



Panasonic®

Operating Instructions LCD Television

Model No. **TX-32LZD81**
TX-37LZD81

VIERA

VIERA
Link



with **freesat HD**

DVB®

GUIDEplus+
GEMSTAR



DOLBY
DIGITAL PLUS

BBE.ViVA
HD3D Sound



**FULL
HD**
1920x1080p

**HD
TV**
1080p

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

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



TQB0E0700

Features



■ freesat HD tuner built-in

Receives freesat - free digital satellite broadcasts in the UK

This TV has a built-in freesat HD tuner.

freesat is a brand new free digital TV service which broadcasts via satellite so you can receive TV, radio, interactive TV, and HD TV with crystal clear reception.

You can enjoy sharp pictures, vivid colours, multi-channel sound, and various services with the interactive content.



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

Display DVB programmes with TV Guide (p. 17) / Timer Programming (p. 46) / Register and instantly call up favourite programmes with Profile Edit (p. 40)



■ Sharp pictures with HDMI connection

Enjoy high-definition digital picture and high-quality sound by using an HDMI cable (p. 58)

● This TV incorporates HDMI™ (Version 1.3a with x.v.Color™) technology.



■ 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. 50)



■ SD Card viewer

Enjoy your photos individually or as a Slide show on the TV screen. (p. 48)



■ Provides natural 3D sound

BBE ViVA sound provides musically accurate natural 3D sound. (p. 27)

■ Supports Audio Description signal (p. 13 and p. 27)

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 for Terrestrial broadcasts

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”-DVB mode (p. 33)

Users of cable or satellite boxes 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 digital signals may be relatively low in some cases, despite good reception of analogue programmes.

**FULL
HD**
1920X1080p

FULL HD

This TV uses a high definition panel to produce high definition pictures close to their original resolution.



IPS Alpha Panel

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.



10,000:1 Dynamic Contrast

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

x.v.Colour

x.v.Colour

"x.v.Colour" is a promotion name given to the products that have the capability to realize a wide colour space based on the xvYCC specifications.

"x.v.Colour" is a trademark.



24p Playback

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



V-AUDIO Surround

Utilises Panasonic's advanced Digital Amplification technology and BBE ViVA HD3D Sound.



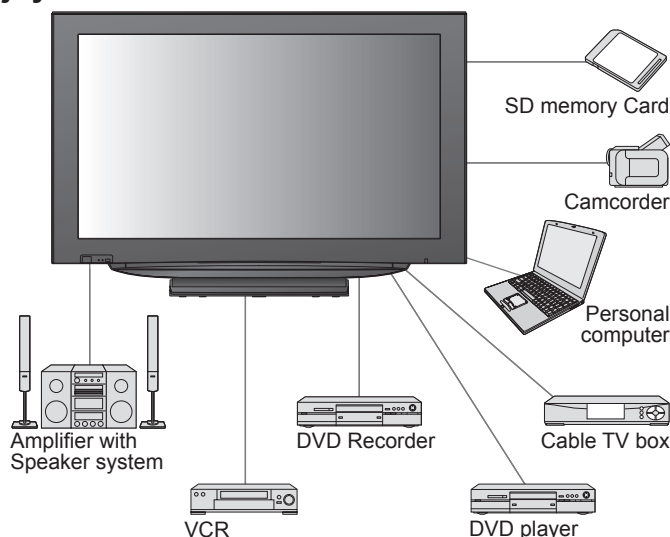
60,000 hours LCD Display Lifetime

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 its 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.

Turn your living room into a home theatre!

Enjoy rich multi-media



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Enjoy your TV!

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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 time.

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.

Power source

- This TV is designed to operate on 220-240 V, 50 / 60 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 your ears to excessive volume from the headphones

- Irreversible damage can be caused.

AC 220-240 V
50 / 60 Hz



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.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

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 safely. 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 .

How to replace the fuse.

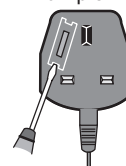
For plug type shown in example 1:

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

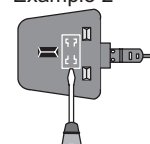
For plug type shown in example 2:

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).

Example 1



Example 2



Notes

Do not expose to rain or excessive moisture

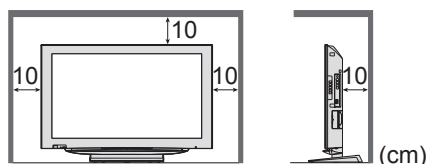
- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture. This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

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.

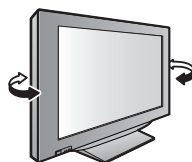
■ Keep the TV away from these types of equipment

- 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

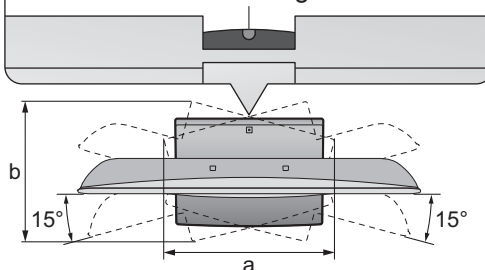
■ Adjust the LCD panel to your desired angle

- Ensure that the pedestal does not hang over the edge of the base even if the TV swivels to the full rotation range.
- Do not place any objects or hands within the full rotation range.



- TX-32LZD81
a: 407 mm / b: 303 mm
- TX-37LZD81
a: 463.5 mm / b: 380 mm

Set the mark at the centre as illustrated, to have the swivel positioned at the centre of the rotation angle.



(View from the top)

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

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

Caution

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

Cabinet, Pedestal

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

Caution

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

Mains plug

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

Accessories / Options

Standard accessories

- ☐ Remote Control
● N2QAYB000239

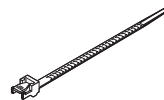


Check that you have the accessories and items shown ☒

- ☐ Batteries for the Remote Control (2)
● R6 (UM3)



- ☐ Clamper
● TMM8E18048



- ☐ Cleaning cloth
● TXFPE01RLTB



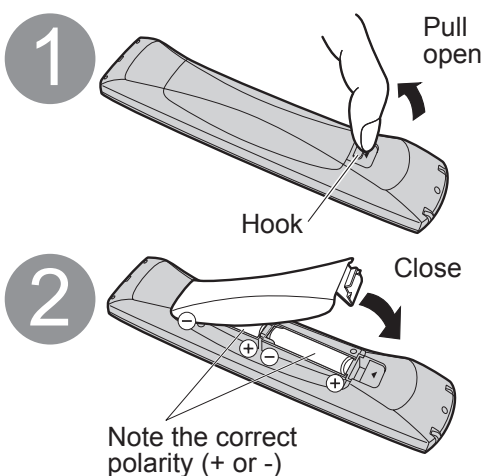
- ☐ Operating Instructions

- ☐ Pan European Guarantee Card

- ☐ 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 / removing remote's batteries

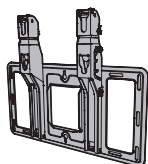


Caution

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

Optional accessories

- Wall-hanging bracket
● TY-WK32LR2W

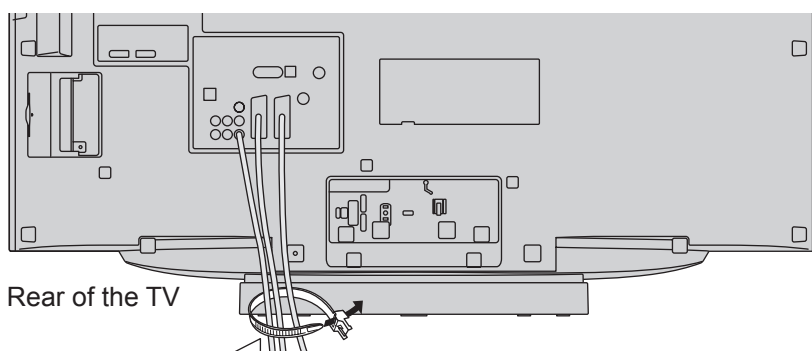


Holes for wall-hanging bracket installation
Please note the holes for TX-32LZD81 are off-centred to the left by 50 mm, as shown on the diagram.

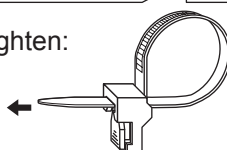
WARNING!

- 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 product damage.
- 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.

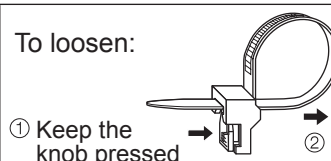
Using the clamper



To tighten:



To loosen:



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

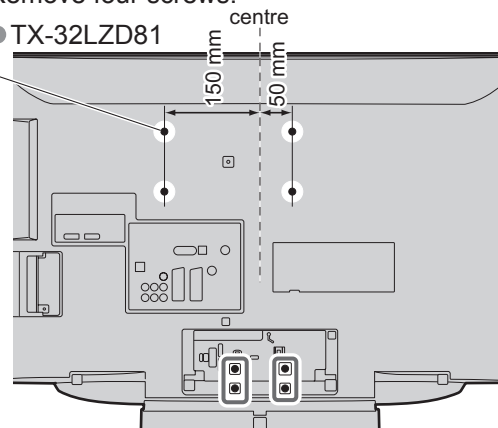
Some items may not be available locally.

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.

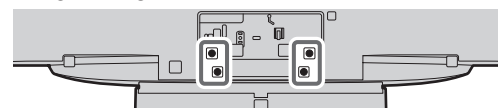
How to remove the Pedestal

Remove four screws.

- TX-32LZD81

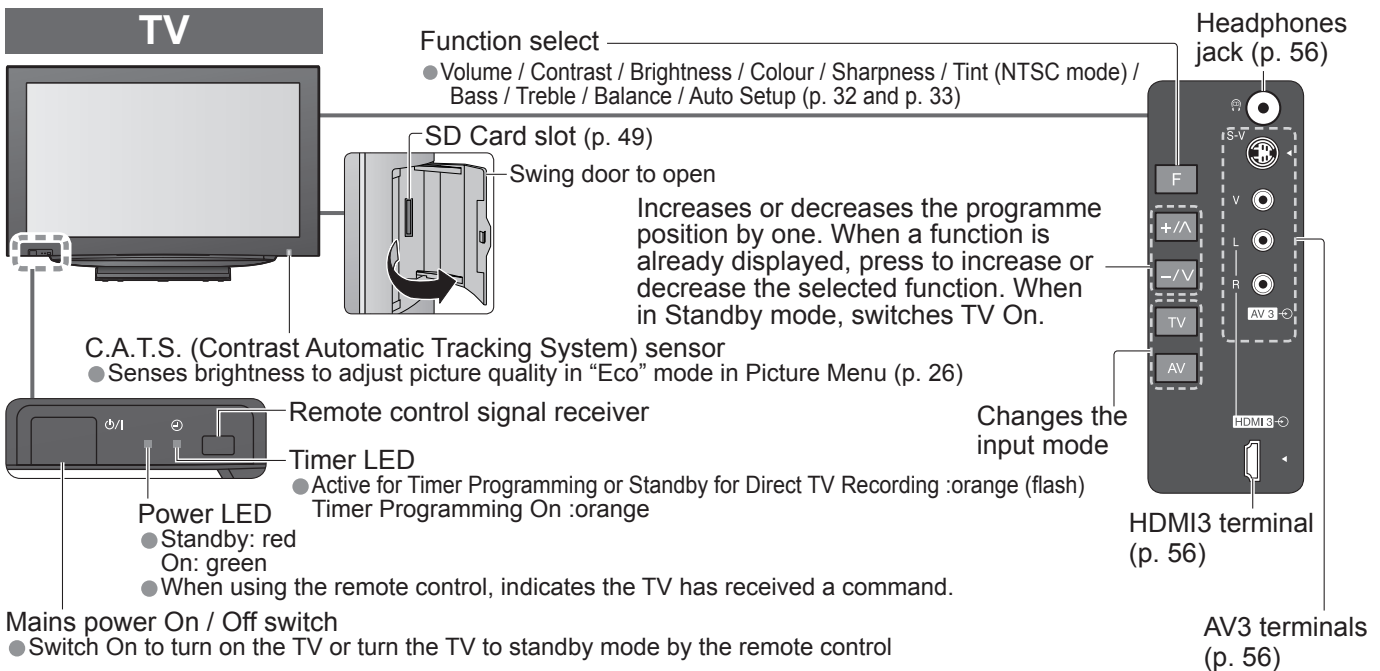


- TX-37LZD81

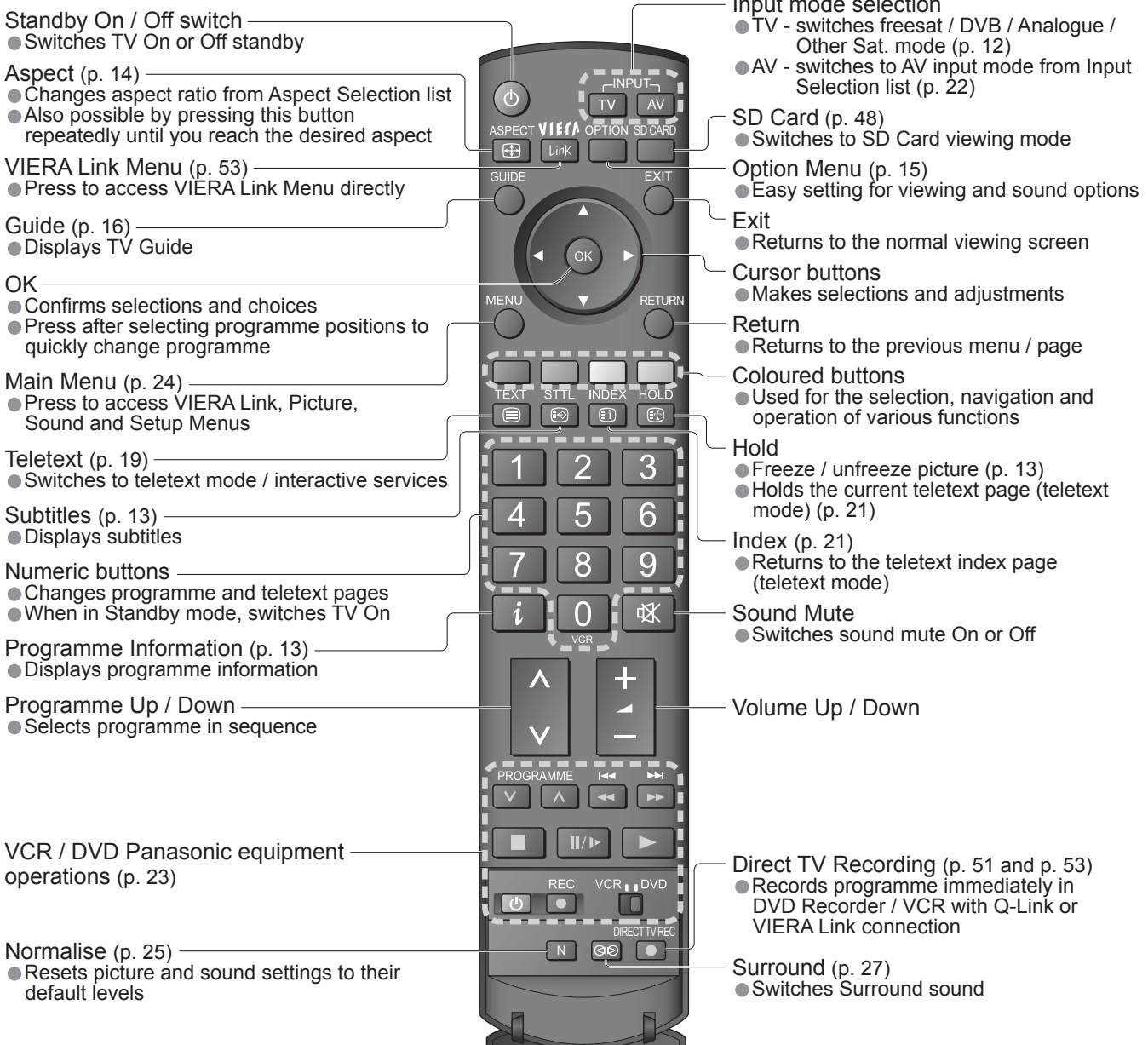


Rear of the TV

Identifying Controls



Remote Control



Basic Connection

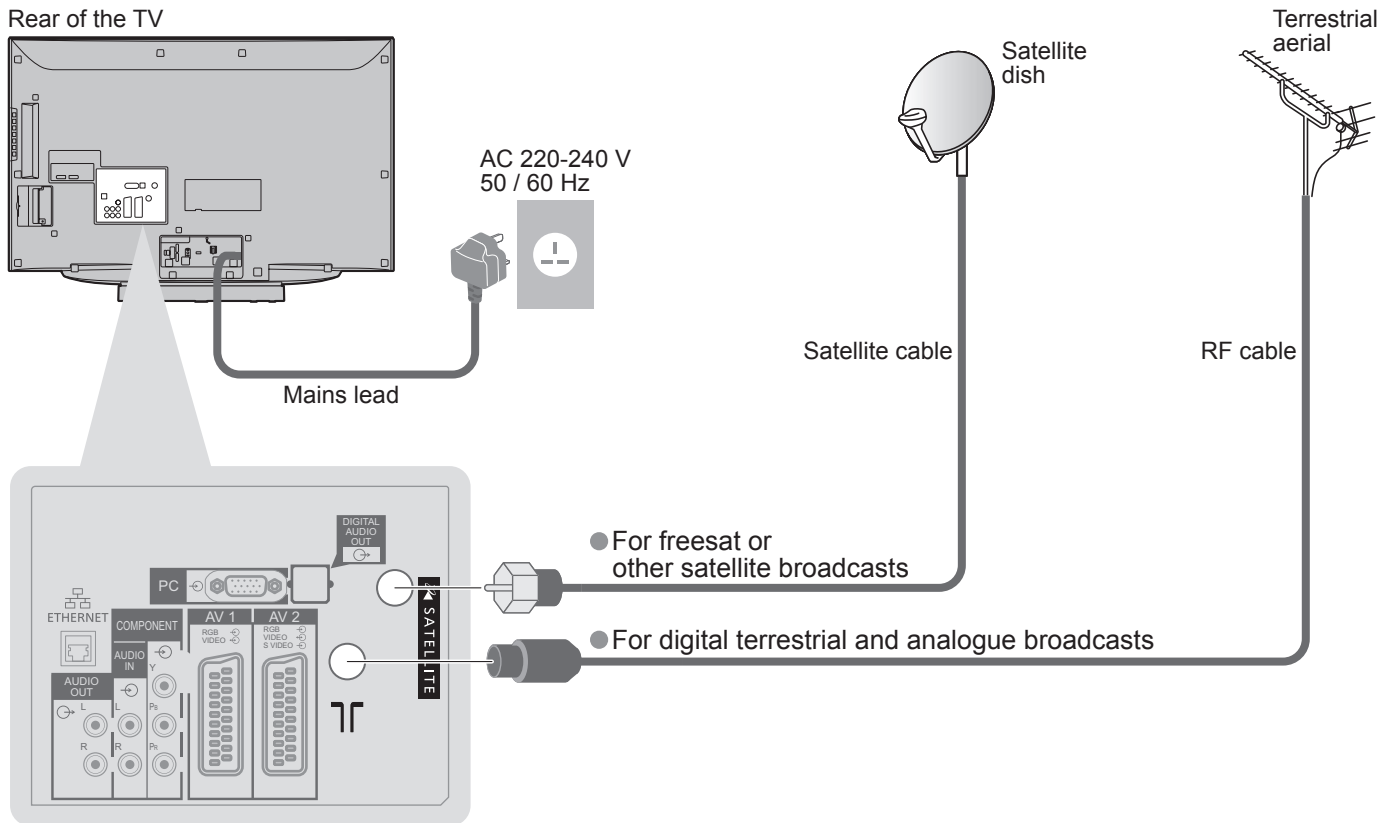
External equipment and cables shown are not supplied with this TV.

Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.

Example 1 Connecting dish or aerial

TV only

Rear of the TV



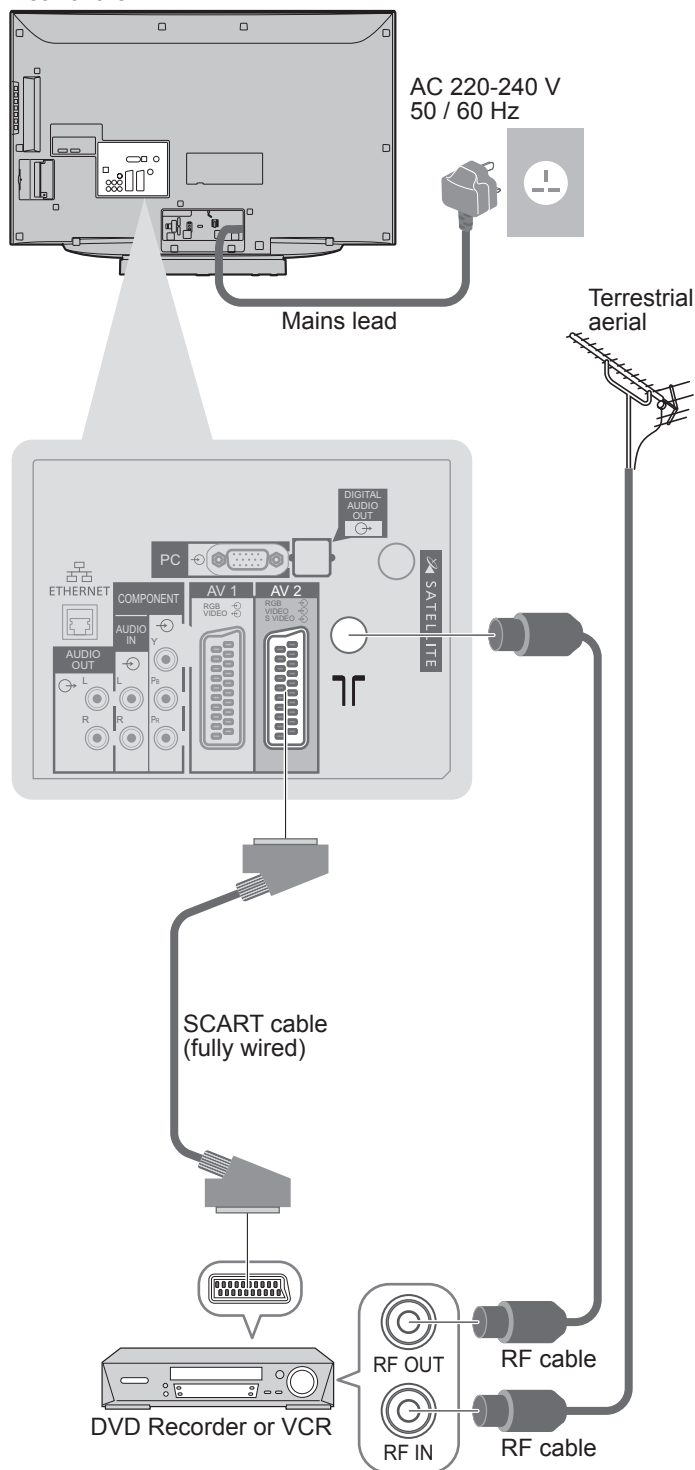
Note

- The freesat service uses Astra 2 at 28.2° East, and Eurobird 1 at 28.5° East satellites. To ensure your satellite dish is correctly installed please consult your freesat registered dealer.
- Connect to AV2 for a DVD Recorder / VCR supporting Q-Link (p. 51).
- For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 56).
- Q-Link connection ➔ p. 50
- VIERA Link connection ➔ p. 50
- Read the manual of the equipment too.

Example 2 Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR

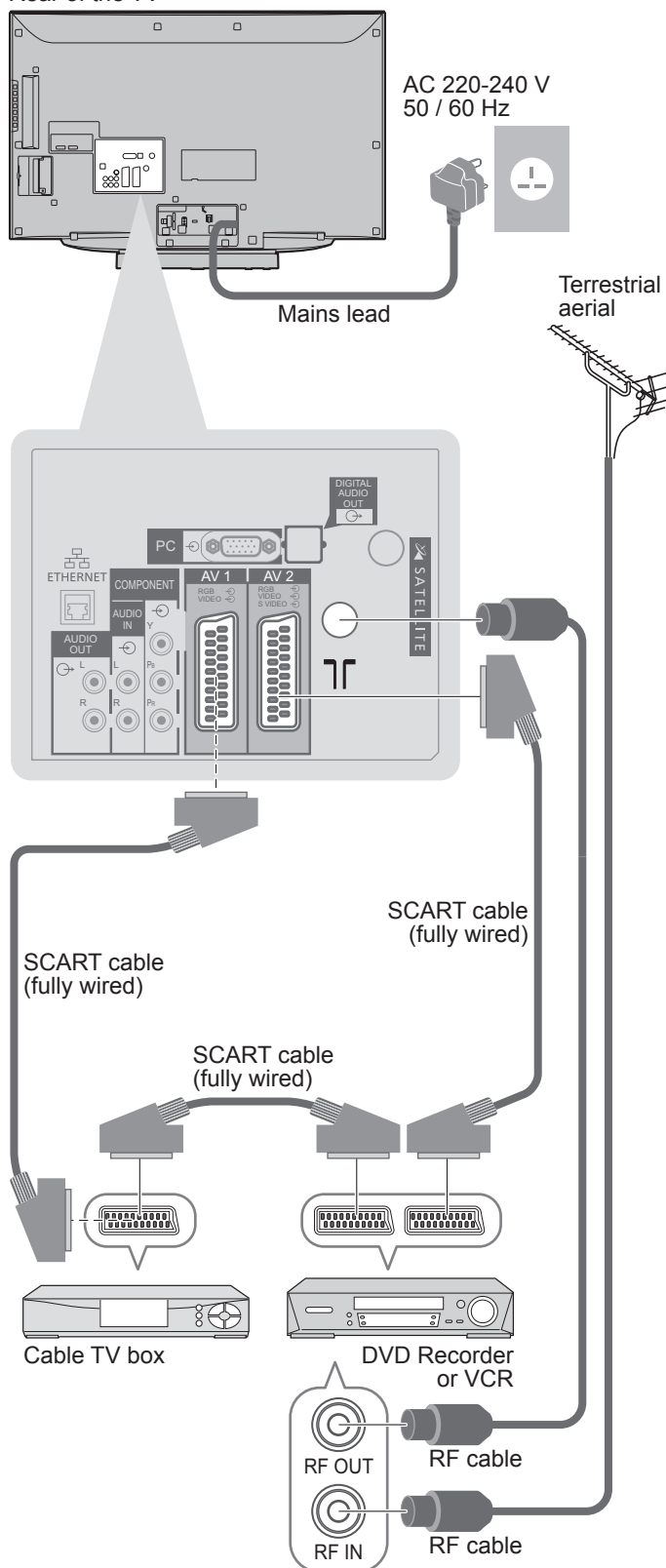
Rear of the TV



Example 3 Connecting DVD Recorder / VCR and Cable TV box

TV, DVD Recorder / VCR and Cable

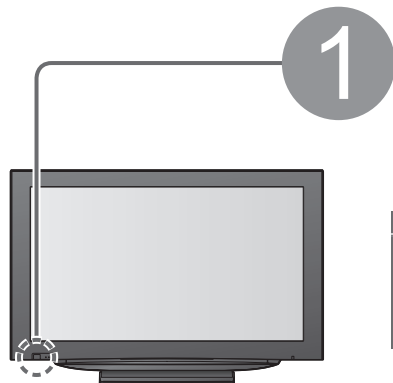
Rear of the TV



Auto Setup

Search and store TV programmes automatically.

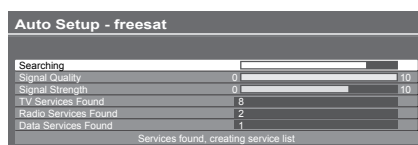
These steps are not necessary if the setup has been completed by your local dealer or freesat registered dealer.



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

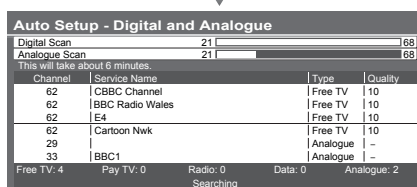


- Auto Setup will start to search for TV programmes and store them in the numbered order as specified by the broadcasters.

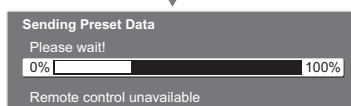


- If Auto Setup - freesat stopped
➔ "FAQs" (p. 62)

(freesat tuning)



(DVB and Analogue tuning)

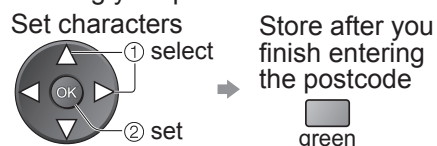


- If Q-Link, or similar technology (p. 51), compatible recorder with analogue tuner is connected, analogue programme information is automatically downloaded to the recorder. (Digital programme information is not downloaded.)

2 Enter your postcode

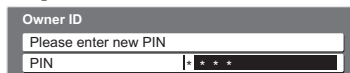


- Your postcode is required to receive local services and sort the programme order. Please ensure to include a space when entering your postcode.



- If you skip this step, the default postcode (central London) will be set.

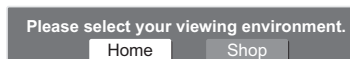
3 Input Owner ID



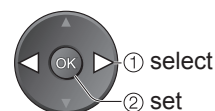
Enter your own choice of PIN number, name, etc.

- For detailed procedures
➔ "Owner ID" (p. 43)
- Make a note of the PIN number in case you forget it.
- If you input the ID later
➔ "Owner ID" (p. 43)

4 Select the picture setting



- "Home" and "Shop" are equal to "Normal" and "Dynamic" respectively - "Viewing Mode" in "Picture Menu" (p. 26)



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



- To check programme list at-a-glance
➔ "Using TV Guide" (p. 16)
- To edit programmes
➔ "Editing Programmes" (p. 40)

Using the On Screen Displays

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

■ How to use remote control

MENU



Open the main menu



Move the cursor / select the menu



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



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

RETURN

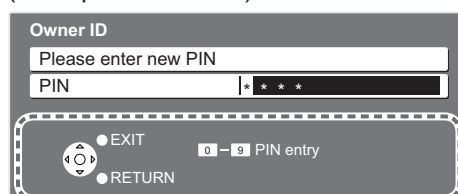


Return to the previous menu



Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box (example: Owner ID)

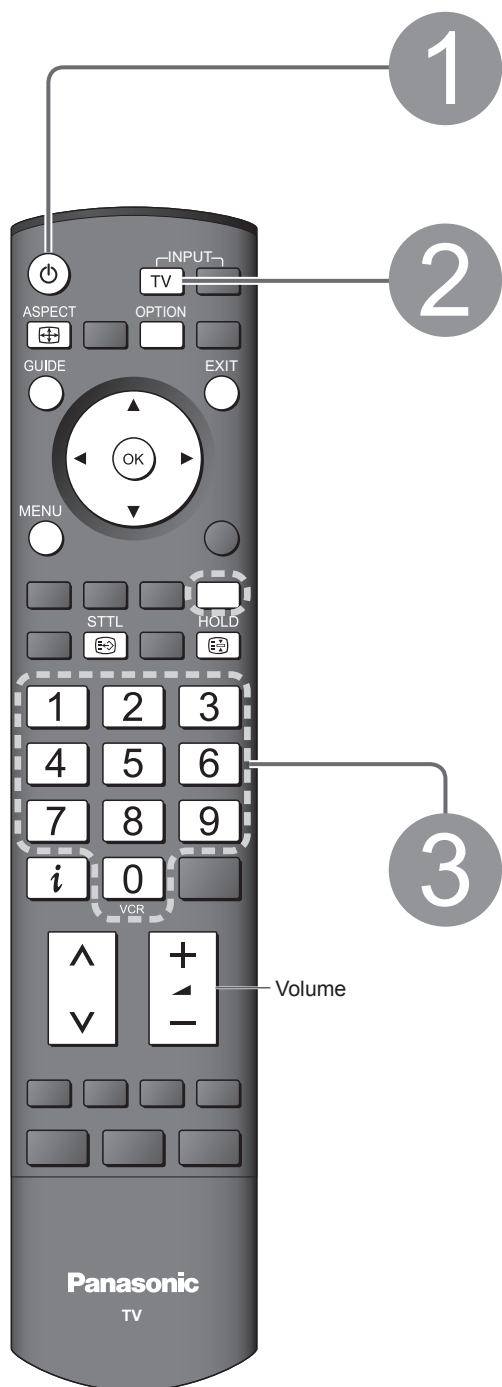


On-screen operation guide will help you.

Note

- If tuning has failed ➔ “Auto Setup” (p. 32 and p. 33)
- If you wish to tune in other satellite services ➔ “Add Other Sat. Services” (p. 37)
- If downloading has failed ➔ “Q-Link Download” (p. 28)
- To initialize all settings ➔ “Shipping Condition” (p. 42)
- 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



1

Turn power on

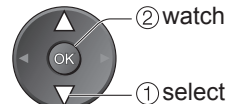
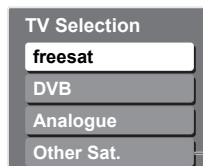
(Press for about 1 second)



- Mains power On / Off switch should be On. (p. 7)

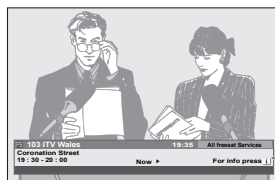
2

Select the mode (freesat, DVB, Analogue or Other Sat.)



Displayed if Other Satellite services are tuned (p. 37)

- Also possible to select the mode pressing the TV button repeatedly on the remote control or side panel of the TV. (p. 7)

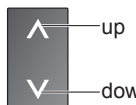


Information banner appears whenever you select a programme

- For details → p. 13

3

Select a programme



or



freesat programme numbers run in the ranges 100 - 999 and 0100 - 0999.

- To select a three-digit programme number, e.g. 133

→ 1 → 3 → 3

- To select a four-digit programme number, e.g. 0246

→ 0 → 2 → 4 → 6

DVB and Other Sat. programme numbers run from 1 onwards.
Analogue programme numbers run in the ranges 0 - 99.

- To select a two or three-digit programme number, e.g. 39

→ 3 → 9

Note

- To watch pay-TV → p. 36

Select a programme using Information banner (p. 13)

Possible to confirm the programme name before selecting programmes.

Display Information banner if it is not displayed



While the banner is displayed, select the programme

① select programme

② watch

- Possible to set display timeout in "Banner Display Timeout" (p. 29).

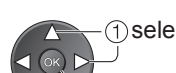
Select a programme using TV Guide (p. 16)

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

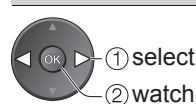
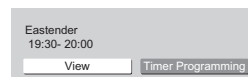
Display TV Guide



Select the event now on the air



Select "View"



Other useful functions

Hold

Freeze / unfreeze picture



Display subtitles

Display / hide subtitles (if available)

- To change the language for DVB (if available)
 - ➔ "Preferred Subtitles" (p. 29)



Display Information banner

- Also appears when changing a programme



- "All freesat Services" or "Favourites"
 - To switch ➔ "Using TV Guide" (p. 16)

TV mode: Example (freesat): FS 103 ITV Wales

Programme position and name: Radio

Programme type (if it is Radio or Data service): 19:35

Current time: All freesat Services

Event: Coronation Street 19:30 - 20:00

Now ▶ For info press i

Mute Encrypted AD Subtitles TXT Multi Audio 45

Event Start / Finish time

Example (DVB):

D 1 BBC ONE Wales Radio 19:35 All DVB Services

Coronation Street 19:30 - 20:00

Now ▶ For info press i

Mute Encrypted AD Subtitles TXT Multi Audio 45

Category: To change the category ➔ blue

Example (Analogue):

A 3 ITV 19:35 All Analogue Services

itv1 CH23

Now ▶ For info press i

Mute Encrypted AD Subtitles TXT Multi Audio 45

Category: To change the category ➔ blue

Example (Other Sat.):

S 103 ITV Wales Radio 19:35 Other Sat Services

Coronation Street 19:30 - 20:00

Now ▶ For info press i

Mute Encrypted AD Subtitles TXT Multi Audio 45

Features available / Message meanings

Mute

Sound mute On

Bad signal

Poor TV signal quality

Encrypted

Scrambled programme

AD

Audio Description service available

- This function can aid visually-impaired viewers by adding an additional audio track to describe events on-screen.
- For settings ➔ p. 27

Subtitles

Subtitle service available

TXT

Teletext service available

Multi Audio

Multiple audio available

Stereo, Mono, NICAM

Audio mode

1 - 90

Off Timer remaining time

- For settings ➔ p. 14

- To confirm another tuned programme name ➔



- Information on the next event (freesat, DVB, Other sat.) ➔



- Extra information ➔ i (press again to hide the banner) (freesat, DVB, Other sat.)

- "AD", "Subtitles", "TXT", "Multi Audio" indications are displayed as available on particular programmes, but may not be available for all individual programmes being broadcast. Display the extra information to confirm availability of these functions.

- To watch the programme listed in the banner ➔ OK

- To hide ➔ EXIT

- To set display timeout ➔ "Banner Display Timeout" (p. 29)

Example:

FS 103 ITV Wales 19:35 All freesat Services

Coronation Street 19:30 - 20:00

Now ▶ Exit info i

[AD]

AD

Display Information banner

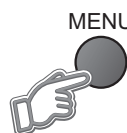
Watching TV

Other useful functions

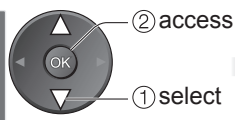
Off Timer

Turn the TV off automatically after a fixed period

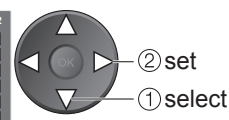
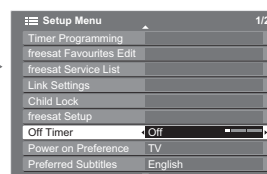
Display the menu



Select "Setup"



Select "Off Timer" and set the time



- 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 the screen.

Change the aspect ratio

ASPECT

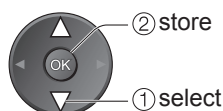


Enjoy viewing the picture at its optimum size and aspect.

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)

Auto



The best ratio is chosen and the picture expanded to fill the screen. For details → p. 58

16:9



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

14:9



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

4:3



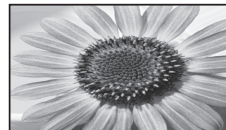
Displays the image at the standard "4:3" without distortion.

Zoom1



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

Zoom2



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

Zoom3



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

Note

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

Change aspect ratio

■ Other useful functions

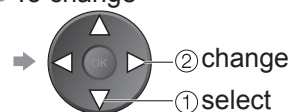
Display the selectable settings for the current programme

Check or change the current programme status instantly

OPTION



● To change



Multi Audio / AD

(freesat mode)

Allows you to select between alternative language or Audio Description for sound tracks (if available)

- Set "Audio Description" to "On" in Sound Menu (p. 27) to select the audio description sound track.

In freesat mode, Audio Description cannot be controlled separately from the audio description sound track.

Multi Audio

(DVB or Other Sat. mode)

Allows you to select between alternative language for sound tracks (if available)

Subtitle Language

(freesat, DVB or Other Sat. mode)

Allows you to select the language in which subtitles should appear (if available)

NICAM

(Analogue mode)

- Sound Menu (p. 27)

Volume Correction

Adjusts volume of individual programme or input mode

Audio Description

(DVB mode)

Select "On" if the programme has Audio Description service, then you will hear an additional audio track to describe events on-screen

Note

- Also possible to change the settings in Menu list (p. 26 - 29).

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).

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

■ freesat mode

- 1 Select freesat**
→ p. 12
- 2 Display the Service Genre selection list**
- 3 Select the genre and view TV Guide**

Example:

- To change the layout (Landscape / Portrait) → view "Landscape" to see many programmes
view "Portrait" to see one programme at a time

To return to TV
→ EXIT

TV Guide date Example:

Event	Current date and time
Wed 24th	Wed 24/10/2007 10:46
20:00-20:30 DIY SOS: We open in the Battersbys	
101 BBC ONE Eastender	20:00
102 BBC 2W Hot Wars	20:30
103 BBC NEWS Enmerdal	21:00
104 BBCI Coronation Street	21:30
105 BBC THREE Panorama	
106 BBC FOUR The Real Hustle	
107 BBC Radio I'm A Celebrity	
	15 To 1

Programme TV Guide time

Landscape (Displays by programme)

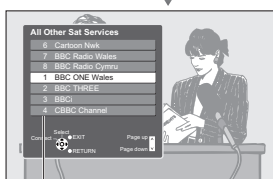
Portrait (Displays by time)

■ Other Sat. mode

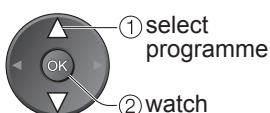
In Other Sat. mode, TV Guide is not available. In stead, Programme List will appear.

- To tune in Other Sat. Services → p. 37

GUIDE (in Other Sat. mode)



Programme List



- There might be some events displayed as grayed-out in TV Guide. These are the Off-Air events (non-running events).

■ To the previous day



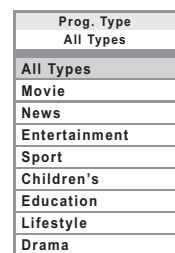
■ To view a programme list of the selected type



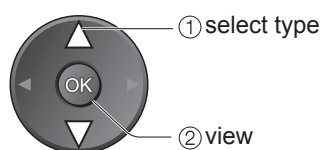
■ To view a programme list of the selected genre



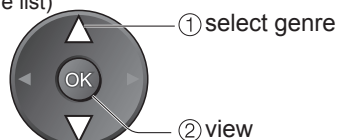
■ To the next day



(Type list)



(Service Genre list)



To list favourite programmes → p. 40

■ DVB or Analogue mode

- This TV supports the GUIDE Plus+ system in DVB or Analogue mode.
- 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.



1

Select DVB or Analogue

→ p. 12



2

View TV Guide



- To change the layout (Landscape / Portrait) →
- view "Landscape" to see many programmes
- view "Portrait" to see one programme at a time

TV Guide time

Example:

Current date and time	TV Guide date	Event	Logo of the Gemstar branding partner
Wed 24/10/2007 10:46	Wed 24th	20:00 - 20:30 DIY SOS - We open in the Barbours	RadioTimes
		Time 19:30 20:00 20:30 21:00	
		D 1 BBC ONE Eastender	The Bill
		D 7 BBC THREE Hot Wars	Horrid Henry
		D 14 E4 Emmerdale	Coronation Street
		D 70 BBC FOUR 10 O'clock News BBC	Pepsi Char.
		D 72 BBC 2W Panorama	Spring watch
		D 105 BBCi I'm A Celebrity	Pop Idol
		D 719 BBC Radi	Rugby
			15 To 1
			The Bill

Advertisement

Landscape (Displays by programme)
Programme

Example:

TV Guide: Portrait

Time	Programme	Channel
19:30-20:00	Eastender	D 1 BBC ONE
20:00-21:00	DIY SOS	D 7 BBC THREE
21:00-22:00	The Bill	D 14 E4
21:00-22:00	Red Cap	D 70 BBC FOUR
22:00-23:00	Good bye	
23:00-23:30	Live junction	
23:00-23:30	POP 100	
23:00-00:00	Rugby	

Portrait (Displays by time)

■ To the previous day (DVB mode)



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



■ To view a programme list of the selected category



■ To the next day (DVB mode)



Prog. Type

All Types

All Types

Movie

News

...

(Type list)

① select type

② view

Category

All Services

All Services

All DVB Services

All Analogue Services

Free Services

TV and Data Services

Profile 1

Profile 2

Profile 3

Profile 4

(Category list)

Only Analogue TV programmes are listed

① select category

② view

To list favourite programmes → p. 40

■ To return to TV



View advertisement

Enter your postcode when using this function for the first time

→ "Postcode" in "GUIDE Plus+ Settings" (p. 29)

If you have already entered your postcode in "Auto Setup" - when first using the TV (p. 10), 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.

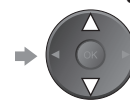
Display advertisement information

- OPTION
- To display the latest advertisement, you will need to update the information.
 - To update the information continuously, the TV must 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 (p. 18).
- The advertisements displayed on the TV Guide are sent from the GUIDE Plus+ system so that they cannot be deleted manually or will not be lost even when the TV is turned Off with Mains power On / Off switch.

■ To change advertisements



■ To return to TV Guide



Using TV Guide

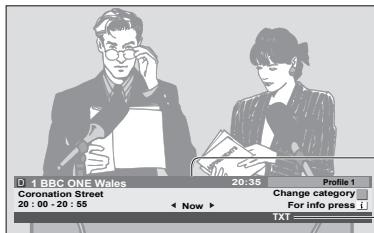
■ Other useful functions (Operate after viewing TV Guide)

<p>Watch the programme</p>	<p>Select the current event or programme</p> <p>Select "View"</p> <p>Eastender 19:30-20:00 View Timer Programming ● Timer Programming ➔ see below</p> <p>(TV screen)</p>																												
<p>View details of the event (freesat or DVB mode)</p>	<p>Select the event</p> <p>View details</p> <p>Details</p> <p>■ To return to the start page ➔ </p>																												
<p>Timer Programming</p>	<p>Select the forthcoming event to output to external recorder</p> <p>Timer Programming screen</p> <table border="1"> <thead> <tr> <th>Pos.</th> <th>Name</th> <th>Date</th> <th>Start</th> <th>End</th> <th>min.</th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>BBC1 <TIMER></td> <td>6/8 FR</td> <td>18:00</td> <td>20:00</td> <td>120</td> <td>OFF</td> </tr> <tr> <td>2</td> <td>ITV1 Freshly Squeezed Extra</td> <td>7/8 SA</td> <td>21:30</td> <td>22:30</td> <td>60</td> <td>OFF</td> </tr> <tr> <td>3</td> <td>ITV1</td> <td>7/8 SA</td> <td>22:30</td> <td>23:30</td> <td>60</td> <td>OFF</td> </tr> </tbody> </table> <p>(Timer Programming screen)</p> <p>Note</p> <ul style="list-style-type: none"> ● While recording, you cannot watch any other programmes except the one being recorded. ● When recording programmes, you must make the proper settings on the recorder connected to the TV. If a compatible recorder with Q-Link or similar technologies is connected to the TV (p. 51) and the "Link Settings" (p. 28) are completed, no setting of the recorder is required. Also read the manual of the recorder. ● If you select the current programme, a screen asking you to confirm whether you wish to watch or record it will appear. Select "Timer Programming" to record from the time you finish the Timer Programming setting. <p>Timer LED will turn on if Timer Programming is set.</p> <p>Timer LED</p> <ul style="list-style-type: none"> ● Orange Timer LED (Blinking during timer active) <p>■ To check / change / cancel a Timer Programming event ➔ "Timer Programming" (p. 47)</p> <p>■ To return to TV Guide ➔ </p>	Pos.	Name	Date	Start	End	min.		1	BBC1 <TIMER>	6/8 FR	18:00	20:00	120	OFF	2	ITV1 Freshly Squeezed Extra	7/8 SA	21:30	22:30	60	OFF	3	ITV1	7/8 SA	22:30	23:30	60	OFF
Pos.	Name	Date	Start	End	min.																								
1	BBC1 <TIMER>	6/8 FR	18:00	20:00	120	OFF																							
2	ITV1 Freshly Squeezed Extra	7/8 SA	21:30	22:30	60	OFF																							
3	ITV1	7/8 SA	22:30	23:30	60	OFF																							
<p>Event recording (Timer Programming according to the TV Guide signal)</p>	<p>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.</p> <p>Select the forthcoming event to output to external recorder</p> <p>"Guide" is displayed if the timer is set from the TV Guide</p> <p>"S/P" is displayed if the timer is set from the TV Guide and the event is a Split Programme</p> <p>Timer LED will turn on if Timer Programming is set.</p> <p>Timer LED</p> <ul style="list-style-type: none"> ● Orange Timer LED (Blinking during timer active) <p>■ To check / change / cancel an Event recording event ➔ "Timer Programming" (p. 47)</p> <ul style="list-style-type: none"> ● If you edit the Event recording after setting to record, it will no longer be performed as Event recording. The recording will be performed according to the time setting in Timer Programming. <p>■ To return to TV Guide ➔ </p> <p>Note</p> <ul style="list-style-type: none"> ● Not available in Analogue or Other Sat. mode. ● Whilst making Split Programme recording, it is not possible to record any events between sections. ● The Split Programme recording does not work if the separated parts are broadcast on differing channels. 																												

Viewing Teletext

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

- The availability of teletext services for a programme is indicated by "TXT" in the information banner.



Information banner (p. 13)

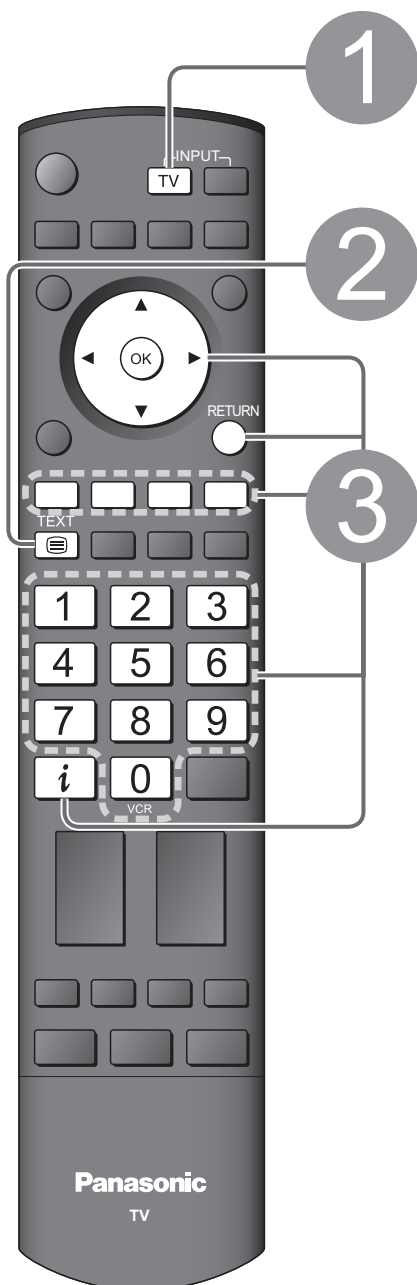
Displayed if programme has teletext service

Digital teletext (MHEG)

Digital teletext services

Digital teletext services differ greatly from analogue teletext.

When you switch to a digital teletext service, the images you see can contain graphics and text, laid out and controlled in a manner decided by the broadcaster.



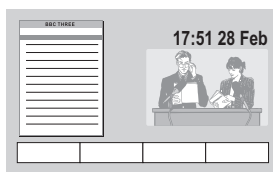
Select freesat or DVB

→ p. 12



- freesat and DVB programmes have digital teletext services (MHEG).

Switch to Teletext



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 digital equipment, some on screen commands may not correspond exactly to the remote control buttons.

For example:

- When "select" or "go" is displayed →
- When "◀", "▶", "▲", "▼" symbol is displayed →
- When "back key" is displayed →
- When the key words are displayed on colour bar →
- When options with numbers are displayed →
- When "i" is displayed → (information)

■ To return to TV →

Note

- As soon as you switch to a digital 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 digital 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 digital 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 teletext

What is FASTEXT mode?

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

What is 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. 21)

■ **To change mode** → "Teletext" in Setup Menu (p. 29)



Select Analogue or Other Sat.

→ p. 12

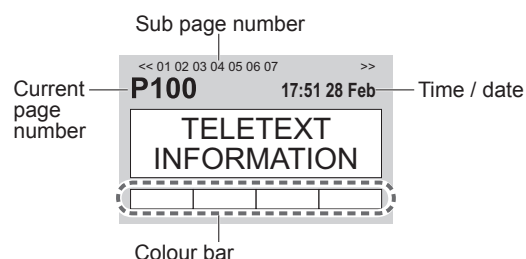


● Other Sat. programmes are digital broadcasts. The operations of the teletext services, however, are equal to Analogue teletext service.

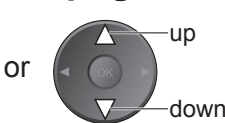
Switch to Teletext



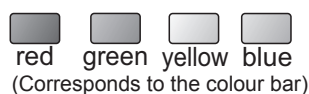
● Displays the index page (content varies depending on the broadcasters)



Select the page



or



■ **To adjust contrast** → MENU (Press twice) →

■ **To return to TV** → EXIT

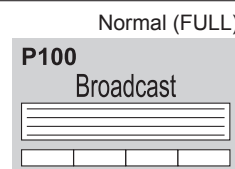
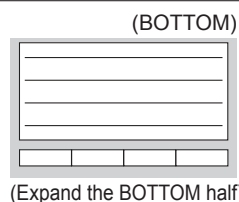
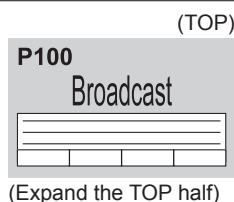
Reveal hidden data









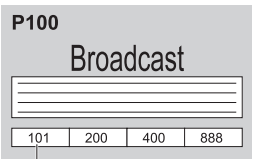




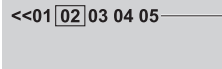









Reveal hidden words e.g. quiz page answers



■ **Re-hide** →

FULL / TOP / BOTTOM



HOLD	Stop automatic updating (If you wish to hold the current page without updating)  To resume → 
INDEX	Return to the main index page 
Subtitles	View subtitles  ● Factory setting is "P888" (subtitle service) on blue button (List mode).
View in multi window	Watch TV and Teletext in two windows at once   <ul style="list-style-type: none"> ● Operations can be made only in Teletext screen. ● Each time pressed: Teletext → TV and Teletext
Store frequently viewed pages	Store frequently viewed pages in the colour bar (List mode only) As page is displayed  →  press and hold Corresponding colour button  The number changes to white. ● If you wish to use Subtitles, do not change number on blue button. ■ To change stored pages →  Colour button you want to change → Enter new page number  →  press and hold
View sub page	View sub page (Only when teletext is more than one page)   Appears at top of the screen ■ To view specific sub page →  →  blue  → Enter the 4-digit number example: P6  →  ● Sub pages: The number of sub pages varies depending on the broadcasters (up to 79 pages). It may take some time for searching, during which time you can watch TV.
Watch TV while waiting for update	View the TV picture while searching for a teletext page Teletext automatically updates itself when new information becomes available. Changes to TV screen temporarily  →  yellow →  Appears when updating is completed →  yellow → View the updated page (You cannot change the programme.) ● The news page provides a function that indicates arrival of latest news ("News Flash").

Watching External inputs

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

● To connect the equipment → p. 9

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

Turn the TV on

■ When connecting with SCART as example 2 or 3 (p. 9)

- ➔ Receives input signals automatically when playback starts or cable TV box is switched on
- Input signals are automatically identified by the SCART (pin 8) terminal.
- This function is also available for HDMI connections (p. 56).

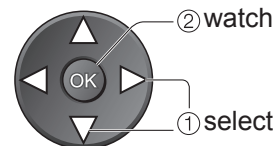
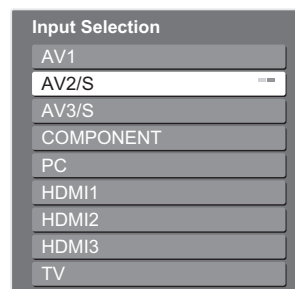
■ If input mode is not switched automatically

- ➔ Perform ② and ③
- Dependant on the setup of the equipment

Display the Input select menu



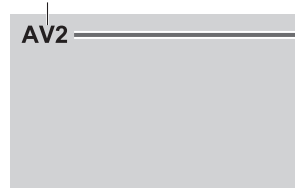
Select the input mode connected to the equipment



- You can also select the input using the AV button on the remote control or the side panel of the TV. Press the button repeatedly until the desired input is selected.
- You can label or skip each input mode → "Input Labels" (p. 44). Skipped inputs will not be displayed when AV button is pressed.

View

Displays the selected mode

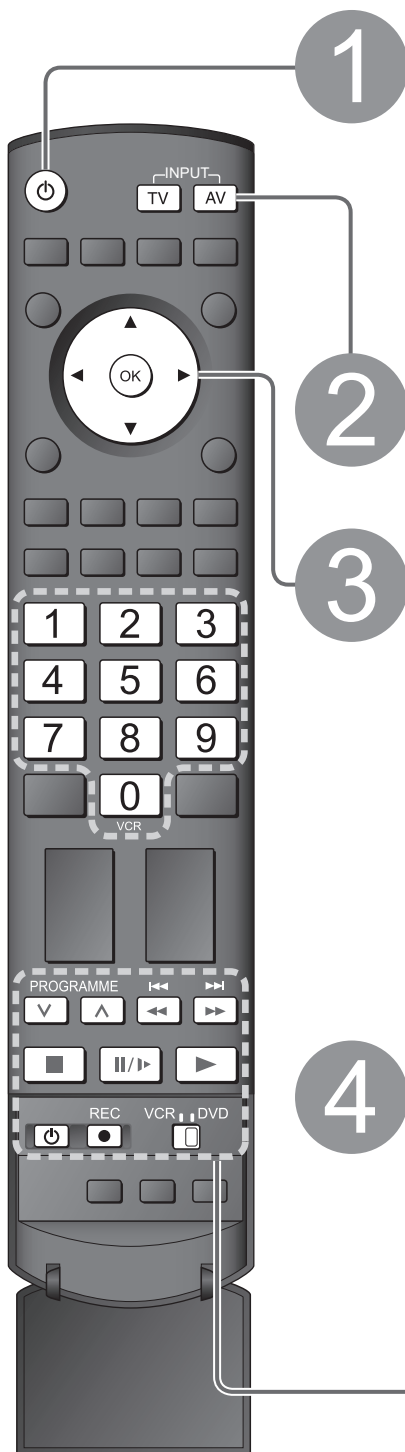


Note

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

■ To return to TV








➔ TV





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/HDMI2 ● Applicable for VIERA Link	EC/HDMI3 ● Applicable for VIERA Link

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

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

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



→ Press 

"VCR" position

Equipment	Code
VCR	10 (default)
DVD	11

"DVD" position


Equipment	Code
DVD	70 (default)
Player home theatre	71

Note

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


How to Use Menu Functions

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



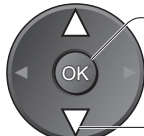
1 Display the menu

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



2 Select the menu

VIERA Main Menu
VIERA Link
☐ Picture
 Sound
 Setup



② access
① select

(example: Picture Menu)

3 Select the item

☐ Picture Menu
1/2

Viewing Mode

Contrast

Brightness

Colour


Sharpness

Tint

Colour Balance Warm

Colour Management Off

P-NR Off



select

(example: Picture Menu)

4 Adjust or select

☐ Picture Menu
1/2

Viewing Mode

Contrast

Brightness

Colour

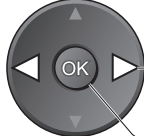
Sharpness

Tint

Colour Balance Warm

Colour Management Off

P-NR Off



① change
② store or access
(Required by some functions)

(example: Picture Menu)

■ To return to TV at any time

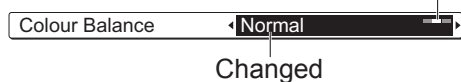


■ To return to the previous screen



■ Choose from among alternatives

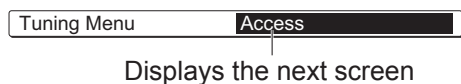
Number and positions of alternatives



■ Adjust using the slide bar



■ Go to the next screen

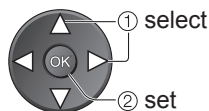


■ Enter characters using alpha / numeric keys

You can input information using alpha / numeric keys.



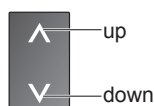
Set characters



Store



■ To change menu pages



■ To reset the settings

- To reset the picture settings only
 - ➔ "Reset to Default" in Picture Menu (p. 26)
- To reset the sound settings only
 - ➔ "Reset to Default" in Sound Menu (p. 27)
- 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. 42)

How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
VIERA Link	Pause Live TV	<p>Controls the connected equipment with VIERA Link function, and enables various convenient recording, playback, etc. (p. 53 - 55)</p> <ul style="list-style-type: none"> ● You can also access VIERA Link Menu directly using the VIERA Link button on the remote control.
	Direct TV Rec	
	VIERA Link Control	
	Speaker Selection	
Picture	Viewing Mode	<p>Selects four different screen settings (Dynamic / Normal / Cinema / Eco)</p> <p>Dynamic : Provides enhanced picture contrast and sharpness when viewing in a bright room</p> <p>Normal : Recommended for viewing under normal ambient room lighting conditions</p> <p>Cinema : For watching movies in a darkened room producing a cinema-like picture</p> <p>Eco : Adjusts picture settings automatically dependent on ambient lighting conditions</p> <p>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.)</p> <ul style="list-style-type: none"> ● Set for each input signal ● Changes will be stored automatically
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	<p>With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste.</p> <ul style="list-style-type: none"> ● For NTSC signal reception only
	Colour Balance	Allows you to set the overall colour tone of the picture (Cool / Normal / Warm)
	Colour Management	<p>Automatically adjusts colours to vivid ones (Off / On)</p> <ul style="list-style-type: none"> ● Not valid on PC signal
	P-NR	<p>Picture Noise Reduction</p> <p>Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture (Off / Min / Mid / Max)</p> <ul style="list-style-type: none"> ● Not valid on PC signal
	3D-COMB	<p>Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen</p> <p>Set to "On" to display sharper and more accurate colours (Off / On)</p> <ul style="list-style-type: none"> ● 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

Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Sound	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
	Balance	Adjusts volume level of right and left speakers
	Headphone Volume	Adjusts the volume of the headphones
	Surround	Surround sound settings (Off / Simulated Surround / BBE ViVA) Simulated Surround: Provides a dynamic enhancer to simulate improved spatial effects BBE ViVA: BBE ViVA HD3D (High Definition 3D) Sound provides musically accurate natural 3D image with Hi-Fi sound. The clarity of the sound is improved by BBE while the width, depth and height of sound image are expanded by BBE's proprietary 3D sound process. BBE ViVA HD3D Sound is compatible with all TV programmes including news, music, dramas, movies, sports and electronic games. ● Switching is also possible by the Surround button on the remote control (p. 7).
	Volume Correction	Adjusts volume of individual programme or input mode
	Speaker Distance to Wall	Adjusts the low frequency sound (Over 30cm / Up to 30cm) ● If the back space between the TV and wall is over 30 cm, "Over 30cm" is recommended. ● If the back space between the TV and wall is within 30 cm, "Up to 30cm" is recommended.
	Preferred 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. 58) 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
	Audio Description Menu	Audio Description Useful for visually-impaired viewers (Off / On) Select "On" to activate the description sound track if available ● freesat or DVB mode only ● The availability of audio description sound track is indicated by "AD" in the information banner (p. 13).
		Volume Adjusts the volume for audio description ● DVB mode only
		Speakers Set to "On" to activate the description sound track from TV speakers (Off / On) ● DVB mode only
		Headphones Set to "On" to activate the description sound track from headphones (Off / On) ● DVB mode only
	Reset to Default	Press the OK button to reset the present Sound Mode to the default settings ● Effective to Bass, Treble, Balance, Headphone Volume and Surround

- A different menu will be displayed while PC or SD Card is used. (p. 45 and p. 49)
- Only available items can be selected.

How to Use Menu Functions

■ Menu list

Menu	Item		Adjustments / Configurations (alternatives)
Setup	Timer Programming		Records forthcoming programmes (p. 46)
	freesat Favourites Edit		Creates list of favourite freesat programmes (p. 40)
	freesat Service List		Skips the unwanted freesat programmes (p. 41)
	DVB Profile Edit		Creates list of favourite DVB programmes (p. 40)
	DVB Service List		Skips the unwanted DVB programmes (p. 41)
	Analogue Service List		Skips the unwanted Analogue programmes or edits Analogue programmes (p. 41)
	Other Sat Service List		Skips the unwanted other satellite programmes or deletes other satellite programmes (p. 41)
	Link Settings	VIERA Link	Sets to use VIERA Link functions (Off / On) (p. 52)
		Q-Link	Selects which AV terminal is to be used for data communication between this TV and a compatible recorder (AV1 / AV2) (p. 51) ● Select the connected terminal to the recorder even it is not compatible with Q-Link.
		AV1 / AV2 out	Chooses the signal to be transmitted from the TV to Q-Link (TV / AV1 / AV2 / AV3 / Monitor) ● Monitor: Image displayed on screen ● Component, PC and HDMI signals cannot be outputted.
		Q-Link Download	Downloads analogue programme information to a Q-Link compatible equipment connected to the TV
	Child Lock		Locks a programme / AV input to prevent access to it (p. 41)
	freesat Setup	Auto Setup	Automatically sets the freesat programmes received in the area (p. 32)
		Signal Condition	Checks the freesat signal condition (p. 34)
		Network Setup	Sets the network setting to use in your Broadband environment (p. 35)
	Tuning Menu	Auto Setup	Automatically sets the DVB or Analogue programmes received in the area (p. 33)
		DVB Manual Tuning	Sets the DVB programmes manually (p. 39)
		Analogue Manual Tuning	Sets the Analogue programmes manually (p. 39)
		Add New DVB Services	Adds new DVB services (p. 39)
		New Service Message	Selects whether to give a notification message when a new DVB service is found (p. 39)
		DVB Signal Condition	Checks the DVB signal condition (p. 39)

Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Setup	GUIDE Plus+ Settings	Postcode Sets your postcode to display advertisements in the GUIDE Plus+ system (p. 17)
		System Information Displays the system information of the GUIDE Plus+ system
	Off Timer Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)	
	Power 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. cable TV box (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. 20)	
	Preferred Subtitles Selects the preferred language for DVB subtitles (depending on the broadcaster) ● To display subtitles ➔ p. 13	
	Add Other Sat. Services	Auto Setup Automatically sets the other satellite programmes (p. 37)
		Signal Condition Checks the condition of other satellite signals (p. 37)
		Manual Tune Sets the other satellite programmes manually (p. 37) ● Please consult the received satellite broadcasting companies for the setting.
		Dish Setup Sets the Low and High band frequency for the other satellite programmes (p. 37) ● Please consult the received satellite broadcasting companies for the setting.
	Shipping Condition Resets all settings, for example, when moving house (p. 42)	
	Owner ID Inputs the owner ID (p. 43)	
	Common Interface Uses include to watch pay-TV (p. 36)	
	System Update Downloads new software to TV (p. 37)	
	Picture Overscan Selects the screen area displaying the image (Off / On) On : Enlarged the image to hide the edge of the image. Off : Displayed the image in the original size. ● Set to "On" if noise is generated on the edge of the screen. ● This function is available when aspect is set to Auto (16:9 signal only) or 16:9. ● This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.	
	Input Labels Labels or skips each input terminal (p. 44)	
	Banner Display Timeout 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 Displays the system information of this TV	

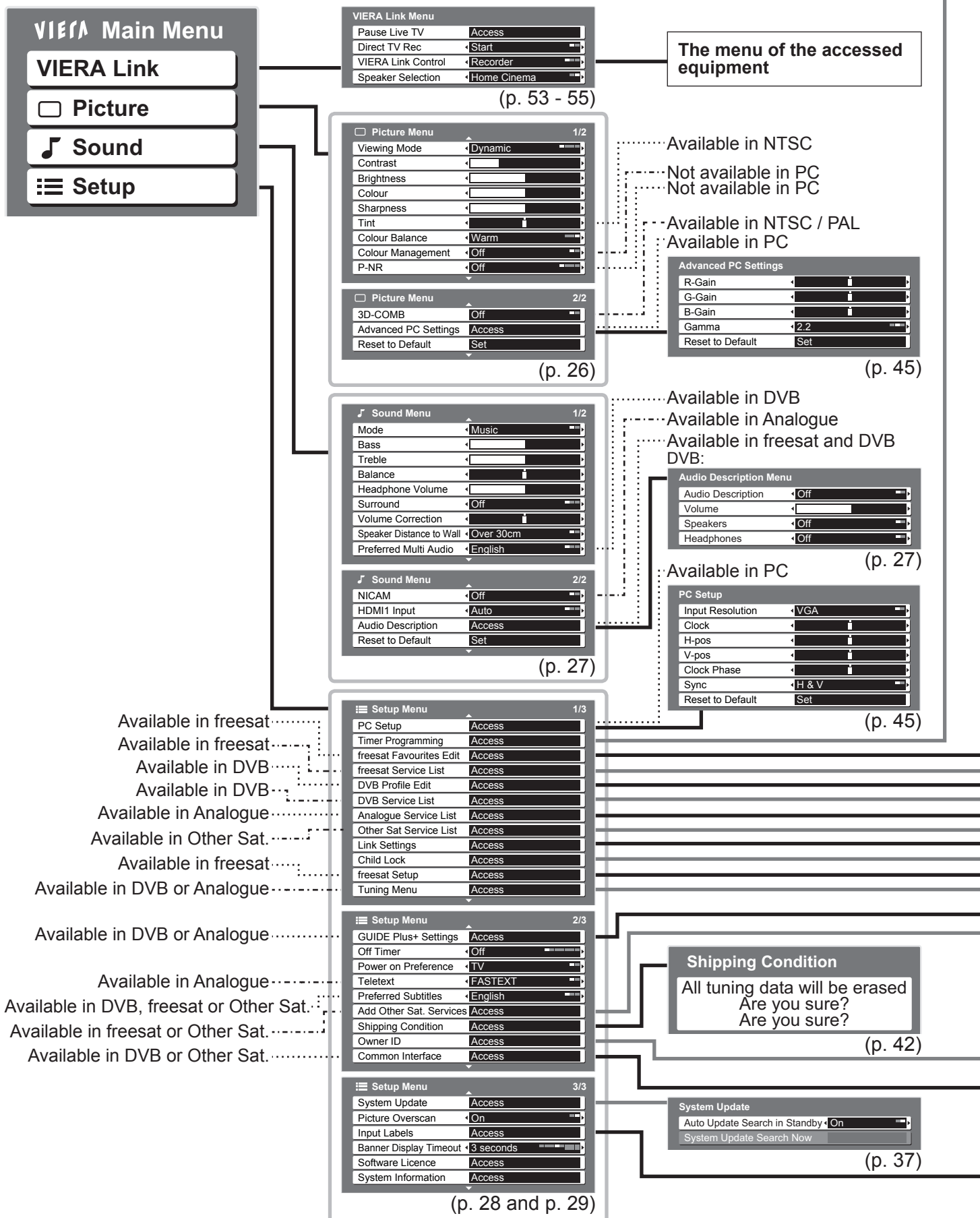
● A different menu will be displayed while PC or SD Card is used. (p. 45 and p. 49)

● Only available items can be selected.

How to Use Menu Functions

■ Overview

● How to operate (p. 24)



Timer Programming					
Wed 05/08/04 18:29					
Pos.	Name	Date	Start	End	min.
0	BBC1	6/8 FR	18:00	20:00	120
1	<TIMER>				
0	BBC1	7/8 SA	21:30	22:30	60
1	Holiday News				
0	ITV1	7/8 SA	22:30	23:30	60
1	Freshly Squeezed Extra				

(p. 46)

freesat Service List	
101	BBC 1 Scotland
102	BBC 2 Scotland
103	stv
104	stv
108	BBC THREE
109	BBC FOUR
110	BBC HD

(p. 41)

DVB Service List	
70	CBBC Channel
72	Cartoon Nwk
105	BBCI
719	BBC Radio Wales
720	BBC Radio Cymru
1	BBC ONE Wales
7	BBC THREE

(p. 41)

Other Sat Service List	
2	freesatHome
3	freesatSSU
4	Brit Shorts
5	HINRG LOWNRG
6	WELL Class
7	GROOVE
8	-

(p. 41)

Child Lock	
Change PIN	Access
Child Lock List	

(p. 41)

Favourites Editor	
All freesat Services	Favourites
101 BBC 1 Wales	
102 BBC 2 Wales	
103 ITV1 WALES	
108 BBC THREE	
109 BBC FOUR	
110 BBC HD	
112 ITV2	
113 ITV2+1	

(p. 40)

Profile Editor	
All DVB Services	Profile 1
1 BBC One Wales	
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCI	
719 BBC Radio Wales	
720 BBC Radio Cymru	

(p. 40)

Analogue Service List	
1	BBC1
2	****
3	****
4	
5	
6	
7	

(p. 41)

Link Settings	
VIERA Link	On
Q-Link	AV2
AV2 out	TV
Q-Link Download	Access

(p. 28)

freesat Setup Menu	
Auto Setup	Access
Signal Condition	Access
Network Setup	Access

(p. 32 and p. 34)

Tuning Menu	
Auto Setup	Access
DVB Manual Tuning	Access
Analogue Manual Tuning	Access
Add New DVB Services	Access
New Service Message	On
DVB Signal Condition	Access

(p. 33 and p. 38)

Available in DVB
Available in Analogue
Available in DVB
Available in DVB
Available in DVB

Auto Setup - freesat	
Searching	
Signal Quality	0
Signal Strength	0
TV Services Found	5
Radio Services Found	2
Data Services Found	1

(p. 32)

Satellite Signal Condition	
Satellite Programme	101 BBC 1 Scotland
Signal Quality	0
Signal Strength	0
Network ID	003B
Transport Stream ID	07FF
Satellite Lock Indicator	Not Locked

(p. 34)

Network Setup Menu	
Connect to network	Access
Acquire IP address	Auto
IP address	
Subnet mask	
Gateway	
Acquire DNS address	Auto
Primary DNS	
Secondary DNS	

Network Setup Menu	
Proxy	
Proxy port	
Speed mode	Auto
MAC address	ab-cd-ef-gh-ij-kl

(p. 35)

Auto Setup - Digital	
Scan	21
This will take about 3 minutes.	
Channel	Service Name
62	CBBC Channel
62	BBC Radio Wales
62	E4
62	Cartoon Nwk
Free TV: 4	Pay TV: 0
Radio: 0	Data: 0

(p. 33)

DVB Manual Tuning	
Frequency	CH21
Signal Quality	0
Signal Strength	0
Position	
Service Name	
Type	
New	
Free TV: 0	Pay TV: 0
Radio: 0	Data: 0

(p. 39)

Analogue Manual Tuning	
1 BBC1	CH33
Manual Tuning	21

(p. 39)

Add New DVB Services	
Scan	21
This will take about 3 minutes.	
Channel	Service Name
Free TV: 0	Pay TV: 0
Radio: 0	Data: 0

(p. 39)

DVB Signal Condition	
DVB Programme	[CH70] CBBC Channel
Signal Quality	0
Signal Strength	0

(p. 39)

Other Satellite Services Menu	
Auto Setup	Access
Signal Condition	
Manual Tune	
Dish Setup	

(p. 37)

GUIDE Plus+ Settings Menu	
Postcode	Access
System Information	

(p. 29)

Owner ID	
Please enter new PIN	
PIN	1 * * *

(p. 43)

Common Interface	
Slot 1:	Module inserted

(p. 36)

Input Labels	
AV1	DVD
AV2/S	AV2/S
AV3/S	AV3/S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2
HDMI3	HDMI3

(p. 44)

Viewing

How to Use Menu Functions
(picture, sound quality, etc.)

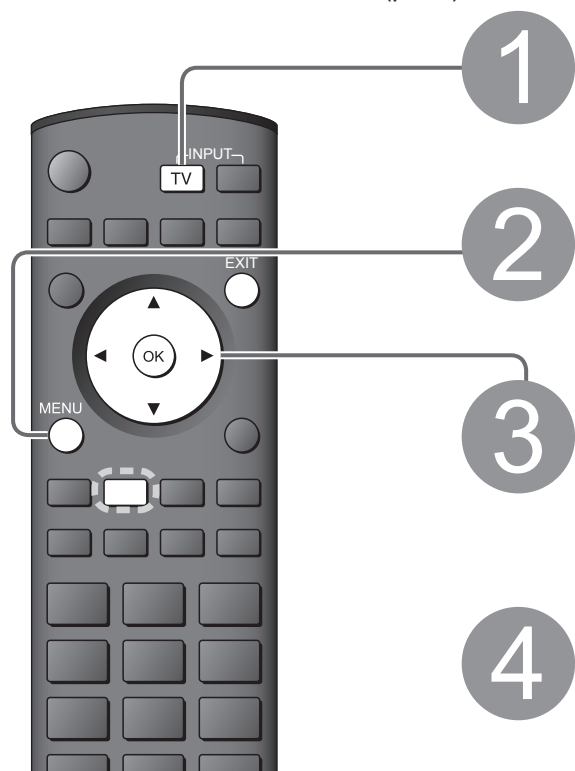
Auto Setup from Setup Menu

Auto Setup retunes all programmes automatically.

■ freesat mode

Automatically retune all the freesat programmes received in the area.

- Only freesat programmes are retuned.
- All the previous tuning settings are erased.
- If a Child Lock PIN number (p. 41) has been set, it must be entered.



■ To return to TV



■ For Auto Setup, using the buttons on the side of the TV (p. 7)

- ① Press repeatedly until "Auto Setup" appears

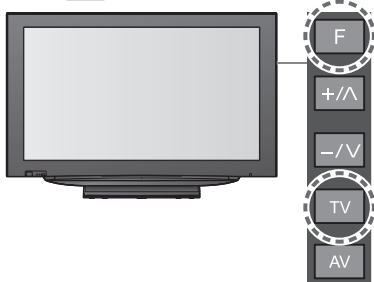
F

- ② Access "Auto Setup"

TV

- ③ Start "Auto Setup"

TV



- To return to TV → F

Note

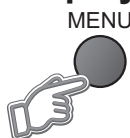
- You cannot set the postcode in this operation. The previous postcode setting is not erased.

Select freesat

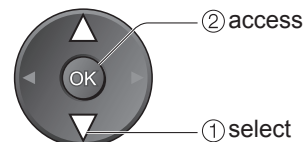
→ p. 12



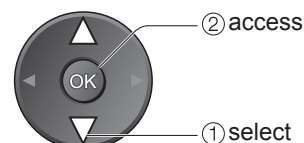
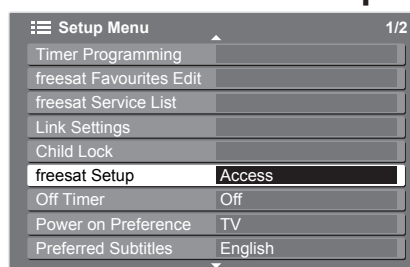
Display the menu



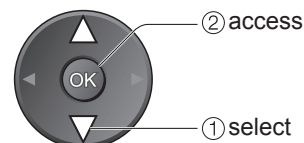
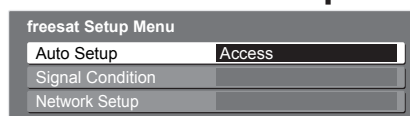
Select "Setup"



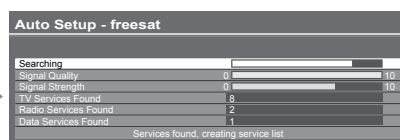
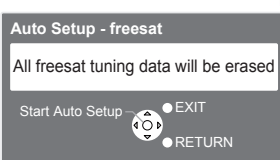
Select "freesat Setup"



Select "Auto Setup"

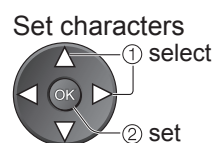


Start Auto Setup



Settings are made automatically

Enter your postcode



Store after you finish entering the postcode
green

Your postcode is required to receive local services and sort the programme order. Please ensure to include a space when entering your postcode.

When the operation is completed, the programme at the lowest position will be displayed.

■ DVB or Analogue mode

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

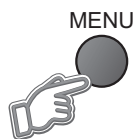
- Only DVB programmes are retuned in DVB mode.
- Only Analogue programmes are retuned in Analogue mode.
- All the previous tuning settings are erased.
- If a Child Lock PIN number (p. 41) has been set, it must be entered.

1 Select DVB or Analogue

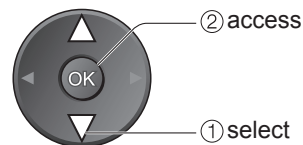
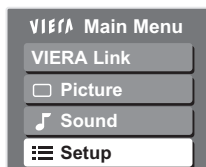
→ p. 12



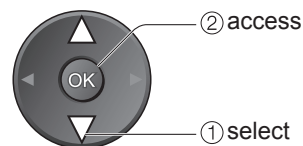
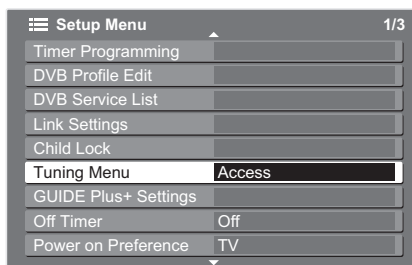
2 Display the menu



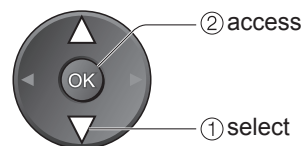
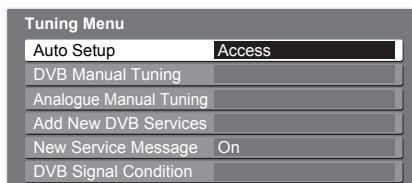
3 Select "Setup"



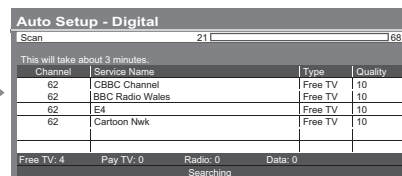
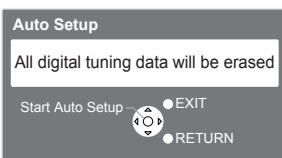
4 Select "Tuning Menu"



5 Select "Auto Setup"



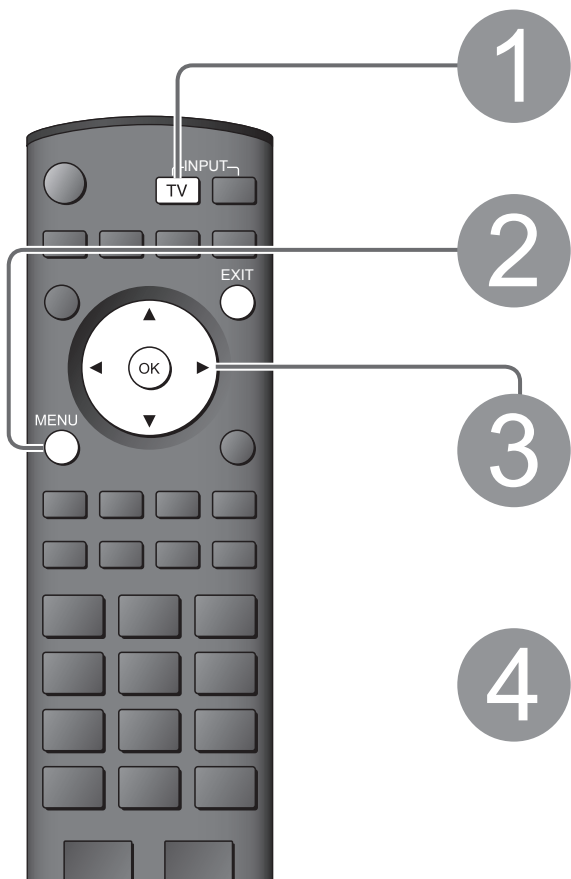
6 Start Auto Setup



Settings are made automatically

- The analogue settings are downloaded to a Q-Link compatible equipment connected to the TV in Analogue mode.
- If tuning has not been done completely
 - ➔ "DVB Manual Tuning" (p. 39)
 - "Analogue Manual Tuning" (p. 39)

When the operation is completed, the programme at programme position "1" will be displayed.



■ To return to TV



■ For Auto Setup, using the buttons on the side of the TV (p. 7)

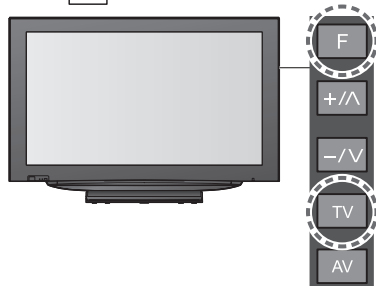
- ① Press repeatedly until "Auto Setup" appears



- ② Access "Auto Setup"



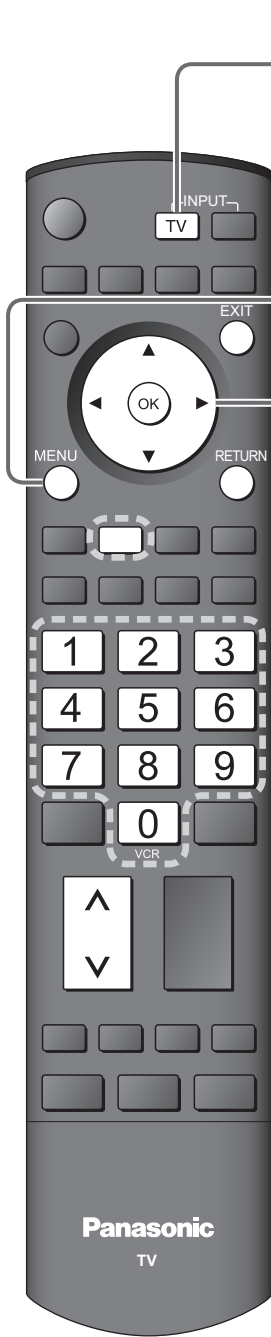
- ③ Start "Auto Setup"


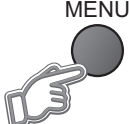
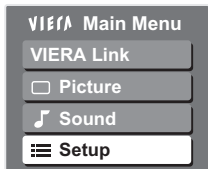
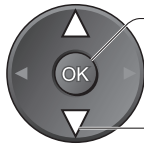
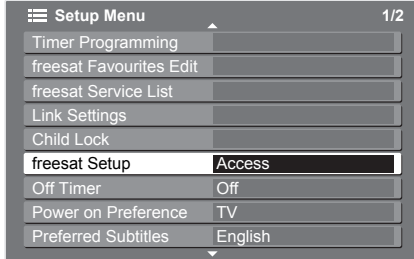
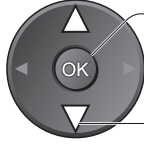
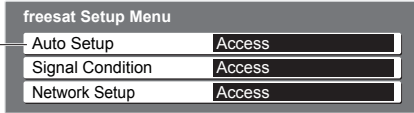
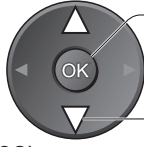



- To return to TV → F

Advanced Settings (freesat)

Advanced Settings provide access to various freesat features.



- Select freesat**
→ p. 12

- Display the menu**

- Select "Setup"**

 ② access
① select
- Select "freesat Setup"**

 ② access
① select
- Select one of the following functions and set**

 ② access
① select
→ "Auto Setup from Setup Menu" (p. 32)

To return to TV
→ EXIT


Check freesat signal

Signal Condition

Selects a programme and checks the freesat signal condition.

- To change the programme → 

Satellite Signal Condition		
Satellite Programme	101 BBC 1 Scotland	
Signal Quality	0	10
Signal Strength	0	10
Network ID	003B	
Transport Stream ID	07FF	
Satellite Lock Indicator	Not Locked	

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

Signal Quality:

- Green bar → Good
- Yellow bar → Poor
- Red bar → Bad (Check the Satellite dish)

Connect to the Broadband network

Network Setup

Sets the network settings for future applications from broadcasters to enable greater interactivity and added features for freesat services.

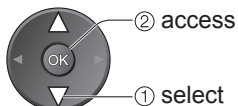
- To connect to your network ➔ p. 56 and p. 60

■ Connect to network

Performs automatic testing of the network connection for the TV.

- ① **Set the network setting items** ➔ see below
- ② **Select "Connect to network" and access to test**

- It takes a while to test.



Connected

The test is successful and the network settings become effective.

Not connected

Check the settings and connections, and then perform this function again.

■ Acquire IP address

■ Acquire DNS address

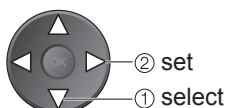
Sets IP address, Subnet mask, Gateway, Primary DNS and Secondary DNS.

For most users, the recommended method of connection to your network is by using Auto feature.

Select "Acquire IP address" and then set to "Auto"

Select "Acquire DNS address" and then set to "Auto"

- The available settings are displayed automatically.

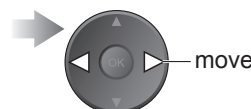


Manual settings

If you wish to set these functions manually, select "Manual".

Select "IP address", "Subnet mask", "Gateway", "Primary DNS" or "Secondary DNS"

Move the cursor and enter the number

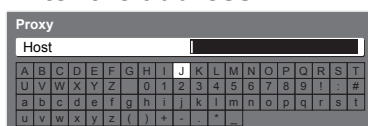
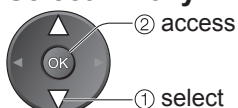


■ Proxy

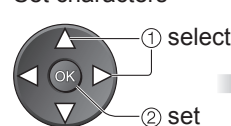
Sets Proxy address.

- This is the address of the relay server that is connected to the target server instead of the browser and sends data to the browser. Setting is required if specified by the provider.

- ① **Select "Proxy"**
- ② **Enter the address**



Set characters



Store



■ Proxy port

Sets Proxy port number.

- This number is also specified by the provider with the Proxy address.

- ① **Select "Proxy port"**
- ② **Move the cursor and enter the number**

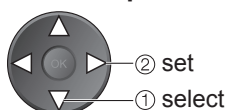


■ Speed mode (Auto / 10base half / 10base duplex / 100base half / 100base duplex)

Sets the LAN speed setting.

- Set to "Auto" normally.
- If "Connect to network" test fails, try the other speed modes.

Select "Speed mode" and then set the speed mode



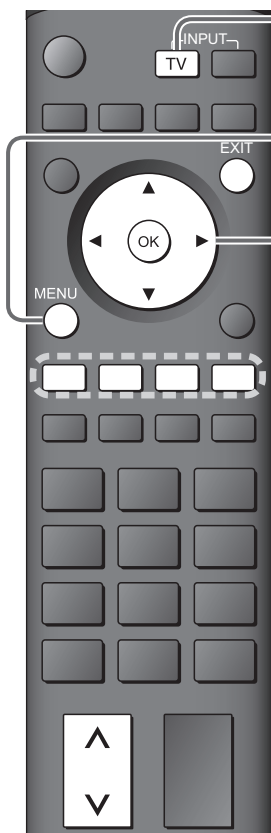
■ MAC address

MAC address is a unique address that identifies hardware in the network.
(for information only)

Advanced Settings (DVB Other Sat.)

Advanced Settings provide access to various advanced DVB or Other Satellite features.

- Some of Other Sat. functions may work to differing specifications (depending on the broadcasters).



- 1** Select freesat, DVB or Other Sat.
→ p. 12
- 2** Display the menu
- 3** Select "Setup"
- 4** Select one of the following functions and set

To return to TV
EXIT

Setup Menu

Main Menu	
VIERA Link	
Picture	
Sound	
Setup	

Setup Menu 2/3

Preferred Subtitles	English
Add Other Sat. Services	Access
Shipping Condition	
Owner ID	
Common Interface	Access
System Update	Access
Picture Overscan	On
Input Labels	
Banner Display Timeout	3 seconds

② access
① select

② access
① select

- "Add Other Sat. Services" is available in freesat or Other Sat. mode only.
- "Common Interface" is available in DVB or Other Sat. mode only.

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.

- This function is not available for BSkyB's Sky services.

Caution

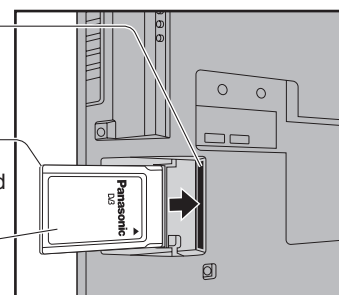
- Turn Off Mains power On / Off switch whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
- Do not insert the module up side down.

CI slot

- Remove the cover before using CI slot.

Insert or remove straightly and completely

CI module



Side of the TV

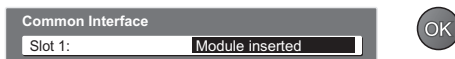
Pay-TV

Common Interface

① Insert the CI module (optional)

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

② Access "Common Interface"



③ Follow the on-screen instructions



Coloured characters → red green yellow blue

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

Set all
receivable
digital
satellite
programmes

Add
Other Sat.
Services

(freesat or
Other Sat. mode)

Update
TV's
software
system

System
Update

Any receivable digital compliant satellite programmes can be tuned.

Auto Setup

Other Sat. programmes are retuned and all the previous Other Sat. tuning settings will be erased.

Available satellite services will be searched and listed in the "Select Services to Keep" list. The tuning will be completed by selecting the services you wish to keep from the list and storing them. Up to 999 services can be stored. You can delete unwanted services later by pressing the red button in Other Sat. Service List (p. 41).

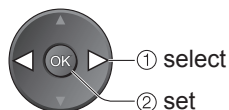
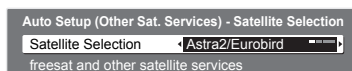
- Selectable satellites are Astra2/Eurobird, Astra1 and Hotbird.

Check the dish alignment for the satellite you want to select

- Astra2/Eurobird → p. 8

- Astra1, Hotbird → Please consult the received satellite broadcasting companies.

1 Select the satellite

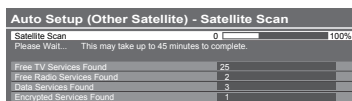


- It takes a while to check the connection for your selected satellite.

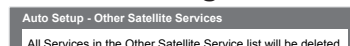
2 Check the signal condition and the message



(Satellites are selected)



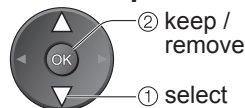
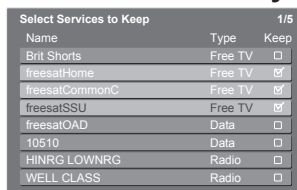
Auto Setup will start



("All" is selected)

- Ensure that the Signal Lock status is shown as "Locked". If it is not locked, the search cannot be executed.
- If the status is shown as "Not locked" and Signal Quality / Signal Strength have no indications, please check the dish alignment.
- If the status is shown as "Not locked" but there are some levels of Signal Quality / Signal Strength indicated, select "All" in Satellite Selection and try again.

3 Select the services you wish to keep



- ☒ : keep (tune)
- ☐ : remove

If you select "Astra2/Eurobird" or "All", freesat programmes will also be searched. But the programmes which have already been tuned in freesat will not be duplicated, and they will not be listed in the "Select Services to Keep" list.

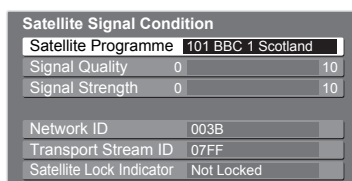
4 Store



Signal Condition

Selects a programme and checks the received signal condition.

- To change the programme →



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

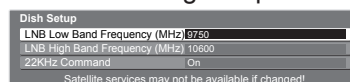
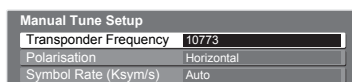
Signal Quality:

- Green bar → Good
- Yellow bar → Poor
- Red bar → Bad (Check the Satellite dish)

Manual Tune

Dish Setup

- Please consult the received satellite broadcasting companies for the setting.

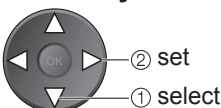


Download new software to TV.

For details → p. 59

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

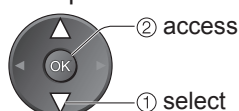
Select "Auto Update Search in Standby" and then set "On" or "Off"



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

To update immediately

Select
"System Update Search Now"



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

Download



- Download may take up to 20 mins.

Advanced Settings
(DVB / Other Sat.)

Advanced

Tuning Programmes (DVB Analogue)

You can search for new services which may have recently started broadcasting.

- 1 Select DVB or Analogue**
 ➔ p. 12
- 2 Display the menu**
- 3 Select "Setup"**
- 4 Select "Tuning Menu"**
- 5 Select one of the following functions and set**
 - "DVB Manual Tuning", "Add New DVB Services", "New Service Message" and "DVB Signal Condition" are available in DVB mode only.
 - "Analogue Manual Tuning" is available in Analogue mode only.

■ **To return to TV**
 EXIT

➔ "Auto Setup from Setup Menu" (p. 33)

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.

DVB Manual Tuning			
Frequency	CH21 474 MHz		
Signal Quality	0 10		
Signal Strength	0 10		
Position	Service Name	Type	New
Free TV: 0	Pay TV: 0	Radio: 0	Data: 0
Stopped			



- 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".

Analogue Manual Tuning	
1 BBC1	CH33
Manual Tuning	21 68

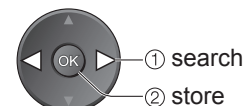
Select the programme position



Select the channel



Search and store



Add DVB programme automatically

Add New DVB Services

Any new services found will be added to the DVB Service List.

Add New DVB Services			
Scan	21 68		
This will take about 3 minutes.			
Channel	Service Name	Type	Quality
Free TV: 0	Pay TV: 0	Radio: 0	Data: 0
Searching			

- 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)

<p>New DVB service found! Press OK to start Auto Setup. Press EXIT to ignore.</p> <p>Selecting Auto Setup will delete current Profile and Childlock settings</p>

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

Check DVB signal

DVB Signal Condition

Selects a programme and checks the DVB signal condition.

- To change the programme →



DVB Signal Condition	
DVB Programme	CH70 CBBC Channel
Signal Quality	0 10
Signal Strength	0 10

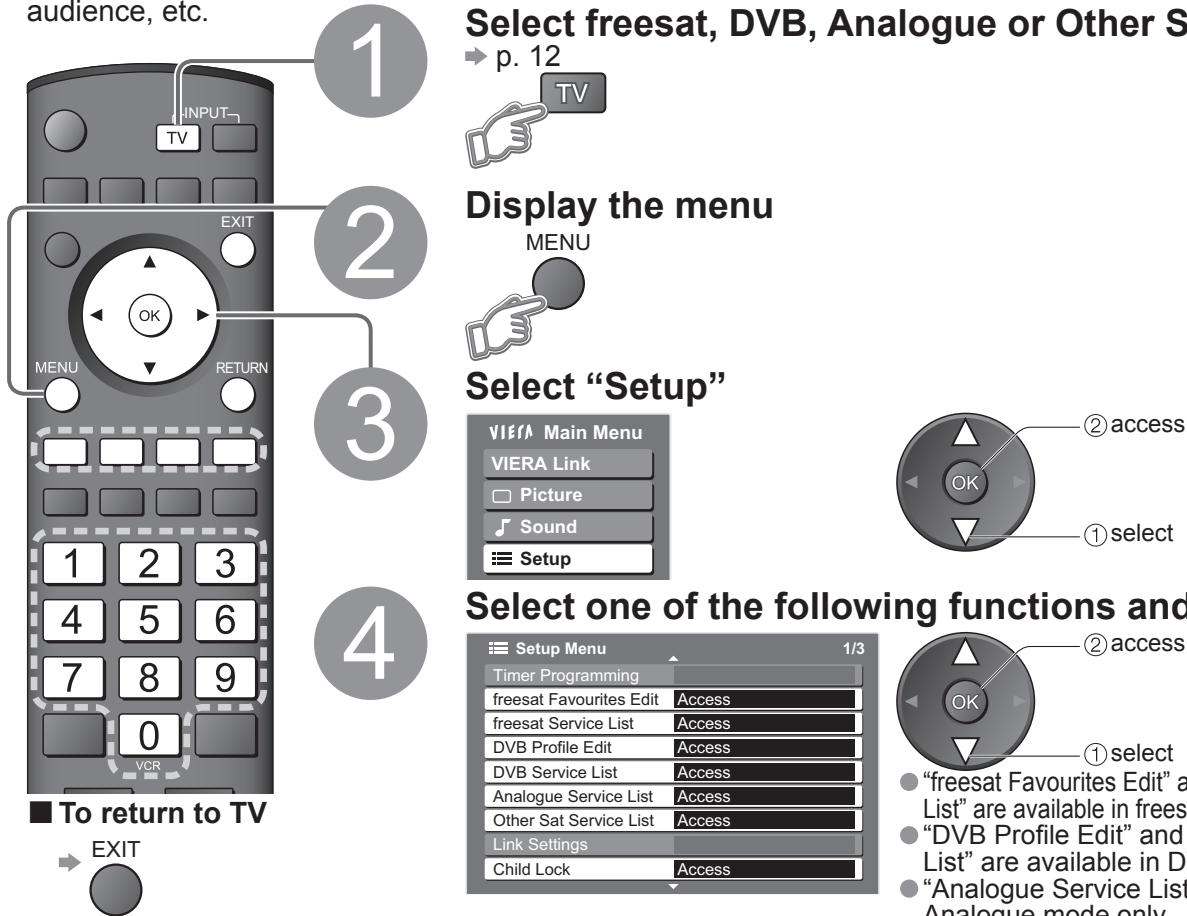
A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows:

Signal Quality:

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

Editing Programmes

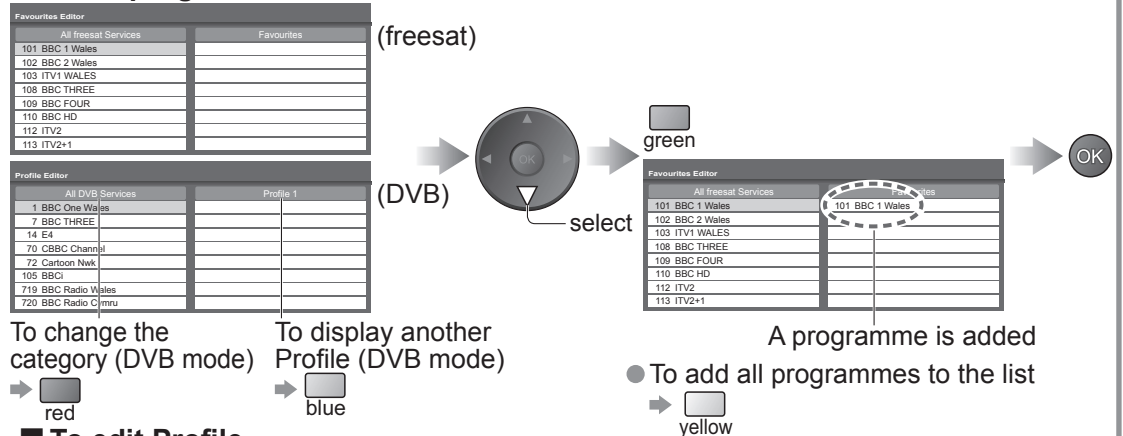
You can make your favourite programme lists, skip unwanted programmes and control programme audience, etc.



- "freesat Favourites Edit" and "freesat Service List" are available in freesat mode only.
- "DVB Profile Edit" and "DVB Service List" are available in DVB mode only.
- "Analogue Service List" is available in Analogue mode only.
- "Other Sat Service List" is available in Other Sat. mode only.

Create your favourite programme list (freesat-Favourites, DVB-Profile) from various broadcasters (DVB-up to 4: Profile 1 to 4). The freesat Favourites list is available from "Service Genre" in TV Guide (p. 16). The DVB Profile lists are available from "Category" in Information banner (p. 13) and TV Guide (p. 17).

Select a programme and add it to the list



To edit Profile

- Select the field of Favourites or Profile to edit and:
 - To name the Profile → red → Select the character → OK → RETURN
 - To move the programme → green → Select the new position → Confirm → OK
 - To delete the programme → yellow → OK
 - To delete all programmes → blue → OK

Note

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

List favourite programmes

freesat Favourites Edit

(freesat mode)

DVB Profile Edit

(DVB mode)

Skip unwanted programmes

freesat Service List

DVB Service List

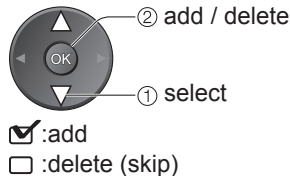
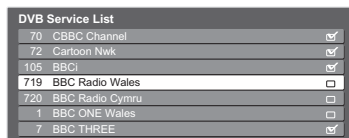
Analogue Service List

Other Sat Service List

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

- “freesat Service List” lists all the tuned freesat programmes in freesat mode.
- “DVB Service List” lists all the tuned DVB programmes in DVB mode.
- “Analogue Service List” lists all the tuned Analogue programmes in Analogue mode.
- “Other Sat Service List” lists all the tuned Other Sat. programmes in Other Sat. mode.

Select a service and add / delete

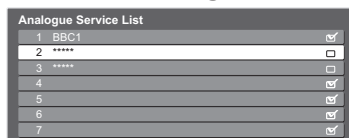


- To retune each programme - DVB Service List or Analogue Service List (Manual Tuning)
→ (p. 39)
- To delete the programme - Other Sat Service List
→

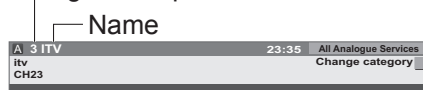
You can change the programme name and programme position for Analogue programmes.

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

① Select the programme to edit



Programme position



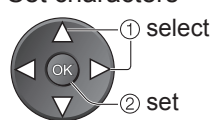
② Edit

■ To change the name displayed when selecting programmes

Select “Rename”



Set characters



(maximum: five characters)

Store



■ To move the programme position

Select new position



Store



Edit analogue programmes (Change name, Move)

Analogue Service List

(Analogue mode)

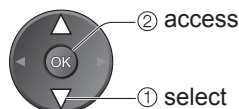
You can lock specific programmes / AV input terminals and control who watches them. (When the locked programme / input is selected, a message appears; by entering the PIN number, you can watch it.)

① Enter the PIN number (4 digits)

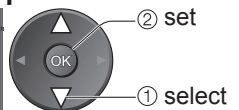
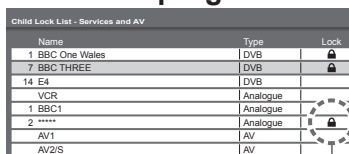


- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

② Select “Child Lock List”



③ Select the programme / input to be locked



- To cancel
→ Select the locked programme / input
→
- To jump to the top of the next type
→
- To lock all →
- 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.

Note

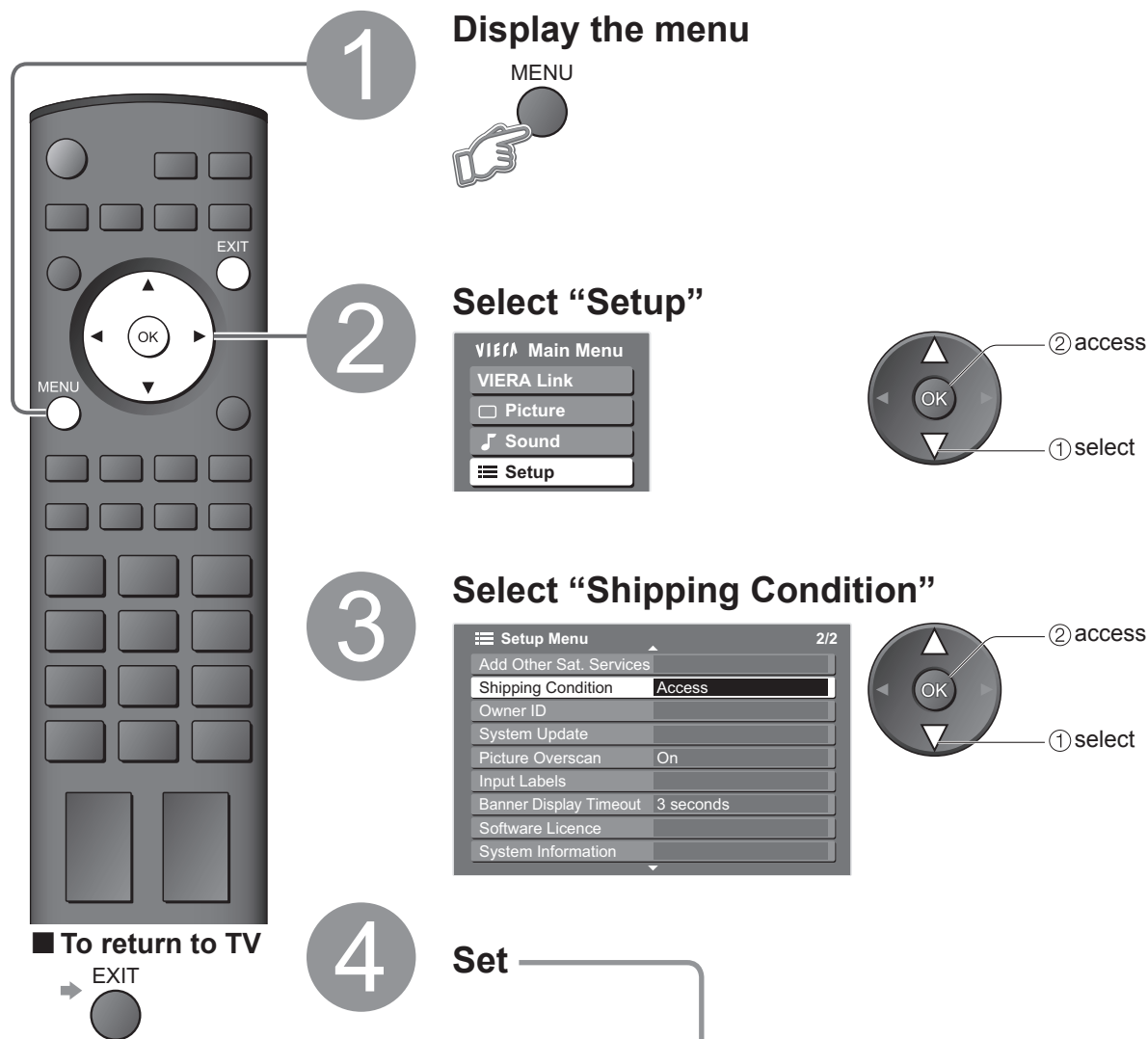
- Setting “Shipping Condition” (p. 42) erases the PIN number and all settings.

Control programme audience

Child Lock

Shipping Condition

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.



Restore Settings

Shipping Condition

① Check the message and initialise

Shipping Condition

All tuning data will be erased
Are you sure?
Are you sure?

Confirm

● EXIT
● RETURN

OK

OK

OK

② Follow the on-screen instructions

**Shipping condition completed.
TV can now be switched off.**

● "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)

■ To retune TV programmes only, e.g. after moving house
 ➔ "Auto Setup" (p. 32 and p. 33)

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.

1 Display the menu

2 Select “Setup”

3 Select “Owner ID”

4 Set

■ To return to TV

① Enter the PIN number (4 digits)

Owner ID

Please enter new PIN

PIN

EXIT RETURN

1 2 3

4 5 6

7 8 9

0

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

② Enter your name, address, and postcode, in that order

- Select the entry field
- OK Enter the “User input” mode
- Select the character
- OK Set
- RETURN Store

To check the “personal information” stored

Hold down for about 6 sec. F

Displays the information on the screen (for several sec.)

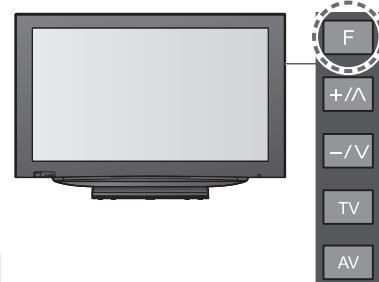
Owner ID

NAME A

HOUSE NO

POSTCODE

EXIT



- The PIN number is not displayed.

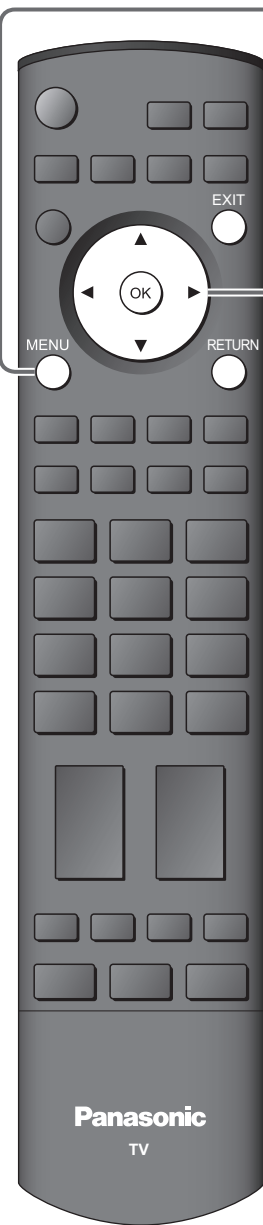
■ To change the PIN number

- Select the “PIN” field
- Enter a new PIN number twice

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. 22



1 Display the menu

MENU

2 Select "Setup"

VIERA Main Menu

- VIERA Link
- Picture
- Sound
- Setup**

3 Select "Input Labels"

Setup Menu 2/2

- Add Other Sat. Services
- Shipping Condition
- Owner ID
- System Update
- Picture Overscan On
- Input Labels Access**
- Banner Display Timeout 3 seconds
- Software Licence
- System Information

4 Select a input terminal and set

Input Labels

AV1	DVD
AV2/S	AV2/S
AV3/S	AV3/S
COMPONENT	COMPONENT
PC	PC
HDMI1	HDMI1
HDMI2	HDMI2
HDMI3	HDMI3

● To return to TV

EXIT

The labels you set will be displayed in "Input Selection" menu (p. 22) or banner.

● If "Skip" is selected, you cannot select the mode.

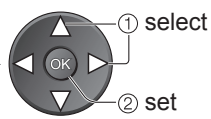
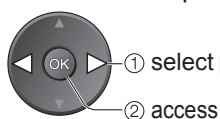
■ User input

You can name each input terminals freely.

Select "User input"

Set characters

Store

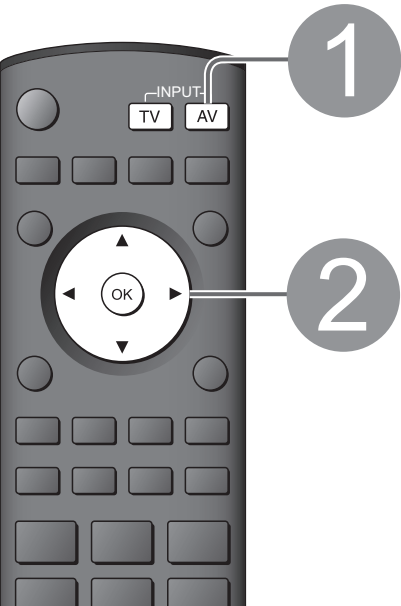


(maximum: ten characters)

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.

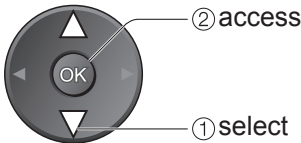
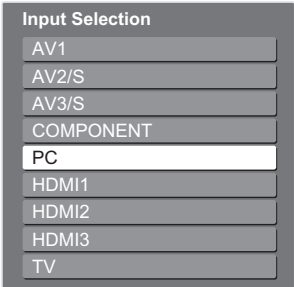
● To connect PC ➔ p. 56



Select the external input



Select "PC"



- Corresponding signals ➔ p. 61
- If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

■ To return to TV



■ PC menu setting (changed as desired)

- To make settings ➔ "How to Use Menu Functions" ① to ④ (p. 24)

Menu	Item		Adjustments / Configurations (options)	
Picture	Advanced PC Settings	R-Gain	Adjusts the white balance for red areas	
		G-Gain	Adjusts the white balance for green areas	
		B-Gain	Adjusts the white balance for blue areas	
		Gamma	(2.0 / 2.2 / 2.5)	
		Reset to Default	Press the OK button to reset to the default Picture settings	
Setup	PC Setup	Input Resolution	Switches to a wide view ● VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,366 × 768 pixels) ● Options change depending on signals	
		Clock	Set to the minimum level if noise occurs	
		H-pos	Adjusts horizontal position	
		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	

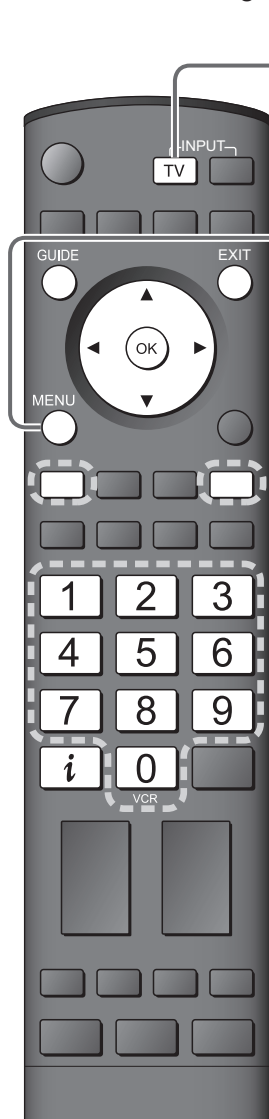
● Other items ➔ p. 26 - 29



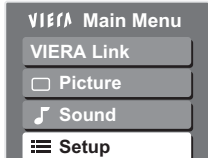
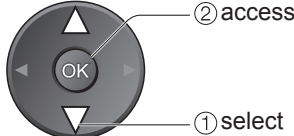
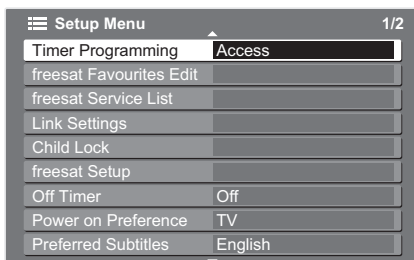
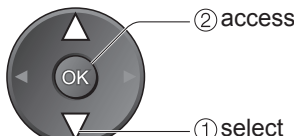

Recording Controls


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. 51), and setup / connection are done completely (p. 50 and p. 51), 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. 28) to the connected terminal (AV1 or AV2), and make timer programming of the recorder (Read the manual of the recorder).
- Recording is possible in composite video via SCART only - including HD content.
- While recording, you cannot watch any other programmes except the one being recorded.



- 1** **Select the mode you want to set a recording**
→ p. 12

- 2** **Display the menu**

- 3** **Select “Setup”**


- 4** **Select “Timer Programming”**


- 5** **Set** _____
- 6** **Store**


■ **To return to TV**
EXIT
→ 

■ **To stop recording**
GUIDE EXIT
→  → 

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).

Set timer programming details

① Start making the settings



FS: freesat
D: DVB
A: Analogue
S: Other Sat.
(you cannot change TV mode within the menu)

② Repeat the operations as below, and set items in the order of ① to ⑤



select the item



set

● ①, ③ and ④ can also be entered with numeric buttons.

Displayed if the timer programming events are overlapped

Current timer programming event

Timer Programming					Wed 05/08/04 18:50			
Pos.	Name	Date	Start	End	min.			
D 7	BBC THREE <TIMER>	6/8 FR	17:00	18:30	90	Off		
D 1	BBC1 Holiday News	6/8 FR	18:00	20:00	120	Off		
D 3	ITV1 Freshly Squeezed Extra	7/8 SA	21:30	22:30	60	Off		
---	---	---	---	---	---	---	---	---

① Programme

② Date



one day ahead

daily or weekly
(press repeatedly)

Guide: Event recording
Records according to the TV Guide signal (p. 18)
S/P: Split Programme (p. 18)

⑤ Subtitles (Off / Auto)

● Recording time
(automatic display)

④ Ending time

③ Starting time

- Daily SU-SA: Sunday to Saturday
- Daily MO-SA: Monday to Saturday
- Daily MO-FR: Monday to Friday
- Weekly SA/FR/TH/WE/TU/MO/SU: Same time on the same day every week

■ To change a timer programming event

➔ Select the programme to be changed



② access

① select

➔ Correct as necessary
(as above)

■ To cancel a timer programming event

➔ Select the programme to be deleted



red

OK

■ To cancel a timer programming event temporarily

➔ Select the programme to be cancelled



blue

● Each time pressed:
cancel ↔ stop cancelling

■ To view details of the programming

➔ Select the programme to be viewed



i

● Press again to return to
Timer Programming menu.

■ Event recording (Timer Programming from TV Guide-EPG) ➔ p. 18

- Not available in Analogue or Other Sat. mode.

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. 51 and p. 53

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

Note

- 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 ➔ EXIT)
- A Timer Programming event will automatically change to the desired programme 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. 53). In this case, Pause Live TV recording will be cancelled.

Viewing from SD Card

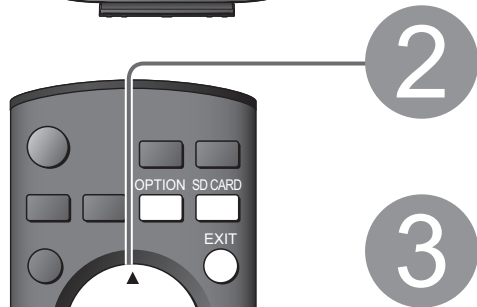
Still images recorded by digital cameras will be displayed.



Insert the SD Card

Signal output from all AV terminals will be disabled during SD card view.
Press OK to proceed.
Press EXIT to return to TV viewing.

- Warning message for output signal is displayed.



Enter SD mode (Photo View Mode)



- All photos in SD Card are displayed by thumbnail.



Select the photo to be viewed

Selected photo Error display (images that could not be loaded, etc.)

Photo View Mode
All pictures
1/175
Filename p1010001
Date 23/10/2007
Pixel 1600 x 1200
Reading
Select EXIT Select RETURN
MENU Select RETURN

Slide show Sort by Month Sort by Date
(Thumbnail)

1 select
2 view

Slide show p. 49

Selected photo information is displayed

- The maximum number of characters for Filename is 8.
- The photo without record of the date is shown "***/**/****".

To sort by date or month recorded

(Sort by Month / Sort by Date)

Display the thumbnail grouped by the same date or the same month

- ☐ (Sort by Month)
yellow
- ☐ (Sort by Date)
blue

Select the group to be viewed

- 1 select
2 view the thumbnail of the selected group

Note

- The group of the photos without record of the date is shown as "Unknown".

To return to TV

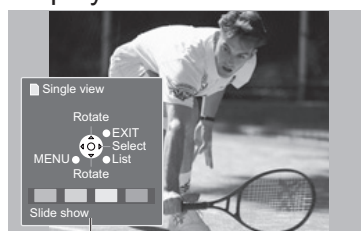
- EXIT or SD CARD



View

To display the operation guide

Displayed one at a time



Operation guide

- OPTION
- To the previous photo
Rotate 90° (anti-clockwise)
To the next photo
Rotate 90° (clockwise)
- To return to thumbnail
RETURN

Caution

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

(Photos)

SD Card

● For details on SD Cards → p. 59

■ To insert

Label surface

Push until a click is heard

→

■ To remove

Press the centre of the card

Slide show

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

① Select the photo for the first view

② Start Slide show

→

● To pause →

● To return to Single view →

Note
● A Slide show will be completed within the group from which it was started.

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

① Display the menu

② Select "Viewing Setup"

③ Select the items and set

→

VIERA Main Menu

Picture

Viewing Setup

● "Picture Menu" (p. 26)

→

② access

① select

→

Viewing Setup

Interval 5 seconds

Repeat Off

→

② set

① select

Menu	Item	Adjustments / Configurations (alternatives)
Viewing Setup	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 style="list-style-type: none">● The file is broken or unreadable.● The TV does not support the format. (For the applicable formats and data, see p. 59.)
Is SD Card in?	▶ <ul style="list-style-type: none">● Confirm SD Card is inserted correctly.
No valid file to play	▶ <ul style="list-style-type: none">● The card has no data.
Over 9999 pictures found	▶ <ul style="list-style-type: none">● 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. 51)
 VIERA Link (HDAVI Control™) connects the TV and the equipment with VIERA Link function, and enables easy control, convenient recording, playback, etc. (p. 52 - 55)
 You can use Q-Link and VIERA Link functions together.

■ Summary of Q-Link and VIERA Link functions

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

* : Available with the equipment which has “HDAVI Control 2” or “HDAVI Control 3” function.

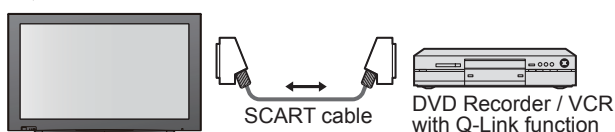
** : Available with the equipment which has “HDAVI Control 3” function.

*** : These features may be available even with other manufacturers’ equipment supporting HDMI CEC.

Connections

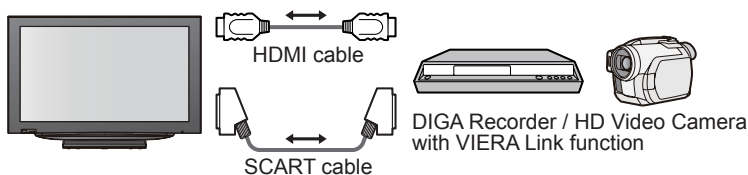
Read the manual of the equipment, too.

■ 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

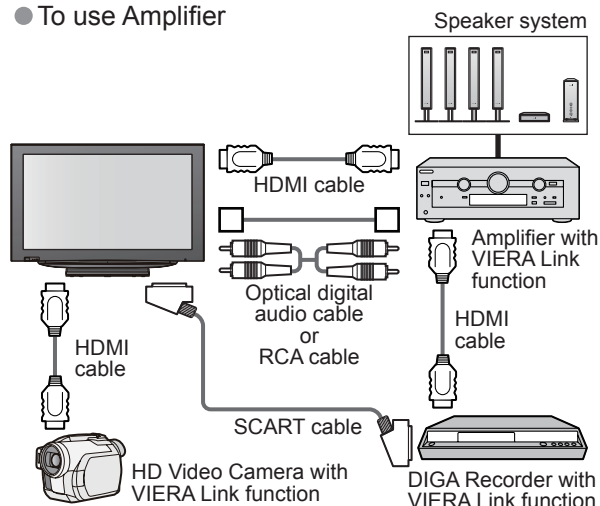


- Connect the equipment supporting VIERA Link to the TV's AV1, AV2, HDMI1, HDMI2 or HDMI3 terminals via fully wired SCART and HDMI cables together.
- Some functions are available only with HDMI cable connection. But use both HDMI and SCART cables to support many features normally.

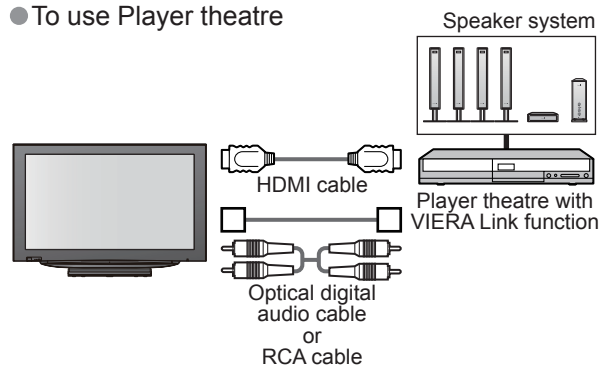
- SCART cable
Use fully wired SCART cable.
- HDMI cable
Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilized.
Recommended Panasonic's HDMI cable part number:
 • RP-CDHG10 (1.0 m)
 • RP-CDHG15 (1.5 m)
 • RP-CDHG20 (2.0 m)
 • RP-CDHG30 (3.0 m)
 • RP-CDHG50 (5.0 m)

For Speaker control (Home Cinema)

- To use Amplifier



- To use Player theatre



Q-Link

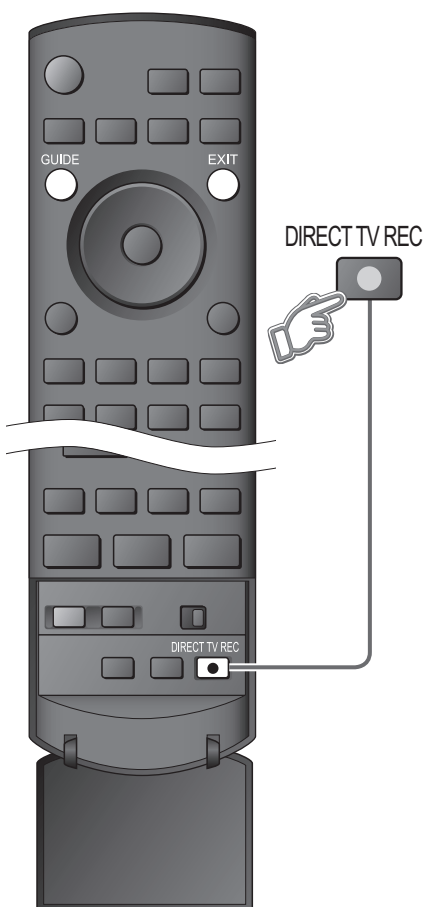
■ Preparations

- Connect the DVD Recorder / VCR with the following logos:
“Q-Link”, “NEXTVIEWLINK”, “DATA LOGIC”, “Easy Link”, “Megalogic” or “SMARTLINK”
- Q-Link connection ➔ p. 50
- Set up the DVD Recorder / VCR. Read the manual of the equipment.
- Q-Link terminal setup in Setup Menu ➔ “Q-Link” (p. 28), “AV1 / AV2 out” (p. 28)
- Download Analogue programme setting ➔ “Q-Link Download” (p. 28) 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.



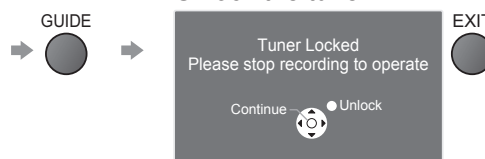
● Available conditions:

Current mode	Using tuner	How to record
Analogue	TV	TV monitor out
	Recorder	Recorder's tuner
freesat, DVB, Other Sat.	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

Unlock the tuner



Direct TV Recording -
What you see
is What you
record

Information
/ Message

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.)

- This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

- “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)

Advanced

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. 50
- 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. 28) 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. 28)
- 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. 22), 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. <ul style="list-style-type: none">● This function will work even if the TV enters standby mode automatically by Off Timer function or auto power standby function.

■ Features available (Using VIERA Link Menu)

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

**Direct TV
Rec**

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. 52)
- 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.

① Display "VIERA Link Menu"

② Select "Direct TV Rec" and start recording

● You can also start recording directly ➔ DIRECT TV REC

● To stop recording
Select "Stop" in "Direct TV Rec" and access

① select
② stop

● 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" 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. 52)

Access and pause the live TV programme

① Display "VIERA Link Menu"

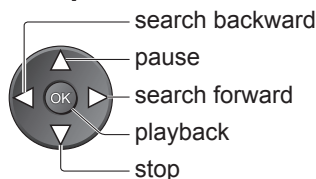
② Select "Pause Live TV" and pause

① select
② pause

The TV picture will be paused.

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



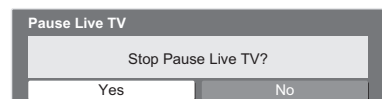
- Operations may be different depending on the recorder. In this case, follow the operation guide or read the manual of the recorder.

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

■ To return to Live TV

(stop playback of Pause Live TV / cancel pause)

Select "Yes"



- 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)

Advanced

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. 52)

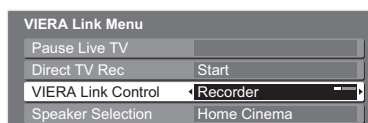
Access and operate the menu of the equipment



① Display "VIERA Link Menu"

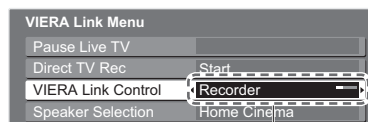


② Select "VIERA Link Control"



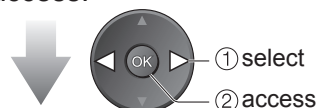
③ Select the equipment you want to access

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



Recorder / Player / Home Cinema / Video Camera

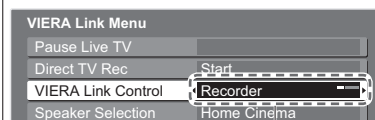
The type of the connected equipment is displayed.
Select the type of the equipment and access.



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

■ If you access the invalid equipment

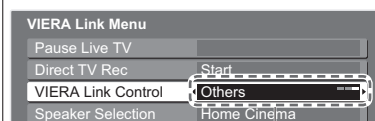
When the equipment with "HDAVI Control" function is connected



Recorder / Player / Home Cinema / Video Camera

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

When the equipment of other types or manufacturers is connected



Others

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

Control the menu of the connected equipment by VIERA remote control

(HDAVI Control 2)
(HDAVI Control 3)

VIERA Link Control

④ Operate the menu of the equipment

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

	Move the cursor / select the menu
	Move the cursor / access / adjust
	Store / set / access
	Return to the previous menu
	Exit the menu
	Display the operation guide for the equipment / The same functions with the OPTION button of the equipment
	Access when the key words are displayed on colour bar

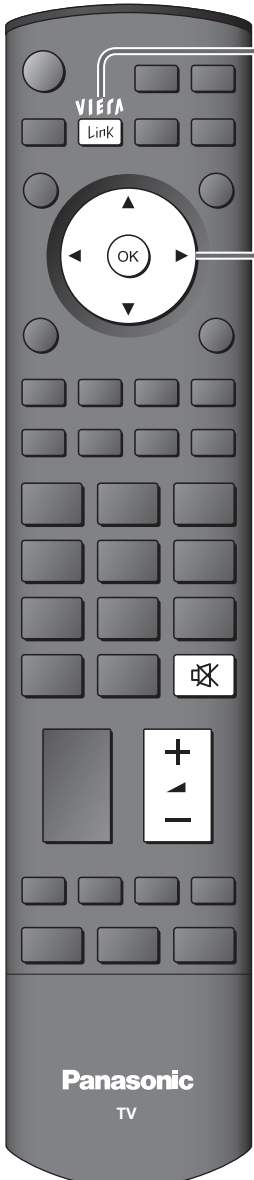
- About the operations for the equipment, read the manual of the equipment.

■ Features available (Using VIERA Link Menu)

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

- This function is available with the Amplifier or Player theatre which has "HDAVI Control" function.
- If you cannot operate, check the settings and the equipment ➔ "Preparations" (p. 52)

Access and control the speaker volume



① **Display "VIERA Link Menu"**



② **Select "Speaker Selection"**

③ **Set to "Home Cinema" or "TV"**

VIERA Link Menu

Pause Live TV	
Direct TV Rec	Start
VIERA Link Control	Recorder
Speaker Selection	Home Cinema

Home Cinema
Amplifier or Player theatre will be automatically turned on if it is in Standby mode and the sound is from theatre speakers connected to the equipment.

- Volume up / down ➔ 
- Mute ➔ 
- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

TV
TV speakers are active.

Speaker control

Speaker Selection

Panasonic
TV

● Link Functions
(Q-Link / VIERA Link)

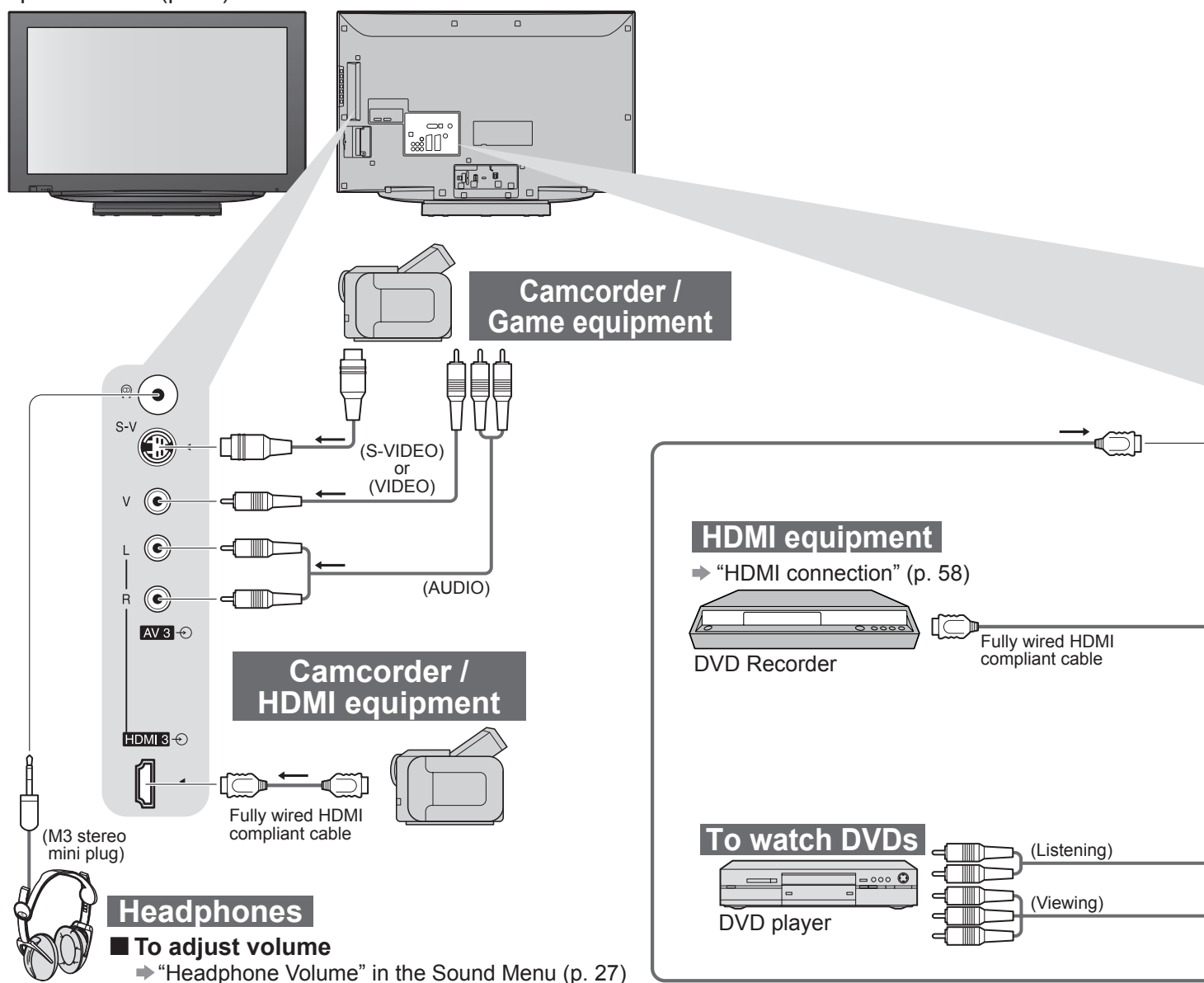
Advanced

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. 29)

External Equipment

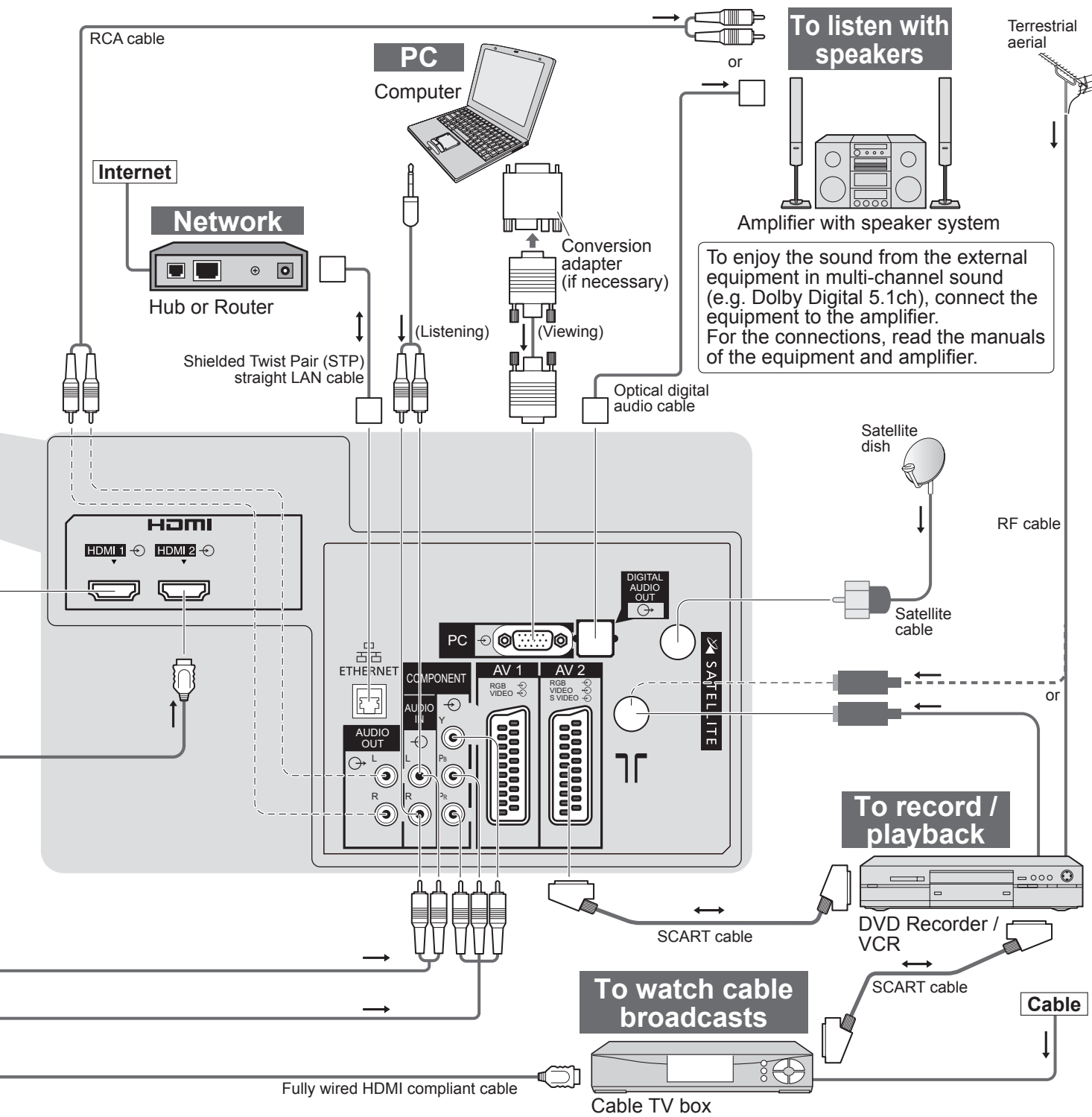
These diagrams show our recommendations for connection of your TV to various pieces of equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 67).



Types of connectable equipment to each terminal

Terminal	AV1	AV2	AV3 (Side of TV)	
Recording / Playback (equipment)				
To record / playback videocassettes / DVDs (VCR / DVD recorder)	○	○		
To watch DVDs (DVD player)	○	○	○	
To watch camcorder images (Video camera)	○	○	○	
To watch cable broadcasts (Set top box)	○	○	○	
To play games (Game equipment)	○	○	○	
To use amplifier with speaker system				
To use Network services for freesat				
Q-Link	○	○		
VIERA Link	○	○		
	(with HDMI)	(with HDMI)		
Direct TV Recording	○	○		

○: Recommended Connection



COMPONENT	AUDIO OUT	DIGITAL AUDIO OUT	ETHERNET	HDMI		
				1	2	3
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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.

Signal name	Aspect Control Signal									
	Widescreen signal (WSS)					Control signal through SCART (pin 8) or HDMI terminal				
	TV	AV1	AV2	AV3	COMPONENT	AV1	AV2	HDMI1	HDMI2	HDMI3
PAL	○	○	○	○		○	○			
PAL 525/60	—	—	—	—		○	○			
freesat, DVB, Other Sat.	○	—	—	—		—	—			
M. NTSC	—	—	—	—		○	○			
NTSC (AV input only)	—	—	—	—		○	○			
SD	525(480)/60i				—			○	○	○
	525(480)/60p				—			○	○	○
	625(576)/50i				○			○	○	○
	625(576)/50p				○			○	○	○
HD	750(720)/50p				—			○	○	○
	750(720)/60p				—			○	○	○
	1125(1080)/50i				—			○	○	○
	1125(1080)/60i				—			○	○	○
	1125(1080)/50p				—			○	○	○
	1125(1080)/60p				—			○	○	○
	1125(1080)/24p				—			○	○	○

Note

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

HDMI connection

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

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

About connections, see “External Equipment” (p. 56).

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. 27)
- 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. 61.
- This TV incorporates HDMI™ (Version 1.3a with x.v.Color™) technology.

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

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

Updating the TV software

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

■ To download from a notification banner

A notification banner will appear when you search for a new version software by using the “System Update Search Now” function (p. 37).

In freesat mode, a notification banner will appear when the TV Guide is exited if a new available software is found.

In DVB mode, a notification banner will appear when one of the BBC channels is tuned if a new available software is found.

To start downloading press “OK”, this may take up to 20 minutes to complete.

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.

New version 1.00 found.
Do you really want to update the software and reboot the system?
Press OK to download the new version
Press EXIT to ignore

■ 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. 37).

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

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

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

Max. number of files: 9,999

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

- Compliant card type (maximum capacity): SDHC Card (32 GB), SD Card (2 GB), Multi Media Card (128 MB), miniSD Card (2 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

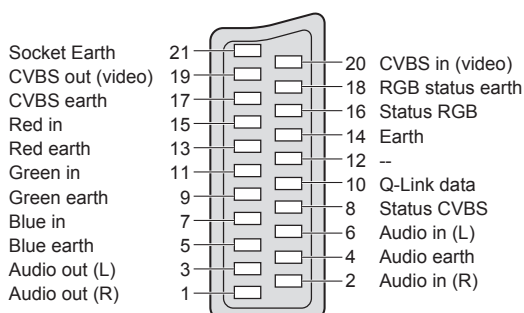
- A JPEG image modified with a PC may not be displayed.
- Images imported from a PC must be compatible with EXIF (Exchangeable Image File) 2.0, 2.1, and 2.2.
- Partly degraded files might be displayed at a reduced resolution.
- Only “.JPG” extension can be read by this TV.
- The folder and file names 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.

Technical Information

SCART, S-VIDEO and HDMI terminal information

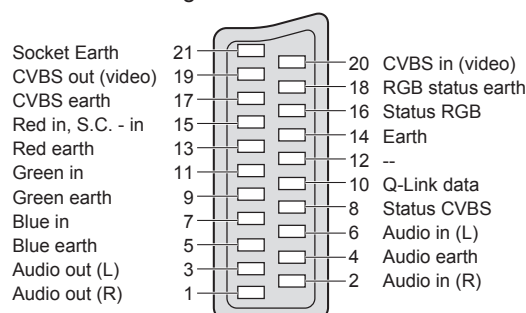
■ AV1 SCART terminal (RGB, VIDEO, Q-Link)

Suitable inputs for AV1 include RGB (Red / Green / Blue).

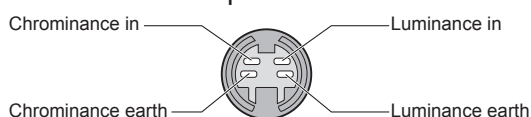


■ AV2 SCART terminal (RGB, VIDEO, S-VIDEO, Q-Link)

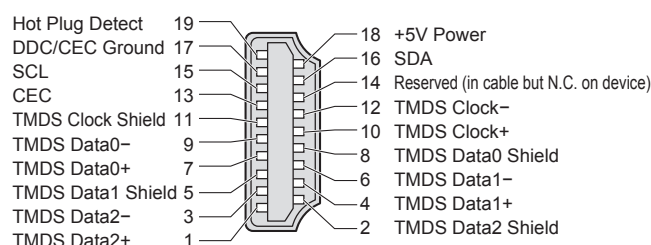
AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.



■ AV3 S-VIDEO 4 pin terminal



■ HDMI terminal



Network connection (ETHERNET)

If you do not have a Broadband network service, please consult your retailer for assistance.
About connections, see "External Equipment" (p. 56).

■ Preparations

- Confirm the terms and conditions of the contracts with your Internet Service Provider (ISP) or telecommunications company.
- Set up and connect any equipment required for the network environment.
- Ensure that the Broadband routers and hubs are compatible with 10BASE-T / 100BASE-TX.
- If you use the equipment compatible only with 100BASE-TX, category 5 straight LAN cables (STP) are required.
- Read the manual of the network equipment, too.

Note

- Depending on the ISP or telecommunications company, the required equipment and the internet connection procedure are different. Ensure that you use the network equipment that are authorized by your ISP and telecommunications company.
- You cannot make settings for the network equipment on this TV. You may be required to make settings on your computer.
- Depending on the terms and conditions of the contracts with your ISP or telecommunications company, additional fees may be incurred or multiple connections to the Internet may be impossible.
- Please contact your ISP or telecommunications company if you require further assistance regarding the network equipment.

PC connection

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

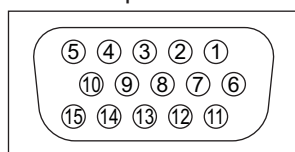
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

Note

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

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

- D-sub 15-pin connector signal



Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
①	R	⑥	GND (Ground)	⑪	NC (not connected)
②	G	⑦	GND (Ground)	⑫	NC (not connected)
③	B	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, P_B, P_R), 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) / 60i	*	*
1,125 (1,080) / 50i	*	*
1,125 (1,080) / 60p		*
1,125 (1,080) / 50p		*
1,125 (1,080) / 24p		*

PC (D-sub 15P)

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

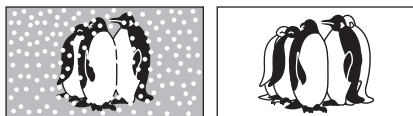
Note

- 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. 68)

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. 26) and volume.
- Check all required SCART cables and connections are firmly in place.

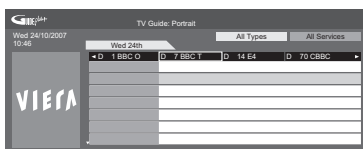
Auto aspect

- Auto aspect is designed to provide you with the best aspect ratio to use to fill your screen. For user control please see p. 58.

S-Video / black and white picture


- Using AV button please confirm your selection is S-Video i.e. AV2/S (p. 22).

No programmes shown on TV Guide



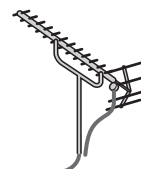
- Check the digital transmitter.
- Adjust the direction of the dish or aerial to another transmitter installed nearby.
- Check the analogue broadcast. If the image quality is poor, check the aerial and consult your nearest dealer.

On Screen messages - i.e. EC/AV1

- You can simply clear these →  Press again to redisplay.

Auto Setup (freesat) is stopped before it is completed

- Check connections and dish alignment. The dish needs to be pointing at Astra 2 at 28.2° East, and Eurobird 1 at 28.5° East.
- If the problem persists, consult your freesat registered retailer or call Freesat (UK) Ltd on 0844 881 6700 or visit www.freesat.co.uk



Q-Link function does not work

- Please confirm SCART cable and connection. Also please set "AV1 / AV2 out" in the Setup Menu (p. 28).

"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. 52)

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 damage to the panel. The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.

	Problem	Actions
Screen	Chaotic image, noisy	<ul style="list-style-type: none"> ● Set "P-NR" in the Picture Menu (to remove noise). (p. 26) ● Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	<ul style="list-style-type: none"> ● Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 26)
	Blurry or distorted image (no sound or low volume)	<ul style="list-style-type: none"> ● Reset programmes. (p. 32 and p. 33)
	Unusual image is displayed	<ul style="list-style-type: none"> ● Turn off the TV with Mains power On / Off switch, then turn it On again.
Sound	No sound is produced	<ul style="list-style-type: none"> ● Is "Sound mute" active? (p. 7) ● Is the volume set to the minimum?
	Sound level is low or sound is distorted	<ul style="list-style-type: none"> ● Sound signal reception may be deteriorated. ● Set "NICAM" (p. 27) in the Sound Menu to "Off". (Analogue only)
Digital Service	<ul style="list-style-type: none"> ● Due to the digital reception technologies involved, quality of the digital signals may be relatively low in some cases, despite good reception of analogue programmes. 	
	Interference or frozen / disappearing image in freesat, DVB or Other Sat. mode	<ul style="list-style-type: none"> ● The quality of image and sound may be poor due to weather conditions (heavy rain, snow etc.). ● Check "Signal Condition" (p. 34 and p. 37) or "DVB Signal Condition" (p. 39). If "Signal Quality" or "Signal Strength" are displayed in red, check aerial or dish. If problem persists, consult your local Panasonic dealer. ● Turn the TV off with the Mains power On / Off switch, then turn it On again.
	Some programmes cannot be tuned	<ul style="list-style-type: none"> ● Check the aerial or dish.
	Cannot find a programme you have previously watched	<ul style="list-style-type: none"> ● The programme may broadcast for part of the day. Check the programme in TV Guide. (p. 16 and p. 17) ● Programme numbers may be changed by broadcasters.
	In freesat mode, not possible to adjust the volume and set Speakers / Headphones for Audio Description sound track (unlike DVB)	<ul style="list-style-type: none"> ● This is due to broadcast limitations. (p. 27)
HDMI	Sound is unusual	<ul style="list-style-type: none"> ● Set the sound setting of the connected equipment to "2ch L.PCM". ● Check the "HDMI1 / 3 Input" setting in the Sound Menu. (p. 27) ● If digital sound connection has a problem, select analogue sound connection. (p. 58)
	Pictures from external equipment are unusual when the equipment is connected via HDMI	<ul style="list-style-type: none"> ● Is the HDMI cable connected properly? (p. 56) ● Turn Off the TV and equipment, then turn them On again. ● Check an input signal from the equipment. (p. 61) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	TV goes into "Standby mode"	<ul style="list-style-type: none"> ● Off Timer function is activated. ● The TV enters "Standby mode" about 30 mins. after analogue broadcasting ends.
	The remote control does not work	<ul style="list-style-type: none"> ● Are the batteries installed correctly? (p. 6) ● Has the TV been switched On?
	An error message appears	<ul style="list-style-type: none"> ● Follow the message's instructions. ● If the problem persists, contact the authorized Service Centre.

On screen messages

Message	Meaning / Action
All tuning data will be erased	▶ ● "Shipping Condition" will erase all tuning data (p. 42).
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.
Child Lock is active ! Press OK to enter PIN	▶ ● The selected programme is locked in Child Lock (p. 41).
Ethernet cable not connected	▶ ● Check the connection of the LAN cable. If you use a hub, also check the light on the hub is lit.
Faulty dish	▶ ● The satellite cable might be short-circuited or there might be connection problems of the cable. Please check the cable and connection and then turn the TV Off with the Mains power On / Off switch, and turn it On again.
Feature not available	▶ ● It is not possible to record these sources (COMPONENT / HDMI / PC).
Gateway does not answer. Please confirm connection and setting of router.	▶ ● A connection failure has occurred and the gateway is not responding. Check the settings and connections of the router.
Invalid operation - Please check settings and connections	▶ ● Check the Q-Link or VIERA Link connection and setting (p. 50 - 52).
Invalid system time. Please exit !	▶ ● Cannot get the time information. Check the connection of the RF cable.
IP address conflict	▶ ● Duplicate IP address has been detected. Check the IP address of other equipment such as computers, routers and ensure that there are no duplicate IP address.
IP address not set	▶ ● Please enter an IP address.
Manual IP setting not correct	▶ ● The system is unable to set the IP address. Please consult your Internet Service Provider or telecommunications company.
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 DVB Service found 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.
No module inserted	▶ ● Check the CI module inserted completely (p. 36).
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	▶ ● The recording may not be performed. Check the equipment. ● Disc or tape may be full.

Message	Meaning / Action
No Service	▶ ● The broadcaster has stopped the service.
No Signal	▶ ● Check the connection of the RF cable.
Other Satellite Service list is full	▶ ● No more Other Satellite services can be added. Up to 999 services can be stored.
PIN incorrect !	▶ ● The PIN number you entered is wrong.
Please check settings and connections on HDMI devices.	▶ ● Communication error in VIERA Link function (p. 52).
Please choose a frequency between 9750 and 12750 MHz	▶ ● The frequency you entered is out of range. Please consult the received satellite broadcasting company.
Please wait.	▶ ● A function is in progress.
Recording this service now	▶ ● The recorder is recording the programme signal from its own tuner. You can turn the TV off and leave the equipment recording in the normal way.
Sending Preset Data Please wait !	▶ ● Q-Link or VIERA Link programme download is in progress.
Shipping condition completed. TV can now be switched off.	▶ ● "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 10)
Software successfully updated Press EXIT to continue	▶ ● The software updating is finished.
Software Update failed. Please try again later. Press EXIT to continue	▶ ● Perform "System Update Search Now" in System Update (p. 37). If this is still unsuccessful, there may not be any new software available.
Timer already expired !	▶ ● Starting time in Timer Programming is already past. Set correctly (p. 47).
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. 47).
Tuner Locked Please stop recording to operate	▶ ● If you want to unlock, cancel Direct TV Recording (p. 51 and p. 53) or Timer Programming (p. 46).
Unable to acquire IP address	▶ ● Unable to obtain the IP address. Check the settings and connections of the router.
Unable to download, Check Equipment	▶ ● The tape or disc is active. Stop the equipment and try again.

Glossary

- **DVB**
Digital Video Broadcasting
- **DVD**
Digital Versatile Disc
- **DVI**
Digital Visual Interface
- **EPG**
Electronic Programme Guide
- **HDMI**
High-Definition Multimedia Interface
- **MAC address**
Media Access Control address
- **NTSC**
National Television System Committee
One of the television signals used in USA, etc.
- **RF**
Radio Frequency - Signal received from terrestrial aerial
- **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)
- **VCR**
Video Cassette Recorder

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|---|--|---|

Specifications

		TX-32LZD81	TX-37LZD81	
Power Source		AC 220-240 V, 50 / 60 Hz		
Power Consumption	Average use	157 W	196 W	
	Standby condition	0.3 W (Without monitor out recording) 23 W (With monitor out recording)		
Display panel	Aspect Ratio	16:9		
	Visible screen size	80 cm (diagonal) 697 mm (W) × 392 mm (H)	94 cm (diagonal) 819 mm (W) × 460 mm (H)	
	Number of pixels	2,073,600 (1,920 (W) × 1,080 (H))		
Sound	Speaker	160 mm × 42 mm × 2 pcs, 8 Ω		
	Audio Output	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		DVB-S / S2 (freesat Other Sat.) : freesat services via Satellite dish input. Receiver frequency range - 950 MHz to 2,150 MHz LNB Power and Polarisation - Vertical: +13 V Horizontal: +18 V Current: Max. 350 mA (overload protection) 22 kHz Tone - Frequency: 22 kHz ± 2 kHz Amplitude: 0.6 V ± 0.2 V Symbol Rate - Max. 30 MS/s FEC Mode - 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 Demodulation - QPSK, 8PSK Not available for DiSEqC control. DVB-T : Digital terrestrial services via UHF aerial input. 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. M.NTSC : Playback from M.NTSC Video recorders (VCR). NTSC (AV input only) : Playback from NTSC Video recorders (VCR).		
Satellite dish input		Female F-type 75 Ω		
Aerial input		UHF		
Operating Conditions		Temperature : 0 °C - 35 °C Humidity : 20 % - 80 % RH (non-condensing)		
Connection Terminals	AV1 (Scart terminal)		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)	
	AV2 (Scart terminal)		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)	
	AV3	VIDEO	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		S-VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
	COMPONENT	VIDEO	Y P _B , P _R	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
	Others	HDMI1 / 2 / 3	TYPE A Connectors HDMI™ (Version 1.3a with x.v.Color™) ● 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	
ETHERNET		RJ45, IEEE802.3 10BASE-T / 100BASE-TX		
Output	AUDIO L - R	RCA PIN Type × 2	0.5 V[rms] (high impedance)	
	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber optic		
Dimensions (W × H × D)		831 mm × 579 mm × 225 mm (With Pedestal) 831 mm × 538 mm × 103 mm (TV only)	943 mm × 648 mm × 295 mm (With Pedestal) 943 mm × 606 mm × 108 mm (TV only)	
Mass		18.0 kg Net (With Pedestal) 15.5 kg Net (TV only)	22.5 kg Net (With Pedestal) 19.5 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.



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

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

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

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

Cd

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**
- Visit our website for product information **www.panasonic.co.uk**
- E-mail: **customer.care@panasonic.co.uk**

Direct Sales at Panasonic UK

- For customers: **0844 844 3856**
- 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).
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Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)

TX-32LZD81 Declaration of Conformity No. 5755, 23 June 2008

TX-37LZD81 Declaration of Conformity No. 5756, 23 June 2008

Customer's Record

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

Model Number _____

Serial Number _____

Panasonic (U. K.) Ltd.

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