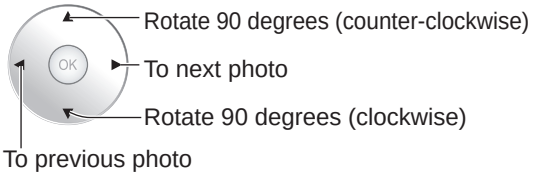


Note

- Depending on the JPEG format, “Information” contents may not be displayed correctly. Refer to p. 47 (Data format for SD card browsing) for details.

3 View





- To display/hide Navigation area ➡ INFO

■ Press to exit from a menu screen

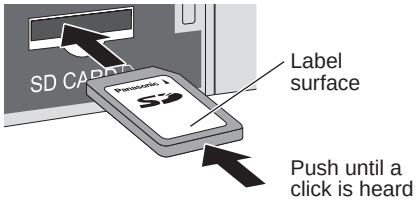
EXIT

■ Press to return to the previous screen

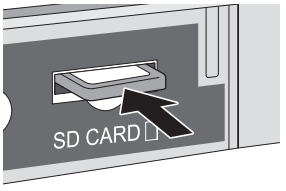
RETURN

SD Card

- Insert the card



- Remove the card
  ➡Press in lightly on SD Card, then release.



- Compliant card type (maximum capacity): SDHC Card (16 GB), SD Card (2 GB), miniSD Card (1 GB) (requiring miniSD Card adapter)
- For cautions and details on SD Cards (p. 47)

To change the view (slide show mode, adjusting images, etc.)

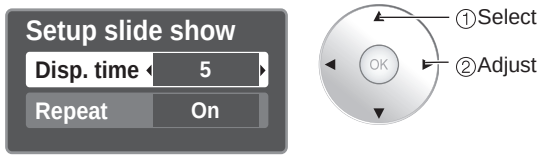
■To set up the slide show mode

In ❷ or ❸

1 Display “Photo menu”

2 Select “Setup slide show”

3 Select the item and adjust



Disp. time	You can set how many seconds each image is displayed in Slide show mode. (1-10/15/20/30/45/60/120 sec)
Repeat	Turn the slide show Repeat function On or Off.

Note

- For large image sizes, the display time will be longer than the number of seconds set.
- To stop in mid-cycle ➡ Press RETURN

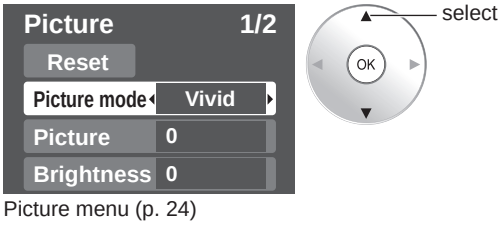
■To adjust picture

In ❷ or ❸

1 Display “Photo menu”

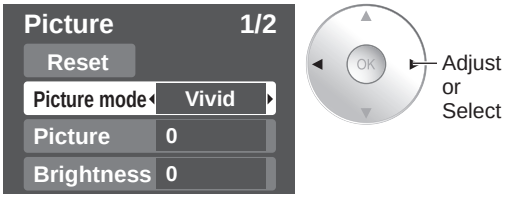
2 Select “Picture”

3 Select the item



Picture menu (p. 24)

4 Adjust or select

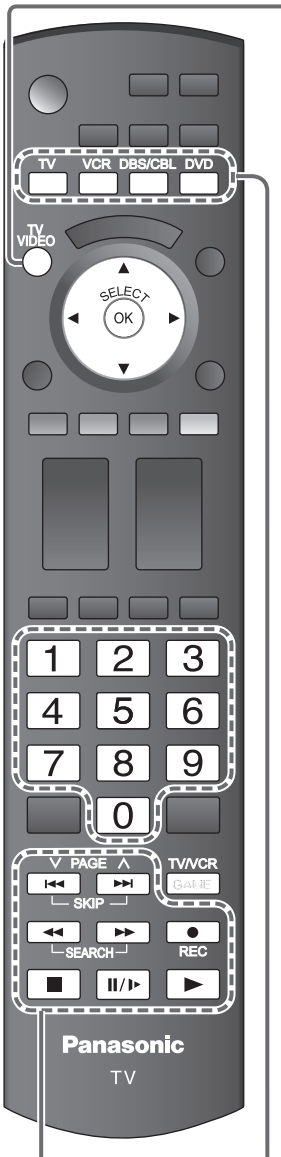


Watching Videos and DVDs

If you have applicable equipment connected to the TV, you can easily watch videos and DVDs using the TV's remote control.

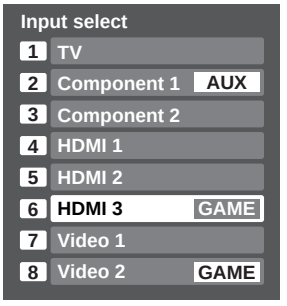
Input Select

You can select the external equipment to access.
To operate other manufacturers' equipment, you need to register the code of the equipment. (p. 39)



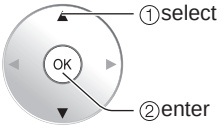
1 With the connected equipment turned On
Display the Input select menu

2 Select the input mode



(example)

or



Press corresponding NUMBER button on the remote control to select the input of your choice.

Select the input of your choice, then press OK.

- During the selection, if no action is taken for several seconds, the "Input select" menu disappears.

(example)

- The terminal and label of the connected equipment are displayed.
  To label each of the inputs, please refer to p. 37.

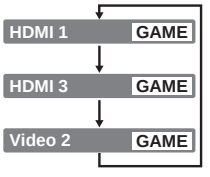
Note

- The input label will be displayed on "Input select" screen if Input label is set on p. 37.
- For front input terminals (HDMI 3/Video 2), "GAME" input label is set as default. (Picture mode is set to "Game", refer to p. 48.)
- For more details for picture mode setting, refer to p.48. For Input label, refer to p. 37.

■ Press Game to switch to the game screen

Switches to Input terminal that has "GAME" label.

- Cycle through the input terminals if there are multiple Input terminals that have "GAME" label. (p. 37)
- If there is no Input terminal with "GAME" label, you cannot switch the input terminal to any other input terminal than the one currently selected.



3 Select the remote control mode

Press the key to select

4 Operate the connected equipment, pointing TV's remote control at the equipment.

(example)

	VCR MODE	DVD MODE		VCR MODE	DVD MODE
REC	VCR Record	Record	STOP	Stop	Stop
PAGE SKIP	–	Skip Reverse/ Forward	PAUSE	Pause	Pause
SEARCH	Rewind/Fast Forward	Reverse/Forward	PLAY	Play	Play

(For other operations, see p. 42)

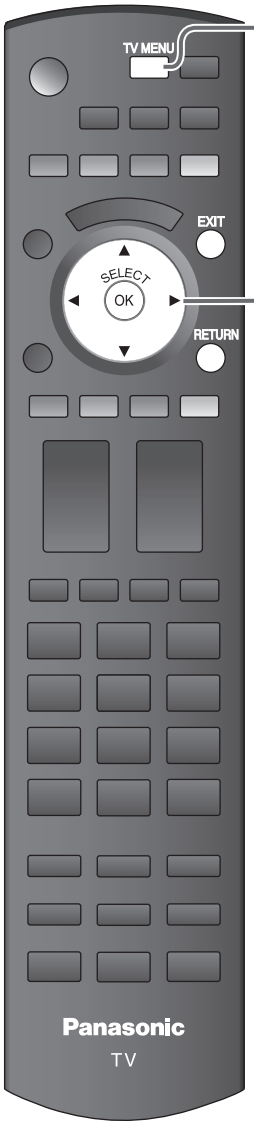
■ To return to TV

Note

- For details, see the manual of the connected equipment.

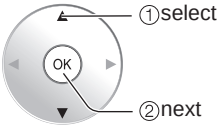
VIERA Link™ Setting

If you connect equipment that has “HDAVI Control” function to this TV with HDMI cable, you can use more convenient functions. Please refer to p. 28-31. Before using these functions, you need to set “VIERA Link” setting to “On” as shown below.

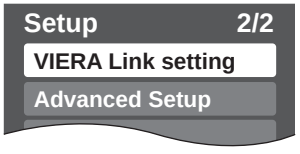


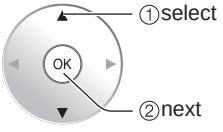
1 Display menu

2 Select “Setup”

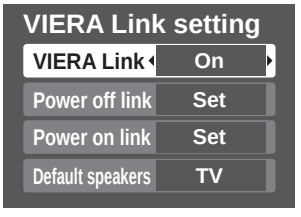


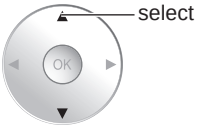
3 Select “VIERA Link setting”





4 Select “VIERA Link”





5 Select “On”

(default is On)

Now you can set each “VIERA Link” function according to your preference (p. 28-29)

■ **Press to exit from a menu screen**

EXIT

■ **Press to return to the previous screen**

RETURN

Note

- If no HDMI equipment is connected or standard HDMI equipment (non- “VIERA Link”) is used, set it to “Off”.
- For the details on the external equipment’s connections, please refer to the operating manuals for the equipment.

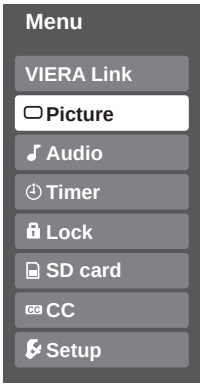
How to Use Menu Functions

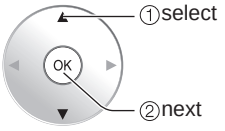
Various menus allow you to make settings for the picture, sound, and other functions so that you can enjoy watching TV best suited for you.

1 Display menu

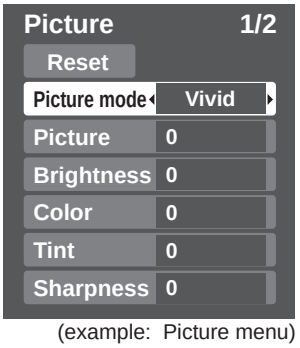
- Displays the functions that can be set (varies depending on the input signal)

2 Select the menu

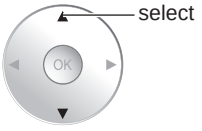




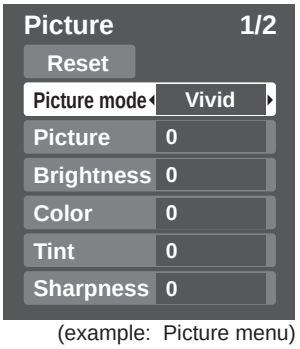
3 Select the item



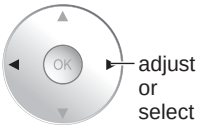
(example: Picture menu)



4 Adjust or select



(example: Picture menu)



■Press to exit from a menu screen

EXIT

■Press to return to the previous screen

RETURN

■Menu list

Menu	Item	
VIERA Link	Record now Stop recording VIERA Link control Speaker output	
Picture	Reset	
	Picture mode	
	Picture, Brightness, Color, Tint, Sharpness	
	Color temp.	
	Color mgmt.	
	x.v.Color	
	Zoom adjust	
	Advanced picture: Video NR	
	Advanced picture: 3D Y/C filter	
	Advanced picture: Color matrix	
	Advanced picture: MPEG NR	
	Advanced picture: Black level	
	Advanced picture: HD size	
Audio	Reset	
	Bass	
	Treble	
	Balance	
	Advanced audio: AI sound	
	Advanced audio: Surround	
	Advanced audio: Bass boost	
	Advanced audio: Audio leveler	
	Advanced audio: Speaker output	
	Advanced audio: HDMI 1 in HDMI 2 in HDMI 3 in	
Timer	Sleep, Timer 1-5	
Lock		
SD Card	SD card	
CC	CC	

Adjustments/Configurations (alternatives)

[Record now/Stop recording]
Records programs on the recorder immediately with the TV's remote control (p. 30-31).
[VIERA Link control]
Selects equipment to access and operate. **(Recorder/Home theater/Player/Camcorder)** (p.30-31)
[Speaker output]
Selects an audio output. **(Home theater/TV)** (p. 30-31)
- VIERA Link menu is accessible directly by pressing the VIERA Link button on the remote control. ➡ VIERA Link (p. 30)

Resets all picture adjustments to factory default settings except for "Advanced picture".

Reset

Basic picture mode **(Vivid/Standard/Cinema/Game/Custom)** (p. 48)

Picture mode Vivid

Adjusts color, brightness, etc. for each picture mode to suit your taste
- Display range
  Picture/Brightness/Color/Sharpness: 0 - 100
  Tint: -50 - +50

Picture +20 | **Tint** 0
Brightness 0 | **Sharpness** 0
Color 0

Selects a choice of Cool(blue), Normal, or Warm(red) color. **(Cool/Normal/Warm)**

Color temp. Cool

On: Enhances green and blue color reproduction, especially outdoor scenes. **(On/Off)**

Color mgmt. On

Auto: Provide the appropriate picture when images corresponding to "x.v.Color" are input via the HDMI input of this TV. **(Off/Auto)**

x.v.Color Auto

Adjusts vertical alignment and size when aspect setting is "ZOOM" (p. 46)

Zoom adjust

Reduces noise, commonly called snow. Leave it off when receiving a strong signal. **(Off/On)**

Video NR Off

Minimizes noise and cross-color in the picture. **(On/Off)**

3D Y/C filter On

Selects image resolution of component-connected devices **(HD/SD)**
- SD: Standard Definition HD: High Definition
- Only 480p signal accepted; regular TV (NTSC) is not available.

Color matrix SD

Reduces noise of specific digital signals of DVD, etc. **(On/Off)**

MPEG NR Off

Selects Dark or Light. Valid only for external input signals. **(Dark/Light)**

Black level Light

Selects between 95 % (Size 1) or 100 % (Size 2) for the scanning area with High-definition signal. **(Size 1/ Size 2)**
Select "Size 1" if noise is generated on the edges of the screen.
- Size 1: Selected item for "HD size". Scanning 95%
- Size 2: Selected item for "HD size". Scanning 100%

HD size Size1

Resets Bass, Treble and Balance adjustments to factory default settings.

Reset

Increases or decreases the bass response.

Bass 0

Increases or decreases the treble response.

Treble 0

Emphasizes the left / right speaker volume.

Balance 0

Equalizes overall volume levels across all channels and external inputs. **(On/Off)**

AI sound On

Enhances audio response when listening to stereo. **(On/Off)**

Surround Off

Enhances bass sound and provides powerful sound. **(On/Off)**
- This setting will not function if "off" is set in "Speaker output".

Bass boost Off

Minimizes volume disparity after switching to external inputs

Audio leveler 0

Switch to "Off" when using external speakers **(On/Off)**
- "AI sound", "Surround", and "Audio leveler" do not work if "Off" is selected

Speaker output On

The default setting is "Digital" for HDMI connection. (Digital input signal)
Select audio input terminal when DVI cable is connected. (Analog audio input signal)
(Digital/Component 1/Component 2/Video 1/Video 2)

HDMI1 in Digital
HDMI2 in Digital
HDMI3 in Digital

The TV can automatically turn On/Off at the designated date and time (p. 38)

Sleep 60

Locks the channels and programs (p. 32)

Displays SD card data (p. 20-21)

SD card

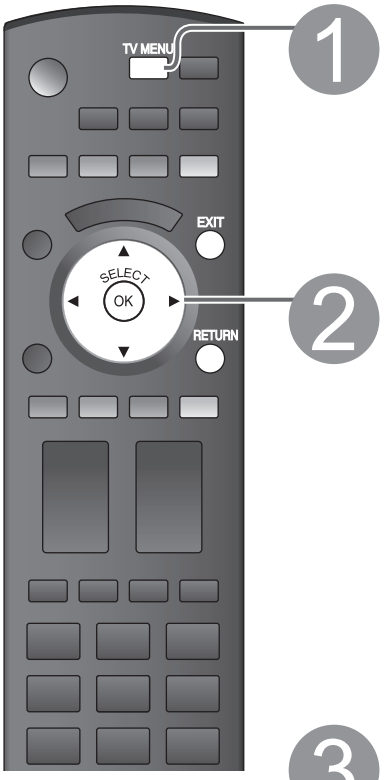
Displays subtitles (Closed Caption) (p. 36)

CC

- In AV mode, the Audio menu and Setup menu give fewer options.

How to Use Menu Functions

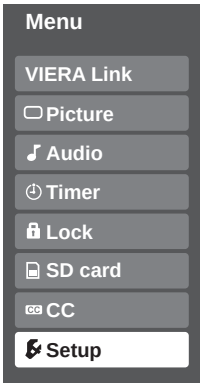
Various menus allow you to make settings for the picture, sound, and other functions so that you can enjoy watching TV best suited for you.

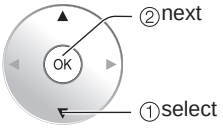


1 Display menu

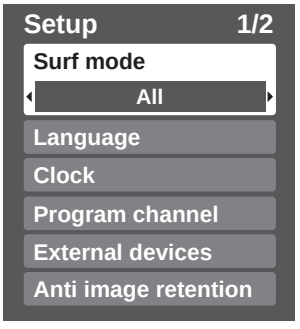
- Displays the functions that can be set (varies depending on the input signal)

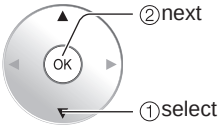
2 Select “Setup”





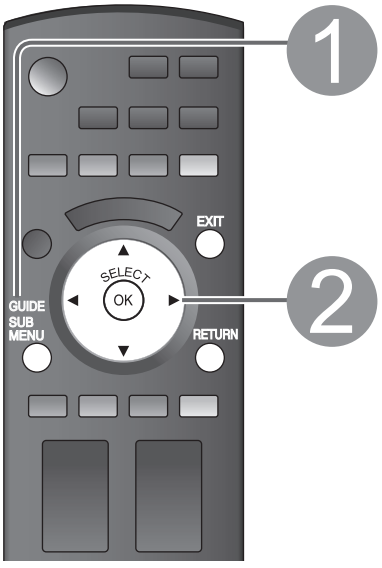
3 Select the item





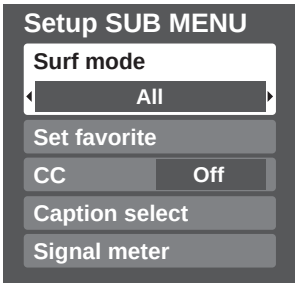
■Press to exit from a menu screen

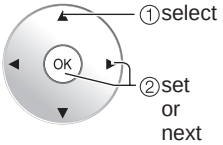
■Press to return to the previous screen



1 Display Sub Menu

2 Select the item





■Menu list

Menu	Item	
Setup	Surf mode	
	Language	
	Clock	
	Program channel	
	External devices: Input labels	
	External devices: Monitor out	
	Anti image retention: Pixel orbiter	
	Anti image retention: Time	
	Anti image retention: Side bar	
	Anti image retention: Scrolling bar	
	VIERA Link setting: VIERA Link	
	VIERA Link setting: Power off link	
	VIERA Link setting: Power on link	
	VIERA Link setting: Default speakers	
	Advanced setup: Auto power on	
	Advanced setup: No signal shut-off	
	Advanced setup: No action shut-off	
	Advanced setup: Play SD card automatically	
	About	
	Reset	

■Sub menu list

Menu	Item	
Setup SUB MENU	Surf mode	
	Set favorite	
	CC	
	Caption select	
	Signal meter	

(Continued)

Adjustments/Configurations (alternatives)	
Sets the mode to select the channel with Channel up/down button **(All/Favorite/Digital Only/Analog only)** ● Favorite: Only channels registered as FAVORITE (p. 19)	**Surf mode** All
Selects the screen menu language (p. 16)	**Language**
Adjusts the clock (p. 16)	**Clock**
Sets channels (p. 34)	**Program channel**
Selects the terminal and label of the external equipment (p. 37)	
[Component 1/Component 2/HDMI 1/HDMI 2/HDMI 3/Video 1/Video 2] To prevent howling and image oscillation, stops output of the pictures and audio specified in this menu. (p. 37) **(On/Off)**	
Prevents “Image retention” with Wobbling. (**Automatic/Force**) ● Automatic: Shifts the display image automatically. ● Force: Shifts the display image every (1/2/3/4) minutes according to what was set in the “Time” menu.	**Pixel orbiter** Automatic
Sets the time for “Pixel orbiter-Force” setting. **(1/2/3/4)**	**Time** 4
Change the brightness of the side bar (**Off/Dark/Mid/Bright**) (4:3 mode only) ● The recommended setting is “Bright” to prevent panel “Image retention”. (p. 49)	**Side bar** Bright
Press “OK” to start “Scrolling” on the screen (p. 49)	**Scrolling bar**
Controls equipment connected to HDMI terminals (p. 28) **(On/Off)** ● “Power off link”, “Power on link”, and “Default speakers” cannot be selected if “Off” is set.	**VIERA Link** On
Sets “Power off link” of HDMI connection equipment (p. 28) **(Set/No)**	**Power off link** Set
Sets “Power on link” of HDMI connection equipment (p. 28) **(Set/No)**	**Power on link** Set
Selects the default speakers (p. 28) **(TV/Theater)**	**Default speakers** TV
Turns TV On automatically when a connected device is turned On **(No/Set)** ● The “Sleep” timer, “On / Off timer”, and “First time setup” will not function if “Auto power on” is set. (p. 38)	**Auto power on** No
To conserve energy, the TV automatically turns off when NO SIGNAL and NO OPERATION is performed for more than 10 minutes. **(Set/No)** **Note** ● Not in use when setting “Auto power on”, “On/Off Timer”, “Lock”, “SD Mode”, or Digital channel. ● “No signal shut-off was activated” will be displayed for about 10 seconds when the TV is turned on for the first time after turning the power off by “No signal shut-off”. ● The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.	**No signal shut-off** Set
To conserve energy, the TV automatically turns off when no operation of remote or front panel key continues for more than 3 hours. **(No/Set)** **Note** ● Not in use when setting “Auto power on” or “On/Off Timer”. ● “No action shut-off was activated” will be displayed for about 10 seconds when the TV is turned on for the first time after turning the power off by “No action shut off”. ● The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.	**No action shut-off** No
Set “On” to play back SD cards automatically. **(On/Off)**	**Play SD card automatically** On
Displays TV version, software license and cableCARD™.	**About**
Performing Reset will clear all items set with Setup, such as channel settings. (p. 34)	**Reset**

Adjustments/Configurations (alternatives)
Sets the mode to select the channel with Channel up/down button **(All/Favorite/Digital Only/Analog only)**
Sets favorite channels. (p. 19)
Displays Closed Caption. (p. 36) **(Off/On)**
Changes the station identifier. (p. 35)
Checks the signal strength if interference or freezing occurs on a digital image. (p. 35)

VIERA Link™ “HDAVI Control™”

✻ Simultaneously control all Panasonic “HDAVI Control” equipped components using one button on one remote.

VIERA Link™ is a new name for EZ Sync™.

Enjoy additional HDMI Inter-Operability with Panasonic products which have “HDAVI Control”.

This TV supports “HDAVI Control 3” function.

Connections to the equipment (DVD recorder DIGA, HD Camcorder, Player theatre, RAM theater, Amplifier, etc.) with HDMI cables allow you to interface them automatically.

The equipment with “HDAVI Control” function enables the following operations:

- Automatic Input Switching (p. 29)
- Power on link (p. 29)
- Power off link (p. 29)
- Default speakers (p. 29)
- One-touch theater playback (p. 29)
- Speaker control (p. 31)

The equipment with “HDAVI Control 2” (or more) function enables the following operations:

- VIERA Link control only with the TV’s remote control (for “HDAVI Control 2” or “HDAVI Control 3”) (P. 31)
- Providing the setting information (for “HDAVI Control 3”) (p. 29)
- Automatic lip-sync function (for “HDAVI Control 3”) (p. 29)
- Direct TV Recording (for “HDAVI Control 3”) (p. 31)

VIERA Link “HDAVI Control”, based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers’ equipment that supports HDMI CEC cannot be guaranteed.

Please refer to the individual manuals for other manufacturers’ equipment supporting the VIERA Link function.

■For the first time / when adding new equipment, reconnecting equipment or changing the setup after the connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1, HDMI2 or HDMI3 (p. 22), and make sure that an image is displayed correctly.

■HDMI cable

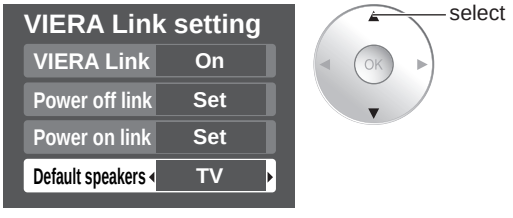
This function needs an HDMI compliant (fully wired) cable. Non-HDMI-compliant cables cannot be utilized.

It is recommended that you use Panasonic’s HDMI cable. Recommended part number:
RP-CDHG10 (3.3 ft/1.0 m), RP-CDHG15 (4.9 ft/1.5 m), RP-CDHG20 (6.6 ft/2.0 m), RP-CDHG30 (9.8 ft/3.0 m), RP-CDHG50 (16.4 ft/5.0 m)

* For more details on the external equipment’s connections, please refer to the operating manuals for the equipment.

1 Follow direction ❶ - ❺ in “VIERA Link setting” (p. 23)

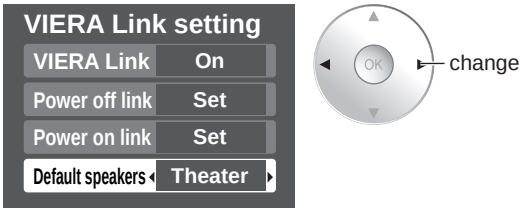
2 Select settings



■Press to exit from a menu screen

EXIT

3 Set



■Press to return to the previous screen

RETURN

At the start of the DIGA, Player theater, or RAM theater playback, the TV's input automatically switches to the input based on the playback equipment.

- For the RAM theater, the speakers automatically switch to the theater system.
  If using the DIGA operation, the TV's input automatically switches to the DIGA and DIGA menu is displayed.

When "Set" is selected (p. 27), TV is turned on automatically and switches to the appropriate HDMI input whenever VIERA Link compatible equipment is initially turned on and Play mode is selected.

When "Set" is selected (p. 27) and the TV is turned off, all connected VIERA Link compatible equipment is also automatically turned off.

- DIGA (Panasonic DVD Recorder) will not turn off if it is still in rec mode.

Caution: The TV remains on even if the VIERA Link compatible equipment is turned off.

"TV" is the default setting. To set the Home Theater system as default speakers, change the default speakers setting from "TV" to "Theater". Sound will be output from the Home Theater whenever the TV is powered on.

If the "ONE TOUCH PLAY" key is pressed on the remote control for Panasonic Home Theater system, the following sequence of operations is performed automatically.

① Home Theater power switches On, and playback begins.
② TV power switches On, and the playback screen is displayed.
③ Audio is muted on the TV and switches to the theater system.

The following information about the TV settings can be transmitted to each equipment (Recorder/Home theater/Player) that has "HDAVI Control 3" function connected to a TV with HDMI piece of cable.

Transmittable data		Recorder	Home theater	Player
① On Screen Display Language setting (English/Español/Français)		○	○	○
② Panel Aspect Ratio (16:9 fixed)		○	○	○
③ Closed caption information	mode	○	---	---
	CC type	○	---	---
	Digital setting	○	---	---
④ Channel information	Input signal	○	---	---
	Channel list	○	---	---
	Caption information	○	---	---

Note

- There is a possibility that all the GUI language information might be set from equipment that has HDMI CEC function connected to TV with HDMI cable. Depending on operating conditions or the specification for each piece of equipment the setting may or may not be applied.
- For details on the external equipment's operation, please refer to the operating manuals for the equipment.

[For Recorder]

- You cannot operate other functions while transmitting TV's information above except Power On/Off key operation. When you turn off this unit, the transmission will be interrupted (only when you are transmitting ④ Channel information).

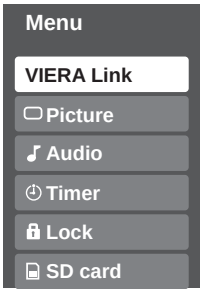
Minimizes lip-sync delays between the picture and audio when you connect to a Panasonic theater system or Amplifier.

VIERA Link™ “HDAVI Control™”

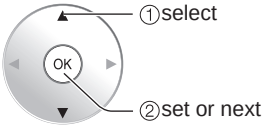
You can enjoy more convenient operation with the “HDAVI Control” function in the “VIERA Link” menu.
For more details on the “HDAVI Control” function, refer to p. 28

1 Display VIERA Link menu

or



2 Select the item



3 Select

4 Set

■ **Press to exit from a menu screen**

EXIT

■ **Press to return to the previous screen**

RETURN

Speaker control

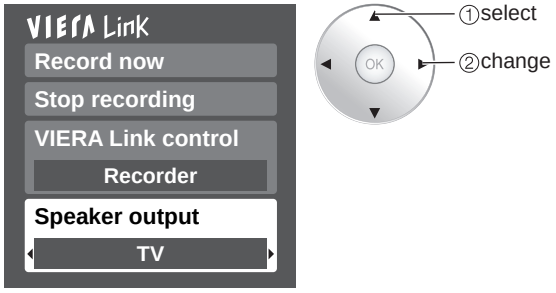
VIERA Link Control only with the TV’s remote control
(for “HDAVI Control 2” or “HDAVI Control 3”)

Direct TV Recording
(for “HDAVI control 3”)

(Continued)

You can select Home theater or TV speakers for audio output.
Control theater speakers with the TV's remote control.
This function is available only when Panasonic Amplifier or Player theater is connected.

① Select "Speaker output"
② Select "Home theater" or "TV"



■**Home theater:** Adjustment for equipment

Volume up / down ➡

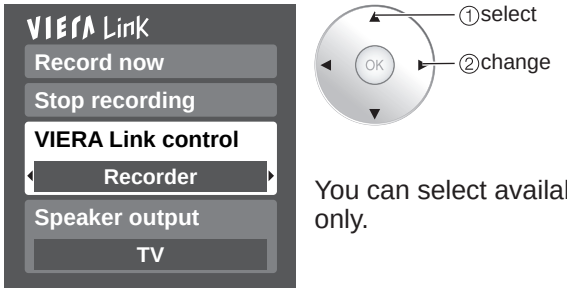
Mute ➡

- The sound of the TV is muted.
- When the equipment is turned off, the TV speakers take over.
- Selecting "Home theater" turns the equipment on automatically if it is in standby mode.

■**TV:** The TV speakers are on.

In the VIERA Link menu, you can select HDMI connected equipment and access it quickly. Continue using your TV's remote control to operate the equipment, pointing it at the TV.

① Select "VIERA Link Control"
② Select the equipment you want to access.
(Recorder/Home theater/Player/Camcorder)



You can select available items only.

■**Available TV's remote control buttons**

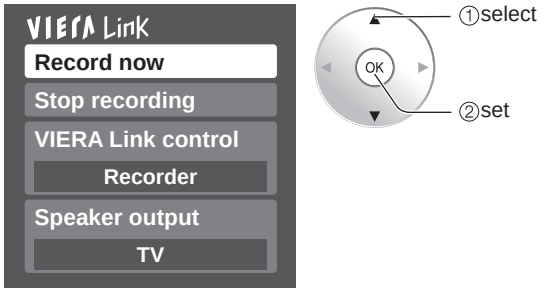
	Move the cursor/Select
	Set/Access
	Return to the previous menu
	Display the Functions menu on the equipment
	Available when the purpose of the keys is displayed on screen

③ Operate the equipment with the TV's remote control, pointing it at the TV.

- To operate the equipment, read the manual of the equipment.

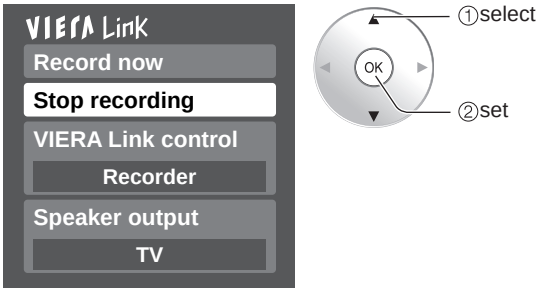
Records the current program on the recorder immediately.

①Select "Record now"



- For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.

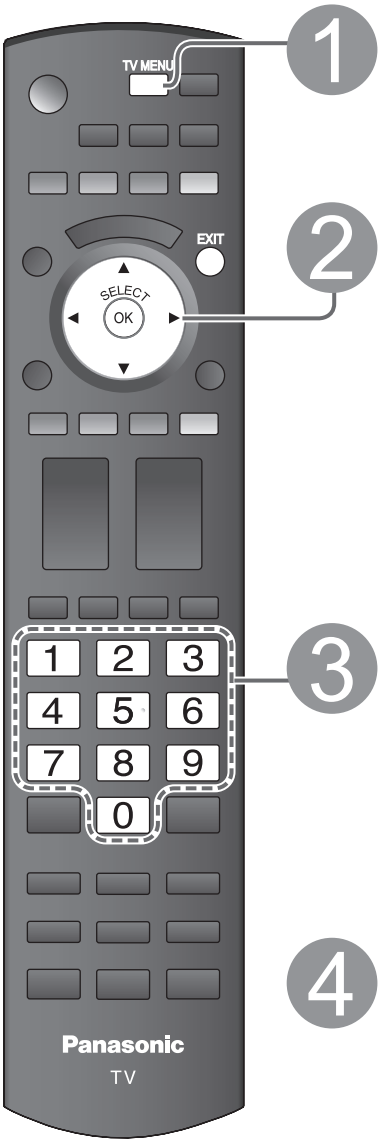
②Select "Stop recording", when you want to stop recording



- Recording will not stop automatically when the program is finished.

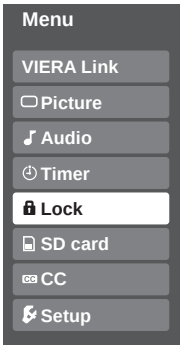
Lock

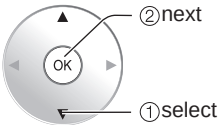
You can lock specified channels or shows to prevent children from watching objectionable content.



1 Display menu

2 Select “Lock”

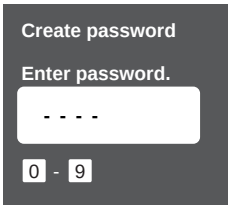




You will be asked to enter your password each time you display the Lock menu.

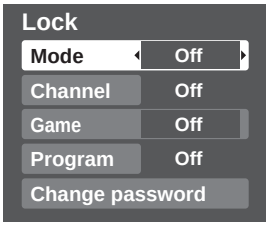
3 Input your 4-digit password

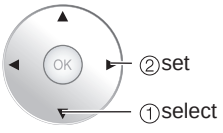
A 4-digit code must be entered to view a blocked program or change rating settings.



- If it is your first time entering the password, enter the password twice in order to register it.

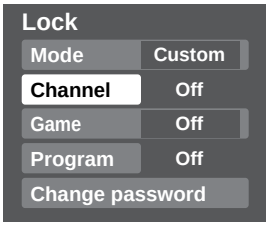
4 Select the Lock mode





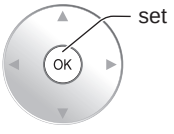
Off: Unlocks all the lock settings of “Channel”, “Game” and “Program”.
All: Locks all the inputs regardless of the lock settings of “Channel”, “Game” and “Program”.
Custom: Locks specified inputs of “Channel”, ”Game” and “Program”.

5 Select the item



- “Channel”, ”Game” and “Program” will grey out unless “Custom” is selected in “Mode”.

6 Set



■ Press to exit from a menu screen

Caution

- Make a note of your password in case you forget it. (If you have forgotten your password, consult your local dealer.)

Note

- When you select a locked channel, a message will be displayed that allows you to view the channel if you input your password.

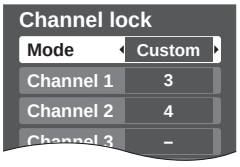
■To select the channel or the rating of the program to be locked

Channel lock

Select up to 7 (1-7) channels to be blocked. These channels will be blocked regardless of the program rating.

① Select “Mode” and set to “Custom”

② Select channel to lock.



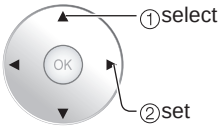
- To lock/unlock all channels:
  Select “Mode” and set to “All” or “Off”.

  All: Locks all channels
  Off: Unlocks all channels

Game lock

Locks Channel 3, Channel 4 and external inputs.

Select “Game” in ❺ and set to “On”.



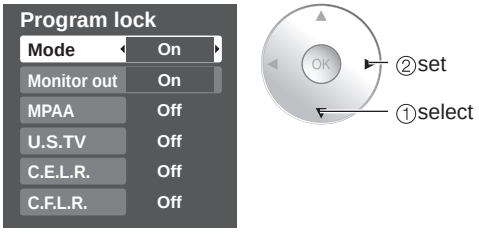
On: Locks
Off: Unlocks

Program lock

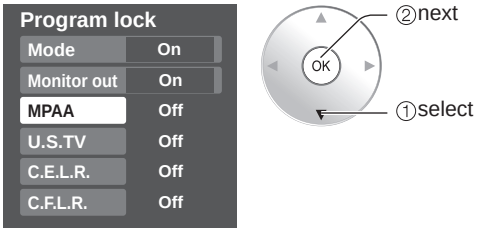
■To set a rating level

“V-chip” technology enables restricted shows to be locked according to TV ratings.

① Select “Mode” and set to “On”.

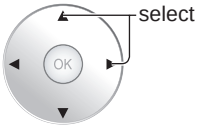


② Select the rating category you wish to follow



MPAA: U.S movie ratings
U.S.TV: U.S TV program ratings
C.E.L.R.:Canadian English ratings
C.F.L.R.:Canadian French ratings

③ Select the rating to be locked



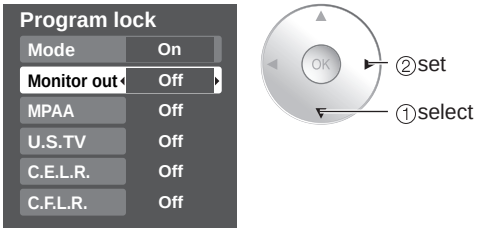
Example of “MPAA” (U.S movie ratings)

NR	No rating
G	General Audience: All ages admitted
PG	Parental Guidance Suggested
PG-13	Parents Strongly Cautioned: Inappropriate for children under 13
R	Restricted: Under 17 requires accompanying parent or adult guardian
NC-17	No one 17 and under admitted
X	Adults only

- To get more information (p. 45)

■To disable recording of the locked program

➡ Select “Monitor out” and set to “Off”.

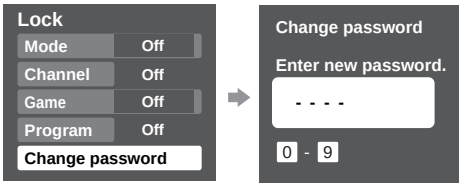


Change password

■To change the password

① In ❹, select “Change password” and press OK

② Input the new 4-digit password twice

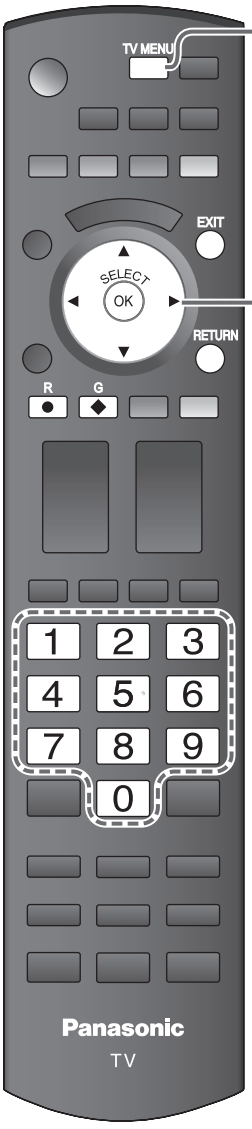


Note

- This television is designed to support the “Downloadable U.S. Region Rating System” when available. (Available only in U.S.A.)
- The Off rating is independent of other ratings.
- When placing a lock on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.

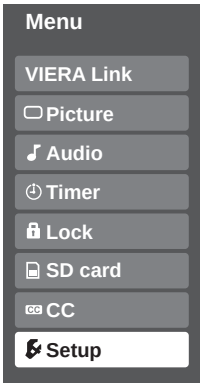
Editing and Setting Channels

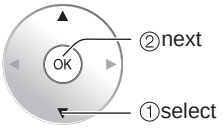
The current channel settings can be changed according to your needs and reception conditions.



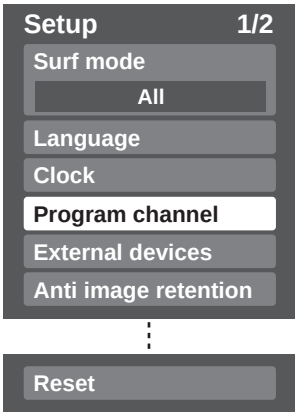
1 Display menu

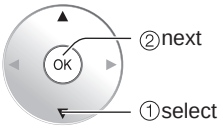
2 Select “Setup”





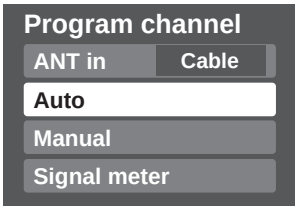
3 Select “Program channel”

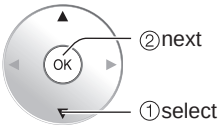




■**Press to exit from a menu screen**

4 Select the function





5 Set

■**To reset the settings of setup menu**

① Select “Reset” in Setup menu (❸) and press OK
② Input your 4-digit password with number buttons
③ Select “YES” on the confirmation screen and press OK

Auto
Set automatically

Manual
Set manually

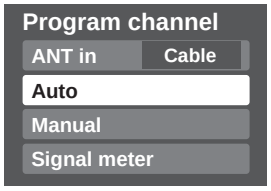
Signal meter
Check signal strength

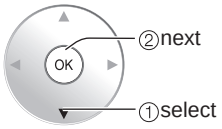
Automatically searches and adds available channels to the memory.

① Select “ANT in”

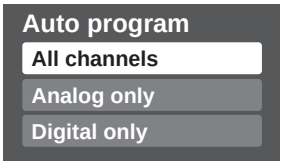
➡Select Cable or Antenna (p. 17)

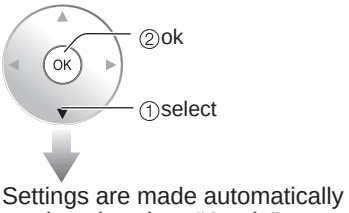
② Select “Auto”





③ Select a scanning mode (p. 17)

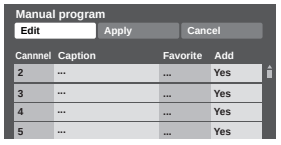


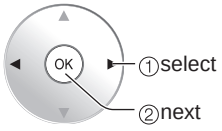


- After the scanning is completed, select “Apply”. (see below ⑤).
- All previously saved channels are erased.

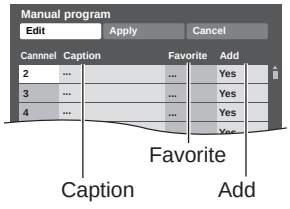
Use this procedure when changing the channel setup or changing the channel display.
Also, use this to add or skip channels from the channel list manually.
You can select a channel tuning mode (Digital only/ Analog only) in “Surf mode”(p. 26)

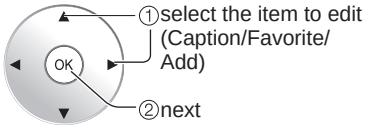
① Select “Edit”



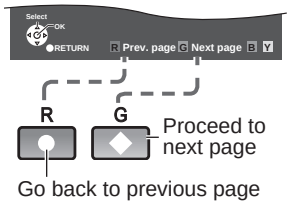


② Select the item to be edited



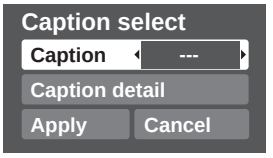


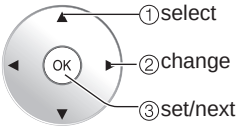
- Caption:
  Changes the station identifier
- Favorite:
  Registers channel to Favorite List
- Add:
  Adds or skips channels



③ Edit

- **Caption**

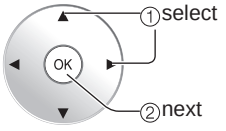




Caption Select the station identifier

Caption detail Rename (maximum 7 characters available)

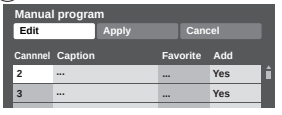
- **Favorite**

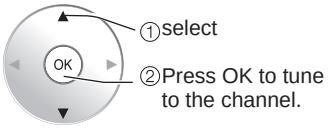


Set favorite Select the number

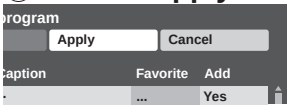
- **Add**
  Press OK to select “Yes (add)” or “No (skip)”

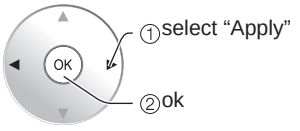
④ Move cursor to channel number



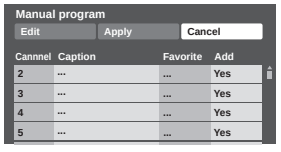


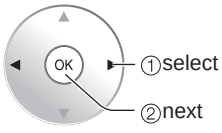
⑤ Select “Apply”

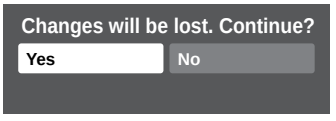


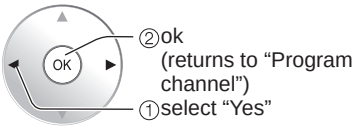


To cancel the Edit

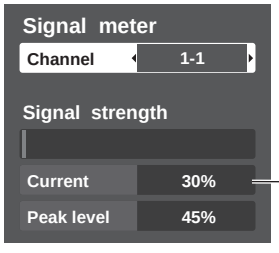








Check the signal strength if interference is found or freezing occurs on a digital image.



Signal intensity

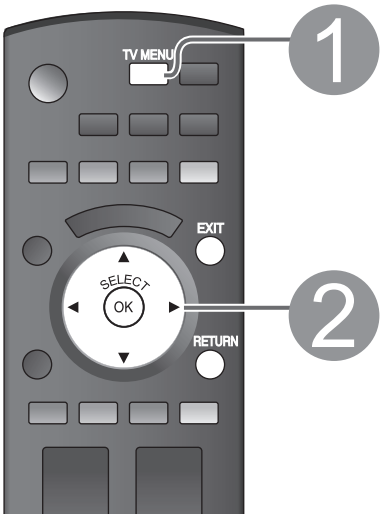
- If the signal is weak, check the antenna.
  If no problem is found, consult your local dealer.

Note

- Not available if “Cable” is selected in “ANT in” (see above).
- Available only for digital antenna channels.

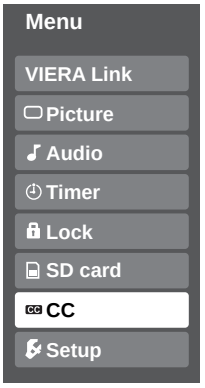
- If “Lock” (p. 32) is activated and “Program channel” is selected, “Enter password.” will be displayed.

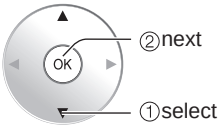
Closed Caption



1 Display menu

2 Select “CC”



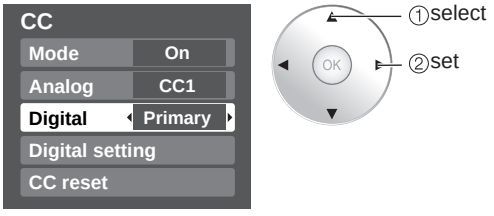


■Press to exit from a menu screen

CC
Display Closed Caption

The television includes a built-in decoder that is capable of providing a text display of the audio. The program being viewed must be transmitting Closed Caption (CC) information. (p. 46)

■Select the item and set



- The settings in “Analog” or “Digital” depend on the broadcaster.

Mode Select “On” (when not using, select “Off”).

Analog (Choose the Closed Caption service of Analog broadcasting.)

CC1-4: Information related to pictures (Appears at bottom of screen)

T1-4: Textual information (Appears over entire screen)

Digital (The Digital Closed Caption menu lets you configure the way you choose to view the digital captioning.)

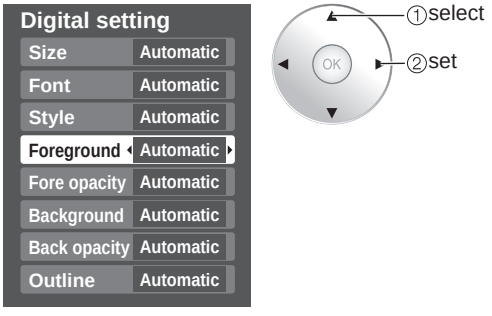
Select the setting.

- “Primary”, “Second.”, “Service 3”, “Service 4”, “Service 5”, “Service 6”

■To make more in-depth display settings in digital programs

① Select “Digital setting” and press OK

② Select the item and set



- Size: Text size
- Font: Text font
- Style: Text style (Raised, Depressed, etc.)
- Foreground: Color of text
- Fore opacity: Opacity of text
- Background: Color of text box
- Back opacity: Opacity of text box
- Outline: Outline color of text

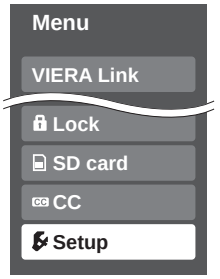
(Identify the setting options on the screen.)

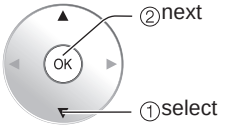
■To reset the settings

Select “CC reset” and press OK

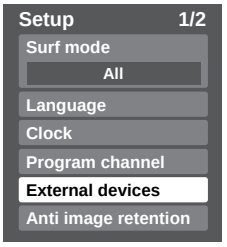
Input Labels/Monitor Out

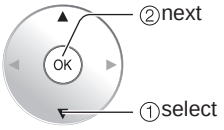
1 Display menu and select “Setup”





2 Select “External devices”

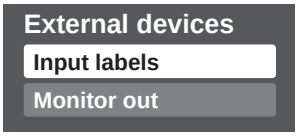


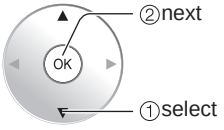


■ **Press to exit from a menu screen**

EXIT

3 Select “Input labels” or “Monitor out”



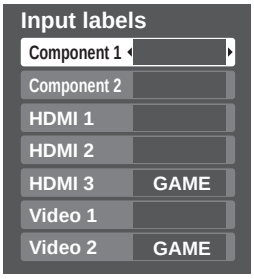


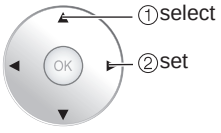
Input labels

Display labels of external devices

Devices connected to external input terminals can be labeled for easier identification during input selection. (In selecting input mode from p. 22 ❷)

■ **Select the terminal and label of the external equipment**





[example]

- Terminals: Comp. 1-2/HDMI 1-3/Video 1-2
- Label: SKIP*/VCR/DVD/CABLE/DBS/PVR/GAME/AUX/ RECEIVER/[BLANK]

* If “SKIP” is selected, the TV/VIDEO button press will skip its input.

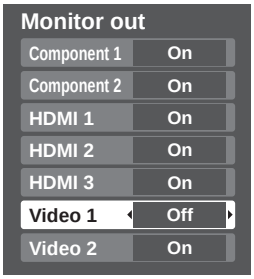
- Each selected labels will be displayed on “Input select” screen. (p. 22)

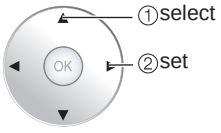
Monitor out

Stop output of the picture and audio

To prevent howling and image oscillation, stops output of the pictures and audio specified in this menu. (p. 27)

■ **Select the terminal and set “Off”**





- Select “Off” to stop output of picture and audio. (Video 1/Video 2)
- Component 1/Component 2/HDMI 1/HDMI 2/HDMI 3 cannot output video signals regardless of “Monitor out” setting. When equipment (DVD, etc.) is connected to HDMI or COMPONENT terminals, only audio signals can be obtained. From the output terminals, no video signals can be passed.

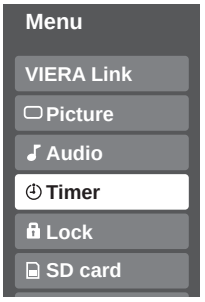
Using Timer

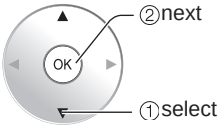
The TV can automatically turn On/Off at the designated date and time.

- The Clock must be set before On time/Off time settings. (p. 16)
- The “Sleep” timer and “On / Off timer” will not work if the “Auto power on” (p. 27) is set.

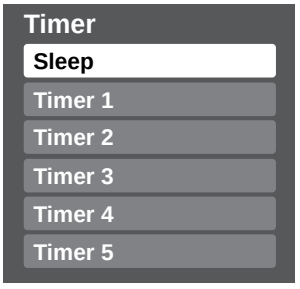
1 Display menu

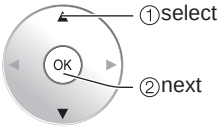
2 Select “Timer”





3 Select the timer to set



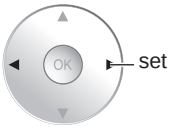


Sleep	Turns Off automatically
Timer 1 ~ **Timer 5**	Turns On/Off automatically (5 timers can be set.)

4 Set the timer

■To set “Sleep” (Off Timer)

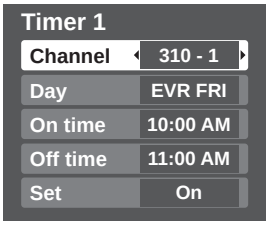
Set to shut the unit off after a pre-selected amount of time.



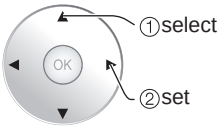
- 0/30/60/90 (minutes)

■To set “Timer 1-5” (On/Off Timer)

Select the item and set



or



Channel	Select the channel
Day	Select the day SUN/MON/TUE/WED/THU/FRI/SAT (displays the nearest future date) MON-FRI/SAT-SUN/DAILY/EVR SUN/EVR MON/ EVR TUE/EVR WED/EVR THU/EVR FRI/ EVR SAT
On time	The time to turn On
Off time	The time to turn Off
Set	Timer setting (On/Off)

■Press to exit from a menu screen

EXIT

■Press to return to the previous screen

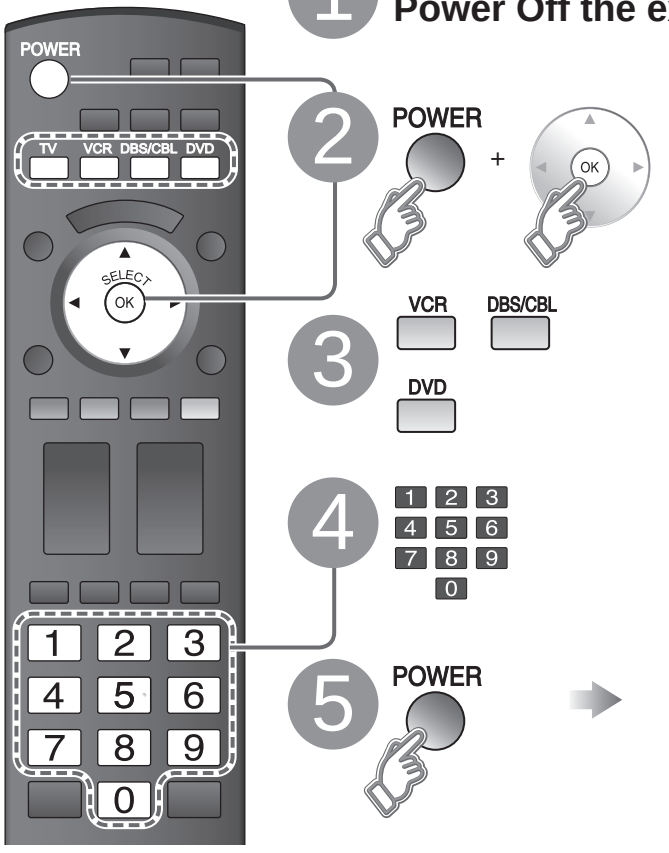
RETURN

Note

- The TV automatically turns Off after 90 minutes when turned On by the Timer. This operation will be cancelled if the Off time is selected or if a key is pressed.

Programming the Remote to Operate Peripheral Equipment

You can operate other manufacturers' equipment using this TV's remote control.



1 Connect the external equipment to the TV and **Power Off the external equipment**

2 POWER + OK

Press both buttons simultaneously for more than 3 seconds.

- Release the buttons when the equipment selection buttons start flashing.

3 VCR DBS/CBL DVD

Select the equipment
with the equipment selection button

- The selected button remains lit (other buttons are not lit).

4 1 2 3 4 5 6 7 8 9 0

Input the equipment's 4-digit remote control code (p. 43-44)

5 POWER

Operate the equipment with the remote control (p. 42)

- The external equipment turns On.

■ **If the equipment does not operate with the remote control**

- When your equipment has a single code
  ➡ Input the remote control code again
- When your equipment has multiple codes
  ➡ Change the code with 4 above and test again

■ **Press to return to the TV mode**

TV

Caution

- Registration will fail if the wrong code is input or it takes more than 30 seconds to register.

To find a code not listed in the code list

This procedure searches all codes and is called the "sequence method."

① **After step 3 above, change the code and test**

OK — change → POWER

➡ Operate the equipment with the remote control (p. 42)

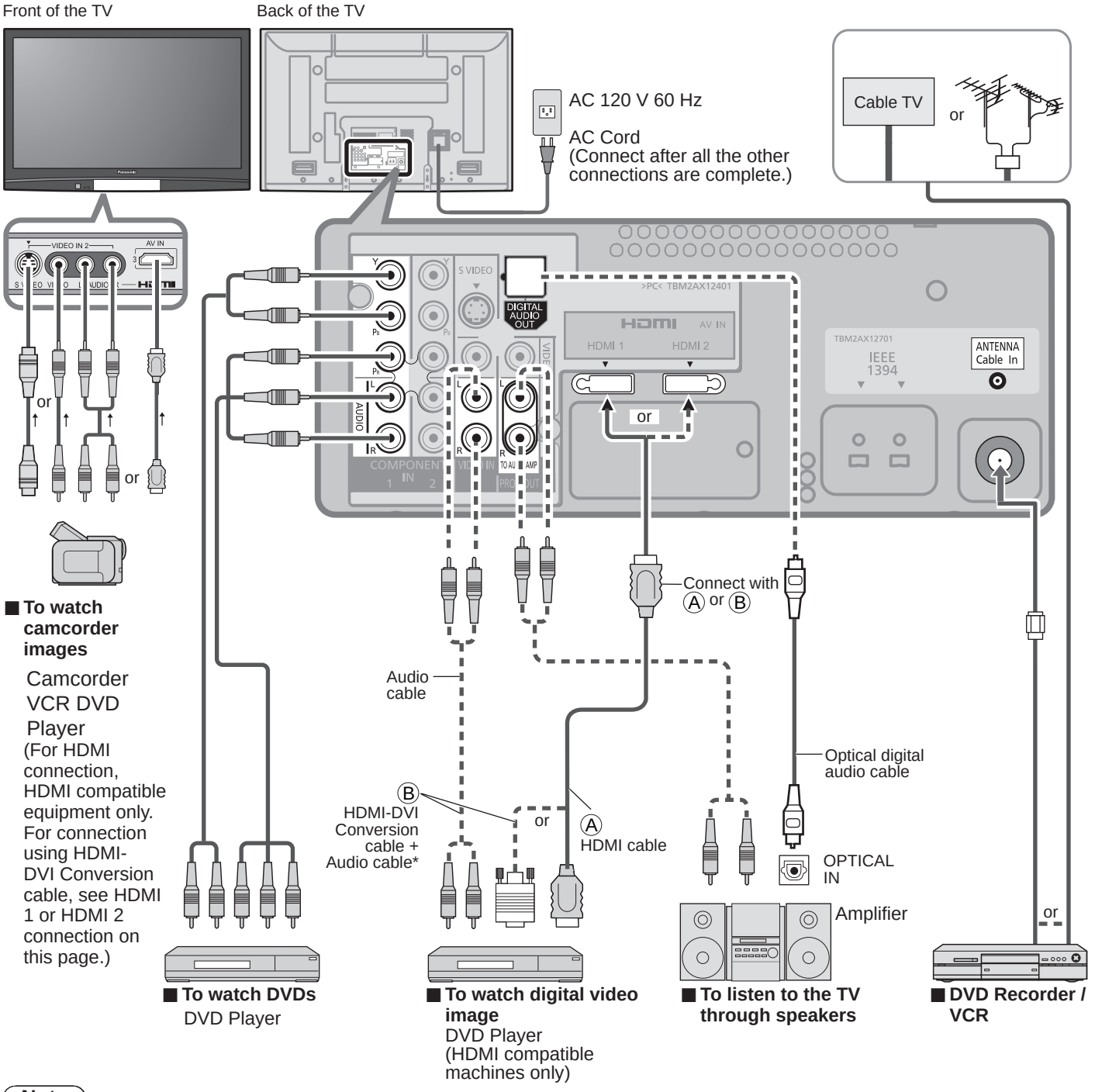
- Repeat until the code is found
- It may take many attempts before the correct code is found

② **When the correct code is found**

OK — store

Recommended AV Connections

These diagrams show our recommendations on how to connect the TV unit to your various equipment.
For other connections, consult the instructions for each piece equipment and its specifications.
For additional assistance, please visit our website at: www.panasonic.com



Note

- The picture and audio input signals connected to a terminal specified in “Monitor out” (p. 37) cannot be output from “PROG OUT” terminals.
  However, audio output can be obtained from “DIGITAL AUDIO OUT” terminal.
- To prevent howling and image oscillation, set the “Monitor out” setting when connecting the VCR with loop-connection. (p. 26, 37)
- When equipment (DVD, etc.) is connected to HDMI or COMPONENT terminals, no video signals can be passed through PROG OUT terminal.
- When receiving digital channel signals, all digital formats are down-converted to composite NTSC video to be output through the PROG OUT terminals.

* Please see p. 24-25 for setup when using an external analog audio cable with an HDMI to DVI cable.

VIERA Link™ Connections

Follow the connection diagrams below for HDAVI control of a single piece of AV equipment such as a DVD recorder (DIGA), RAM theater, or Player theater system.
Refer to page 28-31 for Setup Menu settings and additional control information.
- Optional HDMI and/or optical cables are not included.

If connection (or setting) of equipment compatible with HDAVI control is changed, switch the power of this unit Off and On again while the power of all equipment is On (so that the unit can correctly recognize the connected equipment) and check that the DVD recorder (DIGA), RAM theater, and Player theater playback operate.

Note

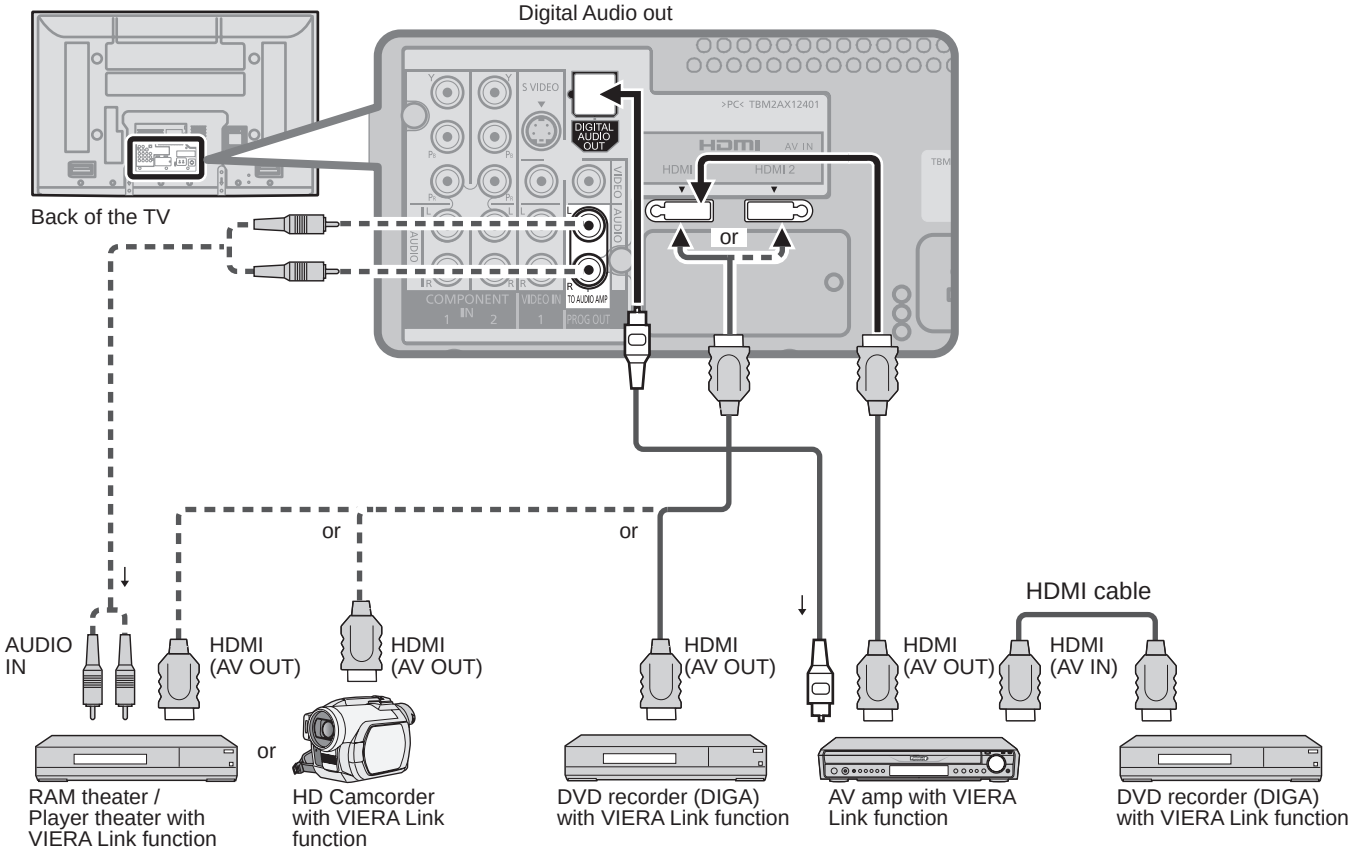
- HDMI 1 is recommended.
  When connecting to HDMI 2/HDMI 3, set the input mode to HDMI 2/HDMI 3 (p. 22) initially before connecting to HDMI 2/HDMI 3. After connection, confirm the HDMI control functions (p. 28-31).

■Connecting this unit to the DVD recorder (DIGA), RAM theater, or Player theater

- For DVD recorder (DIGA): Connect with HDMI cable
- For RAM theater and Player theater:
  Connect with the HDMI and audio cables.
  If audio cable is not connected, you cannot listen to the TV program through the theater system.

■Connecting this unit to a DVD recorder (DIGA) AV amp

When using an “VIERA Link” audio-video amplifier and a compatible DVD recorder (DIGA) use a daisy chain connection as shown below.



- One AV amp and one DVD recorder (DIGA) can be operated with this unit.
- Be sure to connect the AV amp between this unit and the DVD recorder (DIGA).

■Setting of this unit after connection

After making connections as shown above, set “VIERA Link” (under “VIERA Link setting”) to “On” using the Setup menu. (p. 23, 28-29).

Note

- Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective operating instruction manuals.
- When audio from other equipment connected to this unit via HDMI is output using “DIGITAL AUDIO OUT” of this unit, the system switches to 2CH audio.
  (When connecting to an AV amp via HDMI, you can enjoy higher sound quality.)
- About HDMI cable for connecting Panasonic HD camcorder, read the manual of the equipment.

Remote Control Operation/Code List

The following explains how to operate external devices with the TV's remote control.

- Register the remote control codes (p. 39) if you want to operate an external device from another manufacturer. (p. 43-44)

Note

- Operation may not be possible depending on the available memory size of the remote control.
  This remote control is not designed to cover operation of all functions of all models.

■ Remote Control Operation List

This chart defines which keys are operational after programming (if needed) while in the selected remote control mode, CABLE, DBS, VCR, or DVD.

KEY NAME	VCR MODE	DBS/CBL MODE		DVD MODE
		(DBS)	(CBL)	
POWER	Power	Power	Power	Power
SAP	—	LIST	LIST	DVD AUDIO
TV VIDEO	TV Input Switch	TV Input Switch	TV Input Switch	TV Input Switch
TV MENU	—	Menu	Menu	Functions
EXIT	—	Exit	Exit	—
SELECT OK	—	Up/Down/Left/Right	Up/Down/Right/Left	Up/Down/Right/Left
	—	Select	Select	Enter
GUIDE SUB MENU	—	Guide	Guide	Sub Menu
RETURN	—	PPV/VOD	PPV/VOD	Return
R	—	Red	A	Red
G	—	Green	B	Green
B	—	Blue	C	Blue
Y	—	Yellow	D	Yellow
CH	Channel Up/Down	Channel Up/Down	Channel Up/Down	Channel Up/Down
VOL	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down
FORMAT	—	Aspect	Aspect	—
FAVORITE	—	Favorite	Favorite	Direct Navigator
INFO	Onscreen Display	Info	Info/Display/OSD	Onscreen Display
MUTE	TV Mute	TV Mute	TV Mute	TV Mute
0 – 9	0-9	0-9	0-9	0-9
LAST	—	Last Channel	Last Channel	Drive Select
–	—	Sub Channel	Music	PROG (Sub Channel)
PAGE SKIP	—	Page Down/Up	Page Down/Up	Skip Reverse/Forward
TV/VCR GAME	TV/VCR Switch	TV/DBS Switch	TV/CBL Switch	—
SEARCH	Rewind/Fast Forward	Rewind/Fast Forward	Rewind/Fast Forward	Reverse/Forward
REC	VCR Record	PVR Record *1	PVR Record *1	Record
STOP	Stop	Stop	Stop	Stop
PAUSE	Pause	Pause	Pause	Pause
PLAY	Play	Play	Play	Play

*1: Combination type

■Remote Control Code List

Cable Converter (C) (DBS/CBL)

Brand	Code
ABC	0003, 0007, 0008
ADB	2092
Americast	0899
Amino	1602, 1822
Bell South	0899
Clearmaster	0883
ClearMax	0883
Contec	0019
Coolmax	0883
Digeo	1187
Director	0476
General Instrument	0003, 0276, 0476, 0810
GoldStar	0144
Hamlin	0009, 0273
Hytex	0007
i3 Micro	1602
Jerrold	0003, 0012, 0276, 0476, 0810
Memorex	0000
Motorola	0276, 0476, 0810, 1106, 1187, 1254, 1376, 1951
MTS	1951
Multitech	0883
Myrio	1602, 1822
Oak	0007, 0019
Optimus	0021
Pace	0008, 0237, 1877
Panasonic	0000, 0021, 0107, 0623
Paragon	0000
Philips	0317, 1305
Pioneer	0144, 0533, 0877, 1877
Pulsar	0000
Quasar	0000
RadioShack	0883
RCA	0021, 1256
Regal	0273, 0279
Runco	0000
Samsung	0144
Scientific Atlanta	0008, 0477, 0877, 1877
Sejin	1602
Sony	1006
Sprucer	0021
Starcom	0003
Supercable	0276
Supermax	0883
Thomson	1256
Tocom	0012, 0059
Torx	0003
Toshiba	0000
Tristar	0883
United Artists	0007
V2	0883
Viewmaster	0883
Vision	0883
Vortex View	0883
Zenith	0000, 0525, 0899

Cable/PVR Combination (C) (DBS/CBL)

Brand	Code
Americast	0899
Amino	1822
Digeo	1187
General Instrument	0810
Jerrold	0810
Motorola	0810, 1106, 1187, 1376
Myrio	1822
Pace	0237, 1877
Pioneer	0877, 1877
RCA	1256
Scientific Atlanta	0877, 1877
Sony	1006
Supercable	0276
Thomson	1256
Zenith	0899

Satellite Receiver (S) (DBS/CBL)

Brand	Code
AlphaStar	0772
Bell ExpressVu	0775, 1170
Chaparral	0216
Coolsat	1806
Crossdigital	1109
DirecTV	0099, 0247, 0392, 0566, 0639, 0724, 0749, 0819, 1076, 1108, 1109, 1142, 1189, 1377, 1392, 1414, 1442, 1443, 1444, 1609, 1639, 1640, 1749, 1856
Dish Network System	0775, 1005, 1170, 1505, 1775
Dishpro	0775, 1005, 1505, 1775
Echostar	0775, 1005, 1170, 1505, 1775
Expressvu	0775, 1775
Fortec Star	1821, 1948
GE	0566
General Instrument	0869
GOI	0775, 1775
Goodmans	1246
Hisense	1535
Hitachi	0819, 1250
HTS	0775, 1775
Hughes Network Systems	0749, 1142, 1442, 1443, 1444, 1749
Humax	1781, 1790
iLo	1535
Janeil	0152
JVC	0775, 1170, 1775
LG	1226, 1414
Magnavox	0722, 0724
Memorex	0724
Mitsubishi	0749
Motorola	0869
NEC	1270
Next Level	0869
Panasonic	0152, 0247, 0701, 1189, 1786
Pansat	1807
Paysat	0724
Philips	0099, 0722, 0724, 0749, 0856, 1076, 1142, 1442, 1749
Proscan	0392, 0566
Proton	1535
RadioShack	0869
RCA	0143, 0566, 0855, 1392
Samsung	1108, 1109, 1276, 1377, 1442, 1609
Sanyo	1219
Sony	0639, 1639, 1640
Star Choice	0869
Tivo	1142, 1442, 1443, 1444
Toshiba	0749, 0790, 1285, 1749
UltimateTV	1392, 1640
Ultrasat	1806
Uniden	0722, 0724
US Digital	1535
USDTV	1535
Voom	0869
Zenith	1810, 1856

DBS/PVR Combination (S) (DBS/CBL)

Brand	Code
Bell ExpressVu	0775, 1170
DirecTV	0099, 0392, 0639, 1076, 1142, 1377, 1392, 1442, 1443, 1444, 1640
Dish Network System	0775, 1505
Dishpro	0775, 1505
Echostar	0775, 1170, 1505
Expressvu	0775
Hughes Network Systems	1142, 1442, 1443, 1444
JVC	1170
Motorola	0869
Philips	1142, 1442
Proscan	0392
RCA	1392
Samsung	1442
Sony	0639, 1640
Star Choice	0869
Tivo	1142, 1442, 1443, 1444
Zenith	1810

VCR (V) (VCR)

Brand	Code
ABS	1972
Accurian	0000
Admiral	0048, 0209
Adventura	0000
Aiko	0278
Aiwa	0000, 0037, 0124, 0307, 0468
Akai	0041, 0061, 0106, 0175, 0242
Alienware	1972
Allegro	1137
America Action	0278
American High	0035
Asha	0240
Audio Dynamics	0040
Audiovox	0037, 0278
Beaumark	0240
Bell & Howell	0104
Broksonic	0002, 0121, 0184, 0209, 0348, 0479, 1479
Calix	0037
Canon	0035, 0102
Captive Works	2167
Carver	0081
CCE	0072, 0278
CineVision	1137
Citizen	0037, 0278, 1278
Colt	0072
Craig	0037, 0047, 0072, 0240
Curtis Mathes	0035, 0041, 0060, 0162, 1035
Cybernex	0240
CyberPower	1972
Daewoo	0045, 0278, 0561, 0637, 1137, 1278
DBX	0040, 0050
Dell	1972
Denon	0042
Dimensia	2613
DirecTV	0739
Durabrand	0038, 0039
Dynatech	0000
Electrohome	0037
Electrophonic	0037
Emerex	0032
Emerson	0000, 0002, 0037, 0043, 0061, 0068, 0121, 0184, 0208, 0209, 0212, 0278, 0479, 0561, 0593, 0637, 1278, 1479, 1593
ESA	1137
Fisher	0047, 0104
Fuji	0033, 0035
Funai	0000, 0593, 1335, 1593
Garrard	0000
Gateway	1972
GE	0035, 0060, 0202, 0240, 0761, 0807, 1035, 1060, 2613
Go Video	0432, 0526, 0614, 0643, 1137
GoldStar	0037, 0038, 1137, 1237
Gradiente	0000
Harley Davidson	0000
Harman/Kardon	0038, 0075, 0081
Harwood	0068, 0072
Headquarter	0046
Hewlett Packard	1972
HI-Q	0047
Hitachi	0000, 0041, 0042, 0089, 0105, 2613
Howard Computers	1972
HP	1972
Hughes Network Systems	0042, 0739
Humax	0739, 1797, 1988
Hush	1972
iBUYPOWER	1972
Instant Replay	0035, 0226
Jensen	0041
JVC	0008, 0041, 0067, 2079
KEC	0037, 0278
Kenwood	0038, 0041, 0067
KLH	0072
Kodak	0035, 0037
LG	1037, 1137, 2010
Linksys	1972
Lloyd's	0000, 0208
Logik	0072
LXI	0037
Magnasonic	0593, 1278
Magnavox	0000, 0035, 0039, 0081, 0110, 0149, 0563, 0593, 1335, 1593, 1781
Magnin	0240
Marantz	0035, 0081
Marta	0037
Media Center PC	1972
MEI	0035
Memorex	0000, 0035, 0037, 0039, 0046, 0047, 0048, 0104, 0162, 0209, 0240, 0307, 0348, 0479, 1037, 1162, 1237, 1262
MGA	0043, 0061, 0240
MGN Technology	0240,
Microsoft	1972
Mind	1972
Minolta	0042, 0105
Mitsubishi	0043, 0061, 0067, 0075, 0173, 0214, 0242, 0443, 0807
Motorola	0035, 0048
MTC	0000, 0240
Multitech	0000, 0072
NEC	0038, 0040, 0041, 0050, 0067, 0104
Nikko	0037
Nikon	0034
Niveus Media	1972
Noblex	0240
Northgate	1972
Olympus	0035, 0226
Onkyo	0222
Optimus	0037, 0048, 0104, 0162, 0432, 0593, 1048, 1062, 1162, 1262
Orion	0002, 0184, 0209, 0479, 1479
Panasonic	0035, 0077, 0102, 0162, 0225, 0226, 0227, 0246, 0378, 0485, 0614, 0616, 0837, 1035, 1062, 1162, 1244, 1262, 1562, 1807, 1808, 1809
Penney	0035, 0037, 0038, 0040, 0042, 0240, 1035, 1237
Pentax	0042, 0105,
Philco	0035
Philips	0035, 0081, 0110, 0618, 0739, 1081, 1181
Pilot	0037
Pioneer	0067, 1337
Polk Audio	0081
Presidian	1593
Profitronic	0240
Proscan	0060, 0202, 0761, 1060
Protec	0072
Pulsar	0039
Quarter	0046
Quartz	0046
Quasar	0035, 0077, 0162, 1035, 1162
RadioShack	0000, 1037
Radix	0037
Randex	0037
RCA	0042, 0060, 0077, 0105, 0106, 0149, 0202, 0240, 0761, 0807, 0880, 1035, 1060, 2613
Realistic	0000, 0035, 0037, 0046, 0047, 0048, 0104
ReplayTV	0614, 0616
Ricavision	1972
Ricoh	0034
Rio	1137
Runco	0039
Salora	0075
Samsung	0045, 0240, 0739, 1014
Samtron	0643
Sanky	0039, 0048
Sansui	0000, 0041, 0067, 0209, 0479, 1479
Sanyo	0046, 0047, 0104, 0159, 0240
Scott	0043, 0045, 0121, 0184, 0212
Sears	0000, 0035, 0037, 0042, 0046, 0047, 0104, 0105, 1237
Sharp	0048, 0807, 0848
Shintom	0072
Shogun	0240
Singer	0072
Sonic Blue	0614, 0616, 1137
Sony	0000, 0032, 0033, 0034, 0035, 0636, 1032, 1972
Stack 9	1972
STS	0042
Sylvania	0000, 0035, 0043, 0081, 0110, 0593, 1593, 1781
Symphonic	0000, 0593, 1593
Systemax	1972
Tagar Systems	1972
Tashiko	0037
Tatung	0041
Teac	0000, 0041
Technics	0035, 0162, 0246
Teknika	0000, 0035, 0037
Thomas	0000
Tivo	0618, 0636, 0739, 1337, 1996
TMK	0208, 0240
Toshiba	0043, 0045, 0212, 0845, 1008, 1145, 1972, 1988, 1996
Totevision	0037, 0240
Touch	1972
Unitech	0240
Vector	0045
Vector Research	0038, 0040
Video Concepts	0040, 0045, 0061
Videomagic	0037
Videosonic	0240
Viewsonic	1972
Villain	0000
Voodoo	1972
Wards	0000, 0035, 0042, 0047, 0048, 0060, 0072, 0081, 0149, 0212, 0240
White Westinghouse	0072, 0209, 0637
XR-1000	0000, 0035, 0072
Yamaha	0038
Zenith	0000, 0033, 0034, 0039, 0209, 0479, 0637, 1137, 1139, 1479
ZT Group	1972

Remote Control Operation/Code List (Continued)

■ Remote Control Code List

DBS/PVR Combination (V) (DBS/CBL)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
DirecTV	0739	Hughes Network Systems	0739	Philips	0739	Tivo	0739
				Samsung	0739		

DVD-Recorder (V) (DBS/CBL)

Brand	Code
Magnavox	0000

PVR (V) (DBS/CBL)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
ABS	1972	Hughes Network Systems	0739	Northgate	1972	Tagar Systems	1972
Alienware	1972			Panasonic	0614, 0616, 1807, 1808, 1809	Tivo	0618, 0636, 0739, 1337
Captive Works	2167	Humax	0739, 1797, 1988	Philips	0618, 0739	Toshiba	1008, 1972, 1988, 1996
CyberPower	1972	Hush	1972	Pioneer	1337	Touch	1972
Dell	1972	iBUYPOWER	1972	RCA	0880	Viewsonic	1972
DirecTV	0739	LG	2010	ReplayTV	0614, 0616	Voodoo	1972
Gateway	1972	Linksys	1972	Samsung	0739	ZT Group	1972
Go Video	0614	Media Center PC	1972	Sonic Blue	0614, 0616		
Hewlett Packard	1972	Microsoft	1972	Sony	0636, 1972		
Howard Computers	1972	Mind	1972	Stack 9	1972		
HP	1972	Niveus Media	1972	Systemax	1972		

DVD (Y) (DVD)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
Accurian	0675, 1072, 1416	Emerson	0591, 0675, 1268	Malata	0782, 1159	Sampo	0698, 0752
Adcom	1094	Enterprise	0591	Marantz	0539	Samsung	0199, 0490, 0573, 0820, 0899, 1044, 1075, 1470
Aiwa	0641	ESA	1268	McIntosh	1273		
Akai	0695, 0770, 0899, 1089	Fisher	0670	Memorex	0695, 0831, 1270	Sansui	0695
Alco	0790	Funai	0675, 1268, 1334	Microsoft	0522, 1708, 2083	Sanyo	0670, 0695, 0873
Allegro	0869	Gateway	1073, 1077, 1158	Mintek	0717, 0839, 1472	Sensory Science	1158
Amphion Media Works	0872, 1245	GE	0522, 0717, 0815	Mitsubishi	0521, 1521	Sharp	0630, 0675, 0752, 1256
AMW	0872, 1245	Go Video	0715, 0741, 0744, 0783, 0833, 0869, 1044, 1075, 1099, 1144, 1158, 1304, 1730	Momitsu	1082	Sharper Image	1117
Apex Digital	0672, 0717, 0755, 0794, 0796, 0797, 1004, 1020, 1056, 1061, 1100			NAD	0692, 0741	Sherwood	0633, 0770, 1043, 1077
				Nakamichi	1222	Shinsonic	0533, 0839
Arrgo	1023	Go Vision	1072	NEC	0785	Sigma Designs	0674
Aspire Digital	1168, 1407	GoldStar	0741	Nesa	0717	Sonic Blue	0869, 1099
Astar	1678, 1679	GPX	0699, 0769	Next Base	0826	Sony	0533, 0864, 1033, 1069, 1070, 1431, 1432, 1433, 1516, 1533, 1536, 1548, 1791, 1824, 1892, 1903, 1904, 1934, 1981, 2020, 2043
Audiologic	0736	Greenhill	0717	NexxTech	1402		
Audiovox	0790, 1041, 1072, 1121, 1122	Harman/Kardon	0582, 0702	Norcent	0872, 1003, 1107, 1265		
Axion	1072	Helios	2080	Nova	1517		
B & K	0655, 0662	Hello Kitty	0831	Onkyo	0503, 0627, 0792, 1769	Sova	1122
BBK	1224	Hitachi	0573, 0664, 1247	Oppo	0575, 1224 1525	Sungale	1074
Bel Canto Design	1571	Hiteker	0672	OptoMedia Electronics	0896	SVA	0860, 1105
Blaupunkt	0717	Humax	1500, 1588	Oritron	0651	Sylvania	0675, 1268
Blue Parade	0571	iLo	1348, 1472	Panasonic	0458, 0490, 0632, 0703, 1010, 1011, 1362, 1462, 1464, 1490, 1641, 1762, 1907, 1908, 1909, 1910, 1925, 1986, 1990, 2017, 2060, 2061, 2062	Symphonic	0675
Broksonic	0695, 1419	Initial	0717, 1472			TAG McLaren	0894
CAVS	1057	Insignia	1268, 2095			Teac	0790
Cinea	0831	Integra	0627			Technics	0490, 0703
Cinego	1399	Jaton	1078	Philco	0675	Technosonic	0730
CineVision	0833, 0869, 0876	JBL	0702	Philips	0503, 0539, 0646, 0675, 1267, 1340, 1354, 2056, 2084	Techwood	0692
Citizen	0695, 1277, 1587, 2116	JSI	1423			Terapin	1031
Coby	0778, 0852, 1086, 1107, 1165, 1177, 1351, 1628	JVC	0558, 0623, 0867, 1164, 1275, 1550, 1602	Pioneer	0142, 0525, 0571, 0631, 0632, 1571	Theta Digital	0571
				Polaroid	1020, 1061, 1086, 1245, 1316, 1478, 2130	Tivo	1503
Craig	0831	jWin	1049, 1051, 1675			Toshiba	0503, 0695, 1045, 1154, 1503, 1588, 1608, 1769, 1854
Curtis Mathes	1087	Kawasaki	0790	Polk Audio	0539		
CyberHome	0816, 0874, 1023, 1024, 1117, 1129, 1502, 1537	Kenwood	0490, 0534, 0682	Portland	0770	Tredex	0799, 0800, 0803, 0804
		KLH	0717, 0790, 1020, 1149	Presidian	0675, 1072	Urban Concepts	0503
Daewoo	0705, 0784, 0833, 0869, 1169, 1172, 1234, 1242, 1441	Konka	0711, 0721	Princeton	0674	US Logic	0839
		Koss	0651, 0896, 1423	Proscan	0522	Venturer	0790
Denon	0490, 0634, 1634	Landel	0826	ProVision	0778	Vizio	1064, 1226
Desay	1407	Lasonic	0798, 1173	Qwestar	0651	Vocopro	1027, 1360
Diamond Vision	1316	Lenoxx	1127	RCA	0522, 0571, 0717, 0790, 0822, 1022, 1132, 1769	Xbox	0522, 1708, 2083
Disney	0675, 1270	LG	0591, 0741, 0869			Xwave	1001
Dual	1068, 1085	LiteOn	1058, 1158, 1416, 1440, 1656	Rio	0869	Yamaha	0490, 0497, 0539, 0545
Durabrand	1127	Loewe	0511	RJTech	1360	Zenith	0503, 0591, 0741, 0869
DVD2000	0521	Magnavox	0503, 0539, 0646, 0675, 1268, 1354, 1472, 1506	Rotel	0623, 1178	Zoece	1265
Electrohome	2116			Rowa	0823		

DVD-Recorder (Y) (DVD)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
Accurian	0675, 1416	Funai	0675, 1334	Panasonic	0490, 1010, 1011, 2060, 2061, 2062	Sony	1033, 1069, 1070, 1431, 1432, 1433, 1536
Apex Digital	1056	Gateway	1073, 1158	Philips	0646, 1340		
Aspire Digital	1168	Go Video	0741, 1158, 1304, 1730	Pioneer	0631	Sylvania	0675
Broksonic	1419	iLo	1348	Polaroid	1086, 2130	Toshiba	1588
Citizen	2116	JVC	1164, 1275	RCA	0522	Zenith	0741
Coby	1086	LG	0741	Samsung	0490, 1470		
CyberHome	1129, 1502	LiteOn	1158, 1416, 1440	Sensory Science	1158		
Electrohome	2116	Magnavox	0646, 0675, 1506	Sharp	0675		

Blu-ray Disc (Y) (DVD)

Brand	Code	Brand	Code	Brand	Code
LG	0741	Philips	2084	Samsung	0199
Panasonic	1641, 2061, 2062	Pioneer	0142	Sony	1516

HD-DVD (Y) (DVD)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
LG	0741	Onkyo	1769	RCA	1769	Toshiba	1769

HTiB (Y) (DVD)

Brand	Code	Brand	Code	Brand	Code	Brand	Code
Aiwa	0641	Panasonic	0458, 1779, 1907, 1908, 1909, 1910, 1925, 1990, 2017	Rio	0869	Teac	0790
Audiovox	0790			Sherwood	1077	Toshiba	1854
KLH	0790	Philips	1267	Sonic Blue	0869	Venturer	0790
Koss	0651	Polk Audio	0539	Sony	1824, 1892, 1903, 1904, 1934, 1981, 2020, 2043	Yamaha	0497
Oritron	0651	RCA	0790				

Ratings List for Lock

"V-chip" technology enables you to lock channels or shows according to standard ratings set by the entertainment industry. (p. 33)

■U.S. MOVIE RATINGS (MPAA)

NR	NO RATING (NOT RATED) AND NA (NOT APPLICABLE) PROGRAMS. Movie which has not been rated or where rating does not apply.
G	GENERAL AUDIENCES. All ages admitted.
PG	PARENTAL GUIDANCE SUGGESTED. Some material may not be suitable for children.
PG-13	PARENTS STRONGLY CAUTIONED. Some material may be inappropriate for children under 13.
R	RESTRICTED. Under 17 requires accompanying parent or adult guardian.
NC-17	NO ONE 17 AND UNDER ADMITTED.
X	ADULTS ONLY.

■U.S. TV PROGRAMS RATINGS (U. S. TV)

Age-based Group	Age-based Ratings	Possible Content Selections	Description
NR (Not Rated)	TV-NR	● Viewable ● Blocked	Not Rated.
Youth	TV-Y	● Viewable ● Blocked	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
	TV-Y7	● FV Blocked ● Viewable ● Blocked	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
Guidance	TV-G	● Viewable ● Blocked	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
	TV-PG	● D,L,S,V (all selected) ● Any combination of D, L, S, V	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
	TV-14	● D,L,S,V (all selected) ● Any combination of D, L, S, V	Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.
	TV-MA	● L,S,V (all selected) ● Any combination of L, S, V	Mature audiences only. This program may contain mature themes, profane language, graphic violence, and explicit sexual content.

FV: Fantasy/Cartoon Violence. V: Violence S: Sex L: Offensive Language D: Dialogue with sexual content.

■CANADIAN ENGLISH RATINGS (C. E. L. R.)

E	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
C	Programming intended for children under age 8. No offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
G	General programming, suitable for all audiences.
PG	Parental Guidance suggested. Some material may not be suitable for children.
14+	Programming contains themes or content which may not be suitable for viewers under the age of 14. Parents are strongly cautioned to exercise discretion in permitting viewing by pre-teens and early teens.
18+	18+ years old. Programming restricted to adults. Contains constant violence or scenes of extreme violence.

■CANADIAN FRENCH RATINGS (C. F. L. R.)

E	Exempt - Exempt programming.
G	General - Programming intended for audience of all ages. Contains no violence, or the violence content is minimal or is depicted appropriately.
8 ans+	8+ General - Not recommended for young children. Programming intended for a broad audience but contains light or occasional violence. Adult supervision recommended.
13 ans+	Programming may not be suitable for children under the age of 13 - Contains either a few violent scenes or one or more sufficiently violent scenes to affect them. Adult supervision strongly suggested.
16 ans+	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18 ans+	Programming restricted to adults. Contains constant violence or scenes of extreme violence.

Caution

- The V-Chip system that is used in this set is capable of blocking "NR" programs (non rated, not applicable and none) as per FCC Rules Section15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"
  - • Emergency Bulletins (Such as EAS messages, weather warnings and others)
  - • Locally originated programming • News • Political • Public Service Announcements • Religious • Sports • Weather

Technical Information

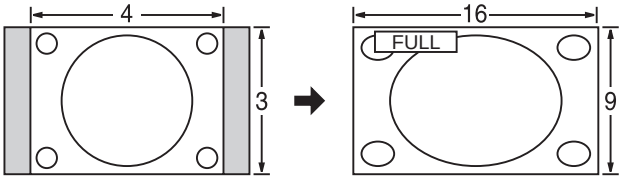
Closed Caption (CC)

- For viewing the CC of digital broadcasting, set the aspect to FULL (If viewing with H-FILL, JUST, ZOOM, or 4:3; characters might be cut off).
- The CC can be displayed on the TV if the receiver (such as a satellite receiver) has the CC set On using the Component or HDMI connection to the TV.
- If the CC is set On both the receiver and TV when the signal is 480i (except for the HDMI connection), the CC may overlap on the TV.
- If a digital program is being output in analog format, the CC data will also be output in analog format.
- If the recorder or output monitor is connected to the TV, the CC needs to be set up on the recorder or output monitor.

Aspect Ratio (FORMAT)

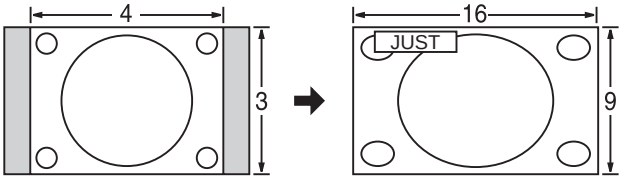
Press the FORMAT button to cycle through the aspect modes, This lets you choose the aspect depending on the format of the received signal and your preference. (p. 19)
(e.g.: in case of 4:3 image)

- FULL



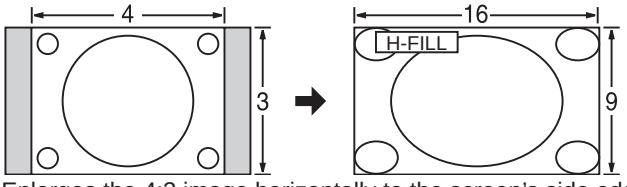
Enlarges the 4:3 image horizontally to the screen's side edges.
(Recommended for anamorphic picture)

- JUST



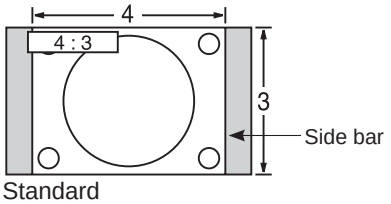
Stretches to justify the 4:3 image to the four corners of the screen.
(Recommended for normal TV broadcast)

- H-FILL



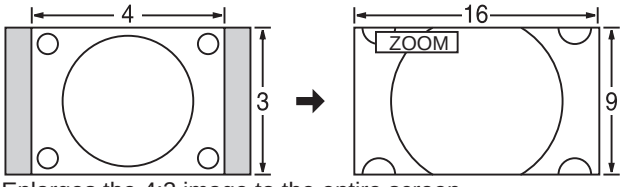
Enlarges the 4:3 image horizontally to the screen's side edges.
The side edges of the image are cut off.

- 4:3



Standard
(Note that "Image retention" of the side bar may occur from displaying it for a long time.)

- ZOOM



Enlarges the 4:3 image to the entire screen.
(Recommended for Letter Box)

Note

- 480i (4:3), 480i (16:9), 480p (4:3), 480p (16:9): FULL, JUST, 4:3 or ZOOM
- 1080p / 1080i / 720p: FULL, H-FILL, JUST, 4:3 or ZOOM

- Zoom adjust
  Vertical image position and size can be adjusted in "ZOOM".
  ① Select "Zoom adjust" on the "Picture" menu. (p. 24-25)
  ② V-position: Vertical position adjustment
  ③ V-size: Vertical size adjustment

- To reset the aspect ratio ➡ (OK)

Data format for SD Card browsing

Photo:	Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF** standards
Data format:	Baseline JPEG (Sub-sampling: 4:4:4, 4:2:2 or 4:2:0)
Max. number of files:	9,999
Image resolution:	160 x 120 to 10,000,000

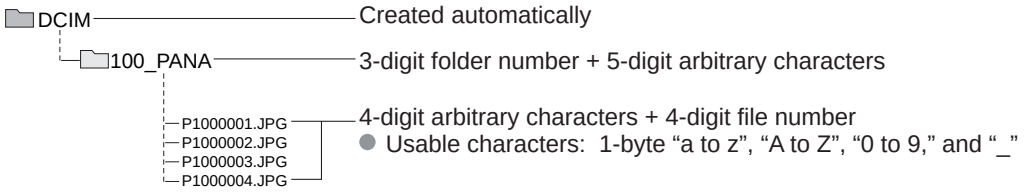
* DCF (Design rule for camera file system): A Japan Electronics and Information Technology Industries Association's standard
** EXIF (Exchangeable Image File Format)

Caution

- A JPEG image modified with a PC may not be displayed.
- Partly degraded files might be displayed at a reduced resolution.

Note

- Folder structure viewed in PC



- The folder and file names may be different depending on the digital camera used.
- For the suitable SD Memory Cards, please confirm the latest information on the following website.
  http://panasonic.co.jp/pavc/global/cs (This site is in English only)

Cautions in handling SD Card:

- Do not remove the card while the unit is accessing data (this can damage card or unit).
- Do not touch the terminals on the back of the card.
- Do not subject the card to a high pressure or impact.
- Insert the card in the correct direction (otherwise, card may be damaged).
- Electrical interference, static electricity, or erroneous operation may damage the data or card.
- Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic operation of the unit. (Panasonic is not liable for any deterioration or damage of recorded data.)

SD Card warning messages

Message	Meaning
Is SD card in?	• The card is not inserted.
No file	• The card has no data or this type of data is not supported.
Cannot read file	• The file is broken or unreadable. • The TV does not support the format.

Technical Information (Continued)

VIERA Link "HDAVI Control™"

HDMI connections to some Panasonic equipment allow you to interface automatically. (p. 28)

- This function may not work normally depending on the equipment condition.
- The equipment can be operated by other remote controls with this function on even if TV is in Standby mode.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Volume function will be displayed when adjusting the volume of the equipment.
- If you connect the same kind of equipment at once (for example: one DIGA to HDMI 1 / another DIGA to HDMI 2), VIERA Link is available for the terminal with the smaller number.
- If you connect equipment that has "HDAVI Control 2" (or more) function to the TV with HDMI cable, the sound from DIGITAL AUDIO OUT terminal can be output as multi channel surround.
- "HDAVI Control 3" is the newest standard (current as of December, 2007) for the HDAVI Control compatible equipment. This standard is compatible with the conventional HDAVI equipment.

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV unit and the devices.
HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a DVD player, can be connected to the HDMI connector using an HDMI compliant (fully wired) cable.

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adapter cable (*2).
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal.
- Audio settings can be made on the "HDMI 1 in", "HDMI 2 in" or "HDMI 3 in" menu screen. (p. 24)
  Applicable audio signal sampling frequencies (L.PCM): 48 kHz, 44.1 kHz, 32 kHz

(*1): The HDMI logo is displayed on an HDMI-compliant device.
(*2): Enquire at your local digital equipment retailer shop.

Caution

- Use with a PC is not assumed.
- All signals are reformatted before being displayed on the screen.
- If the connected device has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- A device having no digital output terminal may be connected to the input terminal of either "COMPONENT", "S VIDEO", or "VIDEO" to receive analog signals.
- The HDMI input terminal can be used with only the following image signals: 480i, 480p, 720p, 1080i and 1080p. Match the output setting of the digital device.
- For details of the applicable HDMI signals, see below.

Input signals that can be displayed

* Mark: Applicable input signal for Component (Y, P_B, P_R) and HDMI

	horizontal frequency (kHz)	vertical frequency (Hz)	COMPONENT	HDMI
525 (480) / 60i	15.73	59.94	*	*
525 (480) /60p	31.47	59.94	*	*
750 (720) /60p	45.00	59.94	*	*
1,125 (1,080) /60i	33.75	59.94	*	*
1,125 (1,080)/60p	67.43	59.94		*
1,125 (1,080)/60p	67.50	60.00		*
1,125(1,080)/24p	26.97	23.98		*
1,125(1,080)/24p	27.00	24.00		*

Note

- Signals other than those shown above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.

Picture mode

- Vivid: Provides enhanced picture contrast and sharpness for viewing in a well-lit room.
- Standard: Recommended for normal viewing conditions with subdued room lighting.
- Cinema: For watching movies in a darkened room. It provides a soft, film-like picture.
- Game: For playing video game. This mode will be set automatically if "GAME" is selected from Input label setting (p. 37)
- Custom (Photo): Customizes each item according to your taste.
  Photo is displayed in JPEG menu.

Note

- Picture mode will be automatically set to "Standard" if you change the Input label from "GAME" to other labels.
- Picture mode will be automatically set to "Game" if you change from an Input label other than "GAME" to "GAME" label.

DIGITAL AUDIO OUT terminals

You can enjoy your home theater by connecting a Dolby Digital (5.1 channel) decoder and “Multi Channel” amplifier to the DIGITAL AUDIO OUT terminals.

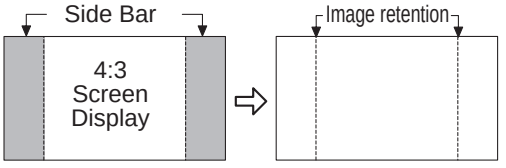
Caution

- Depending on your DVD player and DVD-Audio software the copyright protection function may operate and disable optical output.
- External speakers cannot be connected directly to PROG OUT terminals.
- When an ATSC channel is selected, the output from the DIGITAL AUDIO OUT jack will be Dolby Digital. When an NTSC channel is selected, the output will be PCM.
  See pages 40-41 for more information.

Side Bar

Do not display a picture in 4:3 mode for an extended period, as this can cause “Image retention” to remain on either or both sides of the display field.
To reduce the risk of such “Image retention”, change the brightness of the side bars.
See pages 26-27 for more information.

- The side bar may flash (alternate black/white) depending on the picture. Using Cinema mode will reduce such flashing (See below).



Scrolling bar

Scrolling bar: To prevent “Image retention”, scrolls white horizontal bar from top to bottom on a black screen.

- Press any key except the POWER key to return to previous screen.
- You will return to the previous screen if any key operation has not been performed for 15 minutes.
  See pages 26-27 for more information.

[Scrolling bar]

Care and Cleaning

First, unplug the Power cord plug from the wall outlet.

Display panel

The front of the display panel has been specially treated. Wipe the panel surface gently using only a cleaning cloth or a soft, lint-free cloth.

- If the surface is particularly dirty, soak a soft, lint-free cloth in diluted mild liquid dish soap (1 part mild liquid dish soap diluted by 100 times the amount of water) and then wring the cloth to remove excess liquid. Use this cloth to wipe the surface of the display panel, then wipe it evenly with a dry cloth of the same type until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects. Furthermore, avoid contact with volatile substances such as insect sprays, solvents, and thinner; otherwise, the quality of the surface may be adversely affected.

Cabinet

If the cabinet becomes dirty, wipe it with a soft, dry cloth.

- If the cabinet is particularly dirty, soak the cloth in a weak mild liquid dish soap solution and then wring the cloth dry. Use this cloth to wipe the cabinet and then wipe it dry with a dry cloth.
- Do not allow any mild liquid dish soap to come into direct contact with the surface of the Plasma TV. If water droplets get inside the unit, operating problems may result.
- Avoid contact with volatile substances such as insect sprays, solvents, and thinner; otherwise, the quality of the cabinet surface may be adversely affected or the coating may peel off. Furthermore, do not leave it for long periods in contact with articles made from rubber or PVC.

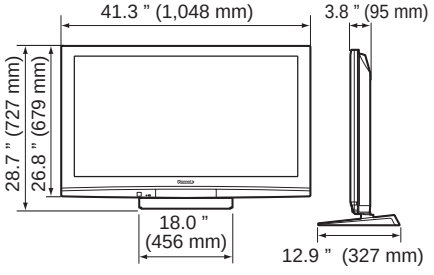
Pedestal

- Cleaning
  Wipe the surfaces with a soft, dry cloth. If the unit is particularly dirty, clean it using a cloth soaked with water to which a small amount of mild liquid dish soap has been added and then wipe with a dry cloth.
  Do not use products such as solvents, thinner, or household wax for cleaning, as they can damage the surface coating. (If using a chemically-treated cloth, follow the instructions supplied with the cloth.)
- Do not attach sticky tape or labels, as they can make the surface of the pedestal dirty. Do not allow long-term contact with rubber, vinyl products, or the like. (Doing so will cause deterioration.)

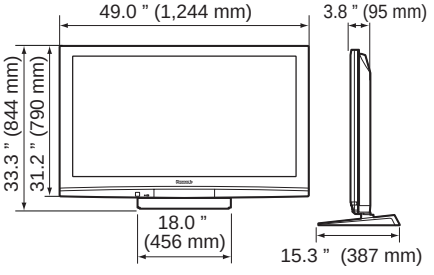
Specifications

		TH-42PZ80Q	TH-50PZ80Q
Power Source		AC 120 V, 60 Hz	
Power Consumption	**Maximum**	583 W	700 W
	Standby condition	0.2 W (With CableCARD : 30.0 W)	0.2 W (With CableCARD : 34.0 W)
Plasma Display panel	**Drive method**	AC type	
	Aspect Ratio	16:9	
	Visible screen size	42 ” class (41.6 inches measured diagonally)	50 ” class (49.9 inches measured diagonally)
	(W × H × Diagonal)	36.2 ” × 20.4 ” × 41.6 ” (922 mm × 518 mm × 1,057 mm)	43.5 ” × 24.4 ” × 49.9 ” (1,106 mm × 622 mm × 1,269 mm)
	(No. of pixels)	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]	
Sound	**Audio Output**	20 W [10 W + 10 W] (10 % THD)	
Channel Capability (Digital/Analog)		VHF/ UHF: 2 - 69, CATV: 1 - 135	
Operating Conditions		Temperature: 32 °F – 104 °F (0 °C – 40 °C) Humidity: 20 % – 80 % RH (non-condensing)	
Connection Terminals	**VIDEO IN 1-2**	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) S-VIDEO: Mini DIN 4-pin Y: 1.0 V [p-p] (75 Ω) C: 0.286 V [p-p] (75 Ω) AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]	
	COMPONENT INPUT 1-2	Y: 1.0 V [p-p] (including synchronization) P_B, P_R: ±0.35 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]	
	HDMI 1-3	TYPE A Connector × 3 ● This TV supports “HDAVI Control 3” function.	
	IEEE1394	IEEE 1394 Standard, 4pin , S400 ,MPEG2-TS	
	Card slot	SD CARD slot × 1, CableCARD slot × 1	
	AV PROG OUT	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]	
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber Optic	
FEATURES		3D Y/C FILTER CLOSED CAPTION V-Chip CableCARD slot Photo viewer HDAVI Control 3 tru2way-ready TV	
Dimensions (W × H × D)	**Including pedestal**	41.3 ” × 28.7 ” × 12.9 ” (1,048 mm × 727 mm × 327 mm)	49.0 ” × 33.3 ” × 15.3 ” (1,244 mm ×844 mm × 387 mm)
	TV Set only	41.3 ” × 26.8 ” × 3.8 ” (1,048 mm × 679 mm × 95 mm)	49.0 ” × 31.2 ” × 3.8 ” (1,244 mm × 790 mm × 95 mm)
Mass	**Including pedestal**	70.6 lb. (32 kg)	90.4 lb. (41 kg)
	TV Set only	66.1 lb. (30 kg)	86.0 lb. (39 kg)

[TH-42PZ80Q]



[TH-50PZ80Q]

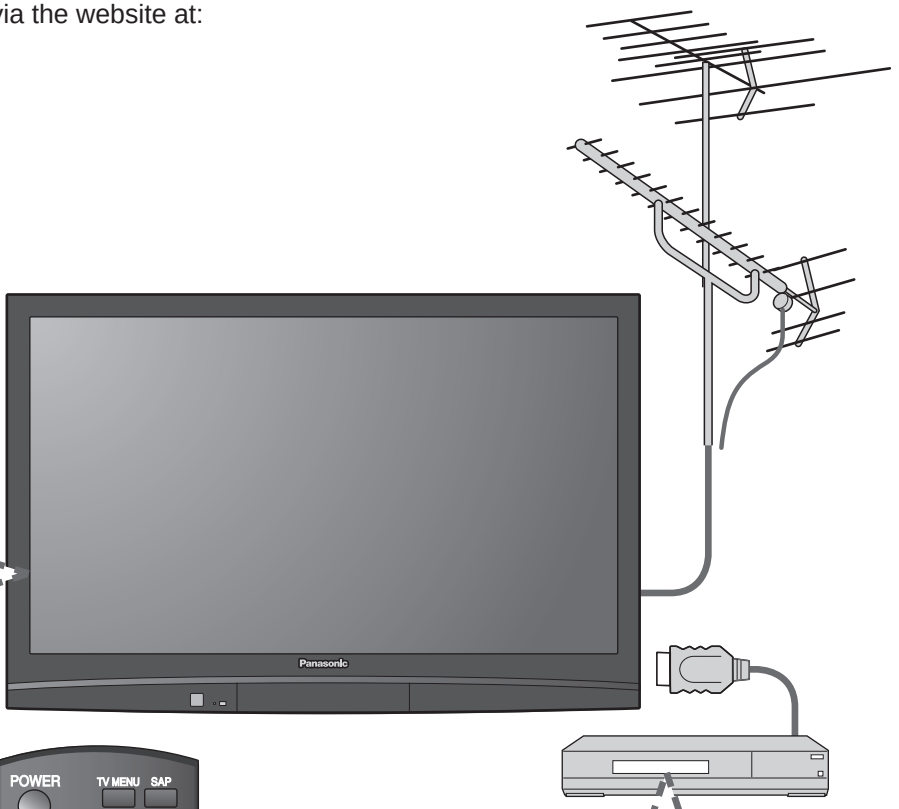


Note

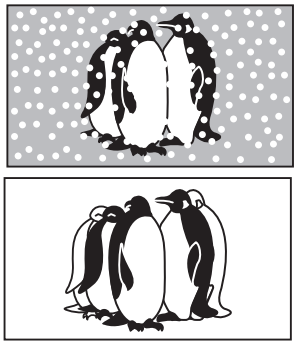
- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

FAQ

Before requesting service or assistance, please follow these simple guides to resolve the problem.
If the problem still persists, please contact your local Panasonic dealer or Panasonic Service Center for assistance.
For details (p. 55)
For additional assistance, please contact us via the website at:
www.panasonic.com/contactinfo

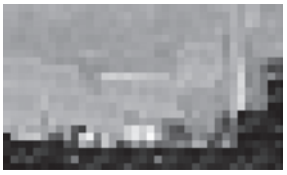


White spots or shadow images (noise)



- Check the position, direction, and connection of the antenna.

Interference or frozen digital channels (intermittent sound)



- Change the direction of antenna for digital channels.
- Check “Signal meter” (p. 35). If the signal is weak, check the antenna and consult your local dealer.

Pictures from external equipment are distorted when the unit is connected via HDMI

- Is the HDMI cable connected properly? (p. 40, 41)
- Turn Off the TV unit and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 48)
- Use equipment compliant with EIA/CEA-861/861B.

Recording does not start immediately

- Check the settings of the recorder. For details, read the manual of the recorder.

The remote control does not work

- Are the batteries installed correctly? (p. 6)
- Are the batteries new?
- Select the correct remote control mode (p. 13, 22)

If there is a problem with your TV, please refer to the table below to determine the symptoms, then carry out the suggested check. If this does not solve the problem, please contact your local Panasonic dealer, quoting the model number and serial number (both found on the rear of the TV).

	Problem	Actions
Screen	**“Press any key to return” moves on the screen**	● The function to prevent “Image retention” is activated. (Not a faulty symptom) ● The screen saver is activated if the TV unit is not operated for a certain time in SD mode. ● “Image retention” (p. 5)
	Some spots remain bright or dark	● The Plasma panel is made up of a few million pixels and is produced with advanced technology through an intricate process. However, sometimes a few pixels may be bright or dark. These pixels do not indicate a defective panel and will have no impact on the performance of the TV.
	Chaotic image, noisy	● Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	● Check Picture menu (p. 24) ● Check the cable connections. (p. 9-12) ● Check that the correct input has been selected. (p. 22)
	Only spots are displayed instead of images	● Check the channel settings. (p. 34) ● Check the antenna cables.
	Neither image nor sound is produced	● Is the AC power cord plugged into the outlet? ● Is the TV unit turned On? ● Check Picture menu (p. 24) and volume. ● Check the AV cable connections. (p. 9-12) ● Check that the correct input has been selected. (p. 22)
	Black Box appears	● Change settings of Closed Caption (CC). (p. 36)
Sound	**No sound is produced**	● Are the speakers’ cables connected correctly? (p. 40) ● Is “Sound Mute” active? (p. 13) ● Is the volume set to the minimum? ● Is “Speaker output” set to “Off”? (p. 24) ● Change “SAP” settings. (p. 18) ● Check “HDMI 1 in”, “HDMI 2 in” or “HDMI 3 in” settings. (p. 24)
	Sound is unusual	● Set “SAP” setting to “Stereo” or “Mono.” ● Check the HDMI device connected to the unit. ● Set the audio setting of the HDMI device to “Linear PCM.” ● If digital sound connection has a problem, select analog sound connection.
	Unknown sound heard **1- Sounds from TV cabinet** **2- Whirring sound** **3- Tick/Click sound** **4- Buzzing sound**	1- Changes in the temperature and humidity of the room may cause the TV’s cabinet to expand or contract and produce metallic sounds. This is not a sign of faulty operation or a malfunction. 2- The TV may have a cooling fan that makes a soft whir. This is not a sign of faulty operation or a malfunction. 3- When the TV is powered on, an electrical component in the TV activates producing a tick/click sound. This is not a sign of faulty operation or a malfunction. 4- Electrical circuits are active while the TV set is on. This is not a sign of faulty operation or a malfunction.
TV set	**Parts of the TV set become hot.**	● Even when the temperature of parts of the front, top and rear panels has risen, these temperature rises will not pose any problems in terms of performance or quality.

Limited Warranty (for U.S.A.)

**PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF
PANASONIC CORPORATION OF NORTH AMERICA
One Panasonic Way
Secaucus, New Jersey 07094**

**PANASONIC SALES COMPANY,
DIVISION OF
PANASONIC PUERTO RICO, INC.
Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park
Carolina, Puerto Rico 00985**

Panasonic Color Television
Limited Warranty

Limited Warranty Coverage
If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Puerto Rico, Inc. (collectively referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("Limited Warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

CATEGORIES	ALL PARTS EXCEPT GLASS PANEL OR CRT	LABOR	GLASS PANEL OR CRT	GLASS PANEL OR CRT LABOR	SERVICE
PLASMA DISPLAY	1 (ONE) YEAR	1 (ONE) YEAR	GLASS PANEL - 2 (TWO) YEARS	1 (ONE) YEAR	ON-SITE OR CARRY-IN

During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" Limited Warranty period, there will be no charge for parts.
You must carry-in your product or arrange for on-site service during the Limited Warranty period. If non-rechargeable batteries are included, they are not warranted. This Limited Warranty only applies to products purchased and serviced in the United States or Puerto Rico. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of the original purchase date is required for Limited Warranty service.

On-Site or Carry-in Service
For On-Site or Carry-In Service in the United States call 1-877-95-VIERA (1-877-958-4372).
For assistance in Puerto Rico call Panasonic Puerto Rico, Inc. (787)-750-4300 or fax (787)-768-2910.

On-site service where applicable requires clear, complete and easy access to the product by the authorized servicer and does not include removal or re-installation of an installed product. It is possible that certain on-site repairs will not be completed on-site, but will require that the product or parts of the product, at the servicer's discretion be removed for shop diagnosis and/or repair and then returned.

Limited Warranty Limits And Exclusions
This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage, nor does it cover markings or retained images on the picture tube resulting from viewing fixed images (including, among other things, letterbox pictures on standard 4:3 screen TV's, or non-expanded standard 4:3 pictures on wide screen TV's, or onscreen data in a stationary and fixed location). The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, bug infestation, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, or travel to and from the servicer. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE LIMITED WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied Limited Warranty lasts, so the exclusions may not apply to you.

This Limited Warranty gives you specific legal rights and you may also have others rights which vary from state to state. If a problem with this product develops during or after the Limited Warranty period, you may contact your dealer or Service Center. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE (INCLUDING COST OF AN ON-SITE SERVICE CALL, WHERE APPLICABLE) WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer Services Directory (for U.S.A.)

Customer Services Directory

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Service Center; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:

http://www.panasonic.com/help

or, contact us via the web at:

http://www.panasonic.com/contactinfo

You may also contact us directly at:

1-877-95-VIERA (958-4372)

Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

■For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Accessory Purchases

Purchase Parts, Accessories and Instruction Books on line for all Panasonic Products by visiting our Web Site at:

http://www.pstc.panasonic.com

or, send your request by E-mail to:

npcparts@us.panasonic.com

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday - Friday 9 am to 9 pm, EST.)

Panasonic Service and Technology Company

20421 84th Avenue South,

Kent, WA 98032

(We Accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

■For hearing or speech impaired TTY users, TTY: 1-866-605-1277

Service in Puerto Rico

Panasonic Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park,
Carolina, Puerto Rico 00985
Phone (787)750-4300, Fax (787)768-2910

Note

Note

Note

Customer's Record
The model number and serial number of this product can be found on its back cover. You should note this serial number in the space provided below and retain this book, plus your purchase receipt, as a permanent record of your purchase to aid in identification in the event of theft or loss, and for Warranty Service purposes.

Model Number _____ Serial Number _____

Panasonic Consumer Electronics Company,
Division of Panasonic Corporation of North America
One Panasonic Way, Secaucus
New Jersey 07094 U.S.A.

Panasonic Puerto Rico, Inc.
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