Panasonic[®]

Operating Instructions Digital High Definition Plasma Television

Model No.

TH-37PX60U TH-42PX60U TH-50PX60U TH-50PX60X TH-58PX60U







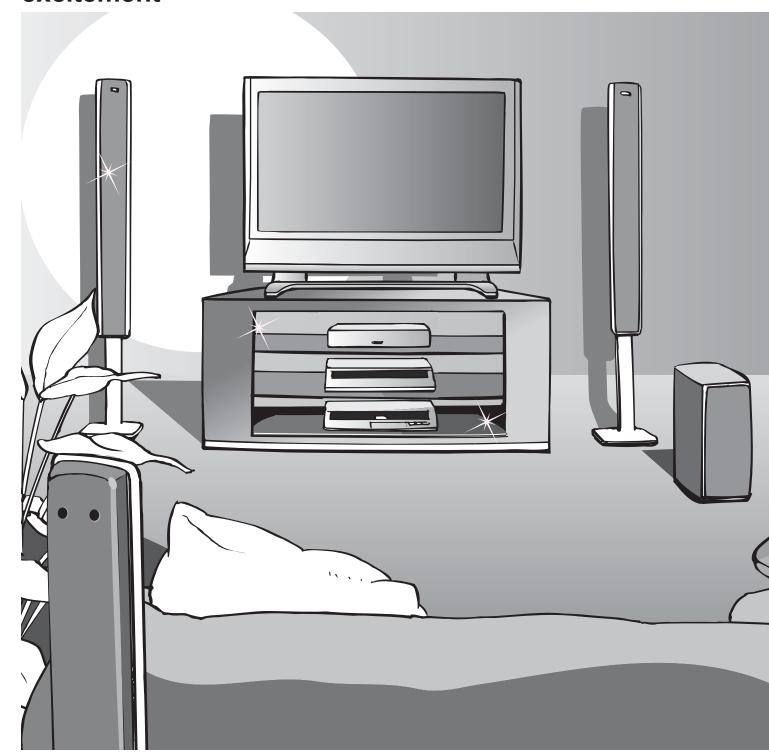




For assistance, please call: 1-888-VIEW-PTV (843-9788) or contact us at www.panasonic.com/contactinfo	(U.S.A.)
For assistance, please call: 787-750-4300 or visit us at www.panasonic.com	(Puerto Rico)
For assistance, please call : 1-800-561-5505 or visit us at www.panasonic.ca	(Canada)

Turn your own living room into a movie theater!

Experience an amazing level of multimedia excitement





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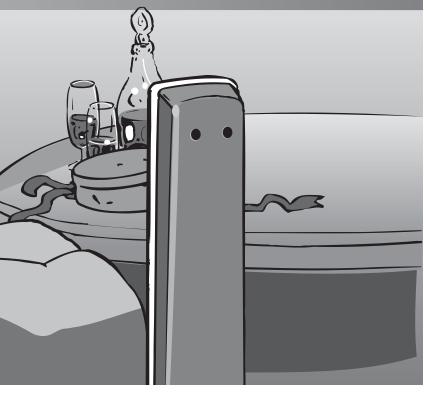


HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



SD Logo is a trademark.

Enjoy rich multimedia SD memory card Camcorder VCR DVD player Home theater unit Set Top Box



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



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Safety Precautions



CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN



A

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.

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

WARNING:

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

Important Safety Instructions

- 1) Read these instructions.
- 2) Keep these instructions.
- 3) Heed all warnings.
- 4) Follow all instructions.
- 5) Do not use this apparatus near water.
- 6) Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- Only use attachments / accessories specified by the manufacturer.
- 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.



- 13) Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15) To prevent electric shock, ensure the grounding pin on the AC cord power plug is securely connected.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for an Other Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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-50PX60U, TH-50PX60X, TH-58PX60U This Class B digital apparatus complies with Canadian ICES-003.

WARNING/CAUTION



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

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

■ If problems occur during use

If a problem occurs (such as no picture or no sound), or if smoke or an abnormal odor is detected from the Plasma TV, unplug the power cord immediately.

 Continued use of the TV under these conditions might cause fire or permanent damage to the unit. Have the TV evaluated at an Authorized Service Center. Servicing of the TV by any unauthorized personnel is strongly discouraged due to its high voltage dangerous nature.

If water or foreign objects get inside the Plasma TV, if the Plasma TV is dropped, or if the cabinet becomes damaged, disconnect the power cord plug immediately.

 A short may occur, which could cause fire. Contact an Authorized Service Center for any repairs that need to be made.



Do not cover the ventilation holes.

 Doing so may cause the Plasma TV to overheat, which can cause fire or damage to the Plasma TV.

If using the pedestal, leave a space of 3 15/16" (10 cm) or more at the top, left and right, 2 3/8" (6 cm) or more at the bottom, and 2 3/4" (7 cm) or more at the rear.

■When using the Plasma TV

Be sure to disconnect all cables before moving the Plasma TV.

 Moving the TV with its cables attached might damage the cables which, in turn, can cause fire or electric shock.

Disconnect the power plug from the wall outlet as a safety precaution before carrying out any cleaning.

Electric shocks can result if this is not done.
 Clean the power cable regularly to prevent it from becoming dusty.

 Built-up dust on the power cord plug can increase humidity which might damage the insulation and cause fire. Unplug the cord from the wall outlet and clean it with a dry cloth.

This Plasma TV radiates infrared rays; therefore, it may affect other infrared communication equipment. Install your infrared sensor in a place away from direct or reflected light from your Plasma TV. Do not climb up onto the television or use it as a step.

Do not climb up onto the television or use it as a step. (Young children should be made particularly aware of this caution.)

 If the unit falls over or becomes damaged through misuse, injury may result.

The TV will still consume some power as long as the power cord is inserted into the wall outlet.

Notes

■ Do not display a still picture for a long time

This causes the image to remain on the plasma screen ("after image"). This is not considered a malfunction and is not covered by the warranty.

Typical still images

- Channel number and other logos
- Image displayed in 4:3 mode
- SD Card photoVideo game

Computer image





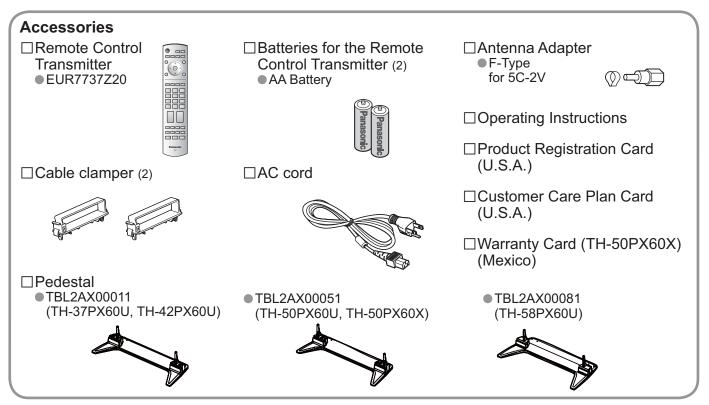
To prevent after image, the screen saver is automatically activated after a few minutes if no signals are sent or no operations are performed. (p. 45)

■ Setup

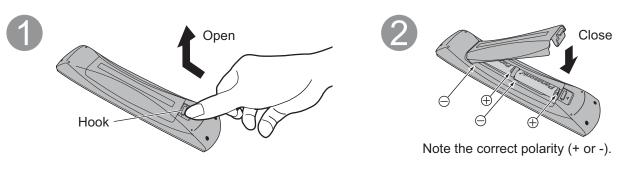
- Do not place the unit where it's exposed to sunlight or other bright light (including reflections).
- Use of some types of fluorescent lighting may reduce the remote control's transmission range.

Accessories/Options

Check you have all the items shown.



Installing remote's batteries



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)

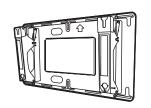
Optional accessories

Wall-hanging bracket (vertical)

TY-WK42PV3U (TH-37PX60U, TH-42PX60U, TH-50PX60U, TH-50PX60UX, TH-58PX60U)



- (angle)
- TY-WK42PR2U
- TY-WK42PR3U (TH-37PX60U, TH-42PX60U, TH-50PX60U, TH-50PX60X)



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.

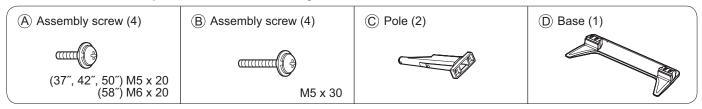
Use the accessory fall-prevention brackets to secure the plasma television.

• 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.

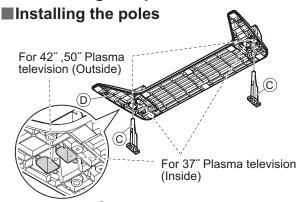
• If two people are not present, the television may be dropped, and personal injury may result.

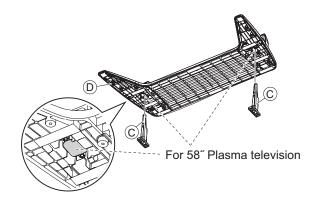
Accessories for pedestal assembly



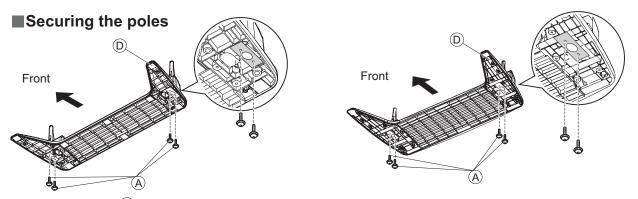


Assembling the pedestal





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



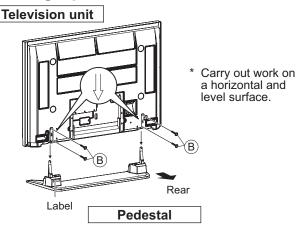
Use the assembly A screws to secure the poles firmly to the bottom of the base.

Note

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

Accessories/Options

Setting-up



Lift the television unit above the pedestal base, with the back of the display unit on the same side as the Label. Then align the holes in the television unit with the poles of the pedestal and lower the television unit into place.

Use the assembly screws (B) (M5 x 30) to fasten securely.

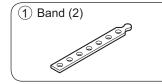


Stopping the plasma television from falling over

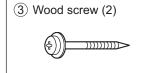
* The plasma TV must be fastened to both the base and the wall.

For 37", 42", 50" Plasma television

Accessories for pedestal security



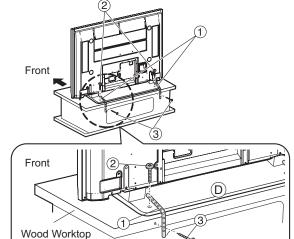






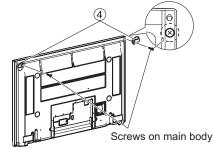


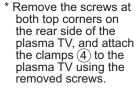
■Securing to a base

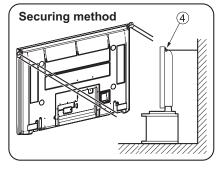


Fasten with wood screws in the holes in the back edge of the wood worktop. If there are no holes, first drill them in the middle of the thickness of the wood worktop, and then fasten the strap with wood screws.

■Securing to a wall



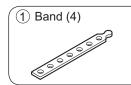




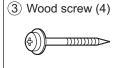
Use strong wire or chain which is commercially available to secure the plasma television to a solid area of the wall or a

For 58" Plasma television

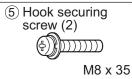
Accessories for pedestal security



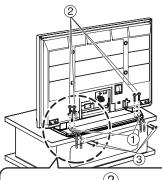
② Screw (4) (4) Nominal diameter 4 mm x 12

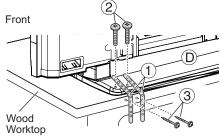






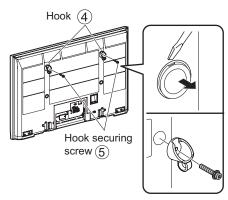
■ Securing to a base.



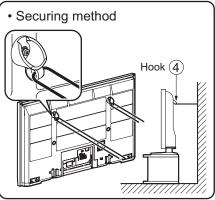


Fasten with wood screws in the holes in the back edge of the wood worktop. If there are no holes, first drill them in the middle of the thickness of the wood worktop, and then fasten the strap with wood screws.

■Securing to a wall.

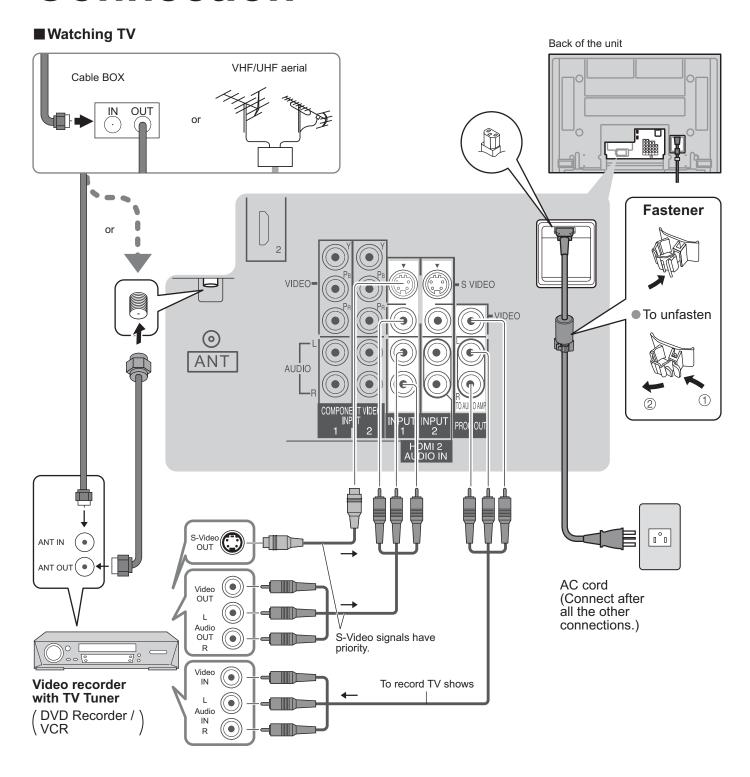


* Use a flat-head screwdriver to remove the caps at the left and right top on the rear side of the plasma TV, and attach the hooks 4 to the plasma TV using the hook securing screws (5). (Keep the caps you have removed in a safe place.)



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

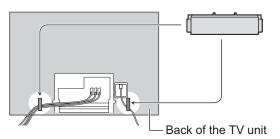


Note

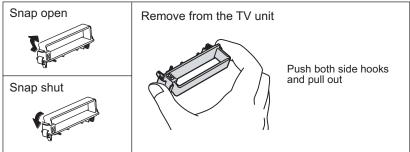
- All cables and external equipment shown in this book are not supplied with the TV.
- For additional assistance, visit us at : www.panasonic.com www.panasonic.ca
- The S Video input will override the composite video signal when S Video cable is connected. Connect either S Video cable or Video cable.
- When receiving digital channel signals, all digital formats are down-converted to composite NTSC video to be output through the PROG.OUT terminals.
- Some programs contain a copyright protection signal to prevent VCR recording.
- Set the TV channel to CH3 or CH4 for using Cable Box Connection.

Cable Binding Instructions

■Attaching the Cable clampers

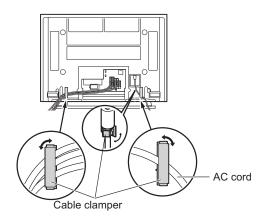


- Do not bundle the RF cable and AC cord together (could cause distorted image).
- Fix cables with Cable clampers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.



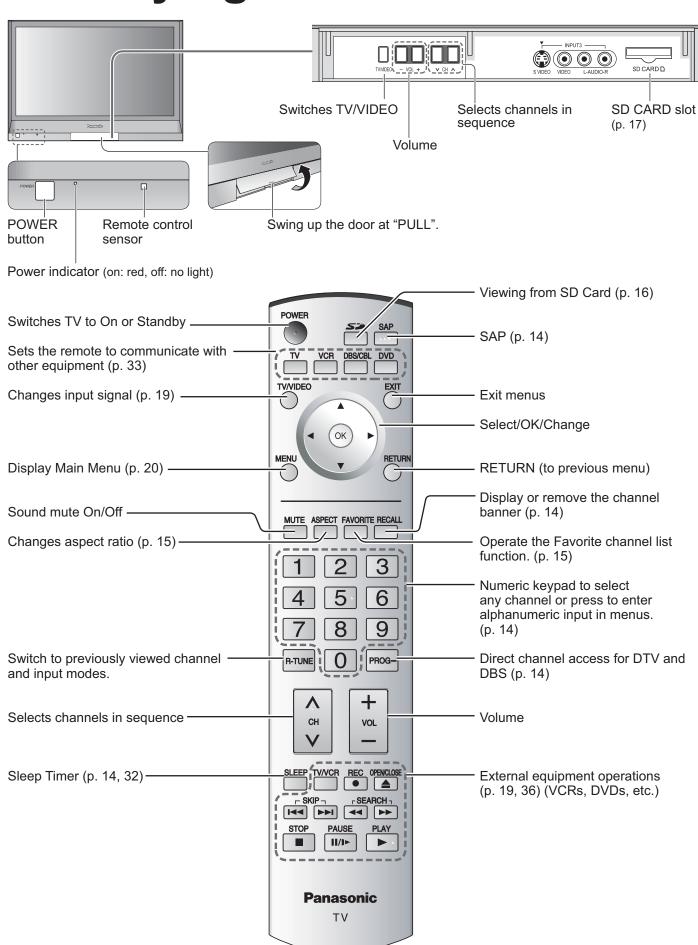
■Cable Binding Instructions

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



- Bundle cables with the Cable clamper on the left
- Fasten the AC cord with the Cable clamper on the right side.

Identifying Controls



First Time Setup

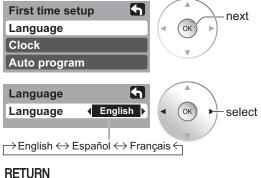
"First time setup" is displayed only when the TV is turned on for the first time after the AC cord is inserted into a wall outlet. Available only when "Auto power on" (p. 20) is set to "Off".



Turn the TV On with the **POWER button**



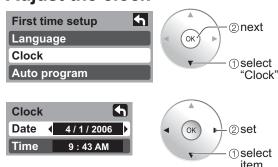
Select your language





Press to go to previous screen. Or, select 5 icon, then press OK for same results.





Date: Adjust the date

(Press and hold to change the month.)

Time: Adjust the time

(If the button is held, the speed of

change increases.)



Auto channel setup

①Select "Auto program"



2) Select antenna and input modes



ANT In Cable: Cable TV Antenna: Antenna

All: digital and analog Analog: analog only (Reduces time for scanning)

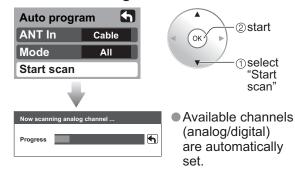
About broadcasting systems Analog: traditional TV system Digital: new system that allows you to view

more channels featuring high-quality

Mode

video and sound

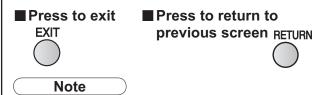
3 Start scanning the channels



4 Confirm registered channels



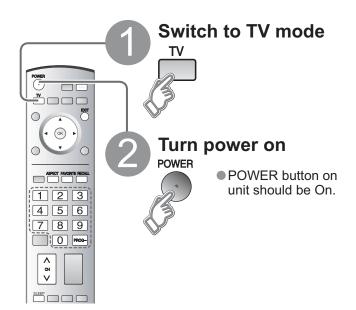
If OK is not pressed after selecting "Apply", the channels will not be memorized.

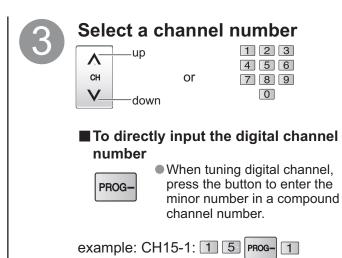


To change setting later, go to Menu screen (p. 20)

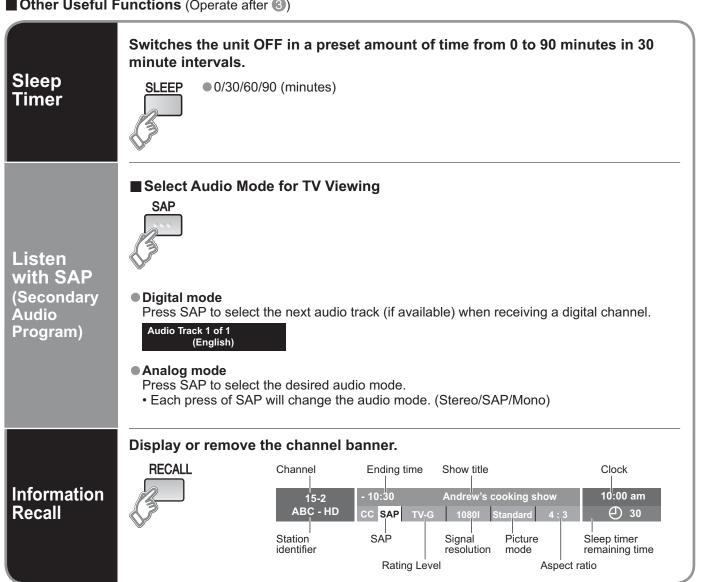
Watching TV

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





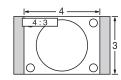
■ Other Useful Functions (Operate after ③)



Change aspect ratio

Change the aspect (p. 40)





- Each press changes the mode.
- 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.

Call up a favorite channel



■ FAVORITE

Channel numbers registered in Favorite are displayed on the favorite tune screen. Select the desired broadcast station with the cursor, or using number keys. (see below)

Caution

● ATSC broadcasts cannot be received in countries other than the USA, Canada, and Mexico.

Note

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

Set Favorite Feature

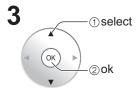
1 Display the channel to be placed on the Favorites list.

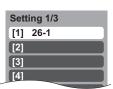




Hold down FAVORITE for several seconds.

 Press FAVORITE repeatedly to change between pages (1/3, 2/3, 3/3, or exit). Pressing ◀ ► also changes the page.





Then, press OK to memorize the displayed CH in that position.

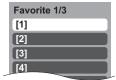
 You can also use the NUMBER keys (1-9 and 0) to select the recorded list numbers (1-9 and 0). By doing so, the numbers will be directly recorded without having to press the OK key.

To delete a favorite channel

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

Use Favorite Feature





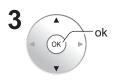
Press FAVORITE.

 Press FAVORITE repeatedly to change between pages (1/3, 2/3, 3/3, or exit). Pressing ◀ ► also changes the page.



Press ▲ ▼ or a Numbered key (1-9 and 0) to highlight a channel on the list.

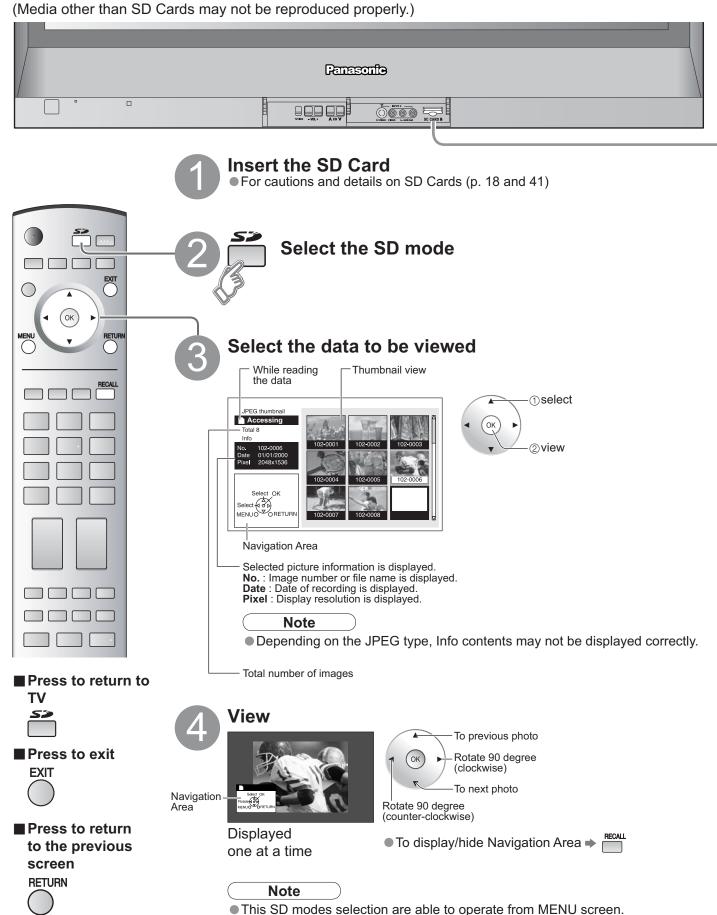
 Selecting a channel number from the list with the Number keys will display the channel directly.

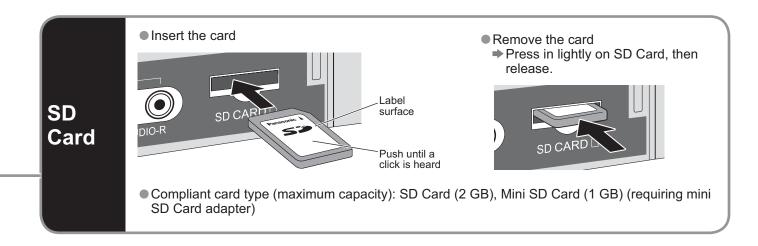


Press OK to display the highlighted channel.

Viewing from SD Card

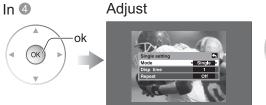
You can view photos taken with a digital camera or a digital video camera saved on SD card. (Media other than SD Cards may not be reproduced properly.)





To change the view (slide show, adjusting images, etc.)







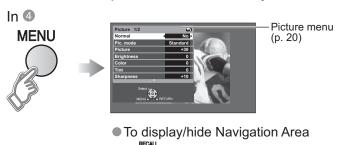
Mode	Set to Single/Slide to view single images or perform a slide show.	
Disp time	You can set how many seconds each image is displayed in Slide mode.	
Repeat	Turn the slide show Repeat function On or Off.	

Note

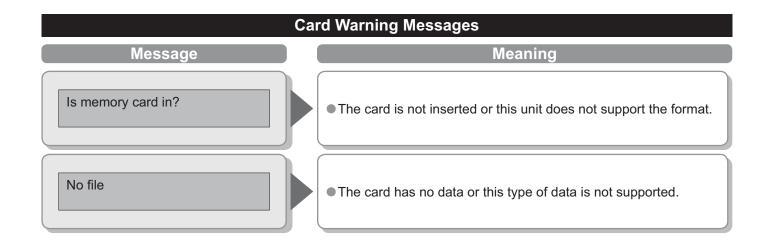
- For large image sizes, the display time will be longer than the number of seconds set.
- To stop in mid-cycle ⇒ Press "OK" button

■ To adjust picture

When MENU is pressed, the Picture Adjust menu is displayed. (p. 20)



SD Card: Notes and Cautions

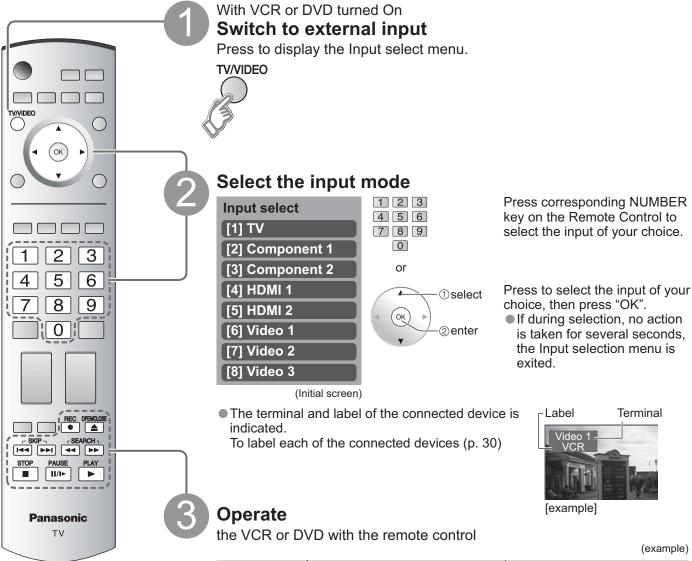


Cautions in handling card:

- 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)



■ Press to return to

TV/VIDEO

Note

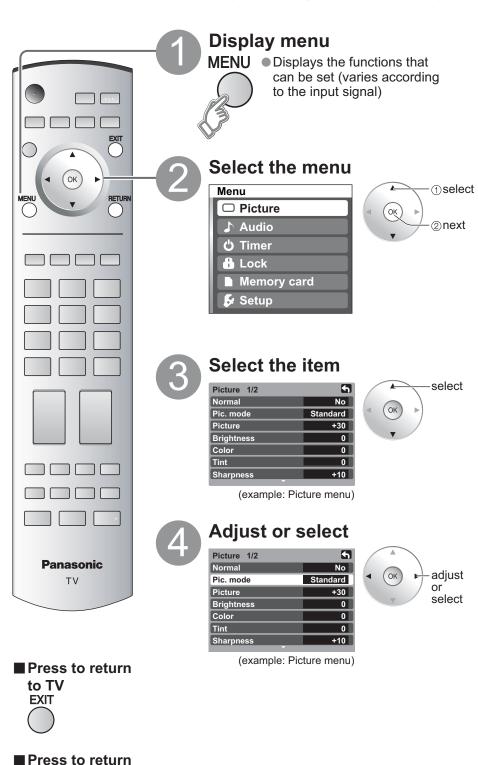
 For details, see the manual of the equipment or ask your local dealer.

	(схатріс		
	VCR	DVD	
REC •	VCR Record	Record	
OPEN/CLOSE	1	Open/Close	
⊢ SKIP¬	_	Skip Reverse/Forward	
□ SEARCH ¬	Rewind/Fast Forward	Reverse/Forward	
STOP	Stop	Stop	
PAUSE II/I>	Pause	Pause	
PLAY	Play		

(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		Item	
	Nor	mal	
	Pic. mode		
	Picture, Brightness, Color, Tint, Sharpness		
	Color temp		
o ic	Col	or mng.	
Picture	Zoc	om adjust	
Ф	_	Video NR	
	Oth C	3D Y/C filter	
	Other adjust	Color matrix	
	st	MPEG NR	
		Black level	
		rmal	-
	Bas Tre		+-
		ance	+
Αu		Al sound	
Audic	암	Surround	
	Other adjust	Speakers	
		HDMI1 in HDMI2 in	
		Audio leveler	
Timer	Sle	ep, Timer1-5	
Lock			
Memory Card			
	СН	scan	
	Lan	iguage	
	Clo		<u> </u>
		gram channel	-
	CC	ut labels	
Setul		Auto power on	
tup	Other adjust	Side bar	
		Prog-out stop	
		Ctrl with HDMI	
		Power of link	
	Abo	Power on link	-
	Res		+
			·

to the previous

screen **RETURN**

	ions (alternatives)		
Resets all picture adjustments to factory default settings except for "Other adjust"			
Basic picture mode (Vivid/Standard/Cinema) (p. 42)			Stand
Adjusts color, brightness, etc. for each picture mode to suit your taste	Picture +3 Brightness Color	Tint Sharpness	
Selects level of warm colors (red) and cool colors (blue) (Warm/Coo	Color temp		
On enhances green and blue color reproduction, especially outdoor	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 s	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/Ligh	t)	Black level	
Reset Bass, Treble and Balance adjustments to factory default setting	igs.	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 inputs	s. (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 se	elected	Speakers	
Selects according to the signal when HDMI is connected (Auto/Digit	tal/Analog)	HDMI1 in	
Auto: Automatically selects Analog / Digital signal		Audio leveler	
· · · · · · · · · · · · · · · · · · ·	Minimizes volume disparity after switching to external inputs		
The TV can automatically turn On/Off at the designated date and time. (p. 32)			
<u> </u>	e. (p. 32)	Sleep	∢ 60
Locks the channels and programs (p. 26) Displays SD card data (p. 16) Selects the channel with "Program up/down" button (Fav./All)	e. (p. 32)		
Locks the channels and programs (p. 26) Displays SD card data (p. 16)	e. (p. 32)	Sleep CH scan	√ 60
Locks the channels and programs (p. 26) Displays SD card data (p. 16) Selects the channel with "Program up/down" button (Fav./All)	e. (p. 32)		
Locks the channels and programs (p. 26) 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)	e. (p. 32)	CH scan	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28)	e. (p. 32)	CH scan Language	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28)	e. (p. 32)	CH scan Language Clock	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30)		CH scan Language Clock Program channel	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devic The Sleep Timer and On / Off timer will not function if "Auto power"	e is turned On (Set/Off) on" is set.	CH scan Language Clock Program channel Input labels	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devic The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 r The recommended setting is Bright to prevent panel "after image".	e is turned On (Set/Off) on" is set. mode only) (p. 42)	CH scan Language Clock Program channel Input labels CC	
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devic The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 r The recommended setting is Bright to prevent panel "after image". To prevent howling and image oscillation, stops output of the pictures menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video	e is turned On (Set/Off) on" is set. mode only) (p. 42) s and audio specified in this	CH scan Language Clock Program channel Input labels CC Auto power on	4 AI
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected devic The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 r The recommended setting is Bright to prevent panel "after image". To prevent howling and image oscillation, stops output of the pictures menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video Controls equipment connected to HDMI terminals (p. 22) (On/Off)	e is turned On (Set/Off) on" is set. mode only) (p. 42) s and audio specified in this 2/Video 3)	CH scan Language Clock Program channel Input labels CC Auto power on Side bar	4 AI
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected device The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 r The recommended setting is Bright to prevent panel "after image". To prevent howling and image oscillation, stops output of the pictures menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video Controls equipment connected to HDMI terminals (p. 22) (On/Off) "Power off link" and "Power on link" do not work if "Off" is selected.	e is turned On (Set/Off) on" is set. mode only) (p. 42) s and audio specified in this 2/Video 3)	CH scan Language Clock Program channel Input labels CC Auto power on Side bar Prog-out stop Ctrl with HDMI	4 AI
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected device The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 representation of the property of the pictures menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video 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)	e is turned On (Set/Off) on" is set. mode only) (p. 42) s and audio specified in this 2/Video 3)	CH scan Language Clock Program channel Input labels CC Auto power on Side bar Prog-out stop Ctrl with HDMI Power off link	4 AI
Locks the channels and programs (p. 26) 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) Selects the screen menu language (p. 13) Adjusts the clock (p. 13) Sets channels (p. 28) Select the terminal and the label of the external equipment (p. 30) Displays subtitles (Closed Caption) (p. 30) Turns TV On automatically when the cable box or a connected device The Sleep Timer and On / Off timer will not function if "Auto power Increases the brightness of the side bar (Off/Dark/Mid/Bright) (4:3 r The recommended setting is Bright to prevent panel "after image". To prevent howling and image oscillation, stops output of the pictures menu. (p. 35) (Off/Comp.1/Comp.2/HDMI 1/HDMI 2/Video 1/Video Controls equipment connected to HDMI terminals (p. 22) (On/Off) "Power off link" and "Power on link" do not work if "Off" is selected.	e is turned On (Set/Off) on" is set. mode only) (p. 42) s and audio specified in this 2/Video 3)	CH scan Language Clock Program channel Input labels CC Auto power on Side bar Prog-out stop Ctrl with HDMI	4 AI

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

Control with HDMI "HDAVI Control™"*

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

Newer Panasonic audio-video products with HDMI output connections can be controlled using the TV's remote. Limited features such as home theater system volume and automatic switching to the TV's HDMI input are available.

- 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)

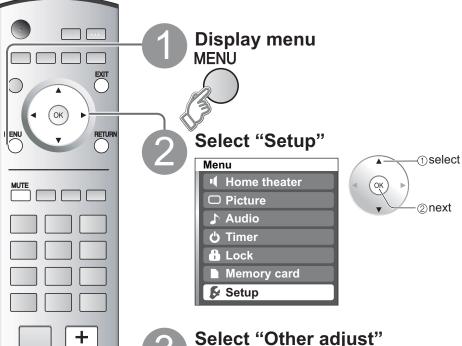
Automatic input switching

Theater speaker

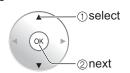
Power on link

Power off link

One-touch theater playback







Select "Ctrl with HDMI"

Other adjust	4
Auto power on	Off
Side bar	Off
Prog-out stop	Off
Ctrl with HDMI	On
Power off link	Set
Power on link	Set

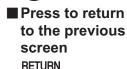


■ Press to return to TV **EXIT**

Panasonic TV

VOL

Select "On"





Default setting is "On". If no HDMI equipment is connected or standard HDMI equipment (non- "Control with HDMI") is used, set to "Off".

At the start of DIGA, Player theater or RAM theater playback, the TV's input automatically switches to the input corresponding to the playback equipment.

• For RAM theater, the speakers automatically switch to theater.

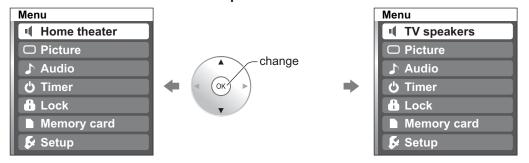
If using DIGA operation, the TV's input automatically switches to DIGA and the DIGA menu is displayed.

You can control the theater speaker with TV's remote control.

"Home theater" with speaker icon appears when a Panasonic "Control with HDMI" home theater system is connected via the HDMI input (1 or 2).

Pressing the OK button toggles between TV and home theater volume control.

- "Ctrl with HDMI" must be set to "On".
- Limited to newer Panasonic Home Theater, RAM theater and DIGA/DVD models with "Control with HDMI".
- ① Display menu ⇒ ○
- ② Select "Home theater" or "TV speakers"



■ Home theater:

Adjustment for Panasonic Amplifier, Panasonic Player theater, Panasonic RAM theater



■ TV speakers:

The TV speakers are active.

- When selecting "Home theater", the sound of TV speakers is mute.
- When "Home theater" is selected, the home theater volume control can be raised or lowered using the TV remote volume button. The TV will display "Home Theater + / -" on screen.
- If home theater/RAM theater/Player theater is currently off, selecting the "Home theater" option will automatically turn the equipment on. See "Power on link" below.
- If home theater/Player theater/RAM theater power is turned Off, speakers automatically switch to the TV.

When "Set" is selected, this allows for the TV to automatically turn on and switch to the appropriate HDMI input whenever a "Control with HDMI" compatible DVD player/recorder is initially turned on and Play mode is selected.

When "Set" is selected, this allows for the TV to turn off and also turn off the connected home theater/RAM theater/player theater and/or DIGA-DVD player.

If the "ONE TOUCH PLAY" key is pressed on the AV amp or Player theater remote control, the following sequence of operations is performed automatically.

- ① Home theater/Player theater power switches On, and playback begins.
- 2 TV power switches On, and the playback screen is displayed.
- 3 Audio is muted on the TV and switches to theater.

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™"

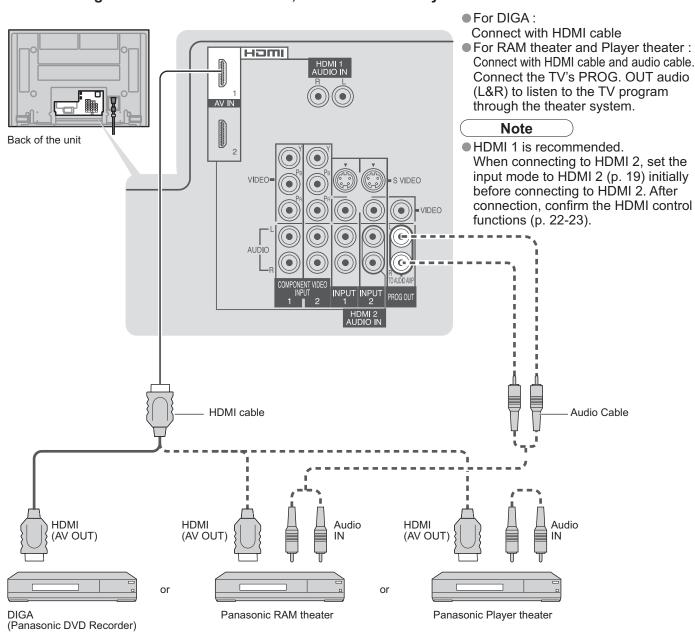
Recommended HDMI Connections

Follow the connection diagrams below for HDMI control of a single AV piece of equipment such as a Panasonic DIGA-DVD recorder, RAM Theater or Player Theater system. Refer to page 22 for Setup Menu settings and additional control information.

Optional HDMI and/or optical cables are not provided.

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

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



■ Setting of this unit after connection

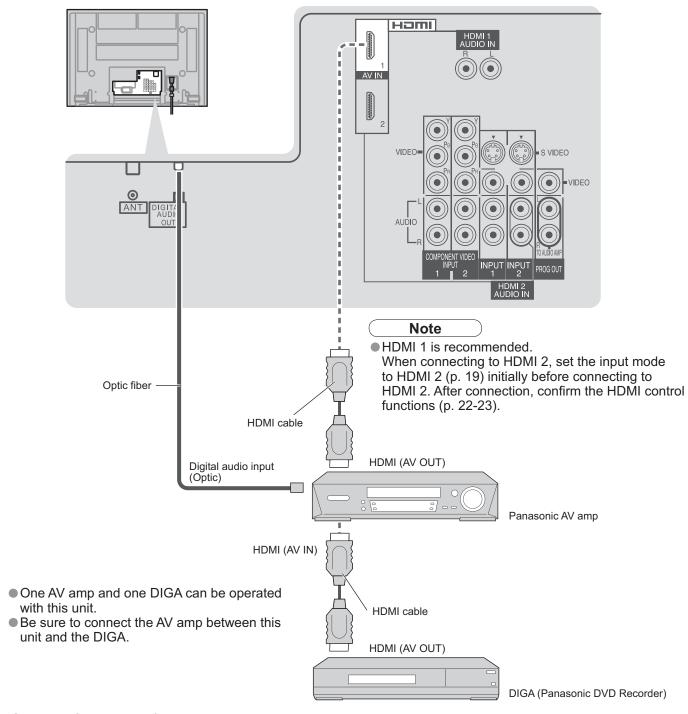
After making connections as shown above, set "Ctrl with HDMI" (under "Other adjust") to "On" using the Setup menu. (p. 22).

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

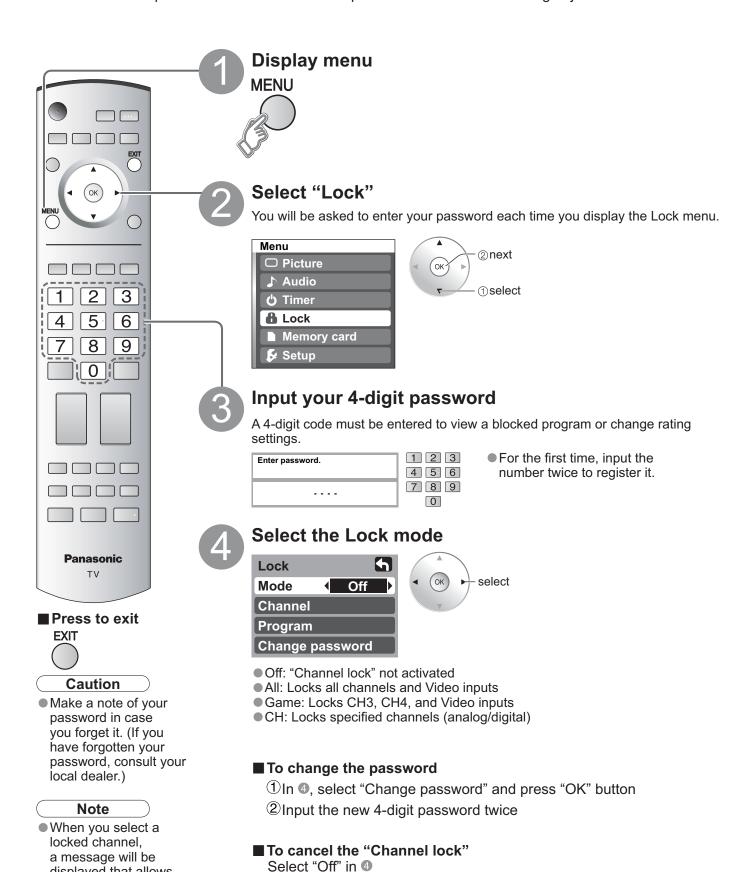
After making connections as shown above, set "Ctrl with HDMI" (under "Other adjust") to "On" using the Setup menu. (p. 22).

Note

- Individual HDMI equipment may require additional menu settings specific to each model. Please refer to their respective operating instruction manuals.
- When audio from other equipment connected to this unit via HDMI is output using "DIGITAL AUDIO OUT" of this
 unit, the system switches to 2CH audio.
 (When connecting to an AV amp via HDMI, you can enjoy higher sound quality.)

Channel Lock

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



displayed that allows you to view the channel if you input your password.

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



Block

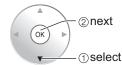
program

Select up to 7 (1-7) channels to be blocked out. These channels will be blocked out regardless of the program rating.

Select "CH" in ② on p. 26

1)Select "Channel"







ОК

Off

PG

PG-13

R



(3) Select the rating to be locked

select

No rating

X Adults only

Example of "MPAA" (U.S movie ratings)

for children under 13

NC-17 No one 17 and under admitted

To get other information (p. 39)

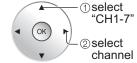
General Audience: All ages admitted

Parents Strongly Cautioned: Inappropriate

accompanying parent or adult guardian

Parental Guidance Suggested

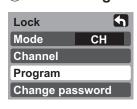
Restricted: Under 17 requires

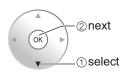


■ To set rating level

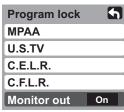
"V-chip" technology enables restricted shows to be locked according to TV ratings.

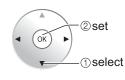
1) Select "Program"





2 Select the rating category you wish to follow

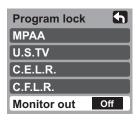




- MPAA : U.S movie ratings
- U.S.TV : U.S TV program ratings
- C.E.L.R : Canadian English ratings
- C.F.L.R : Canadian French ratings

■ To disable recording of the locked program

⇒ Select "Monitor out" in "Program lock" menu (2)



On: Turns on the monitor terminal output for programs that

have been set to "Blocked."

Off: Turns off the monitor terminal output for programs that

have been set to "Blocked."

Caution

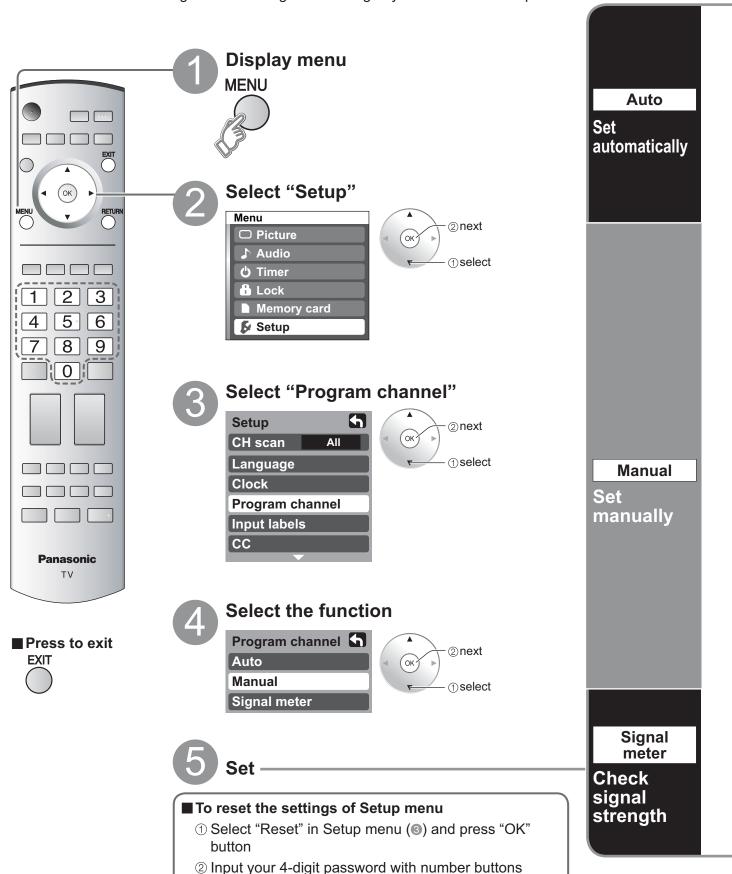
- The V-Chip system that is used in this set is capable of blocking "NR" programs (non rated, not applicable and none) as per FCC Rules Section15.120(e)(2). If the option of blocking "NR" programs is chosen "unexpected and possibly confusing results may occur, and you may not receive emergency bulletins or any of the following types of programming:"
 - Emergency Bulletins (Such as EAS messages, weather warnings and others)
 - · Locally originated programming · News · Political · Public Service Announcements · Religious · Sports
 - Weather

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.

Editing and Setting Channels

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

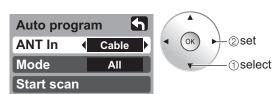


3 Select "Yes" on the confirmation screen and press

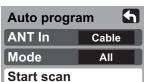
"OK" button

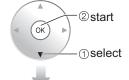
Automatically searches and adds receivable channels to memory.

- (1) **Select "ANT In"** → (Select Cable or Antenna)
- ② Select "Mode"
- Select All or Analog All: Analog and digital Analog: Analog only



③ Select "Start scan"





Settings are made automatically

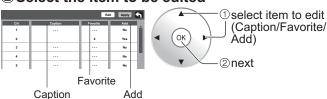
- After completing the setting, select "Apply". (see below 4).
- All previous memorized channels are erased.

Use this procedure when changing setting of receiving channels or changing the channel display. Also, use to add or delete channels from channel list manually.





②Select the item to be edited



- Caption:
- Changes the station identifier
- Favorite:
- Registers channel to Favorites List
- Add:

Adds or deletes channels







Preset

Select the station identifier

Caption detail

Rename (maximum 7 characters available)

Favorite



Favorite

Select the number

Add

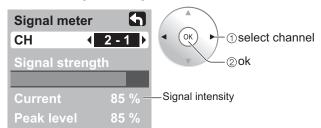
- Press "OK" button to select "Yes (add)" or "No (delete)"
- 4 Select "Apply"

Press to move cursor to "Apply"



(to enter your program)

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

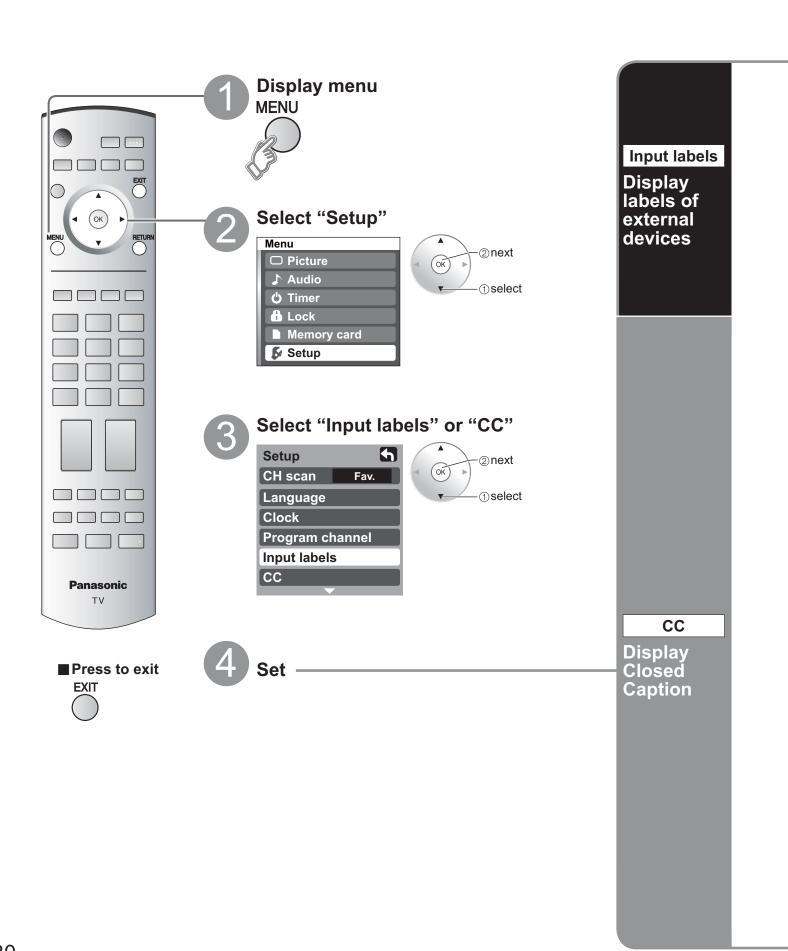


If the signal is weak, check the antenna. If no problem is found, consult your local dealer.

Note

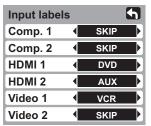
- Not available if "Cable" is selected in "ANT In" (see above).
- Effective only for digital antenna channels.
- If "Channel lock" (p. 26) is activated and "Auto", "Manual" or "Signal meter" is selected, "Enter password." will be displayed.

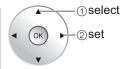
Input Labels/Closed Caption



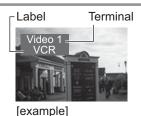
The labels of devices connected to external input terminals can be indicated for easy recognition on the screen. (In selecting input mode of p. 19 2)

Select the terminal and the label of the external equipment





- Terminals: Comp.1-2/HDMI1-2/ Video1-3
- Label: SKIP*/VCR/DVD/CABLE/ DBS/PVR/GAME/AUX/[BLANK]

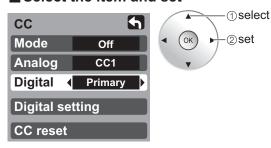


* If "SKIP" is selected for a non-connected terminal, its input is skipped when switched with TV/VIDEO button.

Input labels Video 3

The television includes a built-in decoder that is capable or providing a visual display of the audio portion. The program viewed must provide Closed Captioning (CC) for the television to display it. (p. 40)

■ Select the item and set



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

Mode

Select "On" (when not using, select "Off").

(Choose the closed caption service of Analog Analog broadcasting.)

CC1-4: Information related to pictures

(Appears at bottom of screen)

T1-4: Textual information

(Appears over entire screen)

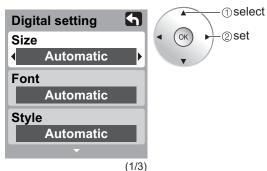
(The Digital Closed Caption menu lets you **Digital** configure the way you choose to view the digital captioning.)

Select the setting.

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

■ To make more in-depth display settings in digital programs

- ① Select "Digital setting" and press "OK" button
- 2 Select the item and set



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

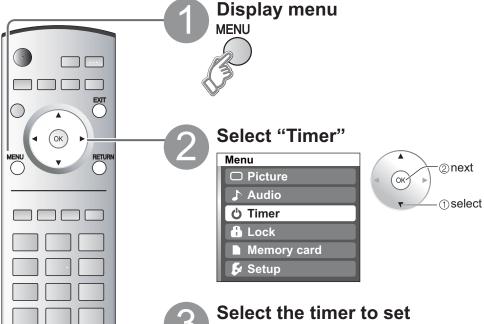
■ To reset the settings

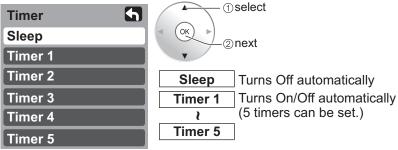
Select "CC reset" and press "OK" button

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)

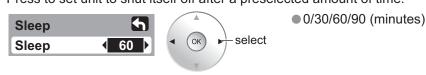




Set the timer

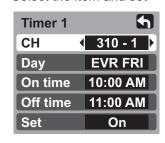
■ To set "Sleep" (Off Timer)

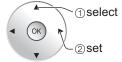
Press to set unit to shut itself off after a preselected amount of time.



■ To set "Timer 1-5" (On/Off Timer)

Select the item and set





CH Select the channel Day Select the day SUN/MON/TUE/WED/THU/FRI/SAT/ MON-FRI/SAT-SUN/DAILY/EVR SUN/ EVR MON/EVR TUE/EVR WED/EVR THU/ EVR FRI/ EVR SAT

On time The time to turn On Off time The time to turn Off Set Timer setting (On/Off)



Panasonic

TV

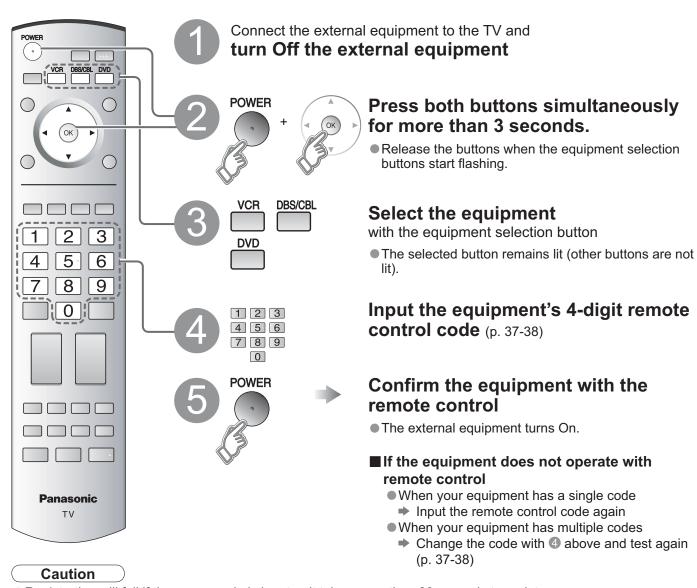
■ Press to return to the previous screen **RETURN**



The TV automatically turns Off after 90 minutes when turned On by the Timer. This operation will be cancelled if the Off time is selected or if a key is pressed.

Operating Peripheral Equipment

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



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

To find a code not listed in the code list

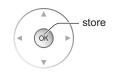
This procedure searches all codes and is called the "sequence method."

①After step ③ above, change the code and test



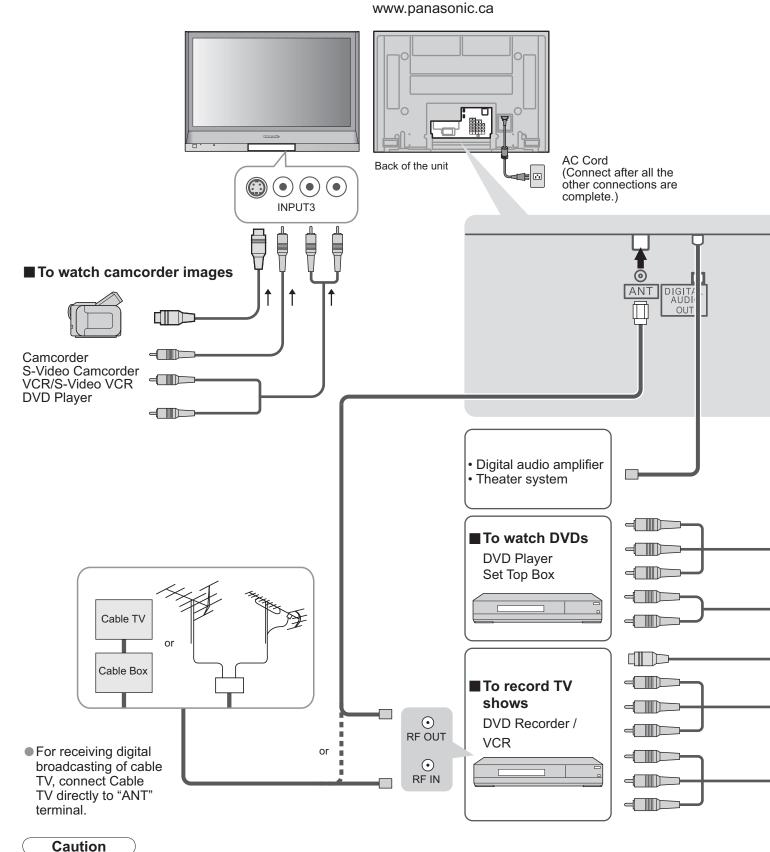
- Operate the equipment with the remote control (p. 36)
- Repeat until the code is found
- It may take many attempts before the correct code is found

2) When the correct code is found



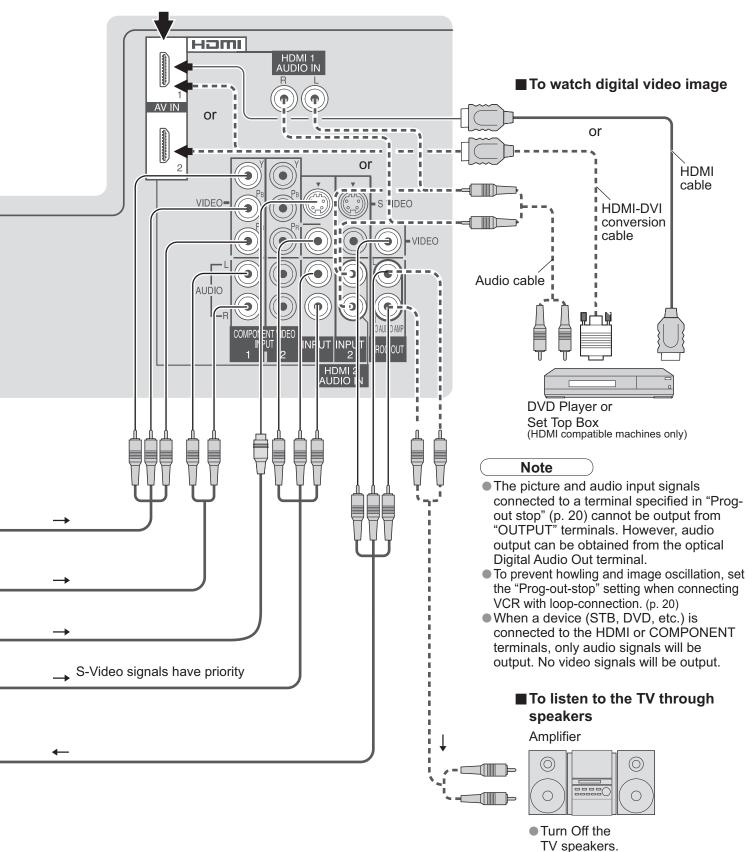
Recommended AV Connections

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



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

■ Recommended HDMI Connections (p. 24-25)



(p. 20 "Speakers")

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		L MODE	DVD MODE
	VOK MODE	(DBS)	(CBL)	515 mose
POWER	Power	Power	Power	Power
TV/VIDEO	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	Ok
MENU	_	DBS Menu	CBL Menu	DVD Setup Menu
RETURN	_	_	_	Return, Clear
MUTE	TV Mute	TV Mute	TV Mute	TV Mute
ASPECT	_	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
A OH V	Channel Up/Down	DBS Channel Up/Down	CBL Channel Up/Down	Channel Up/Down
+ vo.	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down	TV Volume Up/Down
SLEEP	_	Sleep	Sleep	_
TV/VCR	TV/VCR Switch	TV/DBS Switch	TV/CBL Switch	_
REC •	VCR Record	PVR Record *1	PVR Record *1	Record
OPENCLOSE	_	Search *1	Search *1	Open/Close
⊢ SKIP¬	_	_	_	Skip Reverse/Forward
r SEARCH 1	Reverse/Forward	_	_	Rewind/Fast Forward
STOP	Stop		_	Stop
PAUSE II/I>	Pause	_	_	Pause
PLAY	Play	_	_	Play

■ Remote Control Code List

	nverter (BBS/CBL)						
Brand	Code	Brand	Code	Brand	Code	Brand	Code
BC	0003, 0008	Hamlin	0009, 0273	Philips	0317, 1305	Scientific Atlanta	0008, 0477, 0877, 1877
mericast	0899	Jerrold	0003, 0276, 0476, 0810	Pioneer	0144, 0533, 0877, 1877	Sony	1006
ell South	0899	Memorex	0000	Pulsar	0000	Starcom	0003
igeo	1187	Motorola	1376, 0276, 0476, 0810, 1187	Quasar	0000	Supercable	0276
irector	0476	Pace	0008, 0237, 1877	Regal	0273, 0279	Torx	0003
eneral Instrument	0003, 0276, 0476, 0810	Panasonic	0000, 0107	Runco	0000	Toshiba	0000
oldStar	0144	Paragon	0000	Samsung	0144	Zenith	0000, 0525, 0899
Satellite R	Receiver (DBS/CBL)						
lphaStar	0772	General		Magnavox	0722, 0724	_	1108, 1109, 1142, 1276, 1
haparral	0216	Instrument	0869	Memorex	0724	Samsung	1442, 1609
rossdigital	1109	GOI	0775, 1775	Mitsubishi	0749	Sanyo	1219
roodigitar		Goodmans	1246	Motorola	0856, 0869	Sony	0639, 1639, 1640
	0099, 0247, 0392, 0566, 0639, 0724, 0749, 0819,	Hisense	1535	NEC	1270	Star Choice	0869
recTV	1076, 1108, 1109, 1142, 1377,	Hitachi	0819, 1250	Next Level	0869	Tivo	1142, 1442, 1443, 144
1001 V	1392, 1414, 1442, 1443, 1444, 1609, 1639, 1640,	HTS	0775, 1775	Panasonic	0152, 0247, 0701, 1786	Toshiba	0749, 0790, 0819, 1285, 174
	1749, 1856	Hughes	0749, 1442, 1749		0724	UltimateTV	1392, 1640
1.51.6.1	,		, ,	Paysat		Uniden	0722, 0724
sh Network /stem	0775, 1005, 1170, 1505, 1775	Hughes Network Systems	0749, 1142, 1442, 1443, 1444, 1749	Philips	0099, 0722, 0724, 0749, 0819, 1076, 1142, 1442, 1749		-
		•	, , , , , , , , , , , , , , , , , , ,	Dionost	· · · ·	US Digital	1535
shpro	0775, 1005, 1505, 1775	iLo	1535	Prosean	1442	USDTV	1535
hostar	0775, 1005, 1170, 1505, 1775	Janeil	0152	Proscan	0392, 0566	Voom	0869
kpressvu	0775, 1775	Jerrold	0869	Proton	1535	Zenith	1856
E	0392, 0566	JVC	0775, 1170, 1775	RadioShack	0869		
	DRS/CR	LG	1226, 1414	RCA	0143, 0392, 0566, 0855, 1392		
Cable/PVF	R Combination(ົ)					
mericast	0899	Jerrold	0476, 0810	Pioneer	0877, 1877	Supercable	0276
geo	1187	Motorola	0476, 0810, 1187, 1376	Scientific Atlanta	0877, 1877	Zenith	0899
neral Instrument	0476, 0810	Pace	0237, 1877	Sony	1006	_	
DBS/PVR	Combination (DBS/CBL)					
	0099, 0392, 0639, 1076.	Dishpro	0775, 1505	JVC	1170	Samsung	1442
irecTV	1142, 1377, 1392, 1442,	Echostar	0775, 1170, 1505	Motorola	0869	Sony	0639, 1640
	1443, 1444, 1640	Expressvu	0775	Philips	1142, 1442	Star Choice	0869
ish Network	0775, 1505	Hughes Network	1142, 1442, 1443, 1444	Proscan	0392		
ystem	0770, 1000	Systems	,,	RCA	1392		
/CR (KING)						
BS	1972	Hewlett Packard	1972	NEC	0067	Scott	0043, 0045
dventura	0000	Hitachi	0000, 0042, 0089	Nikko	0037	Sears	0000, 0035, 0037, 0042, 123
			1972	Niveus Media	1972	01	0807, 0848
wa	0000, 0037, 0124	Howard Computers	1972	Miveus Media		Snarp	10007, 0040
		Howard Computers HP	1972	Northgate	1972	Sharp Sonic Blue	0614, 0616
kai	0000, 0037, 0124	HP	1972			Sonic Blue	0614, 0616
kai ienware	0000, 0037, 0124 0175			Northgate	1972		-
kai ienware nerican High	0000, 0037, 0124 0175 1972	HP Hughes	1972	Northgate Olympus	1972 0035, 0226	Sonic Blue	0614, 0616 0000, 0032, 0033, 0035,
kai ienware nerican High udiovox	0000, 0037, 0124 0175 1972 0035 0037	HP Hughes Network Systems Humax	1972 0042, 0739 0739	Northgate Olympus Onkyo Optimus	1972 0035, 0226 0222 0037	Sonic Blue Sony Stack 9	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972
ienware nerican High udiovox roksonic	0000, 0037, 0124 0175 1972 0035 0037 1479	HP Hughes Network Systems Humax Hush	1972 0042, 0739 0739 1972	Northgate Olympus Onkyo Optimus Orion	1972 0035, 0226 0222 0037 1479	Sonic Blue Sony Stack 9 STS	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042
kai ienware merican High udiovox roksonic alix	0000, 0037, 0124 0175 1972 0035 0037 1479 0037	HP Hughes Network Systems Humax Hush iBUYPOWER	1972 0042, 0739 0739 1972 1972	Northgate Olympus Onkyo Optimus	1972 0035, 0226 0222 0037	Sonic Blue Sony Stack 9 STS Sylvania	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781
kai ienware merican High udiovox roksonic alix anon	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035	HP Hughes Network Systems Humax Hush	1972 0042, 0739 0739 1972 1972 0067	Northgate Olympus Onkyo Optimus Orion Panasonic	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244	Sonic Blue Sony Stack 9 STS Sylvania Symphonic	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000
kai ienware merican High udiovox roksonic alix anon	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC	1972 0042, 0739 0739 1972 1972 0067 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972
kai ienware nerican High udiovox roksonic alix anon tizen	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037 0035	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood	1972 0042, 0739 0739 1972 1972 0067 0037 0067	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972
kai ienware nerican High udiovox roksonic alix anon tizen raig	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037 0035 0037, 1278 0037 0035, 0060, 1035	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000
kai ienware nerican High udiovox roksonic alix anon tizen raig urtis Mathes //berPower	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035
kai ienware nerican High udiovox roksonic alix anon tizen raig urtis Mathes yberPower aewoo	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 1972 0000 0035 0000, 0035, 0037
cai ienware merican High udiovox roksonic alix anon tizen raig urtis Mathes yberPower aewoo ell	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 1972 0000 0035 0000, 0035, 0037
cai ienware merican High udiovox roksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739
cai ienware merican High udiovox roksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon recTV	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100
enware enerican High idiovox oksonic alix anon tizen aig urtis Mathes vberPower aewoo all enon recTV	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100145, 1972
enware enrican High diovox oksonic elix enon izen aig ertis Mathes berPower eewoo ell enon recTV erabrand natech	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 1001145, 1972 0037
enware enerican High diovox oksonic alix anon dizen aig artis Mathes elewoo ell enon erecTV urabrand matech ectrohome	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037
enware enerican High Idiovox oksonic alix anon tizen aig urtis Mathes vberPower aewoo ell enon recTV urabrand vnatech ectrohome ectrophonic	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045
ienware nerican High Idiovox oksonic alix anon tizen raig urtis Mathes vberPower aewoo ell enon recTV urabrand vnatech ectrohome ectrophonic merex	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0037	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 0037 0035 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0007 0042, 0060, 0077, 0807,	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045
cai ienware nerican High udiovox oksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon recTV urabrand ynatech ectrohome ectrophonic merex merson	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0032 0000, 0037, 0043, 1278, 1479	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 0037 0035 0037 0035 0037 0035 0037	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0007 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0037
cai ienware nerican High udiovox oksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon recTV urabrand ynatech ectrohome ectrophonic merex merson uji	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0032 0000, 0037, 0043, 1278, 1479 0033, 0035	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0037 0035 1972 0035 0000, 0035, 0037, 0039, 1237 0043	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0037 1972
cai ienware nerican High udiovox oksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon recTV urabrand ynatech ectrohome ectrophonic merex merson uji	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0039	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA Microsoft	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0037 0035 1972 0035 0000, 0035, 0037, 0039, 1237 0043 1972	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic ReplayTV	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037 0614, 0616	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic Villain	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0045 0045 0045 0037 1972 0000
cai ienware nerican High udiovox oksonic alix anon tizen raig urtis Mathes yberPower aewoo ell enon recTV urabrand ynatech ectrohome ectrophonic merex merson uji	0000, 0037, 0124 0175 1972 0035 0037 1479 0035 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA Microsoft Mind	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0037 0035 1972 0035 1972 0035 1972 0035 1972 0035 1972 0043 1972	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Technics Teshika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic Villain Voodoo	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 00042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0037 1972
wa kai ienware merican High udiovox roksonic alix annon titizen raig urtis Mathes yberPower aewoo ell enon irecTV urabrand ynatech ectrohome ectrophonic merex merson uji unai arrard ateway	0000, 0037, 0124 0175 1972 0035 0037 1479 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0039	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA Microsoft	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0037 0035 1972 0035 0000, 0035, 0037, 0039, 1237 0043 1972	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic ReplayTV	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0067 0060, 1060 0039 0035, 0077, 1035 0000 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037 0614, 0616	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Teknika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic Villain	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0045 0037 1972 0000
kai ienware merican High udiovox roksonic alix annon titizen raig urtis Mathes yberPower aewoo ell eenon irecTV urabrand ynatech ectrohome ectrophonic merex merson uji unai arrard	0000, 0037, 0124 0175 1972 0035 0037 1479 0035 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA Microsoft Mind	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0037 0035 1972 0035 1972 0035 1972 0035 1972 0035 1972 0043 1972	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic ReplayTV Ricavision	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0036, 0618, 0739, 1081, 1181 0037 0060, 1060 0039 0035, 0077, 1035 0000 0037 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037 0614, 0616 1972	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Technics Teshika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic Villain Voodoo	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0045 0045 0037 1972 0000 1972
kai ienware merican High udiovox roksonic alix annon titizen raig urtis Mathes yberPower aewoo ell ennon irecTV urrabrand ynatech ectrohome ectrophonic merex merson uji unai arrard ateway	0000, 0037, 0124 0175 1972 0035 0037 1479 0035 0037 0035 0037, 1278 0037 0035, 0060, 1035 1972 0045, 1278 1972 0042 0739 0039 0000 0037, 0043 0037 0032 0000, 0037, 0043, 1278, 1479 0033, 0035 0000 0000 1972	HP Hughes Network Systems Humax Hush iBUYPOWER JVC KEC Kenwood Kodak Linksys Lloyd's LXI Magnasonic Magnavox Marantz Marta Matsushita Media Center PC MEI Memorex MGA Microsoft Mind	1972 0042, 0739 0739 1972 1972 0067 0037 0067 0035, 0037 1972 0000 0037 1278 0000, 0035, 0039, 1781 0035 0037 0035 1972 0035 0007 0035 1972 0035 1972 0035 1972 0043 1972 1972 1972 0042	Northgate Olympus Onkyo Optimus Orion Panasonic Penney Pentax Philco Philips Pilot Pioneer Proscan Pulsar Quasar RadioShack Radix Randex RCA Realistic ReplayTV Ricavision Runco	1972 0035, 0226 0222 0037 1479 0035, 0077, 0225, 0226, 0227, 0378, 0616, 1035, 1244 0035, 0037, 0042, 1035, 1237 0042 0035 0035, 0618, 0739, 1081, 1181 0037 0060, 1060 0039 0035, 0077, 1035 0000 0037 0037 0042, 0060, 0077, 0807, 0807, 0880, 1035, 1060 0000, 0035, 0037 0614, 0616 1972 0039	Sonic Blue Sony Stack 9 STS Sylvania Symphonic Systemax Tagar Systems Teac Technics Technics Tenika Thomas Tivo Toshiba Totevision Touch Vector Video Concepts Videomagic Viewsonic Villain Voodoo Wards	0614, 0616 0000, 0032, 0033, 0035, 0636, 1032, 1232, 1972 1972 0042 0000, 0035, 0043, 1781 0000 1972 1972 0000 0035 0000, 0035, 0037 0000 0618, 0636, 0739 0043, 0045, 0845, 100 1145, 1972 0037 1972 0045 0045 0045 0045 0045 0045 0045 0007 1972 0000 1972 0000 1972

Remote Control Operation/Code List

■ Remote Control Code List

— IXCIIIO	ic control code	LIST					
DBS/PVR	Combination ()					
Brand	Code	Brand	Code	Brand	Code	Brand	Code
ughes Network		Philips	0739				
ystems	0739	Samsung	0739				
PVR ()						
BS	1972	Hughon Notwork		Niveus Media	1972	Systemax	1972
Alienware	1972	_ Hughes Network Systems	0739	Northgate	1972	Systemax	
CyberPower	1972	Humax	0739	Panasonic	0616	Tagar Systems	1972
)ell	1972	Hush	1972	Philips	0618, 0739	Tivo	0618, 0636, 0739
)irecTV	0739	iBUYPOWER	1972	RCA	0880	Toshiba	1008, 1972
Bateway	1972	Linksys	1972	ReplayTV	0614, 0616	Touch	1972
ewlett Packard	1972			Sonic Blue	0614, 0616	Viewsonic	1972
	1372	 Media Center PC 	1972	Sony	0636, 1972	Voodoo	1972
loward Computers	1972	Microsoft	1972	Stack 9	1972	ZT Group	1972
IP	1072		1972	Stack 9	1372	Z1 Group	1372
DVD	1972	Mind	1312				
DVD ()						
dcom	1094	GoldStar	0741	Onkyo	0503, 0792	Sensory Science	1158
llegro	0869	Gradiente	0490			- Consony Colonico	1100
	0672, 0794, 0796, 0797,	Grundig	0539	Panasonic	0490, 0503, 0632, 0703, 1010, 1011, 1362, 1462,	Sharp	0630, 0675, 0752, 1256
pex Digital	1004, 1056, 1061, 1100	Hitachi	0573, 0664	Tanasomo	1490, 1762, 1967	Onarp	0000, 0070, 0702, 1200
		Hiteker	0672			Shinsonic	0533
spire Digital	1168	Integra	0571		0503 0530 0646 0675	Sonic Blue	0869
Blue Parade	0571	- JVC	0558, 0623, 0867, 1164, 1275	Philips	0503, 0539, 0646, 0675, 1267, 1354	Sony	0533, 0864, 1033, 1431, 1
Broksonic	0695	300	0000, 0020, 0007, 1104, 1270		1201, 1001		0555, 0604, 1055, 1451, 15
California Audio	0490	Kenwood	0490, 0534	PianoDisc	1024	Sylvania	0675
.abs	0430	Lecson	1533	Pioneer	0525, 0571, 0631, 0632	Symphonic	0675
CineVision	0833, 0869	- LG	0591, 0741, 0801, 0869		0020, 0071, 0001, 0002	Teac	0809
Coby	1086	_	0331, 0741, 0001, 0003	Polaroid	1061, 1086	Technics	0490, 0703
CyberHome	0816, 1023, 1024, 1129	LiteOn	1158, 1440	Polk Audio	0539	Theta Digital	0571
)aewoo	0833, 0869	Loewe	0511	Proceed	0672	Toshiba	0503, 0695, 1045, 1154
)enon	0490			Proscan	0522	- Urban Concepts	0503
Disney	0675	Magnavox	0503, 0539, 0646, 0675	RCA	0522, 0571, 0822	Orban Concepts	0303
VD2000	0521			Rio	0869	Xbox	0522
merson	0591, 0675	Marantz	0539	Rotel	0623	Yamaha	0490, 0539, 0545
Interprise	0591	McIntosh	1533	Sampo	0752	Zenith	0503, 0591, 0741,0869
unai	0675	Memorex	0695	Comours	0400 0572 0020 4075		
Sateway	1158	Microsoft	0522	Samsung	0490, 0573, 0820, 1075		
GE .	0522	Mitsubishi	0521, 1521	Sansui	0695	-	
No Midoo	0741, 0833, 0869, 1075,	NAD	0591, 0741	Sanyo	0695, 0873, 1967		
So Video	1158, 1304, 1730	NEC	0785				
DVD Reco	order (DVD)						
pex Digital	1056	Go Video	0741, 1158, 1304, 1730	Philips	0646		
Aspire Digital	1168	JVC	1164, 1275	Pioneer	0631	Sensory Science	1158
Coby	1086	LG	0741	Polaroid	1086	Sharp	0675
CyberHome	1129	LiteOn	1158, 1440	RCA	0522		1033, 1431
unai	0675		0646	Samsung	0490	Sony	0675
		Magnavox		Samsung	U-73U	Sylvania	
Gateway	1158	Panasonic	0490, 1010, 1011			Zenith	0741

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.
X	ADULTS ONLY.

■ U.S. TV PROGRAMS RATINGS (U. S. TV)

Age-based Group			Description			
NR (Not Rated)	Rated) TV-NR Viewable Not Rated.					
	TV-Y	Viewable Blocked	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 BlockedViewableBlocked	Directed to older children. Themes and elements in this program may include mild physical or comedic violence, or may frighten children under the age of 7.			
	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/Cartoon Violence. V: Violence S: Sex L: Offensive Language D: Dialogue with sexual content.

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

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

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

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

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.

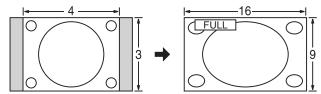
If a digital program is being output in analog format, the CC data will also be output in analog format.

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

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

Aspect Ratio

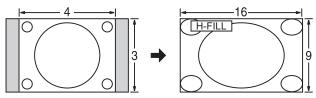
Let you choose the aspect depending on the format of the received signal and your preference. (p. 15)



Enlarges the 4:3 image horizontally to the screen's

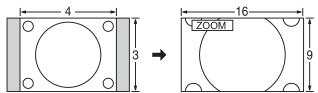
(Recommended for anamorphic picture)

H-FILL



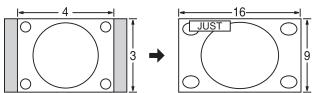
Enlarges the 4:3 image horizontally to the screen's side edges. The side edges of the image are cut off.

ZOOM



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

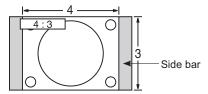
JUST



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

(Recommended for normal TV broadcast)

4:3



Standard

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

Note

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

Zoom adjust

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

- ① Select "Zoom adjust" on the Picture menu. (p. 20)
- ②Vertical position adjustment











Vertical size adjustment





■ To reset the aspect ratio ⇒



(OK)

Data format for Card browsing

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

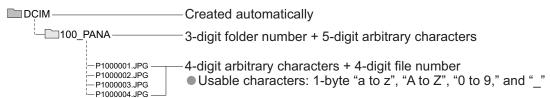
* DCF (Design rule for camera file system): A Japan Electronics and Information Technology Industries Association's standard

Caution

- A JPEG image modified with a PC cannot be displayed.
- Partly degraded files might be displayed at a reduced resolution.

Note

Folder structure viewed in PC



- 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.

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 "HDMI1 in" 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.

Caution

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

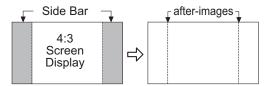
- Signals other than those shown above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.

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

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

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

If problem still persists, please contact your local Panasonic dealer or Panasonic Service center for assistance. For details (p. 49, 50)

For additional assistance, please contact our website at:

www.panasonic.com/contactinfo

www.panasonic.ca

White spots or shadow images (noise)

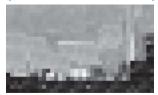




 Check the position, direction, and connection of the aerial.

Interference or frozen digital channels

(intermittent sound)



- Change the direction of antenna for digital channels.
- Check "Signal meter" (p. 28).
 If the signal is weak, check the antenna and consult your local dealer.





Panasonic

TV

Pictures from external equipment are distorted when the unit is connected via HDMI

- Is the HDMI cable connected properly? (p. 24-25, 34-35)
- Turn Off the TV unit and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 24-25, 34-35)
- Use a device compliant with EIA/CEA-861/861B.

The remote control does not work

- Are the batteries installed correctly? (p. 6)
- Has the battery run down?
- Has the TV POWER button been turned On?
- To operate external equipment of other manufacturers, register the remote control codes. (p. 33)

Before requesting service or assistance, please follow these simple guides to resolve the problem. If problem still persists, please contact your local Panasonic dealer or Panasonic Service center for assistance. For details (p. 49, 50) **Problem Actions** ● The function to prevent "after image" is activated. (Not a faulty symptom) "Press any key to return" The screen saver is activated if the TV unit is not operated for moves on the screen a certain time in SD mode. "after image" (p. 5) A pixel or luminescent spot can occasionally One spot remains dark be missing in plasma displays. (Not a faulty symptom) Check nearby electrical products Chaotic image, noisy (car, motorcycle, fluorescent lamp). No image can be Screen Check Picture menu (p. 20) displayed Only spots are displayed Check the channel settings. (p. 13, 28) Check the antenna cables. instead of images Is the AC power cord plugged into the outlet? **Neither image nor** Is the TV unit turned On? sound is produced Check Picture menu (p. 20) and volume. • Are the remote control codes correct? (p. 37-38) Black Box appears Change settings of Closed Caption (CC). (p. 30) ■ Is "Sound Mute" active? (p. 12) Is the volume set to the minimum? No sound is produced Is "Speakers" set to "Off"? (p. 20) Change "SAP" settings. (p. 14) Check "HDMI1 in" or "HDMI2 in" settings. (p. 20) Set "SAP" setting to "Stereo" or "Mono." Check the HDMI device connected to the unit. Set the audio setting of the HDMI device to Sound is unusual "Linear PCM." If digital sound connection has a problem, select analog sound connection.

Whirling sound is The sound is from built-in cooling fan (not a sign of faulty operation).

"Control with HDMI"

function does not work

heard

- Switch the TV unit on again with the equipment on.
- Set "Control with HDMI" to "Off", then set to "On" again. (p. 22)

45

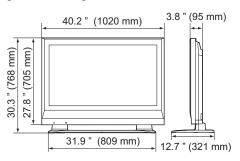
Specifications

		TH	-37PX60U	TH-42PX60U		
Powe	er Source	AC 120 V, 50 / 60 H	Z			
Power Consumption	Maximum		323 W	390 W		
nption	Standby condition		0.2 W	0.2 W		
	Drive method	AC type				
lasr ane	Aspect Ratio	16:9				
Plasma panel	Contrast Ratio	(max) 10000:1				
Die	Visible screen size		94 cmV	106 cmV		
Display	(W × H × Diagonal)	32.2 " × 18.2 " × 37. (818 mm × 461 mm		36.3 " × 20.4 " × 41.6 " (920 mm × 518 mm × 1,056 mm)		
	(No.of pixels)	737,280 (1,024 (W) [3,072 × 720 dots]	× 720 (H))	786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]		
Sound	Speaker	4.8 " × 2.4 " (120 mr	m × 60 mm) × 2pcs, 8 Ω			
	Audio Output	20 W [10 W + 10 W] (10 % THD)				
	nnel Capability tal/Analog)	VHF/ UHF: 2-69, CATV:1-135				
Oper	rating Conditions	Temperature: 32 °F - 104 °F (0 °C - 40 °C) Humidity: 20 % - 80 % RH (non-condensing)				
Cc	INPUT 1-3	VIDEO: RCA PIN Type × 1 1.0 V [p-p] (75 Ω) S-VIDEO: Mini DIN 4-pin Y:1.0 V [p-p] (75 Ω) C:0.286 V [p-p] (75 Ω) AUDIO L - R: RCA PIN Type × 2 0.5 V [rms]				
Connection Terminals	COMPONENT VIDEO INPUT 1-2	Рв, Pr: ±0				
n Ter	HDMI 1-2	TYPE A Connector AUDIO L-R: R	CA PIN Type × 2 0.5 V [rms]			
<u> </u>	Card slot	SD CARD slot × 1				
als	AV PROG. OUT	VIDEO: RI AUDIO L - R: RI	CA PIN Type × 1 1.0 V [p-p] CA PIN Type × 2 0.5 V [rms	(75 Ω)		
	DIGITAL AUDIO OUT	PCM / Dolby Digital,	Fiber Optic			
FEAT	TURES	3D Y/C FILTER CLOSED CAPTION V-Chip Photo Viewer				
Dimensions (W×H×D)	Including pedestal	36.1 " × 27.9 " × 12. (917 mm × 708 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		40.2 " × 27.8 " × 3.8 " (1,020 mm × 705 mm × 95 mm)		
Weight	Including pedestal	61.	7 lb. (28 kg)	70.5 lb. (32 kg)		
ght	TV Set only	57.	3 lb. (26 kg)	66.1 lb. (30 kg)		



36.1 " (917 mm) 3.8 " (95 mm) (95 mm) 3.9 " (809 mm) 12.7 " (321 mm)

[TH-42PX60U]

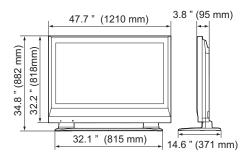


Note

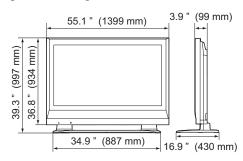
Design and Specifications are subject to change without notice. Weight and Dimensions shown are approximate.

		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)	סט)				
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					
Dis	Visible screen size	127 cmV	148 cmV				
Display	(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)					
	nnel Capability tal/Analog)	VHF/ UHF : 2-69, CATV:1-135					
Oper	rating Conditions	Temperature: 32 °F - 104 °F (0 °C - 40 °C) Humidity: 20 % - 80 % RH (non-condensing)					
CC	INPUT 1-3	VIDEO : RCA PIN Type × 1 1.0 V [p-p] (75 Ω) S-VIDEO : Mini DIN 4-pin Y:1.0 V [p-p] (75 Ω) C:0.286 V [p-p] (75 Ω) AUDIO L - R : RCA PIN Type × 2 0.5 V [rms]					
Connection Terminals	COMPONENT VIDEO INPUT 1-2	Y: 1.0 V [p-p] (including synchronization) PB, PR: ±0.35 V [p-p] AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]					
n Ter	HDMI 1-2	TYPE A Connector AUDIO L-R: RCA PIN Type × 2 0.5 V [rms]					
≣.	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					
FEA	ΓURES	3D Y/C FILTER CLOSED CAPTION V-Chip Photo Viewer					
Dimer (W×F	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)				
Dimensions (W×H×D)	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)				
₩e	Including pedestal	93.7 lb. (42.5 kg)	138.9 lb. (63 kg)				
Weight	TV Set only	88.2 lb. (40 kg)	130.1 lb. (59 kg)				

[TH-50PX60U, TH-50PX60X]



[TH-58PX60U]



Note

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

Limited Warranty (for U.S.A.)

PANASONIC CONSUMER ELECTRONICS COMPANY, DIVISION OF PANASONIC CORPORATION OF NORTH AMERICA One Panasonic Way Secaucus, New Jersey 07094 PANASONIC SALES COMPANY, DIVISION OF PANASONIC PUERTO RICO INC. Ave. 65 de Infanteria, Km. 9.5 San Gabriel Industrial Park Carolina, Puerto Rico 00985

Panasonic Color Television Limited Warranty

Limited Warranty Coverage

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

CATEGORIES	ALL PARTS EXCEPT 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 non-rechargeable 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) 624-5505

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 www.panasonic.ca:

Link: "Servicentres™ locator" under "Customer support"

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

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

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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
Model Number	Serial Number

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")

Àve. 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