

Panasonic®

Model No.
Número de modelo

TC-L32C5 / TC-L32C5X / TC-32LC54
TC-L42U5 / TC-L42U5X

Owner's Manual

32" Class 720p LCD HDTV

(31.5 inches measured diagonally)

42" Class 1080p LCD HDTV

(42 inches measured diagonally)

Manual de usuario

**Televisión de alta definición de 720p y
clase 32" de LCD**

(31,5 pulgadas medidas diagonalmente)

**Televisión de alta definición de 1080p y
clase 42" de LCD**

(42 pulgadas medidas diagonalmente)

For assistance (U.S.A./Puerto Rico), please call:

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

www.panasonic.com/help

For assistance (Canada), please call:

1-866-330-0014

concierge.panasonic.ca

Para solicitar ayuda (EE.UU./Puerto Rico), llame al:

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

www.panasonic.com/help

VIERA



HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

DOLBY®
DIGITAL

English

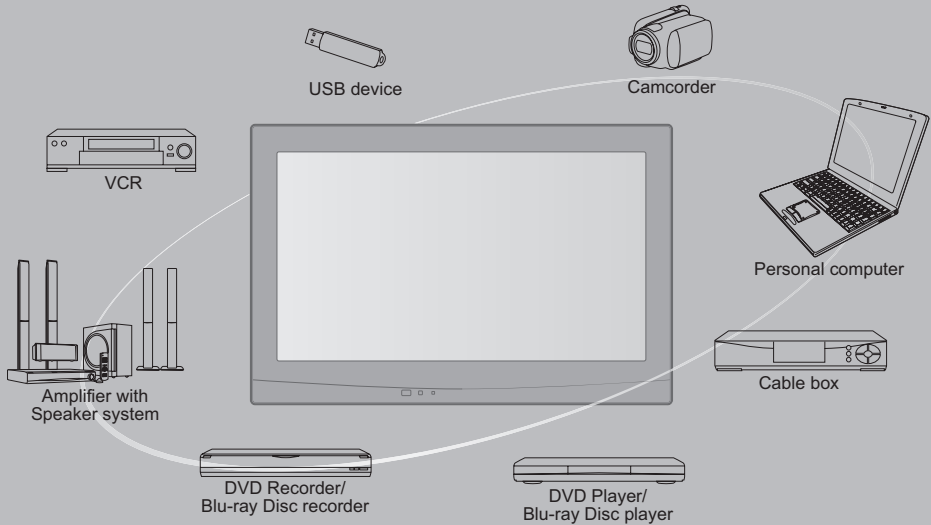
Thank you for purchasing this Panasonic product.
Please read these instructions before operating your set and retain them for future reference. The images shown in this manual are for illustrative purposes only.

Español

Gracias por su decisión de comprar este producto marca Panasonic.
Lea estas instrucciones antes de utilizar su televisor y guárdelas para consultarlas en el futuro. Las imágenes mostradas en este manual tienen solamente fines ilustrativos.

Experience an amazing level of multimedia excitement

Enjoy rich multimedia



This product incorporates the following software:

- (1) the software based in part on the work of the Independent JPEG Group,
- (2) the software developed by the FreeType Project,
- (3) open sourced software other than the software licensed under the GPL and/or LGPL.

For the software categorized as (3), please refer to the applicable license terms included in the "Setup" menu on product.

HDMI, the HDMI logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

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

Contents

Please read before using the unit

- Safety Precautions4

Getting started

- Accessories/Optional Accessory7
- Connections9
- Identifying Controls11
- First Time Setup12
- Watching TV15

Getting started

Basic

- Watching content from external devices18
- The Media Player19
- CEC function22

Basic

Advanced

- Editing and Setting Channels26
- How to Use Menu Functions28
 - Picture settings29
 - Audio settings30
 - Timer settings30
 - Lock31
 - Closed caption31
 - Setup32

Advanced

Support Information

- Ratings List for parental control33
- Technical Information34
- Care and Cleaning38
- Specifications39
- Frequently Asked Questions (FAQ)41
- Limited Warranty
(for U.S.A. and Puerto Rico only)43
- Customer Services Directory
(for U.S.A. and Puerto Rico)44
- Limited Warranty (for Canada)45

Support Information

Safety Precautions

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
WARNING: To reduce the risk of electric shock, do not remove cover or back. No user-serviceable parts inside. Refer servicing to qualified service personnel.		



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

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

Note to CATV System Installer

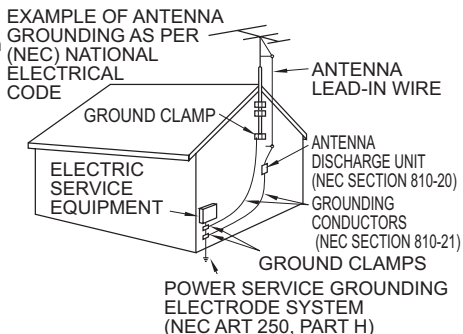
This reminder is provided to direct the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as 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 around the TV. 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.
- 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 supply 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.
- 20) Unplug this LCD TV from the wall outlet and refer servicing to qualified service personnel under the following conditions:
- When the power cord or plug is damaged or frayed.
 - If liquid has been spilled into the LCD TV.
 - If the LCD TV has been exposed to rain or water.
 - If the LCD TV does not operate normally by following the operating instructions.
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 TV to normal operation.
 - If the LCD TV has been dropped or the cabinet has been damaged.
 - 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 hazards.
- 22) **WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING. DO NOT PLACE LIQUID CONTAINERS (FLOWER VASES, CUPS, COSMETICS, ETC.) ABOVE THE SET (INCLUDING ON SHELVES ABOVE, ETC.).**
- 23) **WARNING: SMALL PARTS CAN PRESENT CHOKING HAZARD IF ACCIDENTALLY SWALLOWED. KEEP SMALL PARTS AWAY FROM YOUNG CHILDREN. DISCARD UNNEEDED SMALL PARTS AND OTHER OBJECTS, INCLUDING PACKAGING MATERIALS AND PLASTIC BAGS/SHEETS TO PREVENT THEM FROM BEING PLAYED WITH BY YOUNG CHILDREN, CREATING THE POTENTIAL RISK OF SUFFOCATION.**
- 24) **WARNING: To prevent the spread of fire, keep candles or other open flames away from this product at all times.** 
- 25) **WARNING: A warning that batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.**
- 26) **CAUTION:** The Power switch on this unit will not completely shut off all power from AC outlet. Since the power cord serves as the main disconnect device for the unit, you will need to unplug it from the AC outlet to shut down all power. Therefore, make sure the unit has been installed so that the power cord can be easily unplugged from AC outlet in case of an accident. To avoid fire hazard, the power cord should also be unplugged from the AC outlet when left unused for a long period of time (for example, when on vacation).
- 27) **CAUTION:** 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.
- 28) **CAUTION:** USE WITH OTHER STAND MAY RESULT IN INSTABILITY POSSIBLY CAUSING INJURY.
- 29) **CAUTION:** DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.
- 30) **CAUTION:** This LCD TV is for use only with the following optional accessory. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.
(All of the following accessories are manufactured by Panasonic Corporation)
• Wall-hanging bracket: TY-WK3L2RW
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.
- Contains Mercury, Dispose According to Local, State or Federal Laws
- This product has a fluorescent lamp that contains mercury. Disposal may be regulated in your community due to environmental considerations. For disposal or recycling information, please visit Panasonic website: <http://www.panasonic.com/environmental> or call 1-888-769-0149.

FCC STATEMENT

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. **FCC Caution:** To assure continued compliance, follow the attached installation instructions and use only shielded interface cables when connecting to computer or peripheral devices. Any changes or modifications not expressly approved by Panasonic Corp. of North America could void the user's authority to operate this device.

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

FCC Declaration of Conformity

Model No. TC-L32C5 / TC-L32C5X / TC-32LC54 / TC-L42U5 / TC-L42U5X

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

CEA CHILD SAFETY NOTICES

WARNING

Flat panel displays are not always supported on the proper stands or installed according to the manufacturer's recommendations. Flat panel displays that are inappropriately situated on dressers, bookcases, shelves, desks, speakers, chests or carts may fall over and may cause personal injury or even death.

The consumer electronics industry (of which Panasonic is a member) is committed to making home entertainment enjoyable and safe. To prevent personal injury or death, be sure to follow the following safety guidelines:

TUNE INTO SAFETY:

- One size does NOT fit all. Follow the manufacturer's recommendations for the safe installation and use of your flat panel display.
- Carefully read and understand all enclosed instructions for proper use of this product.
- Don't allow children to climb on or play with furniture and television sets.
- Don't place flat panel displays on furniture that can easily be used as steps, such as a chest of drawers.
- Remember that children can become excited while watching a program, especially on "larger than life" flat panel displays. Care should be taken to install the display where it cannot be pushed, pulled over, or knocked down.
- Care should be taken to route all cords and cables connected to the flat panel display so that they cannot be pulled or grabbed by curious children.
-

WALL MOUNTING: IF YOU DECIDE TO WALL MOUNT YOUR FLAT PANEL DISPLAY, ALWAYS:

- Use a mount that has been recommended by the display manufacturer and/or listed by an independent laboratory (such as UL, CSA, ETL).
- Follow all instructions supplied by the display and wall mount manufacturers.
- If you have any doubts about your ability to safely install your flat panel display, contact your retailer about professional installation.
- Make sure the wall where you are mounting the display is appropriate. Some wall mounts are not designed to be mounted to walls with steel studs or old cinder block construction. If you are unsure, contact a professional installer.
- A minimum of two people are required for installation. Flat panel displays can be heavy.

Panasonic recommends that a qualified installer perform the wall-mount installation. See page 5.

The American Academy of Pediatrics discourages media viewing for children younger than two years. For more details see www.aap.org.

 **CEA**
Consumer Electronics Association
www.CE.org/safety

Accessories/Optional Accessory

Accessories

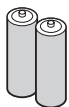
☒ Check you have all the items shown.

Accessories

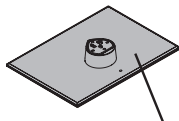
- ☐ Remote Control Transmitter
● TZZ00000008A



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



- ☐ Pedestal



How to assemble (p. 8)

Accessories Assembly screws (4)



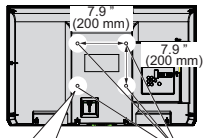
M5 x 4

- ☐ Quick Start Guide

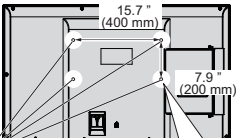
Optional Accessory

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.

Back of the 32" TV



Back of the 42" TV



Holes for wall-hanging bracket installation

Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)

Depth of screw:
Minimum: 0.16" (4.0 mm)
Maximum: 0.43" (11.0 mm)

M6

(View from the side)

Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)

Depth of screw:
Minimum: 0.24" (6.0 mm)
Maximum: 0.71" (18.0 mm)

M6

(View from the side)

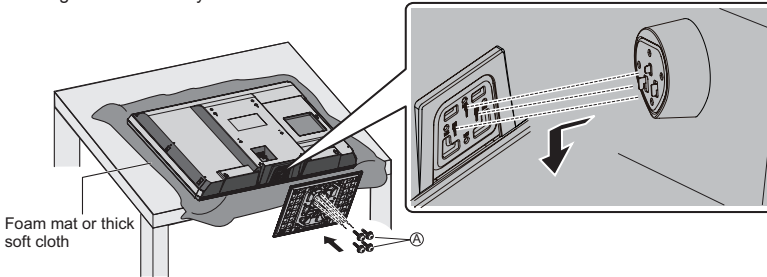
WARNING

- Customer assumes liability if mounting the unit themselves or if a Panasonic bracket is not used. Any damage resulting from not having a professional installer mount your unit will void your warranty.
- Always be sure to ask a qualified technician to perform any necessary set-up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
- Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging the bracket.
- When using an angled-type wall hanging bracket, please ensure that there is sufficient space for the connecting cables so that they do not press against the wall when the TV is tilted forward.
- For safety reasons, remove units no longer being used from their wall-mounted locations.

Attaching the pedestal to TV

■ Set-up

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



WARNING

Do not disassemble or modify the pedestal.

- Otherwise the TV may fall over and become damaged, and personal injury may result.

Caution

Do not use any pedestal other than that provided with this TV.

- Otherwise the TV may fall over and become damaged, and personal injury may result.

Do not use the pedestal if it becomes warped or physically damaged.

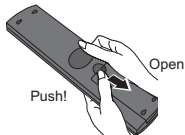
- If you use the pedestal when it is physically damaged, personal injury may result. Contact your nearest Panasonic Dealer immediately.

During set-up, make sure that all screws are securely tightened.

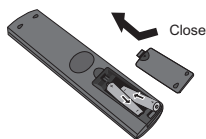
- If sufficient care is not taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

Installing the remote's batteries

1



2

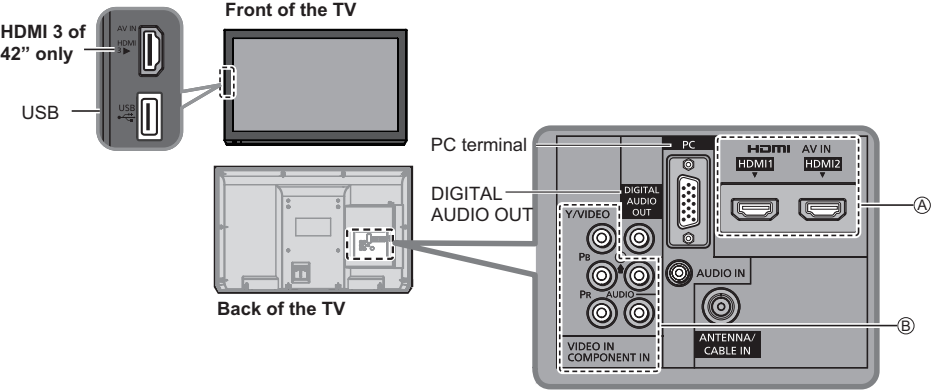


Caution

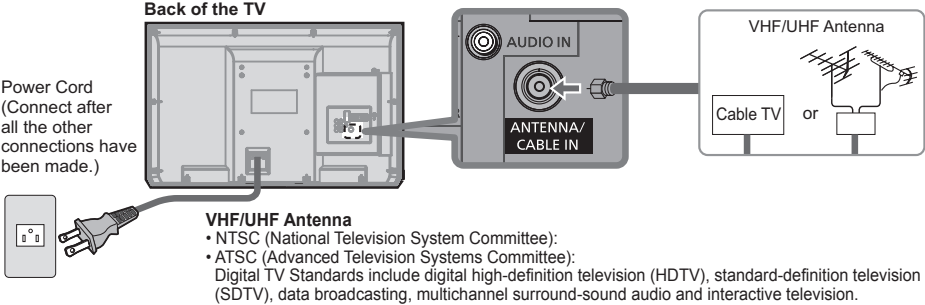
- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
 - Do not mix old and new batteries.
 - Do not mix different battery types (such as alkaline and manganese batteries).
 - Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or break batteries.

Connections

Connection Panels



Antenna or Cable connection



Cable

- You need to subscribe to a cable TV service to enjoy viewing their programming.
 - You may need to subscribe to a high-definition (HD) cable service to enjoy HD programming.
- The connection for high-definition can be done with the use of an HDMI or Component Video cable. (p. 10)

Note

- When using a Cable box, external equipment and video cables shown in this manual are not supplied with the TV.
 - For additional assistance, visit us at: www.panasonic.com/help
www.panasonic.ca

Connection references

■ Antenna terminal

①

②

● Firmly tighten by hand.

■ Pin terminals

red blue green

green/ yellow

● Insert firmly.

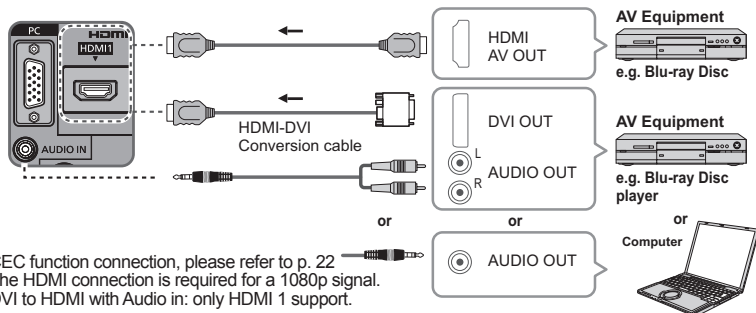
■ HDMI terminal

● Insert firmly.

AV cable connection

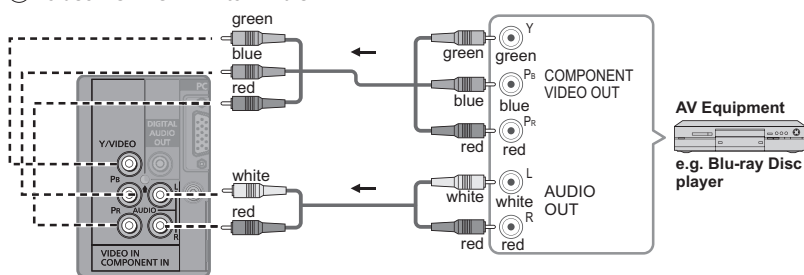
(A) To use HDMI terminals

Best



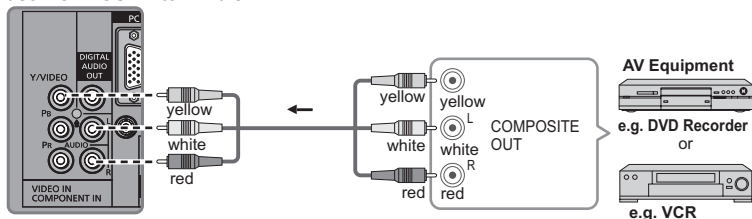
(B) To use COMPONENT terminals

Good



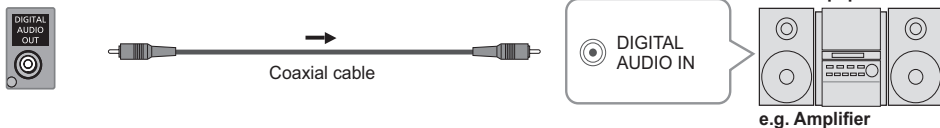
(C) To use COMPOSITE terminals

Basic
(Not HD)



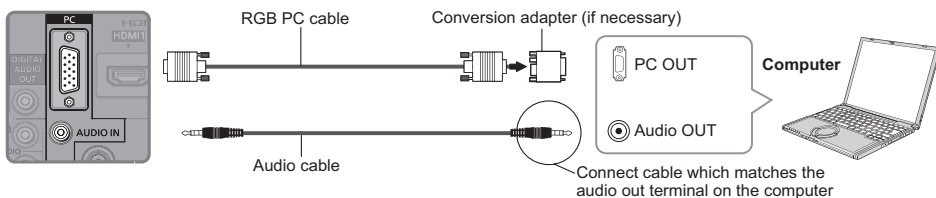
- The Green terminal is shared for both the COMPONENT and COMPOSITE (VIDEO IN) connection. When using COMPOSITE (VIDEO IN) connection, the Yellow connector (Video) should be inserted into Green connection.

Audio connection



- For HDMI-ARC (Audio Return Channel) connection, see p. 22

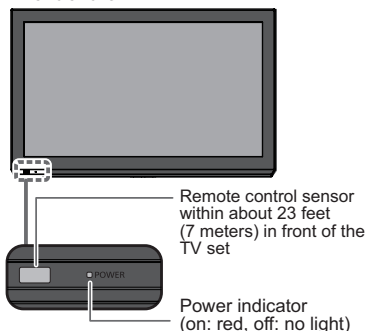
PC / Computer connection (VGA)



Identifying Controls

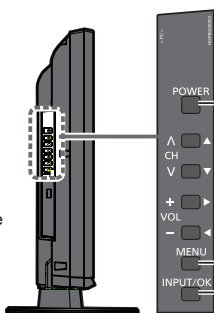
TV controls/indicators

Front of the TV



Note

- The TV consumes a small amount of electric energy even when turned off.
- Do not place any objects between the TV remote control sensor and remote control.



-POWER button

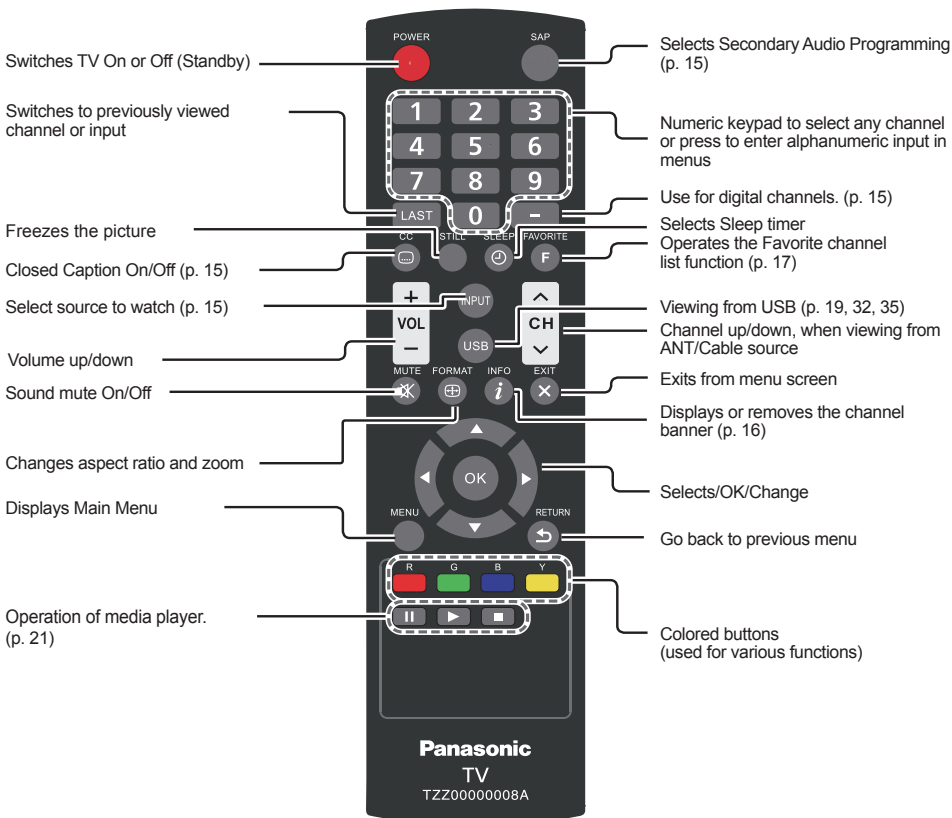
- Selects channels in sequence

- Volume up/down

- Menu navigations

- Changes the input mode
- Chooses menu and submenu entries

Remote control

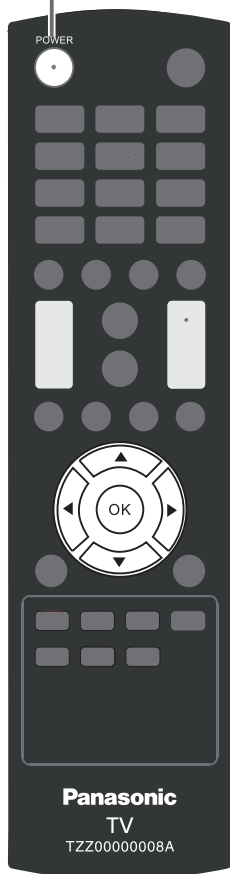
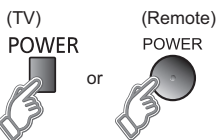


First Time Setup

First time setup screen 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. 32) is set to "No".



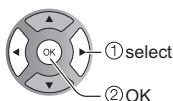
Turn the TV On with the POWER button



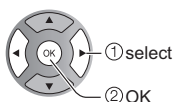
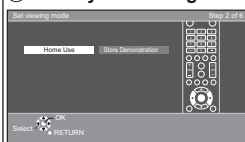
2

Configure your viewing mode

① Select your language



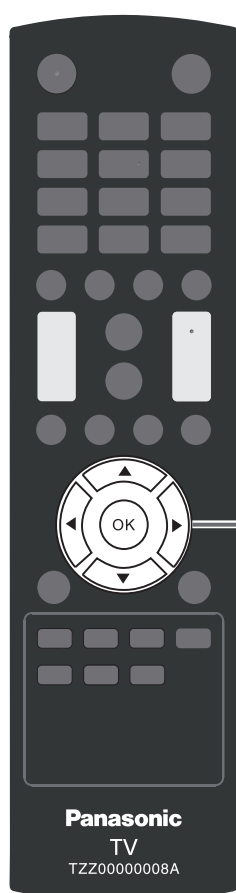
② Select your viewing mode (Be sure to select "Home use")



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

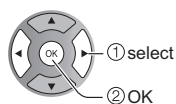
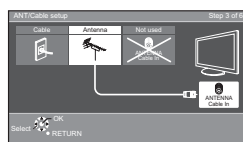
Note

- If you use any other step other than ② then turn the TV off, or if you used the EXIT button to quit before completing the settings, the next time you turn the TV on, "First time setup" will not be automatically displayed.
 - The settings up to that point are saved.
 - You can start "First time setup" at any time. (p. 32)
- Language, ANT/Cable setup, Input labels, and Clock can also be changed in the Settings Menu. (p. 32)



3 Auto channel setup (ANT/Cable setup)

① Select the connected Antenna in terminal

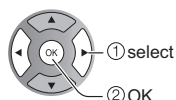


Not used: Go to ④
(Label inputs)

Select **"Not used"** when no wire is connected to the "Antenna/Cable" terminal.

- Typical when a Cable/Satellite box is connected to a TV AV input.
- Prevents accidental tuning to an unavailable signal, when Cable or Satellite box is used.

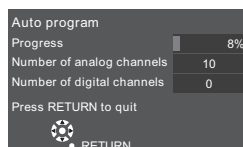
② Select "Start"



Skip: Go to ④
(Label inputs)

Start scanning the channels

(Available channels are automatically set.)

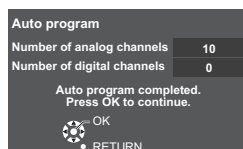


This process may take up to 20 minutes.

- This step is not needed when a Cable or Satellite box is connected to an AV input.

③ Select "Start"

Completion message is displayed when the Auto program scan is successfully completed.



If there is no available channel, return to ③ - ① (ANT/ Cable setup). "Not used" will be selected.

■ Press to go back to the previous screen

RETURN



Note

- About broadcasting systems

Analogue (NTSC):

Conventional broadcasting

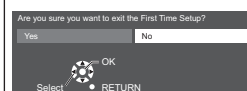
Digital (ATSC):

New programming that allows you to view more channels featuring high-quality video and sound

■ Operation of the EXIT button during "First time setup"

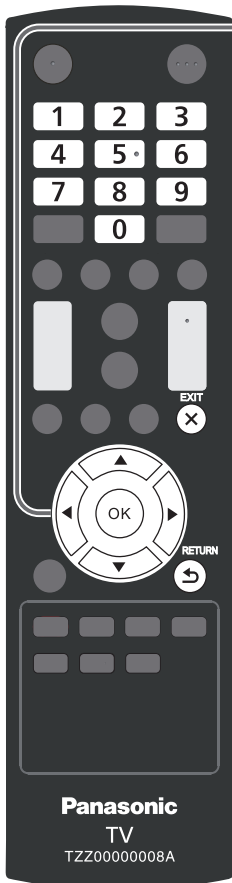
Press the button once to display confirmation screen. Press again to close confirmation screen.

[EXIT confirmation screen]



Yes ➡ Exit "First time setup"

No ➡ Return to the original screen.



■ Press to go back to the previous screen

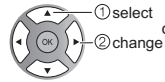
RETURN



4

Give names to the TV's inputs (Label inputs)

When done, select NEXT and press OK to go to the next step.



Follow the instructions on screen to complete the following operations.

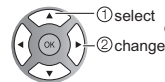
Label: [BLANK] Not used/Blu-ray/DVD/DVD REC/HOME THTR/GAME/COMPUTER/VCR/CABLE/SATELLITE/DVR/CAMERA/MONITOR/AUX/RECEIVER/MEDIA CTR/MEDIA EXT/OTHER

- Select "Not used" for any back-panel input that has no device connected to it. Afterward, the input will be skipped when pressing INPUT, for your convenience.
- The input labels can be changed at any time from the TV's setup menu.

5

Adjust the Clock (Set clock)

When done, select NEXT and press OK to go to the next step.



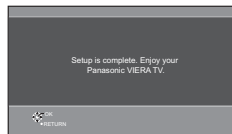
Follow the instructions on screen to complete the following operations.

6

Complete the First time setup

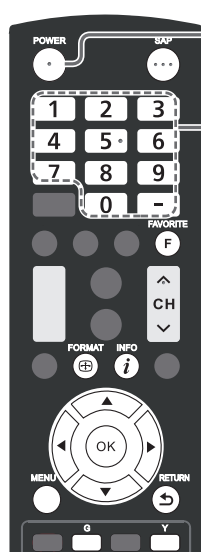
Congratulations! You are done.

The First time setup can be repeated at any time. Press MENU and select SETUP; then "First time setup".



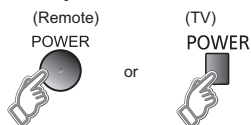
To watch TV via a Cable box, Satellite receiver, or any other source (DVD, DVR, gaming device, etc.), press the INPUT button and select the appropriate input.

Watching TV



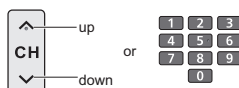
1

Turn power on



2

Select a channel number



• Also available side CH button on the unit.

[For Cable/Satellite box connection]
- Use your connected box's remote control.

Note

- Reselect "Cable" or "Antenna" in "ANT in" of "ANT/Cable setup" to switch the signal reception between cable TV and antenna. (p. 13, 26)
- The channel number and volume level remain the same even after the TV is turned off.

Note

- Please select correct input --> **INPUT** (p.18)

■ To directly enter the digital channel number

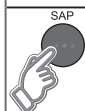
- When tuning to a digital channel, press the button to enter the minor number in a compound channel number.

example: CH15-1: **1 5 - 1**

■ Other Useful Functions

Listen with SAP (Secondary Audio Programming)

■ Select the Audio mode for watching TV



Digital mode

Press SAP to select all available audio service (if available).

- Audio information is displayed in banner for the first time.
- When pushing SAP key twice, audio information and actual output audio from speaker will change.

Audio track 1 of 7
English (Main Audio)
English audio

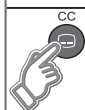
Analog mode

Press SAP to select the desired Audio mode.

- Each press of SAP will change the Audio mode. (Stereo/SAP/Mono)
- SAP is not available when watching TV with a Cable or Satellite box connected via HDMI.
- Contact your Cable or Satellite operator for instructions on enabling SAP with their box.

Closed Caption

■ Switches the Closed Caption mode On or Off

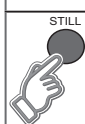


Closed caption Off → Closed caption on → Closed caption on mute

- Closed Caption is not available when watching TV with a Cable or Satellite box connected via HDMI.
- Contact your Cable or Satellite operator for instructions on enabling CC with their box.

Still Feature

■ Using the STILL feature.




- When viewing the TV, press **STILL** to make the picture a still picture.
- To return to the moving picture, press **STILL** again (or any other button).

Note

- If the TV is left in STILL mode for more than 15 minutes, the STILL mode will automatically be released and the TV will return to moving picture.
- Using the STILL function for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

Displaying Information

- Displays and removes information. When watching programming via the Antenna/Cable input, shows the channel banner.

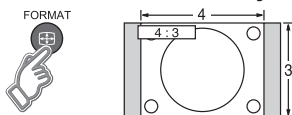


INFO

Channel						Clock	
15-2	THE NEWS					12:30 PM	
ABC-HD	CC SAP	TV-G	1080i	Standard	4:3	⌚ 30	
Station identifier	SAP indication	Signal resolution	Picture mode	Sleep timer remaining time			
Closed caption		Rating Level	Aspect ratio				

Change aspect ratio and Zoom the picture

- Press **FORMAT** to cycle through the aspect modes (p. 34)



- SD (480i) : FULL / JUST / 4:3 / ZOOM
- HD (480p, 720p, 1080i, 1080p) : FULL / H-FILL / JUST / 4:3 / ZOOM
- HDMI (DVI) & PC : FULL / 4:3

Use when the picture does not fill the whole screen (bars appear on either side of the image) or portions of the picture is trimmed.

Note

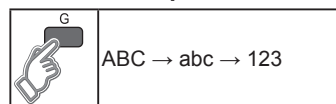
1. Some content, such as film-based movies, are available in extra-wide format. Top and bottom bars are unavailable.
2. Connected devices, such as Cable/Satellite box, DVD/Blu-ray players and game consoles have their own aspect (format) settings. Adjust the device's aspect settings.

Other Useful Operations

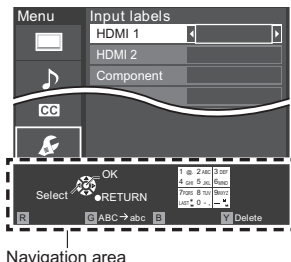
Entering characters

You can use the remote control keys to enter the alphanumeric characters.

- Switches input mode.

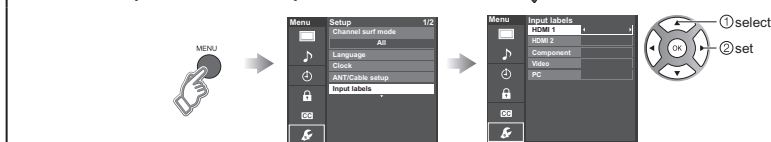


- Press each number key to cycle through the alphanumeric character.



- Label each input

- ① Select "Input labels" in "Setup"
- ② For each input, press  to select a label or  to edit

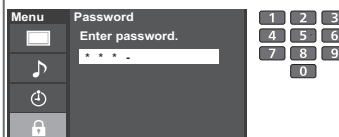


- Labeling each input with names of connected devices such as DVD Player, Cable box, etc. will help you to identify and switch among them.
- See p. 32 for list of available label names.

Password setting/entering

You need to enter the password when you access locked channel or inputs.

Input your 4-digit password

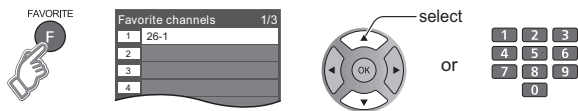


- If it is your first time entering the password, enter the password twice in order to register it.
- Make a note of your password. Do not forget it. (If you have forgotten your password, consult your local dealer.)
- When you select a locked channel, a message will be displayed that allows you to view the channel after you input your password.
- Change password (p. 31)

Call up a favorite channel

FAVORITE

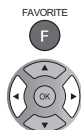
Channel numbers registered in Favorite are displayed on the favorite tune screen. Select the desired broadcast station with the cursor or use the number buttons. (p. 15)



Set the Favorite channel

For more details, please refer to p. 27.

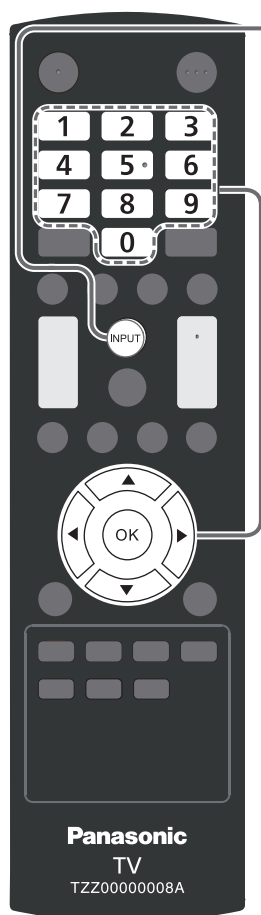
To change the page



Press repeatedly or ◀▶ to change pages (1/3, 2/3, 3/3).

Favorite channels cannot be set when using Cable or Satellite box.

Watching content from external devices



1

With the connected equipment turned On
Display the Input select menu



2

Select the input mode

Input select		
1	ANT/Cable in	
2	HDMI 1	DVD
3	HDMI 2	DVD
4	Component	AUX
5	Video	DVD
6	PC	

(example)



(example)

Note

- The input label will be displayed on the "Input select" screen if the Input label was customized.



or



① select

② enter

(shortcut) press the corresponding NUMBER button on the remote control to select the input of your choice. Or, press the INPUT button repeatedly to cycle through the available inputs.

* set unused input to "Not used" (below) for quick skipping.

Select the input of your choice, then press **OK**.

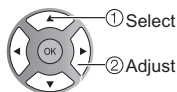
- During the selection, if no action is taken for several seconds, the "Input select" menu disappears.
- The terminal and label (names) of the connected equipment are displayed. To label each of the inputs, see below.

The Media Player

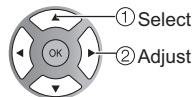
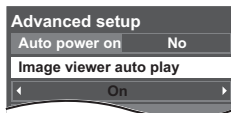
You can enjoy photos or music contents stored in a USB storage device.

Select the Image viewer auto play function

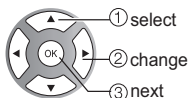
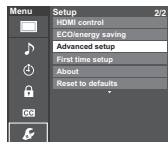
① Display "Main Menu".



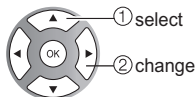
③ Press ▲ or ▼ to select Image viewer auto play.



② Select the Advanced setup item in Setup.



④ Press ◀ or ▶ to adjust Image viewer auto play.



Open the Media Player

There are two methods for starting the Media Player.

Automatically:

① Gently insert a supported USB storage device to the USB port on the rear side of the TV. A prompt will appear.

② Press ◀ or ▶ to select **Yes**, and then press **OK**, the Media Player menu will appear. When you select **No**, nothing happens.

A USB device was connected to the TV. Would you like to open the Media Player?

Yes No

Note

- The prompt will disappear after about 10 sec.
- If **Image viewer auto play** is set to **Off**, you can start the Media Player manually.
- If you repeatedly insert and remove the USB device, the prompt may not appear.

Manually:

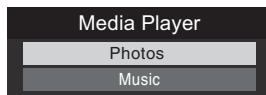
① Press USB key on remote. A prompt will appear.

② Press ◀ or ▶ to select **Yes**, and then press **OK**, the Media Player menu will appear. When you select **No**, nothing happens.

A USB device was connected to the TV. Would you like to open the Media Player?

Yes No

③ Press ▲ or ▼ to select **Photos** or **Music**, then press **OK**.



Note

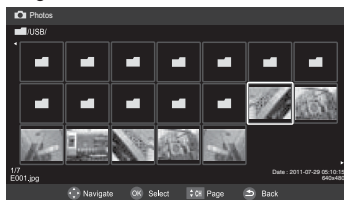
- The viewer will also open even if there are no photo or music files.
- While the Media Player is active, the main menu cannot be displayed.

Viewing photos

There are three types of view modes.

Multi View:

This view allows you to search for photos in a grid format. These pictures are displayed using thumbnail data in each image file.



- ① Press **▲▼◀▶** to move the highlight in one window. If all of the photos will not fit in one screen, when pressing **◀** at the top left thumbnail, the screen will move to the previous page. Conversely, when pressing **▶** at the bottom right thumbnail, the screen will move to the next page. **CH** / **CH** buttons can be used to page up/down the photo list when there are more photos than will fit onto one screen.
- ② When you select a folder, press **OK** to move to the next layer. Press **RETURN** to move back to the previous layer.
- ③ Press **OK** to view the selected photo in Single View mode.

Single View:

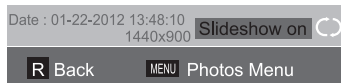
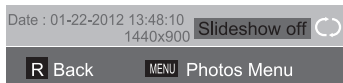
In this view mode, only files located in the selected directory shall be displayed. This view allows you to change the photo content manually. When moving from Multi View to the Single View, the currently selected photo shall be displayed.

- ① Press **▶** to view the next photo. Press **◀** to view the previous photo.
- ② Press **▲** to rotate the image 90° counterclockwise. Press **▼** to rotate the image 90° clockwise.

Slideshow:

This view allows you to watch a slideshow of the photos. In this mode, only files located in the selected directory will be played.

- ① To start slideshow, press **OK** in the Single View mode.



- ② Press **◀** or **▶** to view the previous or next photo.

To set Display interval and Repeat settings:

- ① Press **MENU** to open the **Photos Menu**.
- ② Press **▲** or **▼** to select either **Display interval** or **Repeat**.
- ③ Press **◀** or **▶** to adjust the setting and press **RETURN**.

To close the Photo Viewer:

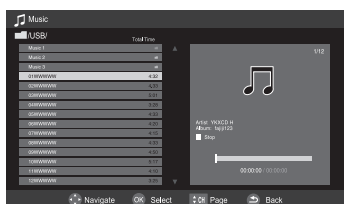
- ① Press **EXIT**. The television will return to the last viewed channel or external input.

To adjust Back light:

- ① Select "Back light" to adjust it until your eyes feel comfortable.

Playing music files

You can listen to music from a list of available files.








- ① Press **▲▼** to select a file or folder. **CH** / **CH** buttons can be used to page up/down the music list when there are more files than what will fit onto one screen.
- ② When you select a folder, press **OK** to move to the next layer. Press **RETURN** to move back to the previous layer.
- ③ With the desired file selected, press **OK** or **▶** to start playback.
- ④ Press **■** to stop playback.

Note

- If playback finishes before **■** is pressed, the next file will automatically start to play from the beginning.
- Depending on the file size, it may take some time for playback to begin.

During playback







You can listen to music from a list of available files.

- Press  to pause.
- To resume normal playback, press .
- To adjust volume, press  / .
- Press  to set repeat mode **Off > 1 > All**.


Note

- During playback, you can adjust the AUDIO menu functions from the Music menu.

To set the repeat mode:





- ① Press  to open the **Music Menu**.
- ② Press  or  to select **Repeat**.
- ③ Press  or  to set **Off > 1 > All**.
- ④ Press .







To close the Music Player

- ① Press .

Viewing photos and playing music files at the same time

While viewing photos, this allows you to listen to music from a list of available files.

- ① While viewing photo in the **Single View** or **Slide Show** mode, press  to open the **Photos menu**.
- ② Highlight **Music** and press , the music list will appear.
- ③ Select a music file and press  to start playback.
- ④ Press  to move back the photo view mode, now the music is playing in the background.

Contents	Description	Description						
Photo	Photo list (Multi view)	See p. 30						
	Sorting To sort the folders and files ① Press  to open the Photos Menu from Multi View mode. ② Press  or  to select Title , New or Old to set the sorting rule.							
	<table><tr><td>Title</td><td>File sorting rules: 1 Unicode priority 2 Numerical (0-9) ; Upper Case (A-Z); lowercase (a-z), Chinese 3 Increasing order</td></tr><tr><td>New</td><td>From new to old according to the date and time when the picture was taken.</td></tr><tr><td>Old</td><td>From old to new according to the date and time when the picture was taken.</td></tr></table>	Title	File sorting rules: 1 Unicode priority 2 Numerical (0-9) ; Upper Case (A-Z); lowercase (a-z), Chinese 3 Increasing order	New	From new to old according to the date and time when the picture was taken.	Old	From old to new according to the date and time when the picture was taken.	
	Title	File sorting rules: 1 Unicode priority 2 Numerical (0-9) ; Upper Case (A-Z); lowercase (a-z), Chinese 3 Increasing order						
	New	From new to old according to the date and time when the picture was taken.						
Old	From old to new according to the date and time when the picture was taken.							
Single View mode Slide Show mode Skip to previous/next photo Slide Show Repeat play Slide Show Display interval selection	See p. 30							
Music	Music list (Multi view)	See p. 30						
	Sorting To sort the folders and files ① Press  to open the Music Menu. ② Press  or  to select Title , New or Old to set the sorting rule.							
	Playback Pause Stop Repeat play AUDIO Settings	See p. 31						

Note

- Sorting, Total Time display may not be available in all cases.

CEC function

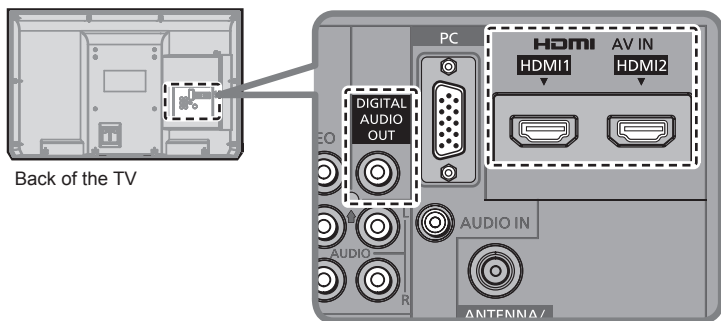
This TV supports standard CEC function: Power on link and Power off link.

■ HDMI cable

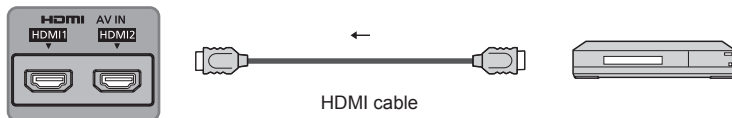
This function needs an HDMI compliant (fully wired) cable. Non-HDMI-compliant cables cannot be utilized. It is recommended that you use Panasonic's HDMI cable. Recommended part number: RP-CDHS15 (4.9 ft/1.5 m), RP-CDHS30 (9.8 ft/3.0 m), RP-CDHS50 (16.4 ft/5.0 m) * For more details on the external equipment's connections, please refer to the operating manual for the equipment.

CEC function Connections

■ Terminal overview

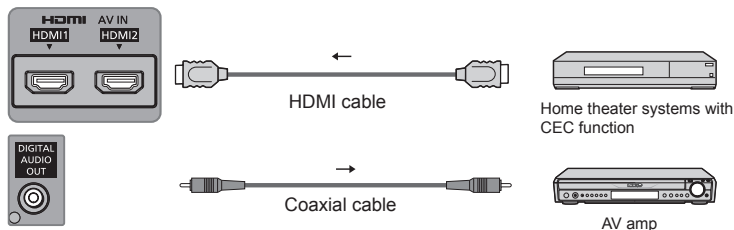


■ Connecting DVD Recorder (DIGA)



■ Connecting Home theater system/AV amp

HDMI 1 is recommended.

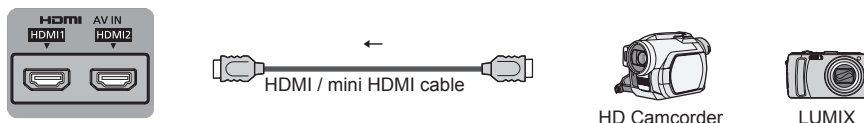


No optical cable is necessary when connecting a Home Theater supporting "CEC function" with an HDMI cable.

- One AV amp and one DVD recorder (DIGA) can be operated with this unit.

■ Connecting HD Camcorder/Digital camera

Press INPUT and select an available HDMI terminal, then connect the camcorder to this input. After connection, confirm the CEC function. (p. 24-25)

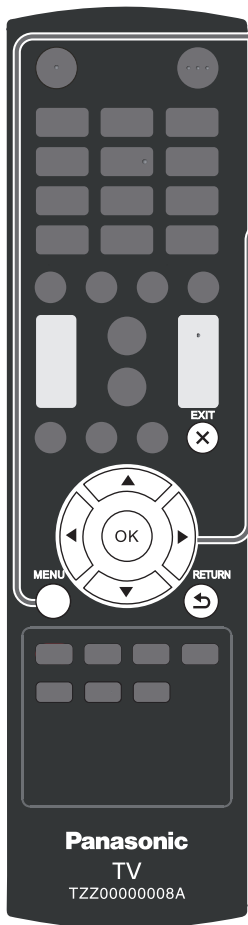


If connection (or setting) of equipment compatible with CEC function control is changed, switch the power of this unit Off and On again while the power of all equipment is On (so that the unit can correctly recognize the connected equipment) and check that the connected equipment playback operates.

- Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective 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.)
- Some devices use Mini-HDMI terminal. HDMI (type A) to Mini-HDMI (type C) cable or adapter should be used.

HDMI control and Available features

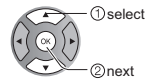
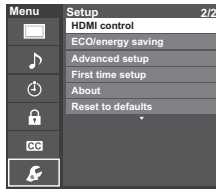
To use all CEC function: After everything is connected, in HDMI control menu, set "CEC function" to "On". Some features are disabled depending on the "CEC function" version of the equipment.



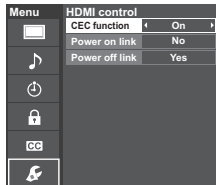
1 Display the menu



2 Select "HDMI control" in "Setup"



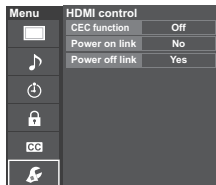
3 Select "CEC function"



4 Select "Yes"



5 Select and make other settings



- Press to exit from a menu screen

EXIT



- Press to go back to the previous screen

RETURN



Power on link

Yes: The TV is turned on automatically and switches to the appropriate HDMI input whenever Standard CEC function compatible equipment is initially turned on and the Play mode is selected.

Power off link

When "Yes" is selected and the TV is turned off, all connected Standard CEC function compatible equipment is also automatically turned off.

- A Panasonic DVD Recorder will not turn off if it is still in Rec mode.
- The TV remains on even if the Standard CEC function compatible equipment is turned off.

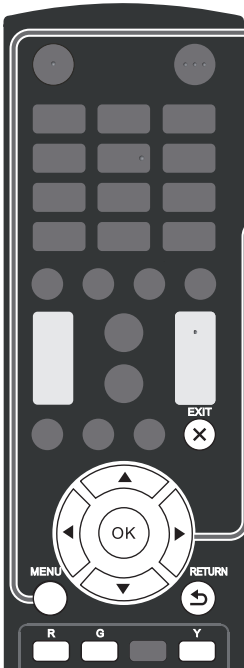
Note

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

Editing and Setting Channels


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

ANT/Cable setup and operation



1 Display the menu

MENU



2 Select Setup


Menu	Setup	1/2
Channel surf mode	All	
Language		
Clock		
ANT/Cable setup		
Input labels		

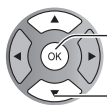
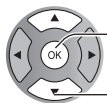
3 Select "ANT/Cable setup"

Menu	Setup	1/2
Channel surf mode	All	
Language		
Clock		
ANT/Cable setup		
Input labels		

■ Press to exit from a menu screen

EXIT



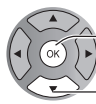
Auto program (Set automatically)

Automatically searches and adds available channels to the memory.

- ① **Select "ANT in"**
- ➔ Select "Cable" or "Antenna"
- Or select "Not used" (p. 13).


- ② **Select "Auto program"**

Menu	ANT/Cable setup
ANT in	Cable
Auto program	
Manual program	
Signal meter	



- ③ **Select a scanning mode (p. 13)**

Menu	Auto program
All channels	
Analog only	
Digital only	

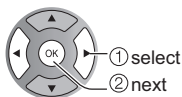
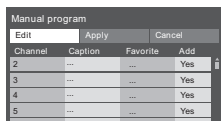


- After the scanning is completed, select "Apply". (see p. 27 ⑤).
- All previously saved channels are erased.

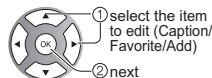
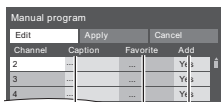
Auto program (Set automatically)

Use this procedure when changing the channel setup or changing the channel display. Also, use this to add or skip channels from the channel list manually. You can select a channel tuning mode (Digital only/Analog only) in "Channel surf mode" (p. 32)

① Select "Edit"



② Select the item to edit



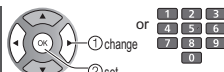
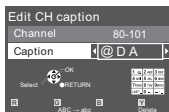
- **Caption:**
Changes the station identifier
- **Favorite:**
Registers channels to the Favorite List
- **Add:**
Adds or skips channels



Proceed to next page
Go back to the previous page

③ Edit

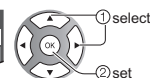
● Caption



Select or edit the station identifier.
(maximum 8 characters available)



● Favorite



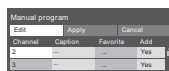
Select the number

● Add

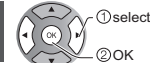
Press OK to select "Yes (add)" or "No (skip)"



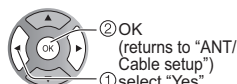
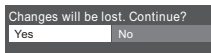
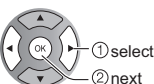
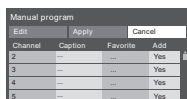
④ Move the cursor to a channel number



⑤ Select "Apply"

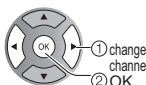
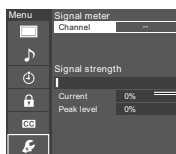


To cancel the Edit



Signal meter (Check signal strength)

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



Signal intensity

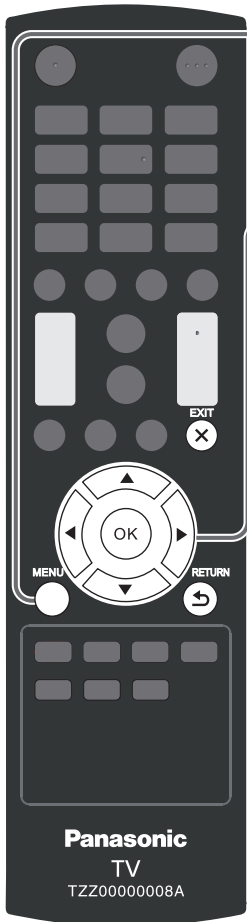
- If the signal is weak, check the antenna.
If no problem is found, consult your local dealer.

Note

- Not available if "Cable" is selected in "ANT in" (see p. 26).
- Available only for digital antenna channels.

How to Use Menu Functions

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

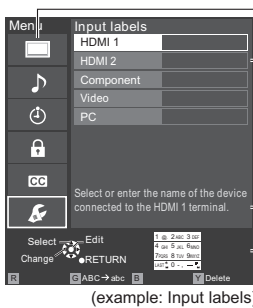


1 Display the menu



- Shows the functions that can be adjusted.
- Some functions will be disabled depending on the type of input signal.

2 Menu structure



Menu bar
Press OK to move to the Menu items.

Menu items
Press OK to proceed to next screen if available.

Help information

Operation guide

(example: Input labels)

3 Select the menu



Picture settings

Audio settings

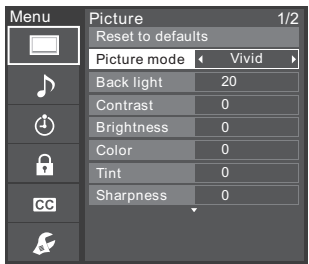
Timer (Sleep, On/Off timer)

Lock (Channel, Game, Program etc.)

Closed Caption setting

Setup (other settings)

Adjust or select a menu item



(example: Picture menu)



adjust
or
select

■ Press to exit from a menu screen

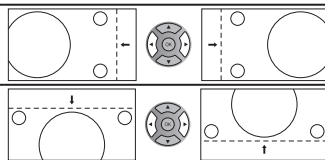


■ Press to go back to the previous screen





- "Reset to default" will be grayed out if no changes are made in the following menus: "Picture", "PC adjustments", "Audio" and "Closed caption".

<div> <div></div> Picture settings </div> Adjust the image or picture quality		
Settings	Items	Item Description
Reset to defaults		Resets all picture adjustments to factory default settings except for "Advanced picture".
Picture mode	Vivid	Provides enhanced picture contrast and sharpness for viewing in a well-lit room.
	Standard	Recommended for normal viewing conditions with subdued room lighting.
	Cinema	For watching movies in a darkened room. It provides a soft, film-like picture.
	Custom	Customizes each item according to your taste.
Back light		Adjusts the luminance of the back light.
Contrast, Brightness, Color, Tint, Sharpness		Adjusts the color, brightness, etc. for each picture mode to suit your taste • Display range Contrast/Brightness/ Color : 0-100 Tint : -50 - +50 Sharpness : 0 - 30
Color temp.	Cool/Normal/Warm	Selects a choice of Cool (blue), Normal, or Warm (red) color.
A.I. picture	Off/On	Controls dark areas without affecting the black level or brightness in the overall picture.
Video NR	Off/On	Reduces noise, commonly called snow. Leave it off when receiving a strong signal.
Game Mode	Off/On	Allows optimum picture settings for gaming. (Except TV and PC)
• Some menus are grayed out depending on the input signal or condition. (e.g. "Zoom adjustments" will be grayed out if the aspect is not set to Zoom.)		
Aspect adjustments	Screen format	JUST/4:3/ZOOM/FULL/H-FILL Changes the format (aspect ratio). Lets you choose the aspect depending on the format of received signal. (p. 34)
	HD size	Size 1/Size 2 1: Display 95% of HD signal, to trim noise at the edges of the screen. 2: Full image.
	H size	Size 1/Size 2 Adjusts the horizontal display range to reduce noise of both side edges of an image. Size 2: Adjusts the image size according to the aspect mode to reduce noise. (p. 34)
	Zoom adjustments	Adjusts vertical alignment and size when aspect setting is "ZOOM".
PC adjustments	Reset to defaults	Resets PC adjustments.
	Dot clock	Alleviates the problem if a picture appears to be vertically-striped, flickers partially or is blurred.
	H-position	Adjusts the horizontal position.
	V-position	Adjusts the vertical position.
	Clock phase	Alleviates the problem if the whole picture appears to flicker or is blurred. First adjust the Dot Clock to get the best possible picture, then adjust the clock Phase so that a clear picture appears. ● It may not be possible to display a clear picture due to poor input signals.
	Auto Adjust	Automatically adjust all PC functions by the PC resolution
	H-frequency V-frequency	Displays the H (Horizontal)/V (Vertical) frequencies. Display range



Settings	Items	Item Description
<ul style="list-style-type: none"> Some menus are grayed out depending on the input signal or condition. (e.g. "3:2 pulldown" will be grayed out if the input signal is high definition or you are viewing photos, etc.) 		
Advanced picture	3D Y/C filter	Off/On Minimizes noise and cross-color in the picture.
	MPGE NR	Off/On Reduces noise of specific digital signals of DVD, Cable box, etc.
	Black level	Dark/Light Selects Dark or Light.
	3:2 pulldown	Off/On Adjusts the picture recorded in 24 fps for optimum quality.

 Audio settings Adjust Audio quality		
Settings	Items	Item Description
Reset to defaults		Resets Bass, Treble, and Balance adjustments to factory default settings.
Bass		Increases or decreases the bass response.
Treble		Increases or decreases the treble response.
Balance		Emphasizes the left / right speaker volume.
Advanced audio	Surround	Off/On Enhances audio L/R response when listening to stereo.
	Volume leveler	Minimizes volume disparity after switching to external inputs.
	TV speakers	Off/On Switches to "Off" when using external speakers. Off: "Surround" and "Volume leveler" do not work if "Off" is selected.
	HDMI 1 in	Digital/ Analog The default setting is "Digital" for the HDMI connection. (Digital input signal) Select audio input terminal when DVI cable is connected. (Analog audio input signal)

 Timer settings The TV can automatically turn On/Off at the designated date and time.		
If the Timer settings are grayed out, first set the clock (see p. 32) and make sure "Auto power on" is set to "No" (see p. 32)		
Settings	Items	Item Description
Sleep(Off timer)	Sleep(minutes)	Off/15/30/60/90 Select how long for the TV to automatically turn off.
Timer 1-2 (On/Off timer)	Timer set	Enables or disables this timer. (Off/On)
	Inputs	Sets the input to select when the TV turns on.
	Channel	Sets the channel to select when the TV turns on.
	Day	Sets the day when the TV turns on. [SUN/MON/TUE/WED/THU/FRI/SAT(displays the nearest future date) MON-FRI/SAT-SUN/DAILY/Every SUN/Every MON/Every TUE/EveryWED/ Every THU/Every FRI/ Every SAT]
	On time	Sets the time when the TV turns on. The TV will turn off after 90 minutes or as specified.
	Off time	Sets the time when the TV turns off within 24 hours.

🔒 Lock Locks specified channels or shows to prevent children from watching objectionable content.

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

- Password setting/entering (p. 16)

Set "Custom" in "Mode" to specify "Channel", "Game" and "Program" settings.

Settings	Items	Item Description
Mode	Off	Unlocks all the Lock settings of "Channel", "Game" and "Program".
	All	Locks all the inputs regardless of the Lock settings of "Channel", "Game" and "Program".
	Custom	Locks specified inputs of "Channel", "Game" and "Program".
Channel (These channels will be blocked regardless of the program rating.)	Mode	Set channel lock status. (Off/All/Custom) All: Locks all channels Off: Unlocks all channels Custom: Locks specified channels. Set "Channel 1" - "Channel 7"
	Channel 1-7	Select a channel to lock. (Select up to 7 (1-7) channels to block.)
Game	On/Off	Locks Channel 3, Channel 4, and external inputs.
Program (To set a rating level)	Mode	Set program lock status. (Off/On) "V-chip" technology enables restricted shows to lock according to TV ratings. On: Set each rating level (MPAA, U.S.TV, C.E.L.R., C.F.L.R.)
	MPAA	Select U.S. movie ratings to lock.
	U.S.TV	U.S. TV program ratings. For more information (p. 33)
	C.E.L.R.	Canadian English ratings.
	C.F.L.R.	Canadian French ratings.
Change password		Change the password. Input the new 4-digit password twice.

- This television is designed to support the "Downloadable U.S. Region Rating System" when available. (Available only in U.S.A.)
- The Off rating is independent of other ratings.
- When placing a lock on a specific-age-based-rating level, the Off rating and any other more restrictive ratings will also be blocked.
- It is downloaded and stored in memory and can be adjusted on the program lock menu page 2. (Page 2 only appeared while detecting RRT5 data.)


CC Closed caption Display closed caption

The television includes a built-in decoder that is capable of providing a text display of the audio.

The program being viewed must be transmitting the Closed caption (CC) information. (p. 36)

Settings	Items	Item Description
Reset to defaults		Resets all Closed caption settings to factory default settings.
Mode	On/Off/CC on mute	On: To display Closed captions. CC on mute: To display Closed captions when the audio is muted. (When not using, select "Off").
	Analog	Choose the Closed caption service of Analog broadcasting. CC1-4: Information related to pictures (Appears at the bottom of the screen) T1-4: Textual information (Appears over the entire screen)
Digital	Primary/Second./Service 3/4/5/6	The Digital Closed caption menu lets you configure the way you choose to view the digital captioning.
Digital setting (Set display settings in digital program)	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.)

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

 Setup		Other function settings
Settings	Items	Item Description
Channel surf mode	All/Favorite/Digital only/Analog only	Sets the mode to select the channel with the Channel up/down button. Favorite: Only channels registered as FAVORITE. (p. 17)
Language	English/Español/Français	Selects the screen menu language.
Clock		Adjusts the clock. (p. 14)
ANT/Cable setup See p. 26-27 for more detail.		
Input labels (Display labels of connected devices)	Selects the terminal and label of the external equipment. Devices connected to external input terminals can be labeled for easier identification during the input selection. (Input select (p. 18)) Terminals: HDMI 1/HDMI 2/Component/Video/PC { Label: [BLANK] Not used/Blu-ray/DVD/DVD REC/HOME THTR/GAME/COMPUTER/VCR/ CABLE/SATELLITE/DVR/CAMERA/MONITOR/AUX/RECEIVER/MEDIA CTR/MEDIA EXT/OTHER } • You can also enter the label name directly. (Entering characters (p. 16))	
HDMI control See p. 24 for more detail.		
Eco/Energy saving	Power save (Standard/Saving) Reduces screen brightness to lower power consumption. Eye-friendly for viewing in a dark room. No signal for 10 minutes (Stay on/Power TV off) To conserve energy, the TV automatically turns off when NO SIGNAL and NO OPERATION continue for more than 10 minutes. • Not in use when "Auto power on" is set to "Yes", or "On/Off Timer" is set. • "No signal for 10 minutes was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No signal for 10 minutes". • The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off. No activity for 3 hours (Stay on/Power TV off) To conserve energy, the TV automatically turns off when no operation of remote and side panel key continues for more than 3 hours. • Not in use when "Auto power on" is set to "Yes", or "On/Off Timer" is set, or while "PC input" is selected. • No activity for 3 hours was activated" will be displayed for about 10 seconds when the TV is turned on for the first time after the power was turned off by "No activity for 3 hours". • The on-screen display will flash 3, 2 and 1 to indicate the last three (3) remaining minutes prior to the shut-off.	
Advanced setup	Auto power on(No/Yes) Turns TV On automatically when the cable box or connected device is turned On. TV AC cord must be plugged into this device. TV turns on every time the power is restored. Image viewer auto play (Off/On) Displays the confirming message or not if the USB stick is inserted into the TV.	
First time setup		Restarts the first time setup from "Language" setting. (p. 12)
About		Displays TV version and software license.
Reset to defaults		Performing Reset will clear all settings made with Setup, such as channel settings. • Password setting/entering (p. 16)

Ratings List for parental control

“V-chip” technology enables you to lock channels or shows according to standard ratings set by the entertainment industry.

■ U.S. MOVIE RATINGS (MPAA)

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

■ U.S. TV PROGRAMS RATINGS (U. S. TV)

Age-based Group	Age-based Ratings	Possible Content Selections	Description
NR (Not Rated)	TV-NR	<ul style="list-style-type: none">ViewableBlocked	Not Rated.
Youth	TV-Y	<ul style="list-style-type: none">ViewableBlocked	All children. The themes and elements in this program are specifically designed for a very young audience, including children from ages 2-6.
	TV-Y7	<ul style="list-style-type: none">FV BlockedViewableBlocked	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.
Guidance	TV-G	<ul style="list-style-type: none">ViewableBlocked	General audience. It contains little or no violence, no strong language, and little or no sexual dialogue or situations.
	TV-PG	<ul style="list-style-type: none">D, L, S, V (all selected)Any combination of D, L, S, V	Parental guidance suggested. The program may contain infrequent coarse language, limited violence, some suggestive sexual dialogue and situations.
	TV-14	<ul style="list-style-type: none">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	<ul style="list-style-type: none">L, S, V (all selected)Any combination of L, S, V	Mature audiences only. This program may contain mature themes, profane language, graphic violence, and explicit sexual content.

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

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

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

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

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

Caution

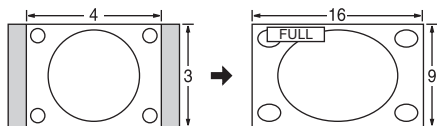
- The V-Chip system that is used in this set is capable of blocking “NR” programs (non rated, not applicable and none) as per FCC Rules Section 15.120(e)(2). If the option of blocking “NR” programs is chosen “unexpected and possibly confusing results may occur, and you may not receive emergency bulletins 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

Aspect Ratio (FORMAT)

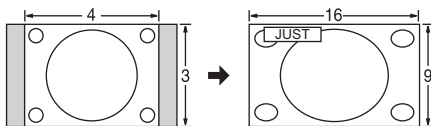
Press the FORMAT button to cycle through the aspect modes. This lets you choose the aspect depending on the format of the received signal and your preference. (p. 16)
(e.g.: in case of 4:3 image)

● FULL



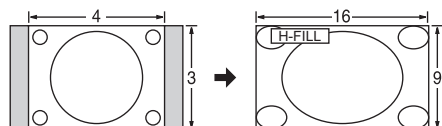
Enlarges the 4:3 image horizontally to the screen's side edges. (Recommended for anamorphic picture)

● JUST



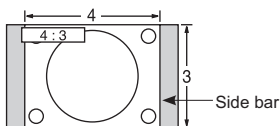
Stretches to justify the 4:3 image to the four corners of the screen. (Recommended for normal TV broadcast)

● H-FILL



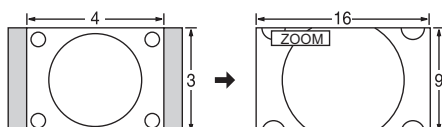
Enlarges the 4:3 image horizontally to the screen's side edges. The side edges of the image are cut off.

● 4:3



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

● ZOOM



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

Note

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

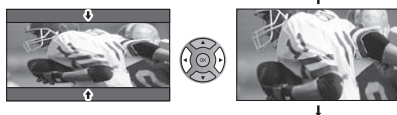
● Zoom adjustments

Vertical image position and size can be adjusted in "ZOOM".

① Select "Zoom adjustments" on the "Picture" menu. (p. 29)

② V-position: Vertical position adjustment

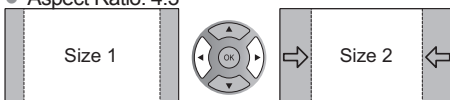
③ V-size: Vertical size adjustment



● To reset the aspect ratio →  (OK)

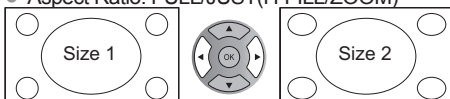
H size

● Aspect Ratio: 4:3



- The width will be decreased on both sides to reduce noise.

● Aspect Ratio: FULL/JUST(H-FILL/ZOOM)



- The width will be increased on both sides to reduce noise.

See page 29 for more information

Data format for Media player with USB

You can enjoy photos or music contents stored on a USB storage device.

Photo: JPEG

Data format: JPEG Exif ver2.1

Max. number of files: 500 / folder

Image resolution: 4096 x 4096 pixels ; 920 x 1080 pixels

Music Player MP3

Max. number of files: 500 / folder

Sampling frequency: 16 kHz, 22.05 kHz, 24 kHz, 32 kHz, 44.1 kHz, 48 kHz

Bit rate: From 8 to 320 kbps

Caution

- Supported file system: FAT32.
- Supported Single Partition
- Maximum memory size up-to 32GB
- Media player only supports USB Mass storage class devices.
- A JPEG image modified with a PC may not be displayed.
- Partly degraded files might be displayed at a reduced resolution.
- Some USB devices or USB HUB may not used with this TV.
- Do not use a USB Hub.

Note

- Folder structure viewed in PC
- The folder and file names may be different depending on the digital camera used.
- Support USB 2.0 Type A connector (DV5V MAX500mA)
- Some files may not be played back even if they fulfill these conditions
- USB HDD formatted by PC is not supported in Media Player.

Media information

Action

Press USB button

Take off the USB

Message

• No media. Please insert a USB storage device.

• You USB stick is unplug, please press OK to exit.

HDMI connection

HDMI (high-definition multimedia interface) allows you to enjoy high-definition digital images and high-quality sound by connecting the TV unit and HD devices.

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a Cable or Satellite 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 "HDMI1 in" menu screen. (p. 30)

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

(*1): The HDMI logo is displayed on an HDMI-compliant device.

(*2): Enquire at your local digital equipment retailer shop.

Caution

- Use with a PC is not assumed
- All signals are reformatted before being displayed on the screen.
- If the connected device has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- A device having no digital output terminal may be connected to the input terminal of either "COMPONENT" or "VIDEO" to receive analog signals.
- The HDMI input terminal can be used with only the following image signals: 480i, 480p, 720p, 1080i, 1080p. Match the output setting of the digital device.
- For details of the applicable HDMI signals, see p. 37.

DIGITAL AUDIO OUT terminal

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

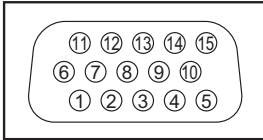
- Depending on your DVD player and DVD-Audio software the copyright protection function may Digital audio and disable optical output.
- When an ATSC channel is selected, the output from the DIGITAL AUDIO OUT jack will be Dolby Digital. When an NTSC channel is selected, the output will be PCM.

Closed Caption(CC)

- For viewing the CC of digital broadcasting, set the aspect to FULL (If viewing with H-FILL, JUST, ZOOM or 4:3; characters might be cut off).
- The CC can be displayed on the TV only when the receiver (such as a Cable box or satellite receiver) has the CC set to ON within the device itself. Check with your Cable or Satellite provider for instructions. The TV's CC button does not operate the Satellite or Cable box's CC function.
- If the CC is set to On on both the receiver and TV when the signal is 480i (except for the HDMI connection), the CC may overlap on the TV.
- If a digital program is being output in analog format, the CC data will also be output in analog format.
- If the recorder or output monitor is connected to the TV, the CC needs to be set up on the recorder or output monitor.

PC Input Terminals Connection

- Signal Names for D-sub 15P Connector



Pin Layout for PC Input Terminal

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	Ground	⑪	Reserved
②	G	⑦	Ground	⑫	SDA
③	B	⑧	Ground	⑬	H-sync
④	Reserved	⑨	5V	⑭	V-sync
⑤	Reserved	⑩	Ground	⑮	SCL

Input signal that can be displayed

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

Format	horizontal frequency (kHz)	vertical frequency (Hz)	COMPONENT	HDMI	PC
525 (480i) / 60i	15.734	59.940	*	*	
525 (480p) / 60p	31.469	59.940	*	*	
750 (720p) / 60p	45.000	60.000	*	*	
1,125 (1,080i) / 60i	33.750	60.000	*	*	
1,125 (1,080p) / 60p	67.500	60.000	*	*	
1,125 (1,080p) / 24p	27.000	24.000		*	
640 × 480 @ 60	31.469	59.940		*	*
800 × 600 @ 60	37.879	60.317		*	*
1,024 × 768 @ 60	48.363	60.000		*	*
1,280 × 768 @ 60	47.776	59.870		*	*
1,280 × 1,024 @ 60 (only for 42")	63.981	60.020		*	*
1,360 × 768 @ 60	47.712	60.015		*	*

Note

- Signals other than above may not be displayed properly or no support.
- The above signals are reformatted for optimal viewing on your display.

Panasonic does not guarantee operation and performance of peripheral devices made by other manufacturers; and we disclaim any liability or damage arising from operation and/or performance from usage of such other maker's peripheral devices.

Care and Cleaning

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

Display panel

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

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

Cabinet

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

- If the cabinet is particularly dirty, soak the cloth in a weak mild liquid dish soap and then wring the cloth dry. Use this cloth to wipe the cabinet and then wipe it dry with a dry cloth.
- Do not allow any mild liquid dish soap to come into direct contact with the surface of the 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.
- Do not let articles made from rubber or PVC be in contact with the TV for long periods of time.

Pedestal

Cleaning

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

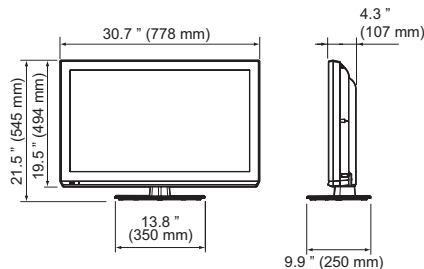
Power cord plug

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

Specifications

TC-L32C5 / TC-L32C5X / TC-32LC54		
Power Source		AC 110-127 V, 60 Hz
Power Consumption	Rated Power Consumption	97 W
	Standby condition	0.3W
Display panel	Aspect Ratio	16:9
	Visible screen size	32" class (31.5 inches measured diagonally)
	(H x V)	27.5" x 15.4" (698 mm x 392 mm)
	(No. of pixels)	1,049,088 (1,366 (W) x 768 (H)) [4,098 x 768 dots]
Sound	Speaker	1-way 2 bottom SP System
	Audio Output	10W (5W+5W)
PC signals		VGA, SVGA, XGA, WXGA Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz
Channel Capability-ATSC/NTSC (Digital/Analog)		VHF/ UHF: 2 - 69, CATV: 2 - 135
Operating Conditions		Temperature: 32 °F – 95 °F (0 °C – 35°C) Humidity: 20 % – 80 % RH (non-condensing)
Connection Terminals	COMPONENT IN (Shared with COMPOSITE)	Y(shared with VIDEO): 1.0 V [p-p] (including synchronization) P _B , P _r : ±0.35 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]
	HDMI 1&2	TYPE A Connector × 2 • This TV supports "CEC function".
	USB	USB 2.0 Type A connector × 1 (DC5V MAX500mA)
	PC	D-SUB 15PIN: R,G,B / 0.7 V [p-p] (75 Ω) HD, VD / 1.0 - 5.0 V [p-p] (high impedance)
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Coaxial Out
FEATURES		3D Y/C FILTER, CLOSED CAPTION, V-Chip,
Dimensions (W×H×D)	Including TV stand	30.7" × 21.5" × 9.9" (779 mm × 545 mm × 250 mm)
	TV Set only	30.7" × 19.5" × 4.3" (779 mm × 494 mm × 107 mm)
Mass	Including TV stand	22.1 lb. (10kg) NET
	TV Set only	19.9 lb. (9kg) NET

[TC-L32C5 / TC-L32C5X / TC-32LC54]



Note

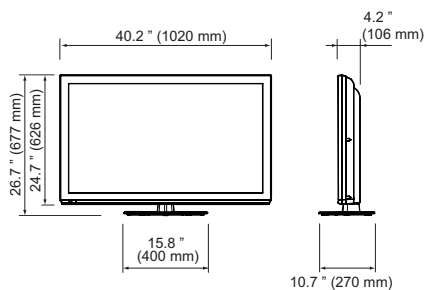
● Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.

● Specifications
● Care and Cleaning

Support Information

TC-L42U5 / TC-L42U5X		
Power Source		AC 110-127 V, 60 Hz
Power Consumption	Rated Power Consumption	172 W
	Standby condition	0.3W
Display panel	Aspect Ratio	16:9
	Visible screen size	42" class (42 inches measured diagonally)
	(H x V)	36.6" × 20.6" (930 mm × 523 mm)
	(No. of pixels)	2,073,600(1,920(W) × 1,080(H)) [5,760 × 1,080 dots]
Sound	Speaker	1-way 2 bottom SP System
	Audio Output	16W (8W+8W)
PC signals		VGA, SVGA, XGA, WXGA, SXGA Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency
Channel Capability-ATSC/NTSC (Digital/Analog)		VHF/ UHF: 2 - 69, CATV: 2 - 135
Operating Conditions		Temperature: 32 °F – 95 °F (0 °C – 35°C) Humidity: 20 % – 80 % RH (non-condensing)
Connection Terminals	COMPONENT IN (Shared with COMPOSITE)	Y: 1.0 V [p-p] (including synchronization) Pb, Pr: ±0.35 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]
	HDMI 1-3	TYPE A Connector × 3 • This TV supports "CEC function".
	USB	USB 2.0 Type A connector × 1 (DC5V MAX500mA)
	PC	D-SUB 15PIN: R,G,B / 0.7 V [p-p] (75 Ω) HD, VD / 1.0 - 5.0 V [p-p] (high impedance)
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Coaxial Out
FEATURES		3D Y/C FILTER, CLOSED CAPTION, V-Chip, CEC function Vesa compatible, VIERA IMAGE VIEWER
Dimensions (W×H×D)	Including TV stand	40.2" × 26.7" × 10.7" (1020 mm × 677 mm × 270 mm)
	TV Set only	40.2" × 24.7" × 4.2" (1020 mm × 625 mm × 106 mm)
Mass	Including TV stand	32.0 lb. (14.5kg) NET
	TV Set only	28.7 lb. (13kg) NET

[TC-L42U5 / TC-L42U5X]



Note

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

Frequently Asked Questions (FAQ)

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, visit the Panasonic website for further assistance. (see cover)

Questions	Answers
How do I view the picture from devices such as a: Cable/Satellite box, game console, Blu-ray or DVD player?	<ul style="list-style-type: none"> Press the INPUT button on the remote to select the correct input source. Check that the device is turned on and functioning correctly.
Why is there no picture or just a blue, black or snowy screen being displayed?	<ul style="list-style-type: none"> Check if the power cord is plugged in and the TV is turned on (front red LED light should be on; not blinking) Press the INPUT button on the remote to select the correct input source. Ensure all connections are correct and secure. When using external video source, such as a Cable/Satellite box or DVD player, check that the device is on and functioning correctly. Press MENU on the TV's remote control. If the menu is displayed, then the TV is working; recheck above steps.
Why doesn't the picture look like it is in High Definition?	<ul style="list-style-type: none"> Press the INFO button on the remote to confirm the type of signal being received (p. 16). HD signal should be 720P, 1080i or 1080p. Select a High Definition channel from your HD source (Cable, Satellite or fiber optic service). HD channels sometimes broadcast non-HD content. Ensure that your HD source (HD box, Blu-ray player, etc.) is connected to the TV with an HDMI or Component cable and set to output an HD video signal.
Why do black bars appear on the top and bottom and/or sides of the screen?	<ul style="list-style-type: none"> Change the format (aspect ratio) of the picture by pressing the FORMAT button on the remote control. (p. 16) Check the aspect settings on your external video source, such as Cable/Satellite box, DVD/Blu-ray Disc player, etc. Note: Some content, such as film-based movies, are available in extra-wide format. Top and bottom bars are unavoidable.
Why is the picture snowy when "ANT/Cable in" is selected?	<ul style="list-style-type: none"> When using a cable service (without a box), check that all connections are secure. When using a cable or satellite box, change the connection (wiring) to Composite, Component or HDMI. (p. 10) If you're using an antenna, then check that connections are secure. Change the position or direction of the antenna and check the "Signal meter". (p. 27)
Why is the picture chaotic and/or torn and/or with a buzz in the speakers?	<ul style="list-style-type: none"> Check if electrical products such as kitchen appliances, fluorescent lights or light dimmers are nearby. They may interfere with the TV's picture. Try viewing a picture from another device, such as a DVD player or a game console, to narrow down the source of the problem.
Why is there a black box on the screen?	<ul style="list-style-type: none"> Change settings of Closed Caption (CC). (p. 15, 36)
Why is the screen blank and the power indicator blinking?	<ul style="list-style-type: none"> The TV has gone into shutdown mode to protect itself. Try unplugging it for a few minutes and connecting it again. If there was a temporary power surge on the AC line it may now be OK. If the blinking returns, call 1-877-95VIERA (U.S.A.) or 1-866-330-0014 (Canada).
Why do some small spots on the screen remain bright or dark?	<ul style="list-style-type: none"> The LCD panel is made up of a few million pixels and is produced with advanced technology through an intricate process. Sometimes a few pixels may be bright or dark. These pixels do not indicate a defective panel and will have no impact on the performance of the TV.

Questions		Answers
Sound	Why is there no sound coming from the TV?	<ul style="list-style-type: none"> ● Make sure the volume is up and MUTE is off. ● Confirm the TV speakers are set to ON by pressing MENU and selecting "Audio" -> "Advanced audio". (p. 30) ● Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control. (p. 15) ● If the TV is connected to a Home Theater via optical cable, then: Check the connection, the audio system is on, the correct input is selected. ● Check "HDMI1 in" analog. (p. 30)
	Why is the sound unusual, distorted, low volume or in another language?	<ul style="list-style-type: none"> ● Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control. ● Check that all connections of external equipment connected to the TV are secure. ● When using Cable or Satellite box, check the device's audio settings. (example: try changing the box's Audio Range to 'narrow')
	Why is there a clicking, ticking or buzzing sound coming from the TV unit?	<ul style="list-style-type: none"> ● When TV power is turned on or shut off there are electrical components that make a click sound. This is normal operation. ● Changes in the temperature and humidity of the room may cause thermal expansion and contraction that can produce sounds. This is not a sign of faulty operation or a malfunction.
Other	What is the easiest and best way to connect a High-Definition Cable or Satellite box to the TV?	<ul style="list-style-type: none"> ● Use an HDMI cable. It carries both digital video and audio signal in HD. HDMI cable is the only cable needed to connect an HD device to the TV.
	Why is there no yellow jack (video input) on the back of the TV?	<ul style="list-style-type: none"> ● The Video input is shared with the Component input. Just connect the yellow plug into the green jack. Be sure to connect the red and white audio plugs into the appropriate red and white audio inputs. (p. 10)
	Why does the CC button not display Closed Caption?	<ul style="list-style-type: none"> ● When viewing TV via an HDMI connected device, such as a Cable or Satellite box, CC must be enabled at the device. ● Closed Caption is available only at supported TV programming.
	Why does the screen and back cover of the TV get warm?	<ul style="list-style-type: none"> ● The main unit radiates heat and some of the parts may become hot. This is normal operation and does not affect the performance of the set. ● Ensure good ventilation. ● Do not block the ventilation holes of the TV and do not place the TV on top of other equipment.
	Why doesn't the Remote Control work?	<ul style="list-style-type: none"> ● Check that the batteries are fresh, are of the same type and are installed with the correct polarity (+ & -). ● To operate other devices, such as changing channels when using Cable or Satellite boxes or operating non-Panasonic Blu-ray players, use the remote supplied with the device.
	Why is the "ANT/Cable" option at the top of the "Input select" menu gray-out and cannot be selected?	<ul style="list-style-type: none"> ● During "First time setup", step 3, you indicated that the "Antenna/ Cable in" connector is "not used" (p. 13). This is the proper setting if the TV is connected to a Cable or Satellite box via any of the other inputs. To re-activate the "ANT/Cable" input, press MENU, select SETUP and then redo the First time setup, selecting Cable or Antenna in step 3.
	Some menu items are grayed-out and cannot be selected. Why?	<ul style="list-style-type: none"> ● Depending on certain modes or the selected input, some options are not available. For example, Zoom adjustments are only available when the FORMAT is changed to zoom mode.

Limited Warranty (for U.S.A. and Puerto Rico only)

PANASONIC CONSUMER MARKETING COMPANY OF NORTH AMERICA
PANASONIC CORPORATION OF NORTH AMERICA
One Panasonic Way Secaucus, New Jersey 07094

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 Marketing Company of North America. (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, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor.

LCD TV CATEGORIES	PARTS	LABOR	SERVICE
Up to 46" (diagonal)	1 (ONE) YEAR	1 (ONE) YEAR	Carry-In
46" (diagonal) and larger			On-Site

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 your product or arrange for on-site service during the Limited 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.

On-Site or Carry-in Service

For On-Site or Carry-In Service in the United States and Puerto Rico call 1-877-95-VIERA (1-877-958-4372)

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

Limited Warranty Limits And Exclusions

This 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, non-expanded 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 howlong 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 ON-SITE SERVICE CALL, WHERE APPLICABLE) WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

● Limited Warranty (for U.S.A. and Puerto Rico only)
● Frequently Asked Questions

Support Information

Customer Services Directory (for U.S.A. and Puerto Rico)

Customer Services Directory (United States and Puerto Rico)

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

<http://www.panasonic.com/help>

or, contact us via the web at:

<http://www.panasonic.com/contactinfo>

You may also contact us directly at:

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

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

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

Accessory Purchases (United States and Puerto Rico)

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

<http://www.pstc.panasonic.com>

or, send your request by E-mail to:

npcparts@us.panasonic.com

You may also contact us directly at:

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

Panasonic National Parts Center

20421 84th Ave. S., Kent, WA 98032

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

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

Limited Warranty (for Canada)

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario L4W 2T3

PANASONIC PRODUCT – LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in material and workmanship under normal use and for a period as stated below from the date of original purchase agrees to, at its option either (a) repair your product with new or refurbished parts, (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by Panasonic Canada Inc.

Viera TV (46" & over)	In-home service	One (1) year, parts (including panel) and labour.
Viera TV (under 46")	Carry-in service	One (1) year, parts (including 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.

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. If removal is required to service the product, it will be at the discretion of the Servicer and in no event will Panasonic Canada Inc. or the Servicer be liable for any special, indirect or consequential damages.

This warranty is given only to the original purchaser, or the person for whom it was purchased as a gift, of a Panasonic brand product mentioned above sold by an authorized Panasonic dealer in Canada and purchased and used in Canada, which product was not sold "as is", and which product was delivered to you in new condition in the original packaging.

IN ORDER TO BE ELIGIBLE TO RECEIVE WARRANTY SERVICE HEREUNDER, A PURCHASE RECEIPT OR OTHER PROOF OF DATE OF ORIGINAL PURCHASE, SHOWING AMOUNT PAID AND PLACE OF PURCHASE IS REQUIRED

LIMITATIONS 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. The warranty **ALSO DOES NOT COVER** damages which occurred in shipment, or failures which are caused by products not supplied by Panasonic Canada Inc., or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Authorized Servicer, or damage that is attributable to acts of God. Dry cell batteries are also excluded from coverage under this warranty.

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 RESULTING FROM THE USE OF THIS PRODUCT OR ARISING OUT OF ANY BREACH OF ANY EXPRESS OR IMPLIED WARRANTY. (As examples, this warranty excludes damages for lost time, travel to and from the Authorized Servicer, loss of or damage to media or images, data or other memory or recorded content. This list of items is not exhaustive, but for illustration only.)

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. This warranty gives you specific legal rights and you may have other rights which vary depending on your province or territory.

WARRANTY SERVICE

For product operation and information assistance, please contact:

Our Customer Care Centre: 1-800 #: 1-866-330-0014
or visit our website: concierge.panasonic.ca

For product repairs, please contact Viera Customer Care Agent using the above contact info.

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.

USA Only: Disposal may be regulated in your community due to Environmental considerations. For disposal or recycling information, please visit Panasonic website: <http://www.panasonic.com/environmental> or call 1-888-769-0149.

Customer's Record

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

Model Number _____

Serial Number _____

Anotación del cliente

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

Modelo _____

Número de serie _____

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America

One Panasonic Way, Secaucus
New Jersey 07094 U.S.A.

Panasonic Canada Inc.

5770 Ambler Drive
Mississauga, Ontario
L4W 2T3 CANADA