Panasonic

Operating Instructions Digital High Definition Plasma Television Manual de instrucciones Televisor digital con pantalla de plasma de alta definición

		modelo TH-4 TH-4 TH-5 TH-5	7PX60U 2PX60U 2PX60X 0PX60U 0PX60X 8PX60U
[For assistance, please call : 1-888-VIEW-PTV (843-9788) or contact us at www.panasonic.com/contactinfo	(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)	
	Para solicitar ayuda, llame al: 1-888-VIEW-PTV (843-9788) ó visitenos en www.panasonic.com/contactinfo	(EE.UU.)	
[Para solicitar ayuda, llame al: 787-750-4300 ó visítenos en www.panasonic.com	(Puerto Rico)]
\neg	Please read these instructions before operating you	ur set and retain ther	

English Español

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

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.

TQB2AA0663-3

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



Contents

Be Sure to Read

Safety Precautions 4 (Warning/Caution) Notes 5	
Accessories/Options 6 Connection 10 Identifying Controls 12 First Time Setup 13	Quick Start Guide

Enjoy your TV ! **Basic Features**

Basic Features	Vie
Watching TV 14	
Viewing from SD Card	Nin
SD Cards: Notes and Cautions	ິຍ
Watching Videos and DVDs	

Advanced Features

How to Use Menu Functions	
(picture, sound quality, etc.) ······ 20	
■ Control with HDMI "HDAVI Control [™] ······· 22	
Channel Lock 26	
Editing and Setting Channels 28	ıdva
Input Labels/Closed Caption 30	ne
Using Timer32	ō
Operating Peripheral Equipment 33	ed
Recommended AV Connections 34	

FAQs, etc.

Remote Control Operation/Code List
Ratings List for Channel Lock 39
Technical Information 40
Maintenance 43
FAQ44
Specifications 46
Limited Warranty (for U.S.A.) 48
Customer Services Directory (for U. S. A.). 49
Limited Warranty (for Canada)

FAQs, etc.

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2



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HDAVI Control[™] is a trademark of Matsushita Electric Industrial Co., Ltd.



Safety Precautions



manufacturer.

from tip-over.

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 ersons The exclamation point within

a triangle is intended to tell the user that important operating and servicing nstructions are in the papers with the appliance.

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

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

Important Safety Instructions

Read these instructions. 1)

- Keep these instructions.
- Зí 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.



storms or when unused for long periods of time.

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

11) Only use attachments / accessories specified by the

- is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.

FCC STATEMENT

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

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

FCC Caution:

To assure continued compliance, use only shielded interface cables when connecting TV to peripheral devices. Any changes or modifications not expressly approved by responsible party may cause harmful interference and could void the user's authority to operate this device.

Responsible Party:	Panasonic Corporation of North America
	One Panasonic Way, Secaucus, NJ 07094
Contact Source:	Panasonic Consumer Electronics Company 1-888-VIEW-PTV (843-9788)
email:	consumerproducts@panasonic.com

CANADIAN NOTICE:

For Models TH-37PX60U, TH-42PX60U, TH-42PX60X, TH-50PX60U, TH-50PX60X, TH-58PX60U This Class B digital apparatus complies with Canadian ICES-003.

WARNING/CAUTION

If problems occur during use

TV, unplug the power cord immediately.

disconnect the power cord plug immediately.

A short may occur, which could cause fire. Contact an

voltage dangerous nature.

Do not cover the ventilation holes.

When using the Plasma TV

cause fire or damage to the Plasma TV

bottom, and 2 3/4" (7 cm) or more at the rear.

precaution before carrying out any cleaning.

Electric shocks can result if this is not done

made

TV.

becoming dusty.

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odor is detected from the Plasma

Continued use of the TV under these conditions might cause

fire or permanent damage to the unit. Have the TV evaluated

at an Authorized Service Center. Servicing of the TV by any

If water or foreign objects get inside the Plasma TV, if the

Authorized Service Center for any repairs that need to be

• Doing so may cause the Plasma TV to overheat, which can

If using the pedestal, leave a space of 3 15/16" (10 cm) or

more at the top, left and right, 2 3/8" (6 cm) or more at the

Be sure to disconnect all cables before moving the Plasma

• Moving the TV with its cables attached might damage the

Disconnect the power plug from the wall outlet as a safety

Built-up dust on the power cord plug can increase humidity

cord from the wall outlet and clean it with a dry cloth.

Do not climb up onto the television or use it as a step.

affect other infrared communication equipment.

reflected light from your Plasma TV.

cord is inserted into the wall outlet.

This Plasma TV radiates infrared rays; therefore, it may

Install your infrared sensor in a place away from direct or

(Young children should be made particularly aware of this

If the unit falls over or becomes damaged through misuse,

The TV will still consume some power as long as the power

which might damage the insulation and cause fire. Unplug the

cables which, in turn, can cause fire or electric shock.

Clean the power cable regularly to prevent it from

Plasma TV is dropped, or if the cabinet becomes damaged,

unauthorized personnel is strongly discouraged due to its high

WARNING

SMALL PARTS CAN PRESENT CHOKING HAZARD IF ACCIDENTALLY SWALLOWED.

KEEP SMALL PARTS AWAY FROM YOUNG CHILDREN DISCARD UNNEEDED SMALL PARTS AND OTHER OBJECTS, INCLUDING PACKAGING MATERIALS AND PLASTIC BAGS/SHEETS TO PREVENT THEM FROM BEING PLAYED WITH BY YOUNG CHILDREN. CREATING THE POTENTIAL RISK OF SUFFOCATION.

Set up

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

Do not place any objects on top of the Plasma TV. If water spills onto the Plasma TV or foreign objects get inside

it, a short-circuit may occur which could result in fire or electric shock. If any foreign objects get inside the Plasma TV, please consult an Authorized Service Center.

This Plasma TV is for use only with the following optional accessories. Use with any other type of optional accessories may cause instability which could result in the possibility of injury.

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

- · Wall-hanging bracket (Vertical):
- TY-WK42PV3U (TH-37PX60U, TH-42PX60U,
- TH-42PX60X, TH-50PX60U, TH-50PX60X, TH-58PX60U) · Wall-hanging bracket (Angled):
- TY-WK42PR2U, TY-WK42PR3U (TH-37PX60U,

TH-42PX60U, TH-42PX60X, TH-50PX60U, TH-50PX60X) Always be sure to ask a qualified technician to carry out set-up.

AC Power Supply Cord

The Plasma TV is designed to operate on 120 V AC, 50/60 Hz (TH-37PX60U, TH-42PX60U, TH-50PX60U, TH-58PX60U) or on 110 - 127 V AC, 50/60 Hz (TH-42PX60X, TH-50PX60X). Securely insert the power cord plug as far as it will go.

. If the plug is not fully inserted, heat may be generated which could cause fire. If the plug is damaged or the wall socket

plate is loose, they should not be used Do not handle the power cord plug with wet hands.

Doing so may cause electric shocks. Do not do anything that might damage the power cable. When disconnecting the power cable, hold the plug, not the cable

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

Notes

Do not display a still picture for a long time This causes the image to remain on the plasma screen

("after image"). This is not considered a malfunction and is not covered by the warranty.

Typical still images

Image displayed in 4:3 mode

SD Card photo



To prevent after image, the screen saver is automatically activated after a few minutes if no signals are sent or no operations are performed, (p. 45)

Setup

Computer image

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





iniury may result.





caution.)





Channel number and other logos

Accessories/Options

Check you have all the items shown.





Caution

Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control unit.
 Do not mix old and new batteries.

- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.

Do not burn or break batteries.

Make a note of the remote control codes before changing batteries in case the codes are reset. (p. 37-38)



Attaching the pedestal to the plasma television

Caution

Do not use any television or displays other than those given in this manual.

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

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

During setting-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 plasma television, and it might fall over and become damaged, and personal injury may result.

- Use the accessory fall-prevention brackets to secure the plasma television.
- If the unit is knocked or children climb onto the pedestal with the Plasma TV installed, the plasma television may fall over and personal injury may result.

Two or more people are required to install and remove the television.

• If two people are not present, the television may be dropped, and personal injury may result.

Accessories for pedestal assembly





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



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

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

Accessories/Options



Lift the television unit above the pedestal, with the back of the television unit on the same side as the pedestal Label. Then align the holes in the television unit (bottom) with the poles of the pedestal and lower the television unit into place. Use the assembly screws (B) (M5 x 30) to fasten securely.



Stopping the plasma television from falling over * The plasma TV must be fastened to both the base and the wall.



For 58" Plasma television Accessories for pedestal security



Securing to a base.



Fasten with wood screws in the holes

in the back edge of the wood worktop. If there are no holes, first drill them in

the middle of the thickness of the wood

worktop, and then fasten the strap with

Wood Worktop

wood screws.



Securing method

Hook @

Hook (4)

* Use a flat-head screwdriver to remove the caps at the left and right top on the rear side of the plasma TV, and attach the hooks ④ to the plasma TV using the hook securing screws ⑤. (Keep the caps you have removed in a safe place.)

 * Use a strong wire or chain which is commercially available to secure the hooks
 (4) to a solid area of the wall or pillar.

Connection



Note

• All cables and external equipment shown in this book are not supplied with the TV. • For additional assistance, visit us at : www.panasonic.com www.panasonic.ca

- The S Video input will override the composite video signal when S Video cable is connected. Connect either S Video cable or Video cable.
- When receiving digital channel signals, all digital formats are down-converted to composite NTSC video to be Some programs contain a copyright protection signal to mevent VCR recording.
 Set the TV channel to CH3 or CH4 for using Cable Box Connection.

Cable Binding Instructions



Cable Binding Instructions

Bind all cables to the plasma television with the Cable clamper.



Bundle cables with the Cable clamper on the left side.

• Fasten the AC cord with the Cable clamper on the right side.

Identifying Controls



First Time Setup

0 ----

· .

"First time setup" is displayed only when the TV is turned on for the first time after the AC cord is inserted into a wall outlet. Available only when "Auto power on" (p. 20) is set to "Off".



Watching TV

Connect cable Box when watching cable TV. (p. 10)



Other Useful Functions (Operate after ③)

Sleep Timer	Switches the unit OFF in a preset amount of time from 0 to 90 minutes in 30 minute intervals. SLEEP • 0/30/60/90 (minutes)
Listen with SAP (Secondary Audio Program)	 Select Audio Mode for TV Viewing SAP Digital mode Press SAP to select the next audio track (if available) when receiving a digital channel. Audio Track 1 of 1 (English) Analog mode Press SAP to select the desired audio mode. Each press of SAP will change the audio mode. (Stereo/SAP/Mono)
	Display or remove the channel banner.
Information Recall	RECALL Channel Ending time Show title Clock 15-2 -10:30 Andrew's cooking show 10:00 am ABC - HD cc SAP 10:01 Station SAP Signal Picture Rating Level Aspect ratio



To delete a favorite channel

A memorized channel can be removed from the list by holding down FAVORITE while its position is highlighted. Viewing

Viewing from SD Card

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



This SD modes selection are able to operate from MENU screen.

Viewing

Viewing from SD Card

SD Card: Notes and Cautions



Cautions in handling card :

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

Watching Videos and DVDs

Some Panasonic equipment connected to the TV unit can be operated with the remote control. Programming the remote control is necessary to operate other manufacturers' products. (p. 33)



(For other operations, see p. 36.)

How to Use Menu Functions

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



Men	u lis	st					
Menu		ltem					
	Normal						
	Pic. mode						
	Picture, Brightness, Color, Tint, Sharpness						
	Col	or temp					
Pic	Col	or mng.					
tur	Zoc	om adjust					
e		Video NR					
	₽₽	3D Y/C filter					
	Other adjus	Color matrix					
	Ist	MPEG NR					
		Black level					
		mal					
	Bas						
	Tre						
⊳	Balance Al sound						
ud	Other	Surround					
ō		Speakers					
	ther adjus	HDMI1 in HDMI2 in					
	-	Audio leveler					
limer	Sle	ep, Timer1-5					
Lock							
Memory							
Card							
	СН	scan					
		iguage					
	Clock						
		gram channel ut labels					
	CC						
Se		Auto power on					
tup	Othe	Side bar					
	ther adjus	Prog-out stop					
	ust	Ctrl with HDMI					
		Power off link					
	Abo	Power on link					
	Res						
			L				

Adjustments/Configura	tions (alternatives)		
Resets all picture adjustments to factory default settings except for	"Other adjust"	Normal	
Basic picture mode (Vivid/Standard/Cinema) (p. 42)		Pic. mode	Standa
Adjusts color, brightness, etc. for each picture mode to suit your taste	Picture + Brightness Color	30 Tint Sharpness	+
Selects level of warm colors (red) and cool colors (blue) (Warm/Cool	ol/Normal)	Color temp	Co
On enhances green and blue color reproduction, especially outdoor	scenes. (On/Off)	Color mng.	
Adjusts vertical alignment and size when aspect setting is "ZOOM"	(p. 40)	Zoom adjust	
Reduces noise, commonly called snow. Leave off when receiving a	strong signal. (On/Off)	Video NR	
Minimizes noise and cross-color in the picture. (On/Off)		3D Y/C filter	
Selects image resolution of component-connected devices (SD/HD) • SD: normal vision HD: high-definition vision • Only 480p signal accepted; regular TV (NTSC) is not available.		Color matrix	
Reduces noise of specific digital signals of DVD, STB, etc. (On/Off)		MPEG NR	
Select Dark or Light. Valid only for external input signals. (Dark/Lig	,	Black level	D
Reset Bass, Treble and Balance adjustments to factory default setti	ngs.	Normal	
Increase or decrease the bass response.		Bass	
Increase or decrease the treble response.		Treble	
Emphasize the left / right speaker volume.		Balance	
Equalize overall volume levels across all channels and VIDEO input	ts. (On/Off)	Al sound	
Enhances audio response when listening to stereo. (On/Off)		Surround	
Switches to "Off" when using external speakers (On/Off) • "Al sound", "Surround" and "Audio leveler" do not work if "Off" is s	elected	Speakers	
Selects according to the signal when HDMI is connected (Auto/Dig • Auto: Automatically selects Analog / Digital signal	ital/Analog)	HDMI1 in	A
Minimizes volume disparity after switching to external inputs		HDMI2 in	A
The TV can automatically turn On/Off at the designated date and tin	no (n. 32)	Audio leveler	
Locks the channels and programs (p. 26)	ne. (p. 52)	Sleep	60
Displays SD card data (p. 16)			
Selects the channel with "Program up/down" button (Fav./All) Fav.: Only channels registered as FAVORITE (p. 15, 28)		CH scan	All
Selects the screen menu language (p. 13)		Language	
Adjusts the clock (p. 13)		Clock	
Sets channels (p. 28)		Program channel	
		Input labels	
Select the terminal and the label of the external equipment (p. 30)			
Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30)		CC	
Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devi		CC Auto power on	
Displays subtitles (Closed Caption) (p. 30)	r on" is set. mode only)		
Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devi • The Sleep Timer and On / Off timer will not function if "Auto powe Increases the brightness of the side bar (Off/Dark/IMid/Bright) (4:3 • The recommended setting is Bright to prevent panel "after image" To prevent howling and image oscillation, stops output of the picture menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video	r on" is set. mode only) . (p. 42) es and audio specified in this	Auto power on Side bar	Bri
Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devi • The Sleep Timer and On / Off timer will not function if "Auto powe Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 • The recommended setting is Bright to prevent panel "after image" To prevent howling and image oscillation, stops output of the picture menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video I/Video Controls equipment connected to HDMI terminals (p. 22) (On/Off)	r on" is set. mode only) . (p. 42) es and audio specified in this 2/Video 3)	Auto power on Side bar	Bri
Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devi • The Sleep Timer and On / Off timer will not function if "Auto powe Increases the brightness of the side bar (Off/Dark/IMid/Bright) (4:3 • The recommended setting is Bright to prevent panel "after image" To prevent howling and image oscillation, stops output of the picture menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video	r on" is set. mode only) (p. 42) es and audio specified in this 2/Video 3) I.	Auto power on Side bar Prog-out stop	Bri
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Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devi • The Sleep Timer and On / Off timer will not function if "Auto powe Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 • The recommended setting is Bright to prevent panel "after image" To prevent howling and image oscillation, stops output of the picture menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Videe Controls equipment connected to HDMI terminals (p. 22) (On/Off) • "Power off link" and "Power on link" do not work if "Off" is selected Sets "Power off link" of HDMI connection equipment (p. 22) (Set/No	r on" is set. mode only) . (p. 42) ss and audio specified in this 2/Video 3) I.	Auto power on Side bar Prog-out stop Ctrl with HDMI Power off link	Brid

In AV mode, the Audio menu and Setup menu give a smaller number of options.

Control with HDMI "HDAVI Control[™]"*

Automatic

switching

input

* Simultaneously control all Panasonic "HDAVI Control" equipped components using one-button on one remote.



- This feature is limited to models incorporating Panasonic's "Control with HDMI". Refer to the individual instruction manuals for compatibility information.
- Non-HDMI-compliant cables cannot be utilized.
- It is recommended that you use Panasonic's HDMI cable.
- Recommended part number: RP-CDHG15 (1.5 m), RP-CDHG30 (3.0 m), RP-CDHG50 (5.0 m)





Caution

• "Control with HDMI" function does not work in countries other than the USA and Canada. • The TV remains on even if the "Control with HDMI" compatible equipment is turned off.

Note

Before using HDMI control functions, the connected equipment (DIGA, RAM theater, Player theater, AV amp) must also be set. For details, see the operation manual for each equipment.

• For equipment connection details, see p. 24.

Control with HDMI "HDAVI Control[™]"

Recommended HDMI Connections

Connecting this unit to a DVD recorder, RAM theater or Player theater



Setting of this unit after connection

After making connections as shown above, set "Ctrl with HDMI" (under "Other adjust") to "On" using the Setup menu. (p. 22).

Note

Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective operating instruction manuals.

Connecting this unit to a DVD recorder and AV amp

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



Setting of this unit after connection

After making connections as shown above, set "Ctrl with HDMI" (under "Other adjust") to "On" using the Setup menu. (p. 22).



Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective operating instruction manuals.

- When audio from other equipment connected to this unit via HDMI is output using "DIGITAL AUDIO OUT" of this unit, the system switches to 2CH audio.
- (When connecting to an AV amp via HDMI, you can enjoy higher sound quality.)

Advanced

Channel Lock

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



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



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
- Note

• The Off rating is independent of other ratings.

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

channel if you input

your password.

Editing and Setting Channels

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



28

Editing and Setting Channels

Advanced

Input Labels/Closed Caption



30

Input Labels/Closed Caption

Advanced

Using Timer

The TV can automatically turn On/Off at the designated date and time. The Clock must be set before On time/Off time settings. (p. 13)



Operating Peripheral Equipment

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



Recommended AV Connections

These diagrams show our recommendations for how to connect the TV unit to your various equipment. For other connections, consult the instructions of each equipment, and the specifications (p. 46-47). For additional assistance, please visit our website at : www.panasonic.com www.panasonic.ca



Recommended HDMI Connections (p. 24-25)

For Antenna connection via VCR, please refer to the Operating Instructions of a VCR.

Recommended AV Connections

35

(p. 20 "Speakers")

Advanced

Remote Control Operation/Code List

The following explains how to operate external devices with the remote control. • Register the remote control codes (p. 33) if you want to operate an external device of another manufacturer. (p. 37-38)

Note

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

Remote Control Operation List

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

KEY NAME	VCR MODE	DBS/CE	DBS/CBL MODE		
POWER	VCR WODE	(DBS)	(CBL)	DVD MODE	
POWER	Power	Power	Power	Power	
	TV Input Switch	TV Input Switch	TV Input Switch	TV Input Switch	
EXIT	_	Exit	Exit	_	
	-	DBS Cursor Up/Down/Right/ Left	CBL Cursor Up/Down/Right/ Left	DVD Cursor Up/Down/Right/ Left	
	_	Ok	Ok	Ok	
MENU	-	DBS Menu	CBL Menu	DVD Setup Menu	
	-	-	_	Return, Clear	
MUTE	TV Mute	TV Mute	TV Mute	TV Mute	
	-	Aspect	Aspect	DVD Disc Menu	
FAVORITE	-	-	_	Title	
RECALL	Onscreen Display	Onscreen Display	Onscreen Display	Onscreen Display	
0~9	0-9	0-9	0-9	0-9	
R-TUNE	_	DBS Previous Channel	CBL Previous Channel	Drive Select	
~ = ~	Channel Up/Down	DBS Channel Up/Down	CBL Channel Up/Down	Channel Up/Down	
+	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down	
SLEEP	_	Sleep	Sleep	_	
	TV/VCR Switch	TV/DBS Switch	TV/CBL Switch	_	
REC	VCR Record	PVR Record *1	PVR Record *1	Record	
	_	Search *1	Search *1	Open/Close	
	-	-	-	Skip Reverse/Forward	
r SEARCH 1	Reverse/Forward	-	-	Rewind/Fast Forward	
STOP	Stop	-	_	Stop	
PAUSE	Pause	-	-	Pause	
PLAY	Play	-	_	Play	

Remote Control Code List

Cable Cor	iverter (🔜)						
Brand	Code	Brand	Code	Brand	Code	Brand	Code
ABC	0003, 0008	Hamlin	0009, 0273	Philips	0317, 1305	Scientific Atlanta	0008, 0477, 0877, 1877
Americast	0899	Jerrold	0003, 0276, 0476, 0810	Pioneer	0144, 0533, 0877, 1877	Sony	1006
Bell South	0899	Memorex	0000	Pulsar	0000	Starcom	0003
Digeo	1187	Motorola	1376, 0276, 0476, 0810, 1187	Quasar	0000	Supercable	0276
Director	0476	Pace	0008, 0237, 1877	Regal	0273, 0279	Torx	0003
	0003, 0276, 0476, 0810		0000, 0237, 1877		0000	Toshiba	0000
General Instrument		Panasonic		Runco			
GoldStar	0144	Paragon	0000	Samsung	0144	Zenith	0000, 0525, 0899
Satellite R AlphaStar	0772	a 1		Magnavox	0722, 0724		
	0216	General Instrument	0869	Memorex	0722, 0724	- Samsung	1108, 1109, 1142, 1276, 13 1442, 1609
Chaparral	1109	GOI	0775 4775		0724	0	
Crossdigital			0775, 1775	Mitsubishi		Sanyo	1219
	0099, 0247, 0392, 0566, 0639, 0724, 0749, 0819,	Goodmans	1246	Motorola	0856, 0869	Sony	0639, 1639, 1640
	0639, 0724, 0749, 0819,	Hisense	1535	NEC	1270	Star Choice	0869
DirecTV	1076, 1108, 1109, 1142, 1377, 1392, 1414, 1442, 1443, 1444, 1609, 1639, 1640,	Hitachi	0819, 1250	Next Level	0869	Tivo	1142, 1442, 1443, 1444
	1444, 1609, 1639, 1640,	HTS	0775, 1775	Panasonic	0152, 0247, 0701, 1786	Toshiba	0749, 0790, 0819, 1285, 1749
	1749, 1856	Hughes	0749, 1442, 1749	Paysat	0724	UltimateTV	1392, 1640
Dish Network	0775, 1005, 1170, 1505,	Hughes Network	0749, 1142, 1442, 1443,	Philips	0099, 0722, 0724, 0749, 0819, 1076, 1142, 1442, 1749	Uniden	0722, 0724
System	1775	Systems	1444, 1749			US Digital	1535
Dishpro	0775, 1005, 1505, 1775	iLo	1535	Pioneer	1442	USDTV	1535
chostar	0775, 1005, 1170, 1505, 1775	Janeil	0152	Proscan	0392, 0566	Voom	0869
Expressvu	0775, 1775	Jerrold	0869	Proton	1535	Zenith	1856
GE	0392, 0566	JVC	0775, 1170, 1775	RadioShack	0869	_	
		LG	1226, 1414	RCA	0143, 0392, 0566, 0855, 1392		
Cable/PVF	R Combination (L)	,		,,,,,,	_	
mericast	0899	Jerrold	0476, 0810	Pioneer	0877, 1877	Supercable	0276
Digeo	1187	Motorola	0476, 0810, 1187, 1376	Scientific Atlanta	0877, 1877	Zenith	0899
•						Zenith	10899
eneral Instrument	0476, 0810	Pace	0237, 1877	Sony	1006		
DBS/PVR	Combination ()					
	0099, 0392, 0639, 1076,	Dishpro	0775, 1505	JVC	1170	Samsung	1442
DirecTV	1142, 1377, 1392, 1442, 1443, 1444, 1640	Echostar	0775, 1170, 1505	Motorola	0869	Sony	0639, 1640
	1443, 1444, 1040	Expressvu	0775	Philips	1142, 1442	Star Choice	0869
Dish Network System	0775, 1505	Hughes Network Systems	1142, 1442, 1443, 1444	Proscan RCA	0392 1392		
	1						
ABS	1972	Hewlett Packard	1972	NEC	0067	Caell	0043, 0045
Adventura		Hitachi	0000, 0042, 0089		0087	Scott	
	0000			Nikko		Sears	0000, 0035, 0037, 0042, 1237
Aiwa	0000, 0037, 0124	Howard Computers	1972	Niveus Media	1972	Sharp	0807, 0848
\kai	0175	HP	1972	Northgate	1972	Sonic Blue	0614, 0616
lienware	1972	Hughes	0042, 0739	Olympus	0035, 0226	Sony	0000, 0032, 0033, 0035,
American High	0035	Network Systems	-	Onkyo	0222	Cony	0636, 1032, 1232, 1972
Audiovox	0037	Humax	0739	Optimus	0037	Stack 9	1972
Broksonic	1479	Hush	1972	Orion	1479	STS	0042
Calix	0037	IBUYPOWER	1972	Deneratio	0035, 0077, 0225, 0226, 0227	Sylvania	0000, 0035, 0043, 1781
Canon	0035	JVC	0067	- Panasonic	0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244	Symphonic	0000
Citizen	0037, 1278	KEC	0037	Penney	0035, 0037, 0042, 1035, 1237	Systemax	1972
Craig	0037	Kenwood	0067	Pentax	0042	Tagar Systems	1972
Curtis Mathes	0035, 0060, 1035	Kodak	0035, 0037	Philco	0035	Teac	0000
CyberPower	1972	Linksys	1972	Philips	0035, 0618, 0739, 1081, 1181	Technics	0035
aewoo	0045, 1278	Lloyd's	0000	Pilot	0037	Teknika	0000, 0035, 0037
)aewoo	1972	Lidyu s	0000		0067		0000, 0035, 0037
				Pioneer		Thomas	0000
Denon	0042	Magnasonic	1278	Proscan	0060, 1060	Tivo	0618, 0636, 0739
DirecTV	0739	Magnavox	0000, 0035, 0039, 1781	Pulsar	0039	Toshiba	0043, 0045, 0845, 1008
Durabrand	0039	Marantz	0035	Quasar	0035, 0077, 1035		1145, 1972
hmotoph	0000	Marta	0037	RadioShack	0000	Totevision	0037
ynatech	0037, 0043	Matsushita	0035	Radix	0037	Touch	1972
		Media Center PC	1972	Randex	0037	Vector	0045
lectrohome	0037				0042, 0060, 0077, 0807,	Video Concepts	0045
Electrohome Electrophonic	0037 0032	MEI	0035				
lectrohome lectrophonic merex		MEI Memorex	0035 0000, 0035, 0037, 0039, 1237	- RCA	0880, 1035, 1060	Videomagic	0037
Electrohome Electrophonic Emerex Emerson	0032 0000, 0037, 0043, 1278, 1479	Memorex					1972
Dynatech Electrohome Electrophonic Emerex Emerson Euji	0032 0000, 0037, 0043, 1278, 1479 0033, 0035	Memorex MGA	0000, 0035, 0037, 0039, 1237 0043	Realistic	0000, 0035, 0037	Viewsonic	1972
Electrohome Electrophonic Emerex Emerson Tuji Funai	0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000	Memorex MGA Microsoft	0000, 0035, 0037, 0039, 1237 0043 1972	Realistic ReplayTV	0000, 0035, 0037 0614, 0616	Viewsonic Villain	1972 0000
Electrohome Electrophonic Emerex Emerson Uji Funai Garrard	0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000	Memorex MGA Microsoft Mind	0000, 0035, 0037, 0039, 1237 0043 1972 1972	Realistic ReplayTV Ricavision	0000, 0035, 0037 0614, 0616 1972	Viewsonic Villain Voodoo	1972 0000 1972
Electrohome Electrophonic Emerex Emerson Uji Funai Garrard Gateway	0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000 1972	Memorex MGA Microsoft Mind Minolta	0000, 0035, 0037, 0039, 1237 0043 1972 1972 0042	Realistic ReplayTV Ricavision Runco	0000, 0035, 0037 0614, 0616 1972 0039	Viewsonic Villain Voodoo Wards	1972 0000 1972 0000, 0035, 0042, 0060
Electrohome Electrophonic Emerex Emerson Euji Eunai Garrard Gateway GE	0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000 1972 0035, 0060, 0807, 1035, 1060	Memorex MGA Microsoft Mind Minolta Mitsubishi	0000, 0035, 0037, 0039, 1237 0043 1972 1972 0042 0043, 0067, 0807	Realistic ReplayTV Ricavision Runco Samsung	0000, 0035, 0037 0614, 0616 1972 0039 0045, 0739, 1014	Viewsonic Villain Voodoo Wards XR-1000	1972 0000 1972 0000, 0035, 0042, 0060 0000, 0035
Electrohome Electrophonic Emerex Emerson Uji Funai Garrard	0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000 1972	Memorex MGA Microsoft Mind Minolta	0000, 0035, 0037, 0039, 1237 0043 1972 1972 0042	Realistic ReplayTV Ricavision Runco	0000, 0035, 0037 0614, 0616 1972 0039	Viewsonic Villain Voodoo Wards	1972 0000 1972 0000, 0035, 0042, 0060

Remote Control Operation/Code List

Remote Control Code List

	/			1		
Code			Brand	Code	Brand	Code
0739	Philips	0739				
0105	Samsung	0739				
)						
1972	Hunnes Network		Niveus Media	1972	Systemax	1972
1972	Systems	0739	Northgate	1972	T	4070
1972	Humax	0739	Panasonic	0616	- Tagar Systems	1972
1972	Hush	1972	Philips	0618, 0739	Tivo	0618, 0636, 0739
0739	IBUYPOWER	1972	RCA	0880	Toshiba	1008, 1972
1972	Linksys	1972	ReplayTV	0614, 0616	Touch	1972
1972	N. J. O	4070	Sonic Blue	0614, 0616	Viewsonic	1972
1070	Media Center PC	1972	Sony	0636, 1972	Voodoo	1972
1972	Microsoft	1972	Stack 9	1972	ZT Group	1972
1972	Mind	1972				
)						
1004	ColdStor	0741	Onkwo	0502 0702		
			Olikyu	0303, 0792	Sensory Science	1158
0003				0490, 0503, 0632, 0703,		0630, 0675, 0752, 1256
0672, 0794, 0796, 0797,			Panasonic	1010, 1011, 1362, 1462,	Sharp	
1004, 1056, 1061, 1100				1490, 1762, 1967	Shinsonic	0533
1168						0869
	intogra	0011	Philips	0503, 0539, 0646, 0675,	Oonic Dide	0000
	JVC	0558, 0623, 0867, 1164, 1275	1 mipa	1267, 1354	Sony	0533, 0864, 1033, 1431, 153
	Kenwood	0490.0534	PianoDisc	1024	Svlvania	0675
0490	Lecson	1533				0675
0833, 0869			Pioneer	0525, 0571, 0631, 0632	Teac	0809
1086	- LG	0591, 0741, 0801, 0869	Polaroid	1061, 1086	Technics	0490, 0703
0816, 1023, 1024, 1129	LiteOn	1158, 1440	Polk Audio	0539	Theta Digital	0571
0833, 0869	Loewe	0511	Proceed	0672	Toshiba	0503, 0695, 1045, 1154
0490			Proscan	0522		
0675	Magnavox	0503, 0539, 0646, 0675	RCA	0522, 0571, 0822	 Urban Concepts 	0503
0521			Rio	0869	Xbox	0522
0591,0675	Marantz	0539	Rotel	0623	Yamaha	0490, 0539, 0545
0591	McIntosh	1533	Sampo	0752	Zenith	0503, 0591, 0741,0869
0675	Memorex	0695		0400 0570 0000 4075		
1158	Microsoft	0522	Samsung	0490, 0573, 0820, 1075		
0522	Mitsubishi	0521, 1521	Sansui	0695	-	
0741, 0833, 0869, 1075,	NAD	0591, 0741	Sanyo	0695, 0873, 1967		
1158, 1304, 1730	NEC	0785			-	
rder (🛄)						
1056	Go Video	0741, 1158, 1304, 1730	Philips	0646		
	JVC	1164, 1275	Pioneer	0631	- Sensory Science	1158
1168			Polaroid	1086	Cham	0675
1168	16	0741				
1086	LG LitoOp	0741			Sharp	
	LG LiteOn Magnavox	0741 1158, 1440 0646	RCA	0522	Sony Sylvania	1033, 1431 0675
	1972 1972 1972 1972 1972 1972 1972 1972	Code Brand Philips 0739 Philips 1972 Hughes Network 1972 Systems 1972 Hush 1972 Hush 1972 Hush 1972 Linksys 1972 Microsoft 0695 JVC 0695 JVC 0695 Lecono 0833, 0689 Loewe 06490 Lecono 0675 Marantz 0675 Merrorex 0675	Code Brand Code 9739 Philips 0739 1972 Hughes Network Systems 0739 1972 Hughes Network Systems 0739 1972 Hughes Network Systems 0739 1972 Humax 0739 1972 Humax 0739 1972 Humax 0739 1972 Hush 1972 1972 Linksys 1972 1972 Linksys 1972 1972 Mid ColdStar 0741 0869 Gradiente 0490 0672 0794, 0796, 0797, 1004, 1056, 1061, 1100 Hitekri 0573, 0664 1168 Integra 0571 0571 0671 JVC 0558, 0623, 0867, 1164, 1275 0490 Lecson 1533 0816, 1023, 1024, 1129 LiteOn 1158, 1440 0633 Leowe 0511 0691 Marantz 0539 0675 Marantz 0539 0675 <td>Code Brand Code Brand 0739 Samsung 0739 Niveus Media 1972 Hughes Network 0739 Niveus Media 1972 Hughes Network 0739 Niveus Media 1972 Humax 0739 Panasonic 1972 Humax 0739 Panasonic 1972 Hush 1972 Philps 1972 Hush 1972 RcA 1972 Linksys 1972 RcA 1972 Linksys 1972 RcA 1972 Media Center PC 1972 Stack 9 1972 Microsoft 1972 Stack 9 1972 Mird 0652 Panasonic 1972 Mird 0571 Onkyo 0669 Gradientle 0490 9433</td> <td>Code Brand Code 9739 Samuag 0739 Brand Code 1972 Highes Network Systems 0739 Neveus Media 1972 1972 Humax 0739 Northgate 1972 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 RCA 0880 1972 Linksys 1972 RcA 0880 1972 Linksys 1972 Stack 9 1972 1972 Microsoft 1972 Stack 9 1972 1972 Mind 0571<!--</td--><td>Code Brand Code Brand Code Brand Pand 0739 Samsung 0739 Samsung 0739 Brand Panasonic Description Brand Brand</td></td>	Code Brand Code Brand 0739 Samsung 0739 Niveus Media 1972 Hughes Network 0739 Niveus Media 1972 Hughes Network 0739 Niveus Media 1972 Humax 0739 Panasonic 1972 Humax 0739 Panasonic 1972 Hush 1972 Philps 1972 Hush 1972 RcA 1972 Linksys 1972 RcA 1972 Linksys 1972 RcA 1972 Media Center PC 1972 Stack 9 1972 Microsoft 1972 Stack 9 1972 Mird 0652 Panasonic 1972 Mird 0571 Onkyo 0669 Gradientle 0490 9433	Code Brand Code 9739 Samuag 0739 Brand Code 1972 Highes Network Systems 0739 Neveus Media 1972 1972 Humax 0739 Northgate 1972 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 Panasonic 0616 1972 Humax 0739 RCA 0880 1972 Linksys 1972 RcA 0880 1972 Linksys 1972 Stack 9 1972 1972 Microsoft 1972 Stack 9 1972 1972 Mind 0571 </td <td>Code Brand Code Brand Code Brand Pand 0739 Samsung 0739 Samsung 0739 Brand Panasonic Description Brand Brand</td>	Code Brand Code Brand Code Brand Pand 0739 Samsung 0739 Samsung 0739 Brand Panasonic Description Brand Brand

Ratings List for Channel Lock

"V-chip" technology enables you to lock out channels or shows according to standard ratings set by the entertainment industry. (p. 27)

U.S. MOVIE RATINGS (MPAA)

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

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

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

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

E	Exempt - Exempt programming includes: news, sports, documentaries and other information programming, talk shows, music videos, and variety programming.
С	Programming intended for children under age 8. No offensive language, nudity or sexual content.
C8+	Programming generally considered acceptable for children 8 years and over. No profanity, nudity or sexual content.
G	General programming, suitable for all audiences.
PG	Parental Guidance suggested. Some material may not be suitable for children.
	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.				
40	Description of the state of the constraint of the second state of				

18 ans+ Programming restricted to adults. Contains constant violence or scenes of extreme violence.

Technical Information

Closed Caption (CC)

- For viewing Closed Caption of digital broadcasting, set the aspect ratio to FULL.
- (If viewing with H-FILL, JUST, ZOOM or 4:3, characters will be cut off.)
- The closed caption is not displayed when you use HDMI connection.
- If analog connected equipment is used for displaying or recording, closed caption (CC) should be set On/Off on the connected equipment.
- The CC mode setting of the TV will not affect the analog input.
- If a digital program is being output in analog format, the CC data will also be output in analog format.
- If digital connected equipment is used for input, CC should be set to On on either the connected equipment or the TV
- If CC is set On on both the connected equipment and the TV, captions from each unit will overlap.

Aspect Ratio

Let you choose the aspect depending on the format of the received signal and your preference. (p. 15) FULL JUST



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

H-FILL



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

ZOOM



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

Zoom adjust

Vertical image position and size can be adjusted in "ZOOM." ①Select "Zoom adjust" on the Picture menu. (p. 20) ②Vertical position adjustment Vertical size adjustment







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

(Recommended for normal TV broadcast)





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



- 480i (4:3), 480i (16:9), 480p (4:3), 480p (16:9) : FULL, JUST, 4:3 or ZOOM
- 1080p / 1080i / 720p : FULL, H-FILL, JUST, 4:3 or ZOOM. • When the signal is 720p/1080i/1080p, the aspect mode automatically defaults to Full after turning off the TV. after changing input mode, or after changed signal resolution other than 720p/1080i/1080p.



Photo: Still images recorded with digital still cameras compatible with JPEG files of DCF* and EXIF standards Data format: Baseline JPEG 160X120-2,560X1,920 pixels (Sub-sampling: 4:4:4, 4:4:2 or 4:2:0) Max. number of files: 9,999 Image resolution: 8 x 8 to 5,120 x 3,840 * DCF (Design rule for camera file system): A Japan Electronics and Information Technology Industries Association's standard

Data format for Card browsing

Caution

A JPEG image modified with a PC cannot be displayed.

Partly degraded files might be displayed at a reduced resolution.





DCIM Created automatically



• The folder and file names may be different depending on the digital camera used. Suitable SD Memory Cards. Please confirm the latest information on the following website.

http://panasonic.co.jp/pavc/global/cs (This site is in English only)

DIGITAL AUDIO OUT terminals

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

Caution

External speakers cannot be connected directly to PROG.OUT terminals.

• When ATSC channel is selected, the output from the DIGITAL AUDIO OUT jack will be Dolby Digital. When NTSC channel is selected, the output will be PCM.

Control with HDMI "HDAVI Control"

- HDMI connections to some Panasonic equipment allow you to enjoy the easy playback or home theater. Setup the equipment to enable this function. Read the manual of the equipment.
- Switch the TV unit on again with the equipment on when connection or setup is changed.
- This function may not work normally depending on the equipment condition.
- The equipment can be operated by TV's remote control with this function on even if TV is in Standby mode.
- Image or sound may not be available for the first few seconds when the playback starts.
- Image or sound may not be available for the first few seconds when Input mode is switched. Volume function will be displayed when adjusting the volume of the equipment.
- Easy playback is also available by using the remote control for Amplifier. Read the manuals of Amplifier.



40

Technical Information

HDMI connection

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

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a set top box or a DVD player, can be connected to the HDMI terminal 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 device has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adapter cable (*2).
 When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal.
 Audio settings can be made on the "HDMI 1in" or "HDMI2 in" menu screen. (p. 20)

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 device retailer shop.

• Use with a PC is not assumed.

Caution

All signals are reformatted before being displayed on the screen.

- If the connected device has an aspect adjustment function, set the aspect ratio to "16:9".
- This HDMI connector is "type A".
- A device having no digital output terminal may be connected to the input terminal of either "COMPONENT", "S VIDEO", or "VIDEO" to receive analog signals.
- The HDMI input terminal can be used with only the following image signals: 480i, 480p, 720p, 1080i and 1080p. Match the output setting of the digital device.
- For details of the applicable HDMI signals, see below.

Input signal that can be displayed

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

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

Note

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

Side Bar

Do not display a picture in 4:3 mode for an extended period, as this can cause an after-image to remain on either or both sides of the display field.

To reduce the risk of such an after-image, change the brightness of the side bars.

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



Pic. mode

Vivid (default)
 Standard

Cinema

- : Provides enhanced picture contrast and sharpness for viewing in a well-lit room. : Recommended for normal viewing conditions with subdued room lighting.
- : For watching movies in a darkened room. It provides a soft, film-like picture.

Maintenance

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

Display panel

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

- If the surface is particularly dirty, soak a soft, lint-free cloth in a weak detergent solution and then wring the cloth to remove excess liquid. Use this cloth to wipe the surface of the display panel, then wipe it evenly with a dry cloth, of the same type, until the surface is dry.
- Do not scratch or hit the surface of the panel with fingernails or other hard objects. Furthermore, avoid contact
 with volatile substances such as insect sprays, solvents and thinner; otherwise, the quality of the surface may be
 adversely affected.

Cabinet

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

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

Pedestal

Cleaning

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

FAQ



(p. 22)

FAQs, etc.

Specifications

		TH-37PX60U	TH-42PX60U, TH-42PX60X			
	er Source	AC 120 V, 50 / 60 Hz (TH-37PX60U, TH-42PX6 AC 110 - 127 V, 50 / 60 Hz (TH-42PX60X)				
Power Consumption	Maximum	323 W	390 W			
mntion	Standby condition	0.2 W	0.2 W			
	Drive method	AC type				
asn	Aspect Ratio	16:9				
la [Contrast Ratio	(max) 10000:1				
Disp	Visible screen size	94 cm	106 cm			
Plasma Display pane	(W × H × Diagonal) (No.of pixels)	32.2 " × 18.2 " × 37.0 " (818 mm × 461 mm × 939 mm)	36.3 " × 20.4 " × 41.6 " (920 mm × 518 mm × 1,056 mm)			
_		737,280 (1,024 (W) × 720 (H)) [3,072 × 720 dots]	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]			
Sol	Speaker	4.8 " × 2.4 " (120 mm × 60 mm) × 2pcs, 8 Ω				
Speaker Audio Output		20 W [10 W + 10 W] (10 % THD)				
	nnel Capability tal/Analog)	VHF/ UHF : 2-69, CATV:1-135				
Operating Conditions		Temperature : 32 °F - 104 °F (0 °C - 40 °C)				
ç	INPUT 1-3	VIDEO : RCA PIN Type × 1 1.0 V [p-p] (75 Ω) S-VIDEO : Mini DIN 4-pin Y:1.0 V [p-p] (75 Ω) C:0.286 V [p-p] (75 Ω) AUDIO L. R : RCA PIN Type × 2 0.5 V [ms]				
Connection Terminals	COMPONENT VIDEO INPUT 1-2	Y: 1.0 V [p-p] (including synchronization) PB, Pr: 4:0.3 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]				
on Ter	HDMI 1-2	TYPE A Connector AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]				
min	Card slot	SD CARD slot × 1				
als	AV PROG. OUT	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) AUDIO L - R: RCA PIN Type × 2 0.5 V [rms]				
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber Optic				
EA	TURES	3D Y/C FILTER CLOSED CAPTION V-Chip Photo Viewer				
Dimensions	Including pedestal	36.1 " × 27.9 " × 12.7 " (917 mm × 708 mm × 321 mm)	40.2 " × 30.3 " × 12.7 " (1,020 mm × 768 mm × 321 mm)			
	TV Set only	36.1 " × 25.4 " × 3.8 " (917 mm × 645 mm × 95 mm)	40.2 " × 27.8 " × 3.8 " (1,020 mm × 705 mm × 95 mm)			
×e	Including pedestal	61.7 lb. (28 kg)	70.5 lb. (32 kg)			
Weight	TV Set only	57.3 lb. (26 kg)	66.1 lb. (30 kg)			

[TH-37PX60U]







12.7 " (321 mm)

	Ν	ο	te	

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

		TH-50PX60U, TH-50PX60X	TH-58PX60U			
	er Source	AC 120 V, 50 / 60 Hz (TH-50PX60U, TH-58PX60 AC 110 - 127 V, 50 / 60 Hz (TH-50PX60X)	DU)			
Power Consu	Maximum	515 W	655 W			
Power Consumption	Standby condition	0.2 W	0.2 W			
	Drive method	AC type				
Plasma panel	Aspect Ratio	16:9				
	Contrast Ratio	(max) 10000:1				
Displa	Visible screen size	127 cm	148 cm			
olay	(W × H × Diagonal)	43.6 " × 24.5 " × 50.0 " (1,106 mm × 622 mm × 1,269 mm)	50.7 " × 28.5 " × 58.1 " (1,287 mm × 723 mm × 1,476 mm)			
	(No.of pixels)	1,049,088 (1,366 (W) × 768(H)) [4,098 × 768 dots]	1,049,088 (1,366 (W) × 768(H)) [4,098 × 768 dots]			
Sound	Speaker	4.8 " × 2.4 " (120 mm × 60 mm) × 2pcs, 8 Ω				
nd	Audio Output	20 W [10 W + 10 W] (10 % THD)				
Channel Capability (Digital/Analog)		VHF/ UHF : 2-69, CATV:1-135				
Operating Conditions		Temperature : 32 °F - 104 °F (0 °C - 40 °C)				
C	INPUT 1-3	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) S-VIDEO: Mini DIN 4-pin Y:1.0 V [p-p] (75 Ω) AUDIO L - R: RCA PIN Type × 2 0.5 V [rms]				
Connection Terminals	COMPONENT VIDEO INPUT 1-2	Y: 1.0 V [p-p] (including synchronization) P8, PR: 4:0.3 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]				
n Ter	HDMI 1-2	TYPE A Connector AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]				
min	Card slot	SD CARD slot × 1				
als	AV PROG. OUT	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) AUDIO L - R: RCA PIN Type × 2 0.5 V [rms]				
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber Optic				
FEATURES		3D Y/C FILTER CLOSED CAPTION V-Chip Photo Viewer				
Dimensions (W×H×D)	Including pedestal	47.7 " × 34.8 " × 14.6 " (1,210 mm × 882 mm × 371 mm)	55.1 " × 39.3 " × 16.9 " (1,399 mm × 997 mm × 430 mm)			
	TV Set only	47.7 " × 32.2 " × 3.8 " (1,210 mm × 818 mm × 95 mm)	55.1 " × 36.8 " × 3.9 " (1,399 mm × 934 mm × 99 mm)			
Weight	Including pedestal	93.7 lb. (42.5 kg)	138.9 lb. (63 kg)			
ight	TV Set only	88.2 lb. (40 kg)	130.1 lb. (59 kg)			

[TH-50PX60U, TH-50PX60X]







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

FAQs, etc.

Specifications

Limited Warranty (for U.S.A.)

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

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

Panasonic Color Television Limited Warranty

Limited Warranty Coverage

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

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

During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" Limited Warranty period, there will be no charge for parts.

You must carry-in your product or arrange for in-home service during the Limited Warranty period. If nonrechargeable batteries are included, they are not warranted. This Limited Warranty only applies to products purchased and serviced in the United States or Puerto Rico. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of the original purchase date is required for Limited Warranty service.

In-Home or Carry-in Service

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

In-Home service requires clear, complete and easy access to the product by the authorized servicer and does not include removal or re-installation of an installed product. It is possible that certain in-home repairs will not be completed in-home, but will require that the product, or parts of the product, be removed for shop diagnosis and/or repair and then returned.

Limited Warranty Limits And Exclusions

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

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

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

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

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

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

Customer Services Directory

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

http://www.panasonic.com/consumersupport

or, contact us via the web at:

http://www.panasonic.com/contactinfo

You may also contact us directly at:

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

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

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

Accessory Purchases

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

http://www.pasc.panasonic.com

or, send your request by E-mail to: npcparts@us.panasonic.com

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday - Friday 9 am to 8 pm, EST.)

Panasonic Services Company

20421 84th Avenue South,

Kent, WA 98032

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

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

Service in Puerto Rico

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

Limited Warranty (for Canada)

Panasonic Canada Inc.

PANASONIC PRODUCT - LIMITED WARRANTY

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

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

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

LIMITATIONS AND EXCLUSIONS

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

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

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

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

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

WARRANTY SERVICE

For product operation and information assistance, please contact: Our Customer Care Centre: Telephone #: (905) 624-53

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

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

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

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

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 ó 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

Panasonic Puerto Rico Inc.

("PSC") Ave. 65 de Infanteria, Km 9.5 San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic De México S.A. De C.V.

Moras No.313, Col. Tlacoquemecatl Del Valle Del. Benito Juárez MÉXICO, D.F. C.P. 03200

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