

Panasonic

Operating Instructions
Plasma Television

Model No. TH-37PX80EA TH-42PX80EA VIECA













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.

Please refer to Pan European Guarantee Card if you need to contact your local Panasonic dealer for assistance.

English



Turn your own living room into a movie theatre!

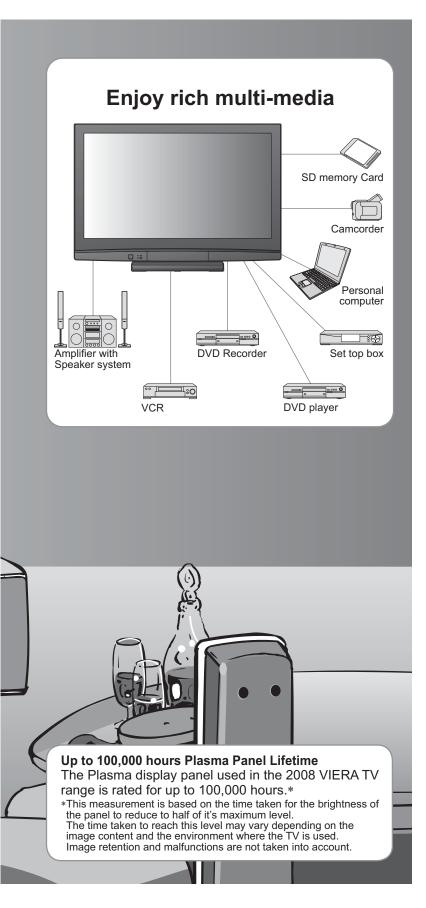
Experience an amazing level of multi-



Notice for DVB functions

- Any functions related to DVB (Digital Video Broadcasting) will work in areas where DVB-T (MPEG2) digital terrestrial broadcasting are received. Consult your local Panasonic dealer with coverage areas.
- DVB functions may not be available in some countries.
- Some functions may not be available in some countries.
- This TV has the capability for DVB specifications. But future DVB services cannot be guaranteed.

media excitement



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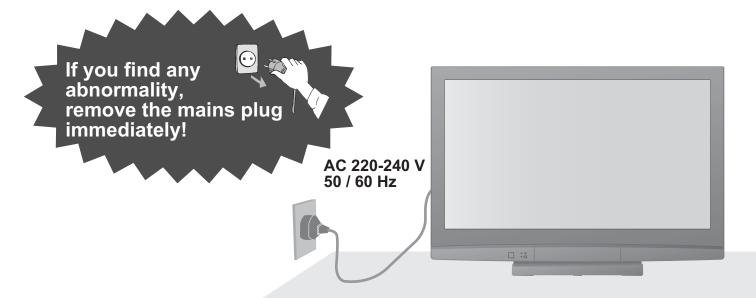
Safety Precautions

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.
 - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- 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

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

As with a small object, SD Card can be swallowed by young children. Please remove SD Card immediately after use.

Notes

Caution

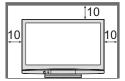
■When cleaning the TV, remove the mains plug

- 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.

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. 49)

■ 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).

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.

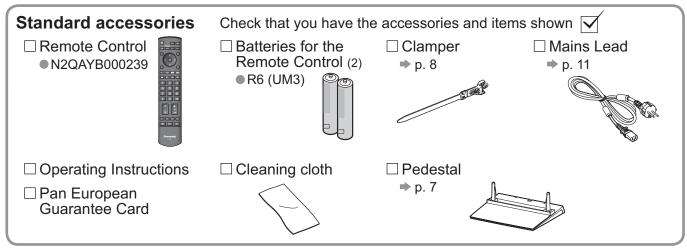
Major contamination: Dampen a soft cloth with clean water or water containing a small amount of neutral detergent. Then, wring the cloth and wipe the surface clean with it. Finally, wipe the surface clean with a dry cloth.

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

Accessories / Options

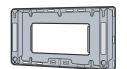


This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

Optional accessories

Wall-hanging bracket (vertical)

- TY-WK42PV3W
- TY-WK42PV4W



(angle)

TY-WK42PR3W

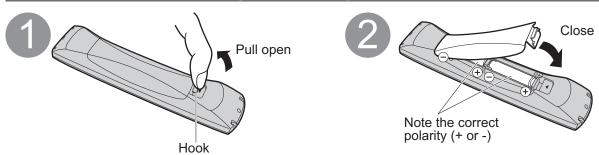
TY-WK42PR4W



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

Installing / removing 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.

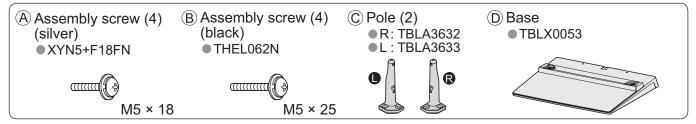
• If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

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.

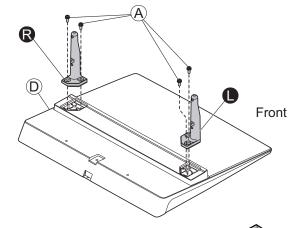
• If two or more people are not present, the TV may be dropped, and personal injury may result.



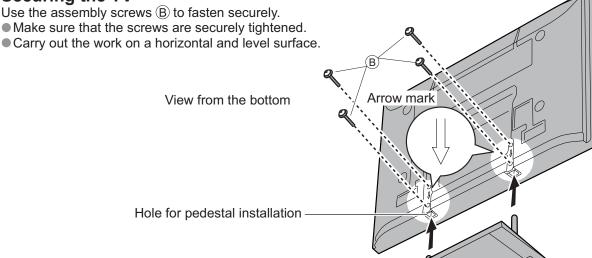
■ Assembling the pedestal

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.

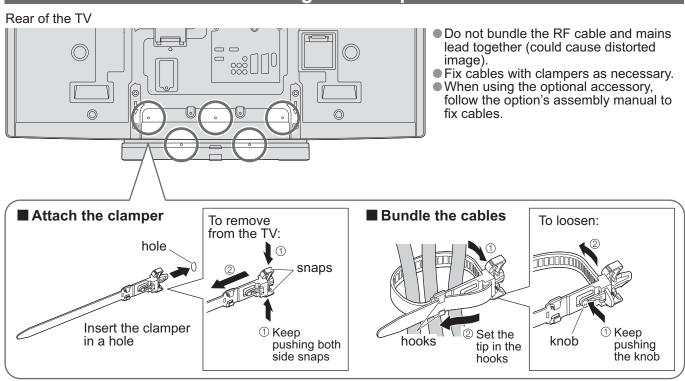


■ Securing the TV

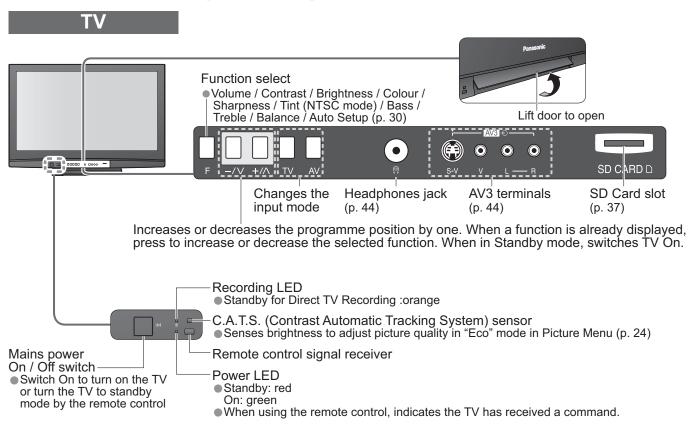


Accessories / Options



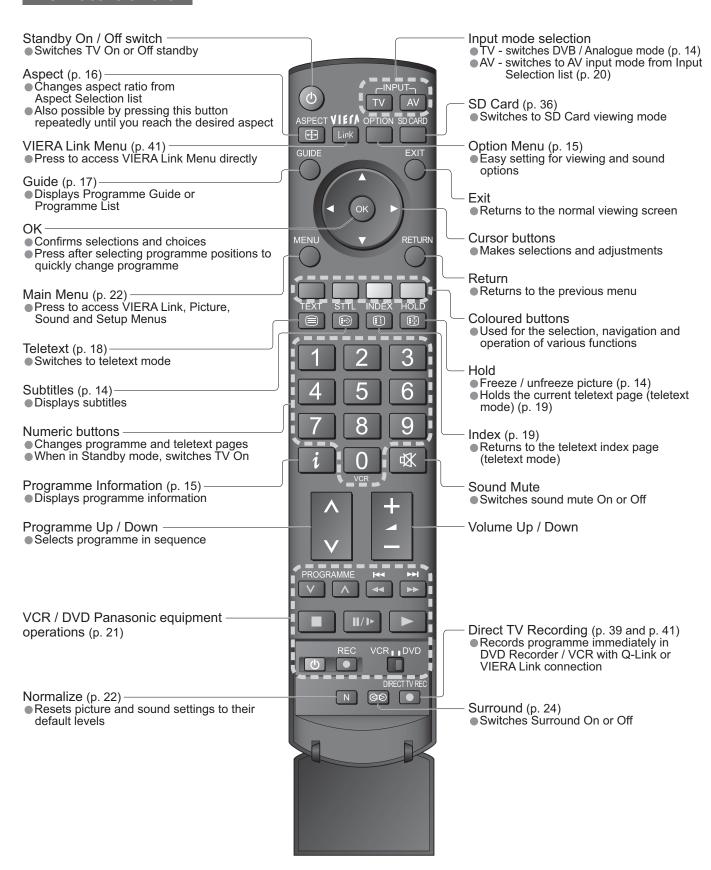


Identifying Controls



Identifying Controls

Remote Control



Basic Connection

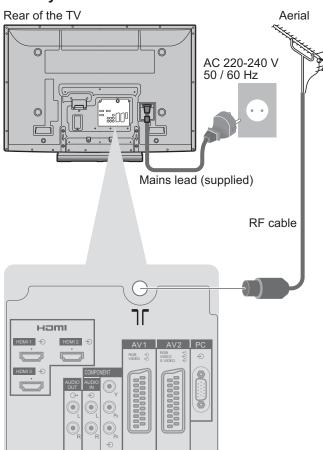
External equipment and cables shown are not supplied with this TV.

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.

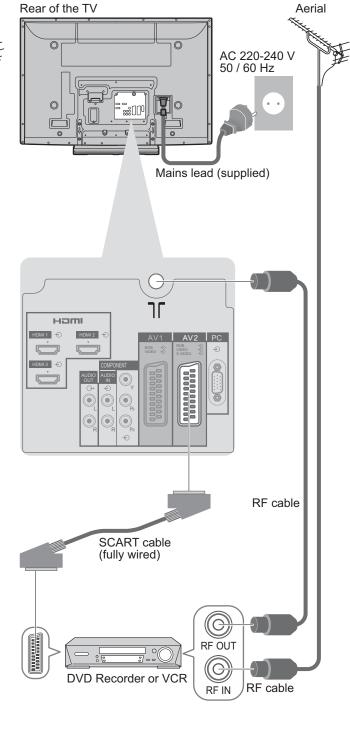


Example 2 Connecting DVD Recorder / VCR

TV only



TV, DVD Recorder or VCR

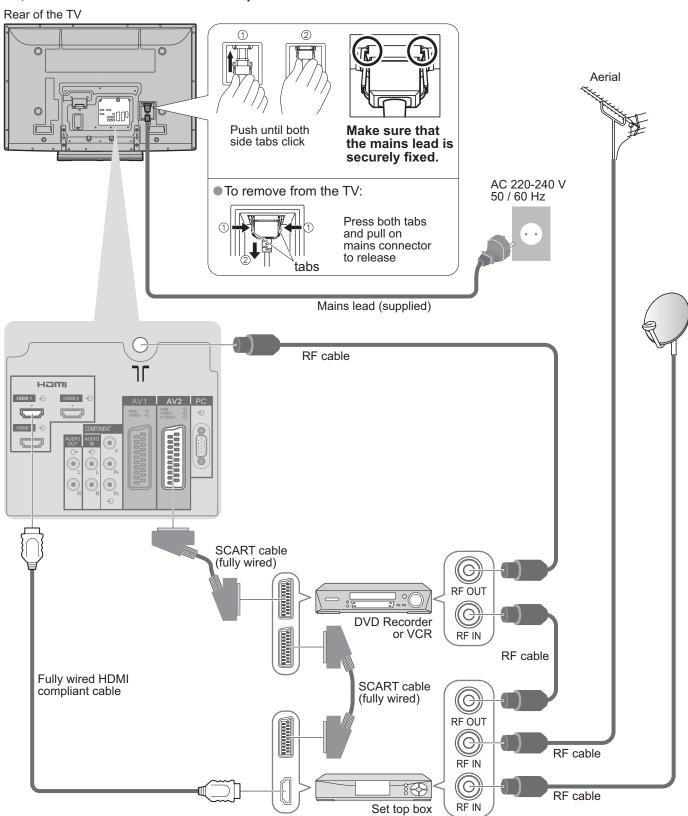


Note

- Connect to AV1 / AV2 for a DVD Recorder / VCR supporting Q-Link (p. 39).
- For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 44).
- Q-Link connection → p. 38
- VIERA Link connection ⇒ p. 38
- Read the manual of the equipment too.

Example 3 Connecting DVD Recorder / VCR and Set top box

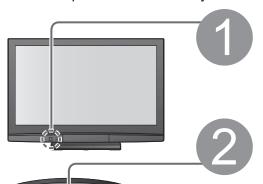
TV, DVD Recorder / VCR and Set top box



Auto Setup

Search and store TV programmes automatically.

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



(D)

ok)

Panasonic

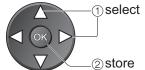
Plug the TV into mains socket and switch On (Takes a few seconds to be displayed)



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







Select your country





 Depending on the selected countries, you may also be required to select the region.



Start Auto Setup





 Auto Setup will start to search for TV programmes and store them. The sorted programme order depends upon the TV signal, the broadcasting system and reception conditions.



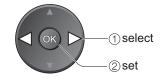
 If Q-Link, VIERA Link or similar technology (p. 38), compatible recorder is connected, programme, language, country / region settings are automatically downloaded to the recorder.



Select the picture setting



 "Shop" and "Home" are equal to "Dynamic" and "Normal" respectively - "Viewing Mode" in "Picture Menu" (p. 24)





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



- To edit programmes
- → "Editing Programmes" (p. 28)

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

■ How to use remote control

MENU

Open the main menu



Move the cursor / select the menu



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

Exit the menu system and return to the normal viewing screen



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

RETURN

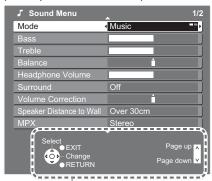
Return to the previous menu

EXIT

Using the On Screen **Displays**

■ ON SCREEN HELP Instructions box

(example: Sound Menu)

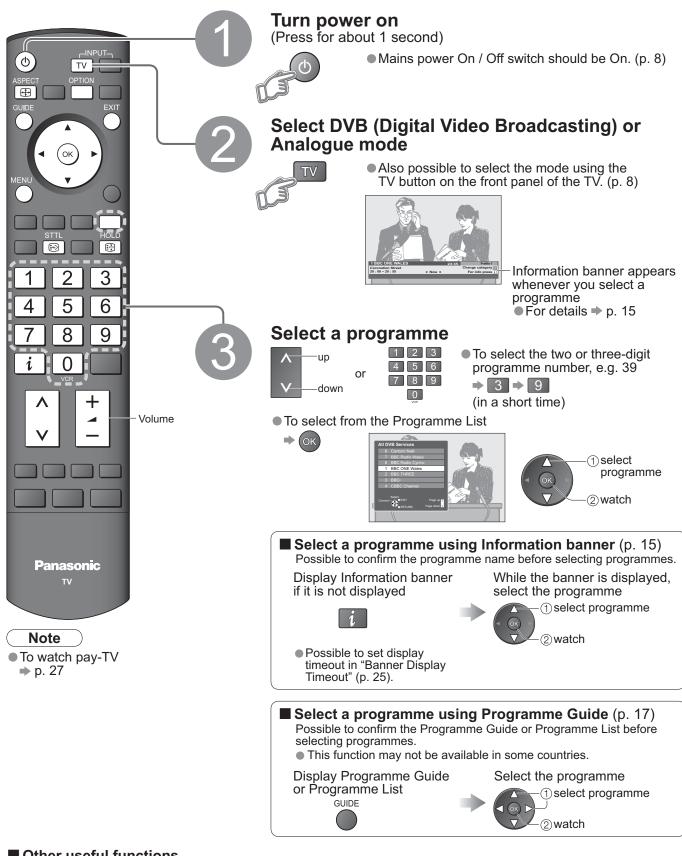


On-screen operation guide will help you.

Note

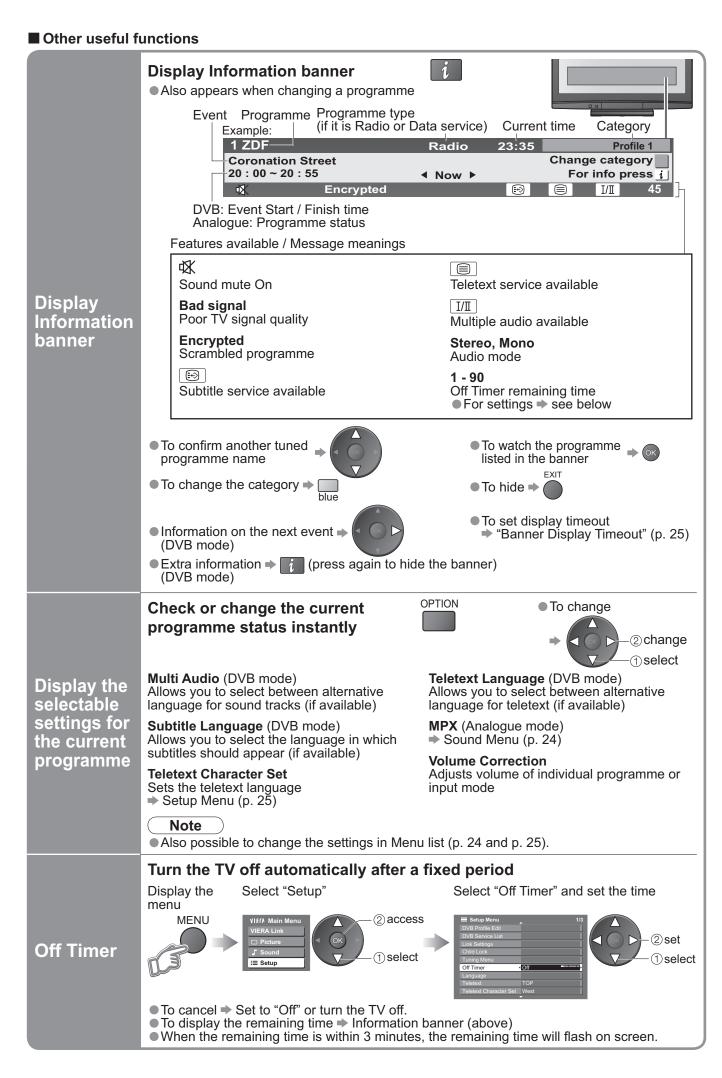
- If tuning has failed ⇒ "Auto Setup" (p. 31)
- If downloading has failed ⇒ "Download" (p. 25)
- To initialize all settings ⇒ "Shipping Condition" (p. 33)
- If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off switch.

Watching TV



■ Other useful functions

Hold	Freeze / unfreeze picture	HOLD
Display subtitles	Display / hide subtitles (if available) ■ To change the language for DVB (if available) ■ "Preferred Subtitles" (p. 25)	STTL



Watching TV

■ Other useful functions

Change the aspect ratio

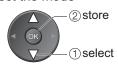
ASPECT

Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list



While the list is displayed, select the mode





Aspect Selection list

- To change the mode using the ASPECT button only
 - (Press repeatedly until you reach the desired mode)



The best ratio is chosen and the picture expanded to fill the screen. For details

p. 46



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

Change aspect ratio



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



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.

● HD signal only



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).

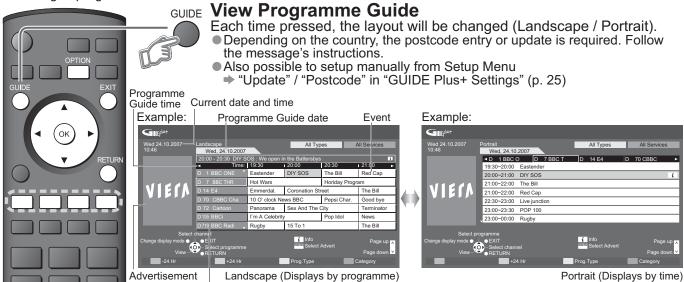
Note

- Only "16:9" and "4:3" 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.

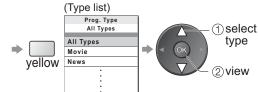
Using Programme Guide

Using Programme Guide enables you to select programme easily, view event informations, etc. Programme 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).

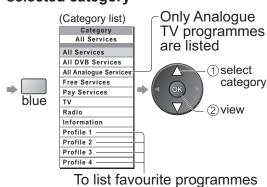
 This function varies depending on the country you select (p. 12).
 Analogue programmes will be listed after DVB programmes. "D" means DVB programme and "A" means Analogue programme.







■ To view a programme list of the selected category



⇒ p. 29

■ To return to TV **EXIT**



now on the air

(DVB mode)



■ To the next day ⇒ [

Programme

To watch the programme

Select the event or programme

■ To view details of the event (DVB mode) Select the event



■ To view advertisement (Depending on the country) If you enter an incorrect postcode for your area, or no postcodes are entered, advertisement may not be displayed correctly.



advertisement

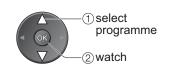
Press the OPTION or RETURN button to return to Programme Guide.

areen

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 Programme Guide is completely shown.
 - Depending on the country you select, Programme Guide may not be supported In this case, Programme List will appear.





Programme List

Viewing Teletext

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

What is FLOF (FASTEXT) mode?

In FLOF 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 → red green

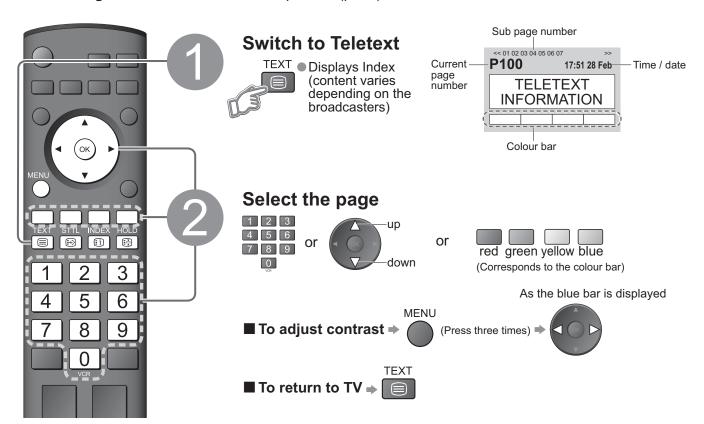
To select among subject blocks →

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

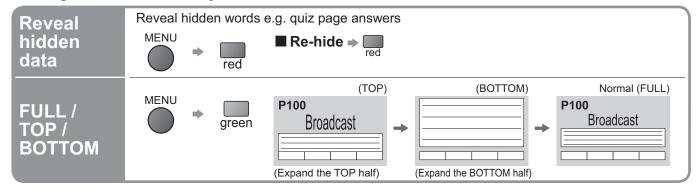
What is List mode?

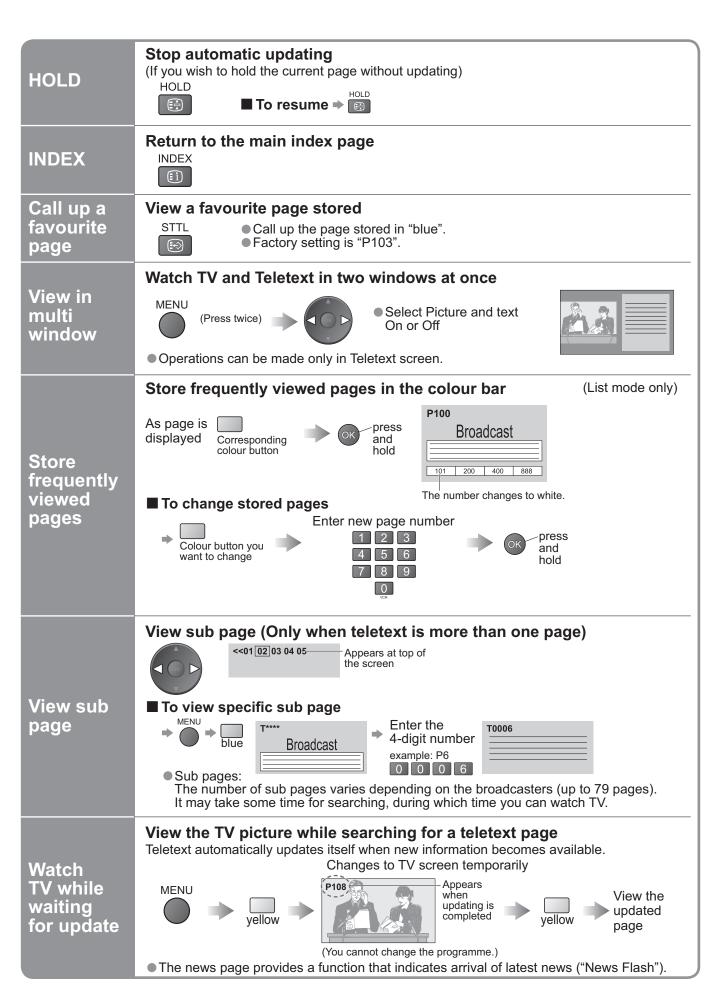
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 19)

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



■ Using teletext conveniently



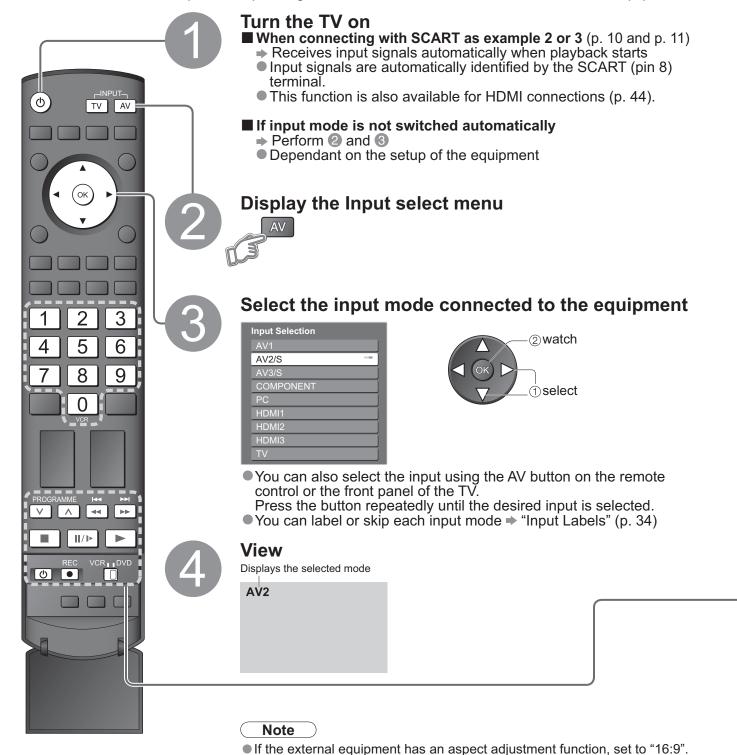


Watching Videos and DVDs

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

To connect the equipment ⇒ p. 10 and p. 11

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



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

 \sim

■ To return to TV

→ TV

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

VCR ₁₁ DVD	VCR / DVD switch* Select VCR to operate Panasonic VCR or DVD equipment Select DVD to operate Panasonic DVD equipment or Player home theatre
U	Standby Set to Standby mode / Turn on
	Play Playback videocassette / DVD
	Stop Stop the operations
44	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
▶ ►	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/1>	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 ⇒

2 Press and hold 0 during the following operat

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

ations		
1 2 3 4 5 6 7 8 9	→ Press [

"VCR" position

volv pooluon	
Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position

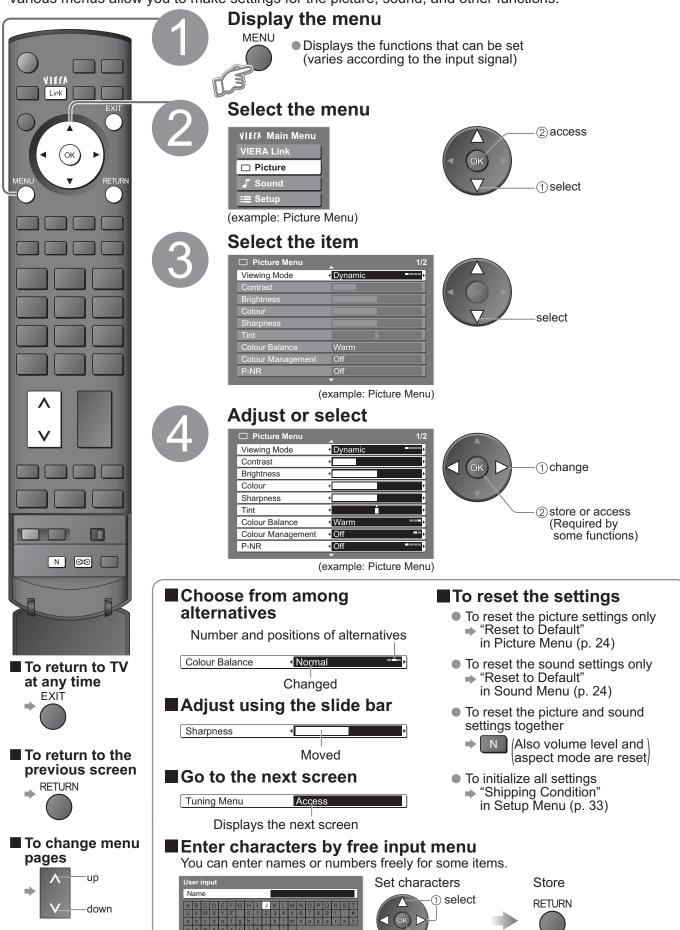
Equipment	Code
DVD	70 (default)
Player home theatre	71

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.

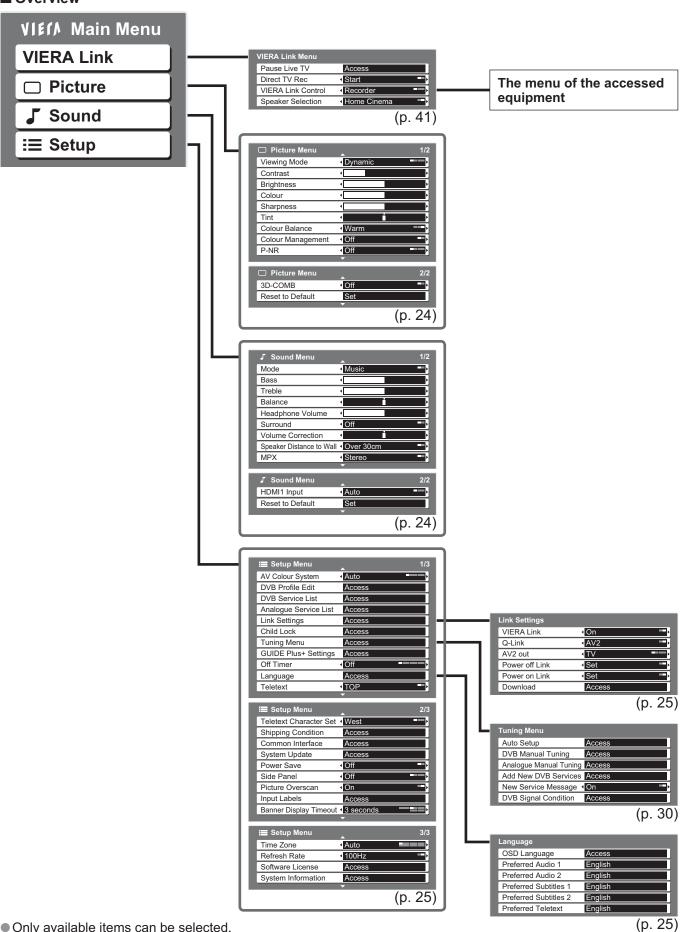
How to Use Menu Functions

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



② set

Overview



Only available items can be selected.

How to Use Menu Functions

■Menu list

	Item	Adjustments / Configurations (alternatives)	
\leq	Pause Live TV		
VIERA Link	Direct TV Rec	Controls the connected equipment with VIERA Link function, and enables various convenient recording, playback, etc. (p. 41 - 43)	
	VIERA Link Control	You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.	
긎	Speaker Selection		
	Viewing Mode	Basic picture mode (Dynamic / Normal / Cinema / Eco) 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	
ס	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste For NTSC signal reception only	
ict	Colour Balance	Allows you to set the overall colour tone of the picture (Cool / Normal / Warm)	
Picture	Colour Management	Automatically adjusts colours to vivid ones (Off / On) Not valid on PC signal	
	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 RGB, S-Video, Component, PC, HDMI and SD Card	
	Reset to Default	Press the OK button to reset the present Picture Mode to the 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	Surround sound settings (Off / On) Provides a dynamic enhancer to simulate improved spatial effects Switching is also possible by the Surround button on the remote control (p. 9).	
(0	Volume Correction	Adjusts volume of individual programme or input mode	
Sound	Speaker Distance to Wall	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. If the back space between the TV and wall is within 30 cm, "Up to 30cm" is recommended.	
d	MPX	Select stereo / monaural (Mono / Stereo) Normally: Stereo Stereo signal cannot be received: Mono M1 / M2: Available while mono signal is transmitted Analogue mode only	
	HDMI1 Input	Select to fit the input signal (Auto / Digital / Analogue) (p. 46) Auto : Automatic detection of digital or analogue sound source Digital : HDMI cable connection Analogue: HDMI-DVI adapter cable connection HDMI input mode only HDMI2 / 3 terminals are for digital signal only No setting for HDMI2 / 3 available	
	Reset to Default	Press the OK button to reset the present Sound Mode to the default settings	

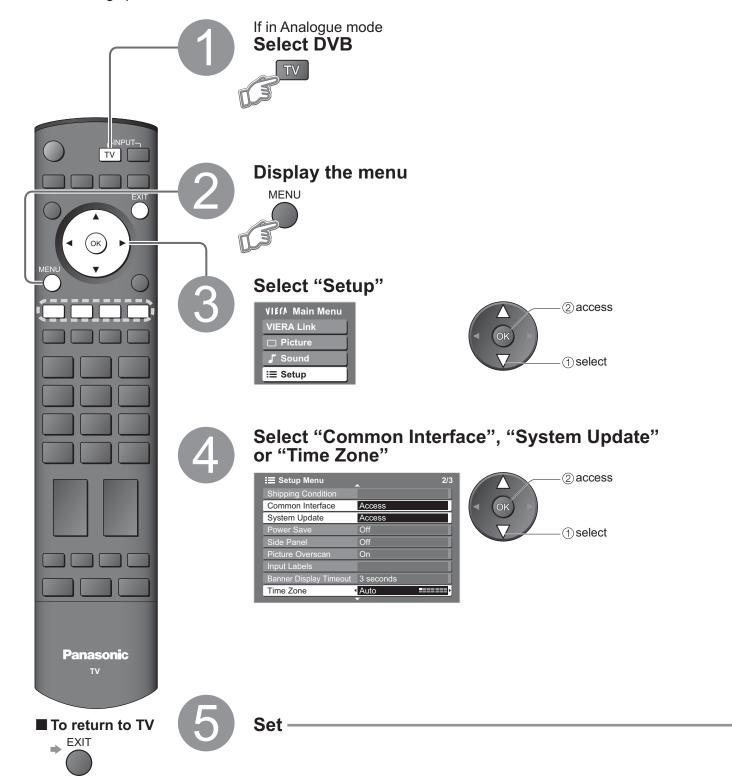
■Menu list

■ Me	Menu list			
Menu		Item	Adjustments / Configurations (alternatives)	
	AV Colour System		Selects optional colour system based on video signals in AV mode (Auto / PAL / SECAM / M.NTSC / NTSC)	
	DVB Profile 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)	
		VIERA Link	Sets to use VIERA Link functions (Off / On) (p. 40)	
	Link Settings	Q-Link	Selects which AV terminal is to be used for data communication between this TV and a compatible recorder (AV1 / AV2) (p. 39) Select the connected terminal to the recorder even it is not compatible with Q-Link.	
		AV1 / AV2 out	Chooses the signal to be transmitted from the TV to Q-Link (TV / AV1 / AV2 / AV3 / Monitor) Monitor: Image displayed on screen Component, PC and HDMI signals cannot be outputted.	
	igi	Power off Link	Sets to use Power off Link function (No / Set) (p. 39 and p. 40)	
	0,	Power on Link	Sets to use Power on Link function (No / Set) (p. 39 and p. 40)	
		Download	Downloads programme, language, country / region settings to a Q-Link or VIERA Link compatible equipment connected to the TV	
	Chi	ild Lock	Locks a programme / AV input to prevent access to it (p. 32)	
	Auto Setup		Automatically sets the programmes received in the area (p. 31)	
	T	DVB Manual Tuning	Sets the DVB programmes manually (p. 31)	
	Tuning	Analogue Manual Tuning	Sets the Analogue programmes manually (p. 31)	
	y Menu	Add New DVB Services	Adds new DVB services (p. 31)	
	ב	New Service Message	Selects whether to give a notification message when a new DVB service is found (p. 31)	
		DVB Signal Condition	Checks the DVB signal condition (p. 31)	
	Settings	Update	Performs the update of the GUIDE Plus+ schedule and advertising informations for the GUIDE Plus+ system	
	: *	Postcode	Sets your postcode for using the GUIDE Plus+ system (p. 17)	
Setup	gs	System Information	Displays the system information of the GUIDE Plus+ system	
*	Off Timer		Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)	
ᅙ		OSD Language	Changes language for on-screen displays	
	anç	Preferred Audio 1 / 2	Selects the preferred language for DVB multi audio (depending on the broadcaster)	
	Language	Preferred Subtitles 1 / 2	Selects the preferred language for DVB subtitles (depending on the broadcaster) ■ To display subtitles ⇒ p. 14	
	Je	Preferred Teletext	Selects the preferred language for DVB teletext service (depending on the broadcaster)	
	Teletext		Teletext display mode (TOP (FLOF) / List) (p. 18)	
	Teletext Character Set		Selects teletext language (West / East1 / East2) West: English, French, German, Greek, Italian, Spanish, Swedish, Turkish, etc. East1: Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian, etc. East2: Czech, Hungarian, Lettish, Polish, Rumanian, etc.	
		ipping Condition	Resets all settings, for example, when moving house (p. 33)	
		mmon Interface	Uses include to watch pay-TV (p. 27)	
	_	stem Update	Downloads new software to TV (p. 27)	
	Pov	wer Save	Reduces brightness of picture to economise on power consumption (Off / On)	
	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 Auto (16:9 signal only) or 16:9. This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.	
	Input Labels		Labels or skips each input terminal (p. 34)	
	Banner Display Timeout		Sets how long the information banner (p. 15) stays on screen 0 (No display) to 10 sec. in 1-sec. increments	
	Tim	ne Zone	Adjusts the time data (p. 27)	
	Refresh Rate		Changes the image processing of the panel (depending on the input signal) (50Hz / 100Hz) Set to "100Hz" normally	
	Sof	ftware License	Displays the software licence information	
	System Informatio		Displays the system information of this TV	
A diff			d while PC or SD Card is used (n. 35 and n. 37)	

A different menu will be displayed while PC or SD Card is used. (p. 35 and p. 37)
 Only available items can be selected.

DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.



The Common Interface Module menu provides access to software contained on Common Interface (CI) Modules.

This function may not be available in some countries or regions.

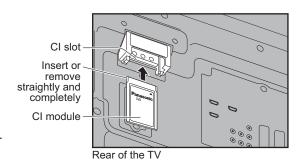
Although CI module may enable you to view some services, this TV does not guarantee all services (e.g. pay-TV).

Please use only the approved CI module by the broadcaster.

Consult your local Panasonic dealer or broadcasters for more information and conditions of the services.

(Caution)

- Turn Off Mains power On / Off switch whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
- Do not insert the module up side down.



Pay-TV

Common Interface

1 Insert the CI module (optional)

- The features that appear on screén are dependent on the contents of the selected CI module.
- Normally pay-TV services will appear without ② and ③.
 If pay-TV service does not appear, perform ② and ③.
- For more details, see the manual of the CI module, or check with the broadcaster.

2 Access "Common Interface"





3 Follow the on-screen instructions

Coloured characters -

example: select, go 🖈





red green yellow blue

 On-screen operation guide may not correspond to the remote control buttons.

Download new software to TV.

For details ⇒ p. 47

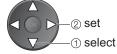
If System Update is performed, the software will be updated (it may change TV functions). If you do not wish to do so, set "Auto Update Search in Standby" to Off.

Update TV's software system_

System Update

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

■ To update immediately

Select

"System Update Search Now"



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



Download



Download may take for about 20 mins.

Adjust the time data automatically

Time Zone

Set the time



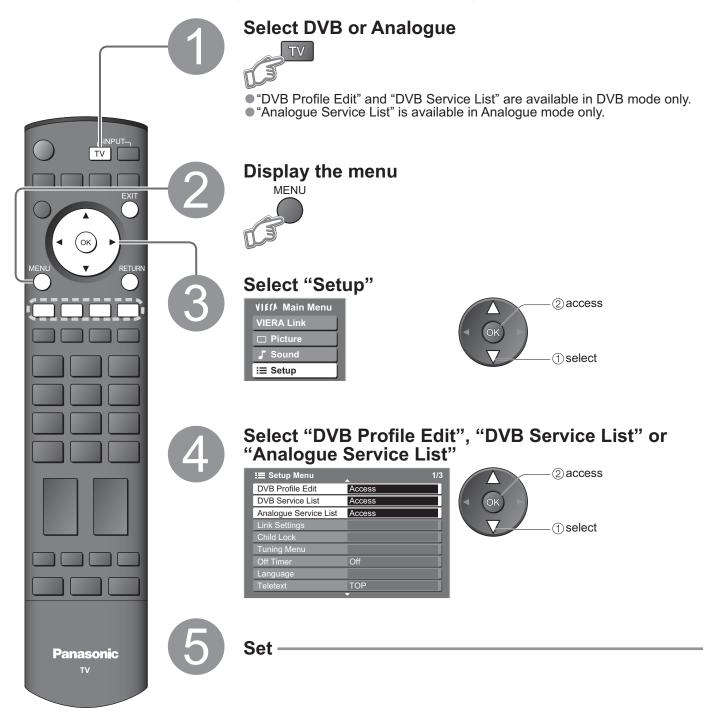
Auto : The time data will be adjusted according to your

area automatically.

Others: The time data will be corrected based on GMT.

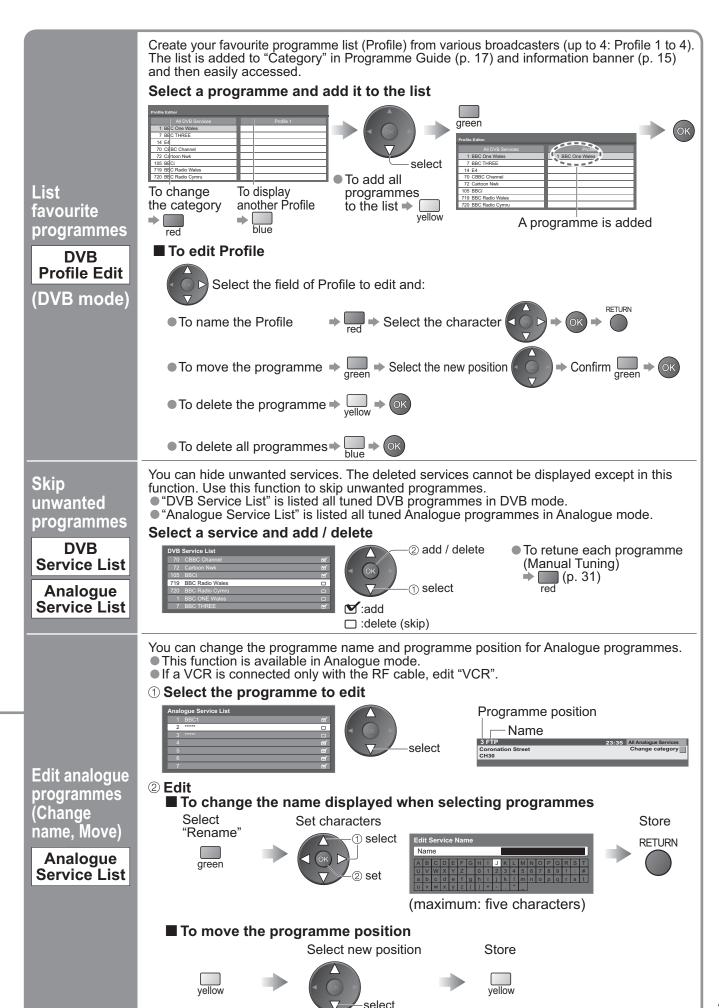
Editing Programmes

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



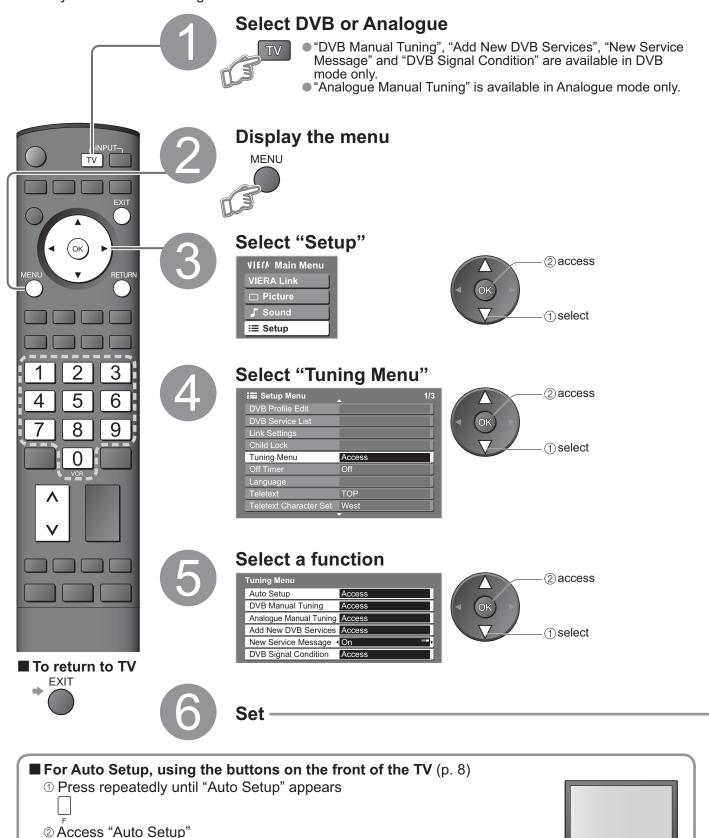
■ To return to TV

→ EXIT



Tuning Programmes

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



■To return to TV ⇒

3 Start "Auto Setup"

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.
- If a Child Lock PIN number (p. 32) has been set, it must be entered.

Set all DVB or Analogue programmes automatically

Auto Setup

Settings are made automatically



- All the previous tuning settings are erased.
- The programme, language, country / region settings are downloaded to a Q-Link or VIERA Link compatible equipment connected to the TV.
- When the operation is completed, the programme at programme position "1" will be displayed.
 If tuning has not been done completely → "DVB Manual Tuning", "Analogue Manual Tuning"

Set DVB programme manually

DVB Manual Tuning

Set Analogue

Analogue

Manual Tuning

programme

manually

Normally use "Auto Setup" 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.

Fine Tuning

Start Auto Setup

Use to make small adjustments to the tuning of an individual programme (affected by weather conditions, etc.)

Manual Tuning

Set Analogue programme manually after Auto Setup.

- Set Sound System and Colour System, and then perform this function. Normally set Colour System "Auto".
- If a VCR is connected only with the RF cable, select programme position "0".



SC1:PAL B, G, H / SECAM B, G SC2:PALI SC3:PAL D, K / SECAM D, K SECAM L / L'

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

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.

Message

Selects a programme and checks the DVB signal condition.

To change the programme



DVB Signal Condition



DVB Signal Condition		
DVB Programme	[CH70] CB	BC Channel
Signal Quality	0	10
Signal Strength	0	10

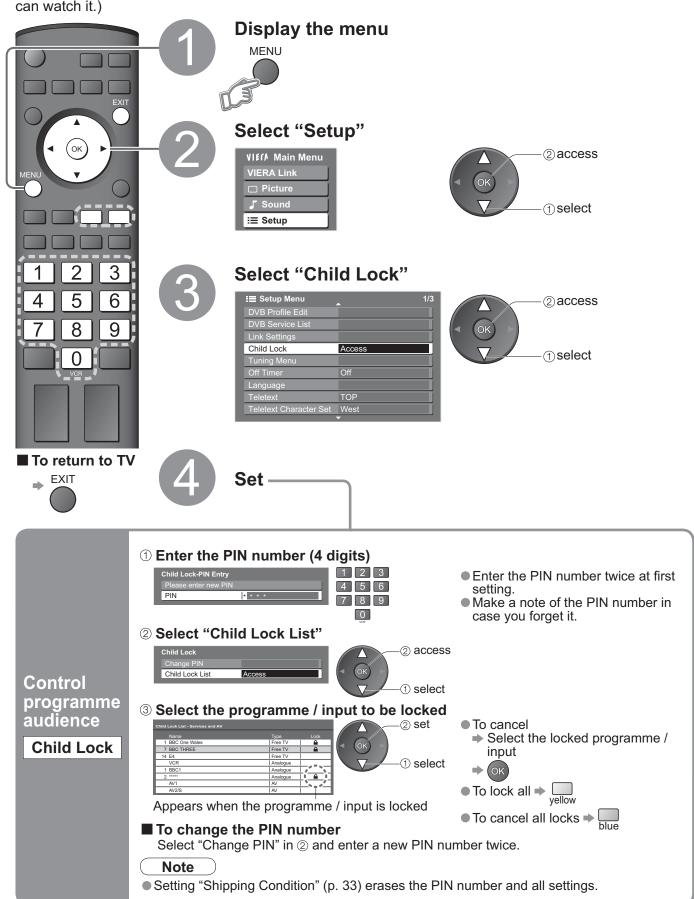
A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows:

Signal Quality:

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

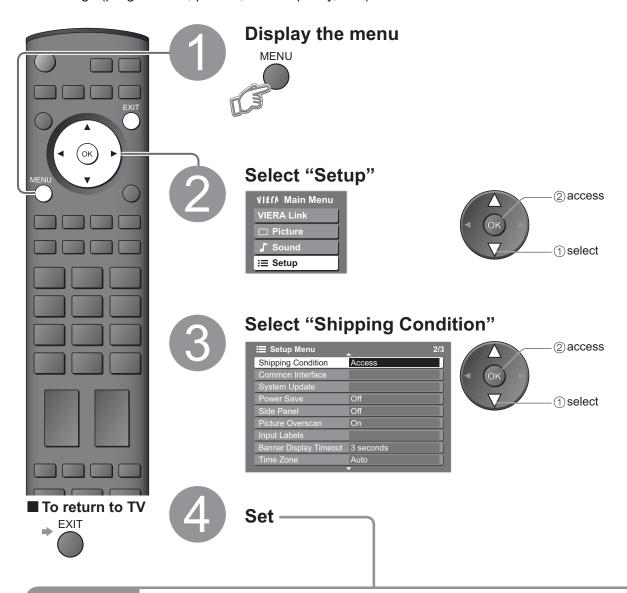
Control Programme Audience

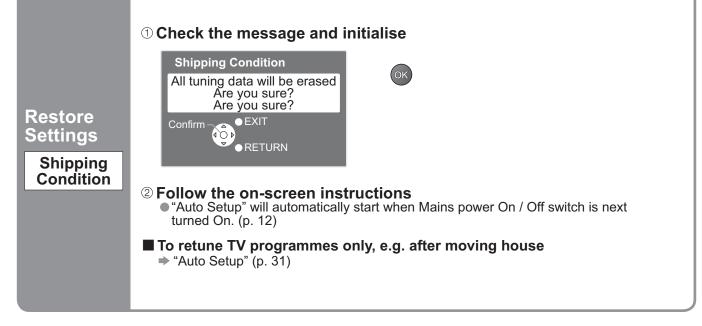
You can lock specific programmes / AV input terminals and control who watches them. (When the locked programme / input is selected, a message appears; by entering the PIN number, you can watch it.)



Restore Settings

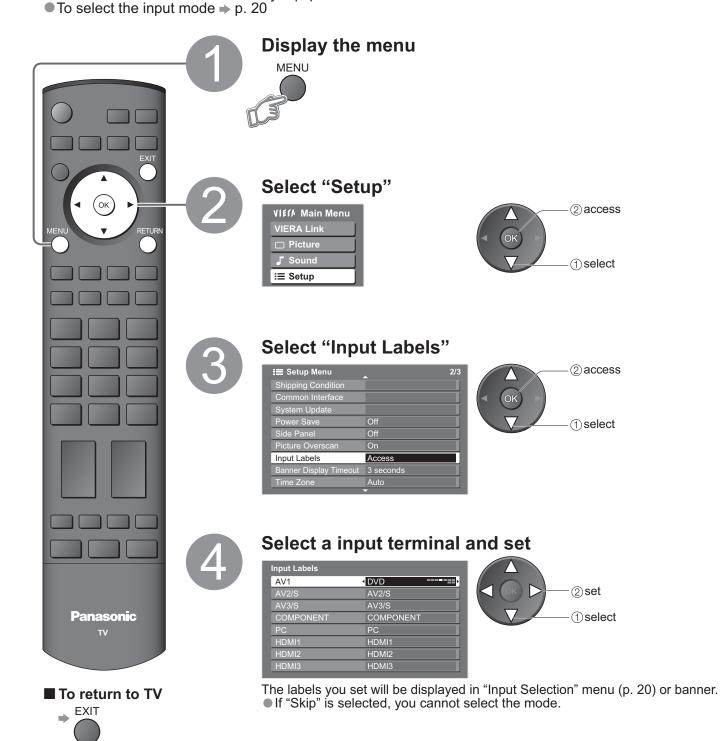
Resets the TV to its original condition, i.e. no programmes tuned in. All settings (programmes, picture, sound quality, etc.) are reset.

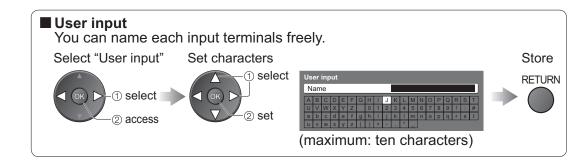




Input Labels

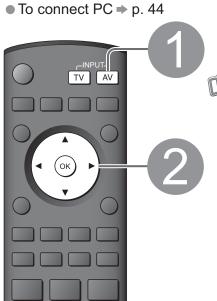
For easier identification and selection of the input mode, you can label each input terminals or skip terminal that is not connected to any equipment.





Displaying PC Screen on TV

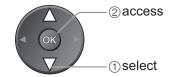
The screen of the PC connected to the TV can be displayed on the TV. You can also listen to PC sound with the audio cable connected.



Select the external input







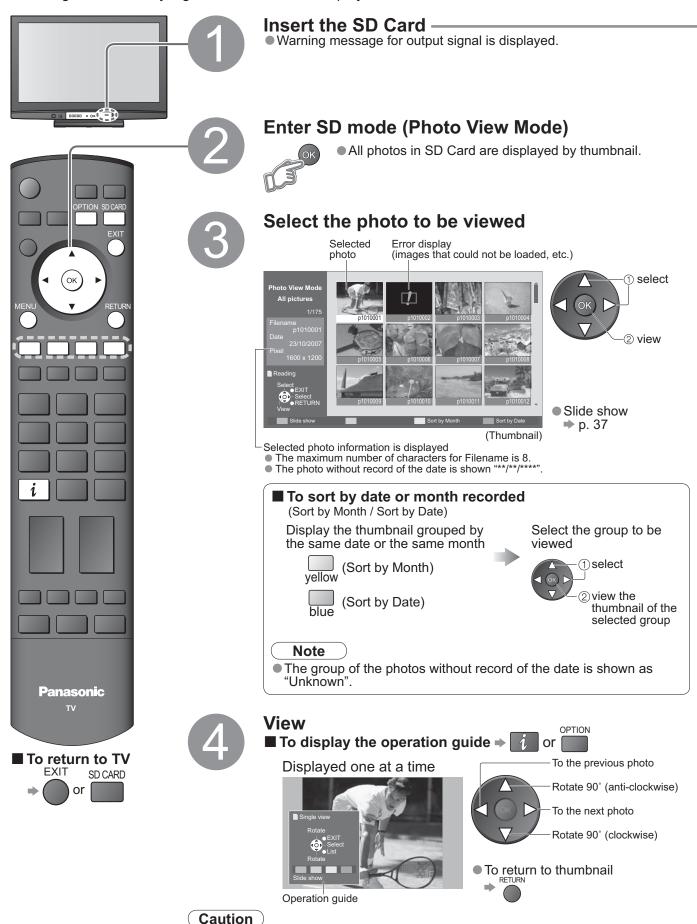
- Corresponding signals ⇒ p. 48
- If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

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

	● To make settings ⇒ "How to Use Menu Functions" 1 to 4 (p. 22)				
Menu	u Item		Adjustments / Configurations (options)		
		W/B High R	White balance of bright red area		
- 70		W/B High B	White balance of bright blue area (1) and (2)		
) ic	Advanced	W/B Low R	White balance of dark red area repeatedly adjusted		
Picture	PC W/B Low B White balance of dark blue area		White balance of dark blue area		
re	Settings	Gamma	(S Curve / 2.0 / 2.2 / 2.5)		
		Reset to Default	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		
		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	Chooses another synchronous signal if the image is distorted (H & V / On G) H & V: by the horizontal and vertical signals from your PC On G: by the green signal from your PC (if available)		
		Reset to Default	Press the OK button to reset to the default Setup settings		

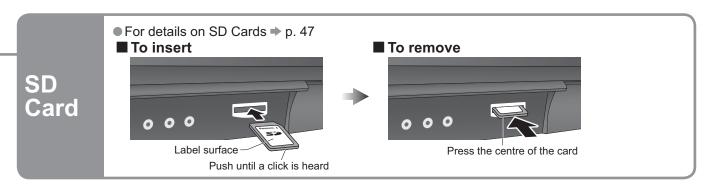
Viewing from SD Card

Still images recorded by digital cameras will be displayed.



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

(Photos)



Slide show



① Select the photo for the first view

② Start Slide show



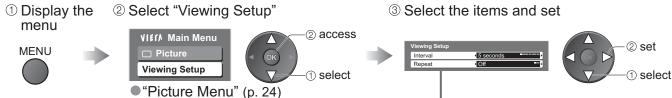






Note

- 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)



Menu	Item	Adjustments / Configurations (alternatives)					
S et linterval		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. 47.) 				
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.				

Link Functions (Q-Link VIERA Link

Q-Link connects the TV and DVD Recorder / VCR, and enables easy recording, playback, etc. (p. 39) VIERA Link (HDAVI Control™) connects the TV and the equipment with VIERA Link function, and enables easy control, convenient recording, playback, etc. (p. 40 - 43) You can use Q-Link and VIERA Link functions together.

■ Summary of Q-Link and VIERA Link functions

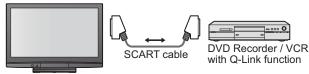
Connection Features	Q-Link (SCART connection)	VIERA Link (HDMI connection only)	VIERA Link (SCART and HDMI connection)
Preset download	0	O**	0
Easy playback	0	0	0
Power on link	0	0	0
Power off link	0	0	0
Speaker control	_	0	0
Control the menu of the connected equipment by VIERA remote control	-	O*	O*
Direct TV Recording	0	_	O**
Pause Live TV programme	_	_	O**

- :Available with the equipment which has "HDAVI Control 2" or "HDAVI Control 3" function.
- **: Available with the equipment which has "HDAVI Control 3" function.

Connections

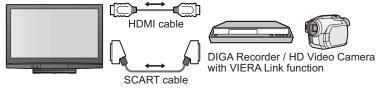
Read the manual of the equipment, too.

Q-Link



 Connect the DVD Recorder / VCR supporting Q-Link to the TV's AV1 or AV2 terminal via a fully wired SCART cable.

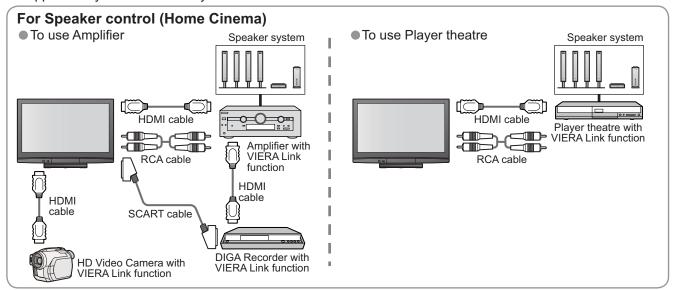
■ VIERA Link



- SCART cable Use fully wired SCART cable.
- HDMI cable Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be

Recommended Panasonic's HDMI cable part number:

- RP-CDHG10 (1.0 m)
- RP-CDHG15 (1.5 m)
- RP-CDHG20 (2.0 m)
- RP-CDHG30 (3.0 m)
 RP-CDHG50 (5.0 m)
- Connect the equipment supporting VIERA Link to the TV's AV1, AV2, HDMI1, HDMI2 or HDMI3 terminals via fully wired SCART and HDMI cables together.
- Some functions are available only with HDMI cable connection. But use both HDMI and SCART cables to support many features normally.



Q-Link

Preparations

- Connect the DVD Recorder / VCR with the following logos: "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic" or "SMARTLINK"
- Q-Link connection ⇒ p. 38

- Set up the DVD Recorder / VCR. Read the manual of the equipment.
 Q-Link terminal setup in Setup Menu ⇒ "Q-Link" (p. 25), "AV1 / AV2 out" (p. 25)
 Download preset programme, language, country / region setting (Preset download)
 ⇒ "Download" (p. 25) or "Auto Setup" (p. 31) or "Auto Setup" when first using the TV (p. 12)

■ Features available

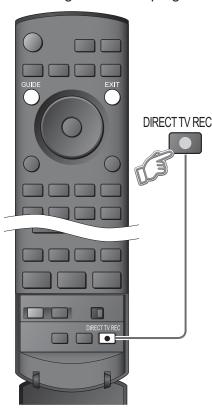
Direct TV Recording -What you see

is What you

record

Some recorders are not applicable. Read the manual of the recorder.

Recording the current programme in DVD Recorder / VCR immediately.



Available conditions:

Current mode	Using tuner	How to record
Analogue	TV	TV monitor out
Analogue	Recorder	Recorder's tuner
DVB	TV	TV monitor out
AV (watching recorder's tuner)	Recorder	Recorder's tuner
AV (watching recorder's external input)	_	Recorder's external input
AV (watching TV's external input)	_	TV monitor out

- When Direct TV Recording is performed, the recorder is automatically turned on if it is in Standby
- Changing programme or turning off the TV is available while the recorder is recording from its own tuner.
- Changing programme is not available while the recorder is recording from the TV tuner.
- Turning off the TV will stop the recording if the recording from an AV source connected to the TV.

■ To stop recording



Information / Message

Recording information or if recording is not possible, a message is displayed.

Power on link and Easy playback

Set Power on Link "Set" in Setup Menu to use this function

→ "Power on Link" (p. 25)

When DVD Recorder / VCR starts playback or direct navigator / function menu for the equipment are activated, the TV is turned on and input mode is switched automatically so that you can view the content. (Only when TV is in Standby mode.)

Power off link

Set Power off Link "Set" in Setup Menu to use this function

→ "Power off Link" (p. 25)
When TV is set to Standby mode, the recorder is also automatically set to Standby. (Only when the videocassette or DVD is not active.)

- "DATA LOGIC" (a trademark of Metz Corporation)
- "Easy Link" (a trademark of Philips Corporation)
- "Megalogic" (a trademark of Grundig Corporation)
- "SMARTLINK" (a trademark of Sony Corporation)

Link Functions (Q-Link VIERA Link

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 and SCART cables 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.

■ Preparations

- Connect the equipment supporting VIERA Link.
- VIERA Link connection ⇒ p. 38
- 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
- Download preset programme, language, country / region setting (Preset download)
 Download" (p. 25) or "Auto Setup" (p. 31) or "Auto Setup" when first using the TV (p. 12)
 Set VIERA Link On in Setup Menu → "VIERA Link" (p. 25)
- Set up the TV
 - **→** After connection, turn the equipment on and then switch the TV on. Select the input mode to HDMI1, HDMI2 or HDMI3 (p. 20), and make sure that an image is displayed
 - 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

Easy playback	Automatic Input switching - When the connected equipment is operated, input mode is switched automatically. When it is stopped operating, input mode is returned.
Power on link	Set Power on Link "Set" in Setup Menu to use this function → "Power on Link" (p. 25) When the connected equipment starts playback or direct navigator / function menu for the equipment are activated, the TV is automatically turned on. (Only when TV is in Standby mode.)
Power off link	Set Power off Link "Set" in Setup Menu to use this function → "Power off Link" (p. 25) When TV is set to Standby mode, the connected equipment is also automatically set to Standby. • This function will work even if the TV enters standby mode automatically by Off Timer 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" function.
- Connect DIGA Recorder with both HDMI and SCART cables to use this function.
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 40)

Access and pause the live TV programme

TV

Link

ОК



Pause Live TV



Select "Pause Live TV" and pause





- Live TV programme is recorded on HDD from where it was paused.
- 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)

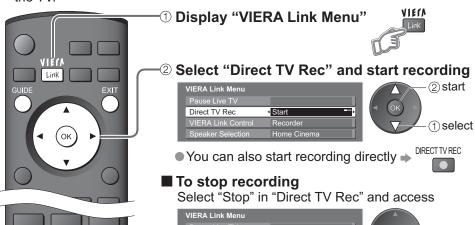
- → TVI (change the input mode)
- If you cancel pause or resumed playback, the recorded programme will be deleted from HDD.

Recording the current programme in DIGA Recorder immediately.

- This function is available with DIGA Recorder which has "HDAVI Control 3" function.
- Connect DIGA Recorder with both HDMI and SCART cables to use this function.
- If you cannot operate, check the settings and the equipment ⇒ "Preparations" (p. 40)
- Changing programme or turning off the TV is available while the recorder is recording from its own tuner.
- Changing programme is not available while the recorder is recording from the TV tuner.
 Turning off the TV will stop the recording if the recording from an AV source connected to the TV.

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

Direct TV Rec







You can also stop recording directly.



Link Functions (Q-Link VIERA Link)

■ 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. 40)

Access and operate the menu of the equipment



② Select "VIERA Link Control"

-① Display "VIERA Link Menu"





3 Select the equipment you want to access

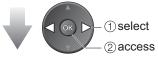
"Home Cinema" means Player theatre. Recorder theatre and Amplifier.



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)

■ If you access the invalid equipment

When the equipment with "HDAVI Control" function is connected



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

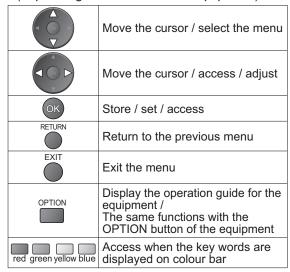


Others

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

4 Operate the menu of the equipment

 Available VIERA remote control buttons (depending on the connected equipment):

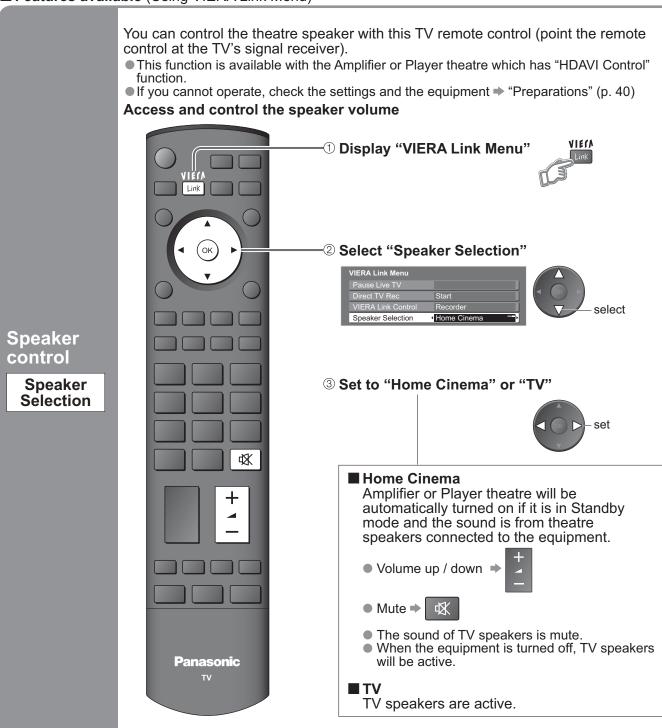


About the operations for the equipment, read the manual of the equipment.

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)

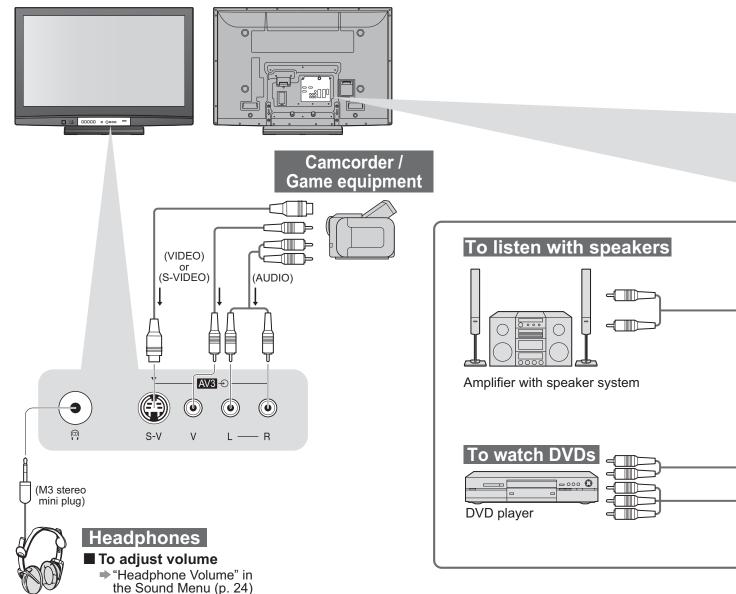


Note

- 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)

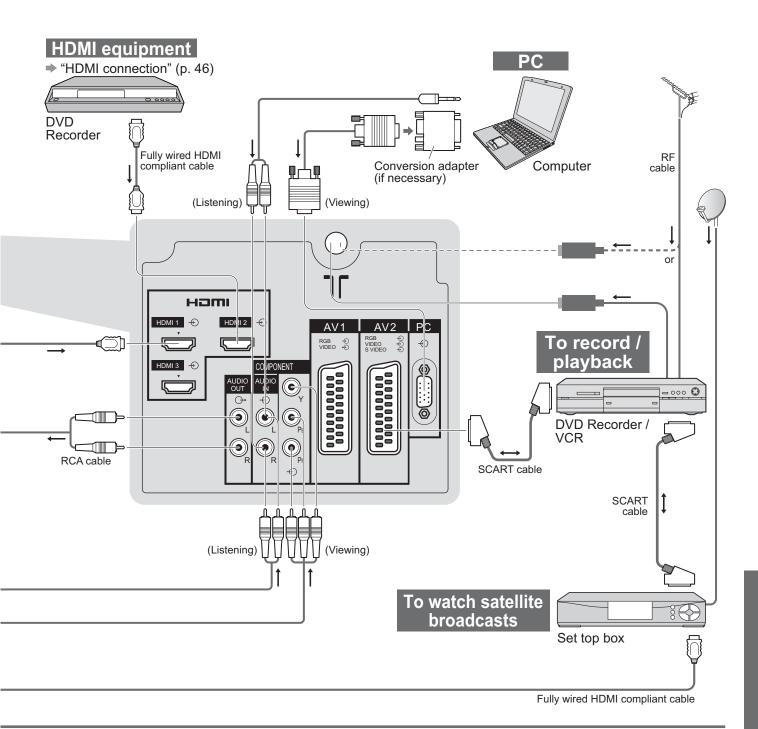
External Equipment

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. 51).



■ Types of connectable equipment to each terminal

- · · · · · · · · · · · · · · · · · · ·							
Terminal Recording / Playback (equipment)	AV1	AV2	AV3 (Front of TV)				
To record / playback videocassettes / DVDs (VCR / DVD recorder)	0	0					
To watch DVDs (DVD player)	0	0	\circ				
To watch camcorder images (Video camera)	0	0	\circ				
To watch satellite broadcasts (Set top box)	0	0	\bigcirc				
To play games (Game equipment)	0	0	\circ				
To use amplifier with speaker system							
Q-Link	0	0					
VIERA Link	(with HDMI)	(with HDMI)					
Direct TV Recording							



COMPONENT O O O O O O O O O O O O O	AUDIO OUT	HOMI		
	R	1	2	3
0		0	0	0
		0	0	0
		0	0	0
		0	0	0
	0			
		0	0	0
		0	0	0

Technical Information

Auto Aspect

The optimum size and aspect can be chosen, and you can enjoy finer images. (p. 16)

Auto

Auto aspect determines the best aspect ratio to use to fill your screen. It does this using a four step process to determine if the picture being viewed is a widescreen picture.

If Auto aspect detects a widescreen signal it switches into the appropriate 16:9 or 14:9 widescreen mode. If Auto aspect does not detect a widescreen signal then this advanced TV enhances the picture for optimum viewing pleasure.

The text shown on the screen indicates how Auto aspect determined which ratio to use:

"WIDE" appears in the top left of the screen if a widescreen identification signal (WSS) is found or a signal found through a SCART or HDMI terminal. Auto aspect switches to the appropriate 16:9 or 14:9 widescreen ratio. This function will also work in any aspect mode. "Auto" appears in the top left of the screen if black stripes above and below the picture are detected. Auto aspect chooses the best ratio and expands the picture to fill the screen. This process can take several minutes, depending on the darkness of the picture.

		Aspect Control Signal									
		Widescreen signal (WSS)					Control signal through SCART (pin 8) or HDMI terminal				MI terminal
5	Signal name	TV	AV1	AV2	AV3	COMPONENT	AV1	AV2	HDMI1	HDMI2	HDMI3
P	AL	0	0	0	0		0	0			
P	AL 525/60	_	_	_	_		0	0		_	
D	VB	0	_	_	_		_	_			
N	I.NTSC	_	_	_	_		0	0			
Ν	TSC (AV input only)	_	_	_	_		0	0			
	525(480)/60i					_			0	0	0
SD	525(480)/60p					_			0	0	0
O	625(576)/50i					0			0	0	0
	625(576)/50p					0			0	0	0
	750(720)/50p					_			0	0	0
	750(720)/60p					_			0	0	0
	1125(1080)/50i					_			0	0	0
금	1125(1080)/60i					_		<u> </u>	0	0	0
	1125(1080)/50p					_		\ [0	0	0
	1125(1080)/60p					_			0	0	0
	1125(1080)/24p					_			0	0	0

Note

- The ratio varies depending on the programme, etc. If the ratio is greater than the standard "16:9", black bands may appear at the top and bottom of the screen.
- If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR. (See the VCR manual.)

HDMI connection

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

HDMI-compatible equipment (*1) with an HDMI or DVI output terminal, such as a DVD player, a set top box or a game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable. About connections, see "External Equipment" (p. 44).

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI1 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 (HDMI1: use COMPONENT-AUDIO terminals).
- 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 and HDMI3 terminals are for digital audio signal only.
- Use with a PC is not assumed.
- 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
- 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. For details of the applicable HDMI signals, see p. 48.
- (*1): The HDMI logo is displayed on HDMI-compliant equipment.
- (*2): Enquire at your local digital equipment retailer shop.

Updating the software system (DVB mode)

Update system software regularly 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 night under the following conditions. Standby (TV turned Off with the remote control) Recording is not in progress.

■ 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".

Note

During downloading, do not turn Off the TV or touch any buttons. (The TV is automatically activated after downloading is completed.)

The message might be the notification beforehand. In this case, the schedule information (the date that the new version can be used) will appear. You can set the reservation for update. The update will not start when the TV is set to Off.

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

- 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).

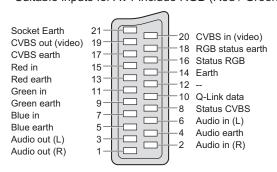
Note

- 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.

SCART, S-VIDEO and HDMI terminal information

■ AV1 SCART terminal

(RGB, VIDEO, Q-Link) Suitable inputs for AV1 include RGB (Red / Green / Blue).

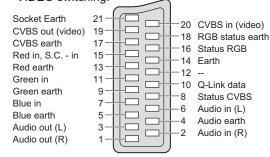


■ AV3 S-VIDEO 4 pin terminal

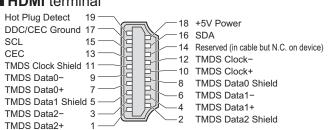


AV2 SCART terminal

(RGB, VIDEO, S-VIDEO, Q-Link) AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.



HDMI terminal



Technical Information

PC connection

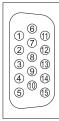
- A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

 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.

- 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

Model No.	TH-37PX80EA	TH-42PX80EA
4:3	768 × 720 pixels	768 × 768 pixels
16:9	1,024 × 720 pixels	1,024 × 768 pixels

D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Pin No. Signal Name		Signal Name
1	R	6	GND (Ground)	11)	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, PR), HDMI

* Mark: Applicable input signal

Mark. 7 ppiloabio iripat digital		
Signal name	COMPONENT	HDMI
525 (480) / 60i	*	*
525 (480) / 60p	*	*
625 (576) / 50i	*	*
625 (576) / 50p	*	*
750 (720) / 60p	*	*
750 (720) / 50p	*	*
_1,125 (1,080) / 60i	*	*
1,125 (1,080) / 50i	*	*
1,125 (1,080) / 60p		*
1,125 (1,080) / 50p		*
1,125 (1,080) / 24p		*

PC (D-sub 15P)

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
1,024 × 768 @70 Hz	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 VESA 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.
 Check all required SCART cables and connections are firmly in place.

Auto aspect

• Auto aspect is designed to provide you with the best aspect ratio to use to fill your screen. For user control please see p. 46.

S-Video / black and white picture

Using AV button please confirm your selection is S-Video I.e. AV2/S (p. 20).

On Screen messages I.e. EC/AV1

You can simply clear these ⇒ Press again to redisplay.



No DVB programmes shown after Auto Setup

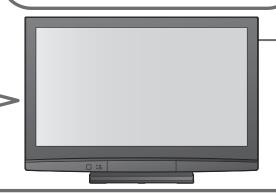
- Check the DVB transmitter.
- Adjust the direction of the aerial to another transmitter installed nearby.
- Check the analogue broadcast. If the image quality is poor, check the aerial and consult your nearest dealer.

An error message appears

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

To customer using indoor aerial

In order to enjoy a good quality DVB image, it is important to receive a good quality DVB signal. For this purpose check "DVB Signal Condition" in Tuning Menu (p. 31). A level of at least 5 is required in order to provide a good picture. It may be necessary to adjust the position and direction of the aerial to achieve the best possible result.



Q-Link function does not work

Please confirm SCART cable and connection. Also please set "AV1 / AV2 out" in the Setup Menu (p. 25).

"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. 40)

Recording does not start immediately

• Check the settings of the recorder. For details, read the manual of the recorder.

Permanently lit spots on screen

 Due to production process involved in this technology this may result in some pixels which are permanently lit or unlit. This is not a malfunction.

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 locked programme
 - selected invalid programme
 - selected radio service
 - displayed menu
 - Thumbnail or still picture in SD Card mode

FAQs

Problem Actions Set "P-NR" in the Picture Menu (to remove noise). (p. 24) Chaotic image, noisy Check nearby electrical products (car, motorcycle, fluorescent lamp). Is "Colour" or "Contrast" in the Picture Menu set to the minimum? No image can be (p. 24) Scree displayed Check Colour System. (p. 31) 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 ■ Is "Sound mute" active? (p. 9) Sound No sound is produced Is the volume set to the minimum? Sound level is low Sound signal reception may be deteriorated. Set "MPX" (p. 24) in the Sound Menu to "Mono". (Analogue only) or sound is distorted • Due to the digital reception technologies involved, quality of the DTV signals may be relatively low in some cases, despite good reception of analogue programmes. Install an aerial individually for the TV and VCR (or use a splitter). T\/ (Individual aerial) Unable to receive signals 1 @ ← a Splitter with a high-performance **Aerial Output** Aerial aerial Input Aerial Input terminal **VCR** Aerial Output (Individual aerial) **T** ⊚ ← **n** Check "DVB Signal Condition". (p. 31) If "Signal Quality" or "Signal Strength" are displayed in red, check Interference or frozen / disappearing If problem persists, consult your local Panasonic dealer. image in DVB Turn the TV off with the Mains power On / Off switch, then turn it On again. Set the sound setting of the connected equipment to "2ch L.PCM" Check the "HDMI1 Input" setting in the Sound Menu. (p. 24) Sound is unusual If digital sound connection has a problem, select analogue sound connection. (p. 46) HDM Pictures from external Is the HDMI cable connected properly? (p. 44) equipment are unusual Turn Off the TV and equipment, then turn them On again. Check an input signal from the equipment. (p. 48) when the equipment is Use an equipment compliant with EIA/CEA-861/861B. connected via HDMI Off Timer function is activated. TV goes into The TV enters "Standby mode" about 30 mins. after analogue "Standby mode" broadcasting ends. The remote control Are the batteries installed correctly? (p. 6) does not work Has the TV been switched On?

Specifications

			TH-37PX80EA		TH-42PX80EA	
Power Source			AC 220-240 V, 50 / 60 Hz			
Power Consumption	Average use		235 W		255 W	
nption	Standby condition		0.7 W (Without monitor out recording) 20 W (With monitor out recording)			
었 므	Aspect Ratio)	16:9			
Display panel	Visible screen size		94 cm (diagonal) 819 mm (W) × 457 mm (H)		106 cm (diagonal) 922 mm (W) × 518 mm (H)	
	Number of pixels		737,280 (1,024 (W) × 720 (H)) [3,072 × 720 dots]		786,432 (1,024 (W) × 768 (H)) [3,072 × 768 dots]	
Sound	Speaker		160 mm × 42 mm × 2 pcs, 8 Ω			
Ē	Audio Outpu		20 W (10 W + 10 W), 10% THD			
ರ Headphones			M3 (3.5 mm) stereo mini Jack × 1			
PC signals			VGA, SVGA, XGA SXGA ······ (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz			
Receiving Systems / Band name			PAL B, G, H, I, SECAM B, G, SECAM L / L' VHF E2 - E12 VHF H1 - H2 (ITALY) VHF A - H (ITALY) UHF E21 - E69 CATV (S01 - S05) CATV S1 - S10 (M1 - M10) CATV S11 - S20 (U1 - U10) CATV S21 - S41 (Hyperband) PAL D, K, SECAM D, K VHF R1 - R2 VHF R3 - R5 VHF R6 - R12 UHF E21 - E69 PAL 525/60 Playback of NTSC tape from some PAL Video recorders (VCR) DVB Digital terrestrial services via VHF / UHF aerial input. M.NTSC Playback from M. NTSC Video recorders (VCR)			
			NTSC (AV input only) Playback from NTSC Video recorders (VCR) TV signals may not be received in some areas.			
Aerial - Rear			VHF / UHF			
Operating Conditions		ons	Temperature : 0 °C - 35 °C Humidity : 20 % - 80 % RH (non-condensing)			
ဂ္ဂ	AV1 (Scart terminal)		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)			
≌	AV2 (Scart te		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)			
Connection Terminals	AV3	VIDEO		1.0 V[p-p] (7		
		S-VIDEO			(75 Ω) C:0.286 V[p-p] (75 Ω)	
		AUDIO L - R		0.5 V[rms]		
	COMPONENT	VIDEO	Y P _B , P _R	1.0 V[p-p] (in ±0.35 V[p-p]	ncluding synchronization)	
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]		
	Others	HDMI1 / 2 / 3	TYPE A Connectors		upports "HDAVI Control 3" function.	
		PC	HIGH-DENSITY D-SUB 15PIN R,G,B/0.7 V[p-p] (75 Ω) HD, VD/TTL Level 2.0 - 5.0 V[p-p] (high impedance)			
	Card slot		SD Card slot × 1			
	Output	AUDIO L - R			nigh impedance)	
Dimensions (W × H × D)		H×D)	917 mm × 665 mm × 327 mm (With Pedestal) 1,020 mm × 727 mm × 327 mm (With Pedestal) 1,020 mm × 679 mm × 95 mm (TV only) 1,020 mm × 679 mm × 95 mm (TV only)			
Mass			24.5 kg Net (With Pedestal) 22.5 kg Net (TV only)		28.0 kg Net (With Pedestal) 26.0 kg Net (TV only)	

Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
 This equipment complies with the EMC standards listed below. EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.
 Pedestal: ST-42R4-WG (For safety approval)

Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.



For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items. Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.



[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

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- Macintosh is a registered trademark of Apple Inc., USA.
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Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996) TH-37PX80EA Declaration of Conformity No. 5734, 18 June 2008 TH-42PX80EA Declaration of Conformity No. 5735, 18 June 2008

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 Nu	umber
----------	-------

Serial Number

Matsushita Electric Industrial Co., Ltd.

Web Site: http://www.panasonic-europe.com

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