

Operating Instructions High Definition Plasma Television Manual de instrucciones Televisor de plasma de alta definición

> Número de modelo TH-42PE77U TH-50PE77U



(See page 6)

## Guía de inicio rápido

(vea la página 6)





or visit us at www.panasonic.com/contactinfo For assistance (Puerto Rico), please call:

787-750-4300

or visit us at www.panasonic.com

For assistance (Canada), please call: 1-800-561-5505

or visit us at www.panasonic.ca

- Para solicitar ayuda (EE.UU.), llame al: 1-888-VIEW-PTV (843-9788) ó visítenos en www.panasonic.com/contactinfo
- Para solicitar ayuda (Puerto Rico), llame al: 787-750-4300 ó visítenos en www.panasonic.com





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.

Español

Lea estas instrucciones antes de utilizar su televisor y guárdelas para consultarlas en el futuro. Las imágenes mostradas en este manual tienen solamente fines ilustrativos.

### Turn your own living room into a movie theater! Experience an amazing level of multimedia excitement





SDHC Logo is a trademark.



GalleryPlayer and the GalleryPlayer Logo are trademarks of GalleryPlayer, Inc. EZ Sync™

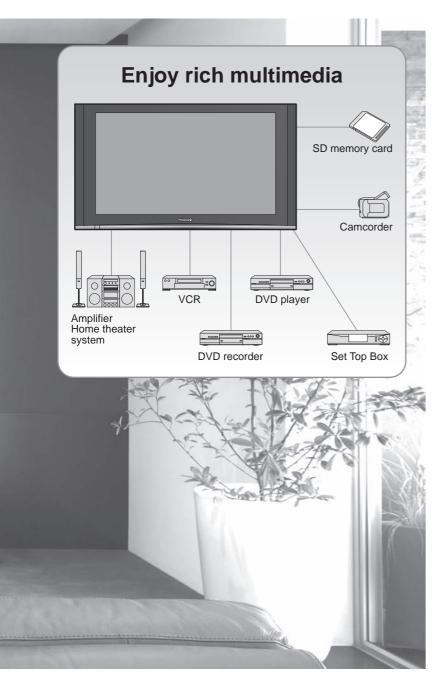
EZ Sync™ is a trademark of Matsushita Electric Industrial Co., Ltd.

### HDAVI Control<sup>™</sup>

HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

HOMI

HDAVI Control<sup>™</sup> is a trademark of Matsushita Electric Industrial Co., Ltd.





Manufactured under license from Dolby Laboratories. DOLBY and the double-D symbol are trademarks of Dolby Laboratories.

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# **Safety Precautions**







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 electric shock, do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.

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.
- 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.
- 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:

Any changes or modifications not expressly approved by responsible party may cause harmful interference and 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 |
|                    | 1-888-VIEW-PTV (843-9788)              |
| email:             | consumerproducts@panasonic.com         |



### 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

Matsushita Electric Industrial Co., Ltd.)

- Wall-hanging bracket (Vertical) TY-WK42PV3U
- Wall-hanging bracket (Angled) TY-WK42PR2U
  - TY-WK42PR3U

#### 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 cable. When disconnecting the power cable, hold the plug, not the cable.

Do not make any modifications to, place heavy objects on, place near hot objects, heat, bend, twist or forcefully pull the power cable. Doing so may cause damage to the power cable which can cause fire or electric shock. If damage to the cable 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.

### 

#### 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.

If using the pedestal, leave a space of 3 15/16 " (10 cm) or more at the top, left and right, 1 49/64 " (4.5 cm) or more at the bottom, and 2 3/4 " (7 cm) or more at the rear.

### ■ 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 cable 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.

### **Typical still images**

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

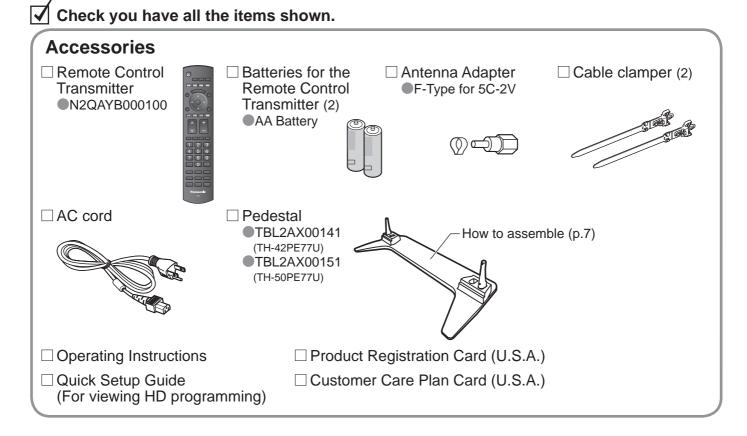


To prevent "Image retention", the screen saver is automatically activated after a few minutes if no signals are sent or no operations are performed. (p. 53)

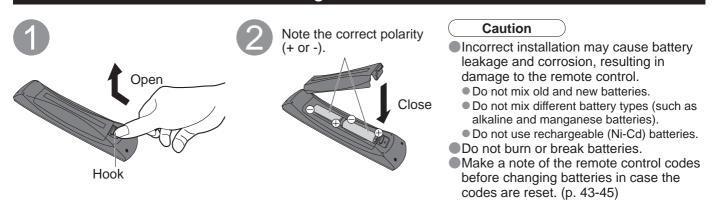
### Setup

- 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**



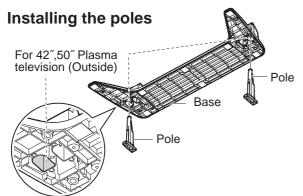
### Installing remote's batteries



**Optional Accessory** 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 818 plasma TV stand or pedestal, and be absolutely sure to take steps to prevent the TV from tipping Wall-hanging bracket over. (vertical) (angle) Handle the TV carefully during installation since TY-WK42PV3U TY-WK42PR2U subjecting it to impact or other forces may cause TY-WK42PR3U its paneling to crack.

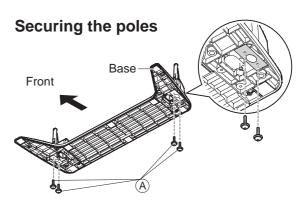
### Attaching the pedestal to TV

### Assembling the pedestal



Insert the poles into the left and right holes in the underside of the base so that they fit securely as shown in the illustration above.

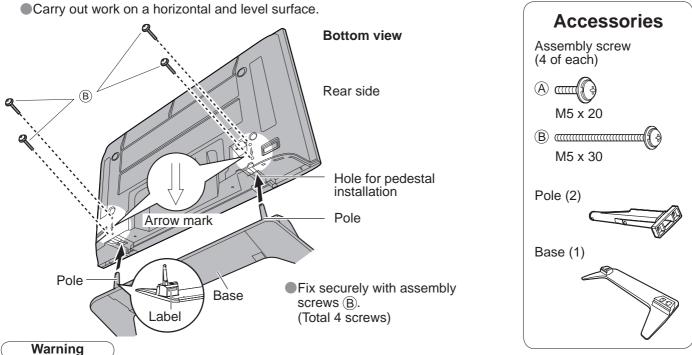
### Set-up



Use the assembly A screws to secure the poles firmly to the bottom of the base.

### Note

Forcing the assembly screws the wrong way will strip the threads.



### 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 television or displays other than those given in this Operating Instructions.

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 while 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.

### Use the accessory fall-prevention brackets to secure the TV.

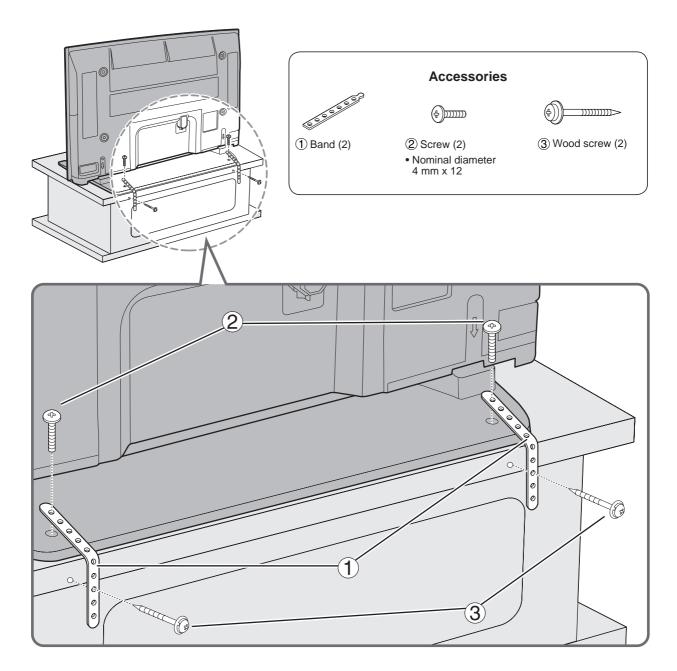
If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.

# **To Prevent TV from Falling Over**

The TV must be fastened to both a base and a wall.

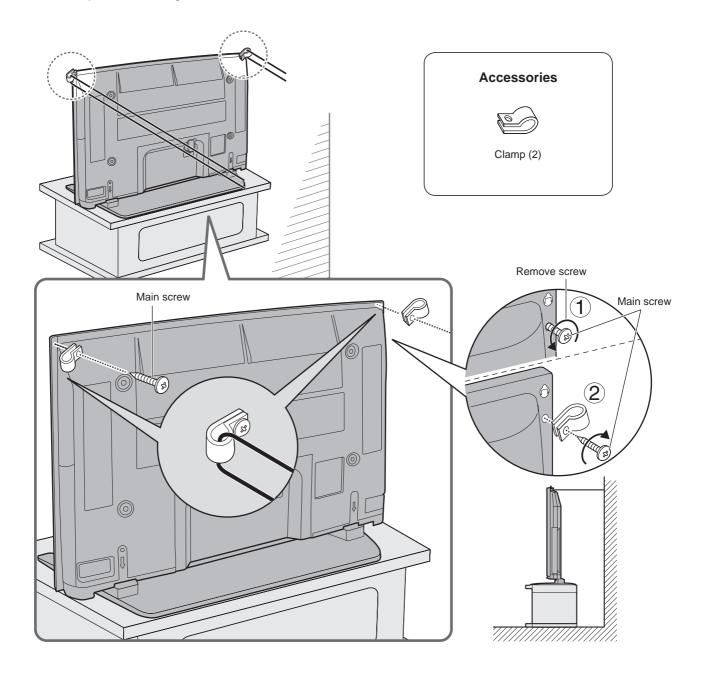
### Securing to a base

Fix pedestal and base together with band.



### Securing to a wall

Fix to wall or post with strong commercial wire or chain.



# **Before Connection**

### **Connected Equipment Introduction (Signal source)**

### Watching 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.

### Cable Box/Cable

•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 box. The connection can be done with the use of HDMI or Component Video cable.

#### Recording/playing back with DVD recorder or VCR DVD Recorder

This source has higher resolution through interlace or progressive signal. Connection can be done with the use of Component Video or HDMI cable. VCR

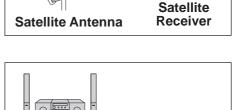
Connection can be done with the use of an RF cable and Composite Video/S Video cable.

### Watching Satellite

**HDMI** connection

•You can enjoy high-definition programming by subscribing to high-definition satellite source. Connection can be done with the use of HDMI or Component Video cable.

Enjoying Home theater and DVD recorder with



Home theater and DVD Recorder HDMI connection enables you to enjoy higher quality audio and video with a single cable.

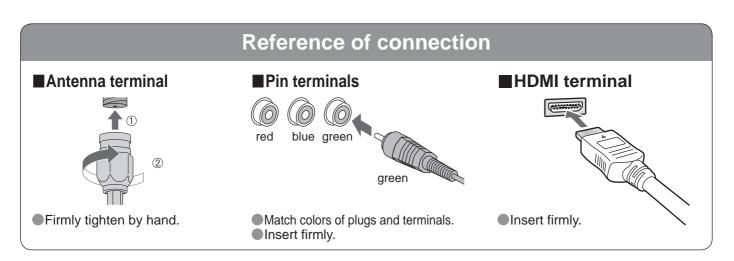


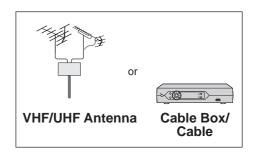
### Note

If your Panasonic DVD Recorder is compatible with EZ Sync (HDAVI control 2), you can operate your Panasonic DVD Recorder with this TV's remote control (p. 25 EZ Sync<sup>™</sup>).

All cables and external equipment shown in this book are not supplied with the TV.

For the details of the external equipment's connections, please refer to the operating manuals of the equipment.





**DVD Recorder** 

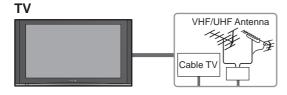
°O

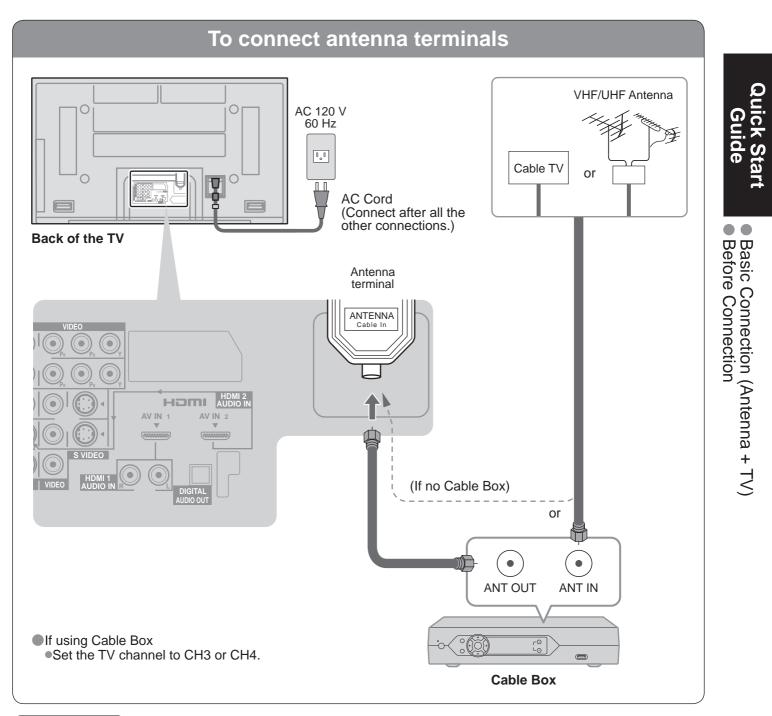
VCR

# **Basic Connection**

### Example 1

### Connecting Antenna (To watch TV)





### Note

When disconnecting the power cord, be absolutely sure to disconnect the power cord plug at the wall outlet first.
 For additional assistance, visit us at: www.panasonic.com

#### www.panasonic.ca

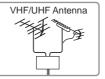
# **Basic Connection** (Continued)

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

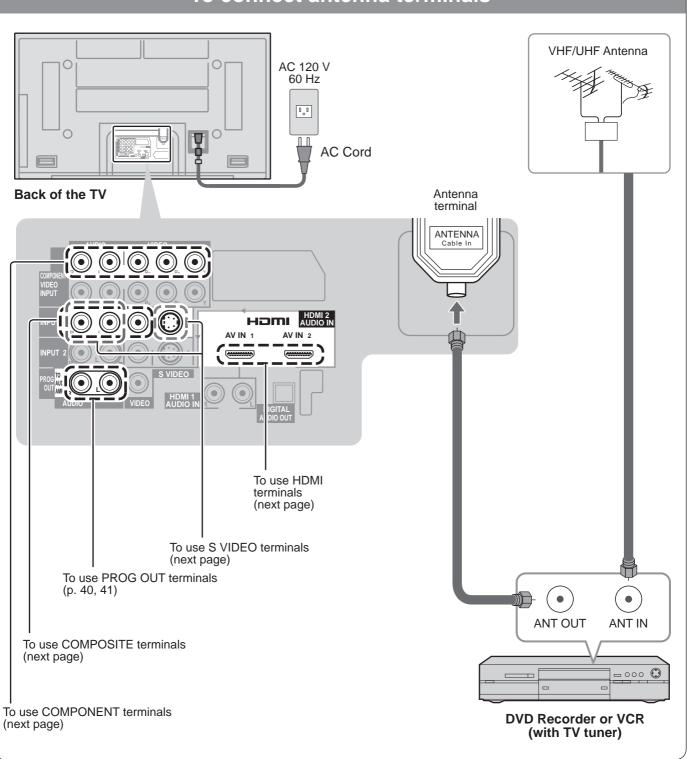
### τν

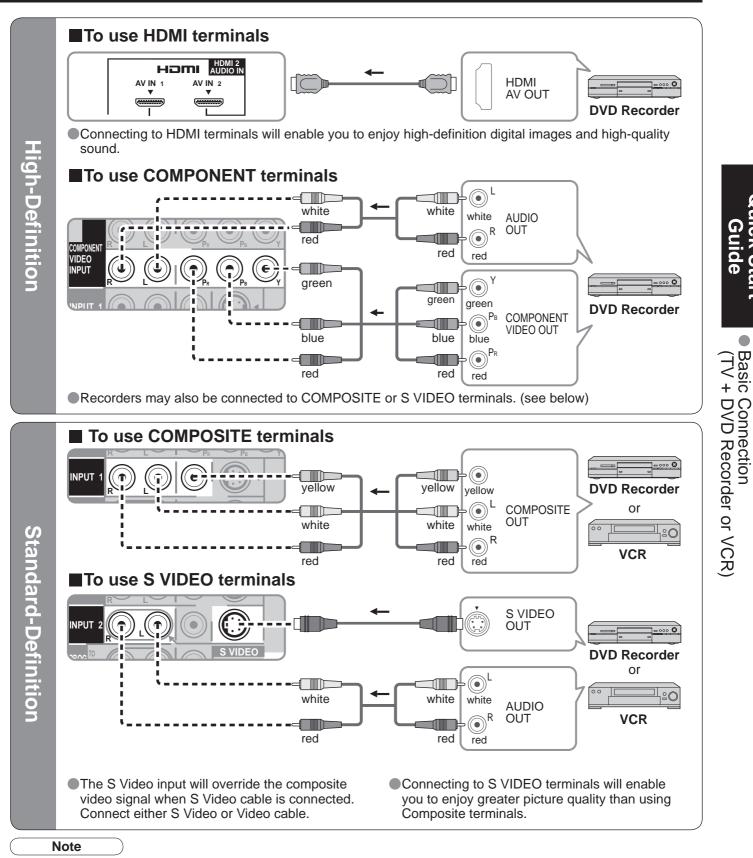


### **DVD Recorder** or VCR 000 **C**



### To connect antenna terminals



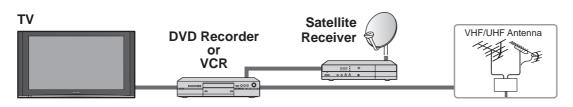


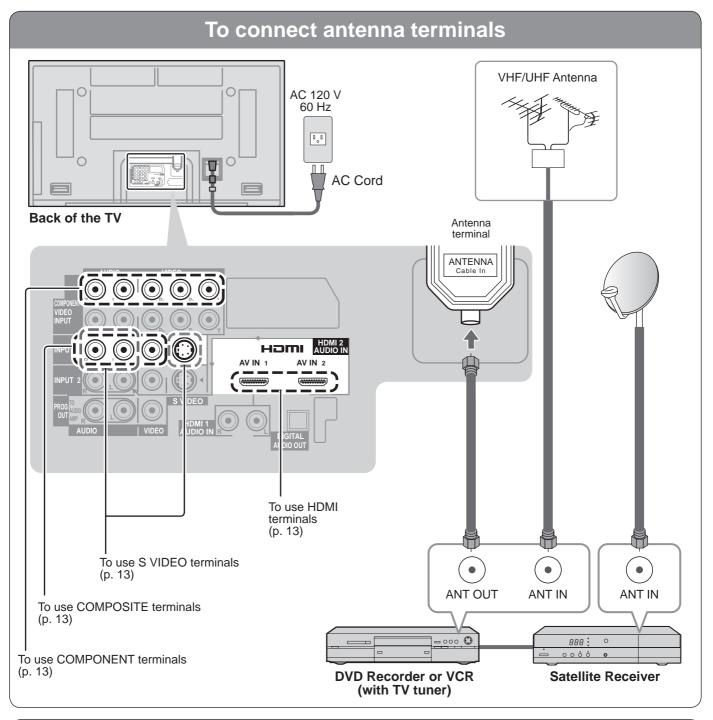
Some programs contain a copyright protection signal to prevent recording.

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.

# Basic Connection (Continued)

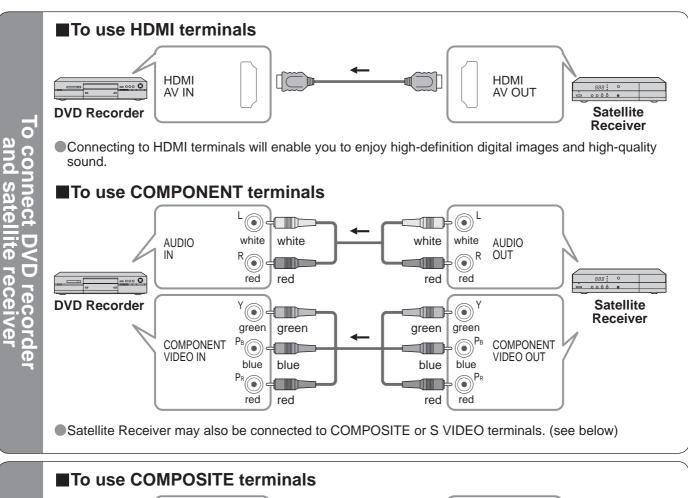
### **Example 3** Connecting DVD recorder (VCR) and satellite receiver

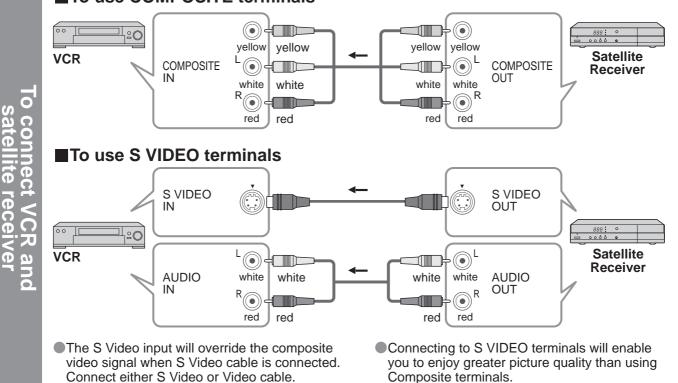




### Connecting TV and DVD recorder (VCR)

Connect in the same way as on p. 13.



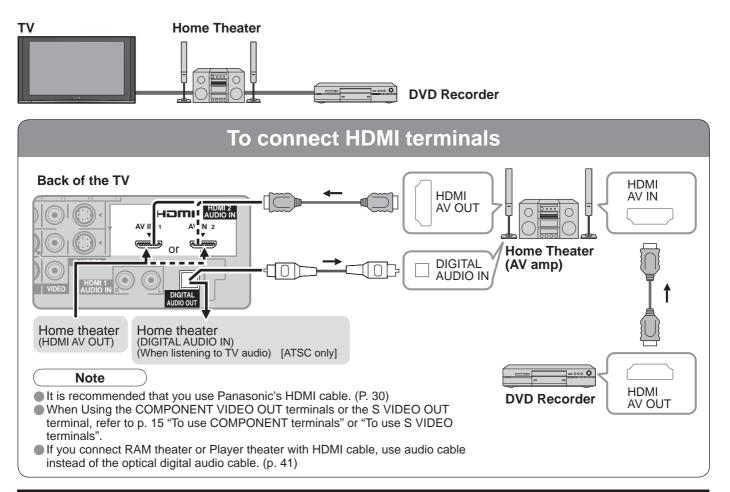


Quick Star Guide

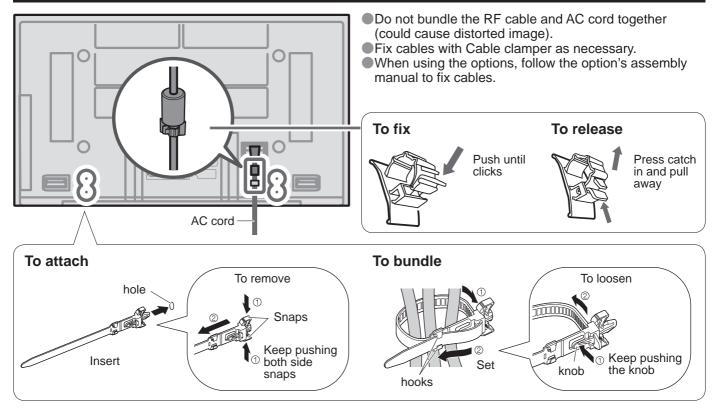
Basic Connection (TV + DVD Recorder or VCR + Satellite receiver)

# Basic Connection (Continued)

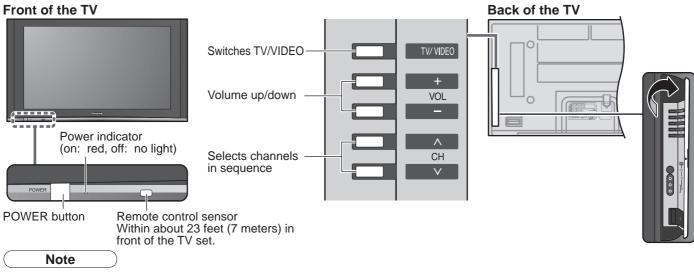
### **Example 4** Connecting Home Theater and DVD recorder



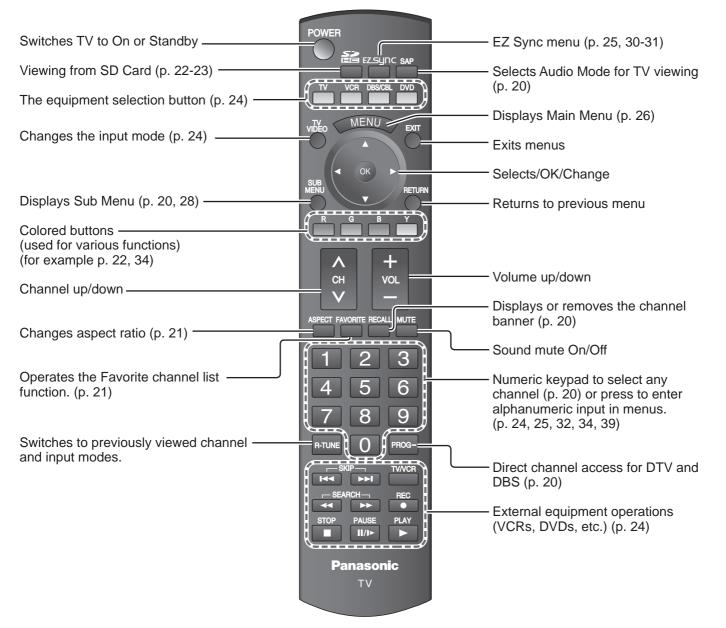
### **Cable Binding Instructions**



# **Identifying Controls**

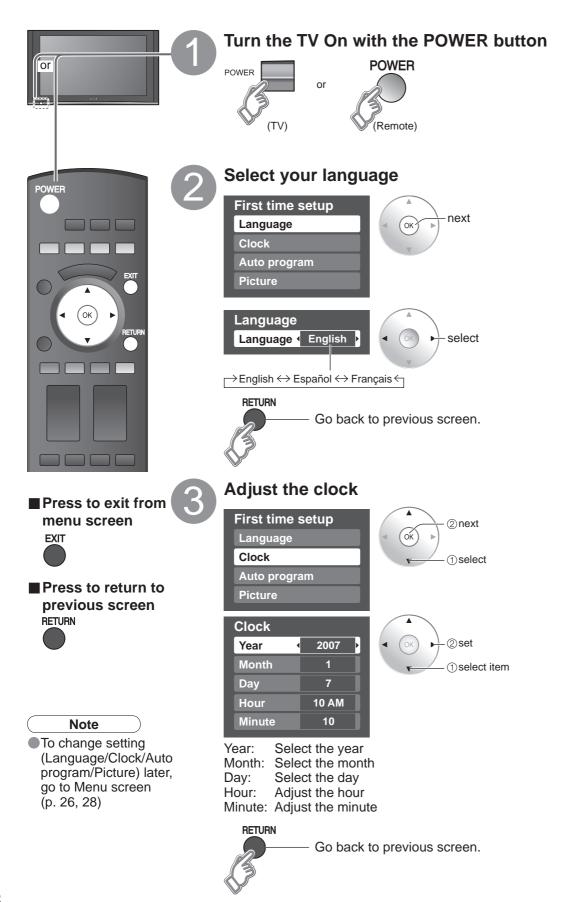


• The TV consumes a limited amount of power as long as the power cord is inserted into the wall outlet.



# **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. 28-29) is set to "No".



18



### Press to exit from menu screen



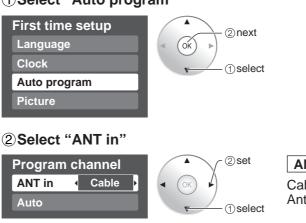
Note

About broadcasting systems

#### Analog (NTSC): traditional TV programming Digital (ATSC): new programming that allows you to view more channels featuring high-quality video and sound

### Auto channel setup

### (1) Select "Auto program"

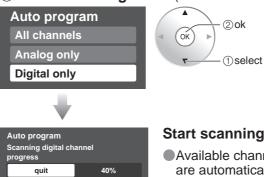


### ANT in Cable: Cable TV Antenna: Antenna

### ③Select "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 Scans Analog channels only Analog only: Scans Digital channels only Digital only:

### **5**Confirm registered channels



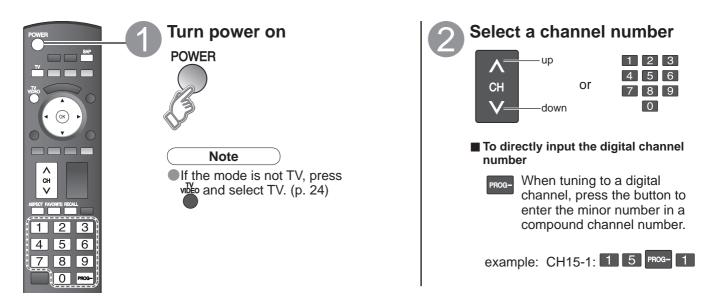
If OK is not pressed after selecting "Apply", the channels will not be saved. If you perform scanning more than twice, previously saved channels are erased.

| First time setup |     |
|------------------|-----|
| Language         |     |
| Clock            |     |
| Auto program     |     |
| Picture          | (Re |
|                  |     |

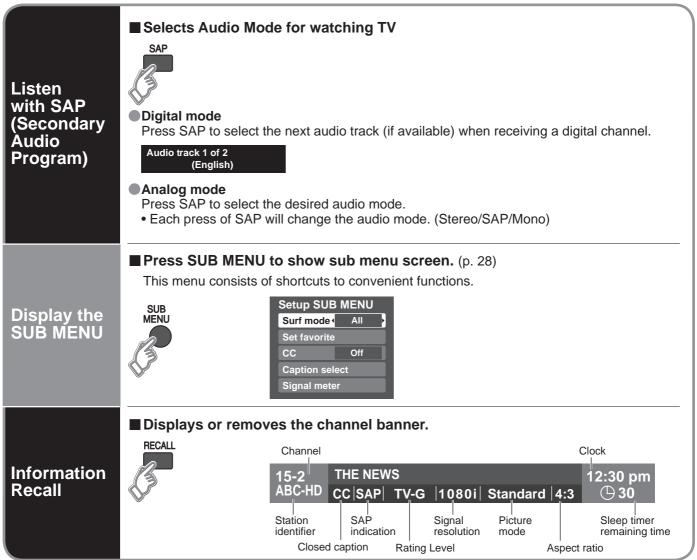
efer to p. 26)

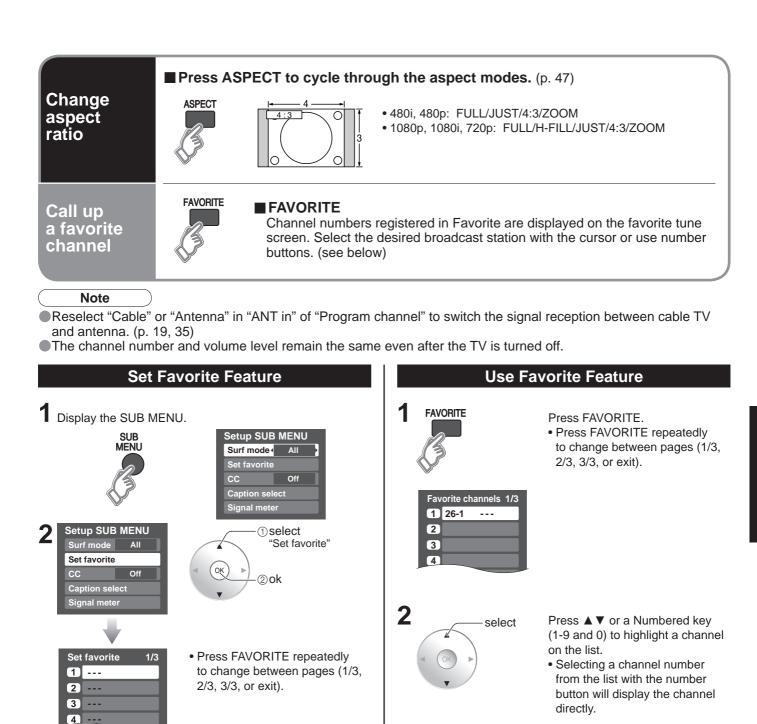
# Watching TV

Connect the TV to a cable box/cable, set-top-box, satellite box, or antenna cable (p. 10-15)



### ■ Other Useful Functions (Operate after 2)





Press OK to display the

highlighted channel.

Viewing

To delete a favorite channel

(1) select

2) **ok** 

---

1/3

3

οĸ

Set favorite

1 26-1

2

3

4

A saved channel can be removed from the list by holding down OK while its position is highlighted.

on the list.

Press ▲ ▼ to highlight a position

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.

Then, press OK to save the

### To change the page

Pressing < changes the page backward.

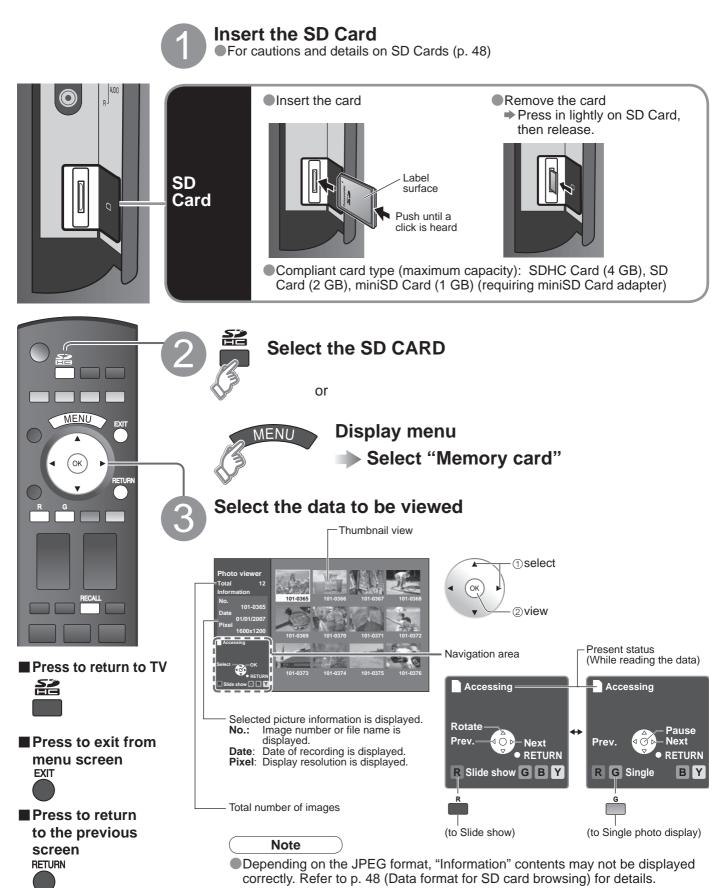
3

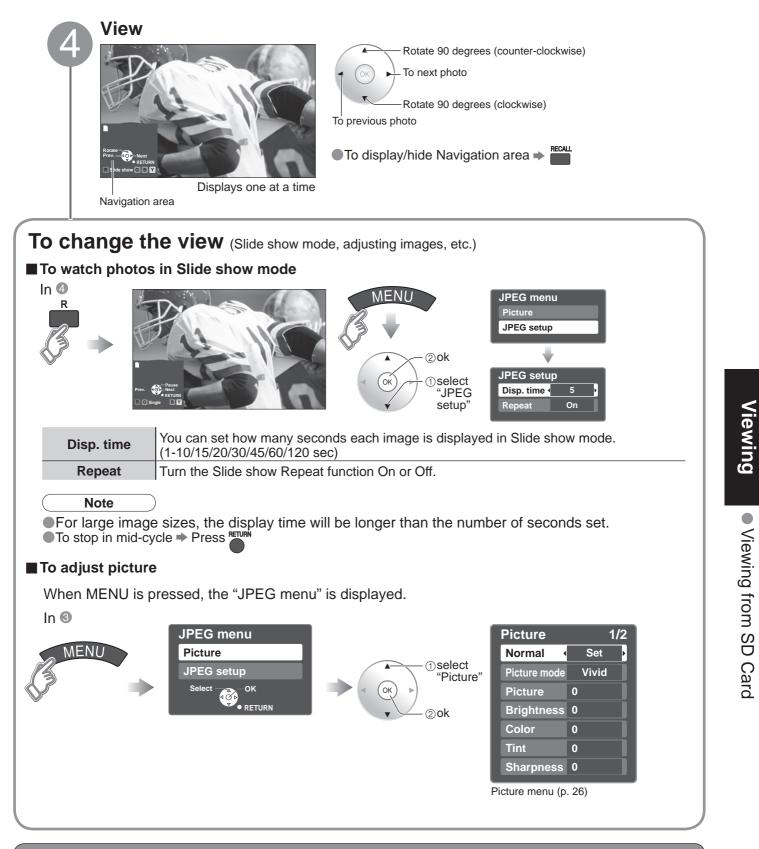
ok

OK)

# Viewing from SD Card

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





### Viewing from a GalleryPlayer SD Card

You can view high-definition art and photography purchased on or downloaded to an SD card. GalleryPlayer provides pre-loaded SD cards with copy-protected imagery and images for download to your computer that can be saved on an SD card for display on your television.

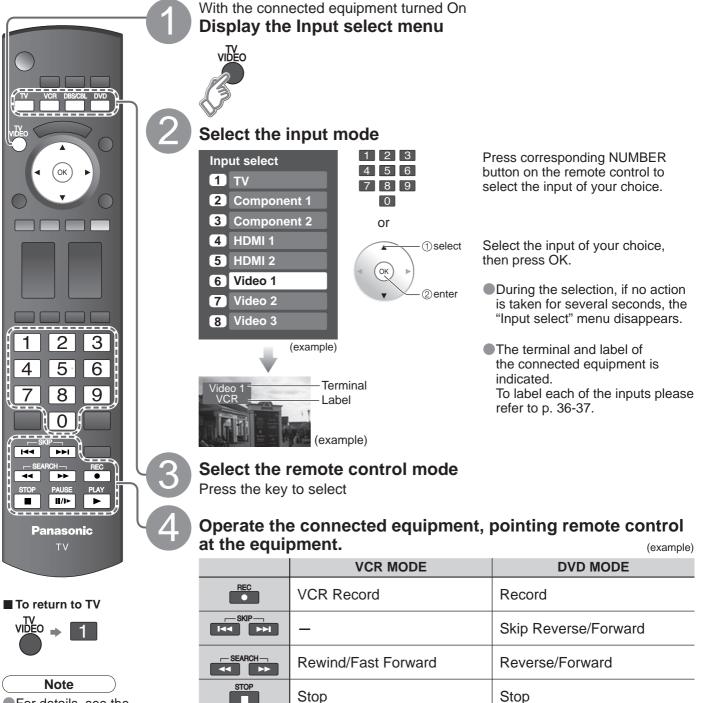
# Watching Videos and DVDs

If you have some 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)



For details, see the manual of the equipment.

(For other operations, see p. 42)

Pause

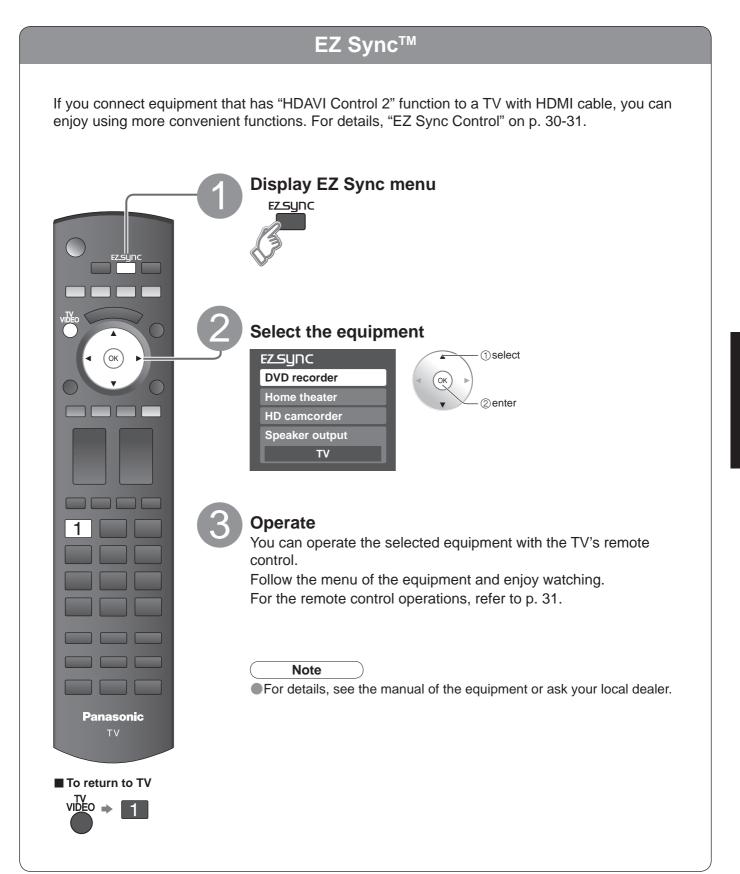
Play

Pause

Play

PAUSE

||/|► PLAY



Watching Videos and DVDs

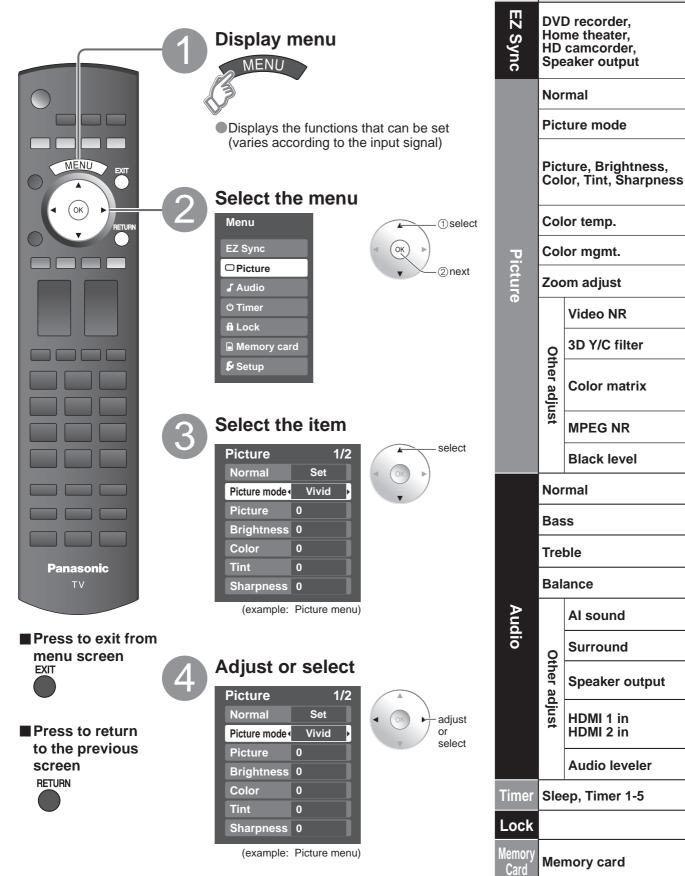
# How to Use Menu Functions

Menu list

Item

Menu

Various menus allow you to make settings for the picture, sound, and other functions so that you can enjoy watching TV in your own way.



| Adjustments/Configurations (a  | alternatives)                               |
|--|---|
| <ul> <li>[DVD recorder/Home theater/HD camcorder]</li> <li>Select equipment to access and operate. (p. 30)</li> <li>[Speaker output]</li> <li>Select audio output. (Home theater/TV) (p. 30)</li> <li>EZ Sync menu is accessible directly by pressing the EZ Sync button on the</li> </ul> | remote control. ➡ EZSUNC (p. 25)            |
| Resets all picture adjustments to factory default settings except for "Other ad  | djust" (Set/No) Normal Set                  |
| Basic picture mode (Vivid/Standard/Cinema/Custom) (p. 49)  | Picture mode Vivid                          |
| Adjusts color, brightness, etc. for each picture mode to suit your taste   | Picture+20Tint0Brightness0Sharpness0Color00 |
| Selects level of warm colors (red) and cool colors (blue) (Cool/Normal/Warr  | m) Color temp. Cool                         |
| On: Enhances green and blue color reproduction, especially outdoor scenes  | s. (On/Off) Color mgmt. On                  |
| Adjusts vertical alignment and size when aspect setting is "ZOOM" (p. 47)  | 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 Off                           |
| <ul> <li>Selects image resolution of component-connected devices (HD/SD)</li> <li>SD: Standard Definition HD: High Definition</li> <li>Only 480p signal accepted; regular TV (NTSC) is not available.</li> </ul>   | Color matrix SD                             |
| Reduces noise of specific digital signals of DVD, STB, etc. (On/Off)   | MPEG NR Off                                 |
| Selects Dark or Light. Valid only for external input signals. (Dark/Light)   | Black level Light                           |
| Resets Bass, Treble and Balance adjustments to factory default settings. (Se   | et/No) Normal Set                           |
| Increases or decreases the bass response.  | Bass + 4                                    |
| 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   | n/Off) Al sound On                          |
| Enhances audio response when listening to stereo. (On/Off)   | Surround Off                                |
| Switches to "Off" when using external speakers (On/Off)<br>• "Al sound", "Surround", and "Audio leveler" do not work if "Off" is selected  | Speaker output On                           |
| Selects according to the signal when HDMI is connected (Auto/Digital/Anal<br>• Auto: Automatically selects Analog / Digital signal   | log) HDMI1 in Auto<br>HDMI2 in Auto         |
| Minimizes volume disparity after switching to external inputs  | Audio leveler 0                             |
| The TV can automatically turn On/Off at the designated date and time (p. 38  | B) Sleep 60                                 |
| Locks the channels and programs (p. 32)  |   |
| Displays SD card data (p. 22)  | Memory card                                 |
|  |   |

 How to Use Menu Functions (picture, sound quality, etc.)

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

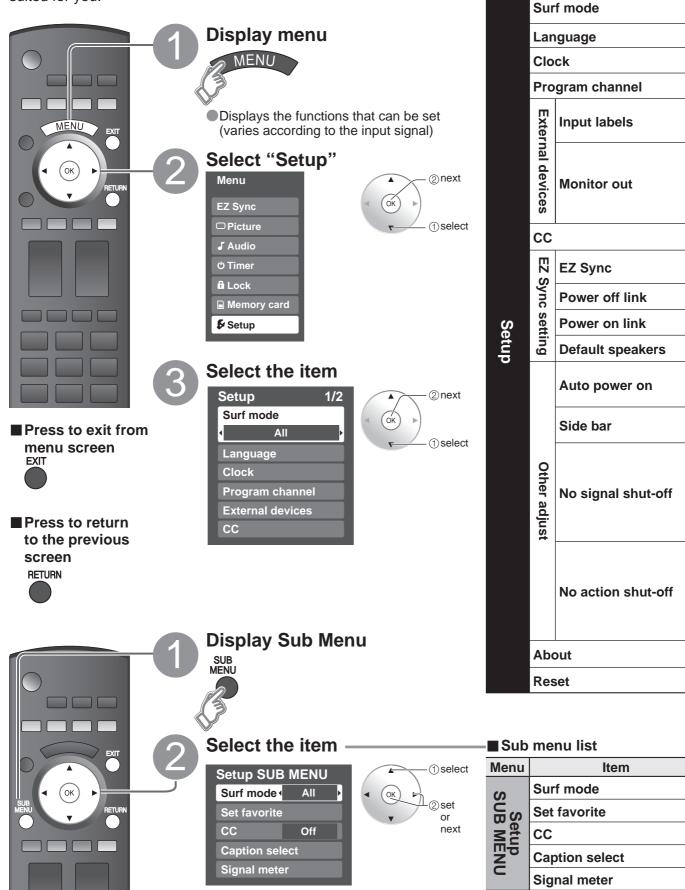
# How to Use Menu Functions

Menu list

Item

Menu

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



### (Continued)

| Adjustments/Configurations (alternatives)   |                 |
|---|-----------------|
| Sets the mode to select the channel with Channel up/down button (Favorite/All) <ul> <li>Favorite: Only channels registered as FAVORITE (p. 35)</li> </ul> | Surf mode All   |
| Selects the screen menu language (p. 18)  | Language        |
| Adjusts the clock (p. 18)   | Clock           |
| Sets channels (p. 34)   | Program channel |

Selects the terminal and label of the external equipment (p. 36)

[Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video 2/Video 3] To prevent howling and image oscillation, stops output of the pictures and audio specified in this menu. (p. 36) (On/Off)

| Displays subtitles (Closed Caption) (p. 36)  | CC                     | : |
|--|------------------------|---|
| Controls equipment connected to HDMI terminals (p. 30) <b>(On/Off)</b><br>• "Power off link", "Power on link", and "Default speakers" cannot be selected if "Off" is set.  | EZ Sync On             |   |
| Sets "Power off link" of HDMI connection equipment (p. 30) (Set/No)  | Power off link Set     |   |
| Sets "Power on link" of HDMI connection equipment (p. 30) (Set/No)   | Power on link Set      |   |
| Selects the default speakers (p. 30) (TV/Theater)  | Default speakers TV    |   |
| <ul> <li>Turns TV On automatically when the cable box or a connected device is turned On (No/Set)</li> <li>The "Sleep" timer, "On / Off timer", and "First time setup" will not function if "Auto power on" is set. (p. 38)</li> </ul>   | Auto power on No       |   |
| Increases the brightness of the side bar (Bright/Off/Dark/Mid) (4:3 mode only)<br>The recommended setting is "Bright" to prevent panel "Image retention". (p. 49)  | Side bar Bright        |   |
| <ul> <li>To conserve energy, the TV automatically turns off when NO SIGNAL continues more than 10 minutes. (Set/No)</li> <li>Note</li> <li>Not in use when setting "Auto power on", "On/Off Timer", "Lock", "SD Mode", or Digital channel.</li> <li>"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".</li> <li>The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.</li> </ul> | No signal shut-off Set |   |
| <ul> <li>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)</li> <li>Note</li> <li>Not in use when setting "Auto power on" or "On/Off Timer".</li> <li>"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".</li> <li>The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.</li> </ul>     | No action shut-off No  |   |
| Displays TV version and software license.  | About                  |   |
| Performing Reset will clear all items set with Setup, such as channel settings. (p. 34)  | Reset                  |   |

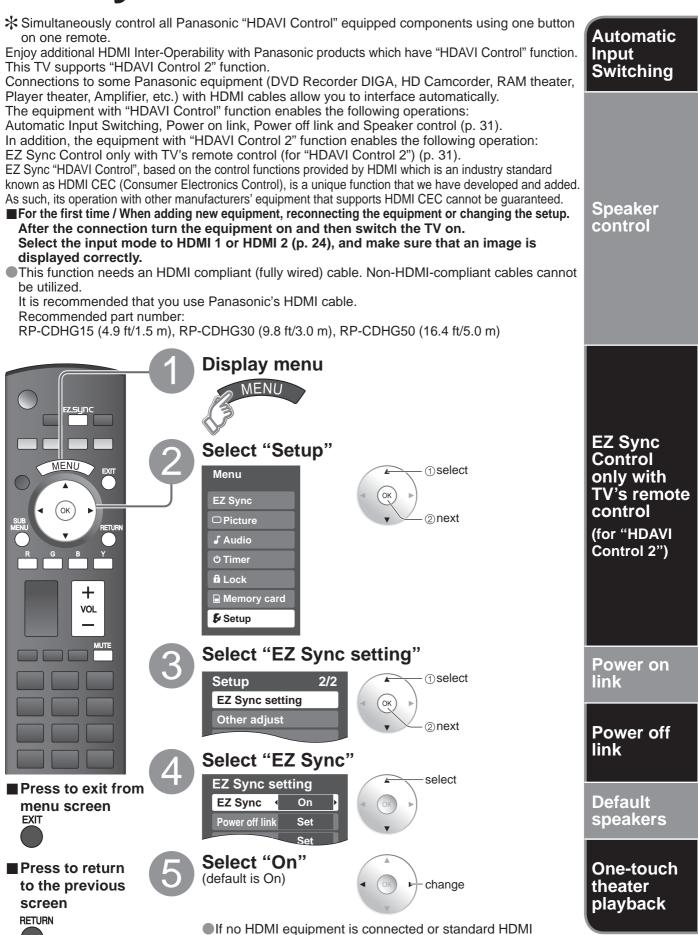
| Adjustments/Configurations (alternatives)                                      |  |
|--|--|
| Sets the mode to select the channel with Channel up/down button (Favorite/All) |  |
| Sets favorite channels. (p. 21)  |  |
| Displays Closed Caption. (p. 36) (Off/On)                                      |  |
| Changes the station identifier. (p. 34)  |  |

Checks the signal strength if interference or freezing occurs on a digital image. (p. 34)

How to Use Menu Functions (picture, sound quality, etc.)

Advanced

# EZ Sync<sup>™</sup> "HDAVI Control<sup>™</sup>"\*



equipment (non- "EZ Sync") is used, set to "Off".

Advanced

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.

You can select Home theater, or TV speakers for audio output.

Control theater speakers with the TV's remote control.

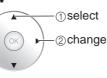
This function is available only when Panasonic Amplifier or Player theater is connected.

### 

### <sup>2</sup>Select "Speaker output"

**3**Select "Home theater" or "TV"





### The sound of TV is muted.

Volume up / down

Mute

•When the equipment is turned off, TV speakers become active.

╋

VOL

**Home theater:** Adjustment for equipment

MUTE

- Selecting "Home theater" turns the equipment on automatically if it is in standby mode.
- **TV:** The TV speakers are active.

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

### 

### <sup>2</sup>Select the equipment you want to access.





You can select available items only.

### <sup>3</sup>Operate the equipment with the TV's remote control, pointing it at the TV.

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

### When "Set" is selected (p. 29), TV is turned on automatically and switches to the appropriate HDMI input whenever EZ Sync compatible equipment is initially turned on and Play mode is selected.

When "Set" is selected (p. 29) and the TV is turned off, all connected EZ Sync 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 EZ Sync 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.

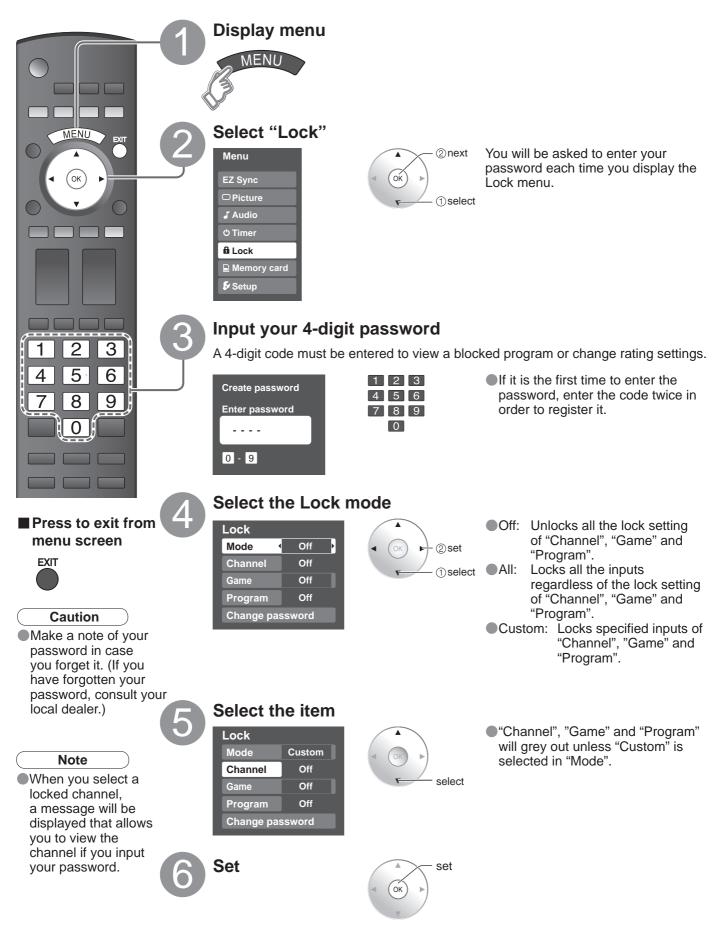
③ Audio is muted on the TV and switches to the theater system.

### 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 are displayed on screen |  |
|  |  |

# Lock

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



#### 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" Channel ②Select channel to lock. lock To lock/unlock all channels: Channel lock (1) select Select "Mode" and set to "All" or "Off". Mode Custom > Channel 1 3 All: Locks all channels Channel 2 Off: Unlocks all channels 2) set Locks Channel 3, Channel 4 and external inputs. (1) select Select "Game" in G and set to "On". Game lock On: Locks Off: Unlocks 2) set To set a rating level <sup>(3)</sup>Select the rating to be locked "V-chip" technology enables restricted shows select to be locked according to TV ratings. (1)Select "Mode" and set to "On". **Program lock** Example of "MPAA" (U.S movie ratings) Mode On Monitor out ②set On NR No rating MPAA Off G General Audience: All ages admitted (1) select U.S.TV Off PG Parental Guidance Suggested C.E.L.R Off Parents Strongly Cautioned: Inappropriate for PG-13 C.F.L.R. Off children under 13 Restricted: Under 17 requires accompanying R parent or adult guardian 2 Select the rating category you wish to follow NC-17 No one 17 and under admitted Program ③next Adults only lock Х **Program lock** To get other information (p. 46) Mode On ②set Óк Monitor out On To disable recording of the locked (1)select MPAA Off program U.S.TV Off Select "Monitor out" and set to "On". C.E.L.R. Off On: Turns on the monitor C.F.L.R. Off Program lock terminal output Mode On MPAA: U.S movie ratings for programs that Monitor out • Off U.S.TV: U.S TV program ratings have been set to MPAA Off C.E.L.R.: Canadian English ratings "Blocked." U.S.TV Off C.F.L.R.: Canadian French ratings Off: Turns off the monitor C.E.L.R. Off terminal output C.F.L.R for programs that Off have been set to "Blocked." To change the password Lock Change password Off (1) In (4), select "Change password" and press OK Change Enter new password Channe Off 2 Input the new 4-digit password twice -Off - - - password Program Off 0 - 9 Change password

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

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.

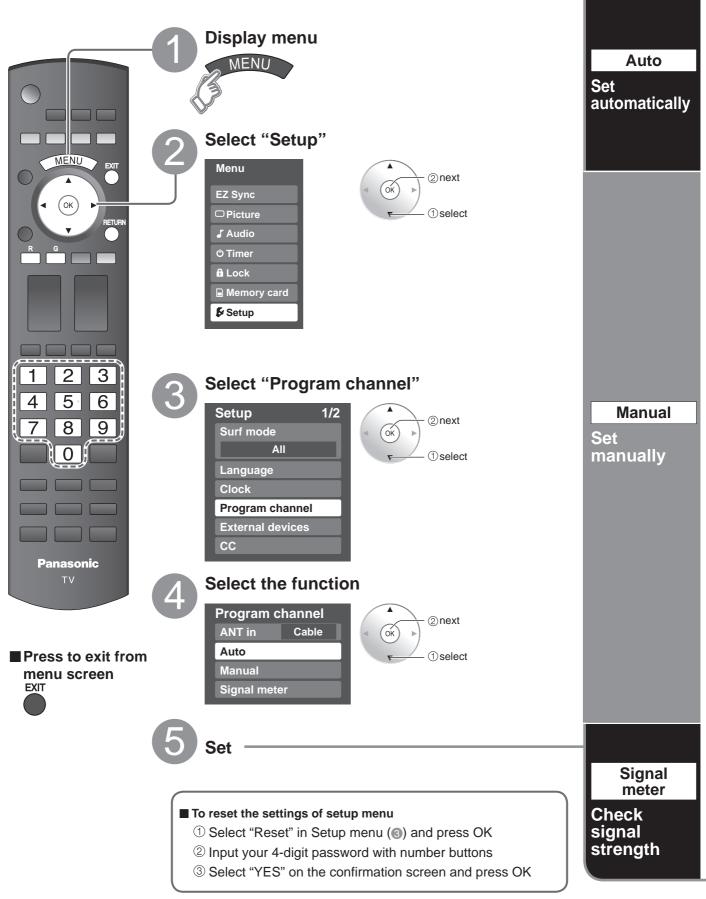
Note

•When placing a block on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.

33

# **Editing and Setting Channels**

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



Automatically searches and adds active channels to memory. (1) Select "ANT in" → Select Cable or Antenna (3) Select scanning mode (p. 19) (p. 19) Auto program 2 Select "Auto" 2**0**k All channels ОК Program channel Analog only (2) next (1)select ANT in Cable OK **Digital only** Auto (1)select Manual Settings are made automatically Signal meter After completing the setting, select "Apply". (see below (5)). All previously saved channels are erased. Use this procedure when changing setting of receiving ③Edit channels or changing the channel display. Caption Also, use to add or skip channels from channel list (1) select Caption select manually. Caption ②change OK (1)Select "Edit" **Caption detail** ③set/next Cancel Apply (ок (1) select Caption **Caption detail** Select the station identifier Rename (maximum 7 characters available) (2) next Favorite (1) select Set favorite 2 Select the item to be edited 1/3 1 26-1 Select item to edit (Caption/Favorite/Add) ②next OK Set favorite Select the number Ye 2next Add RETURN Favorite Press OK to select "Yes (add)" or "No (skip)" Caption: Caption Add Changes the station identifier (4) Move cursor to channel number Favorite: Registers channel to Favorite nselect List Add: 2 Press OK to tune Ĝ Proceed to Adds or skips channels to the channel. **(5) Select "Apply"** next page (1) select "Apply" Go back to previous page Apply Cancel ( ок Ado 2 ok Fav Yes To cancel the Edit Changes will be lost. Continue? 2 ok No Add Yes (returns to "Program (ок (1)select ( ok ) channel") Yes (1) select "Yes" ②next Yes Check the signal strength if interference is found or freezing occurs on a digital image. Signal meter If the signal is weak, check the antenna. Channel If no problem is found, consult your ( ок (1) change channel local dealer. (2) ok Signal strength Note Not available if "Cable" is selected in "ANT in" Current 30% Signal intensity (see above).

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

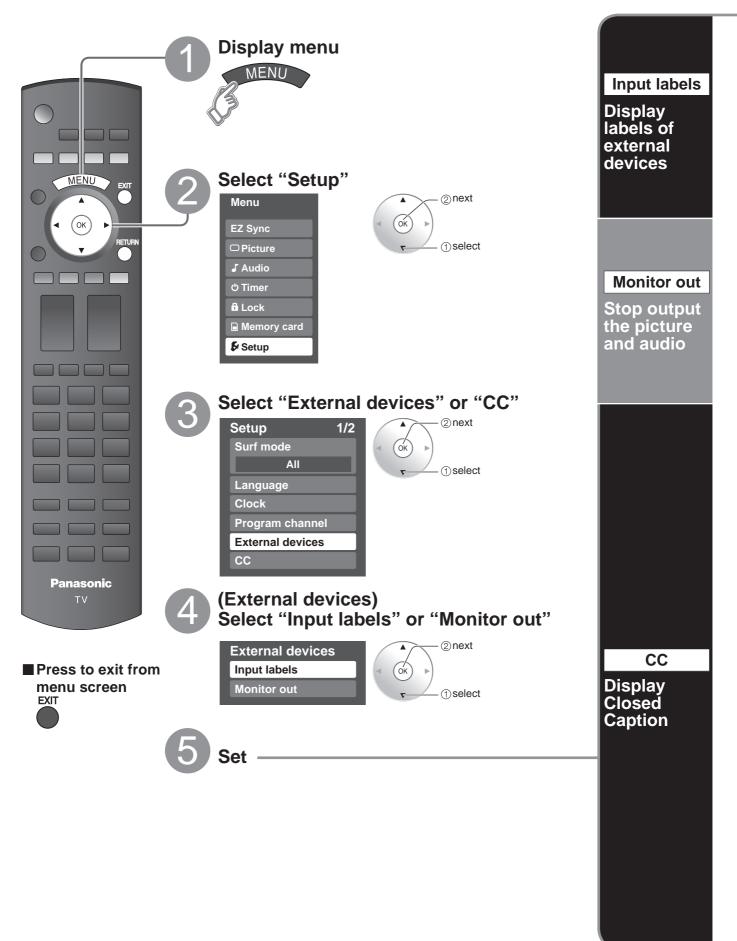
Effective only for digital antenna channels.

Peak level

45%

Advanced

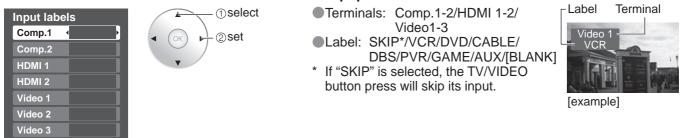
# Input Labels/Monitor Out/



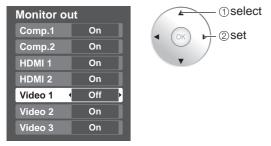
# **Closed Caption**

Devices connected to external input terminals can be labeled for easier identification during input selection. (In selecting input mode from p. 24 <sup>(2)</sup>)

### Select the terminal and label of the external equipment



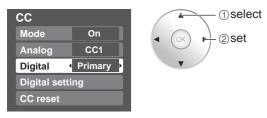
To prevent howling and image oscillation, stops output of the pictures and audio specified in this menu. (p. 28) Select the terminal and set "Off"



- Select "Off" to stop output of picture and audio.
- (Video 1/Video 2/Video 3)
  Comp.1/Comp.2/HDMI 1/HDMI 2 cannot output video signals regardless of "Monitor out" setting.
  When equipment (STB, 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.

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. 47)

### Select the item and set



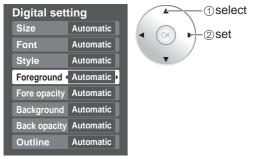
The settings in "Analog" or "Digital" depend on the broadcaster.

| Mode         | Select "On" (when not using, select "Off").   |  |  |
|--------------|---|--|--|
| Analog       | Choose the Closed Caption service of Analog broadcasting.)  |  |  |
| CC1-4:       | Information related to pictures<br>(Appears at bottom of screen)  |  |  |
| T1-4:        | Textual information<br>(Appears over entire screen)   |  |  |
| Digital      | (The Digital Closed Caption menu lets you configure the way you choose to view the digital captioning.) |  |  |
| Select the s | 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.)

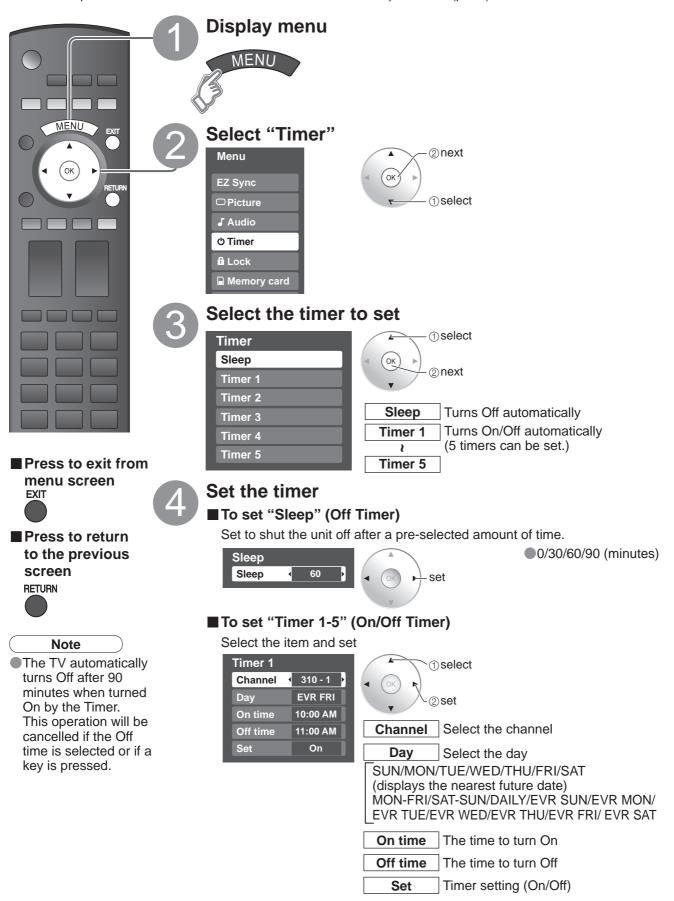
To reset the settings

Select "CC reset" and press OK

# **Using Timer**

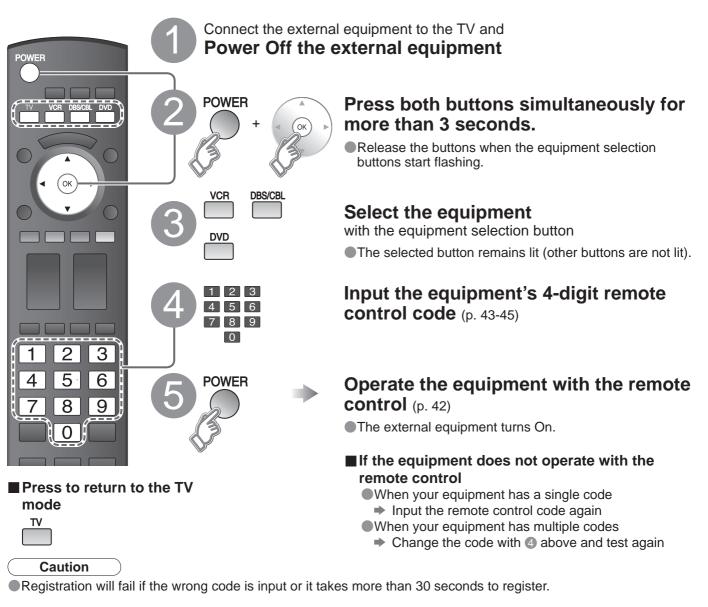
The TV can automatically turn On/Off at the designated date and time. ● The Clock must be set before On time/Off time settings. (p. 18)

The "Sleep" timer and "On / Off timer" will not function if "Auto power on" (p. 29) is set.



# **Operating Peripheral Equipment**

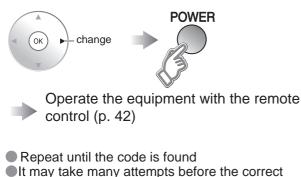
You can operate other manufacturers' equipment using this TV's remote control.



# To find a code not listed in the code list

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

①After step ● above, change the code and test



code is found

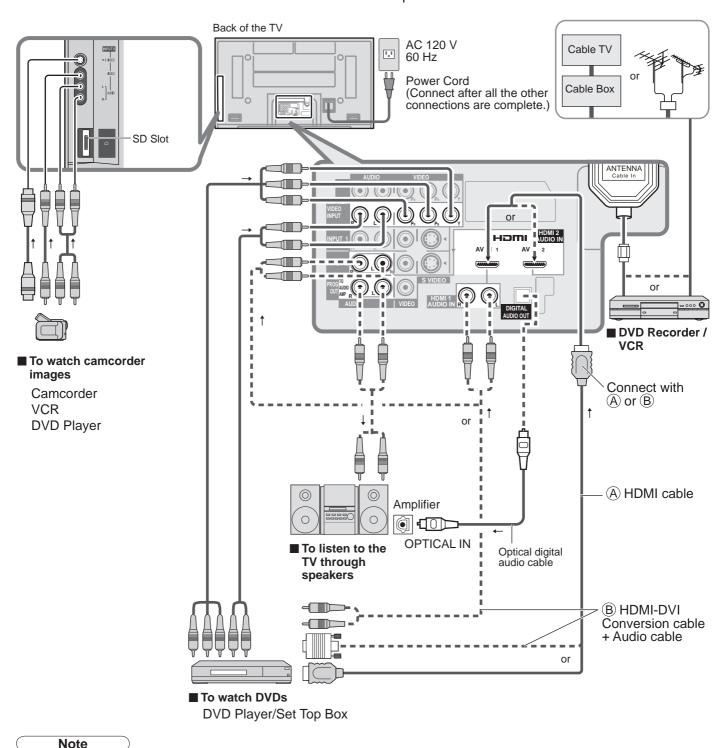
# ②When the correct code is found



# **Recommended AV Connections**

These diagrams show our recommendations for how to connect the TV unit to your various equipment. For other connections, consult the instructions and specifications for each piece of equipment (p. 51). For additional assistance, please visit our website at: www.panasonic.com

www.panasonic.ca



- The picture and audio input signals connected to a terminal specified in "Monitor out" (p. 36) 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. 28, 36)
- When equipment (STB, 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.
- When receiving digital channel signals, all digital formats are down-converted to composite NTSC video to be output through the PROG OUT terminals.

### EZ Sync<sup>™</sup> Connections

Follow the connection diagrams below for HDAVI control of a single AV piece of equipment such as a Panasonic DIGA-DVD recorder, RAM theater, or Player theater system. Refer to page 30-31 for Setup Menu settings and additional control information.

Optional HDMI and/or optical cables are not provided.

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

#### Note

#### HDMI 1 is recommended.

When connecting to HDMI 2, set the input mode to HDMI 2 (p. 24) initially before connecting to HDMI 2. After connection, confirm the HDMI control functions (p. 30-31).

# Connecting this unit to the DIGA, RAM theater, or Player theater

For DIGA: Connect with HDMI cable

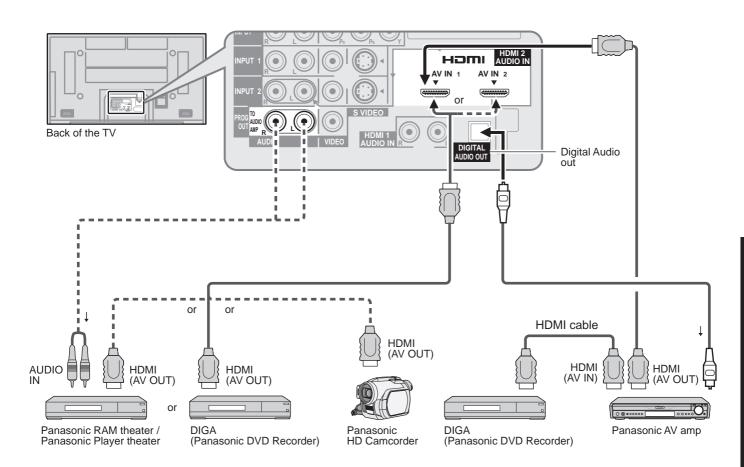
For RAM theater and Player theater:

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 and AV amp

When using an "EZ Sync" audio-video amplifier and a compatible DIGA recorder, use a daisy chain connection as shown below.



•One AV amp and one DIGA recorder can be operated with this unit.

Be sure to connect the AV amp between this unit and the DIGA recorder.

#### Setting of this unit after connection

After making connections as shown above, set "EZ Sync" (under "EZ Sync setting") to "On" using the Setup menu. (p. 30-31).

#### Note

Individual components of 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.

# **Remote Control Operation/Code List**

The following explains how to operate external devices with the remote control. Register the remote control codes (p. 39) if you want to operate an external device of another manufacturer. (p. 43-45)

#### 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.

|                |                     | DBS/CE              | BL MODE             |                      |
|----------------|---------------------|---------------------|---------------------|----------------------|
|                | VCR MODE            | (DBS)               | (CBL)               | DVD MODE             |
| POWER          | Power               | Power               | Power               | Power                |
| SAP            | -                   | LIST                | LIST                | DVD AUDIO            |
| VIDEO          | TV Input Switch     | TV Input Switch     | TV Input Switch     | TV Input Switch      |
| MENU           | _                   | Menu                | Menu                | Functions            |
| EXIT           | -                   | Exit                | Exit                | _                    |
|                |                     | Up/Down/Left/Right  | Up/Down/Right/Left  | Up/Down/Right/Left   |
| < ()K) >       | -                   | Select              | Select              | Enter                |
|                | -                   | Guide               | Guide               | Sub Menu             |
| RETURN         | -                   | PPV/VOD             | PPV/VOD             | Return               |
| R              | _                   | Red                 | A                   | Red                  |
| G              | -                   | Green               | В                   | Green                |
| B              | _                   | Blue                | С                   | Blue                 |
| Y              | _                   | Yellow              | D                   | Yellow               |
| ~<br>он<br>У   | Channel Up/Down     | Channel Up/Down     | Channel Up/Down     | Channel Up/Down      |
| +<br>vol.<br>- | TV Volume Up/Down   | TV Volume Up/Down   | TV Volume Up/Down   | TV Volume Up/Down    |
| ASPECT         | -                   | Aspect              | Aspect              | _                    |
| FAVORITE       | -                   | Favorite            | Favorite            | Direct Navigator     |
| RECALL         | 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                  |
| R-TUNE         | _                   | Last Channel        | Last Channel        | Drive Select         |
| PROG-          | -                   | Sub Channel         | Music               | PROG (Sub Channel)   |
|                | _                   | Page Down/Up        | Page Down/Up        | Skip Reverse/Forward |
| TV/VCR         | 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                 |

# Remote Control Code List

| Cable Conve            |                                     |                           |                   |                    |                                     |                |                  |
|------------------------|-------------------------------------|---------------------------|-------------------|--------------------|-------------------------------------|----------------|------------------|
| Brand                  | Code                                | Brand                     | Code              | Brand              | Code                                | Brand          | Code             |
| A-Mark                 | 0008, 0144                          | Gibralter                 | 0003              | Penney             | 0000                                | Tocom          | 0012             |
| ABC                    | 0003, 0008, 0237                    | GMI                       | 0883              | Philips            | 0317, 1305                          | Torx           | 0003             |
| Accuphase              | 0003                                | GoldStar                  | 0144              | Pioneer            | 0144, 0533, 0877,                   | Toshiba        | 0000             |
| Acorn                  | 0237                                | Hamlin                    | 0009, 0273        |                    | 1877                                | Tristar        | 0883             |
| Action                 | 0237                                | Hitachi                   | 0003, 0008, 0009  | Prism              | 0012                                | United Cable   | 0003, 0276       |
| Active                 | 0237                                | Insight                   | 0476, 0810        | Pulsar             | 0000                                | US Electronics | 0003, 0008, 0276 |
| Americast              | 0899                                | Jerrold                   | 0003, 0012, 0276, | Quasar             | 0000                                | V2             | 0883             |
| Archer                 | 0237                                |                           | 0476, 0810        | RadioShack         | 0883                                | Videoway       | 0000             |
| BCC                    | 0276                                | Memorex                   | 0000              | RCA                | 1256                                | Viewmaster     | 0883             |
| Bell South             | 0899                                | Mitsubishi                | 0003              | Regal              | 0273, 0276, 0279                    | Vision         | 0883             |
| British Telecom        | 0003                                | Motorola                  | 0276, 0476, 0810, | Runco              | 0000                                | Vortex View    | 0883             |
| Century                | 0008                                |                           | 1254, 1376        | Samsung            | 0003, 0144                          | Zenith         | 0000, 0525, 089  |
| Clearmaster            | 0883                                | Multitech                 | 0883              | Scientific Atlanta | 0000, 0003, 0008,                   |                |                  |
| ClearMax               | 0883                                | Nova Vision               | 0008              |                    | 0012, 0237, 0477,                   |                |                  |
| Cool Box               | 0883                                | Novaplex                  | 0008              |                    | 0877, 1877                          |                |                  |
| Coolmax                | 0883                                | NSC                       | 0012              | Sony               | 1006                                |                |                  |
| Director               | 0476                                | Pace                      | 0008, 0237, 0877, | Sprucer            | 0144                                |                |                  |
| osgate                 | 0276                                | 1 400                     | 1877              | Starcom            | 0003                                |                |                  |
| E Signate              | 0144                                | Panasonic                 | 0000, 0008, 0107, | Supercable         | 0276                                |                |                  |
| General                | 0003, 0012, 0276,                   | 1 anasonio                | 0144              | Supermax           | 0883                                |                |                  |
| nstrument              | 0476, 0810                          | Paragon                   | 0000, 0008, 0525  | Thomson            | 1256                                |                |                  |
|                        | DBS/CE                              | Paragon                   | 10000, 0000, 0025 |                    | 1200                                |                |                  |
| Cable/PVR C            | combination (                       | )                         |                   |                    |                                     |                |                  |
| Mericast               | 0899                                | Motorola                  | 0810, 1376        | Scientific Atlanta | 0877, 1877                          | Zenith         | 0899             |
| General                | 0810                                | Pace                      | 0237, 1877        | Sony               | 1006                                | -              |                  |
| nstrument              |                                     | Pioneer                   | 0877, 1877        | Supercable         | 0276                                |                |                  |
| lerrold                | 0810                                | RCA                       | 1256              | Thomson            | 1256                                |                |                  |
| Satellite Rec          | eiver ( DBS/CBL )                   |                           |                   |                    |                                     |                |                  |
| Bell ExpressVu         | 0775                                | GE                        | 0392, 0566        | Motorola           | 0856, 0869                          | Samsung        | 1108, 1109, 1142 |
|                        |                                     |                           | ,                 |                    |                                     | Samsung        | 1276, 1377, 1442 |
| Chaparral              | 0216                                | General                   | 0869              | Netsat             | 0099                                |                | 1609             |
| Crossdigital           | 1109                                |                           | 0775 4775         | Next Level         | 0869                                | 0107           |                  |
| DirecTV                | 0099, 0247, 0392, 0566, 0639, 0724, | GOI                       | 0775, 1775        | Optimus            | 0724                                | SKY            | 0856, 0099       |
|                        | 0749, 0819, 1076,                   | Hitachi                   | 0749, 0819, 1250  | Panasonic          | 0247, 0701, 1786                    | Sony           | 0639, 1639, 1640 |
|                        | 1108, 1109, 1142,                   | Houston                   | 0775              | Paysat             | 0724                                | Star Choice    | 0869             |
|                        | 1377, 1392, 1414,                   | HTS                       | 0775, 1775        | Philips            | 0099, 0722, 0724,                   | Star Trak      | 0869             |
|                        | 1442, 1609, 1639,                   | Hughes Network            | 0749, 1142, 1442, |                    | 0749, 0775, 0819, 1076, 1142, 1442, | Thomson        | 0392, 0566       |
|                        | 1640, 1749, 1856                    | Systems                   | 1749              |                    | 1749                                | Tivo           | 1142, 1442       |
| Dish Network           | 0775, 1005, 1505,                   | Innova                    | 0099              |                    | -                                   | Toshiba        | 0749, 0790, 0819 |
| System                 | 1775                                | Jerrold                   | 0869              | Pioneer            | 1142, 1442                          |                | 1285, 1749       |
| Dishpro                | 0775, 1005, 1505,                   | JVC                       | 0775, 1775        | Primestar          | 0869                                | UltimateTV     | 1392, 1640       |
|                        | 1775                                | LG                        | 1414              | Proscan            | 0392, 0566                          | Uniden         | 0724, 0722       |
| Echostar               | 0775, 1005, 1505,                   | Magnavox                  | 0722, 0724        | RadioShack         | 0566, 0775, 0869                    | Voom           | 0869             |
|                        | 1775                                | McIntosh                  | 0869              | RCA                | 0392, 0566, 0775,                   | Zenith         | 0856, 1856       |
| Expressvu              | 0775, 1775                          | Memorex                   | 0724              |                    | 1142, 1392, 1442                    |                |                  |
| Funai                  | 1377                                | Mitsubishi                | 0749              |                    |                                     |                |                  |
| DBS/PVR Co             | mbination (S) (                     | 3S/CBL                    |                   |                    |                                     |                |                  |
| DirecTV                | 0099, 0392, 0639,                   | Dishpro                   | 0775, 1505        | Motorola           | 0869                                | Sony           | 0639, 1640       |
|                        | 1076, 1142, 1377,                   | Echostar                  | 0775, 1505        | Philips            | 1142, 1442                          | Star Choice    | 0869             |
|                        | 1392, 1442, 1640                    | Expressvu                 | 0775, 1505        | Prinips<br>Proscan | 0392                                | Star Choice    | 10009            |
| Nah Maturada           |                                     |                           |                   |                    |                                     | 1              |                  |
| Dish Network<br>System | 0775, 1505                          | Hughes Network<br>Systems | 1142, 1442        | RCA                | 1392                                |                |                  |
| VCB                    |                                     | Oysterns                  |                   | Samsung            | 1442                                |                |                  |
| VCR ( 📩 )              |                                     |                           |                   |                    |                                     |                |                  |
| A-Mark                 | 0000, 0037, 0240,                   | Asha                      | 0240              | Carver             | 0035, 0081                          | Curtis Mathes  | 0000, 0035, 0060 |
|                        | 0278                                | Astra                     | 0035, 0240        | CCE                | 0278                                |                | 0162, 0240, 0278 |
| BS                     | 1972                                | Audiovox                  | 0037, 0038, 0278  | Cineral            | 0278                                |                | 0432, 1035       |
| dmiral                 | 0039, 0047, 0048,                   | Avis                      | 0000              | Citizen            | 0000, 0035, 0037,                   | Cybernex       | 0240             |
|                        | 0060, 0209, 0479                    | Beaumark                  | 0240              |                    | 0209, 0240, 0278,                   | CyberPower     | 1972             |
| Adventura              | 0000, 0037, 0240                    | Bell & Howell             | 0000, 0035, 0039, |                    | 0479, 1278                          | Daewoo         | 0037, 0045, 027  |
| Aiko                   | 0278                                |                           | 0048, 0479        | Classic            | 0037                                |                | 1278             |
| Aiwa                   | 0000, 0037                          | Broksonic                 | 0002, 0121, 0209, | Colortyme          | 0035, 0045, 0060,                   | Daytron        | 0037, 0278       |
| Alba                   | 0209, 0278                          | Brokoonio                 | 0479, 1479        | Colortymo          | 0278                                | Dell           | 1972             |
| Alienware              | 1972                                | Calix                     | 0037              | Colt               | 0000                                | Denon          | 0042, 0081       |
| Allegro                |                                     | Candle                    | 0037,0038         | Craig              | 0000 0037, 0047, 0240               | DirecTV        | 0739             |
| <u>v</u>               | 0039                                |                           |                   |                    | , ,                                 |                |                  |
| America Action         | 0278                                | Canon                     | 0035              | Criterion          | 0000                                | Dual           | 0000             |
| American High          | 0035, 0081                          | Capehart                  | 0002              | Crosley            | 0000, 0035, 0081                    | Durabrand      | 0038, 0039       |
| Amstrad                | 0000                                | Carrera                   | 0240              | Crown              | 0278                                | Dynatech       | 0000, 0240       |
|                        |                                     |                           |                   |                    |                                     |                |                  |

FAQs, etc.

# Remote Control Operation/Code List (Continued)

### Remote Control Code List

| Brand                  | Code                                   | Brand             | Code                                | Brand         | Code                                | Brand              | Code             |
|------------------------|--|-------------------|-------------------------------------|---------------|-------------------------------------|--------------------|------------------|
| Electrohome            | 0000, 0037, 0043,<br>0060, 0209, 0240  | Magnin<br>Marantz | 0240 0035, 0038, 0081               | Quasar        | 0002, 0035, 0162,<br>1035           | Thomson<br>Tisonic | 0060<br>0278     |
| Electrophonic          | 0037                                   | Marta             | 0033, 0030, 0001                    | RadioShack    | 0000, 0035, 0037,                   | Tivo               | 0618, 0636, 0739 |
|                        | 0121, 0184                             |                   | 0037, 0209                          | RauluShack    | 0047, 0048, 0162,                   | 1100               | 1996             |
| Emerald                | · · ·                                  | Matsui            |                                     | _             | 0240                                |                    |                  |
| Emerex                 | 0032                                   | Matsushita        | 0035, 0162, 0081                    | Dealla        | 0007                                | TMK                | 0000, 0240       |
| Emerson                | 0000, 0002, 0037,<br>0043, 0121, 0184, | Media Center PC   | 1972                                | Radix         | 0037                                | TNIX               | 0037             |
|                        | 0209, 0240, 0278,                      | MEI               | 0035                                | Randex        | 0037                                | Tocom              | 0240             |
|                        | 0479, 1278, 1479                       | Memorex           | 0000, 0035, 0037,                   | RCA           | 0000, 0035, 0042,                   | Toshiba            | 0000, 0043, 0045 |
|                        |  |                   | 0039, 0162, 0047, 0048, 0209, 0240, |               | 0045, 0048, 0060, 0240, 0807, 0880, |                    | 0209, 0240, 0845 |
| Fisher                 | 0000, 0039, 0047                       |                   | 0278, 0479, 1237                    |               | 1035, 1060                          |                    | 1996             |
| Fuji                   | 0033, 0035                             |                   | 02.0,0.00,020.                      |               |                                     |                    |                  |
| Fujitsu                | 0000                                   | Metz              | 0037                                | Realistic     | 0000, 0035, 0037,                   | Tosonic            | 0278             |
| Funai                  | 0000, 0037, 0278                       | MGA               | 0043, 0060, 0240                    |               | 0047, 0048, 0121,                   | Totevision         | 0037, 0240       |
| Garrard                | 0000                                   | MGN Technology    | 0240                                |               | 0162, 0240, 0278                    | Touch              | 1972             |
| Gateway                | 1972                                   | Microsoft         | 1972                                | ReplayTV      | 0614, 0616                          | Trix               | 0037             |
| GE                     | 0000, 0035, 0048,                      | Midland           | 0240                                | Ricavision    | 1972                                | Ultra              | 0045, 0278       |
|                        | 0060, 0240, 0807,                      | Mind              | 1972                                | Runco         | 0039                                | Unitech            | 0240             |
|                        | 1035, 1060                             | Minolta           | 0042                                | Samsung       | 0000, 0038, 0045,                   | Vector             | 0045             |
| Gemini                 | 0060                                   | Mitsubishi        | 0000, 0042, 0043,                   | l             | 0060, 0240, 0432,                   | Vector Research    | 0038, 0184       |
| Genexxa                | 0000, 0037, 0278                       | - Wittoubioini    | 0047, 0048, 0060,                   |               | 0739, 1014                          | Victor             | 0067             |
| Go Video               | 0240, 0432, 0614                       |                   | 0067, 0807                          | Samtron       | 0240                                | Video Concepts     | 0045             |
| GoldStar               | 0000, 0035, 0037.                      | Motorola          | 0035, 0048                          | Sanky         | 0039.0048                           | Videomagic         | 0045             |
| GoldStal               | 0038, 0039, 0278,                      |                   |                                     |               |                                     |                    |                  |
|                        | 1237                                   | MTC               | 0000, 0240                          | Sansui        | 0000, 0002, 0067, 0209, 0240, 0479, | Videosonic         | 0000, 0240       |
| 0 1                    | 0000 0007 0004                         | MTX               | 0000                                | -             | 1479                                | Viewsonic          | 1972             |
| Goodmans               | 0000, 0037, 0081,                      | Multitech         | 0000, 0039                          |               | -                                   | Villain            | 0000             |
|                        | 0278                                   | NAD               | 0240                                | Sanyo         | 0000, 0047, 0240,                   | Voodoo             | 1972             |
| Gradiente              | 0000                                   | NEC               | 0038, 0067                          |               | 0479                                | Wards              | 0000, 0060, 0033 |
| Granada                | 0042, 0081                             | Nikko             | 0037, 0278                          | Scott         | 0043, 0045, 0184,                   |                    | 0035, 0037, 0038 |
| Grundig                | 0081                                   | Nikkodo           | 0037, 0278                          |               | 0121                                |                    | 0042, 0043, 0045 |
| Harley Davidson        | 0000                                   | Nishi             | 0240                                | Sears         | 0000, 0033, 0035,                   |                    | 0240, 0479       |
| Harman/Kardon          | 0038, 0081                             | Niveus Media      | 1972                                |               | 0037, 0039, 0042,                   |                    | ,                |
| Hewlett Packard        | 1972                                   | Noblex            | 0240                                |               | 0043, 0045, 0047,                   | White              | 0000, 0209, 0278 |
| HI-Q                   | 0000, 0035, 0047                       | Northgate         | 1972                                |               | 0048, 0060, 0067, 0162, 0209, 1237  | Westinghouse       | 0479             |
| Hitachi                | 0000, 0035, 0037,                      | Olympus           | 0035, 0162                          | -             | 0102, 0203, 1237                    | World              | 0002, 0209, 0479 |
|                        | 0042, 0045, 0089                       | Optimus           | 0000, 0035, 0037,                   | Sharp         | 0048, 0047, 0032,                   | XR-1000            | 0000, 0035, 0240 |
| Howard                 | 1972                                   | p                 | 0047, 0048, 0162,                   |               | 0000, 0807                          | Yamaha             | 0038             |
| Computers              |  |                   | 0240, 0432, 1062                    | Shintom       | 0000, 0039, 0240                    | Zenith             | 0000, 0033, 0037 |
| HP .                   | 1972                                   | Orion             | 0000, 0002, 0121,                   | Shogun        | 0240                                |                    | 0039, 0209, 0278 |
| Hughes Network         | 0042, 0739                             |                   | 0184, 0209, 0240,                   | Siemens       | 0037                                |                    | 0479, 1479       |
| Systems                | 0042,0733                              |                   | 0278, 0479, 1479                    |               | 0000, 0035, 0037,                   | ZT Group           | 1972             |
|                        | 0720                                   | Deneme            | 0025                                | Signature     | 0048, 0060, 0479                    | 21 01000           | 1072             |
| Humax                  | 0739                                   | Panama            | 0035                                | 0             |                                     |                    |                  |
| Hush                   | 1972                                   | Panasonic         | 0000, 0035, 0162, 0225, 0614, 0616, | Singer        | 0037, 0240                          |                    |                  |
| Hytek                  | 0000, 0047                             |                   | 1035, 1062, 1244                    | Sonic Blue    | 0614, 0616                          |                    |                  |
| IBUYPOWER              | 1972                                   |                   |                                     | Sony          | 0000, 0032, 0033,                   |                    |                  |
| ITT Nokia              | 0240                                   | Penney            | 0000, 0035, 0037,                   |               | 0035, 0047, 0067, 0636, 1232, 1972  |                    |                  |
| Janeil                 | 0240                                   |                   | 0038, 0042, 0047, 0067, 0081, 0162, |               | 0030, 1232, 1972                    |                    |                  |
| Jensen                 | 0067                                   |                   | 0240, 1035, 1237                    | Soundmaster   | 0000                                |                    |                  |
| JVC                    | 0067                                   |                   | 0240, 1000, 1207                    | Stack 9       | 1972                                |                    |                  |
| KEC                    | 0037, 0278                             | Pentax            | 0042                                | STS           | 0042                                |                    |                  |
| Kenwood                | 0038, 0067                             | Philco            | 0000, 0035, 0081,                   | SV2000        | 0000                                |                    |                  |
| Kodak                  | 0035, 0037                             |                   | 0209, 0479                          | SVA           | 0000                                |                    |                  |
| KTV                    | 0000                                   | Philips           | 0000, 0035, 0048,                   | Sylvania      | 0000, 0035, 0043,                   |                    |                  |
| LG                     | 0037, 0038, 0240                       |                   | 0045, 0081, 0162,                   | ,             | 0081, 1781                          |                    |                  |
| Linksys                | 1972                                   |                   | 0209, 0616, 0618,                   | Symphonic     | 0000, 0002, 0240                    |                    |                  |
| Lloyd's                | 0000, 0038, 0240                       |                   | 0739                                | Systemax      | 1972                                |                    |                  |
| Loewe                  | 0081                                   | Pilot             | 0037                                | Tagar Systems | 1972                                |                    |                  |
| Logik                  | 0000, 0240                             | Pioneer           | 0042, 0067, 0081,                   | Tandy         | 0000                                |                    |                  |
| 0                      |  |                   | 0162                                |               |                                     |                    |                  |
| Lumatron               | 0278                                   | Della Assalla     |                                     | Tatung        | 0000, 0048, 0067,<br>0081           |                    |                  |
| LXI                    | 0000, 0037, 0042,                      | Polk Audio        | 0081                                | -             |                                     |                    |                  |
|                        | 0067                                   | Portland          | 0278                                | Teac          | 0000, 0067                          |                    |                  |
| M Electronic           | 0240                                   | Profitronic       | 0240                                | Technics      | 0000, 0035, 0037,                   |                    |                  |
|                        | 0000, 0037, 0240,                      | Proscan           | 0060, 1060                          |               | 0162                                |                    |                  |
| Magnasonic             |  |                   | 0000                                | Teknika       | 0000, 0035, 0037                    |                    |                  |
| Magnasonic             | 0278, 1278                             | Protec            | 0000                                | ТСКПКа        | 0000, 0000, 000.                    |                    |                  |
|                        | 0000, 0035, 0037,                      | Protec<br>Pulsar  | 0039, 0240, 0278                    | Telecorder    | 0240                                |                    |                  |
| Magnasonic<br>Magnavox |  |                   |                                     |               |                                     |                    |                  |

|                   | mbination (V) (   | )                         |                   |            |                                     |                       |                  |
|-------------------|-------------------|---------------------------|-------------------|------------|-------------------------------------|-----------------------|------------------|
| Brand             | Code              | Brand                     | Code              | Brand      | Code                                | Brand                 | Code             |
| lughes Network    | 0739              | Philips                   | 0739              |            |                                     |                       |                  |
| systems           |                   | Samsung                   | 0739              |            |                                     |                       |                  |
| PVR (V) ( DBS/CBL | <u>`</u> `        | Ŭ.                        |                   |            |                                     |                       |                  |
| BS                | 1972              | Llughoo Notwork           | 0739              | Northgata  | 1972                                | Togor Sustama         | 1972             |
| -                 | -                 | Hughes Network<br>Systems | 0739              | Northgate  |                                     | Tagar Systems         |                  |
| lienware          | 1972              |                           | 0700              | Panasonic  | 0616                                | Tivo                  | 0618, 0636, 0739 |
| CyberPower        | 1972              | Humax                     | 0739              | Philips    | 0618, 0739                          | Toshiba               | 1008, 1972, 1996 |
| Dell              | 1972              | Hush                      | 1972              | RCA        | 0880                                | Touch                 | 1972             |
| DirecTV           | 0739              | IBUYPOWER                 | 1972              | ReplayTV   | 0614, 0616                          | Viewsonic             | 1972             |
| Bateway           | 1972              | Linksys                   | 1972              | Samsung    | 0739                                | Voodoo                | 1972             |
| lewlett Packard   | 1972              | Media Center PC           | 1972              | Sonic Blue | 0614, 0616                          | ZT Group              | 1972             |
| loward            | 1972              | Microsoft                 | 1972              | Sony       | 0636, 1972                          |                       |                  |
| Computers         |                   | Mind                      | 1972              | Stack 9    | 1972                                |                       |                  |
| IP DVD            | 1972              | Niveus Media              | 1972              | Systemax   | 1972                                |                       |                  |
|                   |                   |                           |                   |            |                                     |                       |                  |
| BD LAB            | 0503, 0539        | Funai                     | 0675, 1268        | Minato     | 0752                                | Samsung               | 0490, 0573, 0744 |
| Aiwa              | 0641              | GE                        | 0522, 0815        | Mintek     | 0839                                |                       | 0820, 0899, 1044 |
| Akai              | 0695, 0899        | Go Video                  | 0573, 0741, 0744, | Mitsubishi | 1521, 0521                          |                       | 1075             |
| Alba              | 0672              | 20                        | 0869, 1044, 1075  | NAD        | 0591, 0741                          | Sansui                | 0695             |
| Alco              | 0790              | GoldStar                  | 0741,0869         | NEC        | 0785, 0869                          | Sanyo                 | 0675, 0695       |
| Allegro           | 0869              | Goodmans                  | 0790              | Onkyo      | 0503, 0627, 0792                    | Schwaiger             | 0752             |
| Apex Digital      | 0533, 0672, 1020, | Gradiente                 | 0490, 0651        | Optimus    | 0571                                | Sharp                 | 0630, 0675, 0752 |
| Apex Digital      | 1056, 1061        | Grundig                   | 0539              | Oritron    | 0651                                | Shaip                 | 1256             |
| 1                 |                   | Harman/Kardon             | 0582              | Palsonic   |                                     | Chinaania             | 0533, 0839       |
| Arrgo             | 1023              |                           |                   |            | 0672                                | Shinsonic<br>Slim Art |                  |
| Audiovox          | 0790              | Hitachi                   | 0573, 0664        | Panasonic  | 0503, 0490, 0571, 0703, 1362, 1462, | •                     | 0784             |
| Blue Parade       | 0571              | Hiteker                   | 0672              |            | 1490, 1762, 2006,                   | Sonic Blue            | 0573, 0869       |
| Blue Sky          | 0695              | Insignia                  | 1268              |            | 2016, 2026, 1779                    | Sony                  | 0533, 0864, 1033 |
| Brandt            | 0651              | Integra                   | 0571,0627         |            |                                     | <u> </u>              |                  |
| Broksonic         | 0695              | JMB                       | 0695              | Philips    | 0503, 0539, 0646,                   | Sylvania              | 0675, 1268       |
| California Audio  | 0490              | JVC                       | 0558, 0623, 0867, |            | 0675, 1267, 1354                    | Symphonic             | 0675, 1268       |
| Labs              |                   |                           | 1164              | Pioneer    | 0525, 0571, 0631                    | Teac                  | 0571, 0790       |
| Celestial         | 1020              | Kawasaki                  | 0790              | Polaroid   | 1020, 1061                          | Technics              | 0490, 0703       |
| Centrex           | 0672              | Kenwood                   | 0490, 0534        | Polk Audio | 0539                                | Tevion                | 0651             |
| CineVision        | 0869              | KLH                       | 0790, 1020        | Presidian  | 0675                                | Theta Digital         | 0571             |
| Clairtone         | 0571              | Kloss                     | 0533              | Proceed    | 0672                                | Thomson               | 0522             |
| Creative          | 0503, 0539        | Koss                      | 0651, 1061        | Proscan    | 0522                                | Toshiba               | 0503, 0539, 0573 |
| CyberHome         | 0816, 0874, 1023, | Lasonic                   | 0627              | Qwestar    | 0651                                |                       | 0695, 1045, 1154 |
|                   | 1129              | Lecson                    | 1533              | Radionette | 0741                                | Universum             | 0591             |
| Daewoo            | 0784, 0869, 1172  | LG                        | 0591, 0741, 0869  | RadioShack | 0571                                | Urban Concepts        | 0503, 0539       |
| Denon             | 0490, 0634        | LiteOn                    | 1058              | RCA        | 0522, 0571, 0790,                   | US Logic              | 0839             |
| Digitrex          | 0672              | Loewe                     | 0741              |            | 0822, 1022, 1132                    | Venturer              | 0790             |
| Disney            | 0675              | Magnasonic                | 0651,0675         | Realistic  | 0571                                | Xbox                  | 0522             |
| Dual              | 0675              | Magnavox                  | 0503, 0539, 0646, | Reoc       | 0752                                | Yamaha                | 0490, 0539, 0545 |
| DVD2000           | 0521              |                           | 0675, 1268        | Rio        | 0869                                | Zenith                | 0503, 0591, 0741 |
| Emerson           | 0591, 0675, 1268  | Marantz                   | 0503, 0539, 0675  | Rotel      | 0623                                | _01101                | 0869             |
| Enterprise        | 0591              | McIntosh                  | 1533              | Saba       | 0651                                | Zeus                  | 0784             |
| Entivo            | 0503, 0539        | Medion                    | 0651              | Sampo      | 0752                                | 2003                  | 10101            |
| ESA               | 1268              | Memorex                   | 0695              | Jampo      | 10102                               |                       |                  |
| Firstline         | 0651              | Microsoft                 | 0522              |            |                                     |                       |                  |
|                   | DV/D              | WICIUSUI                  | 0022              |            |                                     |                       |                  |
| DVD-Recorde       |                   |                           |                   |            |                                     |                       |                  |
| pex Digital       | 1056              | LG                        | 0741              | Pioneer    | 0631                                | Sylvania              | 0675             |
| CyberHome         | 1129              | Magnavox                  | 0646, 0675        | RCA        | 0522                                | Zenith                | 0741             |
| Funai             | 0675              | Panasonic                 | 0490, 2006, 2016, | Samsung    | 0490                                |                       |                  |
| Go Video          | 0741              |                           | 2026              | Sharp      | 0675                                |                       |                  |
| IVC               | 1164              | Philips                   | 0646              | Sony       | 1033, 1431                          |                       |                  |

FAQs, etc.

# **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 has not been rated or 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.  |
| Х     | ADULTS ONLY.   |

#### U.S. TV PROGRAMS RATINGS (U.S. TV)

| Age-based<br>Group | Age-based<br>Ratings | Possible Content<br>Selections  | Description   |  |
|--------------------|----------------------|---|---|--|
| NR<br>(Not Rated)  | TV-NR                | Viewable     Blocked     Not Rated.   |   |  |
|                    | TV-Y                 | <ul><li>Viewable</li><li>Blocked</li></ul>  | All children. The themes and elements in this program are specifically<br>designed for a very young audience, including children from ages 2-6.             |  |
| Youth              | TV-Y7                | <ul> <li>FV Blocked</li> <li>Viewable</li> <li>Blocked</li> </ul>                     | 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                 | <ul><li>Viewable</li><li>Blocked</li></ul>  | General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.                                    |  |
|                    | TV-PG                | <ul> <li>D,L,S,V (all selected)</li> <li>Any combination of D,<br/>L, S, V</li> </ul> | Parental guidance suggested. The program may contain infrequent<br>coarse language, limited violence, some suggestive sexual dialogue and<br>situations.    |  |
|                    | TV-14                | <ul> <li>D,L,S,V (all selected)</li> <li>Any combination of D,<br/>L, S, V</li> </ul> | Parents strongly cautioned. This program may contain sophisticated themes, sexual content, strong language and more intense violence.                       |  |
|                    | TV-MA                | <ul> <li>L,S,V (all selected)</li> <li>Any combination of L,<br/>S, V</li> </ul>      | 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.   |
|-----|---|
| С   | 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<br>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

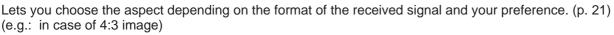
# **Technical Information**

# Closed Caption (CC)

For viewing Closed Caption of digital broadcasting, set the aspect ratio to FULL. (If viewing with H-FILL, JUST, ZOOM or 4:3, characters will be cut off.)

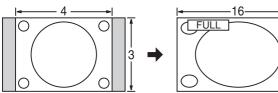
- The Closed Caption is not displayed when you use HDMI connection.
- If analog connected equipment is used for displaying or recording, Closed Caption (CC) should be set On/Off on the connected equipment.
  - The CC mode setting of the TV will not affect the analog input.
  - If a digital program is being output in analog format, the CC data will also be output in analog format.
- If digital connected equipment is used for input, CC should be set On on either the connected equipment or the TV.
- If CC is set On on both the connected equipment and the TV, captions from each unit will overlap.

# Aspect Ratio



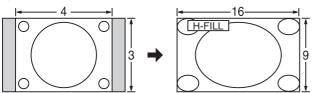
q





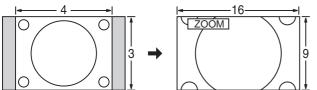
Enlarges the 4:3 image horizontally to the screen's side edges. (Recommended for anamorphic picture)

#### H-FILL



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

#### ZOOM



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

#### Zoom adjust

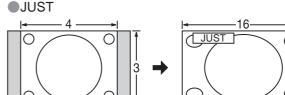
Vertical image position and size can be adjusted in "ZOOM". ①Select "Zoom adjust" on the "Picture" menu. (p. 26-27) 2V-position: Vertical position adjustment





To reset the aspect ratio

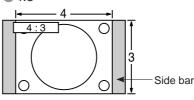




Stretches to justify the 4:3 image to the four corners of the screen.

(Recommended for normal TV broadcast)





Standard

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



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

- When the signal is 720p/1080i/1080p, the aspect mode automatically defaults to Full after turning off the TV, after changing input mode, or after changed signal resolution other than 720p/1080i/1080p.
- ③ V-size: Vertical size adjustment





9

Ratings List for Lock

FAQs, etc.

# Technical Information (Continued)

|   | Data for   | mat for SD Card browsing  |
|---|--|---|
| Data format: Ba<br>Max. number of files: 9,   | till images recorded with<br>aseline JPEG (Sub-samp<br>999<br>60 x 120 to 10,000,000   | digital still cameras compatible with JPEG files of DCF* and EXIF** standards<br>bling: 4:4:4, 4:2:2 or 4:2:0)<br>mera file system): A Japan Electronics and Information Technology Industries Association's standard<br>** EXIF (Exchangeable Image File Format) |
| Caution   |  |   |
| <ul> <li>A JPEG image modified v</li> <li>Partly degraded files migl</li> </ul>   |  |   |
| Note  |  |   |
| Folder structure viewed in  |  | а. н  |
|   | ——— Created automat  | -   |
|   |  | nber + 5-digit arbitrary characters   |
| — P1000001.JP<br>— P1000002.JP<br>— P1000003.JP<br>— P1000004.JP  | Usable charac  | characters + 4-digit file number<br>cters: 1-byte "a to z", "A to Z", "0 to 9," and "_"   |
|   | ory Cards, please confirm  | ding on the digital camera used.<br>n the latest information on the following website.<br>n English only)   |
|   | SD C   | Card warning messages   |
| Messag  | je   | Meaning   |
| Is memory 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  |  | <ul> <li>The file is broken or unreadable.</li> <li>The TV does not support the format.</li> </ul>  |
|   | Gallery  | Player warning messages   |
| Cannot display image o incorrect ID data.   | due to   | <ul> <li>There is a problem with decoder of your TV.</li> <li>If this message appears, please contact Panasonic Service Center for assistance.</li> <li>Refer to page 54, 56 (Limited Warranty), page 55 (Customer Services Directory)</li> </ul>                 |
| Cannot display image  | on SD card.  | • There is a probrem with the data.<br>Check the data inside the SD card.   |
|   | Cautio   | ons in handling SD Card:  |
| <ul> <li>Do not touch the terminal</li> <li>Do not subject the card to</li> <li>Insert the card in the corr</li> <li>Electrical interference, state</li> <li>Back up the recorded data</li> </ul> | while the unit is accessing<br>Is on the back of the card<br>o a high pressure or impa-<br>rect direction (otherwise,<br>atic electricity, or erroned<br>ta at regular intervals in c<br>nasonic is not liable for a | g data (this can damage card or unit).<br>d.<br>act.  |

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.

### EZ Sync™ "HDAVI Control™"

- HDMI connections to some Panasonic equipment allow you to interface automatically. (p. 30)
- 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), EZ Sync<sup>™</sup> is available for the terminal with the smaller number.
- If you connect the equipment that has "HDAVI Control 2" function to the TV with HDMI cable, the sound from DIGITAL AUDIO OUT terminal can be output as multi channel surround.

### **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 set-top box or 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" or "HDMI 2 in" menu screen. (p. 26)
- 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.

Use with a PC is not assumed.

Caution

- 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".
- This HDMI connector is "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, PB, PR) and HDMI

|                    | horizontal<br>frequency (kHz) | vertical<br>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                      |           | *    |

Note

Signals other than those shown above may not be displayed properly.

The above signals are reformatted for optimal viewing on your display.

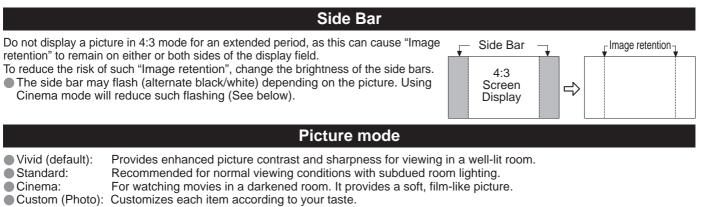


Photo is displayed in JPEG menu.

FAQs, etc.

Technical Information

# Maintenance

#### 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 neutral detergent (1 part detergent 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 detergent 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 detergent 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 neutral detergent 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**

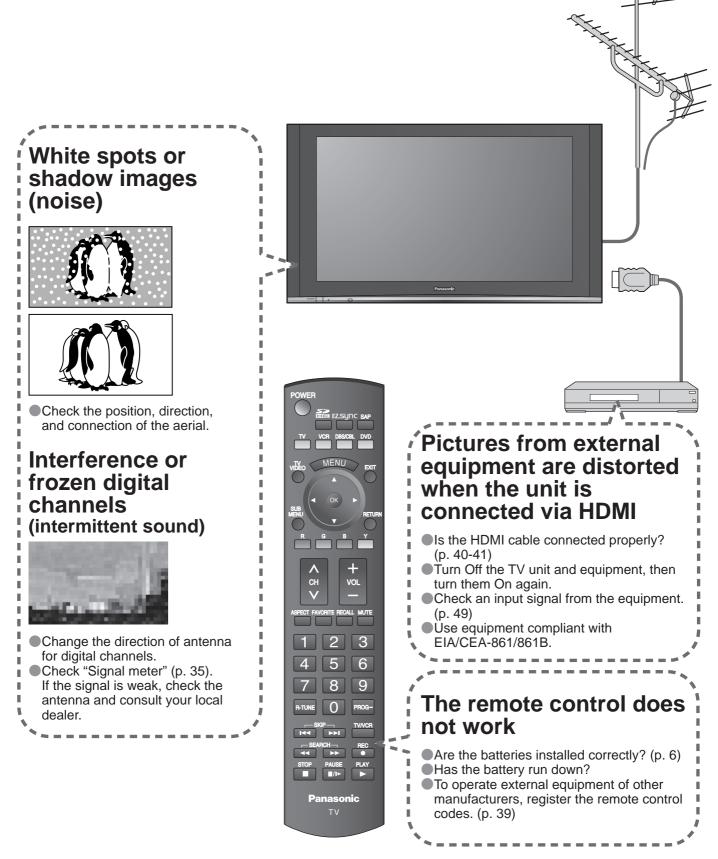
|                             |                                       | TH-42PE77U TH-50PE77U   |  |  |  |  |
|-----------------------------|---------------------------------------|---|--|--|--|--|
|                             | er Source                             | AC 120 V, 60 Hz   |  |  |  |  |
| Powe<br>Cons                | Maximum                               | 387 W 499 W   |  |  |  |  |
| Power<br>Consumption        | Standby condition                     | 0.2 W 0.2 W   |  |  |  |  |
|                             | Drive method                          | AC type   |  |  |  |  |
| Plasma<br>panel             | Aspect Ratio                          | 16:9  |  |  |  |  |
| a D                         | Visible screen size                   | 106 cm 127 cm   |  |  |  |  |
| Display                     | (W × H × Diagonal)<br>(No. of pixels) | 36.3 " × 20.3 " × 41.6 "       43.5 " × 24.4 " × 49.9 "         (922 mm × 518 mm × 1,057 mm)       (1,106 mm × 622 mm × 1,269 mm)   |  |  |  |  |
|                             |                                       | 786,432 (1,024 (W) × 768 (H))       1,049,088 (1,366 (W) × 768 (H))         [3,072 × 768 dots]       [4,098 × 768 dots]   |  |  |  |  |
| Sound                       | Audio Output                          | 20 W [ 10 W + 10 W ] ( 10 % THD )   |  |  |  |  |
| Char<br>(Digi               | nnel Capability<br>tal/Analog)        | VHF/ UHF: 2 - 69, CATV: 1 - 135   |  |  |  |  |
| Oper                        | rating Conditions                     | Temperature:         32 °F - 104 °F (0 °C - 40 °C)           Humidity:         20 % - 80 % RH (non-condensing)  |  |  |  |  |
| 0                           | INPUT 1-3                             | 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]         C: 0.286 V [p-p] (75 Ω)  |  |  |  |  |
| Connect                     | COMPONENT VIDEO<br>INPUT 1-2          | Y:       1.0 V [p-p] (including synchronization)         PB, PR:       ±0.35 V [p-p]         AUDIO L-R:       RCA PIN Type × 2       0.5 V [rms]  |  |  |  |  |
| <b>Connection Terminals</b> | HDMI 1-2<br>AUDIO IN                  | TYPE A Connector x 2<br>This TV supports "HDAVI Control 2" function.<br>AUDIO L-R: RCA PIN Type x 2 0.5 V [rms]   |  |  |  |  |
| nina                        | Card slot                             | SD CARD slot × 1  |  |  |  |  |
| als                         | 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  |  |  |  |  |
|                             | TURES                                 | 3D Y/C FILTER         CLOSED CAPTION       V-Chip         Photo Viewer       HDAVI Control 2  |  |  |  |  |
| Dimensions<br>(W×H×D)       | Including pedestal                    | 44.7 " × 27.0 " × 12.7 "       52.1 " × 31.5 " × 14.7 "         (1,134 mm × 686 mm × 321 mm)       52.1 " × 31.5 " × 14.7 "   |  |  |  |  |
| sions<br>1 × D )            | TV Set only                           | 44.7 " x 25.3 " x 3.92 "       52.1 " x 29.7 " x 3.92 "         (1,134 mm x 641 mm x 99.5 mm)       1,323 mm x 754 mm x 99.5 mm)  |  |  |  |  |
| Mass                        | Including pedestal                    | 66.2 lb. (30 kg) 90.4 lb. (41 kg)   |  |  |  |  |
| SS                          | TV Set only                           | 60.7 lb. (27.5 kg) 86.0 lb. (39 kg)   |  |  |  |  |
|                             |                                       | (TH-42PE77U]     (TH-50PE77U]       44.7 " (1,134 mm)     3.92 " (99.5 mm)       100 mm     52.1 " (1,323 mm)       100 mm     100 mm       100 m |  |  |  |  |
|                             |                                       | 31.9 " (810 mm)<br>12.7 " (321 mm)<br>32.1 " (815 mm)<br>32.1 " (815 mm)<br>14.7 " (371 mm)   |  |  |  |  |

Specifications
 Maintenance

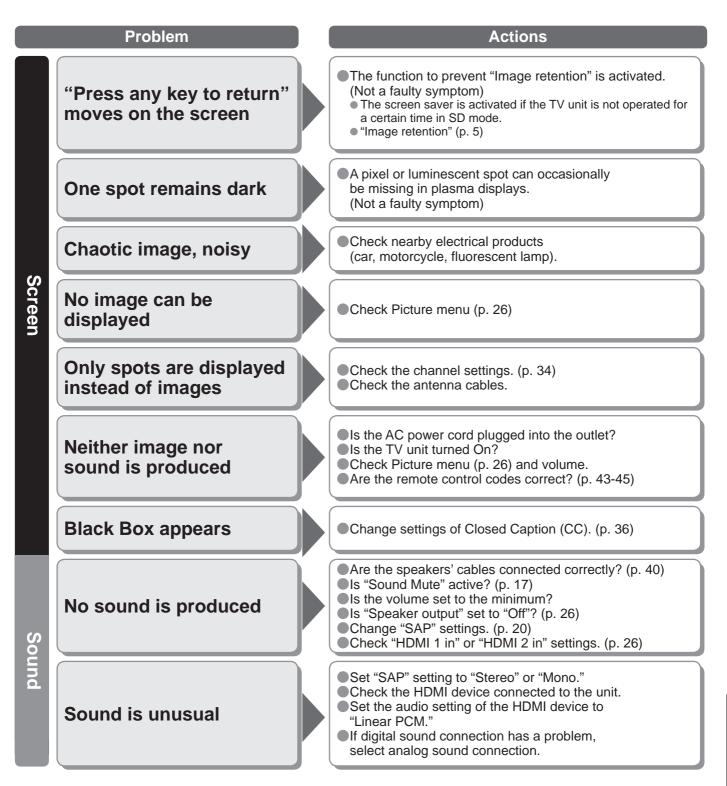
Note
 Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

# 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 www.panasonic.ca



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).



FAQs, etc.

# 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<br>GLASS PANEL OR CRT | LABOR        | GLASS PANEL OR CRT             | GLASS PANEL<br>OR<br>CRT LABOR | SERVICE             |
|----------------|--|--------------|--------------------------------|--------------------------------|---------------------|
| PLASMA DISPLAY | 1 (ONE) YEAR                           | 1 (ONE) YEAR | GLASS PANEL - 2 (TWO)<br>YEARS | 1 (ONE) YEAR                   | IN-HOME 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 in-home service during the Limited Warranty period. If nonrechargeable 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.

#### In-Home or Carry-in Service

For In-Home or Carry-In Service in the United States call 1-888-VIEW-PTV(1-888-843-9788). For assistance in Puerto Rico call Panasonic Puerto Rico, Inc. (787)-750-4300 or fax (787)-768-2910.

In-Home service 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 in-home repairs will not be completed in-home, but will require that the product, or parts of the product, be removed for shop diagnosis and/or repair and then returned.

#### Limited Warranty Limits And Exclusions

This Limited Waranty 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 IN-HOME 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/consumersupport

or, contact us via the web at:

## http://www.panasonic.com/contactinfo

You may also contact us directly at:

1-888-VIEW-PTV (843-9788)

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 8 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

# Limited Warranty (for Canada)

### Panasonic Canada Inc.

### PANASONIC PRODUCT - LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship and agrees to remedy any such defect for a period as stated below from the date of original purchase.

| Plasma TV / Monitor    | In-home service       | One (1) year, parts (including Plasma Panel) and labour. |
|------------------------|-----------------------|--|
| LCD TV (26 in & over)  | In-home service       | One (1) year, parts (including LCD Panel) and labour.    |
| LCD TV (25 in & under) | Carry-in service only | One (1) year, parts (including LCD Panel) and labour.    |

In-home Service will be carried out only to locations accessible by roads and within 50 km of an authorized Panasonic service facility.

#### LIMITATIONS AND EXCLUSIONS

This warranty does not apply to products purchased outside Canada or to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, or which has been altered or repaired in any way that affects the reliability or detracts from the performance, nor does it cover any product which is used commercially. Dry cell batteries are also excluded from coverage under this warranty.

This warranty is extended to the original end user purchaser only. A purchase receipt or other proof of date of original purchase is required before warranty service is performed.

#### THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

In-home service requires clear, complete and easy access to the product by the Authorized Servicentre and does not include removal or re-installation of an installed product. If removal is required to service the product, it will be at the discretion of the Servicentre and in no event will Panasonic Canada Inc. or the Servicentre be liable for any special, indirect or consequential damages.

### WARRANTY SERVICE

For product operation and information assistance, please contact: Our Customer Care Centre: Telephone #: (905)

| entre: | Telephone #: | (905) 624-5505                         |
|--------|--------------|--|
|        | 1-800 #:     | 1-800-561-5505                         |
|        | Fax #:       | (905) 238-2360                         |
|        | Email link:  | "Customer support" on www.panasonic.ca |
|        |              |  |

FOR PRODUCT REPAIRS, please locate your nearest Authorized Servicentre at <u>www.panasonic.ca</u>: Link: "Servicentres<sup>™</sup> locator" under "Customer support"

#### IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton. Include details of the defect claimed, and proof of date of original purchase.

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#### **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

#### Anotación del cliente

El modelo y el número de serie de este producto se encuentran en su panel posterior. Deberá anotarlos en el espacio provisto a continuación y guardar este manual, más el recibo de su compra, como prueba permanente de su adquisición, para que le sirva de ayuda al identificarlo en el caso de que le sea sustraído o lo pierda, y también para disponer de los servicios que le ofrece la garantía.

Modelo

Número de serie

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.** Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985 Panasonic Canada Inc. 5770 Ambler Drive Mississauga, Ontario L4W 2T3 CANADA

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