Quick Start Guide (See page 6)

Guía de inicio rápido

(vea la página 6)

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 avuda 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 ČANADA

For assistance (U.S.A.), please call: 1-800-211-PANA (7262)

- 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: 1-800-211-PANA (7262)
- ó visítenos en www.panasonic.com/contactinfo Para solicitar ayuda (Puerto Rico), llame al:
- 787-750-4300 ó visítenos en www.panasonic.com





English The images shown in this manual are for illustrative purposes only.



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Printed in U.S.A Impreso en EE.UU.



Operating Instructions 32" DIAGONAL LCD TV Manual de instrucciones TV DE LCD DE 32" DIAGONAL









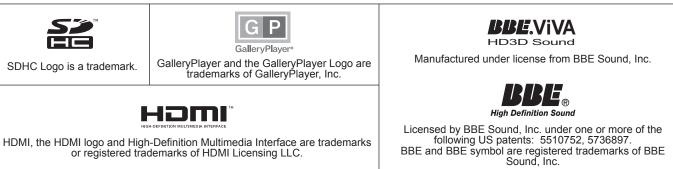
Please read these instructions before operating your set and retain them for future reference.

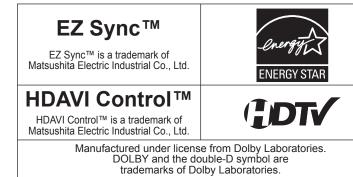
Lea estas instrucciones antes de utilizar su televisor y guárdelas para consultarlas en el futuro.

TQB2AA0781

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







Contents

Please read before using the unit

Safety Precautions ------ 4

Quick Start Guide

| • Accessories/Optional Accessory ··· 6 |
|--|
| • Before Connection ······ 8 |
| Basic Connection 9 |
| • Identifying Controls 15 |
| • First Time Setup ······ 16 |

Enjoy your TV ! Basic Features

| Watching TV18 |
|---------------------------------|
| Viewing from SD Card ······20 |
| Watching Videos and DVDs 22 |

Advanced Features

| How to Use Menu Functions | |
|---|----|
| (picture, sound quality, etc.) ······ | 24 |
| ■ EZ Sync™ "HDAVI Control™" | 28 |
| Lock ····· | 30 |
| Editing and Setting Channels | 32 |
| Input Labels/Monitor out/Closed Caption | 34 |
| Using Timer | 36 |
| Operating Peripheral Equipment | 37 |
| Recommended AV Connections | 38 |

FAQs, etc.

| Customer Services Directory (for U. S. A.) | Remote Control Operation/Code List 40 Ratings List for Lock 44 Technical Information 45 Maintenance 48 Specifications 49 FAQ 50 |
|---|--|
| | Limited Warranty (for U.S.A.) Customer Services Directory (for U. S. A.) |

Quick Start Guide

Viewing

Advanced

Safety Precautions



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.

Note to CATV System Installer

This reminder is provided to direct the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Secure Ventilation

Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the LCD TV and to protect it from overheating. These openings must not be blocked or covered. There should be at least 10 cm of space from these openings. The openings should never be blocked by placing the LCD TV on a bed, sofa, rug or other similar surface. This LCD TV should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

Important Safety Instructions

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

The lightning flash with arrow

The exclamation point within a

user that important operating and

servicing instructions are in the

triangle is intended to tell the

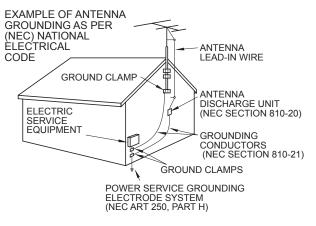
papers with the appliance.

persons

head within a triangle is intended

to tell the user that parts inside the product are a risk of electric shock

- 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) Operate only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home consult your television dealer or local power company.
- 16) Follow all warnings and instructions marked on the LCD TV.
- 17)Never push objects of any kind into this LCD TV through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the LCD TV.
- 18) If an outside antenna is connected to the television equipment, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. In the U.S. Section 810-21 of the National Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.



19) An outside antenna system should not be located in the vicinity of overhead power lines, other electric light, power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

- a. When the power cord or plug is damaged or frayed.
- If liquid has been spilled into the LCD TV. b.
- If the LCD TV has been exposed to rain or water. C.
- If the LCD TV does not operate normally by following the operating instructions. d. TV to normal operation.
- If the LCD TV has been dropped or the cabinet has been damaged. e.
- f.
- hazards MOISTURE, DRIPPING OR SPLASHING. (INCLUDING ON SHELVES ABOVE, ETC.). 23) WARNING: PARTS AWAY FROM YOUNG CHILDREN. CREATING THE POTENTIAL RISK OF SUFFOCATION. 24) CAUTION: 25) CAUTION: 26) CAUTION: OR EQUIVALENT TYPE. accessories may cause instability which could result in the possibility of injury. • Wall-hanging bracket (Vertical): TY-WK32LR2W

Always be sure to ask a qualified technician to carry out set-up.

NOTE: This equipment is designed to operate in North America and other countries where the broadcasting system and AC house current are exactly the same as in North America.

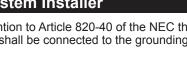
information, please contact your local authorities or the Electronics Industries Alliance: www.eiae.org.

This equipment has been tested and found to comply with the limits for a TV Broadcast Receiver, 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 or receive interference, which can be determined by turning 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 TV antenna. Increase the separation between TV and other equipment. Connect TV into separate outlet from other equipment. Consult the dealer or an experienced radio / TV technician for help.

FCC Caution: user's authority to operate this equipment.

4





20) Unplug this LCD TV from the wall outlet and refer servicing to gualified service personnel under the following conditions:

Adjust only those controls that are covered by the operating instructions as improper adjustment of other

controls may result in damage and will often require extensive work by a qualified technician to restore the LCD

When the LCD TV exhibits a distinct change in performance - this indicates a need for service.

21) When replacement parts are required, be sure the service technician uses replacement parts specified by the manufacturer that have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other

22) WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN,

DO NOT PLACE LIQUID CONTAINERS (FLOWER VASES, CUPS, COSMETICS, ETC.) ABOVE THE SET

SMALL PARTS CAN PRESENT CHOKING HAZARD IF ACCIDENTALLY SWALLOWED. KEEP SMALL

DISCARD UNNEEDED SMALL PARTS AND OTHER OBJECTS, INCLUDING PACKAGING MATERIALS AND PLASTIC BAGS/SHEETS TO PREVENT THEM FROM BEING PLAYED WITH BY YOUNG CHILDREN.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS PLUG WITH A RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

USE WITH OTHER STAND MAY RESULT IN INSTABILITY POSSIBLY CAUSING INJURY.

DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME

27) CAUTION: This LCD TV is for use only with the following optional accessory. Use with any other type of optional

(All of the following accessories are manufactured by Matsushita Electric Industrial Co., Ltd.)

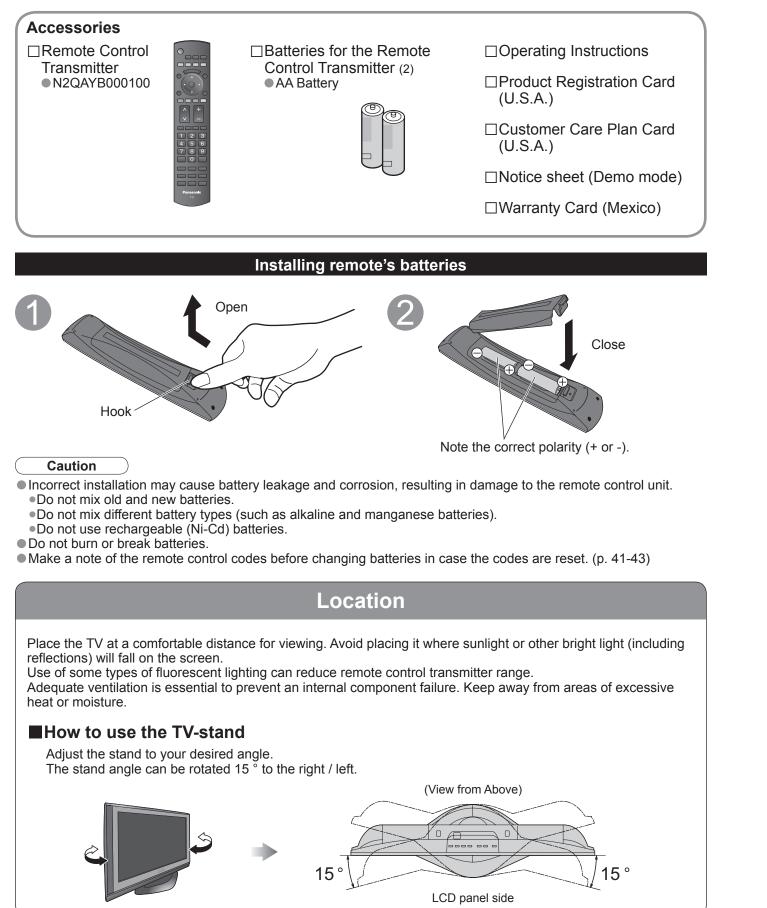
This product utilizes tin-lead solder and has a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling

FCC STATEMENT

Any changes or modifications not expressly approved by the party responsible for compliance could void the

Accessories/Optional Accessory

Check you have all the items shown.



Optional accessory (When Installing on the wall)

Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.

Wall-hanging bracket (vertical) TY-WK32LR2W

Before mounting the TV on the wall, you must remove the TV-Stand from the TV. Follow the steps below:



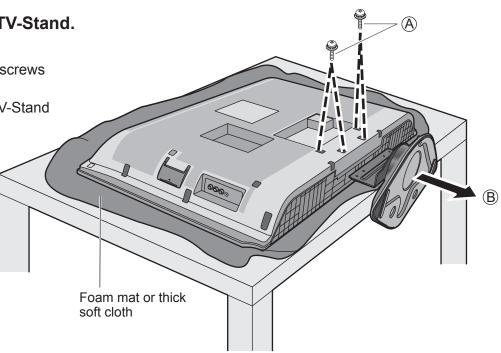
Disconnect all the cables from the TV.



Remove the TV-Stand.

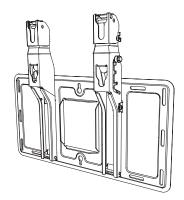
(A) Remove four screws

(B) Pull out the TV-Stand



WARNING

- Any damage resulting from not having a professional installer mount will void your unit's warranty.
- Always be sure to ask a gualified technician to carry out set-up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
- which typically give off high heat. Doing so may warp or damage plastic cabinet parts.



Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer.

• Do not mount this LCD Television directly below ceiling lights (such as spotlights, floodlights, or halogen lights)

Before Connection

Digital TV Standards include digital high-definition television (HDTV),

You need to subscribe to a cable TV service to enjoy viewing their

Recording/playing back with DVD recorder or VCR

standard-definition television (SDTV), data broadcasting, multi-channel

NTSC (National Television System Committee):

•ATSC (Advanced Television Systems Committee):

surround-sound audio and interactive television.

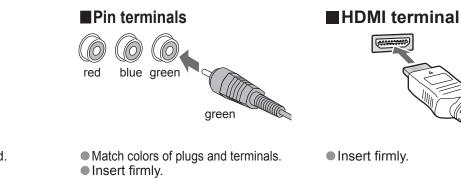
done with the use of HDMI or Component Video cable.

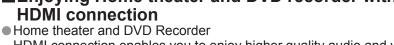


Antenna terminal

-

Firmly tighten by hand.





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. 23 EZ Sync[™])

• 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.

Reference of connection

This source has higher resolution through interlace or progressive signal. **DVD Recorder** Connection can be done with the use of Component Video or HDMI cable. Connection can be done with the use of an RF cable and Composite Video/S Video cable.

Connected Equipment Introduction (Signal source)

• You can enjoy high-definition programming by subscribing to a high-definition cable box. The connection can be

Watching Satellite

Watching TV

VHF/UHF Antenna

Cable Box/Cable

programming.

DVD Recorde

VCR

Conventional broadcasting

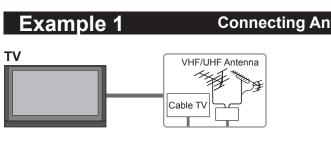
• You can enjoy high-definition programming by subscribing to high-definition satellite source. Connection can be done with the use of HDMI or Component Video cable.

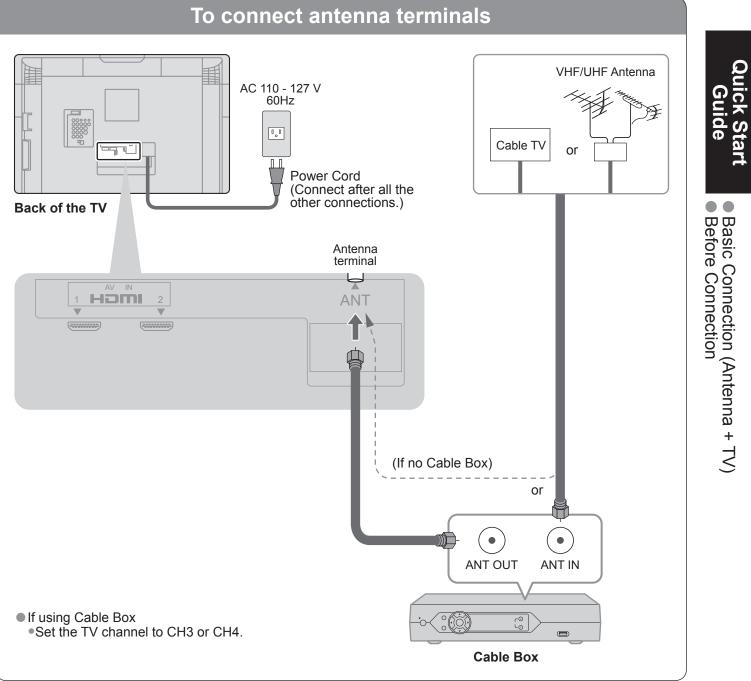




Satellite Antenna

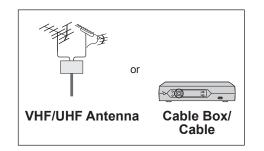
Basic Connection





Note

For additional assistance, visit us at: www.panasonic.com www.panasonic.ca



ಗೇಂ

VCR

888: 0

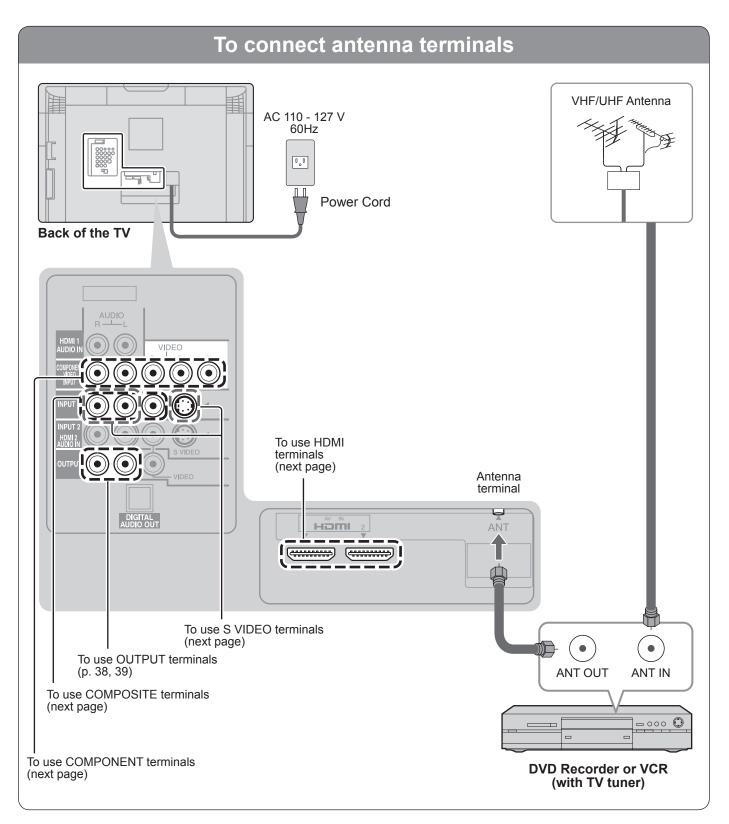
Satellite Receiver Connecting Antenna (To watch TV)

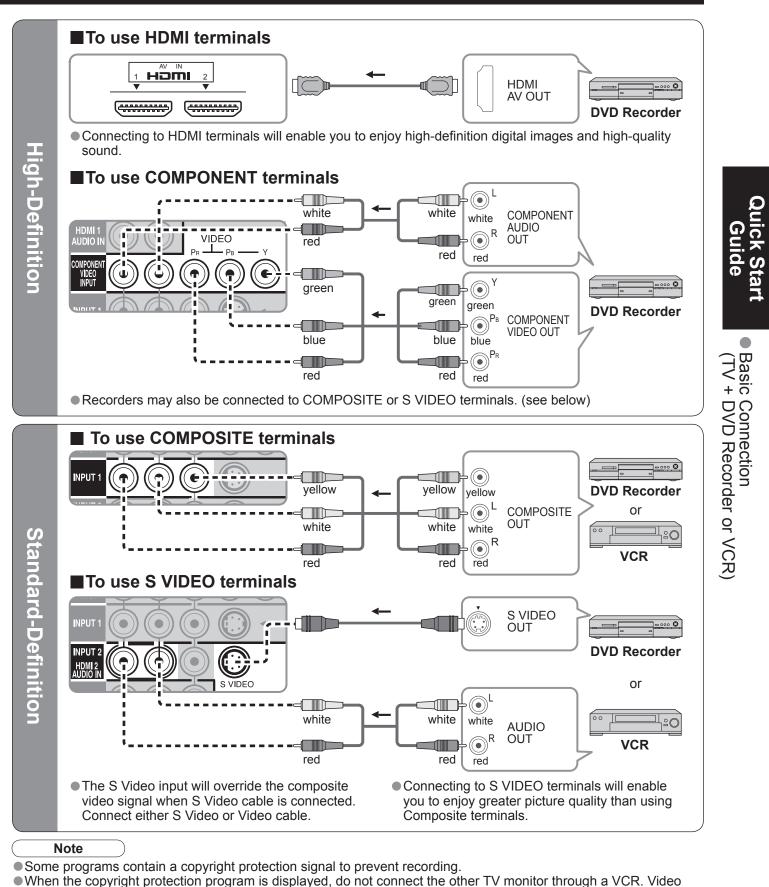
Basic Connection (Continued)

Example 2

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





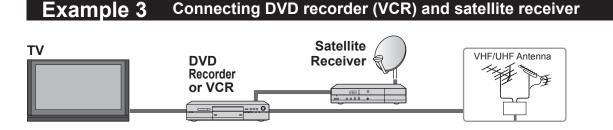


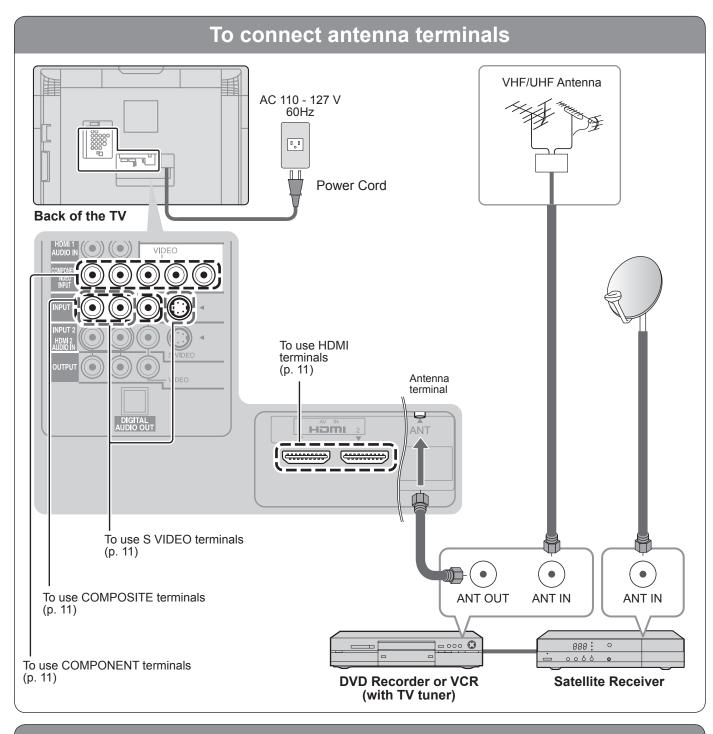
other TV monitor.

signals fed through VCRs may be affected by copyright protection systems and the picture will be distorted on the

Basic Connection (Continued)

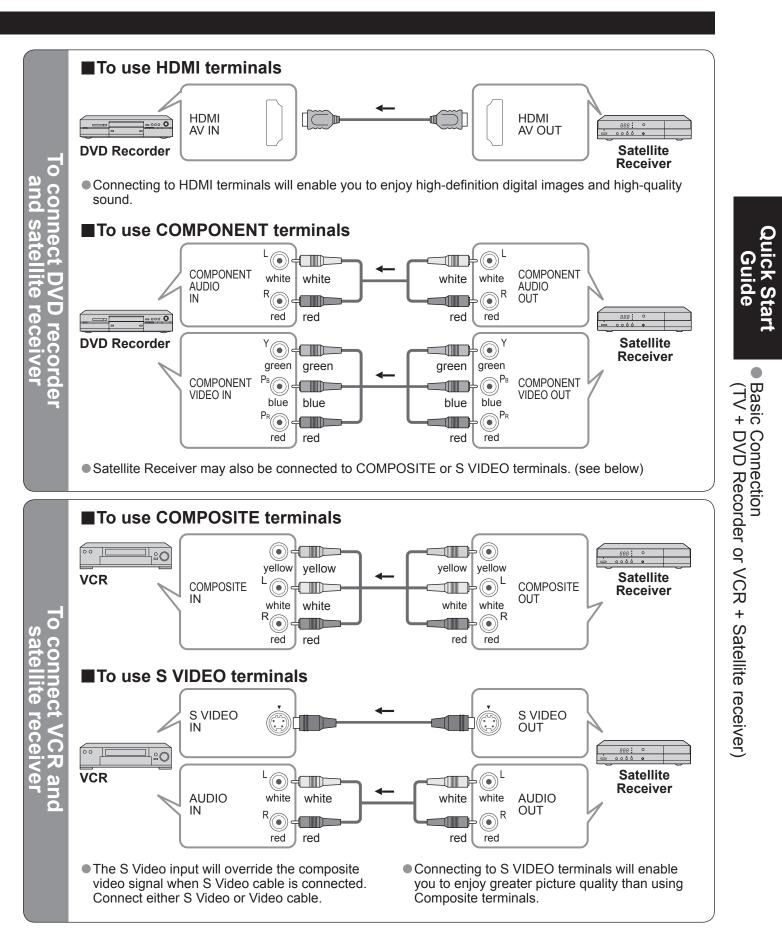
Connecting DVD recorder (VCR) and satellite receiver



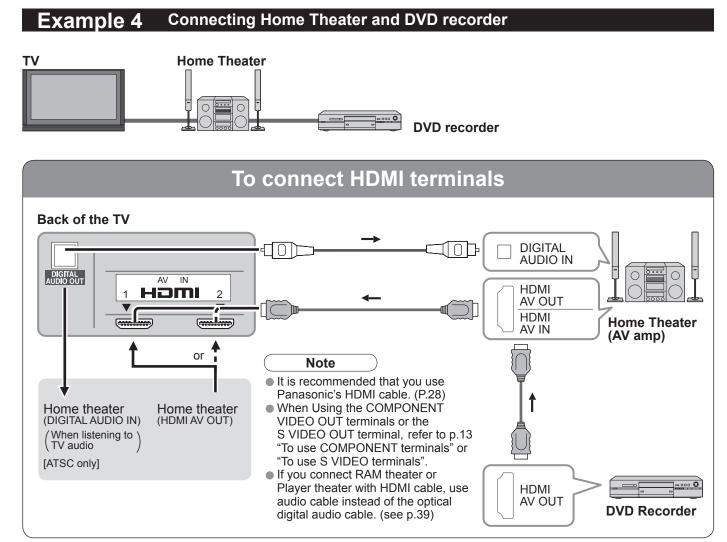


Connecting TV and DVD recorder (VCR)

Connect in the same way as on p. 11.

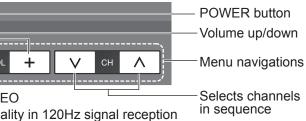


Basic Connection (Continued)



Identifying Controls

| Power Demo TV/IDEO Switches TV Demonstrates pictur (Dress and loss to complete | re qua |
|--|------------|
| (Press any key to ca | ancert |
| Within about 23 feet (7 me | eters) i |
| Power indicator (on: red, o | ff: no l |
| Note | |
| The TV consumes a limited amount of power as | long |
| PO | WER |
| Switches TV to On or Standby |) <u>s</u> |
| Viewing from SD Card (p. 20-21) | |
| The equipment selection button (p. 22) | |
| | |
| Changes the input mode (p. 22) | |
| | |
| SUE | |
| Displays Sub Menu (p. 18, 26) | |
| Colored buttons — | R (|
| (used for various functions) (for example p. 20, 32) | |
| | |
| Channel up/down | |
| ASP | ECT FAVC |
| Changes aspect ratio (p. 19) | |
| | 1 |
| Operates the Favorite channel list function. (p. 19) | |
| | |
| | 7 |
| Switches to previously viewed channel ————R | |
| and input modes. | SKI |
| | |
| | |
| | |
| | Par |
| | Fal |

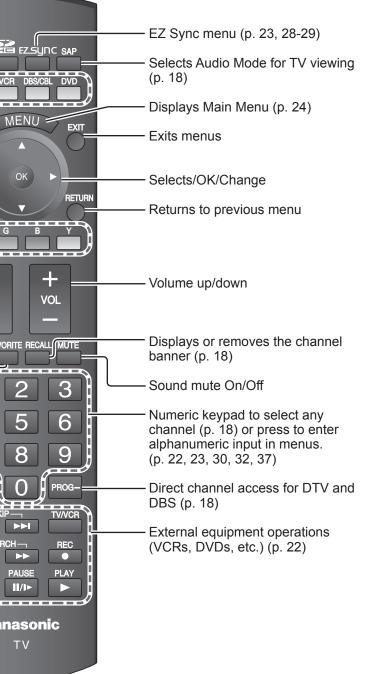


the demo.)

in front of the TV set.

light)

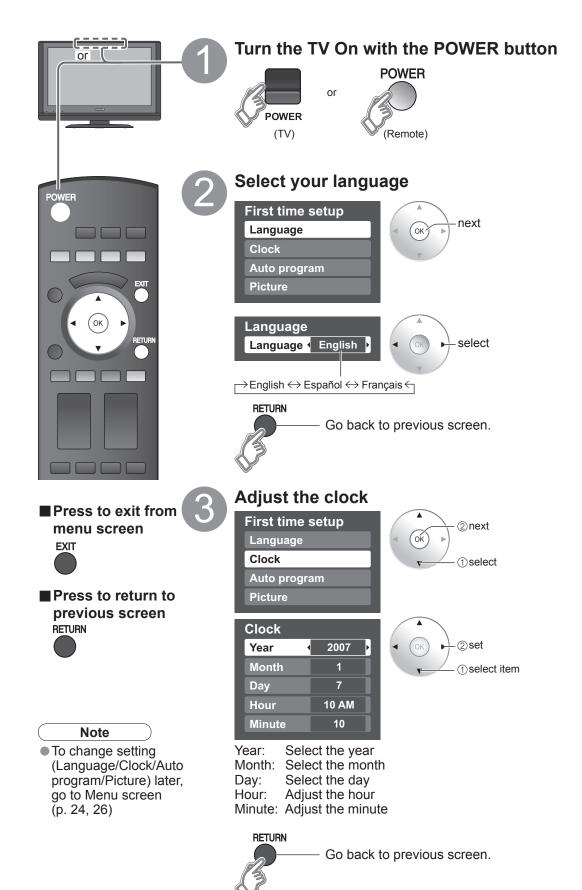
as the power cord is inserted into the wall outlet.

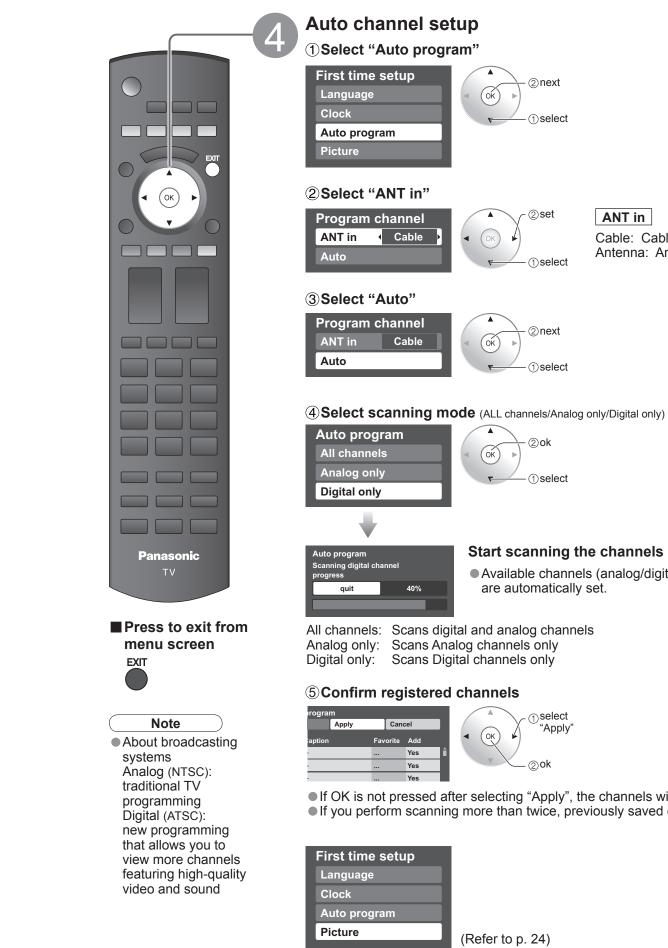


Quick Start Guide

First Time Setup

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







Start scanning the channels

Available channels (analog/digital) are automatically set.

• 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.

Watching TV

Connect the TV to a cable box/cable, set-top-box, satellite box, or antenna cable (p. 8, 9)

Select a channel number

or

To directly input the digital channel

When tuning to a digital

example: CH15-1: 1 5 PROG- 1

channel, press the button to

enter the minor number in a

compound channel number.

 Λ^{-}

CH

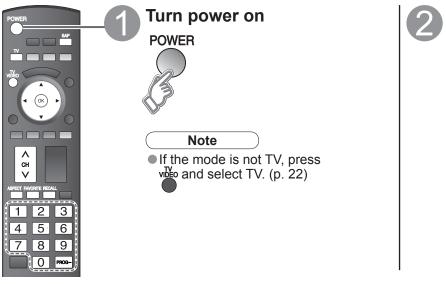
number

PROG-

1 2 3

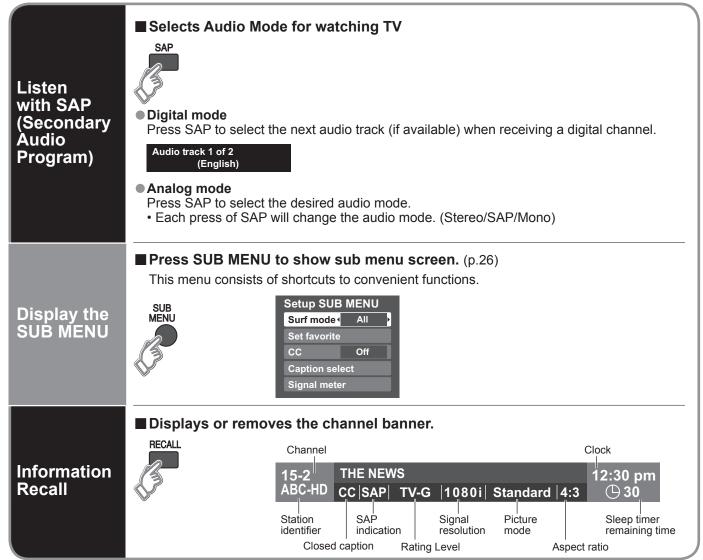
4 5 6

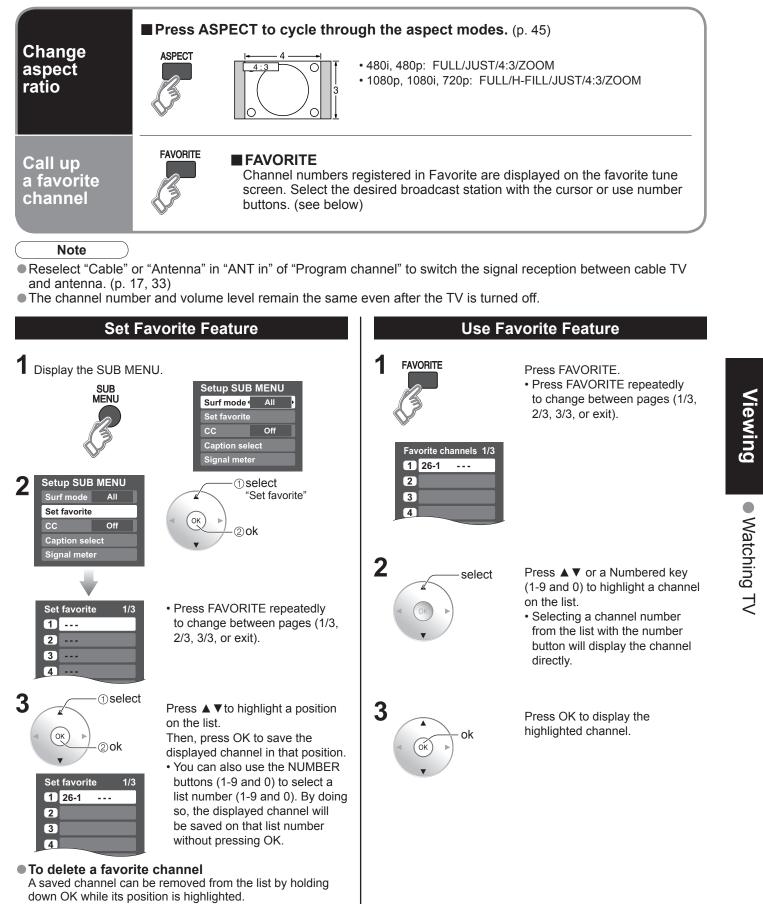
7 8 9 0





■ Other Useful Functions (Operate after 2)



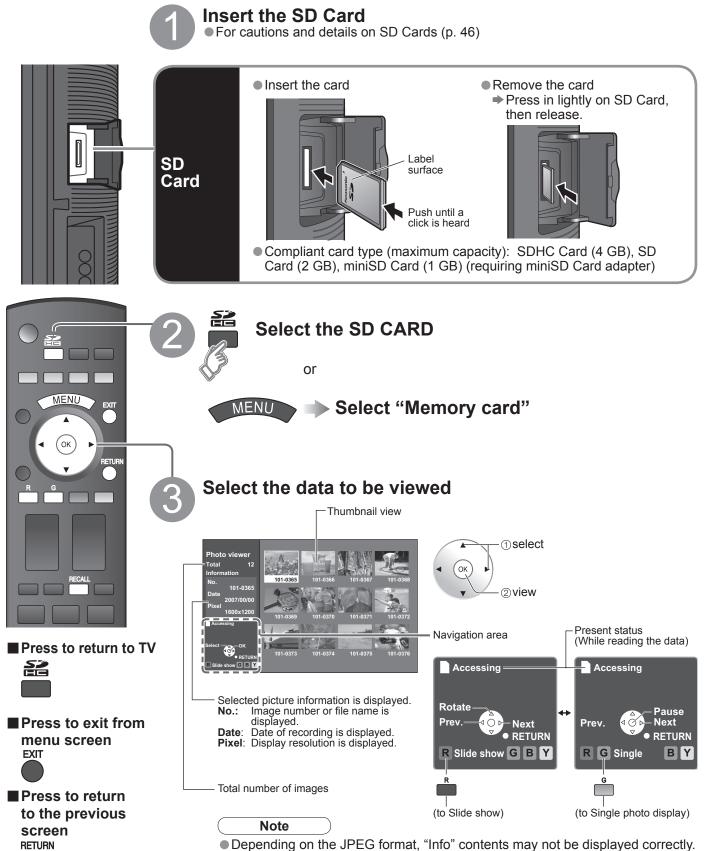


• To change the page

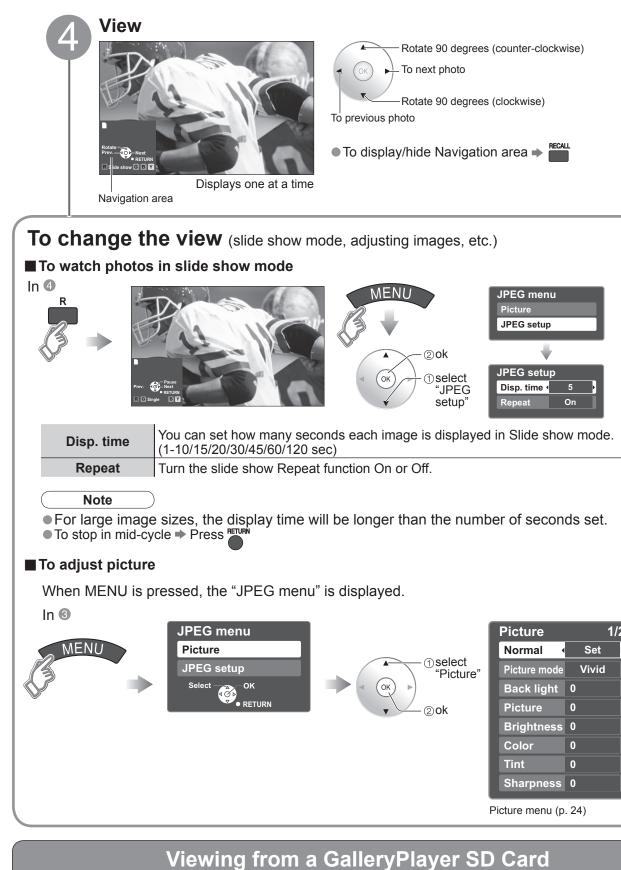
Pressing < changes the page backward.

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.)



Depending on the JPEG format, "Info" contents may not be displayed correctly. Refer to p. 46 (Data format for SD card browsing) for details.



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.

| ſ | Picture | 1/2 |
|----------------------|--------------|-------|
| | Normal • | Set 🕨 |
| ①select "Picture" | Picture mode | Vivid |
| ▶) | Back light | 0 |
| | Picture | 0 |
| | Brightness | 0 |
| | Color | 0 |
| | Tint | 0 |
| | Sharpness | 0 |
| | | |

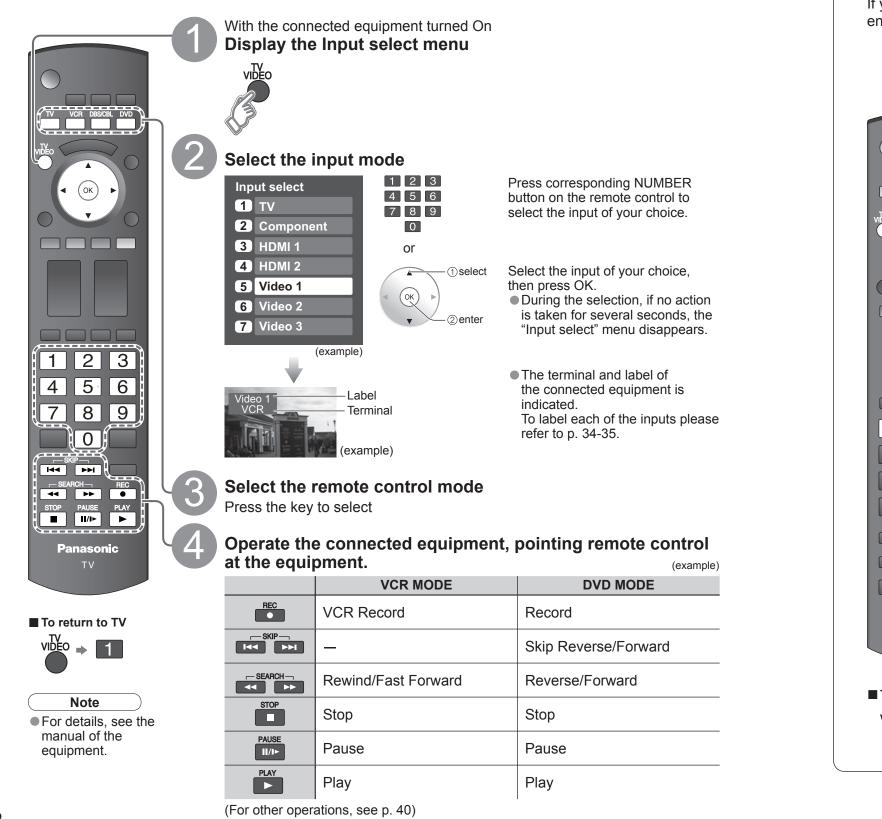
Viewing

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.

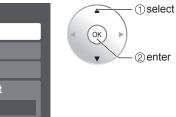
Input Select

You can select the external equipment to access. To operate other manufacturers' equipment, you need to register the code of the equipment. (p. 37)



If you connect equipment that has "HDAVI Control 2" function to a TV with HDMI cable, you can enjoy using more convenient functions. For details, "EZ Sync Control" on p. 28-29. **Display EZ Sync menu** EZSUNC Select the equipment) select (ок) FZSUNC DVD recorder ОК Home theater enter HD camcorder Speaker output тν 3Operate 1 Now you can operate the selected equipment with the TV's remote control. Follow the menu of the equipment and enjoy watching. For the remote control operations, refer to p. 29. Note • For details, see the manual of the equipment or ask your local dealer. Panasonic To return to TV

EZ Sync[™]



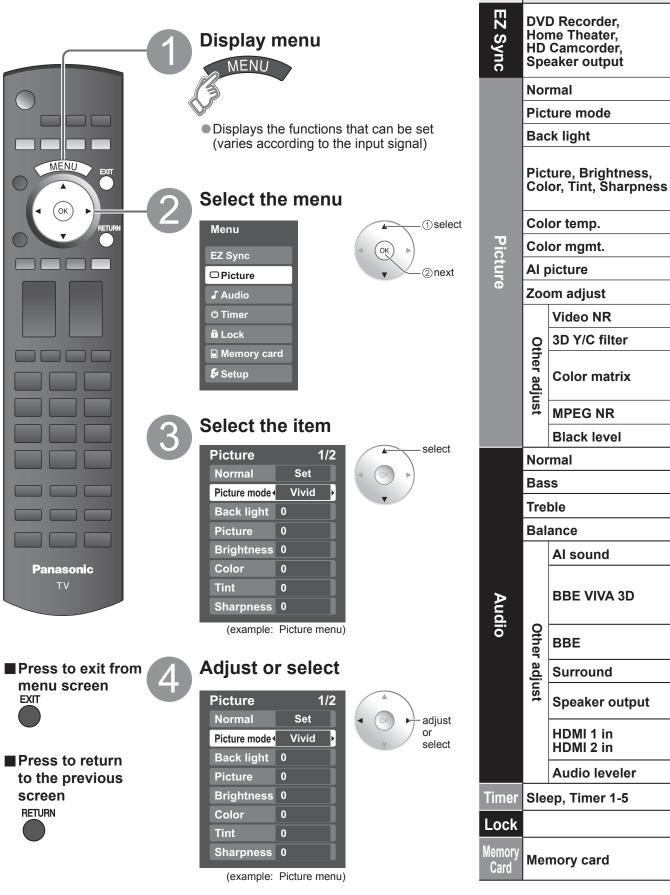
How to Use Menu Functions

Menu list

ltem

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 (alternatives) | |
|--|--------------------------|
| [DVD Recorder/Home Theater/HD Camcorder] Select equipment to access and operate. (p. 28-29) [Speaker output] Select audio output. (Home theater/TV) (p. 28-29) ● EZ Sync menu is accessible directly by pressing the EZ Sync button on the remote control. → ^{EZSUNC} (p. 23 |) |
| Resets all picture adjustments to factory default settings except for "Other adjust" (Set/No) | Normal Set |
| Basic picture mode (Vivid/Standard/Cinema/Custom) (p. 47) | Picture mode Vivid |
| Adjusts luminance of the back light. | Back light +20 |
| Adjusts color, brightness, etc. for each picture mode to suit your taste Picture +20 Brightness 0 Color 0 | Tint 0 Sharpness 0 |
| Selects level of warm colors (red) and cool colors (blue) (Cool/Normal/Warm) | Color temp. Cool |
| On: Enhances green and blue color reproduction, especially outdoor scenes. (On/Off) | Color mgmt. On |
| Controls dark areas without affecting the black level or brightness in the overall picture (On/Off) | Al picture On |
| Adjusts vertical alignment and size when aspect setting is "ZOOM" (p. 45) | 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 |
| Selects image resolution of component-connected devices (HD/SD) SD: Standard Definition HD: High Definition Only 480p signal accepted; regular TV (NTSC) is not available. | Color matrix SD |
| Reduces noise of specific digital signals of DVD, 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. (Set/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/Off) | Al sound On |
| BBE ViVA HD3D (High-Definition 3D) Sound provides musically accurate natural 3D image with Hi-Fi sound. The clarity of the sound is improved by BBE while the width, depth and height of sound image are expanded by BBE's proprietary 3D sound process. BBE ViVA HD3D Sound is compatible with all TV programs including news, music, dramas, movies, sports and electronic games. (On/Off) | BBE VIVA 3D On |
| BBE High Definition Sound restores clarity and presence for better speech intelligibility and musical realism. (On/Off) | BBE On |
| Enhances audio response when listening to stereo. (On/Off) | Surround Off |
| Switches to "Off" when using external speakers (On/Off) "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/Analog) Auto: Automatically selects Analog / Digital signal | HDMI1 inAutoHDMI2 inAuto |
| 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. 36) | Sleep 60 |
| Locks the channels and programs (p. 30) | |
| Displays SD card data (p. 20-21) | Memory card |

How to Use Menu Functions

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

Signal meter

Menu list

Menu ltem Surf mode **Display menu** Language Clock Program channel External devices Displays the functions that can be set Input labels MENU (varies according to the input signal) Select "Setup" (2) next Menu Monitor out (oĸ) EZ Sync (1) select □ Picture СС J Audio E ථ Timer EZ Sync Sync 🖬 Lock Power off link Memory card setting Setup Power on link 🗗 Setup Default speakers Select the item 3 Auto power on 2 next Setup 1/2 Surf mode (ók) Press to exit from All (1) select menu screen Language No signal shut-off Other adjust Clock Program channel External devices Press to return CC to the previous screen No action shut-off RETURN **Power Save Display Sub Menu** About SUB MENU Reset Select the item Sub menu list Menu ltem select Setup SUB MENU Surf mode Setup SUB MENU Surf mode All Set favorite Set favorite or Off next CC СС Caption select

Caption select

Signal meter

(Continued)

| | Adjustments/Config |
|---|--|
| | Sets the mode to select the channel with Channel up/down butt Favorite: Only channels registered as FAVORITE (p. 33) |
| | Selects the screen menu language (p. 16) |
| | Adjusts the clock (p. 16) |
| | Sets channels (p. 32) |
| | Selects the terminal and label of the external equipment (p. 34) |
| | [Comp./HDMI 1/HDMI 2/Video 1/Video 2/Video 3] To prevent howling and image oscillation, stops output of the pi (p. 34) (On/Off) |
| | Displays subtitles (Closed Caption) (p. 34) |
| | Controls equipment connected to HDMI terminals (p. 28) (On/C • "Power off link", "Power on link", and "Default speakers"cann |
| | Sets "Power off link" of HDMI connection equipment (p. 28) (Se |
| | Sets "Power on link" of HDMI connection equipment (p. 28) (Se |
| | Selects the default speakers (p. 28) (TV/Theater) |
| | Turns TV On automatically when the cable box or a connected The "Sleep" timer, "On / Off timer", and "First time setup" will (p. 36) |
| | To conserve energy, the TV automatically turns off when NO SI (Set/No) Note |
| | Not in use when setting "Auto power on", "On/Off Timer", "SE "No signal shut-off was activated" will be displayed for about the first time after turning the power off by "No signal shut-off The on-screen display will flash 3, 2 and 1 to indicate the last three |
| | To conserve energy, the TV automatically turns off when no ope continues more than 3 hours. (No/Set) Note |
| | Not in use when setting "Auto power on" or "On/Off Timer". "No action shut-off was activated" will be displayed for about the first time after turning the power off by "No action shut off The on-screen display will flash 3, 2 and 1 to indicate the last three |
| | Reduces screen brightness to lower power consumption. Eye-fi (Standard/Saving) |
| _ | Displays TV version and software license. |
| | Performing Reset will clear all items set with Setup, such as cha |
| _ | |

| Adjustments/Conf | igı |
|---|------|
| Sets the mode to select the channel with Channel up/down bu | utto |
| Sets favorite channels. (p. 19) | |
| Displays Closed Caption. (p. 34-35) | |
| Changes the station identifier. (p. 32-33) | |
| Checks the signal strength if interference or freezing occurs o | n a |

EXIT

| igurations (alternatives) | |
|---------------------------|-----------------|
| utton (Favorite/All) | Surf mode All |
| | Language |
| | Clock |
| | Program channel |
| | |

pictures and audio specified in this menu

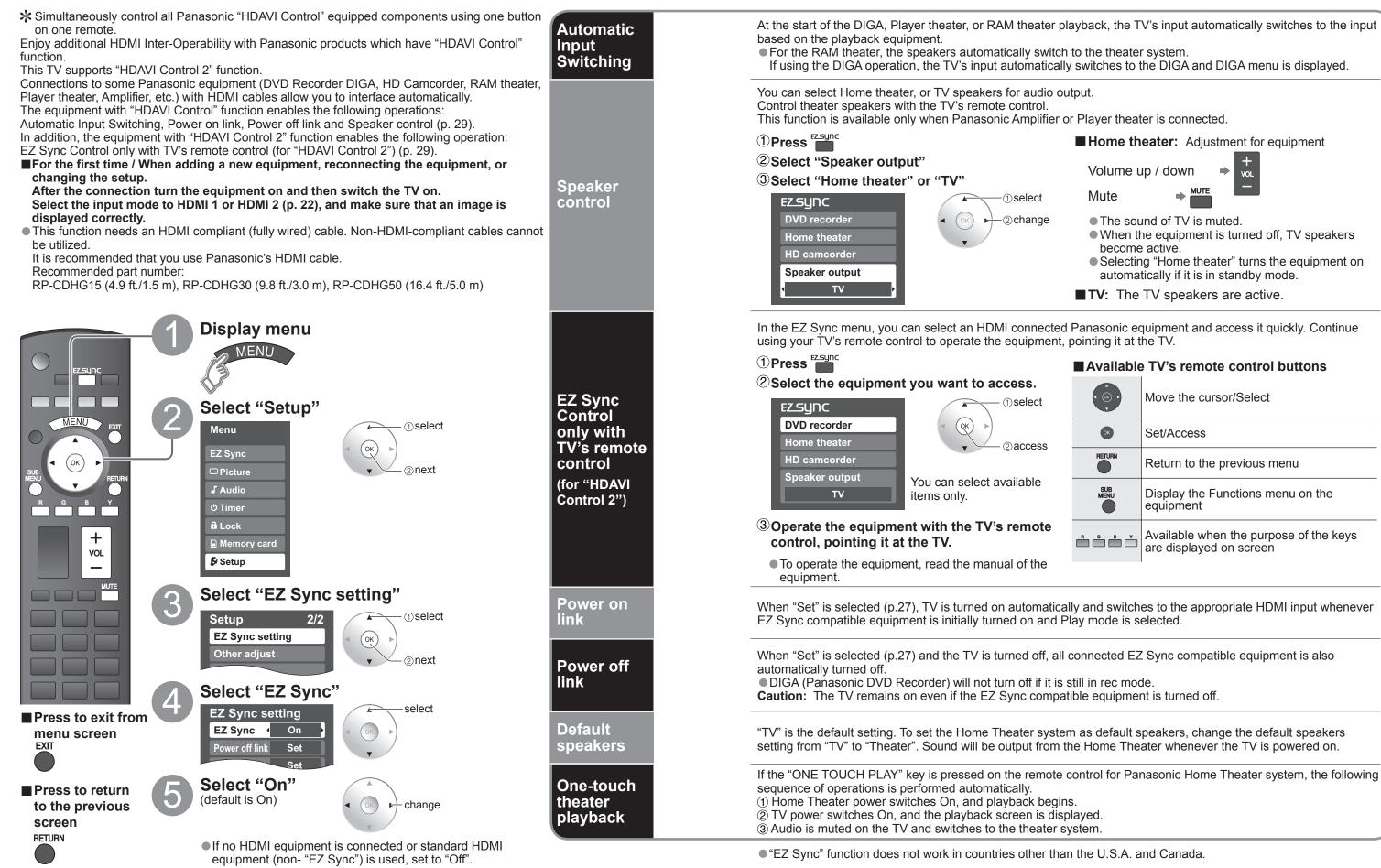
| | CC | (pi |
|--|------------------------|---|
| / Off) nnot be selected if "Off" is set. | EZ Sync On | fow to I (picture |
| Set/No) | Power off link Set | Jse , sc |
| Set/No) | Power on link Set | nn d |
| | Default speakers TV | d di nue |
| d device is turned On (No/Set) ill not function if "Auto power on" is set. | Auto power on No | ow to Use Menu Functior picture, sound quality, etc |
| SIGNAL continues more than 10 minutes. | | tions etc.) |
| SD mode", "Lock", or Digital channel. ut 10 seconds when the TV is turned on for off". | No signal shut-off Set | |
| ree (3) remaining minutes prior to the shut-off. | | |
| peration of remote or front panel key | | Adv |
| ut 10 seconds when the TV is turned on for off". | No action shut-off No | Advanced |
| ree (3) remaining minutes prior to the shut-off. | | ec |
| e-friendly for viewing in a dark room. | Power Save Standard | |
| | About | |
| channel settings. (p. 32) | Reset | |
| | | |

jurations (alternatives)

ton (Favorite/All)

Advanced

EZ Sync[™] "HDAVI Control[™]"*



If using the DIGA operation, the TV's input automatically switches to the DIGA and DIGA menu is displayed. **Home theater:** Adjustment for equipment + VOL Volume up / down -____ Mute The sound of TV is muted. • When the equipment is turned off, TV speakers become active. • 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

| Available T | V's remote | control | buttons |
|-------------|------------|---------|---------|
| | | | |

| | Move the cursor/Select | | | | |
|--------|--|--|--|--|--|
| ОК | Set/Access | | | | |
| RETURN | Return to the previous menu | | | | |
| | Display the Functions menu on the equipment | | | | |
| | Available when the purpose of the keys are displayed on screen | | | | |

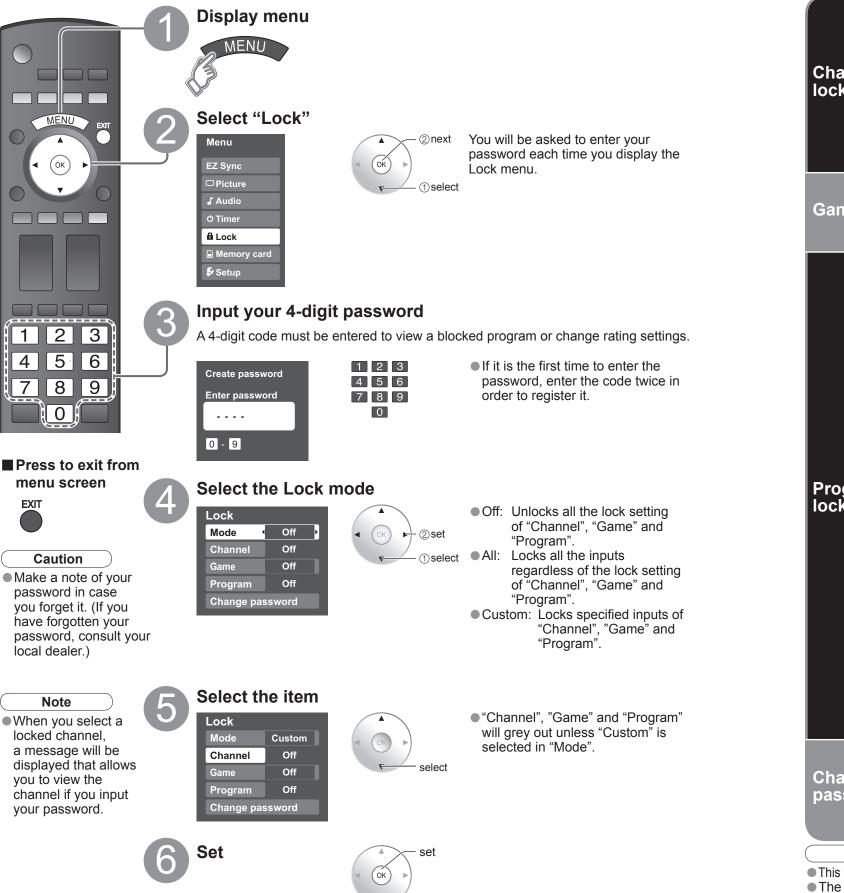
When "Set" is selected (p.27), TV is turned on automatically and switches to the appropriate HDMI input whenever

"TV" is the default setting. To set the Home Theater system as default speakers, change the default speakers

If the "ONE TOUCH PLAY" key is pressed on the remote control for Panasonic Home Theater system, the following

Lock

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



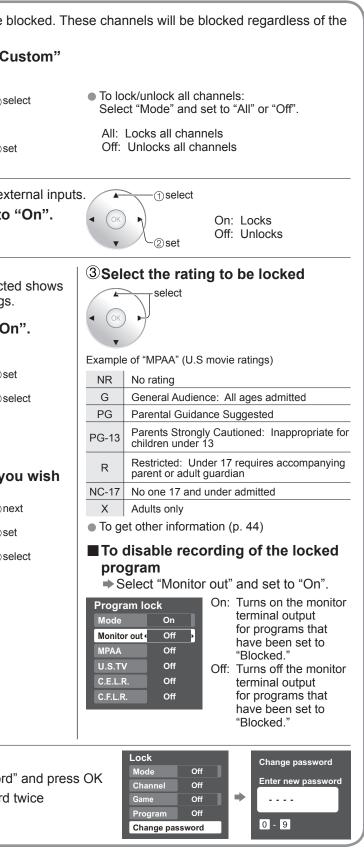
To select the channel or the rating of the program to be locked

| | Select up to 7 (1-7) channels to be bloc program rating. |
|---------------------|--|
| | ①Select "Mode" and set to "Cust |
| Channel | ②Select channel to lock. |
| lock | Channel lock Mode Custom Channel 1 3 Channel 2 4 Channel 3 – |
| | Locks Channel 3, Channel 4 and extern |
| Game lock | Select "Game" in ⑤ and set to "C |
| | ■ To set a rating level "V-chip" technology enables restricted s to be locked according to TV ratings. |
| | ①Select "Mode" and set to "On". |
| | Program lock |
| | Mode On Monitor out On |
| | MPAA Off T (1)select |
| | U.S.TV Off C.E.L.R. Off |
| | C.F.L.R. Off |
| | ②Select the rating category you to follow |
| Program lock | Program lock 3next |
| | Mode On OK P 2 set |
| | Monitor out On MPAA Off T Select |
| | U.S.TV Off C.E.L.R. Off |
| | C.E.L.R. Off C.F.L.R. Off |
| | • MPAA: U.S movie ratings |
| | • U.S.TV: U.S TV program ratings • C.E.L.R.: Canadian English ratings |
| | C.F.L.R.: Canadian French ratings |
| | |
| | To change the password |
| Change _. | () In (), select "Change password" a |
| password | ②Input the new 4-digit password twi |
| | |
| Note |) |
| | esigned to support the "Downloadable U.S. Re |

• This television is designed to support the "Downloadable U.S. Region Rating System" when available. (Available only in U.S.A.)

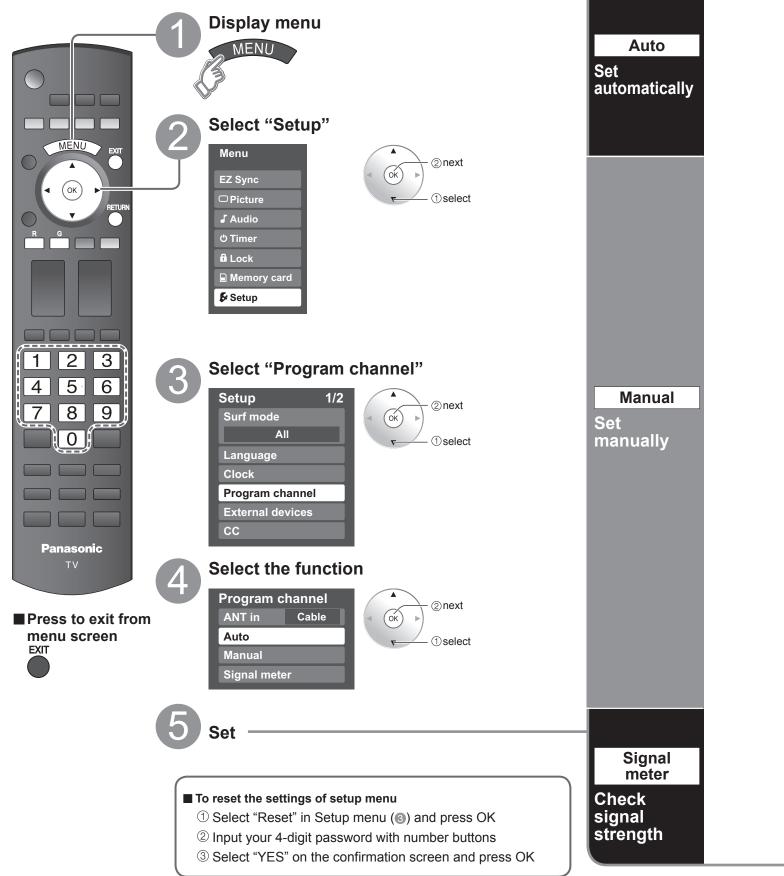
The Off rating is independent of other ratings.

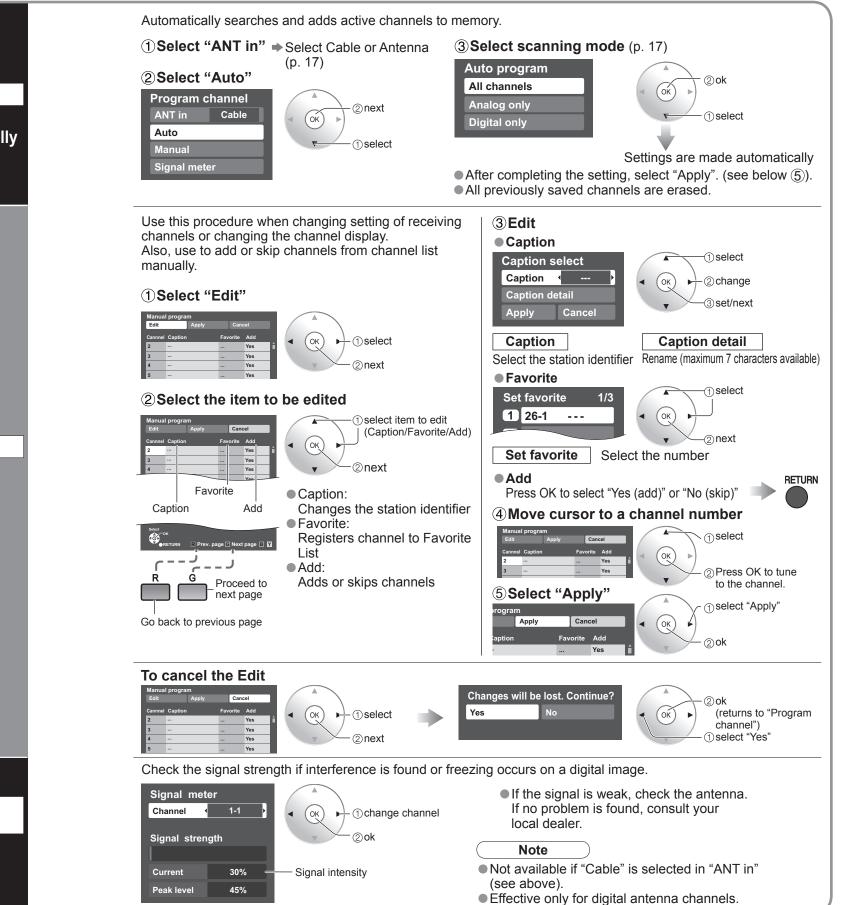
When placing a block on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.



Editing and Setting Channels

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





Advanced

Input Labels/Monitor out/

Closed Caption

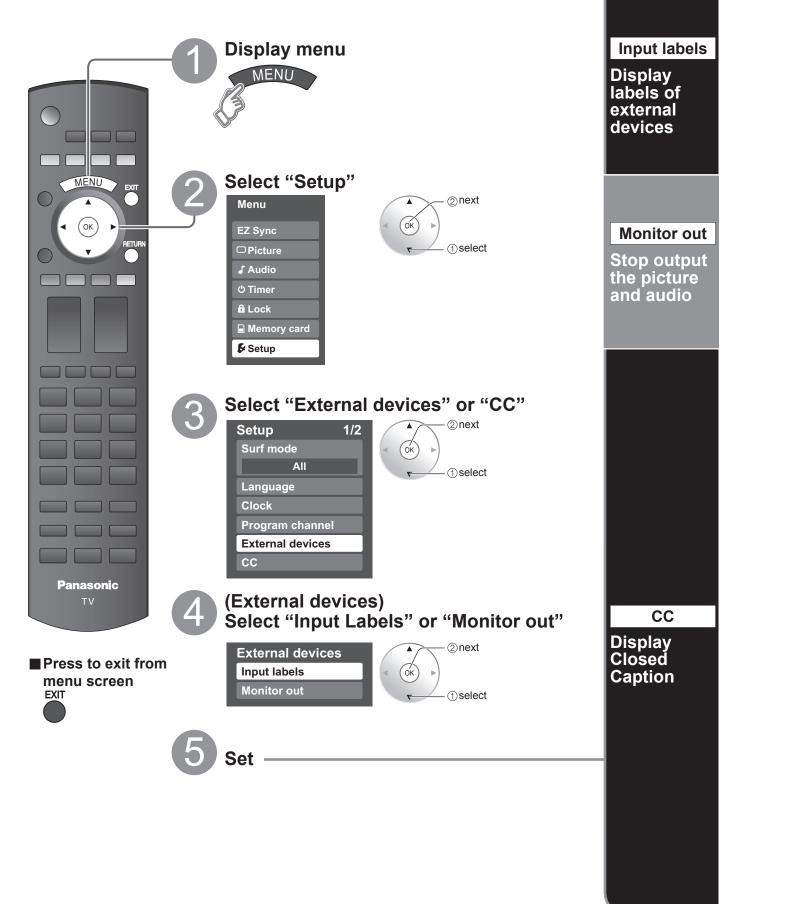
(1) select

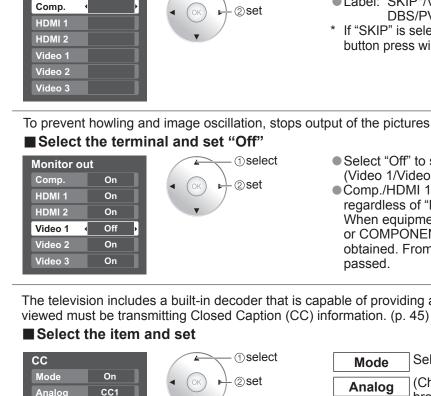
(In selecting input mode from p. 22 2)

Input labels

Digit

Digi





| | | (1) select |
|----------|-----------|---------------------------------|
| 9 | On | (○K) ⊨ ②set |
| og | CC1 | |
| al 🕨 | Primary 🕨 | V |
| al setti | ing | |
| eset | | |
| | | 1 |

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

C

To make more in-depth display settings in digital programs

① Select "Digital setting" and press OK ⁽²⁾ Select the item and set

| Digital set | ting | 1) select | • |
|--------------|-------------|-----------|---|
| Size | Automatic | | • |
| Font | Automatic | | |
| Style | Automatic | V | |
| Foreground • | Automatic > | | |
| Fore opacity | Automatic | | |
| Background | Automatic | | • |
| Back opacity | Automatic | | |
| Outline | Automatic | | |

To reset the settings

Select "CC reset" and press OK

Devices connected to external input terminals can be labeled for easier identification during input selection. Select the terminal and label of the external equipment

> Label • Terminals: Comp./HDMI 1-2/Video1-3 Label: SKIP*/VCR/DVD/CABLE/ DBS/PVR/GAME/AUX/[BLANK] * If "SKIP" is selected, the TV/VIDEO button press will skip its input.



[example]

To prevent howling and image oscillation, stops output of the pictures and audio specified in this menu. (p. 26)

Select "Off" to stop output of picture and audio. (Video 1/Video 2/Video 3)

• Comp./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

| Mode | Select "On" (when not using, select "Off"). |
|---------|---|
| Analog | (Choose the Closed Caption service of Analog broadcasting.) |
| C1-4: | Information related to pictures (Appears at bottom of screen) |
| 1-4: | Textual information (Appears over entire screen) |
| Digital | (The Digital Closed Caption menu lets you configure the way you choose to view the digital captioning.) |

Select the setting.

• "Primary", "Second.", "Service 3", "Service 4", "Service 5", "Service 6"

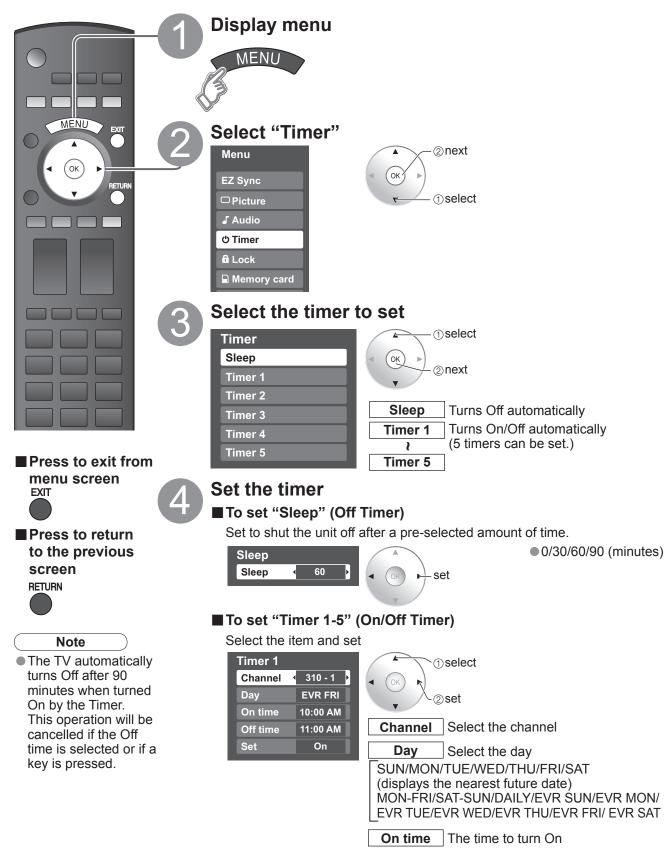
Size: Text size Font: Text font Style: Text style (Raised, Depressed, etc.) Foreground: Color of text Fore opacity: Opacity of text Background: Color of text box Back opacity: Opacity of text box Outline: Outline color of text (Identify the setting options on the screen.)

35

Advanced

Using Timer

The TV can automatically turn On/Off at the designated date and time. • The Clock must be set before On time/Off time settings. (p. 16) • The "Sleep" timer and "On / Off timer" will not function if "Auto power on" (p. 27) is set.



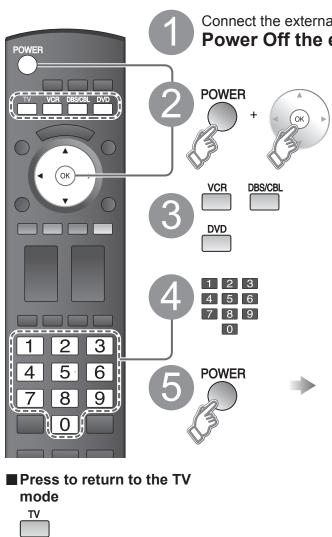
Off time The time to turn Off

Timer setting (On/Off)

Set

Operating Peripheral Equipment

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

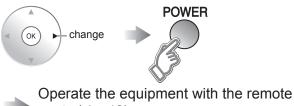


Caution

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

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

(1) After step (3) above, change the code and test



control (p. 40)

Repeat until the code is found

It may take many attempts before the correct code is found

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

Press both buttons simultaneously for more than 3 seconds.

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

Select the equipment

with the equipment selection button • The selected button remains lit (other buttons are not lit).

Input the equipment's 4-digit remote control code (p. 41-43)

Operate the equipment with the remote control (p. 40)

The external equipment turns On.

If the equipment does not operate with the remote control

• When your equipment has a single code

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

To find a code not listed in the code list

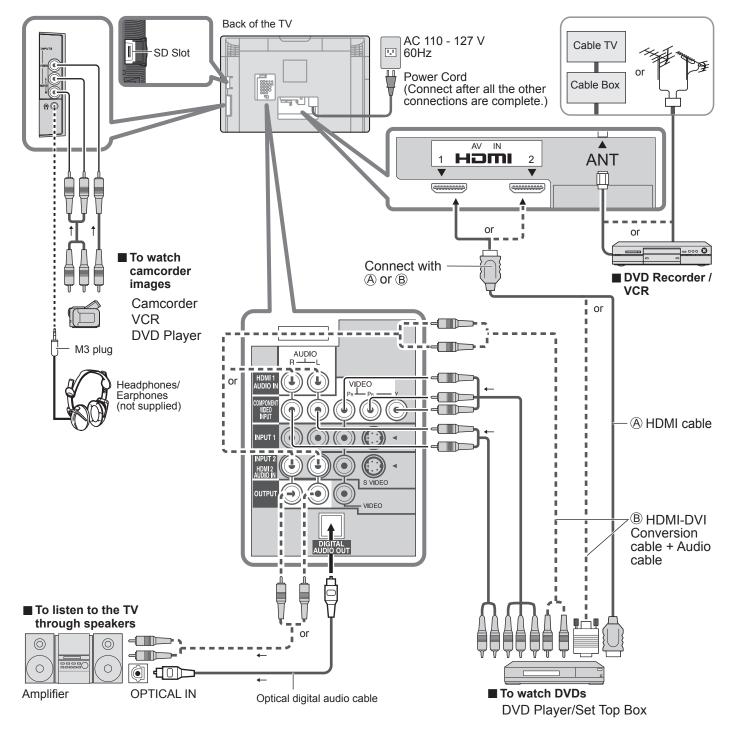
(2) When the correct code is found

(ok)

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 of each piece of equipment and the specifications (p. 49). For additional assistance, please visit our website at: www.panasonic.com

www.panasonic.ca



Note

- The picture and audio input signals connected to a terminal specified in "Monitor out" (p. 34) cannot be output from "OUTPUT" terminals. However, audio output can be obtained from "DIGITAL AUDIO OUT" terminal.
- To prevent howling and image oscillation, set the "Monitor out" setting when connecting the VCR with loop-connection. (p. 26, 34)
- 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 OUTPUT terminals.

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 28-29 for Setup Menu settings and additional control information.

Optional HDMI and/or optical cables are not provided.

Note

HDMI 1 is recommended

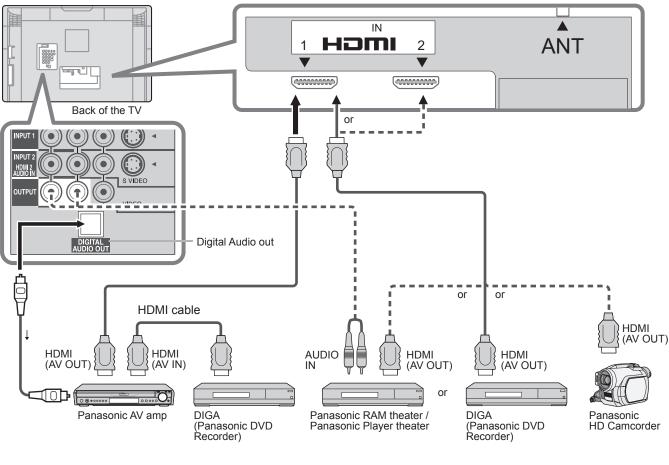
When connecting to HDMI 2, set the input mode to HDMI 2 (p. 22) initially before connecting to HDMI 2. After connection, confirm the HDMI control functions (p. 28-29).

Connecting this unit to a DVD recorder and AV amp

theater

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. 28-29).

Note

Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective operating instruction manuals. • When audio from other equipment connected to this unit via HDMI is output using "DIGITAL AUDIO OUT" of this unit. the system switches to 2CH audio.

(When connecting to an AV amp via HDMI, you can enjoy higher sound quality.)

38

EZ Sync[™] Connections

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 Plaver theater plavback operate.

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

• 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.

Remote Control Operation/Code List

The following explains how to operate external devices with the remote control. • Register the remote control codes (p. 37) if you want to operate an external device of another manufacturer. (p. 41-43)

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.

| EY NAME | VCR MODE | DBS | CBL MODE | | |
|---|---------------------|---------------------|---------------------|----------------------|--|
| | VCR WODE | (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 | |
| | - | 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 | |
| сссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссссс< | Channel Up/Down | Channel Up/Down | Channel Up/Down | Channel Up/Down | |
| vol – | TV Volume Up/Down | TV Volume Up/Down | TV Volume Up/Down | TV Volume Up/Down | |
| 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 | Play | |

Remote Control Code List

| Cable Conve | rter (🗾) | | | | | | |
|--|---|--|--|--|---|--|--|
| Brand | Code | Brand | Code | Brand | Code | Brand | Code |
| A-Mark | 0008, 0144 | Gibralter | 0003 | Penney | 0000 | Tocom | 0012 |
| BC | 0003, 0008, 0237 | GMI | 0883 | Philips | 0317, 1305 | Torx | 0003 |
| ccuphase | 0003 | GoldStar | 0144 | Pioneer | 0144, 0533, 0877, | Toshiba | 0000 |
| corn | 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, 027 |
| Americast | 0899 | Jerrold | 0003, 0012, 0276, | Quasar | 0000 | V2 | 0883 |
| Archer | 0237 | borrola | 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 | motorola | 1254, 1376 | Samsung | 0003, 0144 | Zenith | 0000, 0525, 089 |
| Clearmaster | 0883 | Multitech | 0883 | Scientific Atlanta | 0000, 0003, 0008, | Lonar | 10000, 0020, 000 |
| 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 | 1 000 | 1877 | Starcom | 0003 | | |
| E Section | 0144 | Panasonic | 0000, 0008, 0107, | Supercable | 0276 | | |
| General | 0003, 0012, 0276, | 1 anasonic | 0144 | Supermax | 0883 | | |
| nstrument | 0476, 0810 | Paragon | 0000, 0008, 0525 | Thomson | 1256 | | |
| | DBS/CE | | 10000, 0000, 0323 | 110113011 | 1250 | | |
| Cable/PVR Co | |) | | | | | |
| mericast | 0899 | Motorola | 0810, 1376 | Scientific Atlanta | 0877, 1877 | Zenith | 0899 |
| Beneral | 0810 | Pace | 0237, 1877 | Sony | 1006 | | |
| nstrument | | Pioneer | 0877, 1877 | Supercable | 0276 | | |
| lerrold | 0810 | RCA | 1256 | Thomson | 1256 | | |
| Satellite Rece | eiver (| | | | | | |
| Bell ExpressVu | 0775 | GE | 0392, 0566 | Motorola | 0856, 0869 | Samsung | 1108, 1109, 1142 |
| Chaparral | 0216 | General | 0869 | Netsat | 0099 | cumoung | 1276, 1377, 144 |
| Crossdigital | 1109 | Instrument | 0000 | Next Level | 0869 | | 1609 |
| DirecTV | 0099, 0247, 0392, | GOI | 0775, 1775 | Optimus | 0724 | SKY | 0856, 0099 |
| | 0566, 0639, 0724, | Hitachi | 0749, 0819, 1250 | Panasonic | 0247, 0701, 1786 | Sony | 0639, 1639, 164 |
| | 0749, 0819, 1076, | Houston | 0775 | Paysat | 0724 | Star Choice | 0869 |
| | 1108, 1109, 1142, | HTS | 0775, 1775 | Philips | 0099, 0722, 0724, | Star Trak | 0869 |
| | 1377, 1392, 1414, 1442, 1609, 1639, | Hughes Network | 0749, 1142, 1442, | | 0749, 0775, 0819, | Thomson | 0392, 0566 |
| | 1640, 1749, 1856 | Systems | 1749 | | 1076, 1142, 1442, | Tivo | 1142, 1442 |
| Dish Network | 0775, 1005, 1505, | Innova | 0099 | | 1749 | Toshiba | 0749, 0790, 081 |
| System | 1775 | Jerrold | 0869 | Pioneer | 1142, 1442 | TUSTIIDa | 1285, 1749 |
| • | 0775, 1005, 1505, | JVC | 0775, 1775 | Primestar | 0869 | UltimateTV | 1392, 1640 |
| Dishpro | 1775 | LG | | | | | |
| Echostar | 0775, 1005, 1505, | Magnavox | 1414 0722, 0724 | Proscan RadioShack | 0392, 0566 0566, 0775, 0869 | Uniden Voom | 0724, 0722 |
| LCHOSIAI | 1775 | U | 0869 | | 0392, 0566, 0775, | Zenith | 0856, 1856 |
| | | McIntosh | 0724 | RCA | 1142, 1392, 1442 | Zeniun | 10000, 1000 |
| Expressvu | 0775, 1775 | Memorex Mitsubishi | 0749 | | 1142, 1002, 1442 | | |
| unai | 1377 | IVIIISUDISTII | 0749 | | | | |
| DBS/PVR Co | mbination (S) (| | | | | | |
| | 0099, 0392, 0639, | Dishpro | 0775, 1505 | Motorola | 0869 | Sony | 0639, 1640 |
| DirecTV | | | 0775, 1505 | Philips | 1142, 1442 | Star Choice | 0869 |
| DirecTV | 1076, 1142, 1377, | Echostar | 0775, 1505 | | | | |
| DirecTV | | Echostar Expressvu | 0775 | Proscan | 0392 | | |
| DirecTV Dish Network | 1076, 1142, 1377, | | | | · · · · · · · · · · · · · · · · · · · | | |
| Dish Network System | 1076, 1142, 1377, 1392, 1442, 1640 | Expressvu | 0775 | Proscan | 0392 | | |
| Dish Network System | 1076, 1142, 1377, 1392, 1442, 1640 | Expressvu Hughes Network | 0775 | Proscan RCA | 0392 1392 | | |
| Dish Network System VCR(^{VCR}) | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 | Expressvu Hughes Network Systems | 0775 1142, 1442 | Proscan RCA Samsung | 0392 1392 1442 | Curtia Mathaa | 0000 0025 006 |
| Dish Network System VCR(^{VCR}) | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, | Expressvu Hughes Network Systems Asha | 0775 1142, 1442 0240 | Proscan RCA Samsung Carver | 0392 1392 1442 0035, 0081 | Curtis Mathes | 0000, 0035, 006 |
| Dish Network System VCR (^{vcr}) A-Mark | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 | Expressvu Hughes Network Systems Asha Astra | 0775 1142, 1442 0240 0035, 0240 | Proscan RCA Samsung Carver CCE | 0392 1392 1442 0035, 0081 0278 | Curtis Mathes | 0162, 0240, 027 |
| Dish Network System VCR (^{VCR}) N-Mark | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 | Expressvu Hughes Network Systems Asha Astra Audiovox | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 | Proscan RCA Samsung Carver CCE Cineral | 0392 1392 1442 0035, 0081 0278 0278 | | 0162, 0240, 027 0432, 1035 |
| Dish Network System VCR (^{VCR}) A-Mark | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, | Expressvu Hughes Network Systems Asha Astra Audiovox Avis | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 | Proscan RCA Samsung Carver CCE | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, | Cybernex | 0162, 0240, 027 0432, 1035 0240 |
| Dish Network System VCR (^{VCR}) A-Mark ABS Admiral | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 | Proscan RCA Samsung Carver CCE Cineral | 0392 1392 1442 0035, 0081 0278 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, | Cybernex CyberPower | 0162, 0240, 027 0432, 1035 0240 1972 |
| Dish Network System VCR (^{VCR}) A-Mark ABS Admiral Adventura | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, | Proscan RCA Samsung Carver CCE Cineral Citizen | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 | Cybernex | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 |
| Dish Network System VCR (VCR) A-Mark ABS Admiral Adventura | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark Bell & Howell | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 | Proscan RCA Samsung Carver CCE Cineral Citizen Classic | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 | Cybernex CyberPower Daewoo | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 1278 |
| Dish Network System VCR (VCR) A-Mark ABS Admiral Adventura Niko | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 0000, 0037 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 0002, 0121, 0209, | Proscan RCA Samsung Carver CCE Cineral Citizen | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 0035, 0045, 0060, | Cybernex CyberPower Daewoo Daytron | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 1278 0037, 0278 |
| Dish Network System VCR (VCR) N-Mark NBS Ndmiral Ndventura Niko Niwa Nba | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 0000, 0037 0209, 0278 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark Bell & Howell Broksonic | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 0002, 0121, 0209, 0479, 1479 | Proscan RCA Samsung Carver CCE Cineral Citizen Classic Colortyme | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 0035, 0045, 0060, 0278 | Cybernex CyberPower Daewoo Daytron Dell | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 1278 0037, 0278 1972 |
| Dish Network System VCR (VCR) A-Mark ABS Admiral Adventura Aiko Aiwa Aiba Alba | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 0000, 0037 0209, 0278 1972 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark Bell & Howell Broksonic Calix | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 0002, 0121, 0209, 0479, 1479 0037 | Proscan RCA Samsung Carver CCE Cineral Citizen Classic Colortyme Colt | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 0035, 0045, 0060, 0278 0000 | Cybernex CyberPower Daewoo Daytron Dell Denon | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 1278 0037, 0278 1972 0042, 0081 |
| Dish Network System VCR (VCR) A-Mark ABS Admiral Adventura Aiko Aiwa Aiba Alba | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 0000, 0037 0209, 0278 1972 0039 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark Bell & Howell Broksonic | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 0002, 0121, 0209, 0479, 1479 0037 0037, 0038 | Proscan RCA Samsung Carver CCE Cineral Citizen Classic Colortyme | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 0035, 0045, 0060, 0278 | Cybernex CyberPower Daewoo Daytron Dell | 0240 1972 0037, 0045, 0274 1278 0037, 0278 1972 0042, 0081 0739 |
| Dish Network System VCR (^{VCR}) A-Mark ABS Admiral Adventura | 1076, 1142, 1377, 1392, 1442, 1640 0775, 1505 0000, 0037, 0240, 0278 1972 0039, 0047, 0048, 0060, 0209, 0479 0000, 0037, 0240 0278 0000, 0037 0209, 0278 1972 | Expressvu Hughes Network Systems Asha Astra Audiovox Avis Beaumark Bell & Howell Broksonic Calix | 0775 1142, 1442 0240 0035, 0240 0037, 0038, 0278 0000 0240 0000, 0035, 0039, 0048, 0479 0002, 0121, 0209, 0479, 1479 0037 | Proscan RCA Samsung Carver CCE Cineral Citizen Classic Colortyme Colt | 0392 1392 1442 0035, 0081 0278 0278 0000, 0035, 0037, 0209, 0240, 0278, 0479, 1278 0037 0035, 0045, 0060, 0278 0000 | Cybernex CyberPower Daewoo Daytron Dell Denon | 0162, 0240, 027 0432, 1035 0240 1972 0037, 0045, 027 1278 0037, 0278 1972 0042, 0081 |

Remote Control Operation/Code List (Continued)

Remote Control Code List

| VCR () Brand | Code | Brand | Code | Brand | Code | Brand | Code |
|------------------|-------------------------------------|-----------------|-------------------------------------|---------------|--|-----------------|-------------------------|
| | | | | | | | |
| Electrohome | 0000, 0037, 0043, 0060, 0209, 0240 | Magnin | 0240 | Quasar | 0002, 0035, 0162, 1035 | Thomson | 0060 |
| | | Marantz | , , | DadiaChaol | | Tisonic | |
| Electrophonic | 0037 | Marta | 0037 | RadioShack | 0000, 0035, 0037, 0047, 0048, 0162, | Tivo | 0618, 0636, 073 1996 |
| Emerald | 0121, 0184 | Matsui | 0037, 0209 | | 0240 | Th 417 | |
| Emerex | 0032 | Matsushita | 0035, 0162, 0081 | D " | | TMK | 0000, 0240 |
| Emerson | 0000, 0002, 0037, | Media Center PC | 1972 | Radix | 0037 | TNIX | 0037 |
| | 0043, 0121, 0184, 0209, 0240, 0278, | MEI | 0035 | Randex | 0037 | Tocom | 0240 |
| | 0479, 1278, 1479 | Memorex | 0000, 0035, 0037, | RCA | 0000, 0035, 0042, | Toshiba | 0000, 0043, 004 |
| | | | 0039, 0162, 0047, 0048, 0209, 0240, | | 0045, 0048, 0060, 0240, 0807, 0880, | | 0209, 0240, 084 |
| Fisher | 0000, 0039, 0047 | | 0278, 0479, 1237 | | 1035, 1060 | | 1996 |
| Fuji | 0033, 0035 | | 0210, 0410, 1201 | | 1000, 1000 | | 1000 |
| 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. | Cambung | 0060, 0240, 0432, | Vector Research | 0038, 0184 |
| Genexxa | 0000, 0037, 0278 | Mitodolom | 0047.0048.0060. | | 0739, 1014 | Victor | 0067 |
| Go Video | 0240, 0432, 0614 | | 0067, 0807 | Samtron | 0240 | Video Concepts | 0045 |
| | | Matarala | | Samtron | | | |
| GoldStar | 0000, 0035, 0037, 0038, 0039, 0278, | Motorola | 0035, 0048 | Sanky | 0039,0048 | Videomagic | 0037 |
| | 1237 | MTC | 0000, 0240 | Sansui | 0000, 0002, 0067, 0209, 0240, 0479, | Videosonic | 0000, 0240 |
| <u> </u> | | 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, 003 |
| Granada | 0042, 0081 | Nikko | 0037, 0278 | Scott | 0043, 0045, 0184, | | 0035, 0037, 003 |
| Grundig | 0081 | Nikkodo | 0037, 0278 | | 0121 | | 0042, 0043, 004 |
| 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, 0048, 0060, 0067, | White | 0000, 0209, 0278 |
| HI-Q | 0000, 0035, 0047 | Northgate | 1972 | | 0162, 0209, 1237 | Westinghouse | 0479 |
| Hitachi | 0000, 0035, 0037, | Olympus | 0035, 0162 | | 0102, 0200, 1201 | World | 0002, 0209, 0479 |
| | 0042, 0045, 0089 | Optimus | 0000, 0035, 0037, | Sharp | 0048, 0047, 0032, | XR-1000 | 0000, 0035, 024 |
| Howard | 1972 | | 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, 0700 | | 0278, 0479, 1479 | Signature | 0000, 0035, 0037, | ZT Group | 1972 |
| Humax | 0739 | Panama | 0035 | Signature | 0048, 0060, 0479 | o.oop | 1.0.= |
| | 1972 | Panasonic | 0000, 0035, 0162, | Singer | 0037, 0240 | | |
| Hush | | Fallasoffic | 0225, 0614, 0616, | Singer | | | |
| | 0000, 0047 | | 1035, 1062, 1244 | Sonic Blue | 0614,0616 | l | |
| IBUYPOWER | 1972 | D | | Sony | 0000, 0032, 0033, 0035, 0047, 0067, | | |
| ITT Nokia | 0240 | Penney | 0000, 0035, 0037, | | 0636, 1232, 1972 | | |
| Janeil | 0240 | | 0038, 0042, 0047, 0067, 0081, 0162, | | | | |
| Jensen | 0067 | | 0240, 1035, 1237 | Soundmaster | 0000 | | |
| JVC | 0067 | | | 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 | | |
| Lumatron | 0278 | . 1011001 | 0162 | Tatung | 0000, 0048, 0067, | | |
| LXI | 0000, 0037, 0042, | Polk Audio | 0081 | latung | 0081 | | |
| | 0000, 0037, 0042, | | | Topo | | | |
| | | Portland | 0278 | Teac | 0000,0067 | | |
| M Electronic | 0240 | Profitronic | 0240 | Technics | 0000, 0035, 0037, | | |
| Magnasonic | 0000, 0037, 0240, | Proscan | 0060, 1060 | | 0162 | | |
| | 0278, 1278 | Protec | 0000 | Teknika | 0000, 0035, 0037 | | |
| Magnavox | 0000, 0035, 0037, | Pulsar | 0039, 0240, 0278 | Telecorder | 0240 | | |
| 0 | | | 0040 | Territoria | 0479 | | |
| | 0039, 0048, 0081, 0240, 0618, 1781 | Pulser | 0240 | Tevion | 0479 | | |

| Brand | nbination (V) (| Brand | Code | Brand | Code | Brand | Code |
|------------------|--------------------|----------------------|-------------------|-------------|-------------------|-----------------|-----------------|
| Hughes Network | 0739 | Philips | 0739 | Diana | | Brand | |
| Systems | 0739 | Samsung | 0739 | | | | |
| 5 | \ \ | Samsung | 0759 | | | | |
| PVR (V) (|) | | | | | | |
| ABS | 1972 | Hughes Network | 0739 | Northgate | 1972 | Tagar Systems | 1972 |
| Alienware | 1972 | Systems | | Panasonic | 0616 | Tivo | 0618, 0636, 073 |
| CyberPower | 1972 | Humax | 0739 | Philips | 0618, 0739 | Toshiba | 1008, 1972, 19 |
| Dell | 1972 | Hush | 1972 | RCA | 0880 | Touch | 1972 |
| DirecTV | 0739 | IBUYPOWER | 1972 | ReplayTV | 0614, 0616 | Viewsonic | 1972 |
| Gateway | 1972 | Linksys | 1972 | Samsung | 0739 | Voodoo | 1972 |
| lewlett Packard | 1972 | Media Center PC | 1972 | Sonic Blue | 0614, 0616 | ZT Group | 1972 |
| Howard | 1972 | Microsoft | 1972 | Sony | 0636, 1972 | | |
| Computers | | Mind | 1972 | Stack 9 | 1972 | | |
| -IP DVD | 1972 | Niveus Media | 1972 | Systemax | 1972 | | |
| DVD (📩) | | | | | | | |
| 3D LAB | 0503, 0539 | Funai | 0675, 1268 | Minato | 0752 | Samsung | 0490, 0573, 07 |
| Aiwa | 0641 | GE | 0522, 0815 | Mintek | 0839 | Ŭ | 0820, 0899, 10 |
| Akai | 0695, 0899 | Go Video | 0573, 0741, 0744, | Mitsubishi | 1521, 0521 | | 1075 |
| Alba | 0672 | | 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, 07 |
| | 1056, 1061 | Grundia | 0539 | Oritron | 0651 | · · · · · · · · | 1256 |
| Arrgo | 1023 | Harman/Kardon | 0582 | Palsonic | 0672 | Shinsonic | 0533, 0839 |
| Audiovox | 0790 | Hitachi | 0573,0664 | Panasonic | 0503, 0490, 0571, | Slim Art | 0784 |
| Blue Parade | 0571 | Hiteker | 0672 | | 0703, 1362, 1462, | Sonic Blue | 0573, 0869 |
| Blue Sky | 0695 | Insignia | 1268 | | 1490, 1762, 2006, | Sony | 0533, 0864, 10 |
| Brandt | 0651 | Integra | 0571,0627 | - | 2016, 2026, 1779 | Cony | 1431, 1533 |
| Broksonic | 0695 | JMB | 0695 | Philips | 0503, 0539, 0646, | Sylvania | 0675, 1268 |
| California Audio | 0490 | JVC | 0558, 0623, 0867, | 1 mipo | 0675, 1267, 1354 | Symphonic | 0675, 1268 |
| Labs | 0100 | 000 | 1164 | Pioneer | 0525, 0571, 0631 | Теас | 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, 05 |
| CyberHome | 0816, 0874, 1023. | Lasonic | 0627 | Qwestar | 0651 | 1031104 | 0695, 1045, 11 |
| Cybernome | 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 | RUA | 0822, 1022, 1132 | Venturer | 0790 |
| | 0675 | Magnasonic | 0651,0675 | Realistic | 0571 | Xbox | 0790 |
| Disney | 0675 | | 0503, 0539, 0646, | | 0752 | Yamaha | 0490, 0539, 05 |
| Dual DVD2000 | 0521 | Magnavox | 0675, 1268 | Reoc Rio | 0869 | Zenith | 0503, 0591, 07 |
| Emerson | 0591, 0675, 1268 | Marantz | 0503, 0539, 0675 | Rotel | 0623 | Zeniun | 0869 |
| Enterprise | 0591,0075,1208 | McIntosh | 1533 | Saba | 0651 | Zeus | 0784 |
| | | | | Sampo | 0752 | Zeus | 0704 |
| Entivo ESA | 0503, 0539 1268 | Medion | 0651 0695 | Jampu | 101.52 | | |
| | 0651 | Memorex Microsoft | 0522 | | | | |
| Firstline | DWD | WICIOSOIL | 10322 | | | | |
| DVD-Recorde | | | | | | | |
| Apex Digital | 1056 | LG | 0741 | Pioneer | 0631 | Sylvania | 0675 |
| CyberHome | 1129 | Magnavox | 0646, 0675 | RCA | 0522 | Zenith | 0741 |
| | 0675 | Panasonic | 0490, 2006, 2016, | Samsung | 0490 | | |
| Funai | 0010 | | 2026 | | | | |

Remote Control Operation/Code List

Ratings List for Lock

"V-chip" technology enables you to lock channels or shows according to standard ratings set by the entertainment industry. (p. 31)

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

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

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

| E | Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming. |
|-----|---|
| 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 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 Section 15.120(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

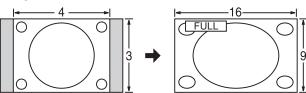
Technical Information

- 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 CC is set On on both the connected equipment and the TV, captions from each unit will overlap.

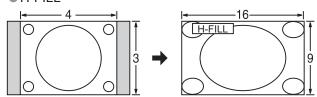
(e.g.: in case of 4:3 image)

FULL



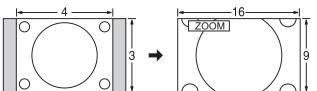
Enlarges the 4:3 image horizontally to the screen's side edges. (Recommended for anamorphic picture)





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. 24-25) ⁽²⁾V-position: Vertical position adjustment



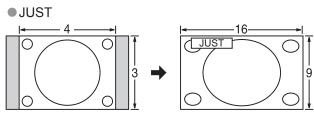
ОК To reset the aspect ratio

Closed Caption (CC)

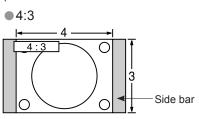
- If digital connected equipment is used for input, CC should be set On on either the connected equipment or the TV.

Aspect Ratio

Lets you choose the aspect depending on the format of the received signal and your preference. (p. 19)



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



Standard

Note • 480i (4:3), 480i (16:9), 480p (4:3), 480p (16:9): FULL, JÚST, 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



Technical Information Ratings List for Lock

••

Technical Information (Continued)

Data format for SD Card browsing

Photo: Data format: Max. number of files: Image resolution:

Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF** standards Baseline JPEG (Sub-sampling: 4:4:4, 4:4:2 or 4:2:0) 9.999

160 x 120 to 10,000,000

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

Caution

A JPEG image modified with a PC cannot be displayed.

Partly degraded files might be displayed at a reduced resolution.

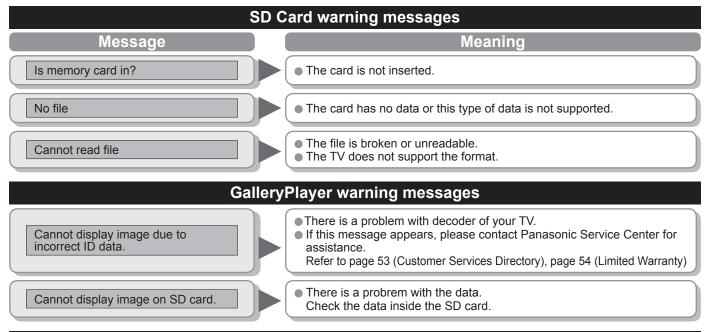
Note

Folder structure viewed in PC

| | -Created automatically |
|----------|---|
| 100_PANA | 3-digit folder number + 5-digit arbitrary characters |
| | 4-digit arbitrary characters + 4-digit file number ● Usable characters: 1-byte "a to z", "A to Z", "0 to 9," and " |

• The folder and file names may be different depending on the digital camera used.

For the suitable SD Memory Cards, please confirm the latest information on the following website. http://panasonic.co.jp/pavc/global/cs (This site is in English only)



Cautions in handling SD Card:

Do not remove the card while the unit is accessing data (this can damage card or unit).

Do not touch the terminals on the back of the card.

Do not subject the card to a high pressure or impact.

Insert the card in the correct direction (otherwise, card may be damaged).

Electrical interference, static electricity, or erroneous operation may damage the data or card.

Back up the recorded data at regular intervals in case of deteriorated or damaged data or erratic

operation of the unit. (Panasonic is not liable for any deterioration or damage of recorded data.)

DIGITAL AUDIO OUT terminals

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

Caution

Depending on your DVD player and DVD-Audio software the copyright protection function may operate and disable optical output. • External speakers cannot be connected directly to OUTPUT 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.

- HDMI connections to some Panasonic equipment allow you to interface automatically. (p. 28)
- This function may not work normally depending on the equipment condition.
- 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.
- EZ Sync[™] is available for the terminal with the smaller number.
- DIGITAL AUDIO OUT terminal can be output as multi channel surround.

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. 24) Applicable audio signal sampling frequencies (L.PCM): 48 kHz, 44.1 kHz, 32 kHz

Caution

- Use with a PC is not assumed.
- All signals are reformatted before being displayed on the screen.
- If the connected device has an aspect adjustment function, set the aspect ratio to "16:9".
- This HDMI connector is "type A".
- "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.

* Mark: Applicable input signal for Component (Y, PB, PR) and HDMI

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

Note

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

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

| Vivid (default): | ŀ |
|------------------|---|
| Standard: | F |
| Cinema: | F |
| Custom (Photo): | (|

Provides enhanced picture contrast and sharpness for viewing in a well-lit room. Recommended for normal viewing conditions with subdued room lighting. For watching movies in a darkened room. It provides a soft, film-like picture. Customizes each item according to your taste. Photo is displayed in Jpeq menu.

EZ Sync[™] "HDAVI Control[™]"

• The equipment can be operated by other remote controls with this function on even if TV is in Standby mode.

• If you connect the same kind of equipment at once (for example: one DIGA to HDMI 1 / another DIGA to HDMI 2),

If you connect the equipment that has "HDAVI Control 2" function to the TV with HDMI cable, the sound from

HDMI connection

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

 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

Input signals that can be displayed

Picture mode

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 a weak detergent solution 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 LCD 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.)

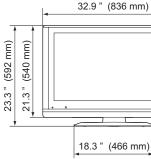
Power cord plug

Wipe the plug with a dry cloth at regular intervals. (Moisture and dust can lead to fire or electrical shock.)

Specifications

| Powe | er Source | AC 110 - 127 V, 60 Hz | | | | | | | |
|-----------------------------|---|---|----|--|--|--|--|--|--|
| Power Consumption | Average use Maximum Current Standby condition | 138 W 1.5 A 0.1 W | | | | | | | |
| C Co | Aspect Ratio | 16:9 | | | | | | | |
| ารท | Visible screen size | 31.5 " DIAGONAL (80.0 | С | | | | | | |
| ımptio | (W × H × Diagonal) | 27.5 " × 15.4 " × 31.5 " (698 mm × 392 mm × 800 | | | | | | | |
| ъ | (No. of pixels) | 1,049,088 (1,366 (W) × | 76 | | | | | | |
| S | Speaker | 2 way 4 speakers | | | | | | | |
| Sound | Audio Output | 20 W [(7.5 W + 2.5 W) > | × | | | | | | |
| Q | Headphones | M3 (3.5mm) Jack × 1 | | | | | | | |
| Char ATSC | nnel Capability- C/NTSC (Digital/Analog) | VHF/ UHF: 2-69, CATV | : | | | | | | |
| Oper | ating Conditions | Temperature:32 °FHumidity:20 % | | | | | | | |
| | INPUT 1-2 | VIDEO: RCA F S VIDEO: Mini D AUDIO L - R: RCA F |) | | | | | | |
| Cor | INPUT 3 | VIDEO: RCA F AUDIO L - R: RCA F | | | | | | | |
| nectior | COMPONENT VIDEO INPUT | Y: 1.0 V Рв, Рк: ±0.35 AUDIO L-R: RCA F | V | | | | | | |
| Connection Terminals | HDMI 1-2 AUDIO IN | TYPE A Connector × 2 This TV supports "HI AUDIO L - R: RCA | | | | | | | |
| als | Card slot | SD CARD slot × 1 | | | | | | | |
| | OUTPUT | VIDEO: RCA F AUDIO L - R: RCA F | | | | | | | |
| | DIGITAL AUDIO OUT | PCM / Dolby Digital, Fib | e | | | | | | |
| FEAT | TURES | 3D Y/C Digital Comb Filt HDMI (HDAVI Control 2) Vesa compatible Photo |) | | | | | | |
| Dimensions (W × H × D) | Including TV stand | 32.9 " × 23.3 " × 9.8 " (836 mm × 592 mm × 24 | 48 | | | | | | |
| isions 1 × D) | TV Set only | 32.9 " × 21.3 " × 4.2 " (836 mm × 540 mm ×10 | 6 | | | | | | |
| Weig | ht | 40.0 lb. (18.0 kg) NET | | | | | | | |
| | | | | | | | | | |

[TC-32LX700]



Note

TC-32LX700

cm DIAGONAL)

00 mm)

768(H)) [4,098 × 768 dots]

2] (10 % THD)

1-135

- 95 °F (0 °C – 35°C) 80 % RH (non-condensing)
 PIN Type × 1
 1.0 V[p-p] (75 Ω)

 VIN 4-pin
 Y:
 1.0 V[p-p] (75 Ω)
 C: 0.286 V [p-p] (75 Ω) PIN Type × 2 0.5 V [rms] PIN Type × 1 1.0 V [p-p] (75 Ω) PIN Type × 2 0.5 V [rms] p-p] (including synchronization) V [p-p] PIN Type × 2 0.5 V [rms]

AVI Control 2" function. PIN Type × 2 0.5 V [rms]

PIN Type × 1 1.0 V [p-p] (75 Ω) PIN Type × 2 0.5 V [rms]

er Optic

er, CLOSED CAPTION, V-Chip

Viewer

18 mm)

6.8 mm)

4.2 " (106.8 mm) 9.8 " (248 mm)

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

FAQs, etc.

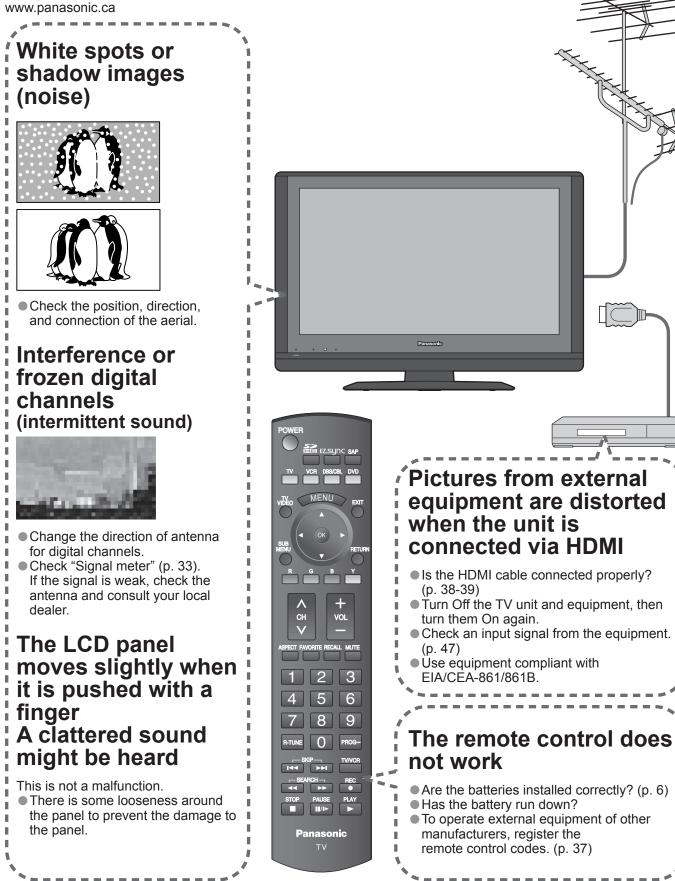
Specifications
 Maintenance

FAQ

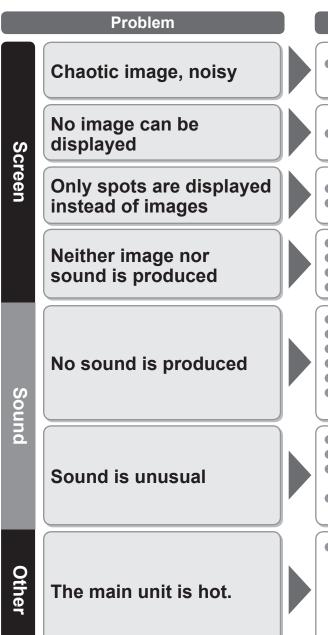
Before requesting service or assistance, please follow these simple guides to resolve the problem.

If the problem still persists, please contact your local Panasonic dealer or Panasonic Service Center for assistance. For details (p. 53, 54) For additional assistance, please contact us via the website at:

www.panasonic.com/contactinfo



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).



| Actions |
|---|
| Check nearby electrical products (car, motorcycle, fluorescent lamp). |
| Check Picture menu (p. 24) |
| Check the channel settings. (p. 32) Check the antenna cables. |
| Is the power cord plugged into the outlet? Is the TV unit turned On? Check Picture menu (p. 24) and volume. Are the remote control codes correct? (p. 41-43) |
| Are the speakers' cables connected correctly? (p. 38) Is "Sound Mute" active? (p. 15) Is the volume set to the minimum? Is "Speaker output" set to "Off"? (p. 24) Change "SAP" settings. (p. 18) Check "HDMI 1 in" or "HDMI 2 in" settings. (p. 24) |
| Set "SAP" setting to "Stereo" or "Mono." Check the HDMI device connected to the unit. Set the audio setting of the HDMI device to "Linear PCM." If digital sound connection has a problem, select analog sound connection. |
| • The main unit radiates heat and some of the parts may become hot. This is not a problem for performance or quality. Set up in a location with good ventilation. Do not cover the ventilation holes of the TV with a tablecloth, etc., and do not place on top of other equipment. |

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 LCD Televisions **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 ("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.

| LCD TV CATEGORIES | PARTS | LABOR | SERVICE |
|---------------------------|--------------|--------------|-------------------------------|
| Up to 20' (diagonal) | 1 (ONE) YEAR | 1 (ONE) YEAR | Carry-In or Mail-in |
| 21" (diagonal) and larger | T (ONE) TEAR | T (ONE) FEAR | In Home or Carry-in / Mail in |

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

In-Home or Carry-in Service

For In-Home or Carry-In Service in the United States call 1-800-211-PANA(7262) or visit the Panasonic web Site: http://www.panasonic.com.

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 warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage, nor does it cover markings or retained images on the LCD panel resulting from viewing fixed images (including, among other things, letterbox pictures on standard 4:3 screen TV's, or nonexpanded standard 4:3 pictures on wide screen TV's, or onscreen data in a stationary and fixed location). The 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 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 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 warranty lasts, so the exclusions may not apply to you.

This 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 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: 1-800-211-PANA (7262)

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

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

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

Accessory Purchases

Service in Puerto Rico

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)

| Telephone #: | (905) 624-5505 |
|--------------|--|
| 1-800 #: | Ì-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™ 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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| | | | | | | | | | | | | | | | | | | | | | | |
| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | | | |
| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | - | | |
| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | - | | |
| | _ | | _ | | | | _ | | - | _ | - | | - | | | - | | _ | | | | |
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| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | - | | |
| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | | | |
| | _ | | - | | | | _ | | - | _ | - | | - | | | - | | _ | | | | |
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| | - | | - | | | | - | | - | - | - | | - | | | - | | - | | - | | |
| | _ | | - | | | | - | | - | - | - | | - | | | - | | - | | | | |
| | | | | | | | | | | | | | | _ | _ | _ | | | | | _ | |

.......

FAQs, etc.

Limited Warranty (for Canada)