Panasonic®

TC-32LH1

LCD TV Operating Instructions



Model No.



For assistance, please call : 1-800-211-PANA (7262) or send e-mail to : consumerproducts@panasonic.com	
or visit us at www.panasonic.com	(U.S.A)
For assistance, please call : 787-750-4300 or visit us at www.panasonic.com	(Puerto Rico)
For assistance, please call : 1-800-561-5505 or visit us at www.panasonic.ca	(Canada)

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



Important Safety Instructions



The lightning flash with arrow head 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.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN

■ Important Safety Instructions for LCD TV

- 1) Read these instructions. All the safety and operating instructions should be read before the appliance is operated.
- 2) Keep these instructions. The safety and operating instructions should be retained for future reference.
- 3) Heed all warnings. All warnings on the appliance and in the operating instructions should be adhered to.
- 4) Follow all instructions. All operating and use instructions should be followed.
- 5) Do not use this apparatus near water. For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
- 6) Clean only with dry cloth.
- Do not use liquid cleaners or aerosol cleaners. Use a dry cloth for cleaning.
- 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Slots and Openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
 This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- 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.
 Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
- 13) Unplug this apparatus during lightning storms or when unused for long periods of time. This will prevent damage to the product due to lightning and power-line surges.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.

- 16) 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. Selection 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.
- 17) An outside antenna system should not be located in the vicinity of overhead power lines or other

EXAMPLE OF ANTENNA GROUNDING AS PER (NEC) NATIONAL ELECTRICAL CODE ANTENNA LEAD-IN WIRE GROUND CLAMP ANTENNA **DISCHARGE UNIT** ELECTRIC (NEC SECTION 810-20) SERVICE EQUIPMENT GROUNDING CONDUCTORS (NEC SECTION 810-21) GROUND CLAMPS POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

electric light or 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.

- 18) Unplug this LCD TV from the wall outlet, and refer servicing to qualified service personnel under the following conditions:
 - a. When the power cord or plug is damaged or frayed.
 - b. If liquid has been spilled into the LCD TV.
 - c. If the LCD TV has been exposed to rain or water.
 - d. 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.
 - e. If the LCD TV has been dropped or the cabinet has been damaged.
 - f. When the LCD TV exhibits a distinct change in performance this indicates a need for service.
- 19) 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 part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 20) WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. DO NOT PLACE LIQUID CONTAINERS (FLOWER VASES, CUPS, COSMETICS, ETC.) ABOVE THE
- SET. (INCLUDING ON SHELVES ABOVE, ETC.) 21) 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.
- **NOTE:** This equipment is designed to operate in the U.S.A. and other countries where the broadcasting system and AC house current is exactly the same as in the U.S.A.
 - The marking or retained image on the LCD panel resulting from fixed image use is not an operating defect and as such is not covered by Warranty. This product is not designed to display fixed image patterns for extended periods of time.
- Important Information Regarding Use of Video Games, Computers, Captions or Other Fixed Image Displays.

The extended use of fixed image program material can cause a permanent "shadow image" on the LCD panel. This background image is viewable on normal programs in the form of a stationary fixed image. This type of irreversible LCD panel deterioration can be limited by observing the following steps:

- A. Reduce the brightness/contrast setting to a minimum viewing level.
- B. Do not display the fixed image for extended periods of time.
- C. Turn the power off when not in actual use.
- This product utilizes tin-lead solder, and has a fluorescent lamp containing a small amount of mercury. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <u>www.eiae.org.</u>

Dear Panasonic Customer

Welcome to the Panasonic family of customers. We hope that you will have many years of enjoyment from your new LCD TV. To obtain maximum benefit from your set, please read these instructions before making any adjustments, and retain them for future reference. Retain your purchase receipt, and record the model number and serial number of your set in the space provided on the rear cover of these instructions.

For assistance, please call : 1-800-211-PANA (72 or send e-mail to : consumerproducts@panasonic.co	262) om
or visit us at www.panasonic.com	(U.S.A)
For assistance, please call : 787-750-4300 or visit us at www.panasonic.com	(Puerto Rico)
For assistance, please call : 1-800-561-5505 or visit us at www.panasonic.ca	(Canada)

Federal Communication Commission Information

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

Reorient or relocate the TV antenna. Increase the separation between TV and other equipment. Connect TV into separate outlet from other equipment. Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Pursuant to 47CFR, Part 15.21 of the FCC rules, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.



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Table of Contents

Important Safety Instructions 2
Installation6
SUPPLIED ACCESSORIES 6
Remote control battery installation7
Maintenance7
Connections8
Connecting the Antenna Cable to the Antenna Terminal 8
Antenna cover removal and fitting8
Antenna / Cable Connection 8
Cable cover removal and fitting10
How to connect the input terminals in front 10
How to connect with other equipment 11
How to connect the HDMI Terminal 12
Power ON / OFF 13
Connecting the Plug to the Wall Outlet 13
How to Turn the Power On 13
Location of Controls 14
Illuminated Remote Control 14
Flow Chart of MENU 16
Tuning channels
(Automatic channel programming)18
Tuning channels
(Manual channel programming)19
ASPECT Controls 20
Picture Adjustments 21
Position / Size Adjustment 23
Audio Adjustments 24
Lock Feature
Closed Captions
Customizing the VIDEO INPUT labels
OTHER ADJUST

Operating peripheral equipment using the remote control 31 Programming The Illuminated
Remote Control Using Access Codes
(When the code is not known)
Infrared Codes Index
Mode Operational Key Chart
Manual de instrucciones [Resumen]
Preparación
Instalación de las pilas en el control remoto
Conexión 40
Conexión del cable de antena al terminal de entrada de RF 40
Desmontaie e instalación de la cubierta de la antena 40
Conexión de antena / cable
Para guitar y colocar la cubierta del cable 41
Reproducción en una videogra
badora o en otro equipo periférico en frente 41
Como conectar las entradas atrás 42
Conexión/desconexión de la alimentación 43
Conexión de la clavija a la toma de corriente 43
Cómo conectar la alimentación 43
Ubicación de los controles 44
Control remoto iluminado 44
Organigrama de menús de televisión 46
Sintonización de canales
(Programaciónautomática de canales) 48
Sintonización de canales
(Programación manual de canales) 49
Troubleshooting
Specifications

Installation

Receiver Location

Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen. Use of some types of fluorescent lighting can reduce remote control transmitter range.

Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture.

Optional External Equipment

The Video/Audio connection between components can be made with shielded video and audio cables. For best performance, antenna cables should utilize 75 ohm coaxial shielded wire. Cables are available from your dealer or electronic supply store.

Before you purchase any cables, be sure you know what type of output and input connectors your various components require. Also determine the length of cable you'll need.

For optimum quality picture

When the LCD is exposed to light from outdoors or lighting fixtures, high-contrast pictures may not be displayed clearly. Turn off florescent lamps near the LCD and place in a location not exposed to outdoor light.

How to use the LCD stand

Adjust the stand to your desired angle. The stand angle can be adjusted between 20 ° left to 20 ° right.





SUPPLIED ACCESSORIES

Check the accessories before installations.

- Operating Instruction book
- Remote Control Transmitter





• Batteries for the Remote Control Transmitter (2 × AA size)



Warranty Card



Coaxial Antenna Plug



Remote control battery installation

Replacing batteries

Replace batteries by following the steps below:

Requires two AA batteries.

1. Open the battery cover.



 Install the batteries as shown in the battery compartment. (Polarity + or – must match the markings in the compartment).



3. Replace the cover.



⚠ Precaution on battery use

Incorrect installation can cause battery leakage and corrosion that will damage the remote control transmitter.

Observe the following precautions:

- 1. Always use new batteries when replacing the old set.
- 2. Do not attempt to charge, short-circuit, disassemble, heat or burn used batteries.
- 3. Battery replacement is necessary when remote control acts sporadically or stops operating this unit.

Notes:

- Do not drop, apply shock to or step on the remote control.
- Do not spill water on the remote control.
- Do not place objects between the remote control and remote control receiver.
- Do not use remote controls for other equipment at the same time.
- If the TV does not operate even when operating the remote control from a close range, it is time to replace the batteries.

Refer to the label on back of the remote control for directions on replacing batteries.

Maintenance

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

If the surfaces are extremely dirty, use a soft cloth dipped in a soap and water solution or a weak detergent solution.

- Use eyeglass cleaner to remove stubborn dirt from the LCD.
- Never use alcohol, paint thinner or benzine to clean this unit.
- Before using a chemically treated cloth, read the instructions that came with the cloth carefully.



CAUTION :

If water or similar substances get inside the monitor via the liquid crystal panel surface, a malfunction may result.

Connections

Connecting the Antenna Cable to the Antenna Terminal

Antenna Connection - For proper reception of VHF/UHF channels, an external antenna is required. For best reception an outdoor antenna is recommended. Antenna Mode must be set to TV.



Antenna cover removal and fitting



1 Removal

1.Push up hooks and pull the cover slightly towards yourself to disengage the claws (at 4 points).

2. Slowly pull out in the downward direction.

(2) Fitting

1.Insert the claws (at 4 points) at the top end. 2.Push it until hook is locked.

Note:

To avoid interference appearing on the screen, do not bundle the antenna wire and AC adapter wire together.

Antenna / Cable Connection

Incoming 75 Ohm Cable from Home Antenna / Cable Company



Cable Connection - For reception of cable channels (01 - 125) connect the cable supplied by your local cable company. Antenna Mode must be set to CABLE. (Refer to Antenna Mode section.) **Note:**

Certain cable systems offset some channels to reduce interference or have Premium (scrambled) channels. A cable converter box is required for proper reception. Check with your local Cable company for its compatibility requirements.

Connections





How to connect with other equipment

Connect VCR and other peripheral equipment



Notes:

- •When connecting video cables, priority is given to the S-Video cable when the S-Video input terminal and the video input terminal are connected at the same time.
- •The volume control output of the LCD TV will be fixed. (SOUND,ADJUST, VOLUME UP/DOWN and SURROUND ON/OFF are not functional for output signals from the AUDIO OUT terminals.)

HDMI^{*1} (HDMI : High Definition Multimedia Interface) is the first all digital consumer electronics A/V interface that supports uncompressed standard. One jack supports both video and audio information. This HDMI^{*1} input can be connected to an EIA/CEA-861/861B^{*2} compliant consumer electronic device, such as a Set Top Box or DVD player equipped with HDMI or DVI output connection.

By inputting a High-bandwidth Digital Content Protection (HDCP) high-definition picture source to the HDMI terminal of this television, high-definition pictures can be displayed on the screen in their digital form.



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

Connecting the Plug to the Wall Outlet



Note:

The TV's power cord must first be plugged into the wall outlet.

How to Turn the Power On



Illuminated Remote Control

Power button -

Press to turn the TV ON or OFF.

Note: The TV's power cord must first be plugged into the wall outlet and then turned on at the POWER switch (standby mode).



MUTE button -

Press this button to mute the sound, press again to cancel the mute.





R-TUNE button -

Switches to previously viewed channel or video mode.

Operation of other Device				
Buttons Device	REW / FF	PLAY	PAUSE	STOP
VCR	VCR REW/FF	PLAY	Pause	STOP
CABLE/DBS	—	—	-	—
DVD/CD	Skip Search REW/FF	PLAY	Pause	STOP
RCVR	Surround +/_	-	-	-
Buttons Device	REC			OPEN/CLOSE
VCR	VCR RECORD	TV/VCR Switch	VCR CH up/down	-
CABLE/DBS	CABLE RECORD	_	CABLE CH up/down	_
DVD/CD	_	_	SLOW +/_ /RAND. REP	OPEN/CLOSE
RCVR	_	_	Center +/_	_

60 900

Flow Chart of MENU

All adjustments and setting functions available in this set can be made using the menu buttons. The menu screen is composed of 2 menus: the ADJUST menu and the SET UP menu.



Tuning channels (Automatic channel programming)

Automatically scans all TV channels and stores them in memory.

Turn the Power on and press the TV/VIDEO button to display the TV channel.

Press the MENU button to display the MENU screen and select SET UP. MENU ADJUST SET UP Press to select PROGRAM CH. **G** LANGUAGE PROGRAM CH Press to display the PROGRAM CHANNELS screen. LOCK 8 CC CLOSED CAPTION INPUT LABEL OTHER ADJUST Ľ Press to select MODE 3 PROGRAM CHANNELS Press to select TV or CABLE. MODE TV CABLE AUTO PROGRAM MANUAL PROGRAM Press to select AUTO PROGRAM. AUTO PROGRAM 4 Activate Press to display the confirmation "AUTO PROGRAM?" screen. YES NO 5 Press to select YES. AUTO PROGRAM In "AUTO PROGRAM" Press to select NO. CHANNEL 59 Press to run AUTO PROGRAM. MENU O STO Channels will automatically advance until all channels have been scanned. Channel numbers with a video signal present will be stored in the Channel Scan Memory. MENU Press to exit from the MENU screen.

Notes:

• When buttons are pressed with AUTO PROGRAM running, the TV set will return to normal viewing. (Channels searched up to this point are added.)

This returns the set to the normal viewing condition.

- After AUTO PROGRAM is finished, the lowest channel number added will be received.
- When there are no receivable channels, channel 69 is displayed for TV and channel 125 is displayed for cable TV.

Tuning channels (Manual channel programming)

Use this setting when changing setting of receiving channels or changing the channel display.

Turn the TV on and select the broadcast channel. Follow the steps on the previous page to display the PROGRAM CHANNELS screen.



ASPECT Controls

The color monitor will allow you to enjoy viewing the picture at its maximum size, including wide screen cinema format picture.





ASPECT button

The aspect mode changes each time the ASPECT button is pressed.



Note:

When a 1080i signal is being received, the mode is set to FULL, and aspect switching is not possible.

Mode	Picture	Explanation
NORMAL		NORMAL mode will display a 4:3 picture at its standard 4:3 size.
JUST		JUST mode will display a 4:3 picture at its maximum size but with aspect correction applied to the sides of the screen so that elongation is only apparent at the left and right edges of the screen. The size of the picture will depend on the original signal.
ZOOM		ZOOM mode magnifies the central section of the picture.
FULL		FULL will display the picture at its maximum size but with slight elongation.

Picture Adjustments



PIC MODE

PICTURE MODE is stored for TV, VIDEO1, VIDEO2, COMPONENT1, COMPONENT2 and HDMI individually.

-> STANDARD --> CINEMA ---> VIVID ---->

MODE	Function	
STANDARD	Displays standard image.	
CINEMA	Ideal for watching movies in a dark room.	
VIVID	Displays a clear screen with contrast of light and dark.	

BACK LIGHT, PICTURE, BRIGHTNESS, COLOR, TINT, SHARPNESS, AI PICTURE, COLOR TEMP

You can change the level of each Item (BACK LIGHT, PICTURE, BRIGHTNESS, COLOR, TINT, SHARPNESS, AI PICTURE and COLOR TEMP) for each MENU (STANDARD, CINEMA, and VIVID) according to your personal preference.

Item	Function
BACK LIGHT	Luminance of the back light is adjusted.
PICTURE	Selects proper brightness and density for the room.
BRIGHTNESS	Adjusts for easier viewing of dark pictures such as night scenes.
COLOR	Adjusts the level of color.
TINT	Adjusts for flesh tone color.
SHARPNESS	Adjusts the degree of sharpness.
AI PICTURE	Displays black and white colors more clearly when turned ON.
COLOR TEMP	Increase or decrease WARM (red) and COOL (blue) colors to suit personal preference.

• To reset to standard setting :



Press to select NORMALIZE.

PICTURE ADJ	UST PAGE 1/2
	NORMALIZE
PIC MODE	STANDARD
BACK LIGHT	+ 20
PICTURE	+ 20
BRIGHTNES	S 0
COLOR	- 1
TINIT	0

3 ADVANCED ADJUST



Press to select PIC MODE.

Select STANDARD or CINEMA.



Press down to PAGE 2 and select ADVANCED ADJUST.

Press to select ADVANCED ADJUST ON.

PICTURE ADJ	UST PAGE 1/2 NORMALIZE
PIC MODE	STANDARD
BACK LIGHT	+ 20
PICTURE	+ 20
BRIGHTNESS	6 0
COLOR	- 1
TINT	0
SHARPNESS	0
AI PICTURE	OFF ON



ADVANCED ADJUST



Press to go to NEXT PAGE. ADVANCED ADJUST will be shown.

ADVANCED ADJUST
NORMAL
BLACK EXTENSION + 8
WHITE CHAR CORR + 8
MPEG NR 0

Press to select the menu to adjust.

 Select the desired level by looking at the picture behind the menu.

NORMAL is displayed at default.

Item	Function	
BLACK EXTENTION	Contrast level will be improved.	
WHITE CHAR CORR	It makes white characters brighter.	
MPEG NR	Noise unique to DVD, STB etc will be reduced.	

Position / Size Adjustment

This function will adjust the picture position / size for easy viewing.



2

Press MENU button to display MENU screen and select adjust.

[Picture Position Adjustment]

It will work for "ZOOM" mode only.



Press to select POSITION/SIZE.

Press to display POSITION/SIZE control.







Press to move picture vertically for the best view.







[Picture Size Adjustment]

It will work for "NORMAL" and "JUST" mode only.



Press to select. size 1: reduced black bar. size 2: widened black bar.

• To return to previous screen :



• To reset to standard setting :



– Press OK.

Audio Adjustments

Press the MENU button to display the MENU screen and select ADJUST.				
	 Press to select AU Press to display th 	DIO ADJUST. e AUDIO ADJU	ADJUST SET OF PICTURE IIII PICTURE ADJUST IIII POSITION / SIZE AUDIO AUDIO ADJUST JST	
	screen.		AUDIO ADJUST	
2	 Press to select the 	e menu to adjus	t. MODE DYNAMIC	
	Select the desired to the sound.	l level by listen	ing TREBLE + 8 BALANCE 0	
	NORMAL is displa	yed at default.	SURROUND OFF ON EQUALIZER OFF ON STEREO SAP MONO HDMI IN AUTO	
MODE		MODE	Function	
AUTO		Αυτο	Automatically adjusts quiet sound and loud sound for ease of listening.	
		STANDARD	Emits the original sound.	
		DYNAMIC	Gives contrast to sound.	
		ltom	Function	
EQUALIZER	RROUND,	BASS	Function	
			Adjusts low sounds	
You can change the level of each	Item (BASS,	BALANCE	Adjusts left and right volume	
TREBLE, BALANCE, SURROUND, EQUALIZER) for each MODE (AUTO, STANDARD and DYNAMIC) according to your personal preference.		SURROUND	To enjoy a concert hall effect, turn SURROUND to ON when a stereo signal is available.	
		EQUALIZER	To make voice sound clear. Normally set to ON.	
Selecting STEREO/SAP/MONO		MODE	Function	
STEREO> SAP> MONO		STEREO	Two channel Audio reception.	
Note: Red display : With signal White display : No signal		SAP	Second Audio Programming (typically used for bilingual audio).	
		MONO	Use when stereo signal is weak.	
White display : MONO				
HDMI IN Perform input switching of analog audio input (for D\/I) and digital audio input (for HDMI) when using the				

Perform input switching of analog audio input (for DVI) and digital audio input (for HDMI) when using the HDMI terminal.

-> AUTO --> DIGITAL --> ANALOG -----

AUTO	Set use of analog audio input when digital audio signal is not available.
DIGITAL	Forces use of digital audio input signal transmitted via the HDMI terminal.
ANALOG	Forces use of analog audio input signal transmitted via separate RCA terminals.

Lock F

In the United S (MOTION PICTU by the rating da can select whic

DTV Press the MENU button to display the MENU screen and select SET UP. 0000 3 1 2 6 (4) (5) $\overline{\mathbf{A}}$ (8) 9 \cap $(\mathbf{0})$ Θ

S data packets sent from broadcasting stations. The user ating programs should be blocked by the LOCK MENU options.



Input code

Press to display the

LOCK screen.

Press to select LOCK.

MENU ADJUST SET UP **9 D** LANGUAGE PROGRAM CH LOCK CC CLOSED CAPTION D INPUT LABEL L OTHER ADJUST

o rating systems, which are MPAA

TAL GUIDELINES. Its function is to block programs











Selecting broadcasts to lock.

Press to select U.S MOVIES, U.S. TV PROGRAMS, CANADIAN ENGLISH

Press to select BLOCK PROGRAMS.

Enter any 4-digit number as a password.

These numbers will be needed when

While entering a code, by pressing the

up 🗻 or down 丈 buttons you can

deactivating the LOCK function.

input a new code again.

After entering your secret code for the first time, the onscreen display will

Note: Use a code that is easy to remember and record it in a safe place.

change to CHANGE CODE. And you can change the Input code.

or CANADIAN FRENCH.





Press to select STATUS.

Press to select ON or OFF.



Press to select CHANGE SETTING.

Press to display the next screen.

for U.S.TV PROGRAM to lock



Locking and unlocking

- When a title field is selected, all ratings below this rating are selected.
- When options within an option field are selected, ratings below this rating within the same field are selected.
- Ratings displayed in green are unlocked and those displayed in red are blocked programs.
- 1. Ratings for children: These ratings are divided into ranks as follows.



2. Ratings for teenagers: These ratings can be created out of these major categories to form various combinations. These combinations are described in the below diagram. Ratings for all ages are on top and ratings for adults are on the bottom.



for U.S.MOVIES to lock



X : Pornography

for CANADIAN ENGLISH / CANADIAN FRENCH to lock



Press to select VIEW E PROGRAMS?.

Press to select NO or YES.



CANADIAN FRENCH
VIEW E PROGRAMS?
NO YES
G
8 ANS+
13ANS+
16ANS+
18ANS+



Press to select rating.

Press to lock or unlock the rating.

Lock: Red Unlock : Green

CANADIAN ENGLISH	CAN
VIEW E PROGRAMS? NO YES	
С	
C8+	
G	
PG	
14+	
18+	



CANADIAN	ENGLISH RATIN	IGS	CHART
----------	----------------------	-----	-------

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

CANADIAN FRENCH RATINGS CHART

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.
13ANS+	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.
16ANS+	Programming may not be suitable for children under the age of 16 - Contains frequent scenes of violence or intense violence.
18ANS+	18+ years old. Programming restricted to adults. Contains constant violence or scenes of extreme violence.

• To return to previous screen :

• To end adjustments :

Press to exit from the MENU screen.
 This returns the set to the normal viewing condition.

Closed Captions

This unit has a built in decoder that provides a visual depiction of the audio portion of a television program in the form of written words across the screen (white colored letters on a black background). It allows the viewer to read the dialog a television program or other information.

Press the MENU button to display the MENU screen and select SET UP.



Press to select CLOSED CAPTION.

Press to display the CLOSED CAPTION screen.



2 CC ON MUTE

Activates the On-Screen Closed Caption feature, when the MUTE button on the Remote Con pressed. To deactivate, press the MUTE button again.

Note:

This feature functions when the Closed Caption Mode is in the "OFF" position. The program being viewed must be broadcast with Closed Caption.

Customizing the VIDEO INPUT labels

Display for each VIDEO INPUT can be changed to match with the connected device (VCR, DVD Player etc.).



Operating peripheral equipment using the remote control

Programming The Illuminated Remote Control Using Access Codes

The Universal Remote Control can be programmed to operate many manufacturers' components, using the component function buttons for VCR, DVD, AUX, RCVR, TV, DTV, CABLE or DBS. Follow the procedures for programming your Remote Control with or without a code for the component.

Determine the manufacturer of the component and look in the table for the code.

Confirm that the external component is plugged in and operating.

2 Turn the component off.



3

Press **POWER** and **OK** together, **for at least 5 seconds**. After 5 seconds, all the illuminated mode keys will begin to flash. Release the POWER and OK keys.

Press the mode key. The mode key will illuminate steadily, all others will go out.

Enter the 3-digit component code using the Remote Control numeric keypad.

POWER

5

6

Press the Remote Control Power to test the component. If the procedure is successful, the component will turn on.

Default Modes For Remote Control

Device	Operates	Default
TV	TV (Panasonic Only)	Panasonic TV Codes
DTV	DTV (Panasonic Only)	Panasonic DTV Codes
CABLE	CABLE (Preset)	Panasonic CABLE Codes
DBS	DBS (Preset)	Panasonic DBS Codes
VCR	VCR (Preset)	Panasonic VCR Codes
DVD/CD	DVD and CD (Preset)	Panasonic DVD Codes
AUX	Personal Video Recorders, Tape and VCR2	Panasonic Personal Video Recorders Code
RCVR	Audio Receiver (Preset)	Panasonic RCVR Code

Helpful Hints: Unsuccessful Code

If the component does not operate with the Remote Control, repeat the procedure using another code. (Some brands have multiple codes). If an incorrect code is entered, or if the procedure takes longer than 30 seconds, the programming will fail.

Programming Without A Code (When the code is not known)

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



Confirm that the external component is plugged in and on.



Turn the component off.

Press **POWER** and **OK** together, **for at least 5 seconds**. After 5 seconds, all the illuminated mode keys will begin to flash. Release the **POWER** and **OK** key.



Press the mode key. The mode key will illuminate steadily, all others will go out.

Press to move forward to the next code, or to move backward.



5

Press the Remote Control (POWER) to test the component. If the

procedure was successful, the component will turn on.

Note:

Repeat the above steps until the component code is found. It may take many attempts before the correct code is found.





After the code is found, press OK to store the code.

Note:

The step and set mode will start from the current device (not the beginning of the list, except for the first time).

Infrared Codes Index

The remote control is capable of operating many brands of peripheral equipment. Refer to pages 31 and 32 for programming procedures.

Note: The remote control memory is limited and therefore some models may not operate. The remote control is not designed to control all features available in all models.

Note: After entering the proper infrared code, press the desired Mode Selection Button on the remote control. Refer to pages 14 and 31 - 32 for details on operating peripheral equipment using the remote control.



Operating peripheral equipment using the remote control



Codes for Personal Video Recorders

Brand	Code
Panasonic Replay	100
Philips Tivo	101
Sony Tivo	102



Codes for DVD

Brand	Code
Denon	100
Ferguson	101
JVC	109
Mitsubishi	105
Nordmende	101
Panasonic	100
Philips	103
Pioneer	102
RCA	101

Brand	Code
Saba	101
Samsung	110
Sharp	108
Sony	104
Technics	100
Thomson	101
Toshiba	103
Yamaha	100
Zenith	107



Brand	Code
Admiral	226
Aiwa	233, 235
Carver	229
Denon	242
Emerson	239
Fisher	205
Harman/Kardon	219, 220, 221, 223
Hitachi	207

Operating peripheral equipment using the remote control



Codes for Receivers

Brand	Code
Admiral	120
Aiwa	125, 126
Denon	134, 135, 136
Fisher	104
Garrard	113
Harman Kardon	115, 123
Jensen	129
JVC	132, 133
Kenwood	100, 108
Magnavox	127
Marantz	124
McIntosh	116
Nakamichi	106
Onkyo	109, 114

Brand	Code
Optimus	103, 127, 130, 131
Panasonic	118, 119, 121
Philips	123
Pioneer	105, 107
Quasar	118, 119, 121
RCA	103, 105, 127, 130, 131
Sansui	103, 111, 139
Sharp	134, 137
Sony	122
Soundesign	138
Teac	111, 112, 113
Technics	118, 119, 121
Victor	132, 133
Yamaha	101, 102

Code



Codes for Cable Box

Brand	Code	Brand	Code
ABC	124	Puser	132
Archer	125, 132	RCA	115
Cableview	105, 132	Realistic	132
Citizen	105, 122	Regal	112, 118, 140, 141, 142,
Curtis	112, 113		145
Diamond	124, 125, 132	Regency	134
Eagle	129	Rembrandt	105, 132, 137
Eastern	134	Samsung	105
GC Brand	105, 132	Scientific Atlanta	111, 112, 113
Gemini	122	Slmark	101, 105
General	111, 119, 120, 121, 122,	Sprucer	105, 110
	123,	Stargate	105, 132
Instrument/ Jerrold	124, 125, 126, 127	Tel eview	101, 105
Hamlin	112, 118, 140, 141, 142,	Texscan	144
	145	Tocom	135
Hitachi	103, 124	Toshiba	104
Macom	103, 104, 105	Unika	125, 132
Magnavox	133	Universal	122, 132
Memorex	130	Videoway	106
Movietime	105, 132	Viewstar	129, 130
Oak	102, 137, 139	Zenith	100, 117
Panasonic	109, 110, 114	Zenith /Drae	100
Philips	106, 107, 128, 129, 130	Satellite	
Pioneer	101, 116		
Pulsar	105, 132		



Codes for DBS

Brand	Code
Dish Network	105, 115, 116
(Echostar)	
Echo Star	105
Express VU	105, 115
G.E.	106
G.I.	108
(General Instrument)	
Gradiente	114
Hitachi	103, 111, 112
HNS (Hughes)	103

Brand	Code
Magnavox	101, 102
Panasonic	104
Philips	101, 102
Primestar	108
Proscan	106, 109, 110, 113
RCA	106, 109, 110, 113
Sony	107
Star Choice	103, 108
Toshiba	100
Uniden	101, 102

Mode Operational Key Chart

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

KEY NAME	TV MODE	DTV MODE	CABLE MODE	DBS MODE
POWER	POWER	POWER	POWER	POWER
SAP	SAP ON/OFF	_	-	STB AUDIO TRACK
MUTE	MUTE	TV MUTE	CBL MUTE	STB MUTE
ASPECT	TV ASPECT	DTV ASPECT	_	STB ASPECT
TV/VIDEO	TV INPUT SW	TV INPUT SW	TV INPUT SW	TV INPUT SW
	REMOTE BUTTONS	REMOTE BUTTONS	REMOTE BUTTONS	REMOTE BUTTONS
	CHANNEL UP/DOWN	NAVIGATION UP/DOWN	CABLE CHANNEL UP/DOWN	STB NAVIGATION UP/DOWN
	ACTION	ACTION	ENTER	STB ACTION
	VOL + / -	NAVIGATION RIGHT/LEFT	CABLE VOL + / -	STB NAVIGATION RIGHT/LEFT
MENU	MENU	MENU	-	STB MENU
RECALL	DISPLAY	PROGRAM INFO.	TV DISPLAY	STB PROG.INFO
	EXIT	EXIT (EPG)ELECTRONIC PROGRAM GUIDE	-	STB EXIT
PAGE	_	STB PAGE UP/DOWN	-	STB PAGE UP/DOWN
GUIDE	_	GUIDE (EPG)ELECTRONIC PROGRAM GUIDE	-	STB GUIDE
	Select Channel	Select Channel	Select Channel	Select Channel
R-TUNE	PREVIOUS CHAN OR VIDEO MODE	PREVIOUS STB CHAN	CABLE PREVIOUS	STB PREVIOUS
SLEEP/PROG	SLEEP	DTV PROGRAM/DASH	_	STB PROGRAM/DASH
REW FF	_	_	_	_
PLAY	-	_	-	_
PAUSE	_	_	-	_
STOP	-	_	-	_
REC	_	_	VCR RECORD	_
TV/VCR	_	_	_	_
	_	_	CABLE CH CHANNEL UP/DOWN	_
OPEN/CLOSE		_	_	_

Operating peripheral equipment using the remote control

	DVD	MODE	AUX	MODE	
VCR MODE	(DVD)	(CD)	(VCR2)	(TAPE)	KUVK MODE
POWER	POWER	POWER	POWER	POWER	POWER
-	-	_	_	-	-
TV MUTE	TV MUTE	RCVR MUTE	TV MUTE	RCVR MUTE	RCVR MUTE
_	_	_	_	-	-

Manuel de instrucciones [Resumen]

Estimado cliente de Panasonic

Bienvenido a la familia de clientes de Panasonic.

Esperamos sinceramente que disfrute durante muchos años de su nuevo televisor LCD.

Para obtener el máximo beneficio de su aparato, lea estas instrucciones antes de hacer cualquier ajuste, y guárdelas para poder utilizarlas como referencia en el futuro.

Guarde también el recibo de su compra, y anote el número del modelo y el número de serie de su aparato en el espacio provisto en la cubierta posterior de estas instrucciones.

Preparación

Instalación de las pilas en el control remoto

Cambio de las pilas

Cambie las pilas siguiendo los pasos indicados más abajo:

Se necesitan dos pilas AA.



A Precauciones relacionadas con la utilización de las pilas

La instalación incorrecta de las pilas puede causar fugas en las mismas que podrían estropear el transmisor de mando a distancia.

Tome las precauciones siguientes:

- 1. Utilice siempre pilas nuevas cuando reemplace las viejas.
- 2. No intente cargar, cortocircuitar, desarmar, calentar o quemar las pilas usadas.
- 3. Las pilas deberán cambiarse cuando el mando a distancia funcione esporádicamente o no pueda controlar esta unidad.

Conexión

Conexión del cable de antena al terminal de entrada de RF

Conexión de antena - Para recibir correctamente los canales de VHF/UHF se requiere una antena externa. Para obtener la mejor recepción se recomienda utilizar una antena para exteriores. El modo de antena debe ajustarse a TV.



Desmontaje e instalación de la cubierta de la antena



1 Desmontaje

 Empuje los ganchos hacia arriba y tire ligeramente de la cubierta hacia usted mismo para soltar las garras (en 4 puntos).
 Sague lentamente la cubierta hacia abajo.

② Instalación

- 1.Inserte las garras (en 4 puntos) en el extremo de la parte superior.
- 2.Empuje la cubierta hasta que los ganchos hagan un ruido seco.

Nota:

Para evitar que aparezcan interferencias en la pantalla, no junte el cable de la antena y el cable del adaptador de CA.

Conexión de antena / cable

Cable entrante de 75 ohmios procedente de la antena del hogar/compañía de televisión por cable

Adaptador de antena tipo F (no suministrado)



Conexión de cable - Para recibir los canales de televisión por cable (01 - 125) conecte el cable suministrado por su compañía de televisión por cable. El modo de antena debe ajustarse a CABLE. (Consulte la sección Modo de la antena.)

ANT (VHF/UHF) en la parte posterior del televisor



Ciertos sistemas de televisión por cable neutralizan algunos canales para reducir interferencias o tienen canales especiales (codificados). Para recibir correctamente estos canales se necesita un sintonizador de conversión de televisión por cable. Póngase en contacto con su compañía de televisión por cable para conocer los requerimientos de compatibilidad.





Conexión/desconexión de la alimentación

Conexión de la clavija a la toma de corriente



Nota:

El cable de la alimentación del televisor deberá enchufarse primero a la toma de corriente.

Cómo conectar la alimentación



Interruptor POWER principal

Presione el interruptor POWER principal del televisor para encenderlo.

POWER-ON: Verde

Cuando el aparato esté en el modo de alimentación conectada o en espera, pulse el interruptor POWER principal del televisor para apagarlo. POWER OFF: Apagado

Ejemplo:La pantalla de abajo se visualiza durante un rato después de encenderse el televisor. (La condición de ajuste es un ejemplo.)



POWER

Pulse el botón POWER del mando a distancia para apagar el televisor: Rojo (espera)

Pulse el botón POWER del mando a distancia para encender el televisor: Verde

Nota:

El televisor y el adaptador de CA consumirán algo de energía siempre que el cable de alimentación esté conectado a la toma de corriente.





Ubicación de los controles

Control remoto iluminado

Botón de la alimentación -

Púlselo para encender o apagar el televisor.

Nota: El cable de la alimentación del televisor deberá enchufarse primero al tomacorriente, y el televisor encenderse luego con el interruptor

POWER (modo de espera).

Botón ASPECT

Cambia el tamaño de la pantalla (consulte la página 20).

 \rightarrow JUSTIFICADO \rightarrow ACERCAMIENTO \rightarrow COMPLETO \rightarrow NORMAL \neg

Botón MUTE

Presione este botón para silenciar el sonido, y púlselo de nuevo para cancelar el silenciamiento.





Botón R-TUNE -

Cambia al canal o modo de vídeo anterior.

Botones Aparato	REW / FF	PLAY	PAUSE	STOP
Videograbadora	Rebobinado/avance rápido de videograbadora	Reproducción	Pausa	Parada
CABLE/DBS	-		-	_
DVD/CD	Búsqueda con salto en rebobinado/avance rápido	Reproducción	Pausa	Parada
RECEPTOR	Sonido envolvente -/+		_	_
Botones Aparato	REC			OPEN/CLOSE
Videograbadora	Grabación de videograbadora	Conmutación de televisor/videograbadora	Subida/bajada de canal para videograbadora	_
CABLE/DBS	Grabación de Cable	_	Subida/bajada de canal	_
UNBEL/BBU	Grabacion de Cabie		para Gable	
DVD/CD	_		Lentamente/+/-	Abertura/cierre

Ubicación de los controles



Organigrama de menús de televisión

Utilizando los botones del menú se pueden hacer todos los ajustes y configuraciones que este aparato es capaz de realizar. La pantalla de menú está compuesta de 2 menús, el menú Ajuste y el menú Configu.



MENU

٠,

Ajuste

€ Idioma

Bloqueo

CC Subtítulos

Prog. Canales

🖵 Ponga Titulos

Otro Ajuste

Configu.

Consulte la ayuda en pantalla

El cuadro de ayuda en pantalla se visualiza siempre que aparece un menú en la pantalla. Este cuadro de ayuda indica qué teclas del mando a distancia se utilizan para desplazarse por el menú mostrado. Consulte más arriba las descripciones de las funciones de los botones.

Cuadro de instrucciones de ayuda en pantalla

46





Explora automáticamente todos los canales de TV y los almacena en la memoria.

Conecte la alimentación y pulse el botón TV/VIDEO para visualizar el canal de televisión.



Notas:

- Cuando se pulsen botones mientras se ejecute PROGRAMAAUTO, el televisor volverá al modo de visión normal. (Los canales encontrados hasta este punto se añadirán.)
- Después de terminar PROGRAMA AUTO, se recibirá el canal con el número más bajo que haya sido añadido.
- Cuando no haya canales que puedan ser recibidos se visualizará el canal 69 (canal 125 para la televisión por cable).

Sintonización de canales (Programación manual de canales)

Utilice este ajuste cuando cambie ajustes de los canales de recepción o cuando cambie la visualización de los canales.

Encienda el televisor y seleccione el canal de emisión. Siga los pasos de la página anterior para visualizar la pantalla Prog. Canales.



Pulse para seleccionar PROGRAMA MANUAL.

Pulse para visualizar la pantalla PROGRAMA MANUAL.





Adición o borrado de canales



Pulse para seleccionar canal (o teclas de números).





Pulse para añadir canales a la memoria (el número del canal se pone de color azul).

Pulse para borrar canales de la memoria (el número del canal se pone de color amarillo).

Repita los pasos 2 y 3 para continuar añadiendo o borrando canales.

Pulse para salir de la pantalla MENU. Esto hace que el aparato vuelva a la condición de visión normal.

Troubleshooting

Before requesting service for this LCD TV, check the chart below for a possible cause of the problem you are experiencing. Some simple checks or a minor adjustment on your part may eliminate the problem and restore proper operation. If you are in doubt about some of the check points, or if the remedies indicated in the chart do not solve the problem, consult your dealer for instructions.

Symptom	Cause and remedy	page
Power supply does not go on	 Is power supply plug unplugged from the outlet? If power will not go on with the remote control, is the power supply of the TV "Off"? 	- 12
Remote control cannot be operated	 Is battery exhausted, or is battery polarity wrong? Is the remote control receiver illuminated with strong light from a fluorescent lamp etc.? Are you using the special-purpose remote control for this equipment? (The unit will not operate with another remote control.) 	
Image shakes, or image is unclear	 Is there deterioration, breakage or disconnection of the antenna or antenna wire? Is the antenna wire connected correctly? 	
There are spots on the picture, or the screen shakes	 Is the system affected (by radio wave interference or induced electromagnetic waves) by external sources (automobiles or trains, high-voltage wires, neon, motors, magnetized steel frame, or iron rain shutters, etc.)? Turn off the power supply, and try changing the equipment setup location. If that has no effect, separate magnet-proofing will be required. 	
The image appears doubled or tripled	 Is the antenna direction shifted? Are reflected electromagnetic waves being received from mountains or buildings? 	-
A color pattern appears, or colors disappear	• Is the equipment being affected by another TV (electromagnetic interference)? • Changing the TV setup location may lead to improvement.	-
The channel number disappears from the screen	 Has the RECALL button been pressed? Press the "RECALL button" again. If the system is switched to external input and there is no external signal video, the number will disappear. 	_
When the image is not stable, the screen turns completely white for a moment	• This occurs when the signal driving the liquid crystal is lost, and is not a malfunction.	15
The screen goes dark momentarily when the channel is changed.	• The screen is darkened for a moment to conceal noise generated when changing channels.	_
The TV makes a hissing noise occasionally	• If the screen and audio are not abnormal, this sound is caused by slight expansion and contraction of the cabinet due to changes in room temperature. It has no effect on performance.	-
The screen display shakes with video input	• When input is switched to "video input", this may occur if there is no signal at the video/audio input terminal.	-
A black band appears momentarily when selecting channels with video	This is due to noise generated when changing channels.	10, 11
Both edges of the screen, or columns or window frames, appear bent	• They may appear bent due to the received channel or some DVD software. This is not a malfunction.	-
The image from the connected equipment does not appear	 Are plugs securely inserted into each terminal? Securely insert plugs all the way. 	10,11
The main unit is hot to the touch	 The main unit radiates heat, so some parts of the console reach a high temperature. This is not a problem for performance or quality. Set up at a location with good ventilation. Do not cover the ventilation holes of the console with a tablecloth, etc., and do not place on top of other equipment (like a video deck). 	_
H Poor Video (Example: Snow noise, no picture, picture runs, etc.) M	 Check HDMI cable is connected securely. Turn the power supply of the TV set and connected equipment ON/OFF. Check compatibility of connected signal. Change settings of connected equipment to make signal compatible. Is the input source from the equipment that is EIA/CEA-861/861B compliant consumer electric device? 	12
I Poor Audio	 Set audio of connected equipment to L.PCM. Check setting of HDMI INPUT under AUDIO ADJUST. If the problem with the digital audio connection persists, change to an analog audio connection. 	24

AC 120 V, 60 Hz

Average use : 172 W (Maximum Current 1.8 A)

Stand-by condition : 0.4 W

801 mm (32-inch), 16 : 9 aspect ratio LCD panel

687.4 mm (27.06 ″) (W) \times 412.4 mm (16.24 ″) (H) $\,\times$

801.6 mm (31.56 ") (DIAGONAL)

VHF-12 : UHF-56 : Cable-125

4W + 4W + 7W (10 % THD)

 ϕ 3.5 cm, 2 pcs

 ϕ 5 cm, 2 pcs

 ϕ 5 cm, 2 pcs

M3 (3.5 mm) Jack \times 1

Aero-Hammer[®] Double Woofer System (3way 6speaker System)

CLOSED CAPTION

V-Chip

Temperature : 41 °F - 95 °F (5 °C - 35 °C)

Humidity : 5 % - 90 % RH (non-condensing)

VIDEO (RCA PIN Type \times 1) \times 2	1.0 Vp-p (75 Ω)
S-VIDEO (MINI DIN 4pin \times 1) \times 2	Ү : 1 Vp-р (75

Customer' Record

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

Model Number

Serial Number

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America One Panasonic Way Secaucus New Jersey 07094 Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico Inc. ("PSC") Ave. 65 de Infanteria, Km 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985 Panasonic Canada Inc. 5770 Ambler Drive Mississauga, Ontario L4W 2T3