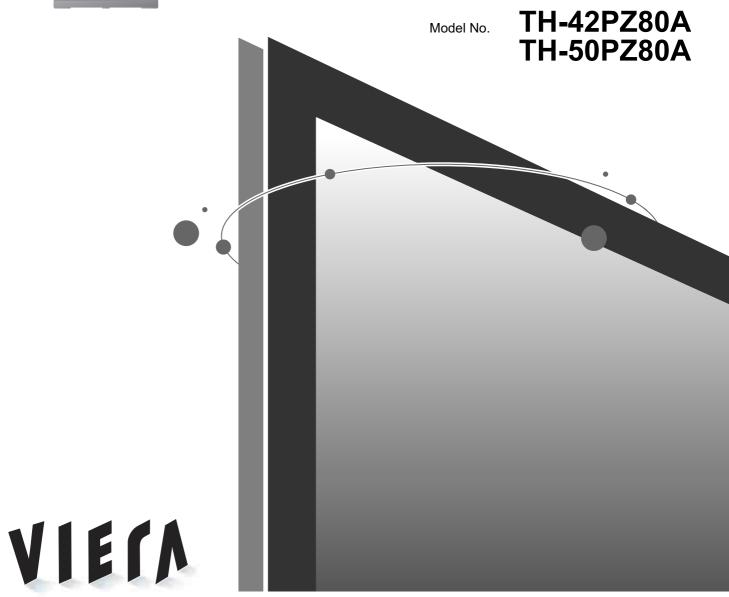


Panasonic[®]

Operating Instructions
Plasma Television











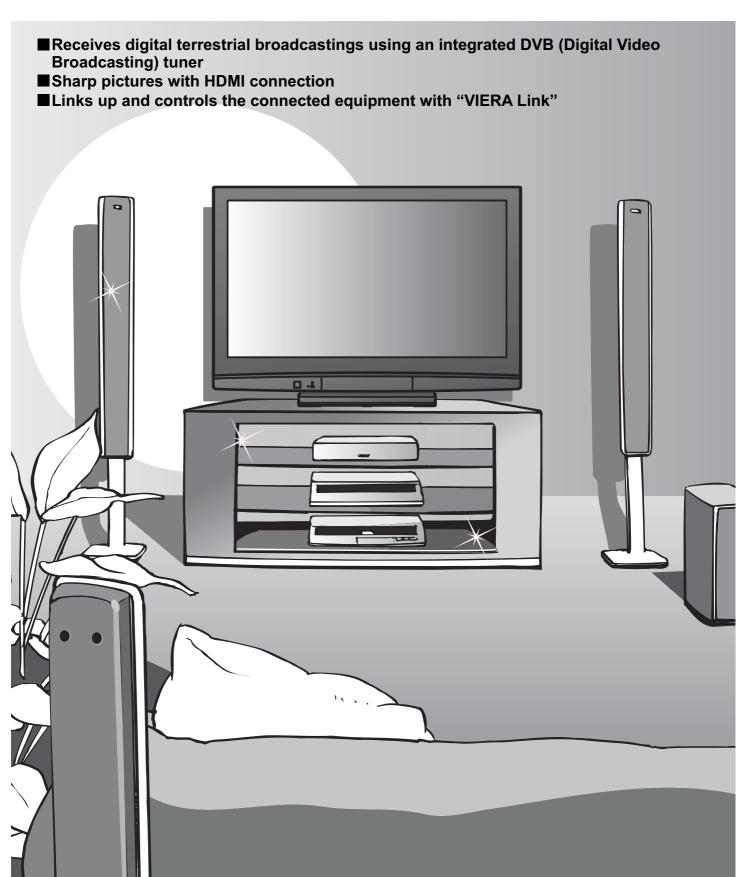


Please read these instructions before operating your set and retain them for future reference. The images shown in this manual are for illustrative purposes only.

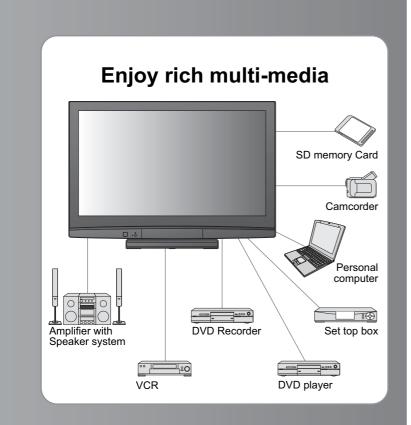
English

Turn your own living room into a movie theatre!

Experience an amazing level of multi-



media excitement





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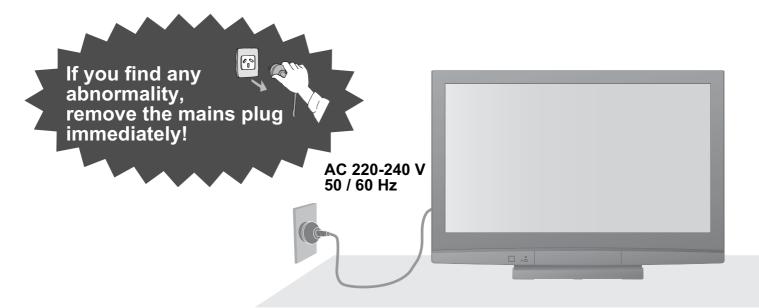
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Safety Precautions

Warning

Handling the mains plug and lead

- Insert the mains plug fully into the socket outlet. (If the mains plug is loose, it could generate heat and cause fire.)
- Ensure that the mains plug is easily accessible.
- Ensure the earth pin on the mains plug is securely connected to prevent electrical shock.
- Do not touch the mains plug with a wet hand. (This may cause electrical shock.)
- Do not use any mains lead other than that provided with this TV. (This may cause fire or electrical shock.)
- Do not damage the mains lead. (A damaged lead may cause fire or electrical shock.)
 - Do not move the TV with the lead plugged in the socket outlet.
 - Do not place a heavy object on the lead or place the lead near a high-temperature object.
 - Do not twist the lead, bend it excessively, or stretch it.
 - Do not pull on the lead. Hold onto the mains plug body when disconnecting lead.
 - Do not use a damaged mains plug or socket outlet.



Power source

 This TV is designed to operate on 220-240 V, 50 / 60 Hz AC.

Do not remove covers NEVER modify the TV yourself

(High-voltage components may cause serious electrical shock.)

 Have the TV checked, adjusted, or repaired at your local Panasonic dealer.

Keep liquids away from the TV

- To prevent damage which may result in fire or shock hazard, do not expose this appliance to dripping or splashing.
- Do not place containers with water (flower vase, cups, cosmetics, etc.) above the TV. (including on shelves above. etc.)

Do not expose to direct sunlight and other sources of heat

Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

Do not place foreign objects inside the TV

 Do not allow any objects to drop into the TV through the air vents (fire or electrical shock may result).

Do not place the TV on sloped or unstable surfaces

The TV may fall off or tip over.

Use only the dedicated pedestals / mounting equipment

 Using an unapproved pedestal or other fixtures may make the TV unstable, risking injury. Be sure to ask your local Panasonic dealer to perform setup.
 Use approved pedestals / mounts (p. 6).

Do not allow children to handle SD Card

As with any small object, SD Cards can be swallowed by young children. Please remove SD Card immediately after use and store out of reach of children.

Important Installation Notices

■Install TV on a stable surface

If a television is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the television.
- Only using furniture that can safely support the television.
- Ensuring the television is not overhanging the edge of the supporting furniture.
- Not placing the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television to a suitable support.
- Not standing the televisions on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television or its controls.

■When cleaning the TV, remove the mains plug

Cleaning an energized TV may cause electrical shock.

■ When the TV is not going to be used for a long period of time, remove the mains plug

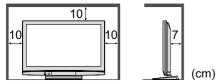
• This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

■ Transport only in upright position

Transporting the TV with its display panel facing upright or downward may cause damage to the internal circuitry.

■ Allow sufficient space around the TV for radiated heat

Minimum distance



- When using the pedestal, keep the space between the bottom of the TV and the floor surface.
- In case of using Wall-hanging bracket, follow the manual of it.

■ Do not block the rear air vents

• Blocked ventilation by newspapers, table cloths, curtains, etc. may cause overheating, fire or electrical shock.

■ Do not expose your ears to excessive volume from the headphones

Irreversible damage can be caused.

■ Auto power standby function

• If no signal is received and no operation is performed in Analogue TV mode for 30 minutes, the TV will automatically go to standby mode.

■ Keep the TV away from these types of equipment

Electronic equipment

In particular, do not place video equipment near the TV (electromagnetic interference may distort images / sound).

Equipment with an infrared sensor

This TV also emits infrared rays (this may affect operation of other equipment).

Do not display a still picture for a long time

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

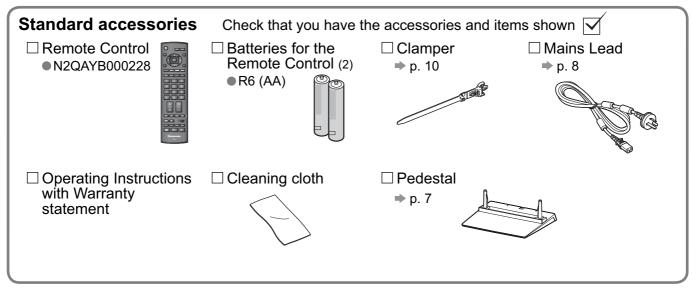
Typical still images

- Programme number and other logos
- Image displayed in "4:3" mode
- Video game
- Computer image



To prevent image retention, contrast is lowered automatically after a few minutes if no signals are sent or no operations are performed. (p. 47)

Accessories / Options



• This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

Optional accessories

Wall-hanging bracket (vertical)

- TY-WK42PV3W
- TY-WK42PV4W



(angle)

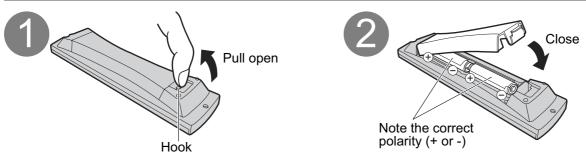
- TY-WK42PR3W
- TY-WK42PR4W



Caution

- In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging brackets.
- Carefully read the instructions accompanying the pedestal, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.

Installing remote's batteries



Caution

- Incorrect installation may cause battery leakage and corrosion, resulting in damage to the remote control.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable (Ni-Cd) batteries.
- Do not burn or breakup batteries.
 - Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

Attaching the pedestal

Warning)

Do not disassemble or modify the pedestal.

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

Caution

Do not use any other TV and displays.

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

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

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

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

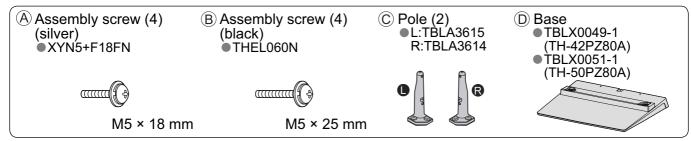
• If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

Ensure that the TV does not fall over.

• If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.

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

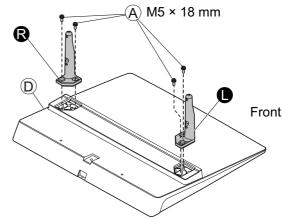
• If two or more people are not present, the TV may be dropped, and personal injury may result.



Assembling the pedestal

Use the four assembly screws (A) to fasten the left and right poles to the base securely.

- Make sure that the screws are securely tightened.
- Forcing the assembly screws the wrong way will strip the threads.
- "L" or "R" mark is stamped on the bottom of the pole.



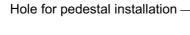
■ Securing the TV

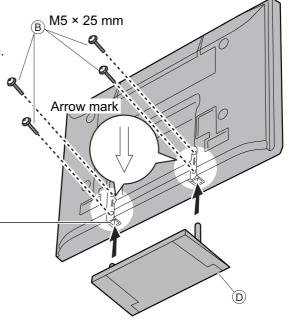
Use the assembly screws (B) to fasten securely.

• Make sure that the screws are securely tightened.

Carry out the work on a horizontal and level surface.

View from the bottom





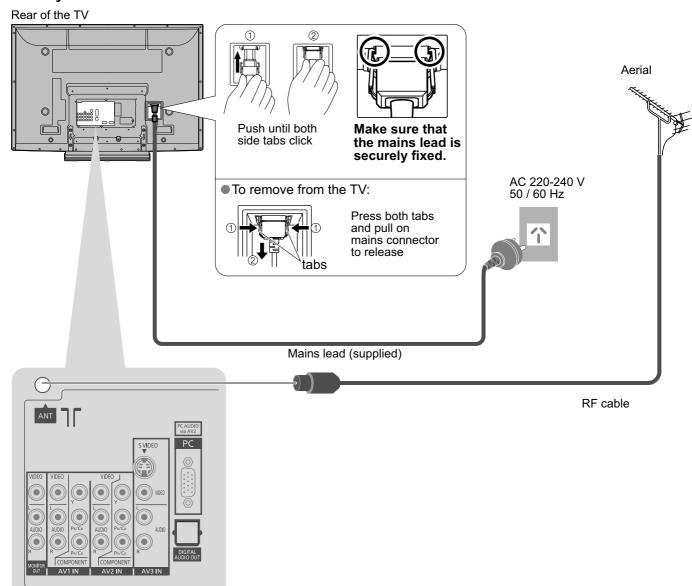
Basic Connection

External equipment and cables shown are not supplied with this TV.

Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads. When disconnecting the mains lead, be absolutely sure to disconnect the mains plug at the socket outlet first.

Example 1 Connecting aerial

TV only

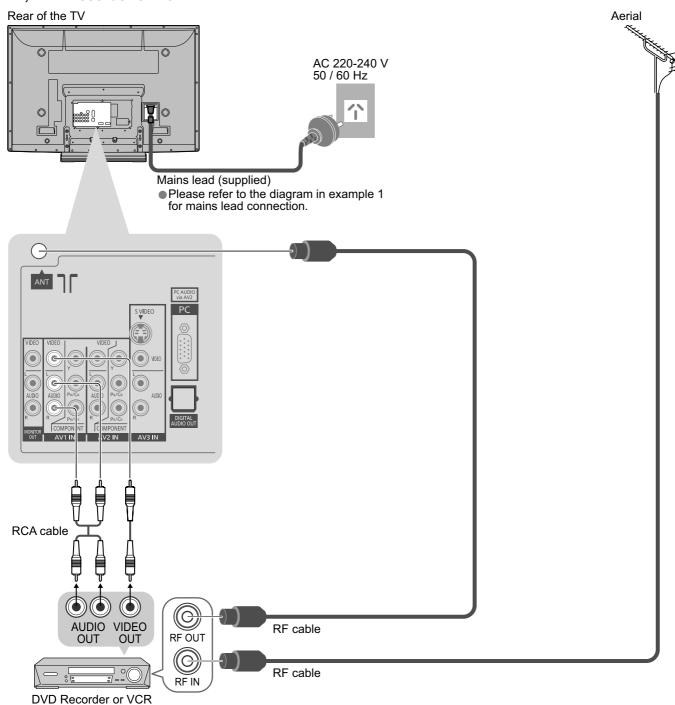


Note

- Do not put the RF cable close to the mains lead to avoid noise.
- Do not place the RF cable under the TV.
- lacktriangle To obtain optimum quality picture and sound, an Aerial, the correct cable (75 Ω coaxial) and the correct terminating plug are required.
- If a communal Aerial system is used, you may require the correct connection cable and plug between the wall Aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct Aerial system for your particular area and the accessories required.
- Any matters regarding Aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the Customer.

Example 2 Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR



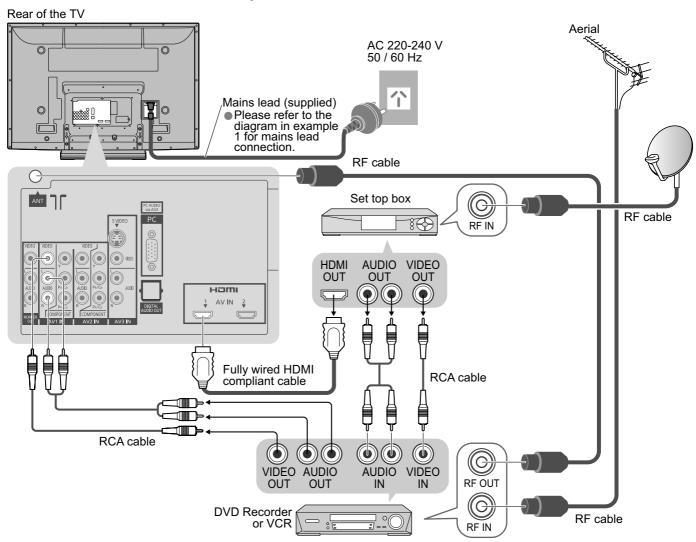
Note

- VIERA Link connection ⇒ p. 38
 If your recorder is not available for DVB ⇒ p. 48
- Read the manual of the equipment too.

Basic Connection

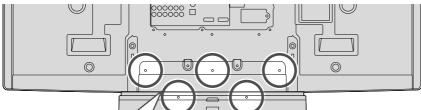
Example 3 Connecting DVD Recorder / VCR and Set top box

TV, DVD Recorder / VCR and Set top box

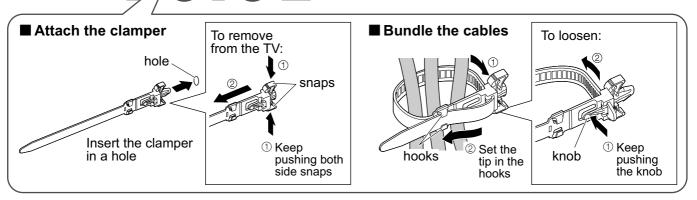


Using the clamper

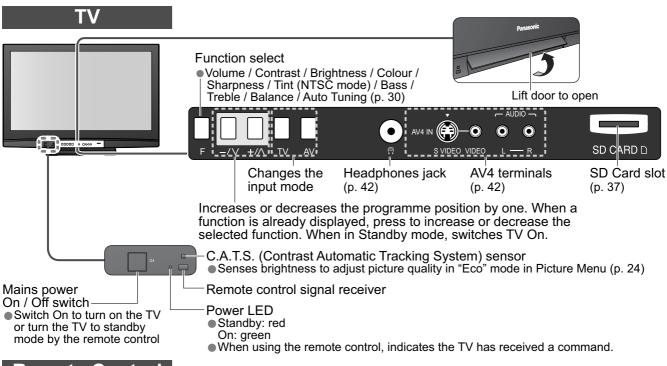


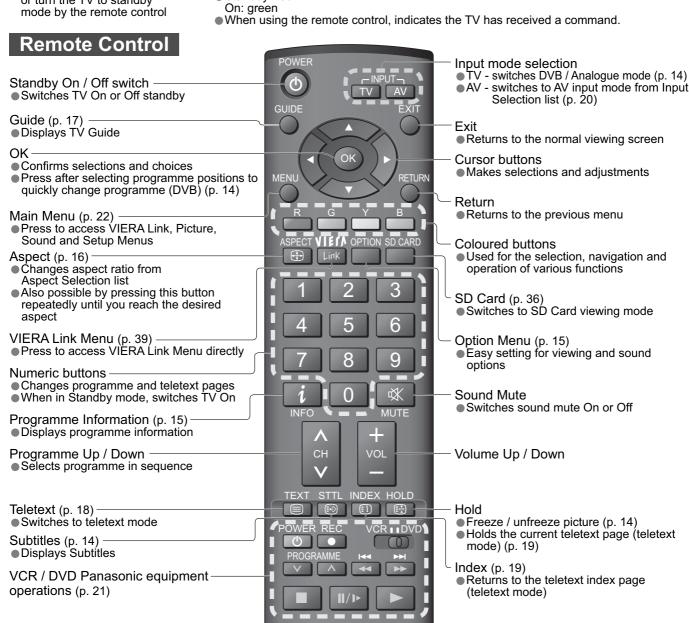


- Do not bundle the RF cable and mains lead together (could cause distorted image).
- Fix cables with clampers as necessary.
- When using the optional accessory, follow the option's assembly manual to fix cables.



Identifying Controls



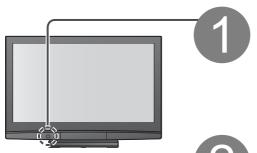


Panasonic

Auto Tuning

Search and store TV programmes automatically.

These steps are not necessary if the setup has been completed by your local dealer.



Plug the TV into mains socket and switch On

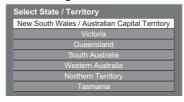
(Takes a few seconds to be displayed)



You can now use the remote control to turn On the TV or turn the TV to standby mode. (Power LED: On)



Select your state







Start Auto Tuning





Auto Tuning will start to search for TV programmes and store them in the numbered order as specified by the broadcasters.



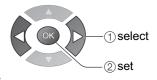
Select the picture setting

Please select your viewing environment. Home

"Home" is the recommended mode for viewing at home. Select "Home" for optimal picture / power consumption. "Shop" is for in-store

If "Shop" is selected, the word "Shop" appears every time the TV is switched on. (p. 14)

Home: "Viewing Mode" is set as "Normal". (p. 24) Shop: "Viewing Mode" is set as "Dynamic". (p. 24)





Auto Tuning is now complete and your TV is ready for viewing.



To edit programmes ⇒ "Editing Programmes" (p. 28)

Panasonic

Many features available on this TV can be accessed via the On Screen Display menu.

■ How to use remote control



Open the main menu



Move the cursor / select the menu



Move the cursor / adjust levels / select from a range of options



Access the menu / store settings after adjustments have been made or options have been set



EXIT

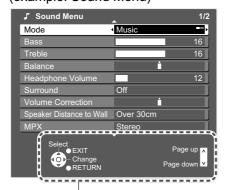
Return to the previous menu

Using the On Screen **Displays**

Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box

(example: Sound Menu)

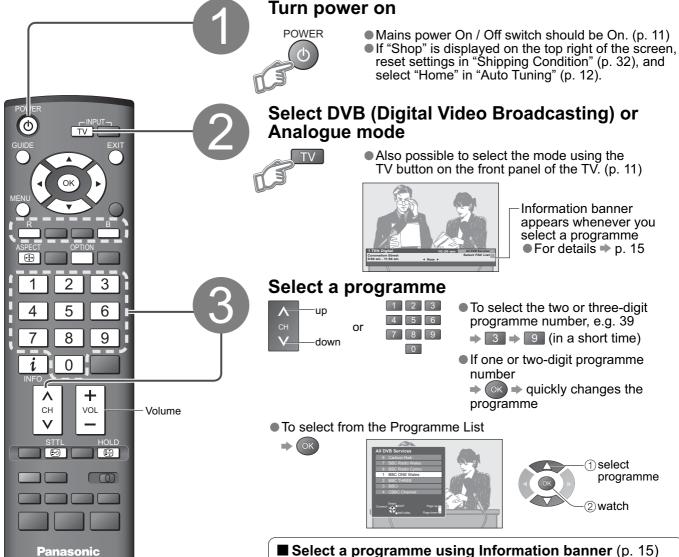


On-screen operation guide will help you.

Note

- If tuning has failed ⇒ "Auto Tuning" (p. 31)
- To initialize all settings ⇒ "Shipping Condition" (p. 32)
- If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Watching TV



Note

When the TV is switched to standby, there will be a clicking sound after a short delay. This is normal.

Possible to confirm the programme name before selecting programmes.

Display Information banner if it is not displayed



Possible to set display timeout in "Banner Display Timeout" (p. 25). While the banner is displayed. select the programme

1) select programme

②watch

1 select programme ② watch

■ Select a programme using TV Guide (p. 17)

Possible to confirm the TV Guide (EPG) before selecting programmes.

Display TV Guide

GUIDE

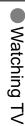
Select the programme

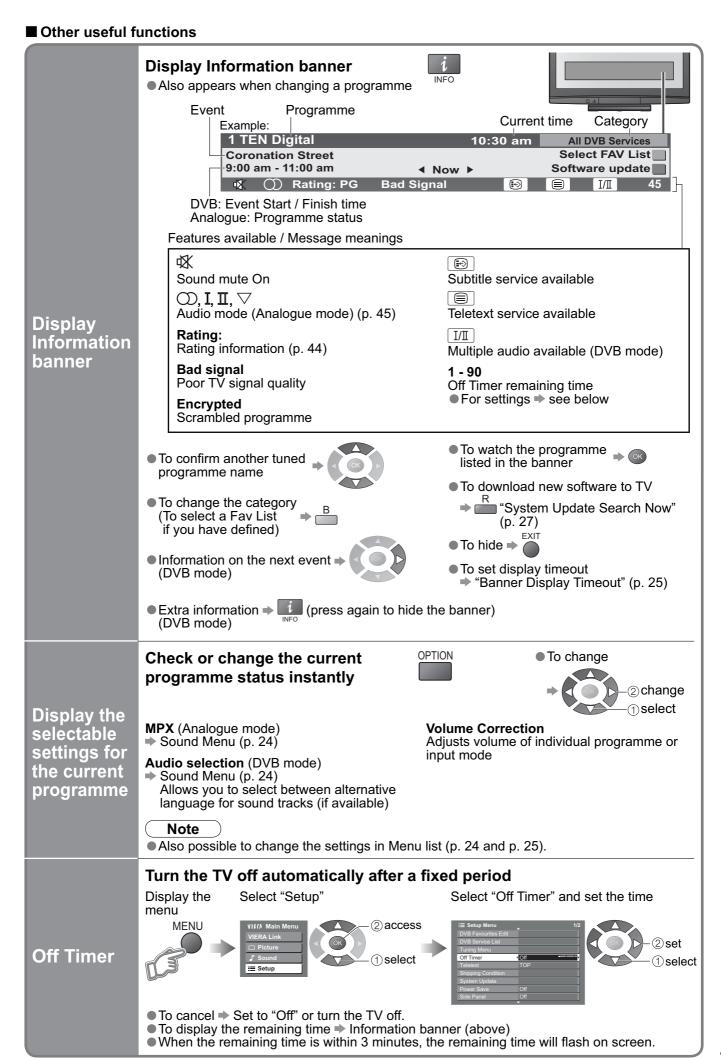
1 select programme 2 watch

Other useful functions

Hold	Freeze / unfreeze picture	HOLD
Display subtitles	Display / hide subtitles (if available) ■ Channel changing is also possible when this	STTL function is active.







Watching TV

■ Other useful functions

Change the aspect ratio



Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list

(



While the list is displayed, select the mode





Selection list

To change the mode using the ASPECT button only



(Press repeatedly until you reach the desired mode)



Directly displays the image at "16:9" without distortion (anamorphic).



Displays the image at the standard "14:9" without distortion.

Change aspect ratio



Displays a "4:3" image full-screen. Stretching is only noticeable at the left and right edges.



Displays the image at the standard "4:3" without distortion.

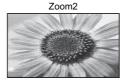


Displays a "4:3" image enlarged horizontally to fit the screen.

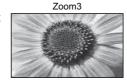
Only available in DVB mode or HD signal



Displays a "16:9" letterbox or "4:3" image without distortion.



Displays a "16:9" letterbox (anamorphic) image full-screen without distortion.



Displays a "2.35:1" letterbox (anamorphic) image full-screen without distortion. At "16:9", displays the image at its maximum (with slight enlargement).

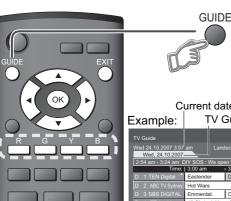
Note

- Only "16:9" and "4:3 Full" are available in DVB mode.
 Only "16:9" and "4:3" are available in PC mode.
- Not available in teletext mode.
- Aspect mode can be memorized separately for SD (Standard definition) and HD (High definition) signals. (except DVB mode)

Using TV Guide

Using TV Guide enables you to select programme easily, view event informations, etc. TV Guide—Electronic Programme Guide (EPG) provides an on-screen listing of the programmes currently broadcast and the future broadcasts over the next seven days (depending on the broadcasters).

Analogue programmes will be listed after DVB programmes. "D" means DVB programme and "A" means Analogue programme.

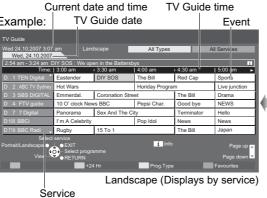


Panasonic

Select the event

GUIDE View TV Guide

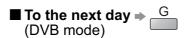
Each time pressed, the layout will be changed. (Landscape / Portrait)

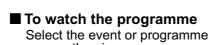




Portrait (Displays by time)

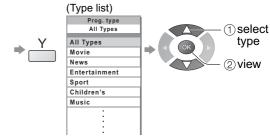
■ To the previous day ⇒ R (DVB mode)







■ To view a programme list of the selected type (DVB mode)



■ To view details of the event (DVB mode)



■ To view a programme list of the selected favourites list



To list favourite programmes

→ p. 29

Note

When this TV is turned on for the first time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.

Viewing Teletext

You can enjoy teletext broadcasting, including news, weather forecasts and subtitles, if this service is provided by the broadcasters.

What is FASTEXT mode?

In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is TOP mode? (in case of TOP text broadcasting)

TOP is a particular improvement of the standard teletext service that results in an easier search and effective guide.

- Fast overview of the teletext information available
- Easy to use step-by-step selection of the topical subject
- Page status information at the bottom of the screen

Available page up / down ⇒ R G

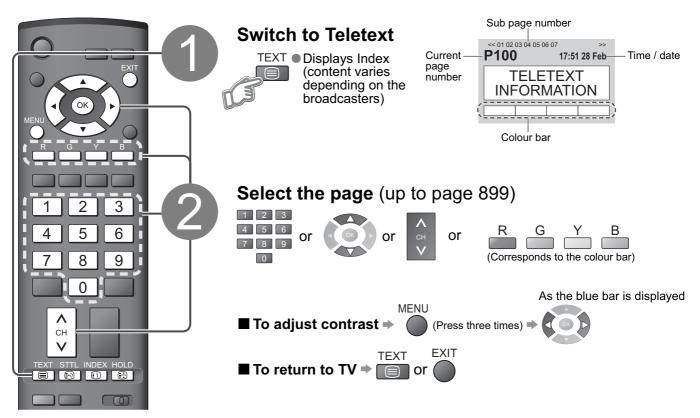
To select among subject blocks ⇒ B

To select next subject within the subject block (After the last subject, it moves to the next subject block.)

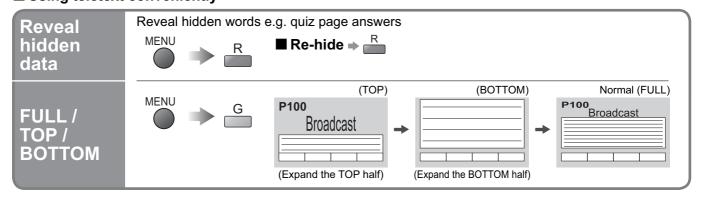
What is List mode?

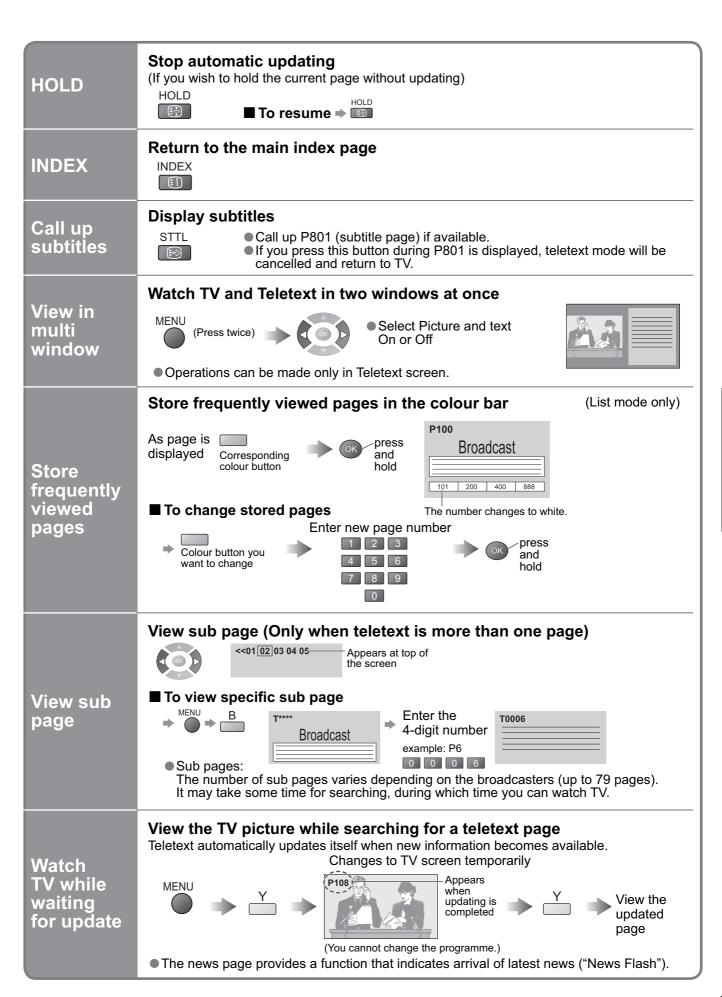
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 19)

■ To change mode ⇒ "Teletext" in Setup Menu (p. 25)



■ Using teletext conveniently



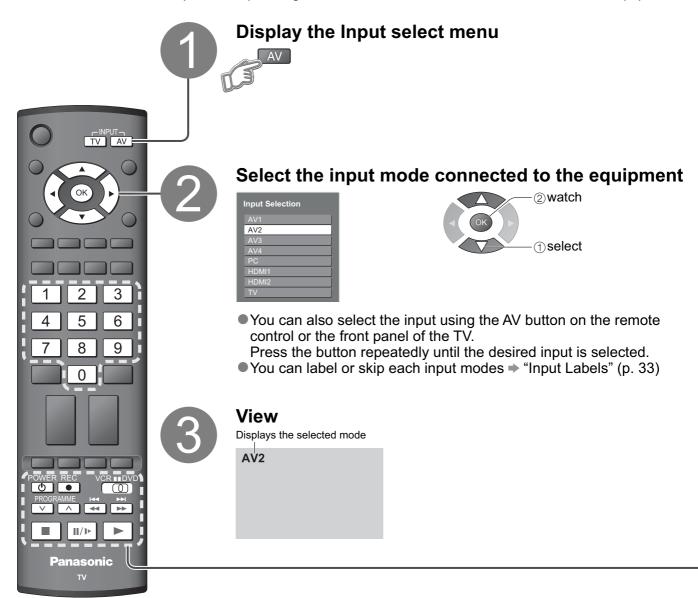


Watching Videos and DVDs

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch the input.

■To connect the equipment ⇒ p. 8-10

The Remote Control is capable of operating some functions of selected Panasonic external equipment.



■ To return to TV



Note

- If the external equipment has an aspect adjustment function, set to "16:9".
- For details, see the manual of the equipment or ask your local dealer.

Panasonic equipment connected to the TV can be directly operated with the remote control.

VCR III DVD	VCR / DVD switch* Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre
POWER	Standby Set to Standby mode / Turn on
	Play Playback videocassette / DVD
	Stop Stop the operations
144	Rewind / Skip / Search VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
H<	Fast-forward / Skip / Search VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
Ⅱ/▶	Pause Pause / Resume DVD: Press and hold to play at slow speed
PROGRAMME	Programme Up / Down Select programme
REC	Record Start recording

*Setting your remote control to operate Panasonic VCR, DVD, etc.

- ① Set the VCR / DVD switch to the appropriate position → VCR DVD
- 2 Press and hold during the following operations

Enter the appropriate code for the equipment 456 Press to be controlled, see table below



"VCR" position

Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position

Equipment	Code
DVD	70 (default)
Player home theatre	71

Note

- Confirm if the remote control works correctly after changing the code.
- The codes will be reset to default values if batteries are replaced.
 "DVD" means DVD player, DVD recorders and Recorder home theatre.
- Some operations may not be possible on some equipment models.

How to Use Menu Functions

Various menus allow you to make settings for the picture, sound, and other functions.

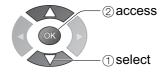


Display the menu

MENU Displays the functions that can be set (varies according to the input signal)

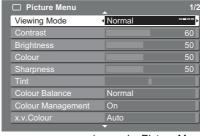
Select the menu





(example: Picture Menu)

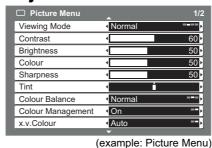
Select the item

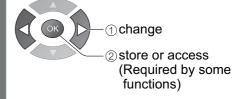




(example: Picture Menu)

Adjust or select





■ To reset the settings

 To reset the picture settings only "Reset Picture Defaults"

in Picture Menu (p. 24)

"Reset Sound Defaults"

To initialize all settings "Shipping Condition" in Setup Menu (p. 32)

in Sound Menu (p. 24)

To reset the sound settings only

■ To return to TV at any time



■ To return to the previous screen



■ To change menu pages

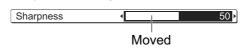


■ Choose from among alternatives

Number and positions of alternatives



■Adjust using the slide bar



Go to the next screen



Displays the next screen

■ Enter characters by free input menu

You can enter names or numbers freely for some items.

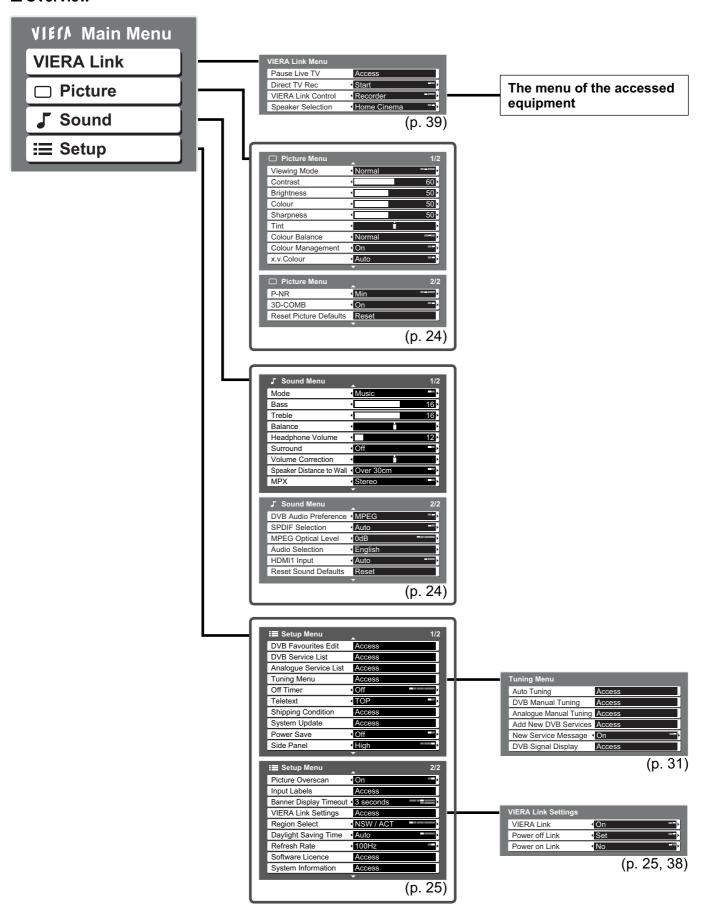








■ Overview



[•] Depending on the received signals, available items are varied.

How to Use Menu Functions

■Menu list

■ IVI e	nu list	
Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	Pause Live TV	Controls the connected equipment with VIERA Link function, and enables various
器	Direct TV Rec	convenient recording, playback, etc. (p. 39 - 41) You can also access VIERA Link Menu directly using the VIERA Link button on the
<u></u>	VIERA Link Control	remote control.
	Speaker Selection	Basic picture mode (Dynamic / Normal / Cinema / Eco)
	Viewing Mode	Dynamic: Provides enhanced picture contrast and sharpness when viewing in a bright room Normal: Recommended for viewing under normal ambient room lighting conditions Cinema: For watching movies in a darkened room producing a cinema-like picture Eco: Adjusts picture settings automatically dependent on ambient lighting conditions Set for each input signal
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste For NTSC or Component / HDMI input signal reception only
T	Colour Balance	Allows you to set the overall colour tone of the picture (Cool / Normal / Warm)
Ö	Colour Management	Automatically adjusts colours to vivid ones (Off / On)
Picture	x.v.Colour	Not valid on PC signal Increases the colour gradations (Off / Auto) This is effective when watching HD moving pictures with extended gamut (xvYCC) from external equipment.
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture (Off / Min / Mid / Max) Not valid on PC signal
	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to "On" to display sharper and more accurate colours (Off / On) For PAL or NTSC signal reception only Not valid on S-Video, Component, PC, HDMI and SD Card
	Reset Picture Defaults	Press the OK button to reset Viewing Mode on all inputs to default settings.
	Mode	Basic sound mode (Music / Speech)
	Bass	Increases or decreases level to enhance or minimise lower, deeper sound output
	Treble	Increases or decreases level to enhance or minimise sharper, higher sound output
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones Surround sound settings (Off / On)
	Surround	Provides a dynamic enhancer to simulate improved spatial effects
	Volume Correction	Adjusts volume of individual programme or input mode
	Speaker Distance	Adjusts the low frequency sound (Over 30cm / Up to 30cm) If the back space between the TV and wall is over 30 cm, "Over 30cm" is recommended.
	to Wall	• If the back space between the TV and wall is within 30 cm. "Up to 30cm" is recommended.
	MPX	Select stereo / monaural (Mono / Stereo) (p. 45) Normally: Stereo Stereo signal cannot be received: Mono M1 / M2: Available while mono signal is transmitted Analogue mode only
Sound	DVB Audio Preference	Selects the initial setting for Audio tracks (Dolby Digital / MPEG) If programme has both Dolby Digital and MPEG audio tracks, priority is given to what you select Dolby Digital:A method of coding digital signals developed by Dolby Laboratories. Apart from stereo (2ch) audio, these signals can also be multi-channel audio. MPEG:An audio compression method that compresses audio to small size without any considerable loss of audio quality. DVB mode only
	SPDIF Selection	Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal (Auto / PCM) Auto: Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM. PCM:Dolby Digital is output as PCM. MPEG is output as PCM. DVB mode only
	MPEG Optical Level	You can adjust the audio level of MPEG output from DIGITAL AUDIO OUT terminal as the initial setting OdB to -12dB in -2dB reductions DVB mode only
	Audio Selection	Selects the preferred language for DVB multi audio (depending on the broadcaster)
	HDMI1 Input	Select to fit the input signal (Auto / Digital / Analogue) (p. 35) Auto: Automatic detection of digital or analogue sound source Digital: HDMI cable connection Analogue: HDMI-DVI adapter cable connection HDMI input mode only HDMI2 terminal is for digital signal only
	Reset Sound Defaults	No setting for HDMI2 available Press the OK button to reset the present Sound Mode to the default settings

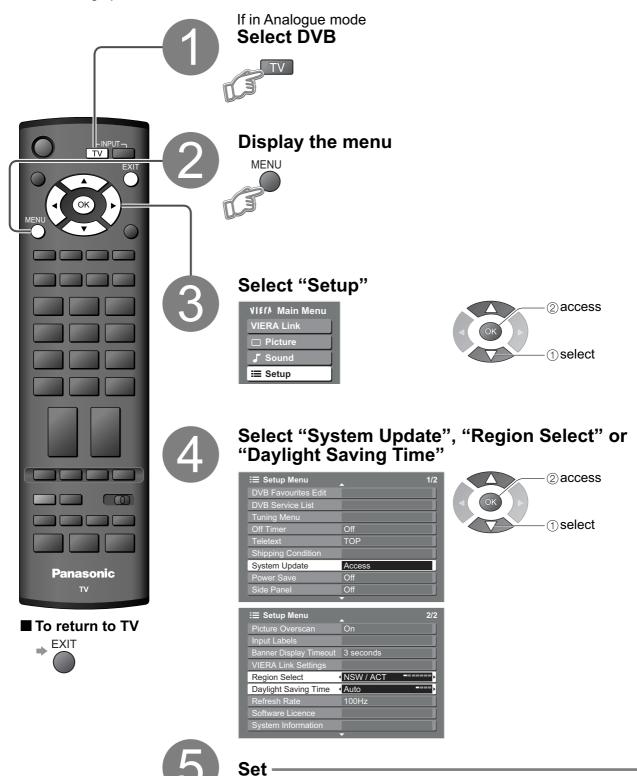
■ Menu list

■ Me	■Menu list			
Menu		ltem	Adjustments / Configurations (alternatives)	
	DVB Favourites Edit		Creates list of favourite programmes (p. 29)	
	DVB Service List		Skips the unwanted DVB programmes (p. 29)	
	Analogue Service List		Skips the unwanted Analogue programmes or edits Analogue programmes (p. 29)	
		Auto Tuning	Automatically sets the programmes received in the area (p. 31)	
	Tuning Menu	DVB Manual Tuning	Sets the DVB programmes manually (p. 31)	
		Analogue Manual Tuning	Sets the Analogue programmes manually (p. 31)	
	g Me	Add New DVB Services	Adds new DVB services (p. 31)	
	nu	New Service Message	Selects whether to give a notification message when a new DVB service is found (Off / On) (p. 31)	
		DVB Signal Display	Checks the DVB signal condition (p. 31)	
	Off Timer		Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)	
	Teletext		Teletext display mode (TOP (FASTEXT) / List) (p. 18)	
	Shipping Condition		Resets all settings, for example, when moving house (p. 32)	
	Sys	stem Update	Downloads new software to TV (p. 27)	
	Pov	wer Save	Reduces brightness of picture to economise on power consumption (Off / On)	
Setup	Side Panel		Increases the brightness of the side panel (Off / Low / Mid / High) The recommended setting is "High" to prevent panel "image retention"	
	Picture Overscan		Selects the screen area displaying the image (Off / On) On: Enlarged the image to hide the edge of the image. Off: Displayed the image in the original size. Set to "On" if noise is generated on the edge of the screen. This function is available when aspect is set to "16:9". This function can be memorized separately for "SD" (Standard definition) and HD (High definition) signals.	
	Input Labels		Labels or skips each input terminals (p. 33)	
	Banner Display Timeout		Sets how long the information banner (p. 15) stays on screen 0 (No display) to 10 sec. in 1-sec. increments	
	VIERA	VIERA Link	Sets to use VIERA Link functions (Off / On) (p. 38)	
	Link Settings	Power off Link	Sets to use Power off Link function (No / Set) (p. 38)	
		Power on Link	Sets to use Power on Link function (No / Set) (p. 38)	
	Region Select		Selects the region where you live to adjust the standard time (NSW/ACT / Victoria / Queensland / South Australia / Western Australia / Northern Territory / Tasmania) (p. 27)	
	Daylight Saving Time		Selects time offset from the standard time for Summer Time (Auto / Off / +1/2 Hr / +1 Hr) (p. 27) Set to "Auto" normally	
	Refresh Rate		Changes the image processing of the panel (depending on the input signal) (50Hz / 100Hz) Set to "100Hz" normally	
	Software Licence		Displays the software licence information	
	System Information		Displays the system information of this TV	
- A 1:00			d while DC DVI to HDMI adapter cable or SD Cord is used (5. 34.35 and 5. 37)	

A different menu will be displayed while PC, DVI to HDMI adapter cable or SD Card is used. (p. 34-35 and p. 37)
 Only available items can be selected.

DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.



26

Download new software to TV.

● For details ⇒ p. 44

If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set "Auto Update Search in Standby" to Off.

Select "Auto Update Search in Standby" and then set "On" or "Off"





On: Automatically performs a search in standby and downloads an update, if any software updates are available

System Update

software

system

Note

When the TV is switched to standby, there will be a clicking sound after a short delay. Similar clicking sounds will also occur at 3:00 AM and 5:00 AM (p. 44) when "Auto update Search in Standby" is set to "On". These sounds are normal.

■ To update immediately

Select

'System Update Search Now"



Searches for an update (for several mins.) and displays a corresponding message if any





Download may take for about 20 mins.

Note

 During downloading, the TV will display a blank screen for 40 to 50 seconds. Do not interrupt the TV during this procedure.

Adjust the standard time

Region Select

Select the region where you live to adjust the standard time.

The time contained in the broadcast signal is UTC (Universal Time coordinated) formally known as GMT (Greenwich Mean Time).

Region	Standard time	(During Summer Time)	
NSW / ACT	+10:00	+11:00	
Victoria	+10.00		
Queensland	+10:00		
South Australia	+9:30	+10:30	
Western Australia	+8:00	+9:00	
Northern Territory	+9:30		
Tasmania	+10:00	+11:00	
		(Racad on GMT)	

Adjust for **Summer Time**

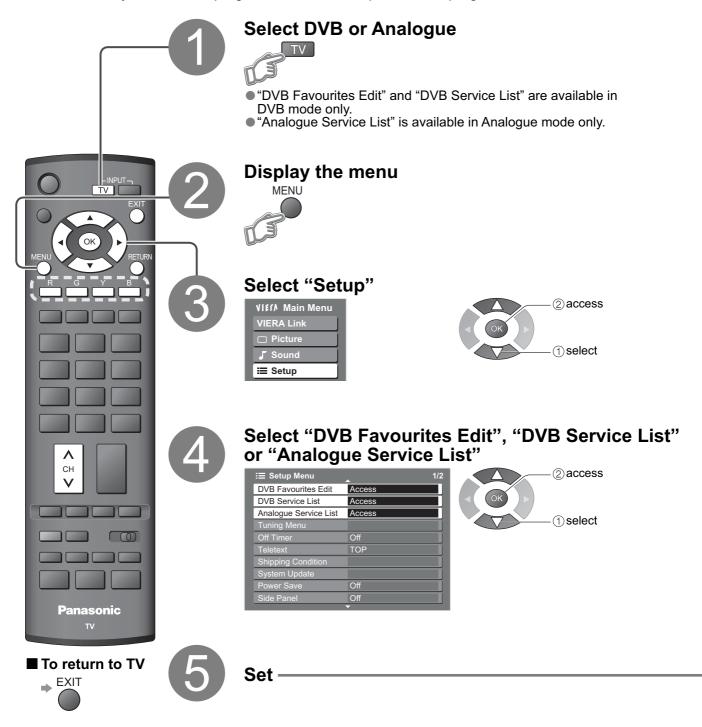
Daylight **Saving Time** Select time offset from the standard time for Summer Time.

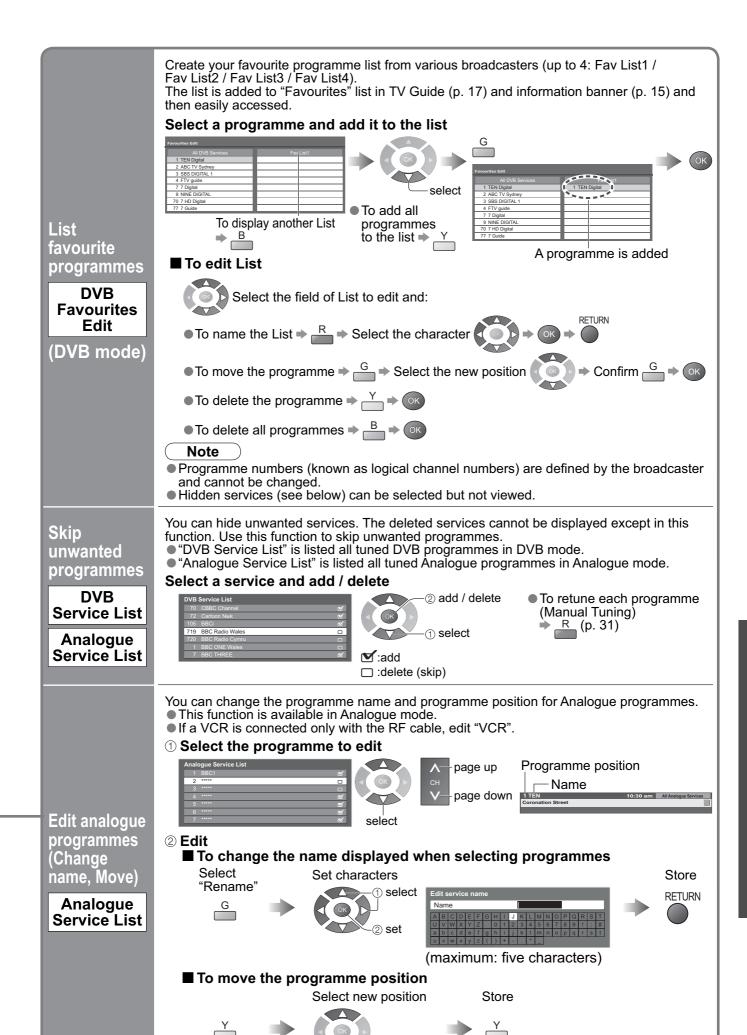
- Normally select "Auto".
- If there is a gap between displayed time and actual time, set this function.

+11.00			
(Based	on	GM	T)

Editing Programmes

You can make your favourite programme lists and skip unwanted programmes, etc.



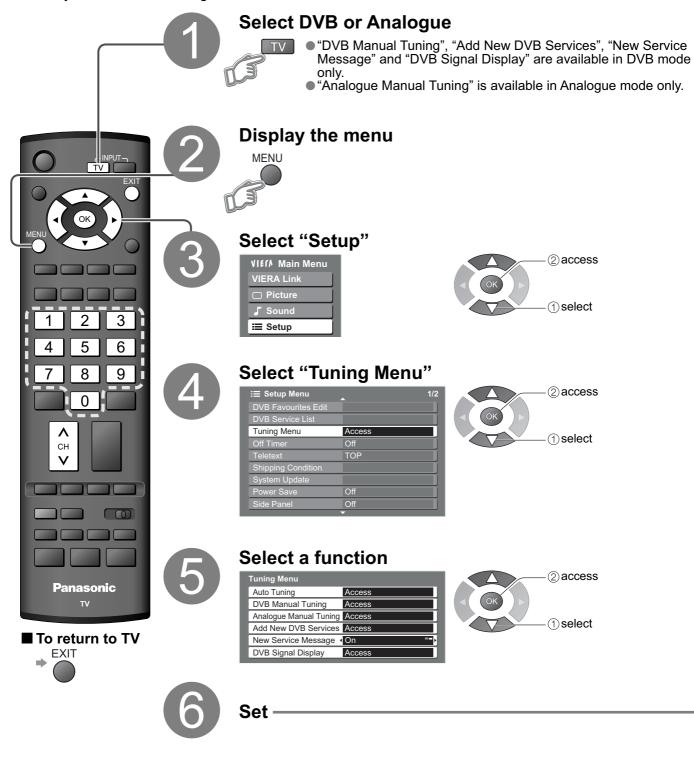


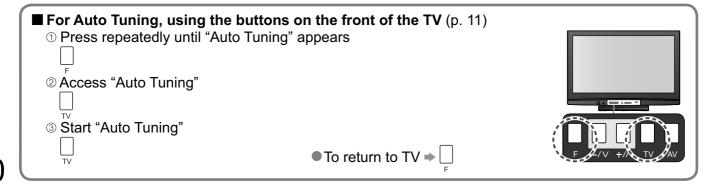
-select

29

Tuning Programmes

You can retune all the TV programmes when moving house or search for new services which may have recently started broadcasting.





Automatically retune all DVB or Analogue programmes received in the area.

- Only DVB programmes are retuned in DVB mode.
- Only Analogue programmes are retuned in Analogue mode.

Set all DVB or Analogue programmes automatically

Auto Tuning

Settings are made automatically



All the previous tuning settings are erased.

Start Auto Tuning

All digital tuning data will be erased

Auto Tuning

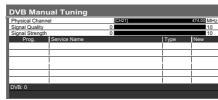
- When the operation is completed, the programme at programme position "1" will be
- If tuning has not been done completely "DVB Manual Tuning", "Analogue Manual Tuning"

Set DVB programme manually

DVB Manual Tuning

Normally use "Auto Tuning" or "Add New DVB Services" to add DVB programmes to your service list.

If tuning has not been done completely or for adjusting the direction of the aerial, use this function.



-(1) select channel ② adjust frequency (set where the level of "Signal Quality" becomes the maximum)

All services found will be added to the **DVB Service List.**

Set Analogue programme manually

Analogue Manual Tuning Set Analogue programme manually after Auto Tuning.

If a VCR is connected only with the RF cable, select programme position "0".



Select the programme position



Select the programme



Search and store



Add DVB programme automatically

Add New **DVB Services** Any new services found will be added to the DVB Service List.



The new service is added with the current settings saved as they are.

Display a notification message

New Service Message

Selects whether to give a notification message when a new DVB service is found. (Off / On)

Press OK to add new service Press EXIT to ignore.

Selects a programme and checks the DVB signal condition.

To change the programme



DVB Signal Display



DVB Signal Display			
Service Name	[CH53] 7 7 Digita		
Signal Quality	0	10	
Signal Strength	0	10	

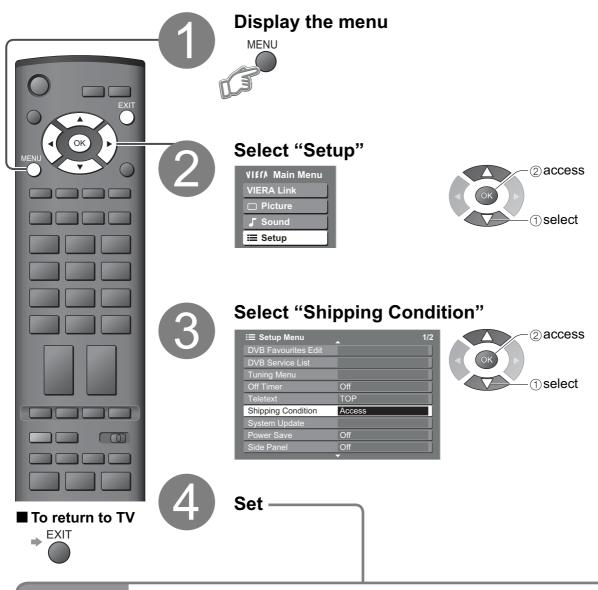
A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows:

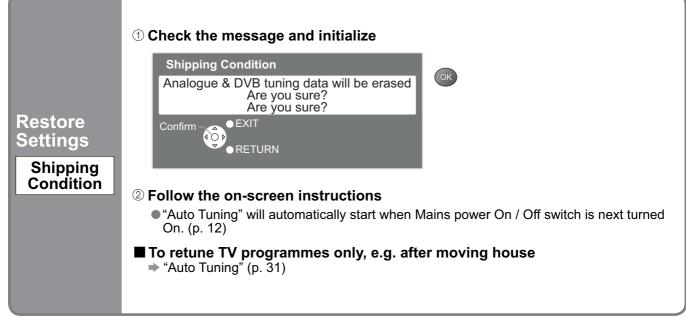
Signal Quality:

- Green bar → GoodYellow bar → Poor
- Red bar ⇒ Bad (Check the aerial)

Restore Settings

Resets the TV to its original condition, i.e. no programmes tuned in. All settings (programmes, picture, sound quality, etc.) are reset.

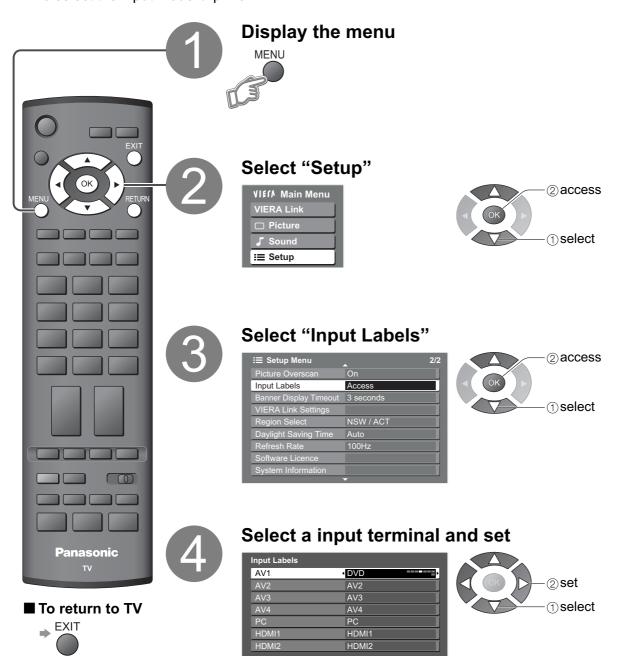




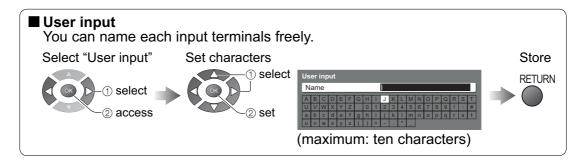
Input Labels

For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment.

■To select the input mode ⇒ p. 20

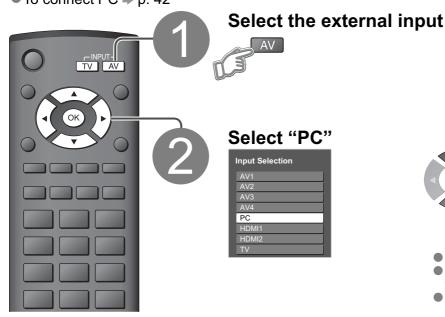


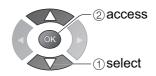
The labels you set will be displayed in "Input Selection" menu (p. 20) or banner.
• If "Skip" is selected, you cannot select the mode.



Displaying PC Screen on TV

The screen of the PC connected to the TV can be displayed on the TV. You can also listen to PC sound with the audio cable connected. ■To connect PC ⇒ p. 42





- Corresponding signals ⇒ p. 46
 If "H-freq." or "V-freq." is shown in red, the signals may not be supported.
- PC Audio input is via AV2 Audio connection. (p. 43)

- To return to TV
 - **⇒** TV
- PC menu setting (changed as desired)
 - To make settings → "How to Use Menu Functions" 1 to 4 (p. 22)

Menu	lt	em	Adjustments / Configurations (options)
	Advanced PC Settings	W/B High R	White balance of bright red area
		W/B High B	White balance of bright blue area
Picture		W/B Low R	White balance of dark red area repeatedly adjusted
芒		W/B Low B	White balance of dark blue area
re		Gamma	(S Curve / 2.0 / 2.2 / 2.5)
		Reset PC Settings	Press the OK button to reset to the default Picture settings
		Input Resolution	Switches to a wide view VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) Options change depending on signals
		Clock	Set to the minimum level if noise occurs
S		H-pos	Adjusts horizontal position
Setup	PC Setup	V-pos	Adjusts vertical position
		Clock Phase	Eliminates flicker and distortion Adjust after Clock adjustment Set to the minimum level if noise occurs
		Sync	PC sync signal type (H & V / SOG) • H & V: Horizontal and Vertical sync from your PC (Most common sync format) SOG: Sync on Green sync from your PC
		Reset PC Settings	Press the OK button to reset to the default Setup settings

HDMI Functions

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

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a set top box, a DVD player or a game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

About connections, see "External Equipment" (p. 42).

Note

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- Audio settings can be made on the "HDMI1 Input" menu screen. (p. 24)
- Applicable audio signal sampling frequencies (2ch L.PCM): 48 kHz, 44.1 kHz, 32 kHz
- HDMI2 terminal is for digital audio signal only.
- Use with a PC is not guaranteed. Only HDMl video formats in page 46 HDMl table are applicable.
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- These HDMI connectors are "type A".
- These HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- An equipment having no digital output terminal may be connected to the input terminal of either "COMPONENT", "S-VIDEO", or "VIDEO" to receive analogue signals.
- The HDMI input terminal can be used with only the following image signals:
- 480i, 480p, 576i, 576p, 720p, 1080i and 1080p. Match the output setting of the digital equipment.

 To represent the applicable HDMI signals, see p. 46.

■ DVI connection

- If the external equipment has only a DVI output, connect to the HDMI1 terminal via a DVI to HDMI adapter
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal (HDMI1: use AV2 IN AUDIO terminals).

■ DVI Position Settings

If the picture position is not fit to the screen during the DVI connection, adjust the position on "DVI Position Settings" in Setup Menu. The settings are memorized for each HDMI terminals and input signals. To make settings → "How to Use Menu Functions" 1 to 4 (p. 22)

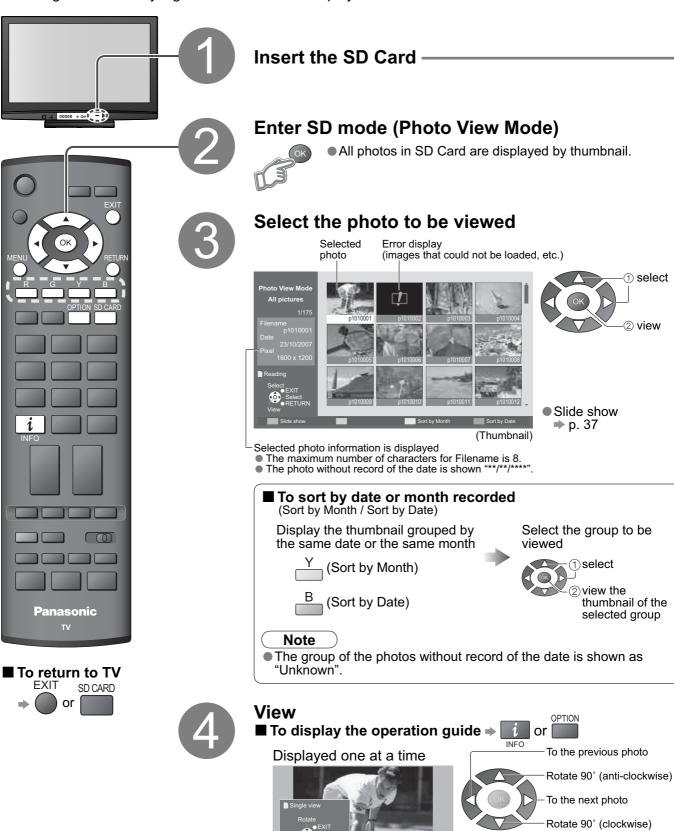
Menu	Item			Adjustments
60		H-pos	Adjusts horizontal position	
Setup	DVI Position Settings	V-pos	Adjusts vertical position	
		Reset DVI Position Settings	Press the OK button to reset	to the default Setup settings

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

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

Viewing from SD Card

Still images recorded by digital cameras will be displayed.



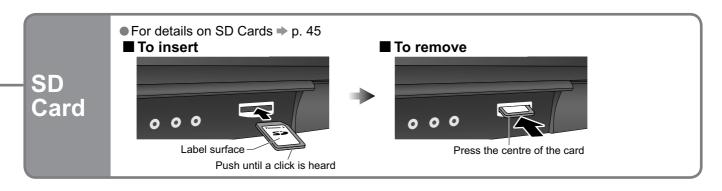
Caution

Operation guide

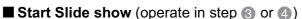
• During the operation, no signals are output from the monitor output terminals.

To return to thumbnail

(Photos)



Slide show



① Select the photo for the first view

2 Start Slide show









To return to Single view ⇒ G



Note

- Slide show is done within the same group if started from the view of the group.
- Slide show settings (operate in step ③ or ④)



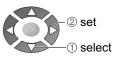
Viewing Setup

"Picture Menu" (p. 24)

(1) select



3 Select the items and set



Menu	Item	n Adjustments / Configurations (alternatives)			
Viev Se	Interval	Select slide show interval (5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)			
	Repeat	Slide show repeat (Off / On)			

Cautions in handling SD Card

- Do not remove the card while the TV is accessing data (this can damage card or TV).
- Do not touch the pins 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 TV. (Panasonic is not liable for any deterioration or damage of recorded data.)

On screen messages					
Message Meaning / Action					
Cannot read file	 The file is broken or unreadable. The TV does not support the format. (For the applicable formats and data, see p. 45.) 				
Is SD Card in?	▶ • Insert a SD Card.				
No valid file to play	▶ • The card has no data.				
Over 9999 pictures found	▶ ● Maximum valid number of photos is 9,999.				

VIERA Link "HDAVI Control™"∗

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 3" function.

Connections to the equipment (DIGA Recorder, HD Video Camera, Player theatre, Amplifier, etc.) with HDMI cable allow you to interface them automatically.

These features are limited to models incorporating "HDAVI Control" and "VIERA Link"

- Some functions are not available depending on the equipment's version of HDAVI Control. Please confirm the connected equipment's version of HDAVI Control.
- VIERA Link "HDAVI Control", based on the control functions provided by HDMI which is an industry standard known as HDMI CEC (Consumer Electronics Control), is a unique function that we have developed and added. As such, its operation with other manufacturers' equipment that supports HDMI CEC cannot be guaranteed.

Please refer to individual manuals for other manufacturers' equipment supporting VIERA Link function. About applicable Panasonic equipment, consult your local Panasonic dealer.

■ Summary of VIERA Link functions

- Easy playback
- Power on link
- Power off link

Speaker control

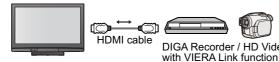
- Control the menu of the connected equipment by VIERA remote control
- (Available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.)
- Pause Live TV programme

Direct TV Recording

(Available with the equipment which has "HDAVI Control 3" function.)

■ Connections

Read the manual of the equipment, too.



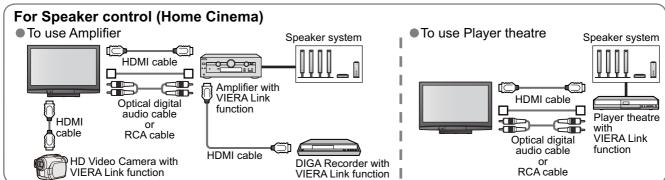


HDMI cable

Use fully wired HDMI compliant cable.

Non-HDMI-compliant cables cannot be utilized. Recommended Panasonic's HDMI cable part number:

- RP-CDHG10 (1.0 m)
- RP-CDHG30 (3.0 m)
- RP-CDHG15 (1.5 m)
- RP-CDHG50 (5.0 m)
- RP-CDHG20 (2.0 m)
- Connect the equipment supporting VIERA Link to the TV's HDMI1 or HDMI2 terminals via fully wired HDMI cables.



Connect the equipment supporting VIERA Link.

set to Standby.

- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.
- Set VIERA Link On in Setup Menu ⇒ "VIERA Link" (p. 22 23, 25)
- Set up the TV ⇒ After connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1 or HDMI2 (p. 20), and make sure that an image is displayed correctly. This setup should be done each time when the following conditions occur:
 - for the first time / when adding or reconnecting equipment / when changing setup

■ Features available

Automatic Input switching - When the connected equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is not returned. playback Set Power on Link "Set" in Setup Menu to use this function "Power on Link" (p. 22 - 23, 25) Power on When the connected equipment starts playback or direct navigator / function menu link for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.) Set Power off Link "Set" in Setup Menu to use this function "Power off Link" (p. 22 - 23, 25) Power off When TV is set to Standby mode, the connected equipment is also automatically

This function will work even if the TV enters standby mode automatically by Off Timer

link

function or auto power standby function.

■ Features available (Using VIERA Link Menu)

You can pause the live TV programme and resume later.

- This function is available with DIGA Recorder which has HDD and "HDAVI Control 3"
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 38)
- Available conditions:

 - when watching TV programmewhen watching the input from DIGA Recorder

Access and pause the live TV programme





-1 Display "VIERA Link Menu"



② Select "Pause Live TV" and pause



- Live TV programme is recorded on HDD from where it was
- **To resume** (stop pause) Select "Pause Live TV" and access
 - About the operations after resuming, read the manual of the equipment.



■ To return to Live TV

(cancel pause or resumed playback)

- → (change the input mode)
- If you cancel pause or resumed playback, the recorded programme will be deleted from HDD.

Recording the current programme in DIGA Recorder immediately.

- This function is available with DIGA Recorder which has "HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 38)
- Available conditions:
 - · when watching TV programme

The recording is performed by using the tuner of DIGA Recorder. Changing programme, input mode or turning off the TV is available during the recording.

Direct TV Recording -What you see is What you record (HDAVI Control 3)

Direct TV Rec



Display "VIERA Link Menu"



Select "Direct TV Rec" and start recording



■ To stop recording

Select "Stop" in "Direct TV Rec" and access





1) select

VIERA Link "HDAVI Control™"

■ Features available (Using VIERA Link Menu)

You can control some functions of the connected equipment with this TV remote control (point the remote control at the TV's signal receiver).

- This function is available with the equipment which has "HDAVI Control 2" or 'HDAVI Control 3" function.
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 38)

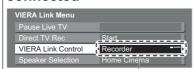
Access and operate the menu of the equipment



■ If you access

When the equipment with "HDAVI Control" function is connected

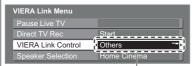
the invalid equipment



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed. But you cannot access it. Use its own remote control to operate the equipment.

When the equipment of other types or manufacturers is connected



Others

"Others" is displayed. You cannot access it. Use its own remote control to operate the equipment.

-1 Display "VIERA Link Menu"



② Select "VIERA Link Control"





3 Select the equipment you want to access

"Home Cinema" means Player theatre, Recorder theatre and Amplifier.



Recorder / Player / Home Cinema / Video Camera

The type of the connected equipment is displayed.

Select the type of the equipment and access.



The menu of the accessed equipment (Input mode will be changed automatically)

4 Operate the menu of the equipment Available VIERA remote control buttons (depending on the connected equipment):

` .	,
< OK >	Move the cursor / select the menu
QIC D	Move the cursor / access / adjust
OK	Store / set / access
RETURN	Return to the previous menu
EXIT	Exit the menu
OPTION	Display the operation guide for the equipment / The same functions with the OPTION button of the equipment
R G Y B	Access when the key words are displayed on colour bar

About the operations for the equipment, read the manual of the equipment.

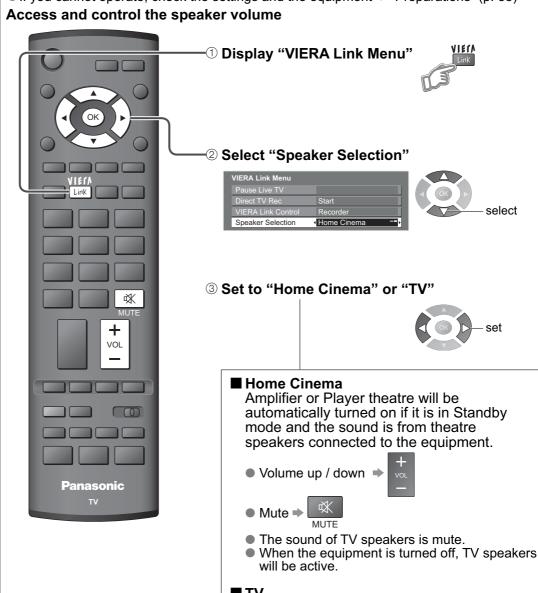
Control the menu of the connected equipment by VIERA remote control HDAVI Control 2 HDAVI Control 3

VIERA Link Control

■ Features available (Using VIERA Link Menu)

You can control the theatre speaker with this TV remote control (point the remote control at the TV's signal receiver).

- This function is available with the Amplifier or Player theatre which has "HDAVI Control" function.
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 38)



TV speakers are active.

Note

Speaker control

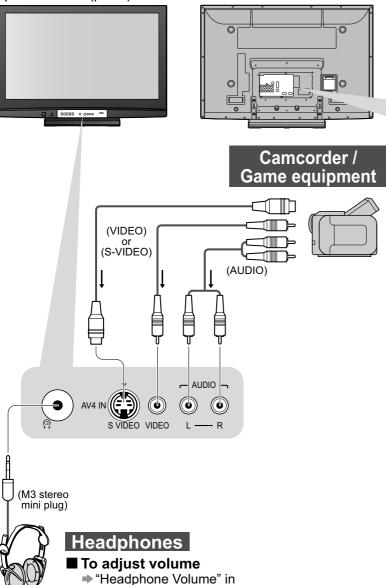
Speaker

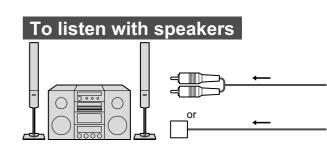
Selection

- This function may not work properly depending on the connected equipment.
- 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 or Player theatre. Read the manual of the equipment.
- About HDMI cable for connecting Panasonic HD Video Camera, read the manual of the equipment.
- If more than one equipment of the same type are connected to the TV by HDMI cables, for example two DIGA Recorders to HDMI1 and HDMI2, VIERA Link will only be available for the lower terminal number, in this case HDMI1.
- "HDAVI Control 3" is the newest standard (current as of December, 2007) for HDAVI Control compatible equipment. This standard is compatible with conventional HDAVI equipment.
- To confirm this TV's version of HDAVI Control ⇒ "System Information" (p. 25)

External Equipment

These diagrams show our recommendations for how to connect the TV to your various equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 50).



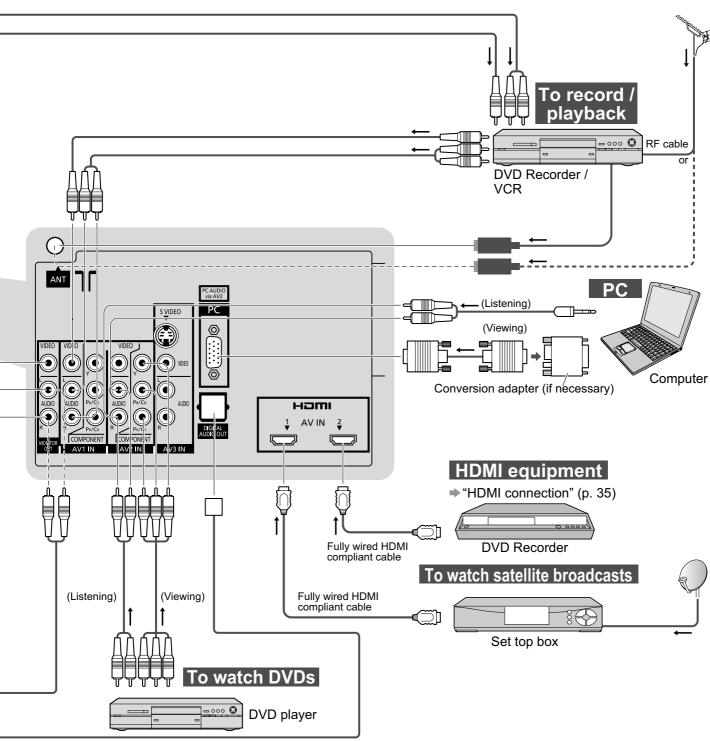


Amplifier with speaker system

■Types of connectable equipment to each terminal

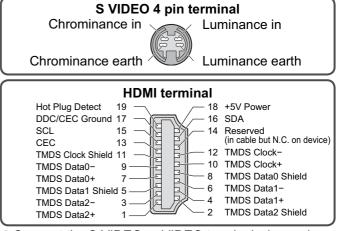
the Sound Menu (p. 24)

Terminal Recording / Playback (equipment)	AV1 IN VOCCO O O O NOCO NOCO	AV2 IN VEED O O ACC PROD R PROD R PROD	AV3 IN S VECTO VECTO VECTO ALONO SI	AV4 IN (Front of TV) AUDIO AUDIO SVIDEO VIDEO L — R	
To record / playback videocassettes / DVDs (VCR / DVD recorder)	\circ	0	0	0	
To watch DVDs (DVD player)	\circ	0	0	0	
To watch camcorder images (Video camera)	0	0	0	0	
To watch satellite broadcasts (Set top box)	0	0	0	0	
To play games (Game equipment)	Ō	Ō	Ō	Ō	
To use amplifier with speaker system					
VIERA Link					



Optical digital audio cable

MONITOR OUT	DIGITAL AUDIO OUT	IMGH	
R		1	2
0			
		0	0
		\circ	0
		0	0
0	0		
		0	0



- Connect the S VIDEO or VIDEO terminal when using AV3 / AV4 IN terminals.
- Connect the COMPONENT or VIDEO terminal when using AV1 / AV2 IN terminals.

Technical Information

Programme Allocation (Analogue mode)

CH Display / Receive Programme	CH Display / Receive Programme	CH Display / Receive Programme
CH 0	S _. 6	СН 10
CH 5	S 10	CH 12
S ,2	CH 6	S 11
S 5	CH 9	S 44
011.54	011.04	CH 20
CH 5A	CH 9A	CH 75

Rating (DVB mode)

Rating	Meaning	Rating	Meaning	
- Not classified		M	Mature	
P Pre school		MA 15+	Mature Adult 15+	
С	Children	AV 15+	Adult strong Violence 15+	
G	General	R	Restricted 18+	
PG	Parental Guidance recommended			

Updating the software system (DVB mode)

Update system software to ensure that you have latest version software.

If there is an update available, a notification banner is displayed when the service has the update information.

■ To download new software, press "OK" → Downloading (approx. 20 mins.)

If you choose not to download, press "EXIT".

■ To update automatically

Set "Auto Update Search in Standby" to "On" (p. 27)

If there is a new version software being broadcast, the TV will download this automatically.

The automatic updating sequence is carried out at 3:00 AM and 5:00 AM every morning under the following condition.

Standby (TV turned Off with the remote control)

■ To update manually

Perform "System Update Search Now" (p. 27)

If there is an update available, a notification banner is displayed.

To download new software, press "OK" → Downloading (approx. 20 mins.) If you choose not to download, press "EXIT".

- During downloading, do not turn Off the TV or touch any buttons. (The TV is automatically activated after downloading is completed.)
- When the TV is switched to standby, there will be a clicking sound after a short delay. Similar clicking sounds will also occur at 3:00 AM and 5:00 AM when "Auto update Search in Standby" (p. 27) is set to "On". These sounds are normal

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 (Sub-sampling 4:4:4, 4:2:2 or 4:2:0)

Max. number of files: 9,999

Image resolution : 160 × 120 to 10,000,000

Transfer rate : 1.6 MB/Sec

- Compliant card type (maximum capacity): SDHC Card (16 GB), SD Card (2 GB), Multi Media Card (128 MB), miniSD Card (1 GB) (requiring miniSD adapter)
- If miniSD Card is used, insert / remove it together with the adapter.
- Check the latest information on the card type at the following website. (English only)

http://panasonic.co.jp/pavc/global/cs/

*DCF (Design rule for camera file system): Unified standard established by Japan Electronics and Information Technology Industries Association (JEITA).

Note

- A JPEG image modified with a PC may not be displayed.
- Images imported from a PC must be compatible with EXIF (Exchangeable Image File) 2.0, 2.1, and 2.2.
- Partly degraded files might be displayed at a reduced resolution.
- Only ".JPG" extension can be read by this TV.
- The folder and file names may be different depending on the digital camera used.
- Do not use two-byte characters or other special codes.
- The card may become unusable with this TV if the file or folder names are changed.

Stereo / Bilingual Sound Selection (Analogue mode)

When you receive the stereo / bilingual sound system, sound output modes can be selected by "MPX" in the Sound Menu (p. 24).

Audio Signal	STEREO	MAIN I	SUB II	MONO
Mode Indicator	0	I	п	∇

NICAMUsed in New Zealand, Singapore, Hong Kong etc.

Type of broadcast	Regular broadcast (Standard Audio)	Regular + NICAM MONO I (MAIN I)	NICAM STEREO	NICAM DUAL MONO (MAIN I / SUB II)	
Mode Indicator	No Indicator → ▽	I → ▽	$\bigcirc \longrightarrow \triangledown$	ĭ → I	

A2(German)Used in Australia, Malaysia etc.

Type of broadcast	Regular broadcast (Standard Audio)	BILINGUAL or DUAL MONO: MAIN I / SUB II	STEREO
Mode Indicator	No Indicator $\longrightarrow \nabla$	I I	\bigcirc \leftarrow \lor

- If the stereo signal is poor or the receiving conditions are not optimum or if STEREO:MONO automatic switching occurs, it is recommended you switch from STEREO to MONO.
- Even when the contents of the receiving signal undergo changes, selection mode is kept intact.
- When the receiving conditions deteriorate, listening will be easier if the mode is set to the MONO position.
- DUAL, also known as DUAL MONO or as BILINGUAL is not currently transmitted in some countries.

Technical Information

PC connection

A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

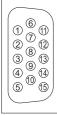
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

- Some PC models cannot be connected to this TV.
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals, see below.
- Max. display resolution

Assest	4:3	1,440 × 1,080 pixels
Aspect	16:9	1,920 × 1,080 pixels

D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	R	6	GND (Ground)	(1)	NC (not connected)
2	G	7	GND (Ground)	12	NC (not connected)
3	В	8	GND (Ground)	13	HD
4	NC (not connected)	9	NC (not connected)	14)	VD
(5)	GND (Ground)	10	GND (Ground)	15	NC (not connected)

Input signal that can be displayed

COMPONENT (Y, PB/CB, PR/CR), HDMI

* Mark: Applicable input signal

a						
Signal name	COMPONENT	HDMI				
480i (60 Hz)	*	*				
480p (60 Hz)	*	*				
576i (50 Hz)	*	*				
576p (50 Hz)	*	*				
720p (60 Hz)	*	*				
720p (50 Hz)	*	*				
1,080i (60 Hz)	*	*				
1,080i (50 Hz)	*	*				
1,080p (60 Hz)		*				
1,080p (50 Hz)		*				
1,080p (24 Hz)		*				

PC (D-sub 15P)

1 3 (D-3db 131)					
Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)			
640 × 400 @70 Hz	31.47	70.07			
640 × 480 @60 Hz	31.47	59.94			
640 × 480 @75 Hz	37.50	75.00			
800 × 600 @60 Hz	37.88	60.32			
800 × 600 @75 Hz	46.88	75.00			
800 × 600 @85 Hz	53.67	85.06			
852 × 480 @60 Hz	31.44	59.89			
1,024 × 768 @60 Hz	48.36	60.00			
<u>1,024 × 768 @70 Hz</u>	56.48	70.07			
1,024 × 768 @75 Hz	60.02	75.03			
1,024 × 768 @85 Hz	68.68	85.00			
1,280 × 1,024 @60 Hz	63.98	60.02			
1,366 × 768 @60 Hz	48.39	60.04			
Macintosh13" (640 × 480)	35.00	66.67			
Macintosh16" (832 × 624)	49.73	74.55			
Macintosh21" (1,152 × 870)	68.68	75.06			

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- Applicable input signal for PC is basically compatible to VÉSA standard timing.
- PC signal is magnified or compressed for display, so that it may not be possible to show fine detail with sufficient clarity.

FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem. If the problem still persists, please contact your local Panasonic dealer for assistance.

White spots or shadow images (noise)





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

Neither image nor sound is produced

- Is the TV in "AV mode"?
- Is the mains lead plugged into the socket outlet?
- Is the TV turned On?
- Check Picture Menu (p. 24) and volume.

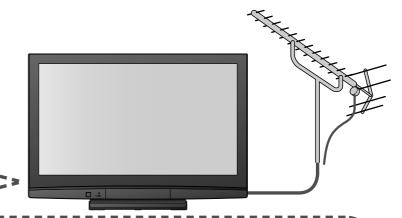
An error message appears

- Follow the message's instructions.
- If the problem persists, contact the authorized Service Centre.

"VIERA Link" function does not work and an error message appears

- Confirm the connection.
- Turn the connected equipment on and then switch the TV on. (p. 38)

or sound is distorted



Contrast is reduced

- Contrast is lowered in the following conditions without any user operation for a few minutes:
- no signal in DVB or AV mode
- selected invalid programme
- selected radio service
- displayed menu
- Thumbnail or still picture in SD Card mode

Pixel Statement

• An image on a LCD or Plasma TV screen is created by many small groups of dots known as pixels (which is similar to the image in a newspaper). It also naturally follows that higher panel resolutions contain more pixels. To create a colour image, each pixel consists of three tiny coloured dots (known as sub-pixels), one each of red, green and blue. Each one of these dots is precisely controlled by the electronics of the TV to produce the picture. Whilst Panasonic maintains the highest standards in manufacturing technology and processes in the construction

manufacturing technology and processes in the construction of these panels, there are a number of allowable pixel/sub-pixel failures that still allow the panel to be defined as a good panel. It is not possible to guarantee absolutely no pixel loss.

Set "MPX" (p. 24) in the Sound Menu to "Mono".

Problem Actions Set "P-NR" in the Picture Menu (to remove noise). (p. 24) Chaotic image, noisy Check nearby electrical products (car, motorcycle, fluorescent Is "Colour" or "Contrast" in the Picture Menu set to the minimum? No image can be displayed (p. 24) Blurry or distorted image Reset programme. (p. 31) (no sound or low volume) Turn off the TV with Mains power On / Off switch, then turn it on Unusual image is displayed again. "Shop" was selected in "Auto Tuning" (p. 12).Reset settings in "Shipping Condition" (p. 32), then select "Home" "Shop" appears on screen at switch on in "Auto Tuning" (p. 12). ■ Is "Sound mute" active? (p. 11) No sound is produced Is the volume set to the minimum? Sound level is low Sound signal reception may be deteriorated.

FAQS

Problem

Actions

Sound is unusual



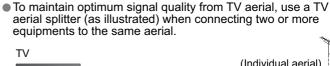
- Set the sound setting of the connected equipment to "2ch L.PCM".
- Check the "HDMI1 Input" setting in the Sound Menu. (p. 24)
- If digital sound connection has a problem, select analogue sound connection. (p. 35)

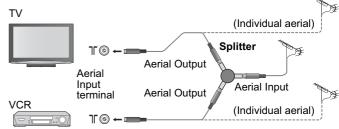
Pictures from external equipment are unusual when the equipment is connected via HDMI



- Is the HDMI cable connected properly? (p. 42)
- Turn Off the TV and equipment, then turn them On again.
- Check an input signal from the equipment. (p. 46)
- Use an equipment compliant with EIA/CEA-861/861B.
- Digital TV reception technology requires high quality, robust DTV signals which in some domestic aerial installations, may be relatively poor despite good analogue reception.

Aerial connection when using DTV and VCR / DVD Recorder





After DVB Auto Tuning only some or no DVB services are found

Check to ensure your area is covered by DVB transmissions.

 Check that the aerial and antenna cable are designed for DVB. For your safety, the aerial and cable should be inspected / installed by a licenced installer that should comply with Australian Standard AS1417.1.

Note: If you live within 5-10 Km of DVB transmission towers, a combined VHF / UHF aerial should be adequate. Outside this area, separate VHF and UHF aerials provide superior reception performance.

If you live in a unit or apartment, check to ensure the Master Antenna TV (MATV) system is designed for analogue and DVB-T reception. Please consult your body corporate.

Picture regularly breaks up on some programmes, or "No Signal" message

Check "Signal Display". (p. 31)If "Signal Quality" or "Signal Strength" are displayed in red or constantly changing, check aerial.

If problem persists consult your local TV aerial installer.

Check that the aerial and antenna cable are designed for DVB. For your safety, the aerial and cable should be inspected / installed by a licenced installer that should comply with Australian Standard AS1417.1.

Interference (known as impulse noise) from household appliances such as light switches, fridges etc may cause picture break up and / or audio distortion. Use high quality quad shielded coaxial cable fly lead between TV and antenna wall socket to minimise impulse noise pickup. If problem persists consult your local TV aerial installer.

 When "No Signal" message is displayed check TV aerial connection.
 The received signal may be too weak to allow the TV to reliably lock to the desired "No Signal" programme to generate a stable picture. Repeat the tuning procedure (p. 31). If problem persists consult your local TV aerial installer.

Picture very infrequently breaks up on some or all programmes



- Electrical atmospheric interference caused by local or distant lighting storms or heavy rain with wind in "leafy" locations may cause pictures to break up and audio to mute or distort momentarily.
- Impulse noise interference from an infrequently used electrical appliance, or a passing vehicle or lawn mower with a "noisy" ignition system.

	Problem	Actions
	TV takes so long to turn on	 Like your computer, the TV has to run a number of diagnostic and software checks before it can display any programmes.
	The programme cannot be changed	● Is the TV in Teletext mode? (p. 18)
Other	The programme cannot be selected	● Is the programme skipped? (p. 29)
	TV goes into "Standby mode"	 Off Timer function is activated. (p. 25) The TV enters "Standby mode" about 30 mins. after analogue broadcasting ends.
	The remote control does not work	Are the batteries installed correctly? (p. 6)Has the TV been switched On?

Licence

- DVB is a trademark of the DVB Digital Video Broadcasting Project (1991 to 1996).
- VGA is a trademark of International Business Machines Corporation.
- Macintosh is a registered trademark of Apple Inc., USA.
- S-VGA is a registered trademark of the Video Electronics Standard Association.
 Even if no special notation has been made of company or product trademarks, these trademarks have been fully respected.
- SDHC Logo is a trademark.
- HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- HDAVI Control™ is a trademark of Panasonic Corporation.
- Manufactured under license from Dolby Laboratories.
 Dolby and the double-D symbol are trademarks of Dolby Laboratories.



Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996) TH-42PZ80A Declaration of Conformity No. 5726, 18 June 2008 TH-50PZ80A Declaration of Conformity No. 5725, 18 June 2008

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

Regular care: Gently wipe the surface clean of dirt by using a soft cloth.

Major contamination: Wipe the surface clean using a soft cloth dampened with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Then, using a soft dry cloth, evenly wipe the surface clean until it is dry.

Caution

- The surface of the display panel has been specially treated and may be easily damaged. Do not tap or scratch the surface with your fingernail or other hard object.
- Take care not to subject the surface to insect repellent, solvent, thinner, or other volatile substances (this may degrade surface quality).

Cabinet, Pedestal

Regular care: Wipe the surface clean using a soft dry cloth.

Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

Caution)

- Take care not to subject the TV's surfaces to detergent. (A liquid inside the TV could lead to product failure.)
- Take care not to subject surfaces to insect repellent, solvent, thinner, or other volatile substances (this may deteriorate the surface by peeling the paint).
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time.

Mains plug

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

Specifications

			TH-42PZ80A		TH-50PZ80A	
Power Source		ce	AC 220-240 V, 50 / 60 Hz			
Power Consumption	Power	rating	475 W		555 W	
nption	Standb	y condition	0.4 W			
<u>8</u> 🖸	Aspect Ratio		16:9			
Display panel		screen size	106 cm (diagonal) 922 mm (W) × 518 mm (H)		127 cm (diagonal) 1,106 mm (W) × 622 mm (H)	
		er of pixels	2,073,600 (1,920 (W) × 1,080 (H))	[5,760 × 1,0	80 dots]	
တ	Speake		160 mm × 42 mm × 2 pcs, 8 Ω			
Sound	Audio		20 W (10 W + 10 W), 10% THD			
ᇫ	Headpl	hones	M3 (3.5 mm) stereo mini Jack × 1			
PC signals			VGA, SVGA, XGA, SXGA Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz			
Receiving Systems / Band name		ystems /	PAL B/G Reception of Off air DVB-T 7 MHz VHF / UHF PAL 60 Hz Playback of NTSC M.NTSC Playback from M. N	r broadcasts (Australia) fre tape from so NTSC Video r	ee-to-air TV broadcast reception me PAL Video recorders (VCR) recorders (VCR)	
Agri	al - Rea	r	1,111 1 111 111 111 1 1 1 1 1 1 1 1 1 1			
	rial - Rear Standard Belling & Lee connector Temperature: 0 °C - 35 °C					
Ope	rating C	onditions	Humidity : 20 % - 80 % RH (non-condensing)			
C		AUDIO L - R		0.5 V[rms]	<u> </u>	
9	AV1	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (7	5 Ω)	
Connection Terminals	Input	COMPONENT	Y P _B /C _B , P _R /C _R	±0.35 V[p-p]	ncluding synchronization)	
<u> </u>		AUDIO L - R		0.5 V[rms]		
1	AV2	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (7		
ermi	Input	COMPONENT		±0.35 V[p-p]	ncluding synchronization)	
าล	AV3	AUDIO L - R		0.5 V[rms]		
S	Input	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (7		
		S VIDEO			(75 Ω) C:0.286 V[p-p] (75 Ω)	
	AV4	AUDIO L - R		0.5 V[rms]		
	Input	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (7		
	5 VIDEO MINI DIN 4-PIN				(75 Ω) C:0.286 V[p-p] (75 Ω)	
		AUDIO L - R			nigh impedance)	
	Output	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (7		
	HDMI1 / 2 Input	TYPE A Connectors		ipports "HDAVI Control 3" function.		
	Others PC Input HIGH-DENS		HIGH-DENSITY D-SUB 15PIN	R, G, B/0.7 \ HD, VD/TTL (PC AUDIO \	/[p-p] (75 Ω) Level 2.0 - 5.0 V[p-p] (high impedance) via AV2 Input Audio L-R)	
DIGITAL AUDIO OUT PCM / Dolby Digital, Fiber optic						
		Card slot	SD Card slot × 1			
Dim	ensions	(W×H×D)	1,020 mm × 727 mm × 327 mm (W 1,020 mm × 679 mm × 95 mm (TV		1,210 mm × 844 mm × 387 mm (With Pedestal) 1,210 mm × 790.5 mm × 95 mm (TV only)	
Mas	s		31.5 kg Net (With Pedestal) 29.5 kg Net (TV only)		40.0 kg Net (With Pedestal) 38.0 kg Net (TV only)	

Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
 Pedestal: ST-42R4-WG / ST-50R4-WG (For safety approval)

WARRANTY - Australia only

- 1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or it's Authorised Service Centre will perform necessary service on the product without charge for parts or labour if, in the opinion of Panasonic, the product is found to be faulty within the warranty period.
- 2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or it's territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.
- 3. This warranty only applies if the product has been installed and used in accordance with the manufacturer's recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.
- 4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
 - (a) Video or Audio Tapes

PRO-031-F01 Issue: 3.0

- (b) Video or Audio Heads and Stylii resulting from wear and tear in normal use
- (c) Shaver Heads or Cutters

(d) Cabinet Parts

- (g) Microwave Oven cook plates.
- (e) User replaceable Batteries Thermal Paper, Toner/Ink Cartridges, Drums, Developer, Film (Ink/Ribbon), Film Cartridge, Printer Heads
- (h) Kneader mounting shaft unit (bread bakery)

- 5. If warranty service is required you should:
 - Telephone Panasonic's Customer Care Centre on 132600 or visit our website and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
 - · Send or bring the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
 - · Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
 - (a) Picture tube (CRT) based Television Receivers (screen sizes greater than 66cm); Rear Projection TV's; Plasma/LCD televisions / displays (screen size greater than 103 cm)
- (b) Convection/Combination Microwave Ovens
- (c) Whiteboard (except portable type)
- 6. The warranties hereby conferred do not extend to, and exclude, any costs associated with the installation, de-installation or re-installation of a product, including costs related to the mounting, de-mounting or remounting of any screen, (and any other ancillary activities), delivery, handling, freighting, transportation or insurance of the product or any part thereof or replacement of and do not extend to, and exclude, any damage or loss occurring by reason of, during, associated with, or related to such installation, de-installation, re-installation or transit.

Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

Unless otherwise specified to the consumer the benefits conferred by this express warranty are additional to all other conditions, warranties, guarantees, rights and remedies expressed or implied by the Trade Practices Act 1974 and similar consumer protection provisions contained in legislation of the States and Territories and all other obligations and liabilities on the part of the manufacturer or supplier and nothing contained herein shall restrict or modify such rights, remedies, obligations or liabilities. November 2005

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the **Panasonic Australia** website

www.panasonic.com.au or by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited

ACN 001 592 187 ABN 83 001 592 187

Locked Bag 505, Frenchs Forest, NSW 2086

23-11-2005

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

Panasonic Corporation

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