

### **Panasonic**®

**Operating Instructions LCD** Television

> **TX-32LXD80** Model No.



















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.

#### U.K. Standard

English



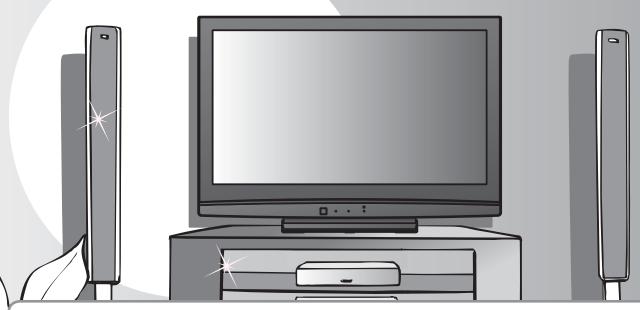
### Turn your living room into a home theatre!

#### Experience an amazing level of multi-media excitement

■ Receives digital terrestrial broadcastings using an integrated DVB (Digital Video Broadcasting) tuner

Display DVB programmes with TV Guide (p. 18) / Timer Programming (p. 38) / Register and instantly call up favourite programmes with Profile Edit (p. 30)

- Sharp pictures with HDMI connection
  Enjoy high-definition digital picture and high-quality sound by using an HDMI cable (p. 50)
- Links up and controls the connected equipment with "Q-Link" and "VIERA Link" Easy recording and playback, create home theatre without complicated settings, etc. (p. 42)
- Supports Audio Description signal (p. 13 and p. 24)
  This function can add an additional audio track to describe events on-screen and aids understanding and enjoyment, particularly for visually-impaired viewers.



#### **Digital Switchover**

Starting in late 2007 and ending in 2012, TV services in the UK will go completely digital, TV region by TV region.

If you have any questions, please call Digital UK on **08456 50 50 50** or visit **www.digitaluk.co.uk** 

Digital Switchover will cover a period of several weeks. When it starts you will lose all Analogue TV programmes and some Digital TV programmes will be missing. You will need to retune your TV each time this happens to recover your digital programmes.

To retune your TV → "Auto Setup" in "Tuning Menu" (p. 32 and p.33)
Cable or Satellite users should still retune the TV to continue to receive Freeview services via their aerial. (Your Analogue programme for viewing Cable or Satellite services will change to a new position.)

 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.

# 178°

#### **IPS-Alpha Panel**

IPS-Alpha Panel is one of LCD panels, which offers 178-degree viewing angle. This delivers beautiful images regardless of the viewing angle.



#### 8,000:1 Dynamic Contrast

A wide contrast ratio will deliver pictures with a deep black level and a brighter white level for greater image depth.



#### 24p Movie Playback

Can support 1080p, 24 frames per second source materials.



#### **V-AUDIO**

Utilises Panasonic's advanced Digital Amplification technology.



#### 60,000 hours LCD Display Lifetime

The LCD display panel used in the 2008 VIERA TV range is rated for up to 60,000 hours.\*

\*This measurement is based on the time taken for the brightness of the panel to reduce to half of it's maximum level.

The time taken to reach this level may vary depending on the image content and the environment where the TV is used.

Malfunctions are not taken into account.



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# Safety Precautions

#### Warning & Caution

#### Handling the mains plug and lead

 Ensure that the mains plug is easily accessible at all times. The On / Off switch on this model does not fully disconnect the TV from the mains supply. Remove the mains plug from the wall socket when the TV is not used for a prolonged period of

#### Power source

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

#### Do not remove the cover

Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.

#### 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 the TV on sloped or unstable surfaces

The TV may fall off or tip over.

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

Irreversible damage can be caused.



IMPORTANT: THE MOULDED MAINS PLUG FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This TV is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this mains plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.

If the mains plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced. If you lose the fuse cover the mains plug must not be used until a replacement cover is obtained. A replacement fuse cover may be purchased from your local Panasonic dealer.

If the fitted moulded mains plug is unsuitable for the socket outlet in your home, then the fuse shall be removed and the mains plug cut off and disposed of safety. There is a danger of severe electrical shock if the cut off mains plug is inserted into any 13 amp socket.

If a new mains plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

IMPORTANT: - The wires in this mains lead are coloured in accordance with the following code: -Blue: Neutral Brown: Live

As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your mains plug, proceed as follows.

The wire which is coloured BLUE must be connected to the terminal in the mains plug which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal in the mains plug which is marked with the letter L or coloured RED.

Under no circumstances should either of these wires be connected to the Earth terminal of the three pin mains plug, marked with the letter E or the earth symbol  $\bigoplus$ .

How to replace the fuse.

For plug type shown in example 1:

Lift out the removable fuse compartment with a screwdriver and replace the fuse, then refit securely into the mains plug (see example 1).

For plug type shown in example 2:

Lift open the fuse compartment, in the mains plug, with a screwdriver, and replace the fuse, then press the fuse cover down securely (see example 2).





### **Notes**

### Do not expose to rain or excessive moisture

 To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture.

This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

### Do not block the rear ventilation openings

 Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths and curtains.

# 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.

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

#### ■ 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).
- Transport only in upright position

### 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 the soft dry cloth provided. 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

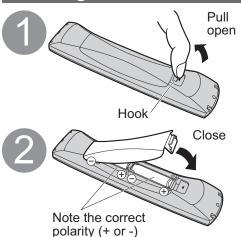
Wipe the mains plug with a dry cloth at regular intervals. (Moisture and dust may lead to fire or electrical shock.)

# **Accessories / Options**

#### Standard accessories Check that you have the accessories and items shown ☐ Remote Control ☐ Batteries for the ☐ Clamper ☐ Cleaning cloth Remote Control (2) N2QAYB000239 ■ TMM8E18048 TXFPE01RLTB ● R6 (UM3) ☐ Operating Instructions

- ☐ Pan European Guarantee Card
- ☐ 1 Year Guarantee Registration
- ☐ CRM (Customer Relationship Management)
- 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.

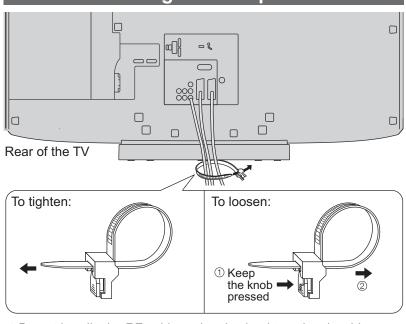
#### Installing remote's batteries



#### 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.

#### 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.

#### **Optional accessories**

Wall-hanging bracket

TY-WK32LR2W



Some items may not be available locally.

Please contact your nearest Panasonic dealer to purchase the recommended wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.

#### **WARNING!**

Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer. Any damage resulting from not having a professional installer mount

your unit will void your warranty. Always be sure to ask a qualified technician to carry out set-up.

Incorrect fitting may cause equipment to fall, resulting in injury and

 Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.

■ Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.

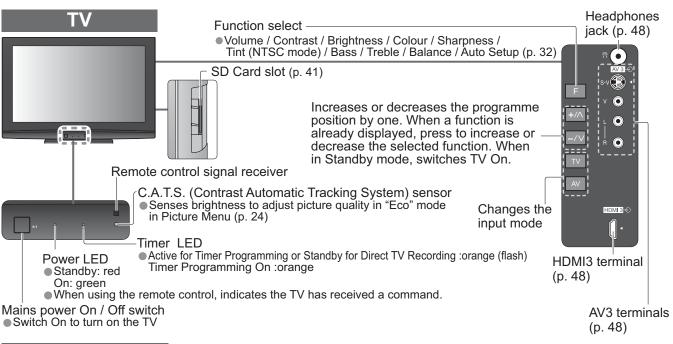
#### ■ How to remove the Pedestal

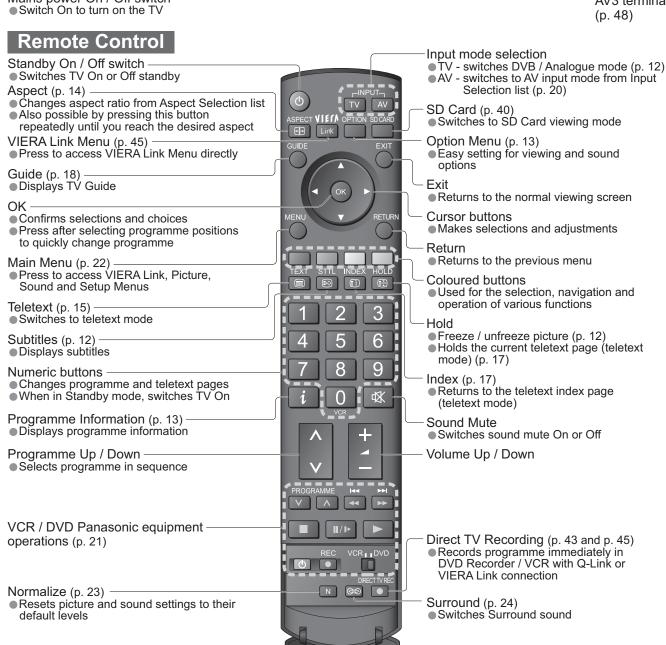
Remove four screws.

TX-32LXD80 

Rear of the TV

# **Identifying Controls**





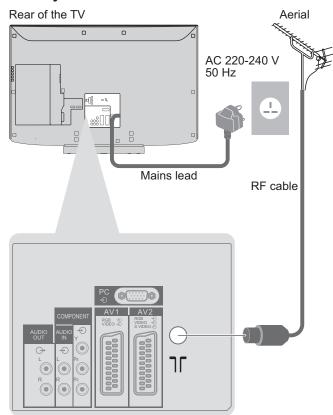
### **Basic Connection**

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.

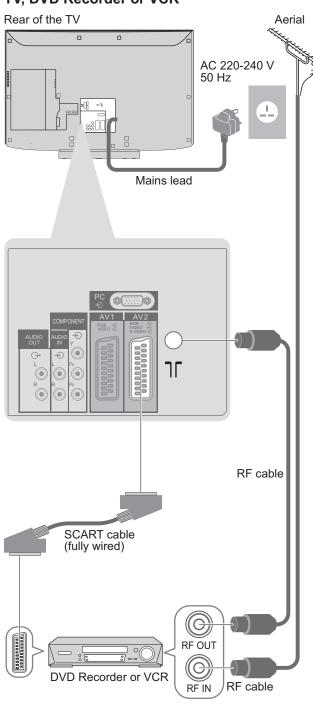
#### Example 1 Connecting aerial

#### Example 2 **Connecting DVD Recorder / VCR**

#### TV only



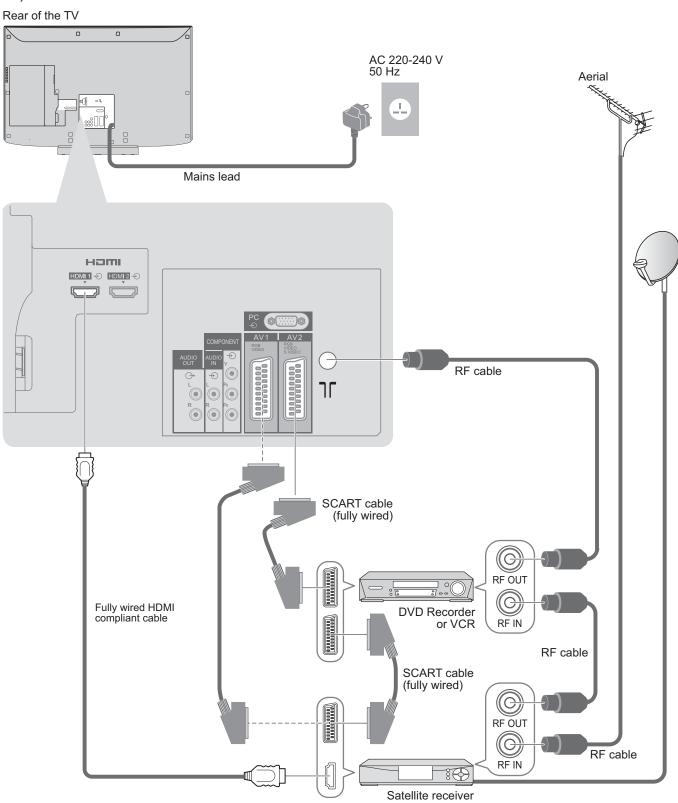
#### TV, DVD Recorder or VCR



- Connect to AV2 for a DVD Recorder / VCR supporting Q-Link (p. 43).
   Connect to AV1 for a Satellite receiver.
- For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 48).
- Q-Link connection ⇒ p. 42
- VIERA Link connection ⇒ p. 42
- Read the manual of the equipment too.

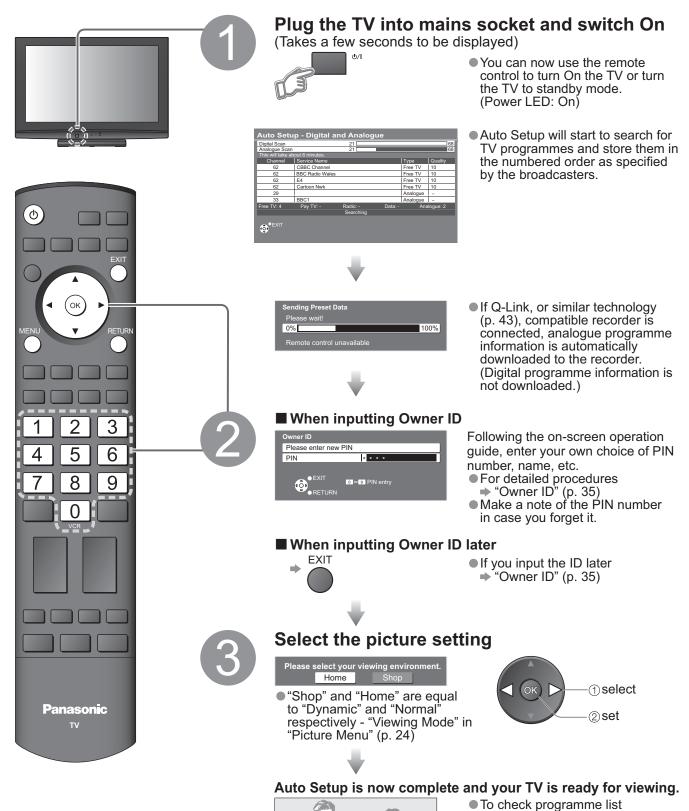
### **Example 3 Connecting DVD Recorder / VCR and Satellite receiver**

#### TV, DVD Recorder / VCR and Satellite



### Auto Setup

Search and store TV programmes automatically. These steps are not necessary if the setup has been completed by your local dealer.



at-a-glance

To edit programmes

→ "Using TV Guide" (p. 18)

→ "Editing Programmes" (p. 30)

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

#### ■ 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

#### Using the On Screen Displays

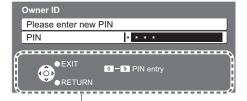
RETURN

Return to the previous menu

Exit the menu system and return to the normal viewing screen

#### ■ ON SCREEN HELP Instructions box

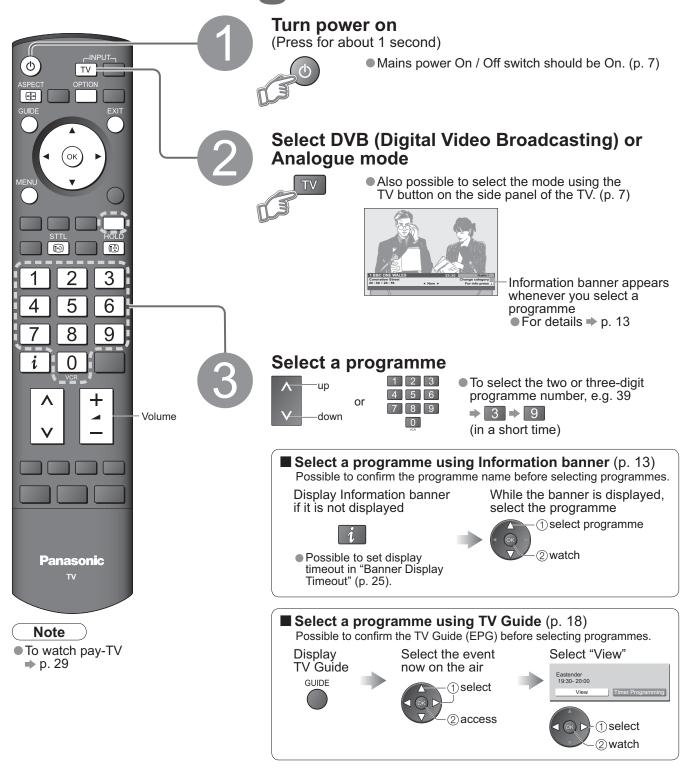
(example: Owner ID)



On-screen operation guide will help you.

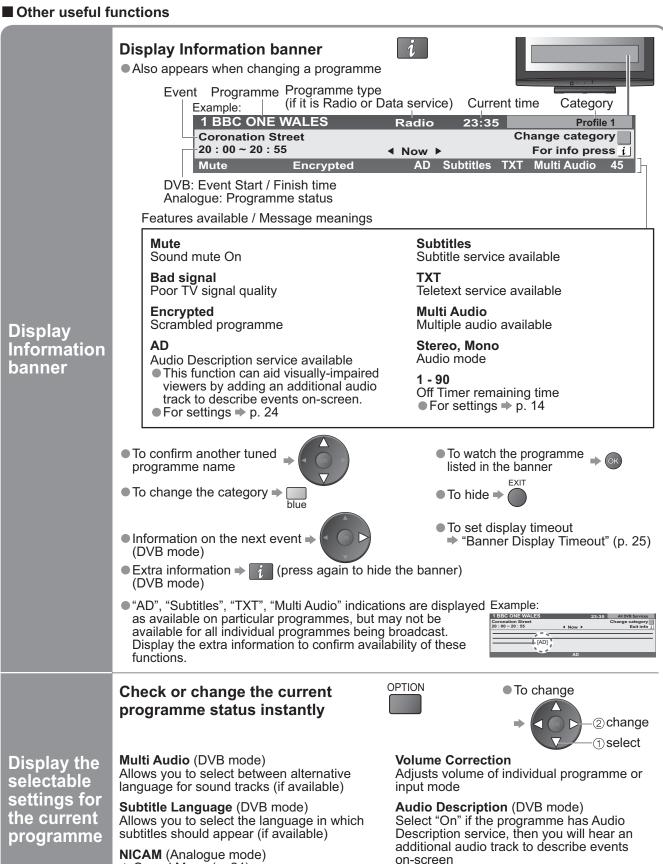
- If tuning has failed ⇒ "Auto Setup" (p. 33)
- If downloading has failed ⇒ "Q-Link Download" (p. 25)
- To initialize all settings ⇒ "Shipping Condition" (p. 34)
- If you turned the TV Off during Standby mode last time, the TV will be in Standby mode when you turn the TV On with Mains power On / Off 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



Also possible to change the settings in Menu list (p. 24 and p. 25).

Sound Menu (p. 24)

# Watching TV

#### ■ Other useful functions

# Turn the TV off automatically after a fixed period Display the select "Setup" Select "Off Timer" and set the time Select "Off Timer" and set the time

Off Timer

- To cancel ⇒ Set to "Off" or turn the TV off.
- To display the remaining time ⇒ Information banner (p. 13)
- When the remaining time is within 3 minutes, the remaining time will flash on screen.

#### Change the aspect ratio

ASPECT

Enjoy viewing the picture at its optimum size and aspect.

Display Aspect Selection list



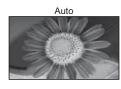
While the list is displayed, select the mode





Aspect Selection list

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



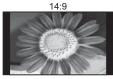
The best ratio is chosen and the picture expanded to fill the screen. For details 

p. 50



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

Change aspect ratio



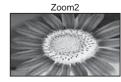
Displays the image at the standard "14:9" without distortion.



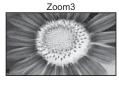
Displays the image at the standard "4:3" without distortion.



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).

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

# Viewing Teletext

You can enjoy news, weather forecasts and subtitles, etc. (depending on the broadcaster)

#### DVB mode

#### **DVB** teletext services

9

0

**Panasonic** 

DVB teletext services differ greatly from analogue teletext. When you switch to a DVB teletext service, the images you see can contain graphics and text, laid out and controlled in a manner decided by the broadcaster.

You can check if the programme has teletext service.



Displayed if programme has teletext service









#### How to use

In all cases, it is possible to navigate the pages using buttons on the remote control, but because the commands available must apply to all manufacturers of DVB equipment, some on screen commands may not correspond exactly to the remote control buttons.

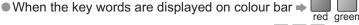
banner

(p. 13)

For example:

- When "select" or "go" is displayed → OK











red green yellow blue



- As soon as you switch to a DVB programme with links to a teletext service, software is downloaded in the background to enable the teletext function. This means that when switching to a DVB programme, you should wait for approximately 5 seconds before pressing the TEXT button - this will allow the software to download. If you press the TEXT button before download is complete, there will be a short delay before the text screen is displayed.
- While navigating DVB teletext, you will find there is a short delay when moving between pages while the page downloads. There is often a prompt shown somewhere on the page (for example "Loading") to let you know that this is happening.

# Viewing Teletext

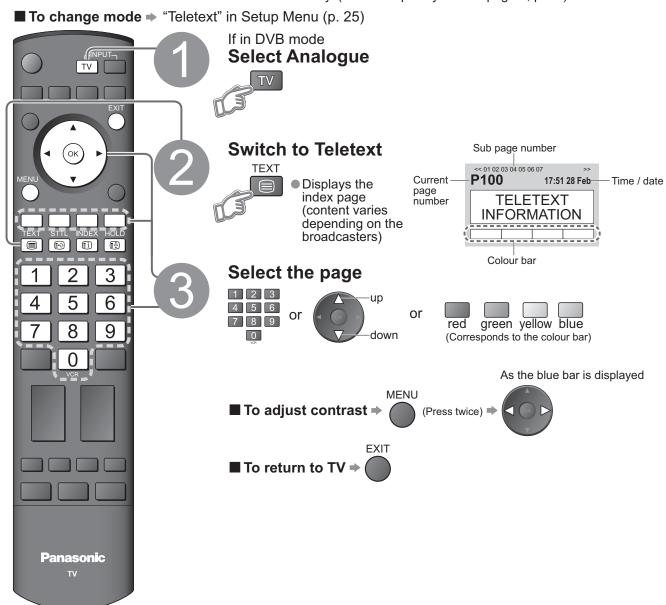
#### Analogue mode

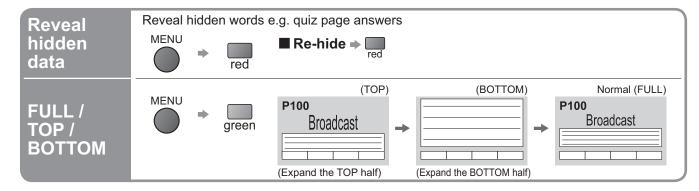
#### What is FASTEXT mode (default)?

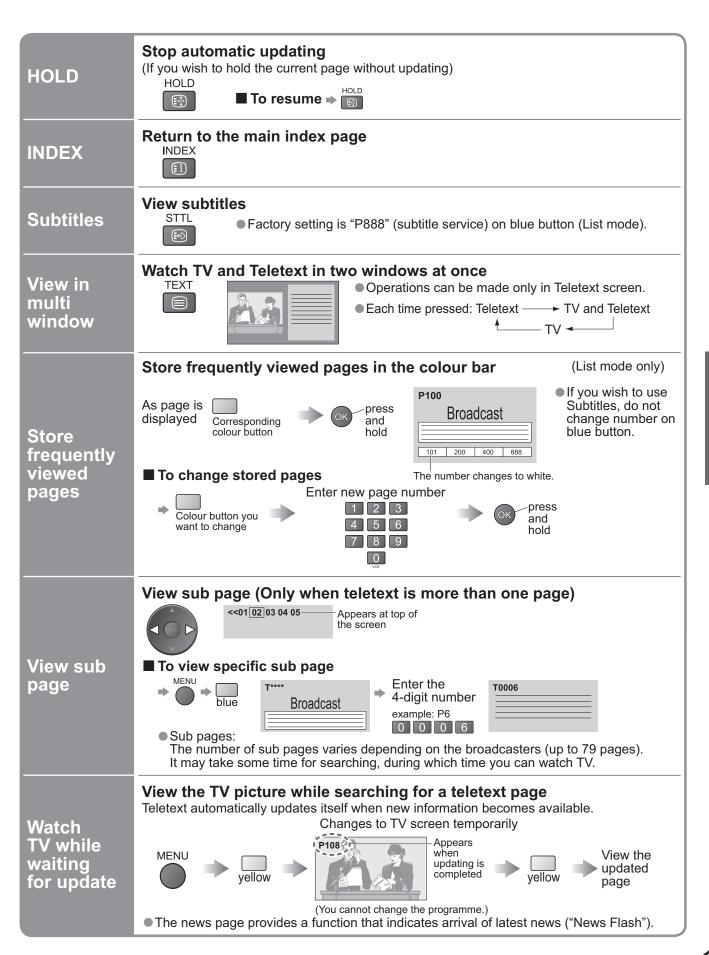
In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

#### What is 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. 17)



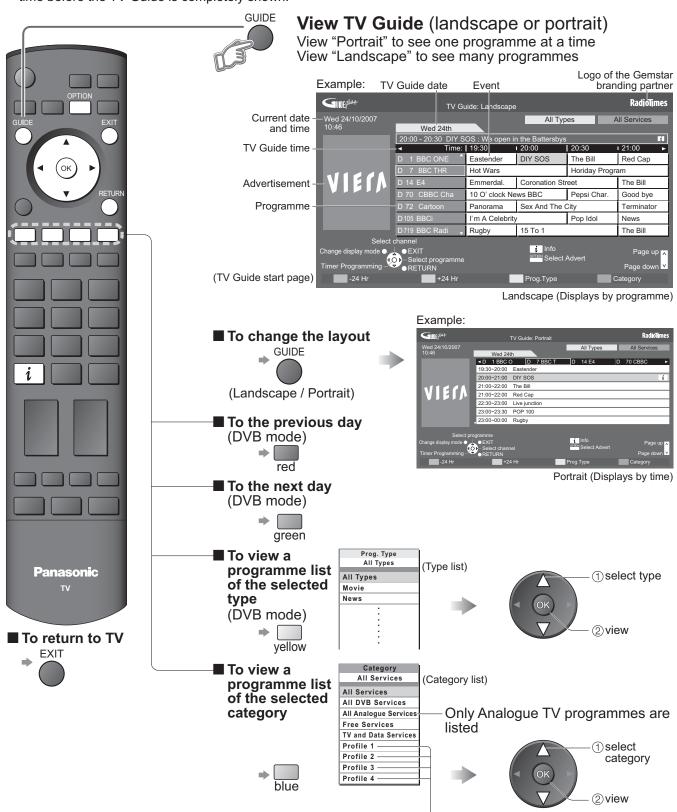


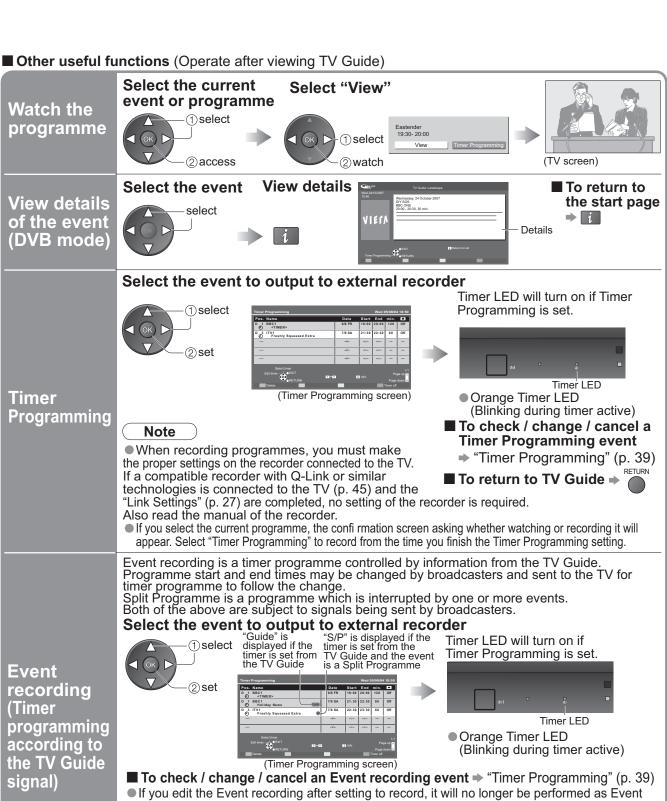


# **Using TV Guide**

TV Guide—Electronic Programme Guide (EPG) provides an on-screen listing of the programmes currently broadcast and the forthcoming broadcasts over the next seven days (depending on the broadcasters).

- This TV supports GUIDE Plus+ system.
- The Gemstar branding partner will supply the rating informations in the event information and the recommended group in the Prog. Type list.
- Analogue programmes will be listed after DVB programmes. "D" means DVB programme and "A" means Analogue programme.
- When this TV is turned on for the fi rst time, or the TV is switched off for more than a week, it may take some time before the TV Guide is completely shown.





- recording. The recording will be performed according to the time setting in Timer Programming.
- To return to TV Guide ⇒

Note

Whilst making Split Programme recording, it is not possible to record any events between sections.

Enter your postcode when using this function for the first time

→ "Postcode" in "GUIDE Plus+ Settings" (p. 27)
If you have already entered your postcode in Owner ID (p. 12), you do not have to enter again. If you enter an incorrect postcode for your area, or no postcodes are entered, advertisement may not be displayed correctly. ■ To change advertisements

#### Display advertisement information

advertisement

View

- To display the latest advertisement, you will need to update the information.
  - To update the information continuously, the
- TV should be left in Standby mode at night. Note
- Some advertisements are for future programmes. In this case it is possible to use the Event recording function → see above
- The information from GUIDE Plus+ system will not be lost even if turned Off with Mains power On / Off switch.



To return to TV Guide

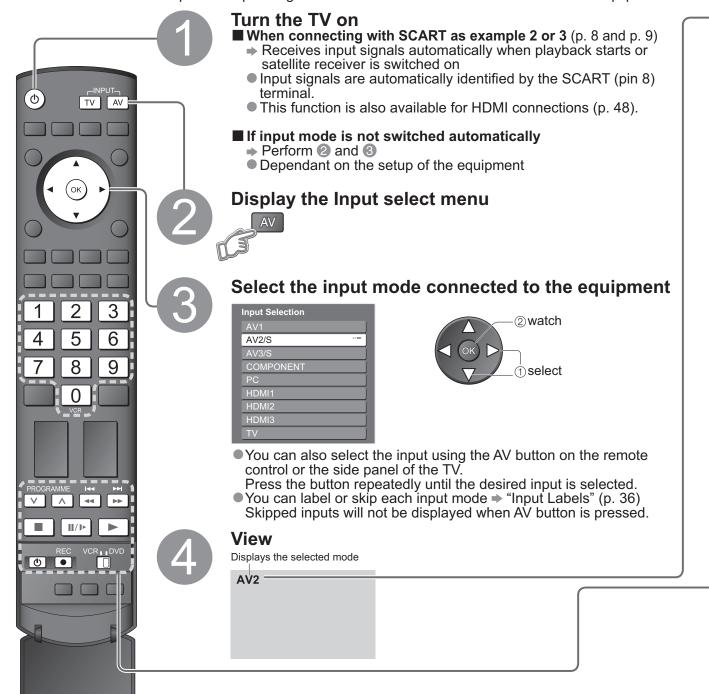


# Watching VCR, DVD and Satellites

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

To connect the equipment ⇒ p. 8 and p. 9

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



Note

■ To return to TV

• 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.

#### Screen display

Terminal	AV1	AV2	AV3	COMPONENT	PC	HDMI1	HDMI2	HDMI3
Manual input (default setting in "Input Labels")	AV1 AV1-RGB	AV2 AV2-S-Video AV2-RGB	AV3 AV3-S-Video	COMPONENT	PC	HDMI1	HDMI2	HDMI3
Auto input (EC mode or (VIERA Link)	EC/AV1 EC/AV1-RGB	EC/AV2 EC/AV2-S-Video EC/AV2-RGB	_	_	_	EC/HDMI1 Applicable for EC mode and VIERA Link		EC/HDMI3 Applicable for VIERA Link

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

Tanadonio equipment connected to the TV dan be directly operated with the remote control.			
VCR <sub>11</sub> 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		
<del> </del>	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		
<b>▶</b>	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 →
- 2 Press and hold U during the following operations

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

1	2	3		
4	5	6	→ Press	
7	8	9	- 1 1033	
	0			

#### "VCR" position

vort position					
Equipment	Code				
VCR	10 (default)				
DVD	11				

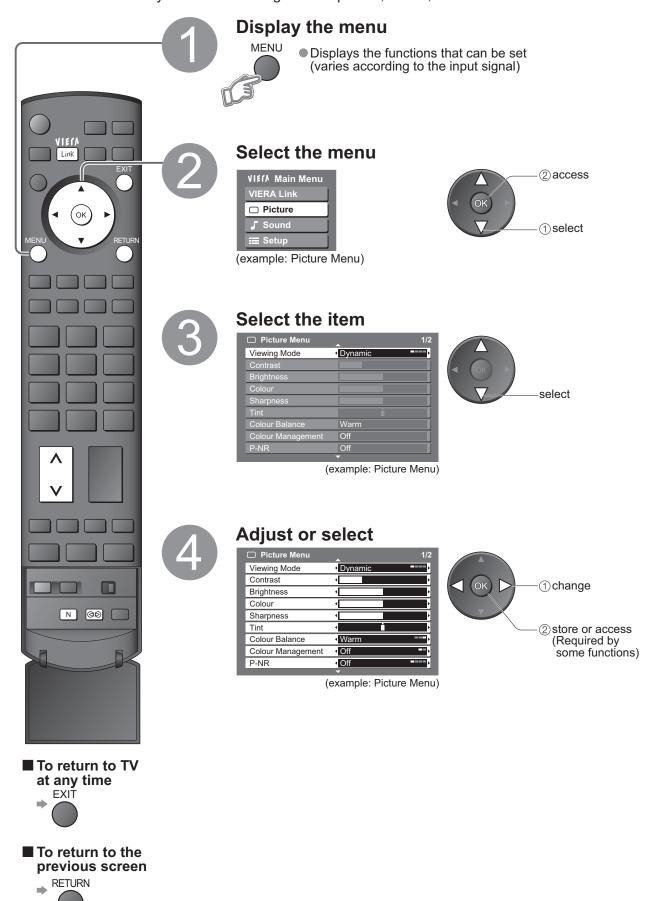
#### "DVD" position

_ · - pooo	
Equipment	Code
DVD	70 (default)
Player home theatre	71

- 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.

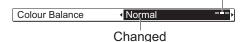
### **How to Use Menu Functions**

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

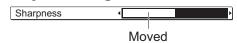


#### **■**Choose from among alternatives

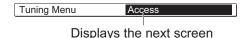
Number and positions of alternatives



#### ■Adjust using the slide bar



#### ■Go to the next screen



#### ■Enter characters using alpha/numeric keys

You can input information using alpha/numeric keys.



#### ■To change menu pages



#### ■To reset the settings

- To reset the picture settings only
  → "Reset to Default" in Picture Menu (p. 24)
- To reset the sound settings only⇒ "Reset to Default" in Sound Menu (p. 24)
- To reset the picture and sound settings together
  - N (Also volume level and aspect mode are reset)
- To initialize all settings
   "Shipping Condition" in Setup Menu (p. 34)

### **How to Use Menu Functions**

#### ■Menu list

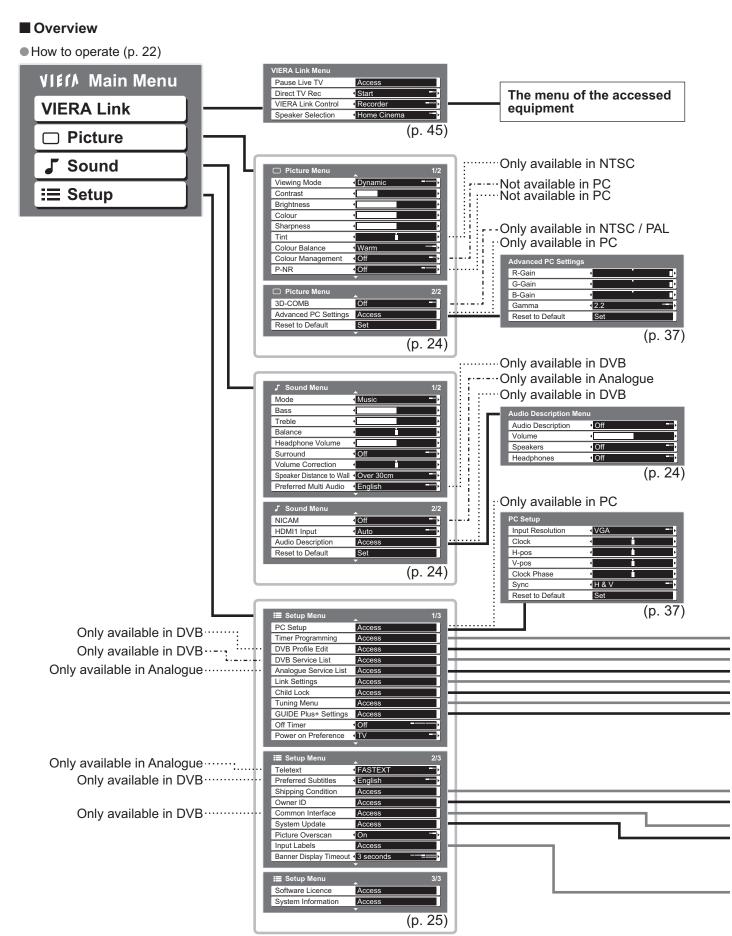
Menu	iiu iist	Item	Adjustments / Configurations (alternatives)
			, tajaotinonio / oomigarationo (alternativos)
VIERA Link	Pause Live TV		Controls the connected equipment with VIERA Link function, and enables various
\$	Direct TV Rec VIERA Link Control		convenient recording, playback, etc. (p. 45 - 47)  Solution You can also access VIERA Link Menu directly using the VIERA Link button on the
듴			remote control.
<del></del>	Speak	er Selection	Colocto form different covers pottings (Dunemia / Newwell (Cinema / Ecc)
		ng Mode	Selects four different screen settings (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 In each Viewing Mode setting, Contrast, Brightness, Colour, Sharpness, Tint, Colour Balance, Colour Management and 3D-COMB can be adjusted and stored to suit your particular viewing requirement (e.g., you may require different settings for viewing sports, films, news etc.)  Set for each input signal  Changes will be stored automatically
ס		ast, Brightness, r, Sharpness	Increases or decreases the levels of these options according to your personal preference
Picture	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
=	Colou	r Balance	Allows you to set the overall colour tone of the picture (Cool / Normal / Warm)
TO	Colou	r 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		Select two different sound settings (Music / Speech) In each Sound Mode setting, Bass and Treble can be adjusted and stored to suit your particular sound requirement Changes to any settings in a mode will affect all signal sources Sound quality can be improved
	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
	Baland		Adjusts volume level of right and left speakers
	Headp	hone 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. 7).
	Volum	e Correction	Adjusts volume of individual programme or input mode
ဟ	Speaker Distance to Wall		Adjusts the low frequency sound <b>(Over 30cm / Up to 30cm)</b> 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.
9	Prefer	red Multi Audio	Selects the preferred language for DVB multi audio (depending on the broadcaster)
	NICAM		NICAM (Near Instantaneous Companded Audio Multiplex) A format for digital sound over television Reproduces stereo sound (Off / On) Off if reception is poor (FM monaural sound)  Analogue mode only
	HDMI1 / 3 Input		Select to fit the input signal (Auto / Digital / Analogue) (p. 50)  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  No setting for HDMI2 available
	De	Audio Description	Useful for visually-impaired viewers (Off / On)
	Audio Description Menu	Volume	Select "On" to activate the description sound track if available  Adjusts the volume for audio description
	Audio scripti Menu	Speakers	Set to "On" to activate the description sound track from TV speakers (Off / On)
		Headphones	Set to "On" to activate the description sound track from headphones (Off / On)
		•	Press the OK button to reset the present Sound Mode to the default settings
	Reset to Default		● Effective to Bass, Treble, Balance, Headphone Volume and Surround

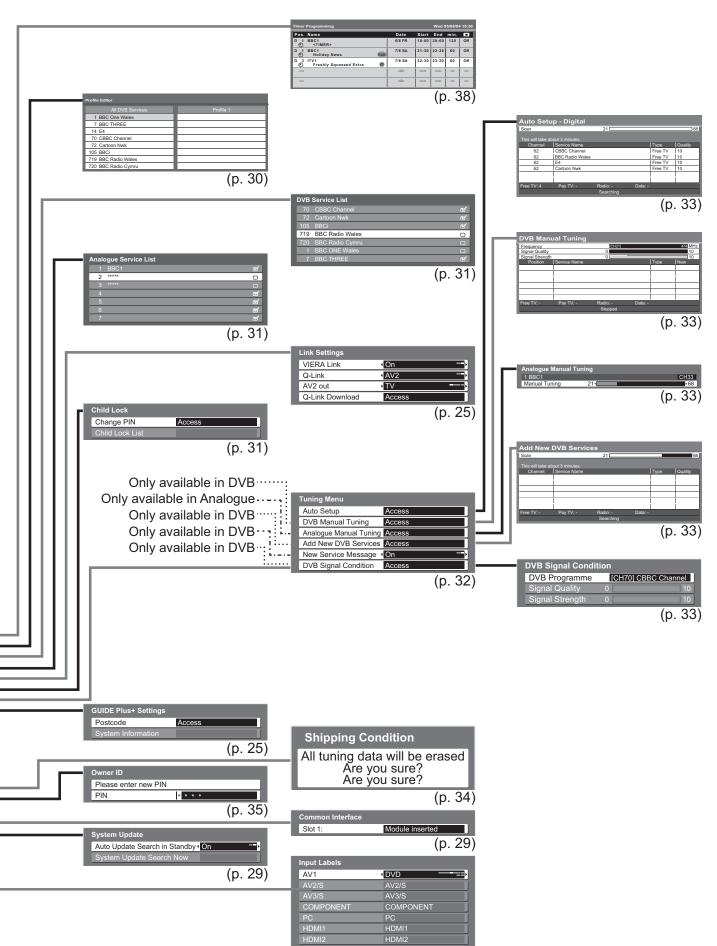
#### ■Menu list

IVIE	IMenu list				
Menu	ı Item		Item	Adjustments / Configurations (alternatives)	
	Timer Programming		Programming	Records forthcoming programmes (p. 38)	
	DV	ВР	rofile Edit	Creates list of favourite programmes (p. 30)	
	DV	B S	Service List	Skips the unwanted DVB programmes (p. 31)	
	Analogue Service List			Skips the unwanted Analogue programmes or edits Analogue programmes (p. 31)	
		VII	ERA Link	Sets to use VIERA Link functions (Off / On) (p. 44)	
	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. 43)  Select the connected terminal to the recorder even it is not compatible with Q-Link.	
		ΑV	/1 / 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.	
		Q-	Link Download	Downloads analogue programme information to a Q-Link compatible equipment connected to the TV	
	Chi	ild	Lock	Locks a programme / AV input to prevent access to it (p. 31)	
		Αι	ıto Setup	Automatically sets the programmes received in the area (p. 33)	
		D\ Ma	/B anual Tuning	Sets the DVB programmes manually (p. 33)	
	unin		nalogue anual Tuning	Sets the Analogue programmes manually (p. 33)	
	Tuning Menu	Se	ld New DVB ervices	Adds new DVB services (p. 33)	
	nu	Me	ew Service essage	Selects whether to give a notification message when a new DVB service is found (p. 33)	
S		Cc	/B Signal ondition	Checks the DVB signal condition (p. 33)	
Setup	Setti		Postcode	Sets your post code to display advertisements in the GUIDE Plus+ system (p. 18)	
7	Postcode  System Information			Displays the system information of the GUIDE Plus+ system	
	Off	Tir	ner	Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)	
	Power on Preference		on Preference	Set to "TV" to view picture from TV tuner.  Set to "AV" to view input from an external equipment connected to a SCART terminal, e.g. satellite receiver (TV / AV)  The external equipment must be switched on and sending a control signal for automatic switching at power on to occur.	
	Teletext			Analogue teletext display mode (FASTEXT / List) (p. 16)	
	Preferred Subtitles		red Subtitles	Selects the preferred language for DVB subtitles (depending on the broadcaster)  ■ To display subtitles ⇒ p. 12	
	Shipping Condition		ing Condition	Resets all settings, for example, when moving house (p. 34)	
	Ow	nei	r <b>ID</b>	Inputs the owner ID (p. 35)	
	Common Interface		on Interface	Uses include to watch pay-TV (p. 29)	
	System Update		m Update	Downloads new software to TV (p. 29)	
	Picture Overscan		e 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. 36)	
	Bai Tin		er Display ut	Sets how long the information banner (p. 13) stays on screen 0 (No display) to 10 sec. in 1-sec. increments	
	Software Licence			Displays the software licence information	
	System Information		m Information	Displays the system information of this TV	

A different menu will be displayed while PC or SD Card is used. (p. 37 and p. 41)
 Only available items can be selected.

### **How to Use Menu Functions**



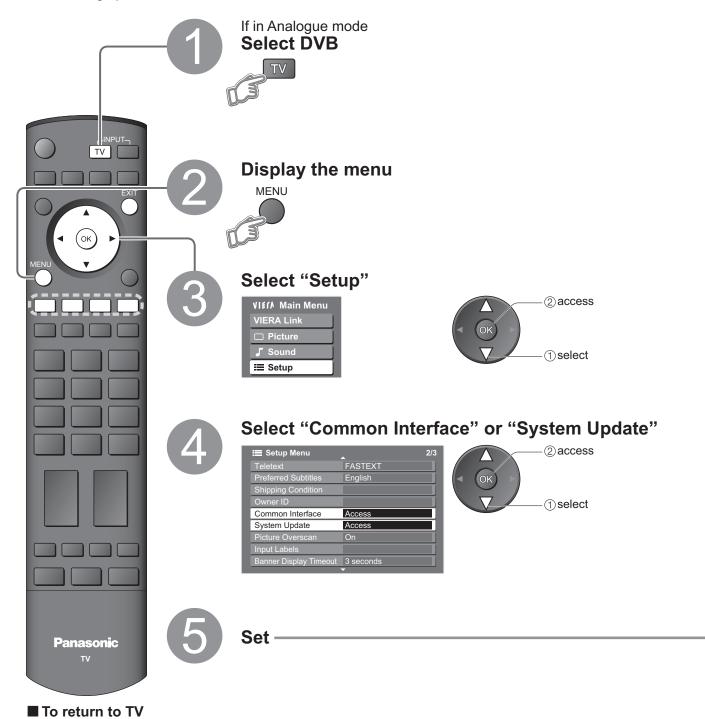


HDMI3

(p. 36)

# DVB Settings (DVB mode)

DVB Settings provide access to various advanced features.



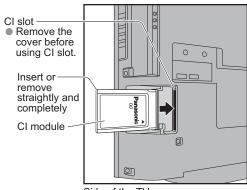
**⇒** EXIT

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

This TV receiver works only Pay TV modules complying with CI standard.

#### 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.
- Insert the module in the correct direction.



#### Side of the TV

#### 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

example: select, go ⇒ (





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



Download new software to TV. ● For details ⇒ p. 51

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

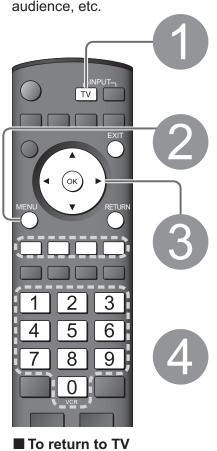




 Download may take for about 20 mins.

# **Editing Programmes**

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



#### Select DVB or Analogue



"DVB Profile Edit" and "DVB Service List" are available in DVB mode only.

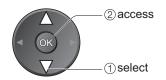
"Analogue Service List" is available in Analogue mode only.

#### Display the menu



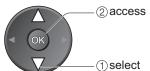
#### Select "Setup"





#### Select "DVB Profile Edit", "DVB Service List", "Analogue Service List" or "Child Lock" and set

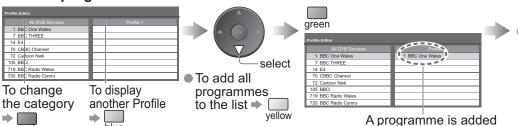






The list is added to "Category" in TV Guide (p. 18) and information banner (p. 13) and then easily accessed.

#### Select a programme and add it to the list

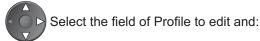


List favourite programmes

**DVB Profile Edit** 

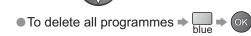
(DVB mode)

#### **■** To edit Profile









Note

Programme numbers (known as logical channel numbers) cannot be changed, due to broadcast restrictions.

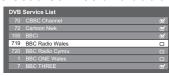
#### Skip unwanted programmes

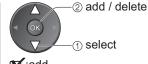
**DVB Service List** 

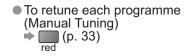
Analogue Service List You can hide unwanted services. The deleted services cannot be displayed except in this function. Use this function to skip unwanted programmes.

- "DVB Service List" lists all tuned DVB programmes in DVB mode.
  "Analogue Service List" lists all tuned Analogue programmes in Analogue mode.

#### Select a service and add / delete







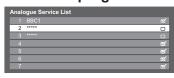
:add

:delete (skip)

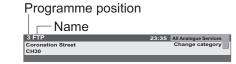
You can change the programme name and programme position for Analogue programmes.

- This function is available in Analogue mode.
- If a VCR is connected only with the RF cable, edit "VCR".

#### Select the programme to edit







Edit analogue programmes (Change name, Move)

Analogue Service List

■ To change the name displayed when selecting programmes







(maximum: five characters)

#### ■ To move the programme position

Select new position Store









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.)

#### ① Enter the PIN number (4 digits)



- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

#### ② Select "Child Lock List"

Control programme audience

**Child Lock** 





#### ③ Select the programme / input to be locked

② set ① select

- To cancel
- Select the locked programme / input

- To cancel all locks ⇒ □

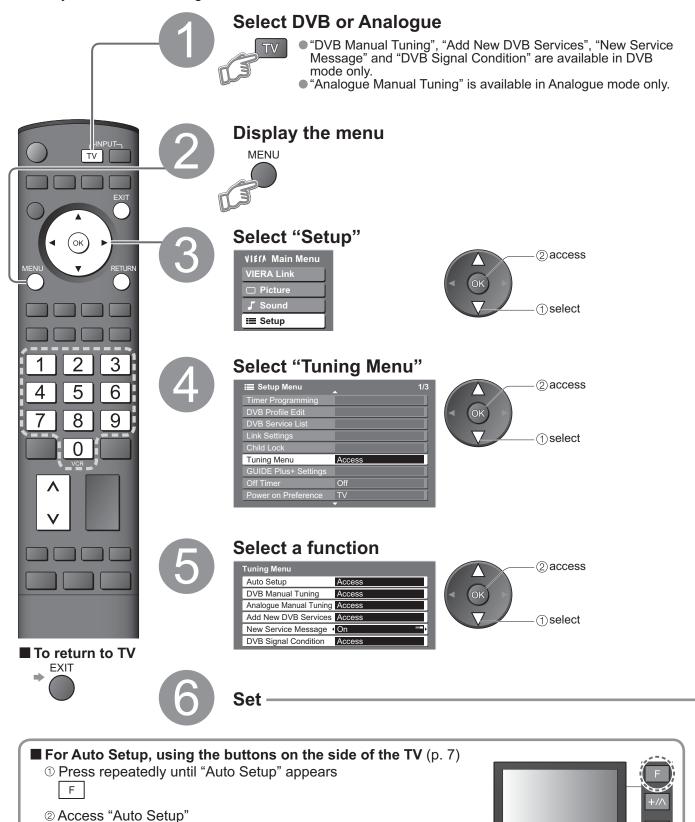
#### Appears when the programme / input is locked

■ To change the PIN number Select "Change PIN" in ② and enter a new PIN number twice.

Setting "Shipping Condition" (p. 34) erases the PIN number and all settings.

# **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 ⇒ F

TV

TV

③ Start "Auto Setup"

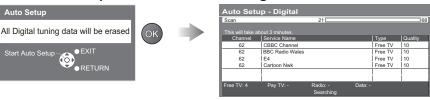
Automatically retune all DVB or Analogue programmes received in the area.

- Only DVB programmes are retuned in DVB mode.
- Onlý Analogue programmes are retuned in Analogue mode.
   If a Child Lock PIN number (p. 31) has been set, it must be entered.

#### Set all DVB or Analoque programmes automatically

#### **Auto Setup**

#### Settings are made automatically



All the previous tuning settings are erased.

Start Auto Setup

Auto Setup

- The analogue settings are downloaded to a Q-Link compatible equipment connected to the TV in Analogue mode.
- 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

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 search

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

#### Set Analogue programme manually

Analogue Manual Tuning

Set Analogue programme manually after Auto Setup.

• 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)

New DVB service found! Press OK to start Auto Setup. Press EXIT to Ignore. Selecting Auto Setup will delete current Profile and Childlock settings

 Selecting OK (Auto Setup) will delete the current Profile and Childlock settings.

Check DVB signal Selects a programme and checks the DVB signal condition.

To change the programme



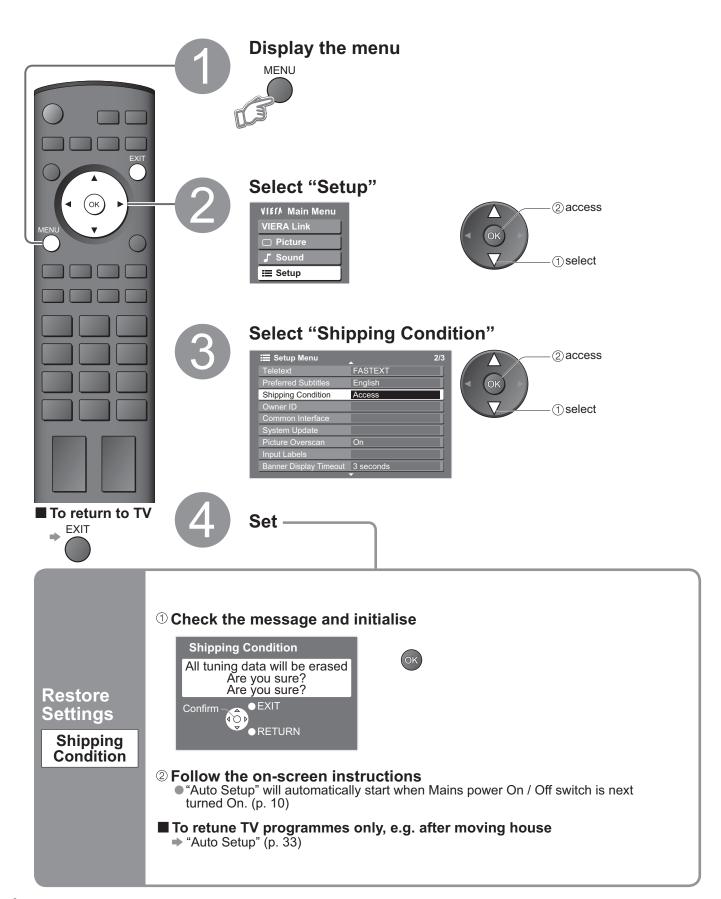
**DVB Signal Condition** DVB Programme [CH70] CBBC Channel A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows:

#### Signal Quality:

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

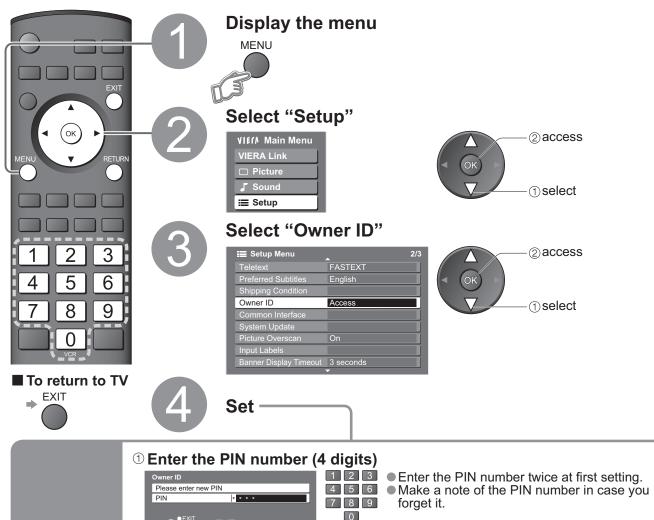
# **Restore Settings**

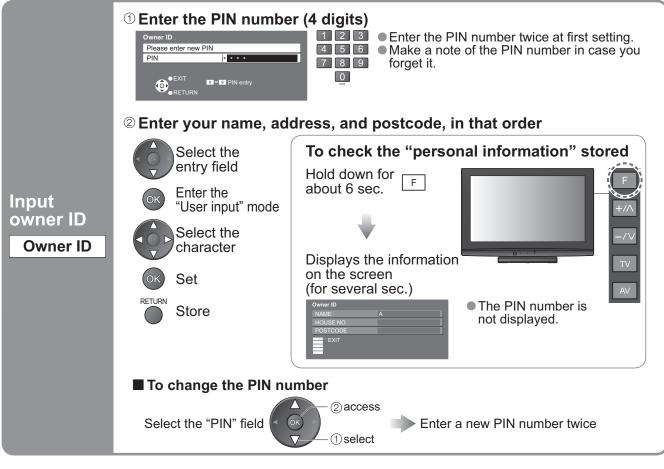
Resets the TV to its original condition, i.e. no programmes tuned in. All settings other than "Owner ID" (programmes, picture, sound quality, etc.) are reset.



### **Owner ID**

Entry of the security code (PIN number) and "personal information" (your name, address and postcode). In the unfortunate event of theft it will help the Police to determine the owner. If you have skipped the Owner ID input in "Auto Setup" (p. 10), and input it later, start from 1. If you input the Owner ID in "Auto Setup" (p. 10), perform 4.

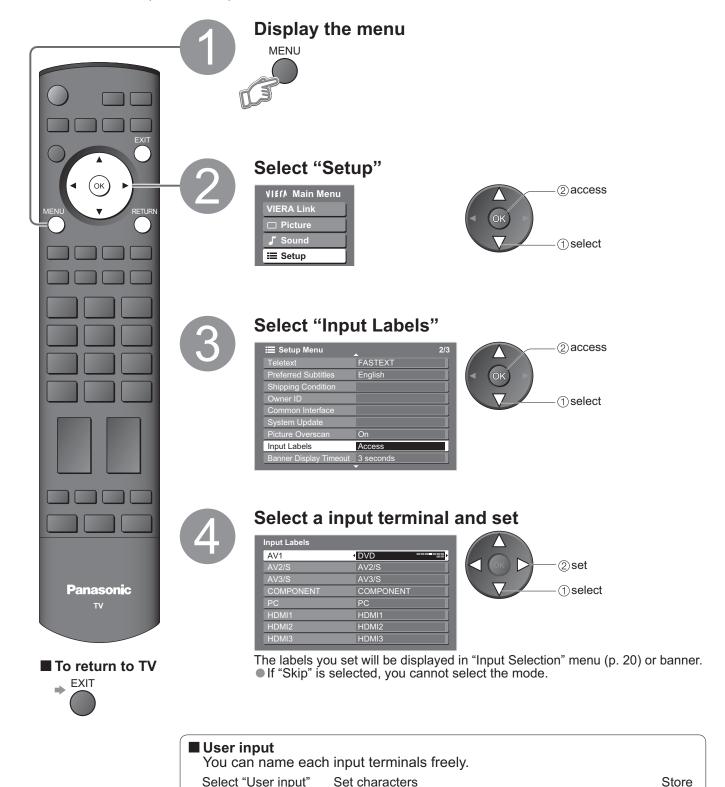




### Input Labels

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



① select

(maximum: ten characters)

② set

① select

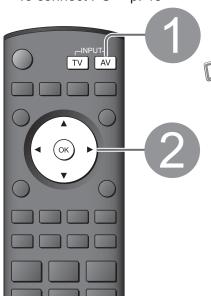
② access

**RETURN** 

# Displaying PC Screen on TV

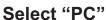
The screen of the PC connected to the TV can be displayed on the TV. You can also listen to PC sound with the audio cable connected.

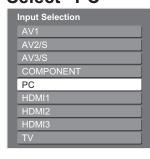
To connect PC ⇒ p. 48

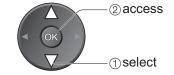


## Select the external input









- Corresponding signals ⇒ p. 52
- 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 (2) (p. 22)						
Menu	lt	em	Adjustments / Configurations (options)				
		R-Gain	Adjusts the white balance for red areas				
<u>P</u>	Advanced	G-Gain	Adjusts the white balance for green areas				
Picture	PC	B-Gain	Adjusts the white balance for blue areas				
ure	Settings	Gamma	(2.0 / 2.2 / 2.5)				
(D		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				
CO		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				

# **Recording Controls**

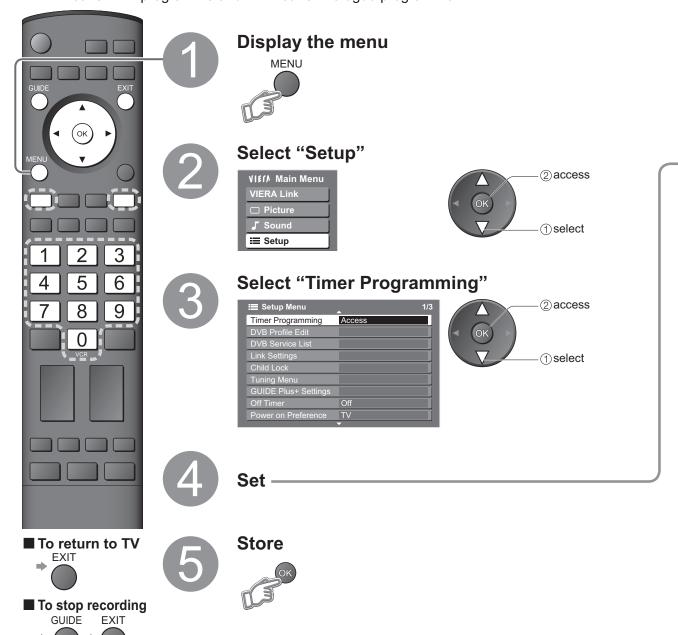
## **Timer Programming from Menu**

The Timer programming menu allows you to choose programmes that you wish to record. At the correct time, the TV will switch on and tune to the correct programme (even if the TV is in Standby mode). TV Guide may also be used to set timer programming. (p. 18)

• If the recorder is compatible with Q-Link or similar technologies (p. 43), and setup / connection are done completely (p. 42 and p. 43), you do not need to programme the recorder – the TV will control the recording progress.

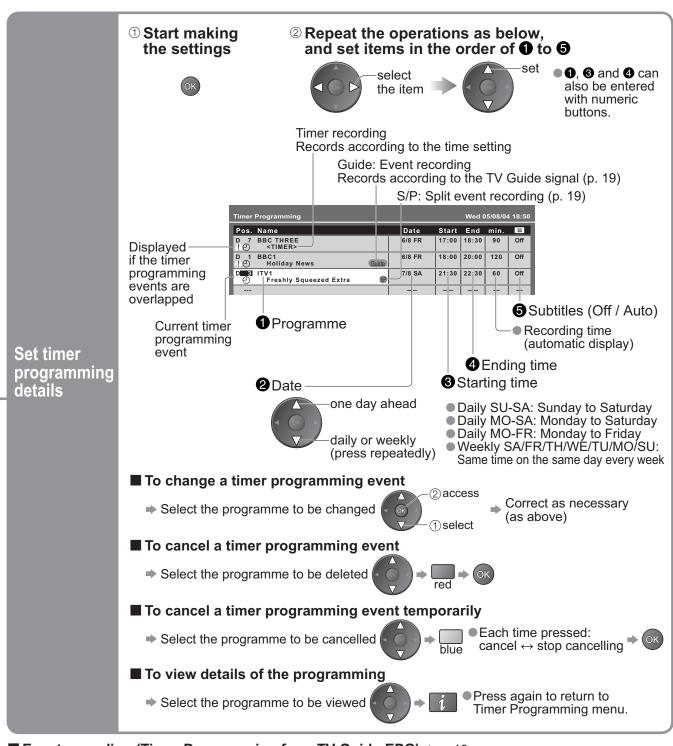
• If the recorder is not compatible with Q-Link or similar technologies, set "Q-Link" in Setup Menu (p. 25) to the connected terminal (AV1 or AV2), and make timer programming of the recorder (Read the manual of the recorder).

• "D" means DVB programme and "A" means Analogue programme.



## Caution

- The TV must either be On or in standby.
- For preparations of a recorder, read the manual of the recorder.
- No other programme can be selected during recording.
- It may not be possible to record an encrypted programme (which is copy-protected).



**■ Event recording (Timer Programming from TV Guide-EPG) ⇒** p. 19

Event recording is a timer programme controlled by information from the TV Guide.

Programme start and end times may be changed by broadcasters and sent to the TV for timer programme to follow the change.

Split Programme is a programme which is interrupted by one or more events.

Both of the above are subject to signals being sent by broadcasters.

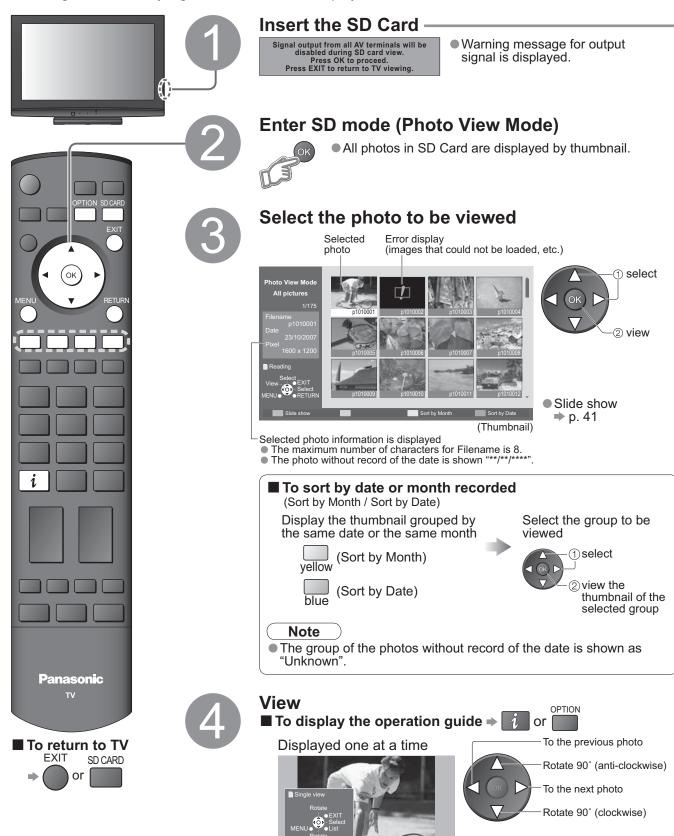
■ Direct TV Recording ⇒ p. 43 and p. 45

You can record the current programme to DVD Recorder / VCR immediately.

- Check that the Timer LED (Orange) is lit. If not, timer programmes are not active or not stored.
   "!" will identify any timer events that have been set and overlap. If this occurs then the first event will start and finish as programmed. The next timer event can then start.
- 2 mins. before the starting time: a reminder message appears. (To remove the message → OK); To cancel the programming →
- A Timer Programming event will automatically change to the desired channel 10 seconds before the start time.
- To stop Timer Programming event directly prior to the start time, it is necessary to stop the recorder manually.
   Timer Programming will be performed even if the TV is in Pause Live TV recording (p. 45). In this case, Pause
- Live TV recording will be cancelled.

# Viewing from SD Card

Still images recorded by digital cameras will be displayed.



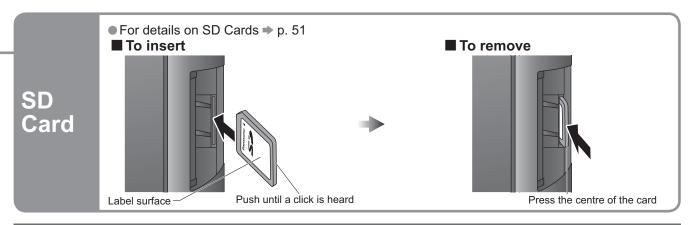
Caution

Operation guide

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

To return to thumbnail

## (Photos)



## Slide show

- Start Slide show (operate in step ③ or ④)
  - ① Select the photo for the first view
- 2 Start Slide show









To return to Single view ⇒ green

Note

menu

MENU

• A slide show will be completed within the group from which it was started.

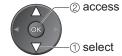
"Picture Menu" (p. 24)

■ Slide show settings (operate in step ③ or ④)



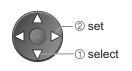
☐ Picture
Viewing Setup

the ② Select "Viewing Setup"





3 Select the items and set



Menu	Item	Adjustments / Configurations (alternatives)
Viev Sei	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	<ul> <li>The file is broken or unreadable.</li> <li>The TV does not support the format. (For the applicable formats and data, see p. 51.)</li> </ul>				
Is SD Card in?	Confirm SD card is inserted correctly.				
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. 43) VIERA Link (HDAVI Control™) connects the TV and the equipment with VIERA Link function, and enables easy control, convenient recording, playback, etc. (p. 44 - 47) You can use Q-Link and VIERA Link functions together.

## ■ Summary of Q-Link and VIERA Link functions

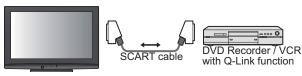
Connection Features	Q-Link (SCART connection)	VIERA Link (HDMI connection only)	VIERA Link (SCART and HDMI connection)
Analogue programme download	0	-	0
Easy playback***	0	0	0
Power on link***	0	0	0
Power off link***	0	0	0
Speaker control***	_	0	0
Control the menu of the connected equipment by VIERA 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.
- \*\*\*: These features may be available even with other manufacturers' equipment supporting HDMI CEC.

## Connections

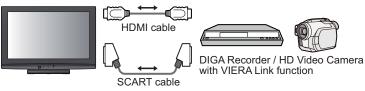
Read the manual of the equipment, too.

### Q-Link



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

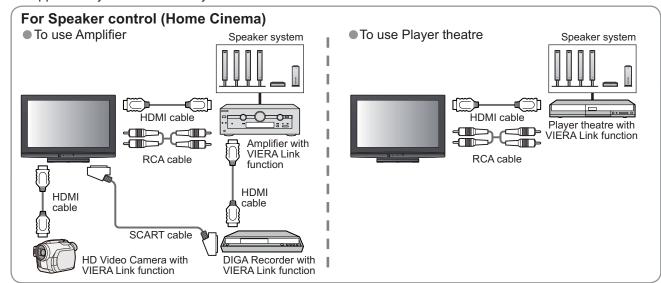
#### ■ VIERA Link



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

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

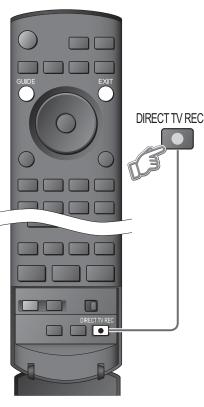
#### ■ Preparations

- Connect the DVD Recorder / VCR with the following logos: "Q-Link", "NEXTVIEWLINK", "DATA LOGIC", "Easy Link", "Megalogic" or "SMARTLINK"
- Q-Link connection ⇒ p. 42
- 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 Analogue programme setting → "Q-Link Download" (p. 25) or "Auto Setup" in Analogue mode (p. 33) or "Auto Setup" - when first using the TV (p. 10)

### **■** Features available

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 mode.
- 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

Direct TV Recording -What you see

is What you

record

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

## Power on link and Easy playback

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

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 or refer to the URL; www.panasonic.co.uk

#### ■ Preparations

- Connect the equipment supporting VIERA Link.
- VIERA Link connection ⇒ p. 42
- 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.
- Download Analogue programme setting → "Q-Link Download" (p. 25) or "Auto Setup" in Analogue mode (p. 33)
   or "Auto Setup" when first using the TV (p. 10)
- 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 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

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	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	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.

Link



- 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. 44) 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



Select "Direct TV Rec" and start recording





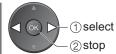
DIRECT TV REC

You can also start recording directly

■ To stop recording

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





You can also stop recording directly. GUIDE EXIT



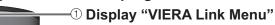
You can pause the live TV programme and resume later.

Live TV programme will be recorded on HDD of the connected DIGA Recorder.

- This function is available with DIGA Recorder which has HDD and "HDAVI Control 3"
- 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. 44)

## Access and pause the live TV programme

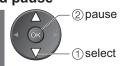
TV





② Select "Pause Live TV" and pause

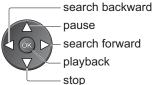




The TV picture will be paused.

- Live TV programme is recorded on HDD from where it was
- If the paused TV picture disappears after a few minutes
- (the paused picture will be restored)
- Follow the operation guide to operate Pause Live TV function.

#### ■ To operate Pause Live TV



Operations may be different depending on the recorder. In this case, follow the operation guide or read the manual of the recorder.

stopIf you stop playback, the recorded programme will be deleted from HDD.

### ■ To return to Live TV

(stop playback of Pause Live TV / cancel pause)





 If you stop playback or cancel pause, the recorded programme will be deleted from HDD.

Pause Live TV programme **HDAVI Control 3** and Recorder with HDD

**Pause Live** TV

## 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. 44)

Access and operate the menu of the equipment



■ If you access

connected

-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)

VIERA Link Menu
Pause Live TV
Direct TV Rec
Start

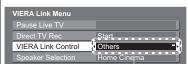
the invalid equipment

When the equipment with "HDAVI Control" function is

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.

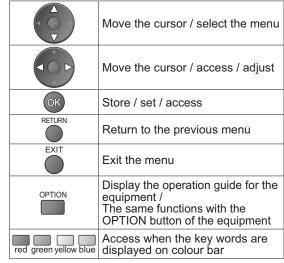
When the equipment of other types or manufacturers is connected



Others

"Others" is displayed. You cannot access it. Use its own remote control to operate the equipment. 4 Operate the menu of the equipment

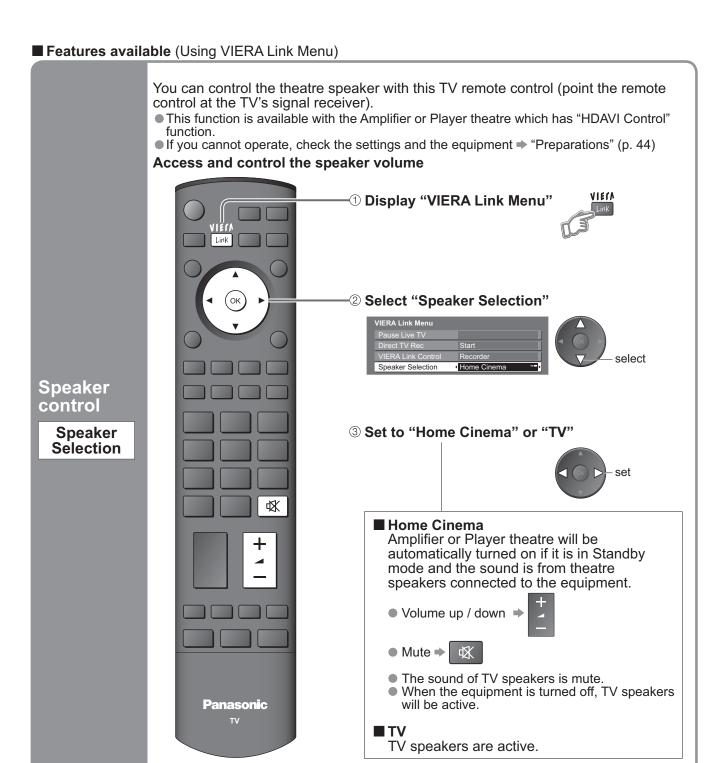
 Available VIERA remote control buttons (depending on the connected equipment):



 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

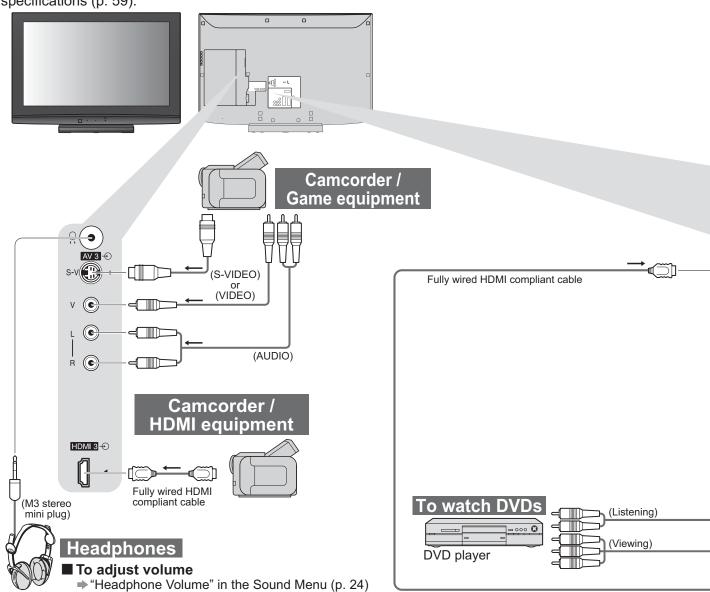


#### Note

- 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)

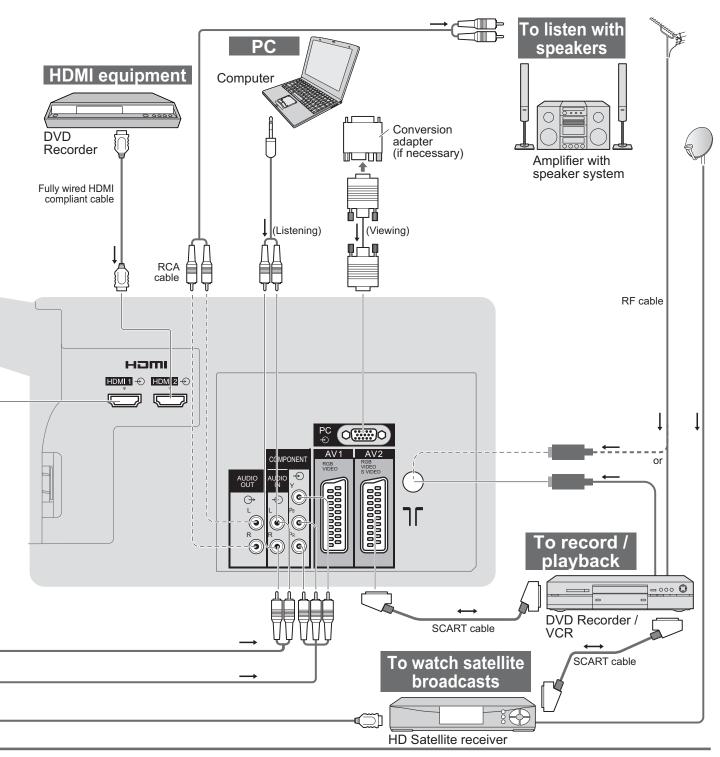
# **External Equipment**

These diagrams show our recommendations for connection of your TV to various pieces of equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 59).



## ■ Types of connectable equipment to each terminal

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



COMPONENT  O O O O O O O O O O O O O O O O O O	AUDIO OUT	H <b>ƏM</b> I		
R PR		1	2	3
		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. 14)

#### 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.

	, 1 9										
		Aspect Control Signal									
		Widescreen signal (WSS)			Control signal through SCART (pin 8) or HDMI terminal						
5	Signal name	TV	AV1	AV2	AV3	COMPONENT	AV1	AV2	HDMI1	HDMI2	HDMI3
P	AL	0	0	0	0		0	0			
Р	AL 525/60	_	_	_	_		0	0		_	
D	VB	0	_	_	_		_	_			
N	1.NTSC	_	_	_	_		0	0			
Ν	ITSC (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					_			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 set top box or a DVD player, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.

About connections, see "External Equipment" (p. 48).

#### Note

- 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 / 3 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 / HDMI3: use AV3 audio terminals).
- Audio settings can be made on the "HDMI1 / 3 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 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 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.
- For details of the applicable HDMI signals, see p. 52
- This TV incorporates HDMI™ (Version 1.3 with x.v.Color™) technology.

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

## Updating the DVB software

From time to time, a new version of software for DVB mode may become available for download to enhance the performance or operations of the TV.

A notification banner will appear when you tune to one of the BBC channels, or you can search for a new version software by using the "System Update Search Now" function (p. 29).

To start downloading press "OK", this may take up to 20 minutes to

To ignore the new software press "EXIT", but this banner will keep appearing during the period of new software availability, usually 2 to 3 days.

To download any new software automatically, ensure that the "Auto Update Search in Standby" function in the System Update menu is set to "On" (p. 29).

The TV will then download new software automatically at night if it is left in standby without any timer programme in progress.

#### Note

During software download and update, DO NOT switch off the TV.

## Data format for Card browsing

Still images recorded with digital still cameras compatible with JPEG files of DCF\* and EXIF standards Photo

Baseline JPEG (Sub-sampling 4:4:4, 4:2:2 or 4:2:0) Data format

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).

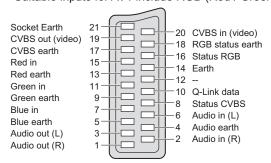
### **Note**

- 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



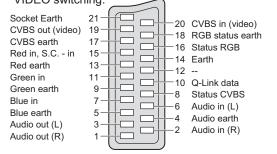
### AV2 SCART terminal (RGB, VIDEO, S-VIDEO, Q-Link)

AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.

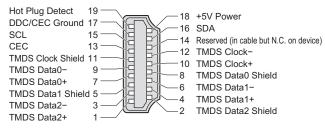
Do you really want to update the software and reboo Press OK to download the new version

Press EXIT to Ignore

vare and reboot the system?



### ■ HDMI terminal



## **Technical Information**

## PC connection

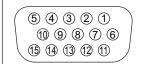
- A PC may be connected to this TV so that the PC screen is displayed and sound is heard from the TV.

  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

A 1	4:3	1,024 × 768 pixels
Aspect -	16:9	1,366 × 768 pixels

D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	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

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) / 50i	*	*
1,125 (1,080) / 60p		*
1,125 (1,080) / 50p		*
1,125 (1,080) / 24p		*

### **PC** (D-sub 15P)

1 G (B ddb fef )						
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				

### **Note**

- 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 or Panasonic Customer Care Centre for assistance. For details (p. 60)

## 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. 50.

## S-Video / black and white picture

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

## No programmes shown on TV Ğuide

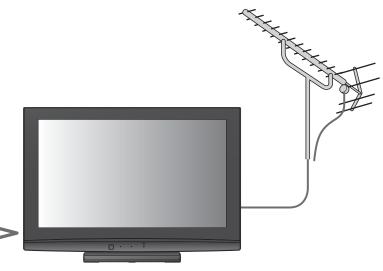


- Check the DVB transmitter.
- Adjust the direction of the aerial to another transmitter installed nearby.
- Check the analogue broadcast. If the image quality is poor, check the aerial and consult your nearest dealer.

## On Screen messages I.e. EC/AV1

You can simply clear these ⇒ Press again to redisplay.





## 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. 44)

## Recording does not start immediately

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

## There may be red spots, blue spots, green spots and black spots on the screen

This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, green, blue or black. Please note this does not affect the performance of your LCD.

## The LCD panel moves slightly when it is pushed with a finger Clattered sound might be heard

There is some flexibility around the panel to prevent the damage to the panel.

Panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.

## **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). No image can be Is "Colour" or "Contrast" in the Picture Menu set to the minimum? displayed Blurry or distorted image Reset programmes. (p. 33) (no sound or low volume) Turn off the TV with Mains power On / Off switch, then turn it On Unusual image is displayed again. Is "Sound mute" active? (p. 7) No sound is produced Is the volume set to the minimum? Sounc Sound signal reception may be deteriorated. Set "NICAM" (p. 24) in the Sound Menu to "Off". Sound level is low or sound is distorted (Analogue only) 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. Check "DVB Signal Condition". (p. 33) 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 / 3 Input" setting in the Sound Menu. (p. 24) Sound is unusual If digital sound connection has a problem, select analogue sound connection. (p. 50) MOH Pictures from external Is the HDMI cable connected properly? (p. 48) Turn Off the TV and equipment, then turn them On again. Check an input signal from the equipment. (p. 52) equipment are unusual 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) • Has the TV been switched On? does not work Follow the message's instructions. An error message appears If the problem persists, contact the authorized Service Centre.

# On screen messages

Message	Meaning / Action
All tuning data will be erased	<ul> <li>"Shipping Condition" will erase all tuning data (p. 34).</li> <li>"Auto Setup" will be erased all present DVB or Analogue tuning datas (p. 33).</li> </ul>
Are you sure ?	Confirm correct operation.
Are you sure you want to delete this timer? Press OK to delete timer Press RETURN to return	Confirm correct operation.
Bad Signal	The signal is weak. Check the aerial.
Feature not available	It is not possible to record these sources (COMPONENT / HDMI / PC).
Invalid operation - Please check settings and connections	<ul> <li>Check the Q-Link or VIERA Link connection and setting (p. 42 - 44).</li> </ul>
Invalid system time. Please exit!	Cannot get the time information. Check the connection of the RF cable.
Max. number of Timers already set !	▶ • The maximum number of timer programming events is 15.
New DVB Service Found! Press OK start Auto Setup Press EXIT to Ignore. Selecting Auto Setup will delete current Profile and Childlock settings	▶ • There is a new DVB service or programme.
New version 1.90 found. Do you really want to update the software and reboot the system? Press OK to download the new version Press EXIT to Ignore	There is a new software available.
No module inserted	Check the CI module inserted completely (p. 29).
No Recording - Check media	▶ • The tape or disc may be "write protected", missing or damaged.
No Recording - Already recording	▶ • The equipment may already be recording.
No Recording - Unknown reason	<ul> <li>The recording may not be performed. Check the equipment.</li> <li>Disc or tape may be full.</li> </ul>
No Service	▶ • The broadcaster has stopped the service.

# On screen messages

Message	Meaning / Action
No Signal	Check the connection of the RF cable.
PIN incorrect !	▶ • The PIN number you entered is wrong.
Please check aerial or local DVB service availability. Press OK to start Auto Setup	Please follow the message.  If it is still failed, consult your local Panasonic dealer.
Please check settings and connections on HDMI devices.	Communication error in VIERA Link function (p. 44).
Please wait.	A function is in progress.
Recording this service now	<ul> <li>The recorder is recording the programme signal from its own tuner.</li> <li>You can turn the TV off and leave the equipment recording in the normal way.</li> </ul>
Sending Preset Data Please wait !	Q-Link or VIERA Link programme download is in progress.
Shipping condition completed. TV can now be switched off.	<ul> <li>"Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)</li> </ul>
Software successfully updated Press EXIT to continue	▶ • The software updating is finished.
Software Update failed. Please try again later. Press EXIT to continue	<ul> <li>Perform "System Update Search Now" in System Update (p. 29).</li> <li>If this is still unsuccessful, there may not be any new software available.</li> </ul>
This service is locked ! Press OK to enter PIN	▶ • The selected programme is locked in Child Lock (p. 31).
Timer already expired !	<ul> <li>Starting time in Timer Programming is already past. Set correctly (p. 39).</li> </ul>
Timer Event Due to Start DVB 1: BBC1 has been Programmed for recording at 20:00	This message will appear 2 minutes before timer programming event due to start.
Timer incorrect !	Set Start and End times in Timer Programming correctly (p. 39).
Tuner Locked Please stop recording to operate	If you want to unlock, cancel Direct TV Recording (p. 43 and p. 45) or Timer Programming (p. 38).
Unable to download, Check Equipment	▶ • The tape or disc is active. Stop the equipment and try again.

## Glossary

Digital Video Broadcasting

Digital Versatile Disc

#### DVI

Digital Visual Interface

## **■** EPG

Electronic Programme Guide

High-Definition Multimedia Interface

#### **■** NTSC

National Television System Committee One of the television signals used in USA, etc.

#### ■ RF

Radio Frequency - Signal received from terrestrial

#### ■ RGB / S-Video / Video

Choose between these three video formats depending on personal preference and equipment requirement

(RGB - Red, Green and Blue)

#### ■ SCART

21 pin connection used for video, audio and switching signals (Also known as Euro SCART and Peritel)

Video Cassette Recorder

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- 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.
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# **Specifications**

		TX-32LXD80						
Power Source			AC 220-240 V, 50 Hz					
Power Consumption	Average use		130 W					
nption	Standby con	dition		1 W (Without monitor out recording) 17 W (With monitor out recording)				
pa D	Aspect Ratio	)	16:9					
Display panel	Visible scree	n size	80 cm (diagonal) 697 mm (W) × 392 mm (H)					
	Number of pixels		1,049,088 (1,366 (W) × 768 (H))					
So	Speaker		160 mm × 42 mm × 2 pcs, 8 Ω					
Sound	Audio Outpu	t	20 W (10 W + 10 W), 10% THD					
	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		as /	PAL I : UHF E21-68 PAL 525/60: Playback of NTSC tape from some PAL Video recorders (VCR) or NTSC disc playback from DVD player and recorder.  DVB : Digital terrestrial services via UHF aerial input.  M.NTSC: Playback from M.NTSC Video recorders (VCR).  NTSC (AV input only): Playback from NTSC Video recorders (VCR).					
Aerial - Rear			UHF					
Operating Conditions		ons	Temperature : 0 °C - 35 °C Humidity : 20 % - 80 % RH (non-condensing)					
ດ AV1 (Scart terminal)		erminal)	21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)					
nn	AV2 (Scart terminal)		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)					
ect		VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)				
og .	AV3	S-VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)				
긑		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]				
Connection Terminals	COMPONENT	VIDEO	Y Pв, Pr	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]				
als			RCA PIN Type × 2	0.5 V[rms]				
	Others	HDMI1 / 2 / 3	TYPE A Connectors	This TV supports "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	RCA PIN Type × 2	0.5 V[rms] (high impedance)				
Dimensions ( W × H × D )		H×D)	820 mm × 573 mm × 250 mm (With Pedestal) 820 mm × 535 mm × 110 mm (TV only)					
Mas	S		17 kg Net (With Pedestal) 14 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.

### 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.



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.

## **Sales and Support Information**

### **Customer Care Centre**

- · For customers within the UK: 0844 844 3852
- For customers within the Republic of Ireland: 01 289 8333
- E-mail: customer.care@panasonic.co.uk

#### Direct Sales at Panasonic UK

- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Care Centre Monday – Thursday 9:00am – 5:30pm, Friday 9:30am – 5:30pm (Excluding public holidays).
- Or go on line through our Internet Accessory ordering application at www.panasonic.co.uk.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Interested in purchasing an extended guarantee?

Please call 0870 240 6284 or visit www.panasonic.co.uk/guarantee.



Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996) TX-32LXD80 Declaration of Conformity No. 5438, 31 January 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.

M	lode	ΙN	lu	ml	her	•

Serial Number

## Panasonic (U. K.) Ltd.

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