

Panasonic[®]

Operating Instructions
Plasma Television

VIECA

Model No. TX-P42G10B
TX-P46G10B
TX-P50G10B



























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



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

■ Receives DVB digital terrestrial broadcasts

Select the programme or set Timer Programming easily by using TV Guide. (p. 19 and p. 20) Register and instantly call up favourite channels with Favourites Edit. (p. 39) DVB - Digital Video Broadcasting

■ VIERA TOOLS-Display special feature icons for easy accessibility (p. 14)

VIERA TOOLS is the easy way to access the special features with the VIERA TOOLS button.

This TV supports high definition TV signals.

■ Sharp pictures with HDMI connection (p. 70)

Enjoy high-definition digital picture and high-quality sound by using an HDMI cable.

■ This TV incorporates HDMI™ (Version 1.3a with x.v.Colour™) technology.

■ Dolby Digital Plus decoder

Possible to decode Dolby Digital Plus audio track (multi-channel sound) and output as Dolby Digital multi-channel sound signal from DIGITAL AUDIO OUT terminal.

■ GUIDE Plus+ (p. 19)

This TV supports Gemstar-TV Guide sent from the GUIDE Plus+ system.

■ Owner ID (p. 51)

Owner ID is an anti-theft function. Entering the PIN number and owner's personal information will help the Police to determine the owner.

This TV supports SDHC Card. SDHC is a high storage capacity card (more than 4 GB).

Possible to play the moving pictures recorded in SD Card by AVCHD format. AVCHD is a high definition recording format. (p. 56)

■ SD Card viewer - VIERA IMAGE VIEWER (p. 54 - 56)

Enjoy your photos or movies recorded in SD Card on the TV screen.

■ Links up and controls the connected equipment with "Q-Link" and "VIERA Link" (p. 58 - 65) Easy recording and playback, create home theatre without complicated settings, etc.

■ Provides suitable images for playing games (p. 30)

Selecting "Game" in Viewing Mode provides fast response to the input signal and you can enjoy playing

■ Supports Audio Description signal (p. 16 and p. 31)

This function can add an additional sound track to describe events on-screen (narration) and aids understanding and enjoyment, particularly for visually-impaired viewers.

You can switch Audio Description service Auto or Off, and adjust the volume of the description sound track.

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 channels and some Digital TV channels will be missing.

You will need to retune your TV each time this happens to recover your digital channels.

To retune your TV ⇒ "Auto Setup" in "DVB Tuning Menu"-DVB mode (p. 35)

Users of cable or satellite boxes should still retune the TV to continue to receive Freeview channels via their aerial. (Your Analogue channel 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 channels.

FULL	
HD	
1920×1080 _P	

FULL HD

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



Neo PDP

Realizes high picture quality and energy efficient panel.



VIERA TOUGH PANEL

A front panel increases the durability of the plasma display. This protects against accidental impacts to the screen surface, and also makes cleaning easier.



Intelligent Frame Creation

This increases the frame count and allows natural frame-to-frame transitions, for flicker-less motion images with high resolution.



Over 2,000,000:1 INFINITE BLACK

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



0.001 msec Panel Response Time

Extremely fast response time to minimise picture



Eco Mode

Adjusts picture settings automatically dependent on ambient lighting conditions.



V-Audio Surround

Utilises Panasonic's advanced digital amplification technology.



Lead-free display

All VIERA plasma display panels are lead-free. This reduces the impact on the environment when recycling or disposing of them in the future.

Up to 100,000 hours Plasma Panel Lifetime The Plasma display panel used in the 2009 VIERA

TV range is rated for up to 100,000 hours.*

100,000 *This measurement is based on the time taken for the brightness of the panel to reduce to half of it's maximum level. The time taken to reach this level may vary depending on the image content and the environment where the TV is used. Image retention and malfunctions are not taken into account.



digital tick

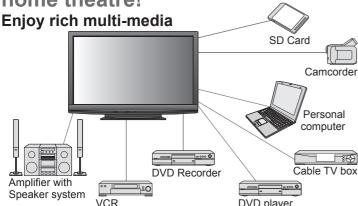
The digital tick logo indicates that a digital tuner is built-in.



Freeview

Freeview is the way to enjoy digital TV for free. There are up to 48 digital TV channels.

Turn your living room into a home theatre!



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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.
- Ensure the earth pin on the mains plug is securely connected to prevent electrical shock.
 - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.
- Do not use any mains lead other than that provided with this TV. (This may cause fire or electrical shock.)

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.

Do not expose to direct sunlight and other sources of heat

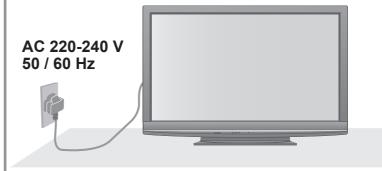
 Avoid exposing the TV to direct sunlight and other sources of heat. To prevent fire never place any type of candle or naked flame on top or near the TV.

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.



Transport only in upright position

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

The TV is heavy. Handle by 2 or more people. Support as shown to avoid injury by the TV tipping or falling.

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.

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 10 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 10 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.

Do not cut off the mains plug.

Do not use any other type of mains lead except the one supplied with this TV.

The supplied mains lead and moulded plug are designed to be used with this TV to avoid interference and for your safety.

If the socket outlet in your home is not suitable, get it changed by a qualified electrician.

If the plug or mains lead becomes damaged, purchase a replacement from an authorized dealer.

WARNING: - THIS TV MUST BE EARTHED.

How to replace the fuse.

Open the fuse compartment with a screwdriver and replace the fuse.

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.

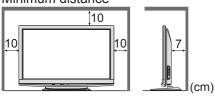
This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

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 surface where the TV is set.
- In case of using Wall-hanging bracket, follow the manual of it.

Use only the dedicated pedestals / mounting equipment • Using an unapproved pedestal or

- 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).

Notes

Do not display a still picture for a long time

This causes the image to remain on the plasma screen ("image retention").

This is not considered a malfunction and is not covered by the warranty.

Typical still images

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



To prevent image retention, contrast is lowered automatically after a few minutes if no signals are sent or no operations are performed. (p. 73)

■ Auto power standby function

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

■ Keep the TV away from these types of equipment

- Electronic equipment
- In particular, do not place video equipment near the TV. (Electromagnetic interference may distort images / sound.)
- Equipment with an infrared sensor
 This TV also emits infrared rays. (This may affect operation of other equipment.)

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

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

Caution

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

Cabinet, Pedestal

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

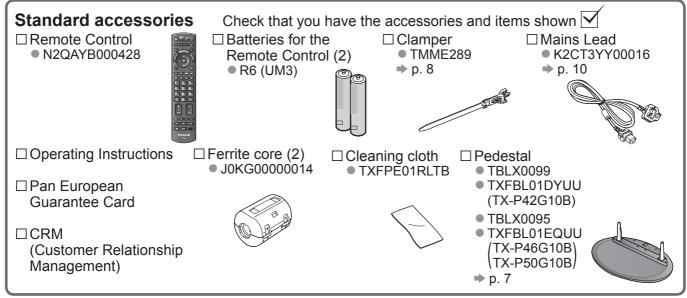
Caution

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

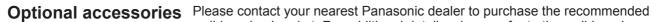
Mains plug

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

Accessories / Options



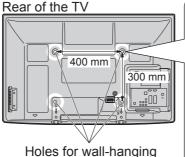
This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.



Wall-hanging bracket

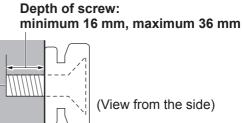


wall-hanging bracket. For additional details, please refer to the wall-hanging bracket installation manual.



bracket installation

Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)

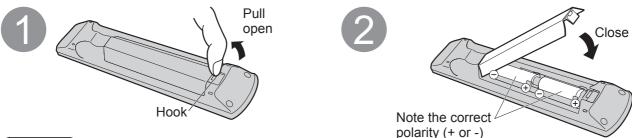


(View from the side)

Caution `

- In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licenced contractor to secure the wall-hanging brackets.
- Carefully read the instructions accompanying optional accessories, and be absolutely sure to take steps to prevent the TV from tipping over.
- Handle the TV carefully during installation since subjecting it to impact or other forces may cause product
- 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.
- When using the angled-type wall hanging bracket, please ensure that there is sufficient space for the connecting cables not to press against the wall when the TV is tilted forward.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Installing / removing remote's batteries



Caution

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

Attaching the pedestal

Warning)

Do not disassemble or modify the pedestal.

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

Caution

Do not use any other TV and displays.

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

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

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

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

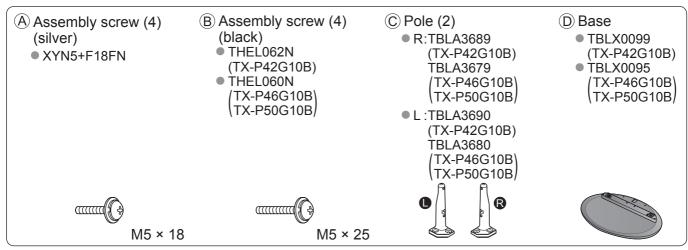
• If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.

Ensure that the TV does not fall over.

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

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

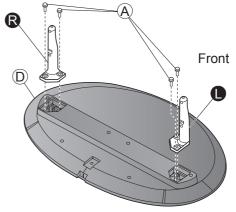
• If two or more people are not present, the TV may be dropped, and personal injury may result.



■ Assembling the pedestal

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

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

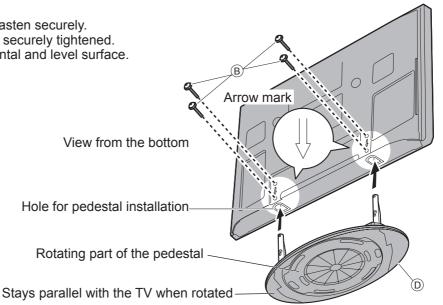


■ Securing the TV

Use the assembly screws (B) to fasten securely.

Make sure that the screws are securely tightened.

Carry out the work on a horizontal and level surface.



Accessories / Options

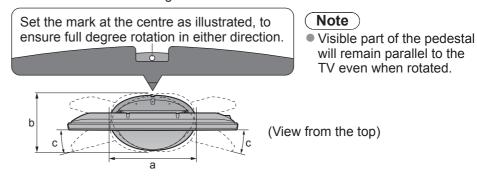
Adjust the panel to your desired angle

- 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.

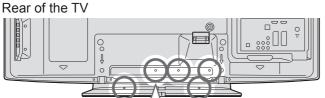


- TX-P42G10B
 - a: 520 mm / b: 354 mm / c: 15°
- TX-P46G10B, TX-P50G10B

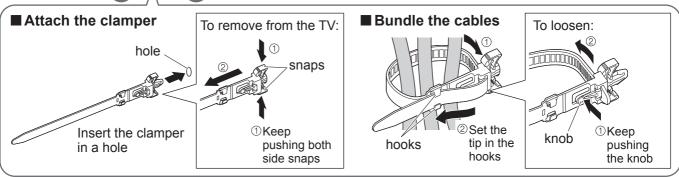
a: 528 mm / b: 407 mm / c: 10°



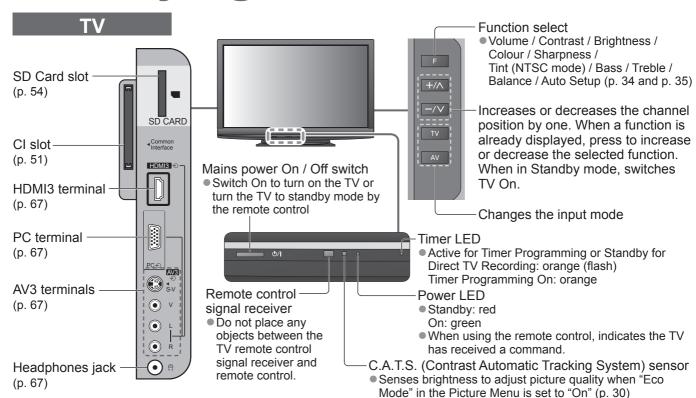
Using the clamper



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

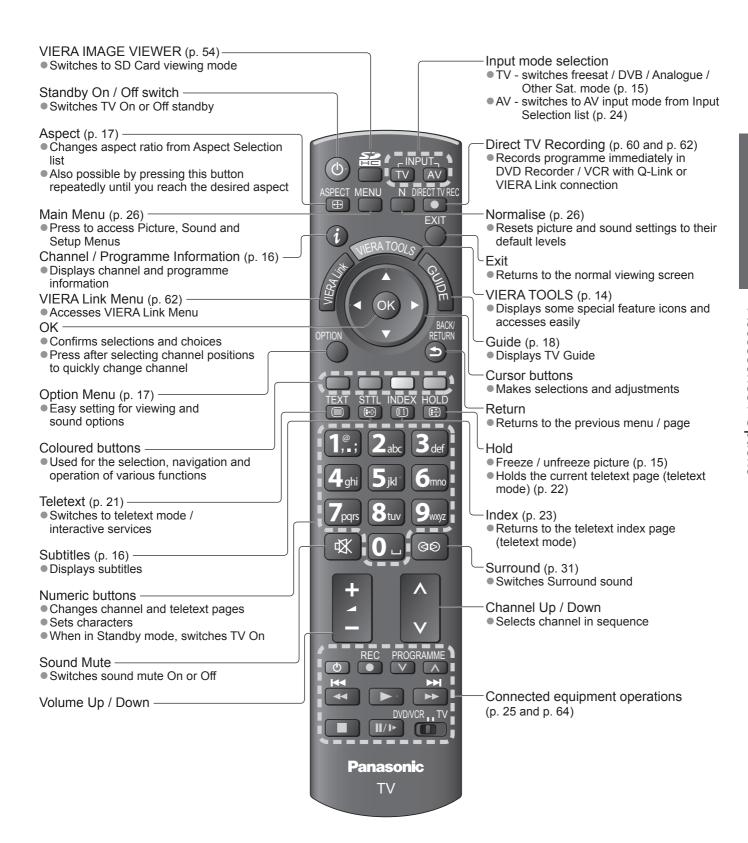


Identifying Controls



Identifying Controls

Remote Control



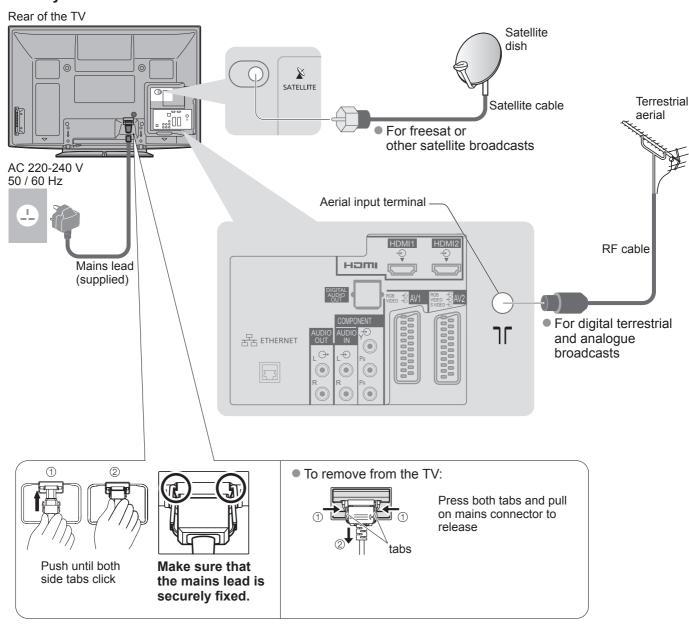
Basic Connection

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

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

Example 1 Connecting dish or aerial

TV only

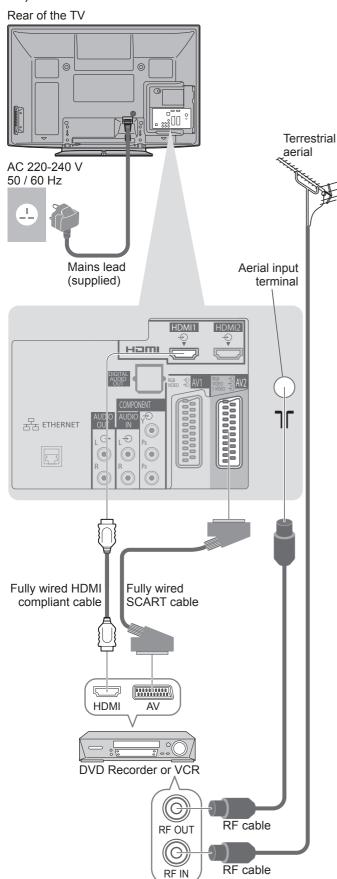


Note

- The freesat channel 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 the TV's AV2 for a DVD Recorder / VCR supporting Q-Link (p. 60).
- Connect to the TV's AV1 for a Cable TV box.
- For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 66).
- Q-Link connection ⇒ p. 58
- VIERA Link connection ⇒ p. 58 and p. 59
- Read the manual of the equipment too.

Example 2 Connecting DVD Recorder / VCR

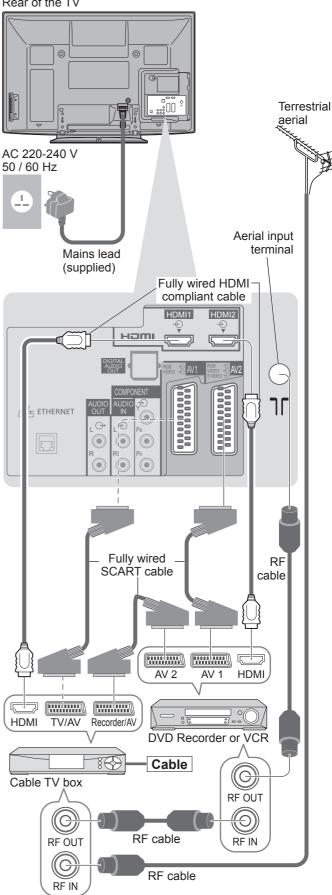
TV, DVD Recorder or VCR



Example 3 Connecting DVD Recorder / VCR and Cable TV box

TV, DVD Recorder / VCR and Cable

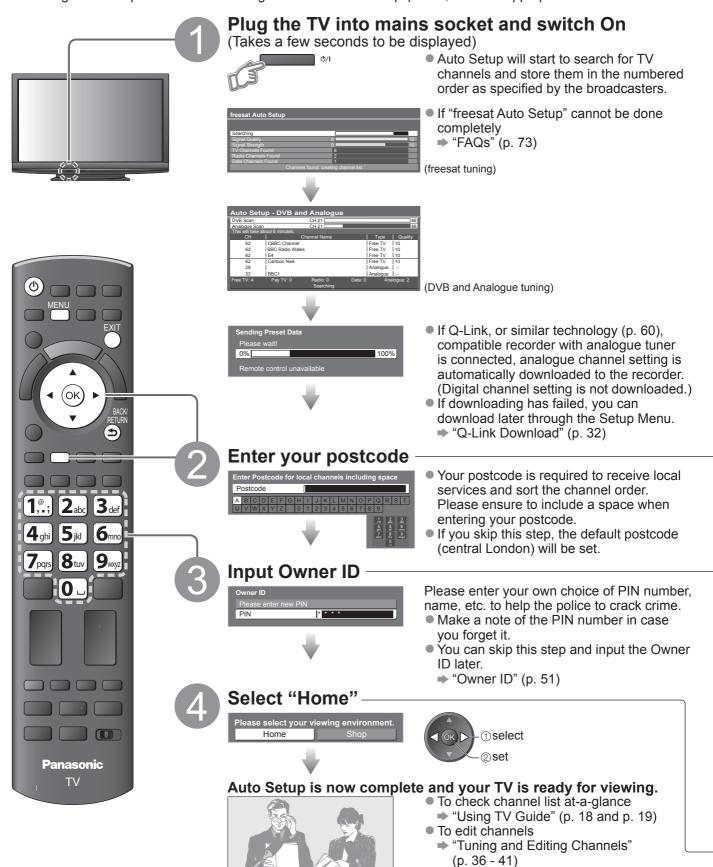
Rear of the TV



Auto Setup

Search and store TV channels automatically.

- These steps are not necessary if the setup has been completed by your local dealer.
- Please complete connections (p. 10 and p. 11) and settings (if necessary) of the connected equipment before starting Auto Setup. For details of settings for the connected equipment, read the appropriate manual.



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



Move the cursor / select the menu item



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



MENU

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



Return to the previous menu

Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box - Operation guide

(example: Owner ID)



Open the main menu

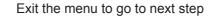
Operation guide will help you.

Note

- If tuning has failed ⇒ "Auto Setup" (p. 34 and p. 35)
- If you wish to tune in other satellite channels ⇒ "Auto Setup" in "Other Sat. Tuning Menu" (p. 43)
- To initialize all settings ⇒ "Shipping Condition" (p. 49)
- 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.

■ How to enter the postcode

Set characters one by one







- You can set characters by using numeric buttons.
 - "Characters table for numeric buttons" (p. 69)

■How to input Owner ID

Enter the PIN number (4 digits)



0 _ Enter the PIN

number twice

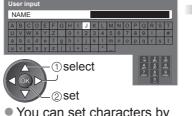
at first setting.

Select NAME / HOUSE NO / POSTCODE and access the "User input" mode





Set characters one by one



You can set characters by using numeric buttons. "Characters table for

numeric buttons" (p. 69)

Return to select other items



or

Exit the menu to go to next step



■"Shop" mode (for shop display use only)

Automatic Demo Off / On selection screen is displayed.

You can change the viewing environment at this stage





① select ②set

(This is not available in "Home" mode)

Auto Setup is complete

- If you set to "Off" or "On" in Automatic Demo Off / On selection screen, the TV will be in "Shop" viewing environment (p. 78), and Auto Setup will be complete. The blue LED on the front panel of the TV will light even if SD Card is not inserted. To turn off the LED, set SD Card LED "Off" in the Setup Menu (p. 33).
- To change viewing environment later on, you will need to initialise all settings by accessing Shipping Condition and go through Auto Setup again.
- ⇒ "Shipping Condition" (p. 49)

How to Use VIERA TOOLS

You can access some special features easily by using the VIERA TOOLS function.

 For "VIERA Link Control" and "Pause Live TV" functions to operate correctly, ensure the connections and settings are completed.

→ "Summary of Q-Link and VIERA Link features" (p. 58 and p. 59), "Preparations" (p. 61) After connection, turn the equipment on and then switch the TV on.



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TV

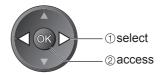
■ To return to TV

Display icons of the feature



Select a feature





Follow the operations of each feature

VIERA Link Control ⇒ "VIERA Link Control" (p. 64)



When more than two pieces of compatible equipment are connected a selection screen will be displayed.

Please select the correct description and access.

Pause Live TV





Slideshow

⇒ "Slideshow" (p. 55)



Slideshow will use all of the photos on the SD Card.



⇒ "Photo View" (p. 54)



Movies

→ "Movie View" (p. 56)



Watching TV

Turn power on (Press for about 1 second)



Mains power On / Off switch should be On. (p. 8)

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



Displayed if Other Satellite channels are tuned (p. 43)

② watch

1) select

 Also possible by pressing the TV button repeatedly on the remote control or side panel of the TV. (p. 8)



Information banner appears whenever you select a

For details ⇒ p. 16

Select a channel



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

- To select a three-digit channel position number, e.g. 133
 - \Rightarrow 1,e; \Rightarrow 3_{def} \Rightarrow 3_{def}
- To select a four-digit channel position number, e.g. 0246
- \Rightarrow 0 \Rightarrow 2 abc \Rightarrow 4 ghi \Rightarrow 6 mno

DVB and Other Sat. channel position numbers run from 1 onwards.

Analogue channel position numbers run in the ranges 0 - 99.

- To select a two or three-digit channel position number, e.g. 39
 - \Rightarrow 3_{def} \Rightarrow 9_{wxyz}

Note `

(D)

10

(i)

To watch pay-TV

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TV

5_{ikl}

8_{tuv}

HO ∟Ľ

Volume

"Common Interface" (p.51)

■Select a channel using Information banner (p. 16)

Possible to confirm the channel name and programme before changing channels.

Display Information banner if it is not displayed



 Possible to set display timeout in "Banner Display Timeout" (p. 33). While the banner is displayed, select the channel



①select channel

②watch

■Select a channel using TV Guide (p. 18)

Possible to confirm the TV Guide (EPG) before changing channels. Select the programme

Display TV Guide



①select ②access Select "View" (freesat or DVB mode)





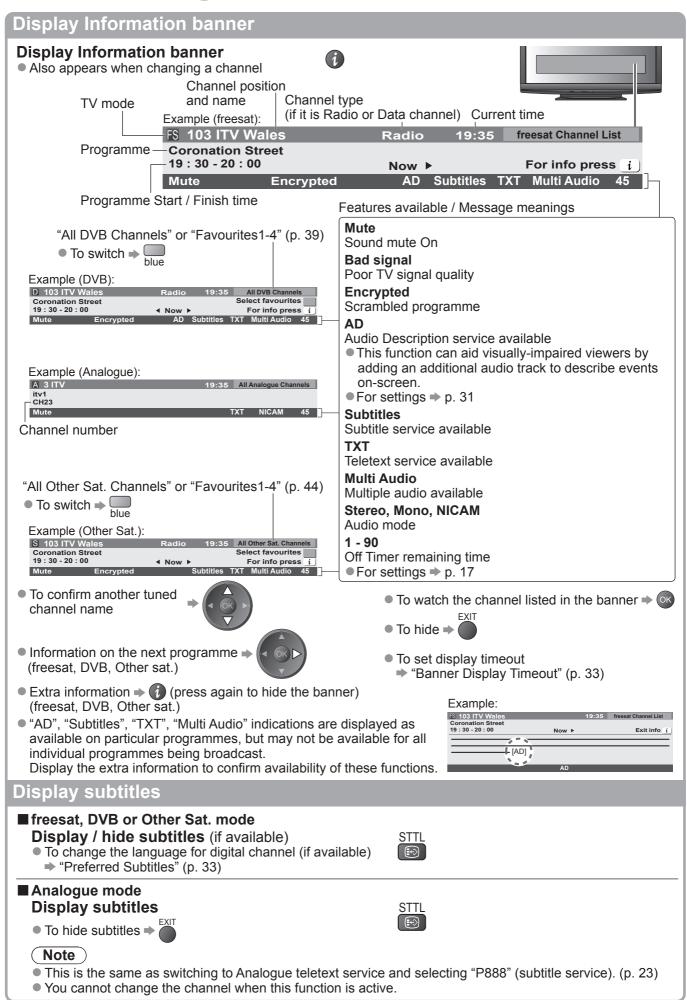
■ Other useful functions

Hold





Watching TV



Aspect

Change the aspect ratio (image size)



Enjoy viewing the image at its optimum size and aspect.

Normally programmes have the Aspect Control Signal (Widescreen signal, etc.), and the TV will choose the aspect ratio automatically according to the Aspect Control Signal (p. 68).

While the list is displayed,

1) select

■ If you would like to change the aspect ratio manually

Display Aspect Selection list



select the mode ②store

To change the mode using the ASPECT button only

ASPECT /Press repeatedly until you \ reach the desired mode

Aspect Selection list



The best ratio is chosen and the image expanded to fill the screen. For details p. 68



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



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



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



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



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



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

Note

- Only "16:9" and "4:3" are available in PC input mode.
- Not available when the subtitle function is active.

Allows you to select between alternative language

or Audio Description for sound tracks (if available)

Set Audio Description "Auto" in the Sound Menu

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

Allows you to select between alternative language

(p. 31) to select the audio description sound track.

- Not available in teletext service.
- Aspect mode can be memorized separately for SD (Standard definition) and HD (High definition) signals.

Display the selectable settings for the current programme

Check or change the current programme status instantly

Multi Audio (DVB or Other Sat. mode)

for sound tracks (if available)

Multi Audio / AD (freesat mode)



■ To change ⇒



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. 31)

Volume Correction

Adjusts volume of individual channel or input mode

Audio Description (DVB mode)

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

- To adjust the volume for Audio Description
 - → "Audio Description Menu" (p. 31)

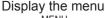
(Note

Also possible to change the settings in Menu list (p. 30 - 33).

Off Timer

sound track.

Turn the TV off automatically after a fixed period













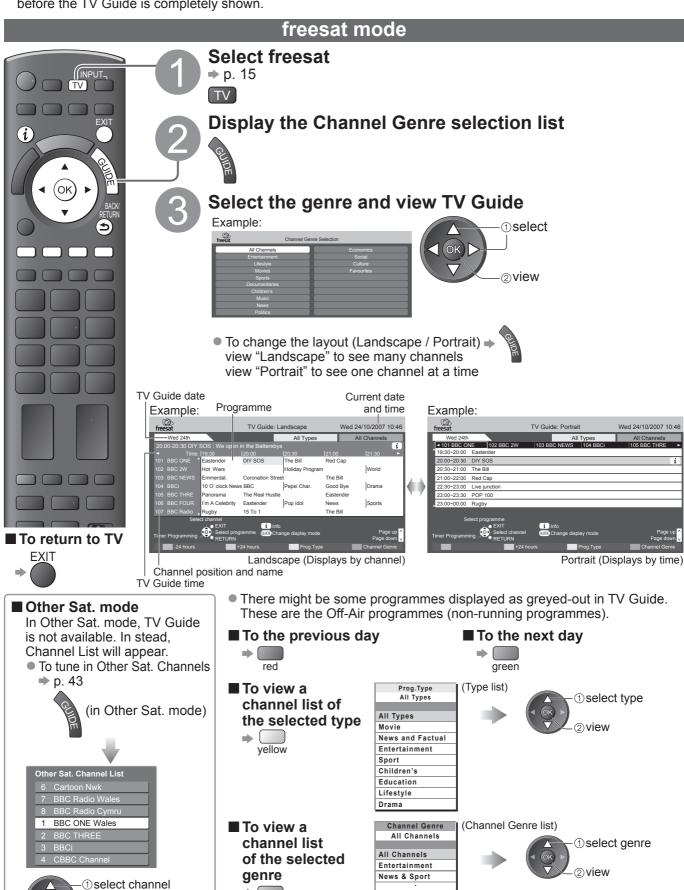
- To cancel ⇒ Set to "Off" or turn the TV off.
- To display the remaining time → Information banner (p. 16)

When the remaining time is within 3 minutes, the remaining time will flash on the screen.

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.



blue

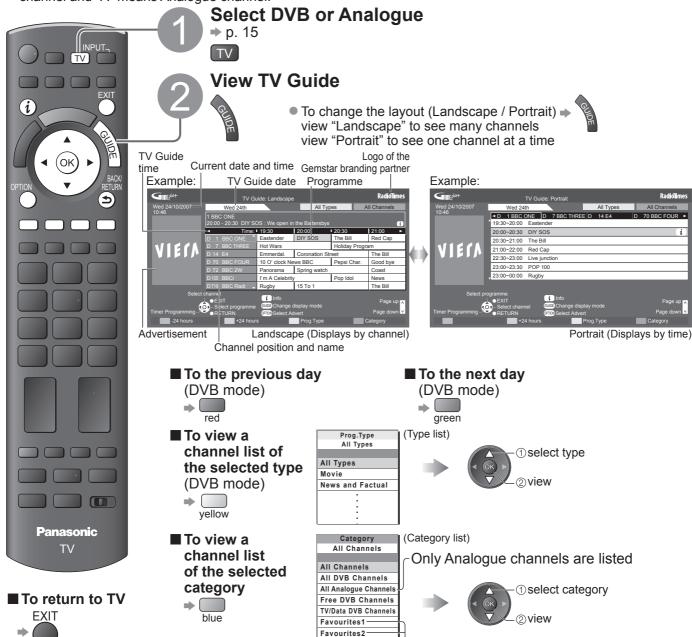
Favourites-

l-To list favourite channels ⇒ p. 37

-②watch

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 programme information and the recommended group in the Prog. Type list.
- Analogue channels will be listed after DVB channels but there will be no programme listings. "D" means DVB channel and "A" means Analogue channel.



View advertisement

Enter your postcode when using this function for the first time

→ "Postcode" in "GUIDE Plus+ Settings" (p. 33)

If you have already entered your postcode in "Auto Setup" - when first using the TV (p. 12), you do not have to enter again.

Favourites3

Favourites4

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 Guide link recording function (p. 20).
- 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 list favourite channels ⇒ p. 39

■ To return to TV Guide



Using TV Guide

■ Other useful functions (Operate whilst viewing TV Guide)



View details of the programme (freesat or DVB mode)



Timer Programming (freesat or DVB mode)

Select the forthcoming programme to output to external recorder



(Timer Programming screen)

Note

- While recording, you cannot watch any other channels 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. 60) and the "Link Settings" (p. 32) 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.

Guide link recording (Timer Programming from the TV Guide signal)

Guide link 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 other programmes. Both of the above are subject to signals being sent by broadcasters.

Select the forthcoming programme to output to external recorder



if the timer is set from the TV Guide

- "S/P" is displayed if the timer is set from the TV Guide and the programme is a Split

Programme

"Guide" is displayed

(Timer Programming screen)

Timer LED will turn on if Timer Programming is set.

■ To check / change / cancel a

Timer Programming event

→ "Timer Programming" (p. 53)

■ To return to TV Guide ⇒

"O" will be displayed in the TV Guide if Timer Programming is set.

GIEP ⁶⁴⁺ TV Guide: Landscape					RadioTm
Wed 15/10/08	Sat 18th		All T	ypes	All Channels
18:50	1 BBC 1 21:00 - 21:30 DF	' SOS : We open	in the Battersby	ys.	
	▼ Tir	ne: 20:30	21:00	21:30	22:00
	D 1 BBC 1	Eastender	DIY SOS	OHoliday Ne	ws
VIECA	D 7 BBC THREE	Hot Wars		Holiday Progr	ram
MIRIV	D 14 E4	Emmerdal.	erdal. Coronation Street		The Bill
	D 70 BBC FOUR	10 O' clock N	lews BBC	Pepsi Char.	Good bye
	D 72 BBC 2W	Panorama	Spring watch	h	Coast
	D105 BBCi	I'm A Celebr	ity	Pop Idol	News
	D719 BBC Radi	Rugby	15 To 1		The Bill

■ To check / change / cancel a Guide link recording event

- → "Timer Programming" (p. 53)
- If you edit the start time or end time of Guide link recording more than 10 minutes after setting to record, it will no longer be performed as Guide link recording. The recording will be performed according to the time setting in Timer Programming.

■ To return to TV Guide ⇒

Note

- Not available in Analogue or Other Sat. mode.
- Whilst making Split Programme recording, it is not possible to record any other programmes between the interrupted programmes.
- 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. 16)

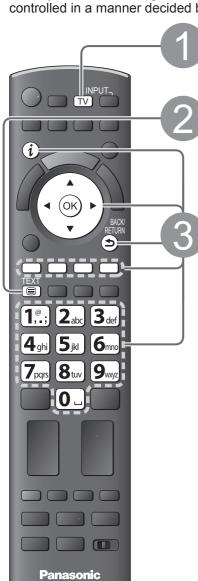
Displayed if programme has teletext service

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.



TV

Select freesat or DVB

⇒ p. 15

TV

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 ⇒ OK



"▲", "▼" symbol is displayed →



■ When "back key" is displayed ⇒

• When the key words are displayed on colour bar ⇒ red green yellow blue



When options with numbers are displayed ⇒ 43 53 6.

7pqrs 8tuv 9myz

1,...; 2_{abc} 3_{def}

When "i" is displayed → (information)

■ To return to TV ⇒

Note

- As soon as you switch to a digital channel 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 channel, 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

Analogue teletext services

Analogue teletext services are the text information provided by the broadcasters. The features may vary depending on the broadcasters.

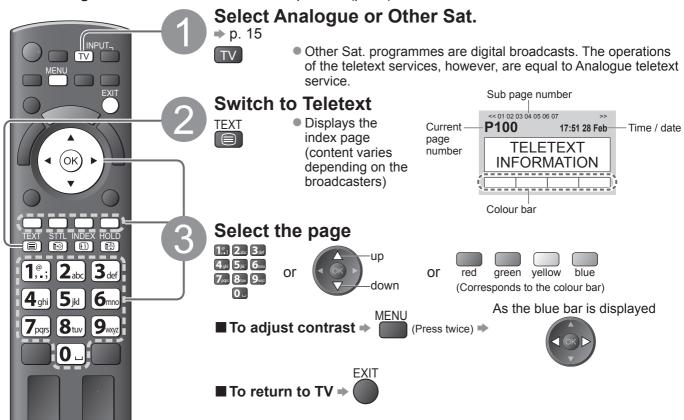
What is FASTEXT mode?

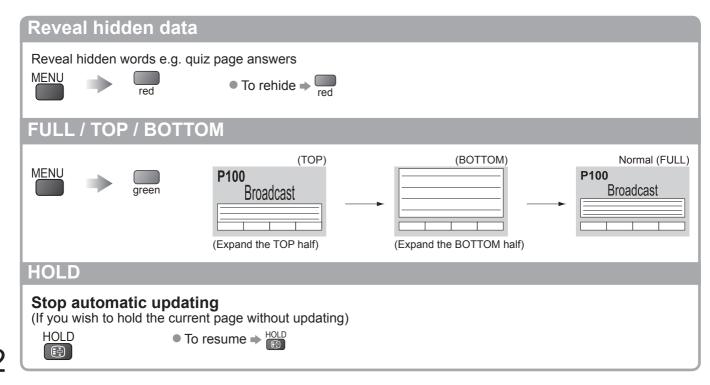
In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriately coloured button. This facility enables fast access to information on the subjects shown.

What is 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. 23)

■ To change mode ⇒ "Teletext" in the Setup Menu (p. 33)





INDEX

Return to the main index page



Subtitles

View a favourite page stored



• Factory setting is "P888" (subtitle service) on the blue button (List mode).

View in multi window

Watch TV and Teletext in two windows at once





- Operations can be made only in Teletext screen.
- Each time pressed: Teletext ➤ TV and Teletext

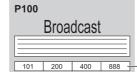
Store frequently viewed pages

Store frequently viewed pages in the colour bar

(List mode only)

As page is displayed

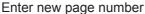




 If you wish to use Subtitles, do not change number on blue button.

The number changes to white.

■ To change stored pages









View sub page

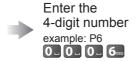
View sub page (Only when teletext is more than one page)





■ To view specific sub page







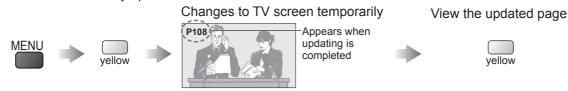
Sub pages:

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.



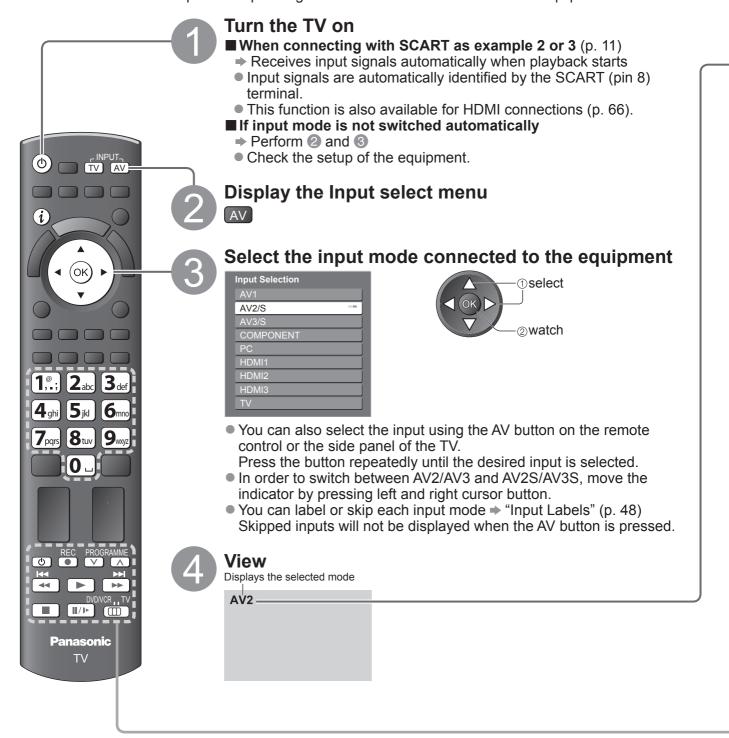
(You cannot change the channel.)

• 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 through the input.
■ To connect the equipment ⇒ p. 11 and p. 66

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



■ To return to TV

Note

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

Screen display

	Terminal	AV1	AV2	AV3	COMPONENT	PC	HDMI1	HDMI2	HDMI3
/defau		AV1 AV1-RGB	AV2 AV2-S-Video AV2-RGB	AV3 AV3-S-Video	COMPONENT	PC	HDMI1	HDMI2	HDMI3
/EC r	input mode or RA 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

ullet If the above information is permanently displayed on the top left of the screen, press the i button to clear.

Operating the equipment with the TV remote control

The equipment connected to the TV can be directly operated with the below buttons of this TV remote control.

	Selection Switch for operating the connected equipment
DVD/VCR , TV	Select "DVD/VCR" to operate Panasonic DVD Recorder, DVD Player, Player theatre, Blu-ray Disc theatre or VCR The How to change the code for the type of the equipment (see below)
	Select "TV" to operate the connected equipment in VIERA Link → "VIERA Link Control" (p. 64)
Ů	Standby Set to Standby mode / Turn on
	Play Playback videocassette / DVD
	Stop the operations
44	Rewind / Skip / Search VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
▶ ►►	Fast-forward / Skip / Search VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
II/I>	Pause Pause / Resume DVD: Press and hold to play at slow speed
PROGRAMME	Channel Up / Down Select channel
REC	Record Start recording

■ How to change the code for the type of the equipment

Each type of the Panasonic equipment has its own remote control code. Please change the code according to the equipment you want to operate.

- ① Set the position to "DVD/VCR" DVD/VCR.
- ② Press and hold during the following operations

Enter the appropriate code, 45 5 6 see table below 7.8 9.9



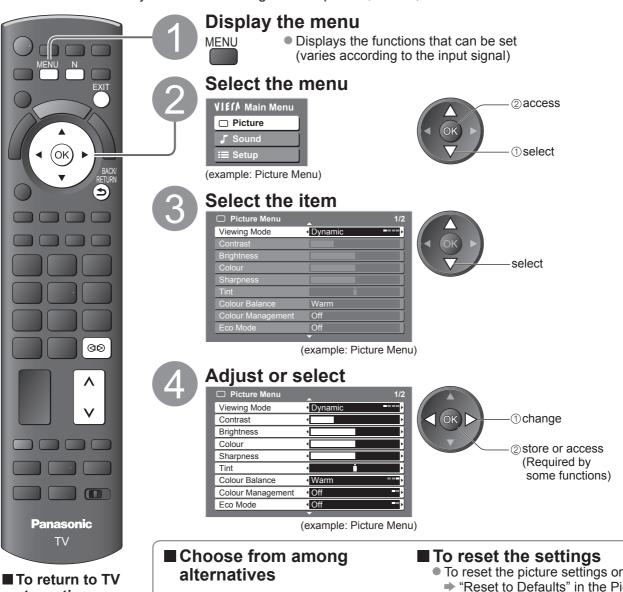
Type of the equipment	Code
DVD Recorder, DVD Player	70 (default)
Player theatre, Blu-ray Disc theatre	71
VCR	72

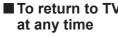
Note

- Confirm if the remote control works correctly after changing the code.
- The codes may be reset to default values if batteries are replaced.
- 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.







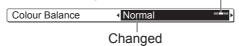
■ To return to the previous screen



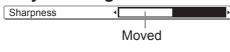
■ To change menu pages



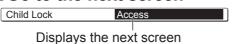
Number and positions of alternatives



■ Adjust using the slide bar



■ Go to the next screen



- To reset the picture settings only
 - → "Reset to Defaults" in the Picture Menu (p. 30)
- To reset the sound settings only
 - → "Reset to Defaults" in the Sound Menu (p. 31)
- To reset the picture and sound settings together
 - /Also volume level and aspect mode are reset
- To initialize all settings
 - ⇒ "Shipping Condition" in the Setup Menu (p. 49)

■ Enter characters by free input menu

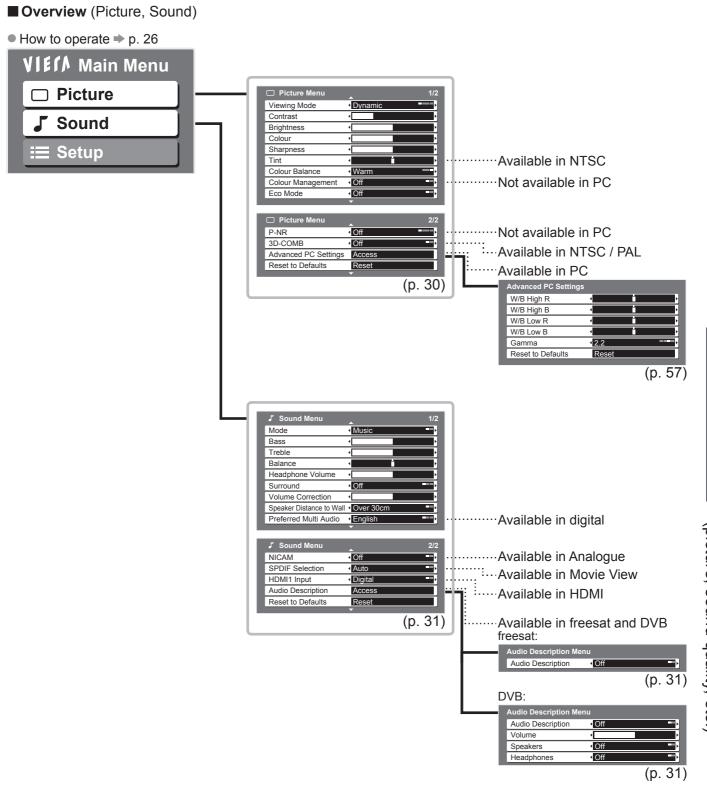
You can enter names or numbers freely for some items.



Set characters one by one ①select ②set



You can set characters by using numeric buttons. "Characters table for numeric buttons" (p. 69)



How to Use Menu Functions ■ Overview (Setup) :·····Available in PC ■ How to operate ⇒ p. 26 Input Resolution Clock H-pos VIETA Main Menu V-pos Clock Phase □ Picture H & V Reset to Defaults Reset (p. 57) Sound Link Settings VIERA Link **≡** Setup Q-Link AV2 PC Setup Access AV2 out TV Timer Programming Access Standby Power Save On Off Timer Off On (No reminder) Intelligent Auto Standby Link Settings Access Q-Link Download Available in Child Lock Access Network Setup freesat or Other Sat. freesat Tuning Menu Access (p. 32)DVB Tuning Menu Available in DVB: Analogue Tuning Menu Other Sat. Tuning Menu Access Available in Display Settings PIN Analogue System Menu Other Settings (p. 45)Available in (p. 32 and p. 33) freesat or Other Sat. esat Tuning M Favourites Edit Access Channel List Auto Setup Available in Signal Condition Access DVB or Analogue Guide Plus+ Settings (p. 34 and p. 36) Intelligent Frame Creation Available in Power on Preference DVB Tuning Men DVB or Other Sat.... Power on Channel List Favourites Edit Power Save Channel List Picture Overscan Auto Setup SD Card LED Manual Tuning (p. 33) Update Channel List Access New Channel Message On Signal Condition Postcode (p. 35 and p. 38) System Information (p. 33)alogue Tuning Channel List Auto Setup (p. 33) Manual Tuning (p. 35 and p. 40) Available in Display Settings Analogue ····· Teletext FASTEXT Preferred Subtitles English Side Panel Available in Input Labels freesat. DVB or Banner Display Timeout Other Sat. Playing Time Display (p. 33) Favourites Edit Acces Channel List Access AV1 Auto Setup AV2/S AV2/S Manual Tuning AV3/S AV3/S Add New Channe COMPONENT COMPONENT PC PC (p. 42)HDMI1 HDMI1 HDMI2 HDMI2 HDMI3 HDMI3 freesat nput Labels Shipping Condition DVB Owner ID Analogue Common Interfac Other Sat Other Sat System Update Access (p. 48) Software Licence 21:30 22:30 System Information Access 18/10 SA 22:30 23:30 (p.33)Available in (p. 52)DVB or Other Sat.







How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Menu	Viewing Mode	Selects four different screen settings (Dynamic / Normal / Cinema / Game) In each Viewing Mode setting, Contrast, Brightness, Colour, Sharpness, Tint, Colour Balance, Colour Management, Eco Mode and 3D-COMB can be adjusted and stored to suit your particular viewing requirement (e.g., you may require different settings for viewing sports, films, news etc.) Set for each input signal Changes will be stored automatically Dynamic: Provides enhanced picture contrast and sharpness when viewing in a bright room Normal: Recommended for viewing under normal ambient room lighting conditions Cinema: For watching movies in a darkened room producing a cinema-like picture Game: Fast response signal specifically to provide suitable images for playing games Not valid on TV mode A continuous record of time spent using Game mode can be displayed in the top right of the screen. Playing Time Display" (p. 33)
	Contrast, Brightness, Colour, Sharpness	Increases or decreases the levels of these options according to your personal preference
	Tint	With an NTSC signal source connected to the TV, the picture hue can be adjusted to suit your taste • For NTSC signal reception only
Picture	Colour Balance	Allows you to set the overall colour tone of the picture (Cool / Normal / Warm)
Ø	Colour Management	Automatically adjusts colours to vivid ones (Off / On) Not valid on PC signal
	Eco Mode	Adjusts picture settings automatically dependent on ambient lighting conditions (Off / On)
	P-NR	Picture Noise Reduction Automatically reduces unwanted picture noise and flicker noise in the contoured parts of a picture (Off / Min / Mid / Max) Not valid on PC signal
	3D-COMB	Occasionally, whilst viewing still or slow moving pictures, colour patterning may be seen Set to "On" to display sharper and more accurate colours (Off / On) For PAL or NTSC signal reception only Not valid on RGB, S-Video, Component, PC, HDMI and SD Card
	Reset to Defaults	Press the OK button to reset the present Picture Viewing Mode to the default settings

Menu		Item	Adjustments / Configurations (alternatives)		
	Мо	de	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		
	Ва	ss	Increases or decreases level to enhance or minimise lower, deeper sound output		
	Tre	eble	Increases or decreases level to enhance or minimise sharper, higher sound output		
	Balance		Adjusts volume level of right and left speakers		
	Не	adphone Volume	Adjusts the volume of the headphones		
	Surround		Surround sound settings (Off / V-Audio / V-Audio Surround) V-Audio: Provides a dynamic enhancer of width to simulate improved spatial effects V-Audio Surround: Provides a dynamic enhancer of width and depth to simulate improved spatial effects Switching is also possible by the Surround button on the remote control (p. 9).		
	Vo	lume Correction	Adjusts the volume of individual channel 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.		
Sot	Preferred Multi Audio		Selects the preferred language for digital channel multi audio (depending on the broadcaster)		
Sound	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 (Digital / Analogue) (p. 70) 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 / Auto) Set to "Auto" 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. 16).		
	escript	Volume	Adjusts the volume for Audio Description OVB mode only		
	tion Me	Speakers	Set to "On" to activate the description sound track from TV speakers (Off / On) • DVB mode only		
	nue	Headphones	Set to "On" to activate the description sound track from headphones (Off / On) • DVB mode only		
	Reset to Defaults		Press the OK button to reset the present Sound Mode to the default settings • Effective to Bass, Treble, Balance, Headphone Volume and Surround		

<sup>A different menu will be displayed while PC or SD Card is used. (p. 55 - 57)
Only available items can be selected.</sup>

How to Use Menu Functions

■ Menu list

Menu		Item	Adjustments / Configurations (alternatives)
	Timer Programming		Records forthcoming channels (p. 52)
	Off Timer		Sets the time the TV automatically turns Off (Off / 15 / 30 / 45 / 60 / 75 / 90 minutes)
	Link Settings	VIERA Link	Sets to use VIERA Link functions (Off / On) (p. 61)
		Q-Link	Selects which AV terminal is to be used for data communication between this TV and a compatible recorder (AV1 / AV2) (p. 60) 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.
		Standby Power Save	Controls the power consumption in Standby mode of the connected equipment to reduce the consumption (Off / On) (p. 62) This function is available when "VIERA Link" is set to "On".
		Intelligent Auto Standby	Makes non-watched or non-used connected equipment go into Standby mode to reduce the power consumption (Off / On (With reminder) / On (No reminder)) (p. 62) This function is available when "VIERA Link" is set to "On".
		Q-Link Download	Downloads analogue channel information to a Q-Link compatible equipment connected to the TV
		Network Setup	Sets the network setting to use in your Broadband environment (p. 46)
	Child Lock		Locks a channel / AV input to prevent access to it (p. 45)
	freesat Tuning Menu	Favourites Edit	Creates list of favourite freesat channels (p. 37)
Setup		Channel List	Skips the unwanted freesat channels (p. 37)
		Auto Setup	Automatically sets the freesat channels received in the area (p. 34)
		Signal Condition	Checks the freesat signal condition (p. 37)
	DVB 1	Favourites Edit	Creates list of favourite DVB channels (p. 39)
		Channel List	Skips the unwanted DVB channels or edits DVB channels (p. 39)
		Auto Setup	Automatically sets the DVB channels received in the area (p. 35)
	un_	Manual Tuning	Sets the DVB channels manually (p. 39)
	Tuning Menu	Update Channel List	Updates DVB Channel List with keeping your settings (p. 38)
		New Channel Message	Selects whether to give a notification message when a new DVB channel is found (p. 38)
		Signal Condition	Checks the DVB signal condition (p. 38)
	Analog	Channel List	Skips the unwanted Analogue channels or edits Analogue channels (p. 41)
	Analogue Tuning Menu	Auto Setup	Automatically sets the Analogue channels received in the area (p. 35)
	g Menu	Manual Tuning	Sets the Analogue channels manually (p. 41)
	Other Sat. Tuning Menu	Favourites Edit	Creates list of favourite Other Satellite channels (p. 44)
		Channel List	Skips the unwanted Other Satellite channels or edits Other Satellite channels (p. 44)
		Auto Setup	Automatically sets the Other Satellite channels received in the area (p. 43)
		Manual Tuning	Sets the Other Satellite channels manually (p. 42)
		Add New	Please consult the received satellite broadcasting companies for the setting. Adds new Other Satellite channels to Channel List (p. 43)
	llen	Channels	
	를 Signal Condition		Checks the condition of Other Satellite signals (p. 42)

Teletext Analogue teletext display mode (FASTEXT / List) (p. 22) Selects the preferred language for digital channel subtitles (depending broadcaster) To display subtitles p. 16 Side Panel Increases the brightness of the side panel (Off / Low / Mid / High) The recommended setting is "High" to prevent panel "image retention. Input Labels Banner Display Timeout Playing Time Display Time Display Set to "On" to display a continuous record of time spent using Game in (Off / On) This function is available when "Game" is selected in "Viewing Model of the owner ID (p. 51) System Update Downloads new software to TV (p. 50) Software Licence Displays the software licence information	on".
Preferred Subtitles □ To display subtitles □ p. 16 Side Panel Increases the brightness of the side panel (Off / Low / Mid / High) □ The recommended setting is "High" to prevent panel "image retention Input Labels Labels or skips each input terminal (p. 48) Banner Display Timeout Sets how long the Information banner (p. 16) stays on screen (0 (No display) / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 seconds) Set to "On" to display a continuous record of time spent using Game or (Off / On) □ This function is available when "Game" is selected in "Viewing Model Resets all settings, for example, when moving house (p. 49)	on".
Input Labels Labels or skips each input terminal (p. 48) Banner Display Timeout Playing Time Display Coff / On) This function is available when "Game" is selected in "Viewing Model Resets all settings, for example, when moving house (p. 49)	mode
Playing Time Display Set to "On" to display a continuous record of time spent using Game re (Off / On) This function is available when "Game" is selected in "Viewing Model (P. 49)	
Playing Time Display Set to "On" to display a continuous record of time spent using Game re (Off / On) This function is available when "Game" is selected in "Viewing Model (P. 49)	
Playing Time Display (Off / On) This function is available when "Game" is selected in "Viewing Mode Shipping Condition Resets all settings, for example, when moving house (p. 49)	
Owner ID Inputs the owner ID (p. 51)	
G Common Interface Uses include to watch pay-TV (p. 51)	
System Update Downloads new software to TV (p. 50)	
Software Licence Displays the software licence information	
System Information Displays the system information of this TV	
Postcode Sets your postcode to display advertisements in the GUIDE Plus+ system Displays the system information of the GUIDE Plus+ system	stem (p. 19)
System Information Displays the system information of the GUIDE Plus+ system	
Intelligent Frame Creation Automatically compensates the picture frame rate to make the image (Off / On)	smooth
Power on Preference Automatically selects the input when the TV is turned on (TV / AV) Set to "TV" to view picture from TV tuner. Set to "AV" to view input from an external equipment connected to a Sterminal, e.g. cable TV box. The external equipment must be switched on and sending a control automatic switching at power on to occur.	
terminal, e.g. cable TV box. The external equipment must be switched on and sending a control automatic switching at power on to occur. Power on Channel List Automatically selects All Channels or Favourites list in the Information (p. 16) when the TV is turned on (All Channel List / Last) Set to "All Channel List" to display all the channels. Set to "Last" to display the one you selected last time.	n banner
Power Save Reduces brightness of picture to economise on power consumption (Constitution of the Constitution of the Constituti	Off / On)
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 onl This function can be memorized separately for SD (Standard definition) signals.	
SD Card LED Lights blue LED while SD Card is inserted (Off / On) (p. 54)	

- A different menu will be displayed while PC or SD Card is used. (p. 55 57)
- Only available items can be selected.
- If "Demo Settings" item is displayed in the Setup Menu, the TV is in "Shop" viewing environment (p. 13). To return to "Home" viewing environment initialise all settings by accessing Shipping Condition.

^{⇒ &}quot;Shipping Condition" (p. 49)

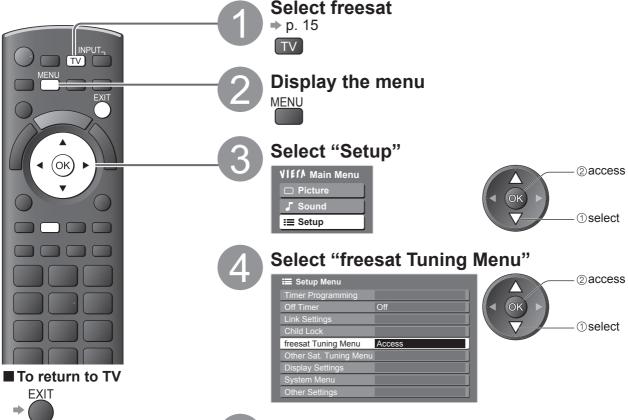
Retuning from Setup Menu

Auto Setup retunes all channels automatically.

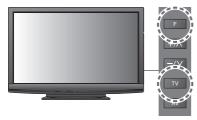
freesat channels

Automatically retune all the freesat channels received in the area.

- Only freesat channels are retuned.
- All the previous tuning settings are erased.
- If a Child Lock PIN number (p. 45) has been set, it must be entered.



- ■For Auto Setup, using the buttons on the side panel of the TV (p. 8)
 - Press repeatedly until "Auto Setup" appears
 - F
 - ② Access "Auto Setup"
 - TV
 - Start "Auto Setup"



■ To return to TV ⇒

Note)

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

Select "Auto Setup"





Start Auto Setup





Settings are made automatically

Enter your postcode



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



②set



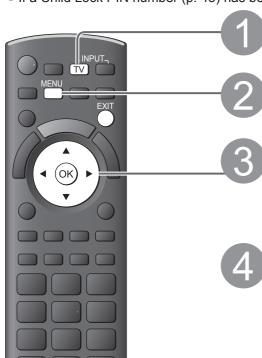
- You can set characters by using numeric buttons.
 - "Characters table for numeric buttons" (p. 69)

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

DVB or Analogue channels

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

- Only DVB channels are retuned in DVB mode.
- Only Analogue channels are retuned in Analogue mode.
- All the previous tuning settings are erased.
- If a Child Lock PIN number (p. 45) has been set, it must be entered.



Select DVB or Analogue

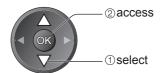
⇒ p. 15

TV Display the menu

MENU

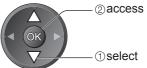
Select "Setup"





Select "DVB Tuning Menu" or "Analogue Tuning Menu"





- "DVB Tuning Menu" is available in DVB mode only.
- "Analogue Tuning Menu" is available in Analogue mode only.

■ To return to TV



- ■For Auto Setup, using the buttons on the side panel of the TV (p. 8)
 - Press repeatedly until "Auto Setup" appears

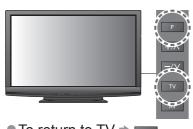


② Access "Auto Setup"



③ Start "Auto Setup"



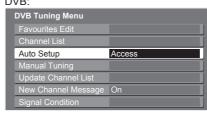


■ To return to TV ⇒

Note

- If tuning has not been done completely
 - "Manual Tuning" (p. 39 and p. 41)







Analogue

Analogue Tuning Menu				
Channel List				
Auto Setup	Access			
Manual Tuning				

Start Auto Setup



Analogue:



Settings are made automatically

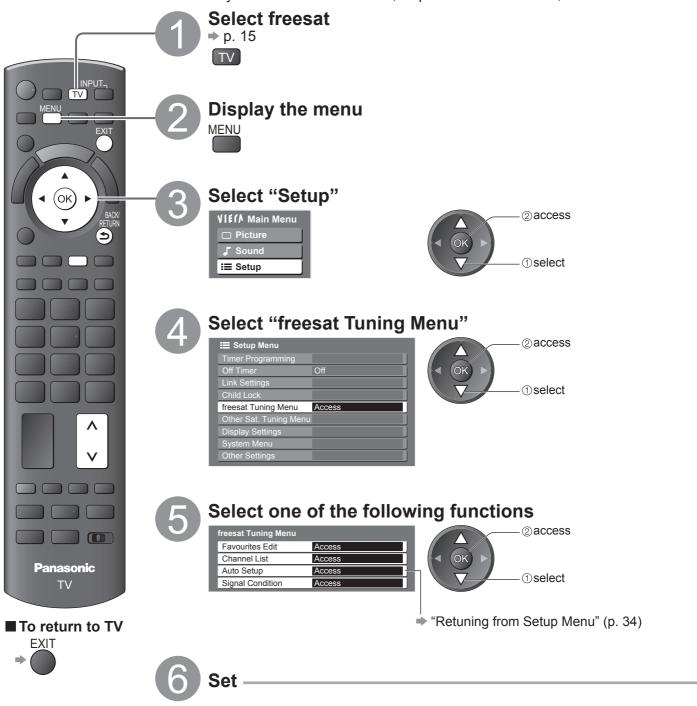
The analogue settings are downloaded to a Q-Link compatible equipment connected to the TV in Analogue mode.

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

Tuning and Editing Channels

(freesat)

You can retune channels or make your favourite channel list, skip unwanted channels, etc.



List favourite freesat channels Favourites Edit

Create your favourite channel list from various broadcasters.

The freesat Favourites list is available from "Channel Genre" in the TV Guide (p. 18).

① Select a channel to list





2 Add it to the Favourites list





A channel is added

■ To edit Favourites list



Select the field of Favourites to edit and:

To delete the channel



To delete all channels



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

3 Store



Skip unwanted freesat channels Channel List

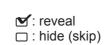
You can hide unwanted freesat channels.

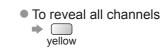
The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide







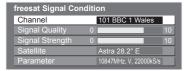


Check freesat signal Signal Condition

Selects a channel and checks the freesat signal condition.

■ To change the channel ⇒





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

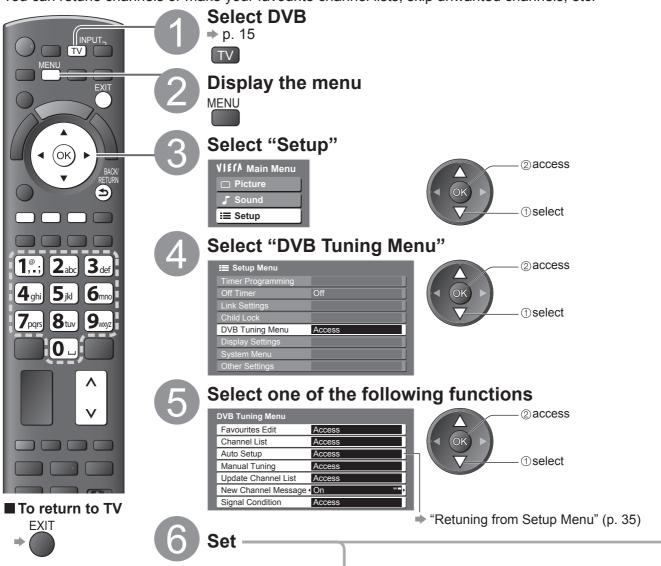
Signal Quality:

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

Tuning and Editing Channels

(DVB)

You can retune channels or make your favourite channel lists, skip unwanted channels, etc.



Update DVB channel automatically Update Channel List

You can add new channels, delete removed channels, update channel name and position automatically to Channel List.



 Channel List is updated with keeping your settings in Favourites Edit, Channel List, Child Lock, Timer Programming, etc.

Display a notification message New Channel Message

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

New channels found!

Press OK to update channel list
Press EXIT to ignore.

Selecting OK will perform "Update Channel List".

Check DVB signal Signal Condition

Selects a channel and checks the DVB signal condition.

To change the channel →



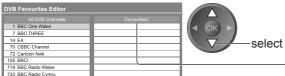
A good Signal Strength is not an indication of suitable signal for DVB reception. Please use the Signal Quality indicator as follows: Signal Quality:

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

List favourite DVB channels Favourites Edit Create your favourite channel lists from various broadcasters (up to 4: Favourites1 to 4). The DVB Favourites lists are available for switching in the Information banner (p. 16) and

The DVB Favourites lists are available for switching in the Information banner (p. 16) and from "Category" in the TV Guide (p. 19).





2 Add it to the Favourites list



■ To add all channels to the list ⇒ vellow

To display other Favourites → green

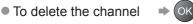
Note

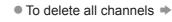
 Channel position numbers (known as logical channel numbers) can be swapped in Channel List.

■ To edit Favourites list



Select the field of Favourites to edit and:







■ To name the Favourites



Set characters one by one





You can set characters by using numeric buttons.

→ "Characters table for numeric buttons" (p. 69)

To move the channel



Select the new position



Confirm

Channel position





Skip unwanted DVB channels, Edit DVB Channels Channel List

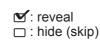
You can hide unwanted DVB channels.

The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide









■ To edit channels

You can also edit each channel in Channel List.



Select a channel to edit and:

(see below)







Set DVB channel manually Manual Tuning

Normally use "Auto Setup" or "Update Channel List" to retune DVB channels.

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



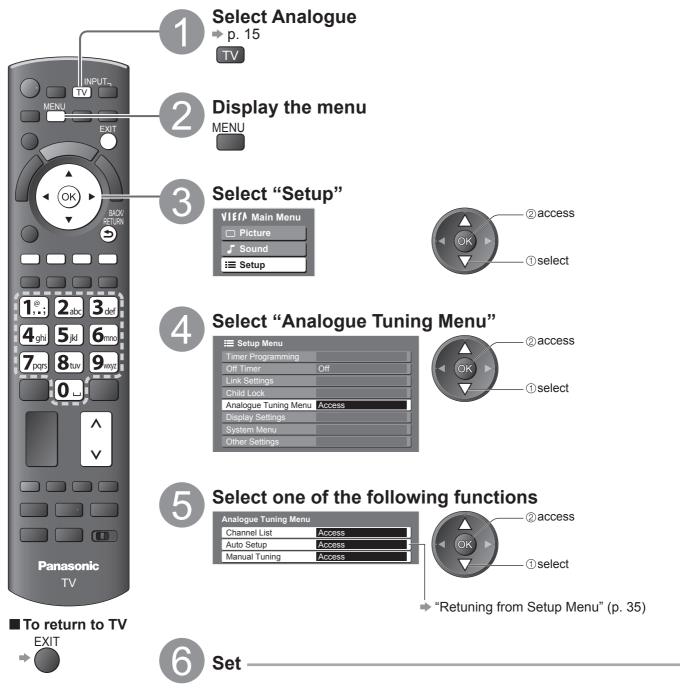


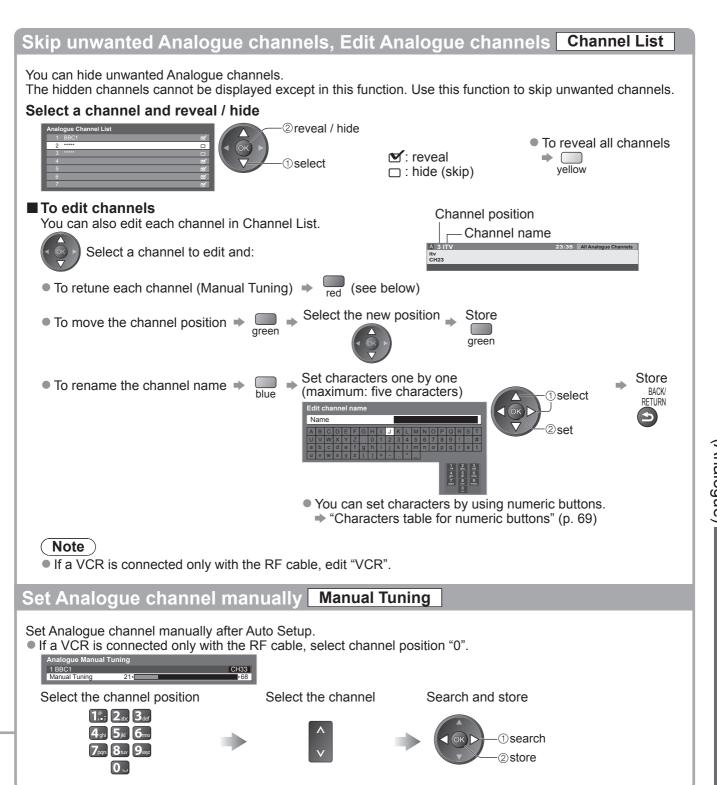
• All channels found will be added to the Channel List.

Tuning and Editing Channels

(Analogue)

You can retune channels or skip unwanted channels, edit channels etc.



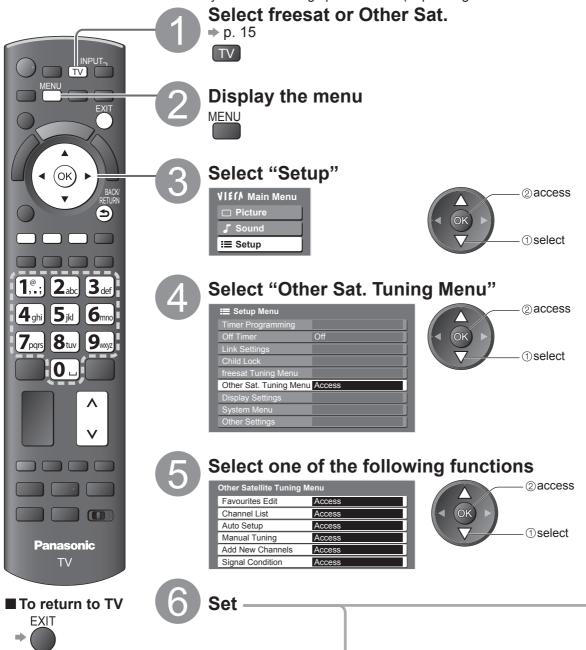


Tuning and Editing Channels

(Other Sat.)

You can tune all receivable digital satellite channels or skip unwanted channels, etc.

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





Normally use "Auto Setup" or "Add New Channels" to tune Other Sat. channels.

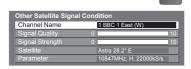


Please consult the received satellite broadcasting companies for the setting.

Check Other Sat. signal Signal Condition

Selects a channel and checks the Other Sat. signal condition.

■ To change the channel ⇒



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

Signal Quality:

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

Set all receivable digital satellite channels **Auto Setup**

Any receivable digital compliant satellite channels can be tuned.

- Only Other Sat. channels are retuned.
- All the previous tuning settings are erased.
- If a Child Lock PIN number (p. 45) has been set, it must be entered.

Select the satellite





- Selectable satellites are Astra2/Eurobird, Astra1 and
- Check the dish alignment for the satellite you want to select
- Astra2/Eurobird

 p. 10
- Astra1, Hotbird → Please consult the received satellite broadcasting companies.
- If you want to tune from all available satellites, select "Any Satellite".

② Check the signal condition and the message





If you select "Any Satellite" this step is skipped.





- It takes a while to check the connection for your 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 "Any Satellite" in Satellite Selection and try again.

3 Set the search mode and start Auto Setup







Settings are made automatically

If you select "Astra2/Eurobird" or "Any Satellite", freesat channels will also be searched. But the channels which have already been tuned in freesat will not be duplicated.

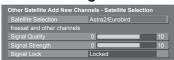
When the operation is completed, the channel at channel position "1" will be displayed.

Add Other Sat. channel automatically **Add New Channels**

①set ②start

You can add any new channels found automatically to Channel List.

Check the signal condition





If you selected "Any Satellite" in Auto Setup, this step is skipped.

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

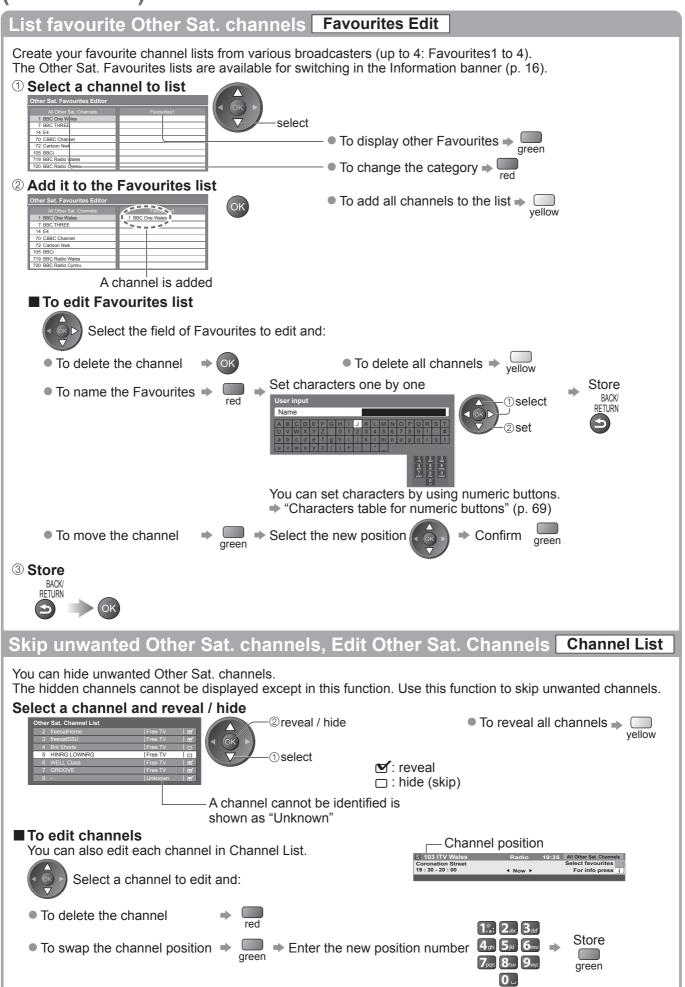
2 Set the search mode and start Add New Channels



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

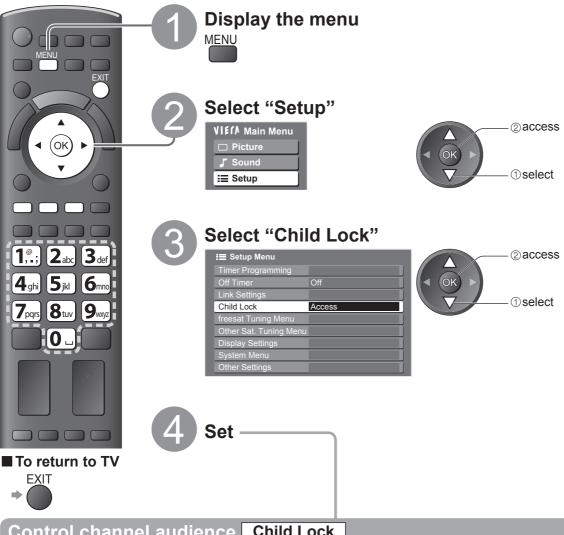
Tuning and Editing Channels

(Other Sat.)



Child Lock

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





① Enter the PIN number (4 digits)

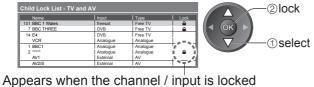


- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

2 Select "Child Lock List"



3 Select the channel / input to be locked



- To cancel ⇒ Select the locked channel / input ⇒ ok
- To jump to the top of the next input ⇒ Ted
- To lock all ⇒ green
- To cancel all locks ⇒ vellow

■ To change the PIN number

Select "Change PIN"





Enter a new PIN number twice

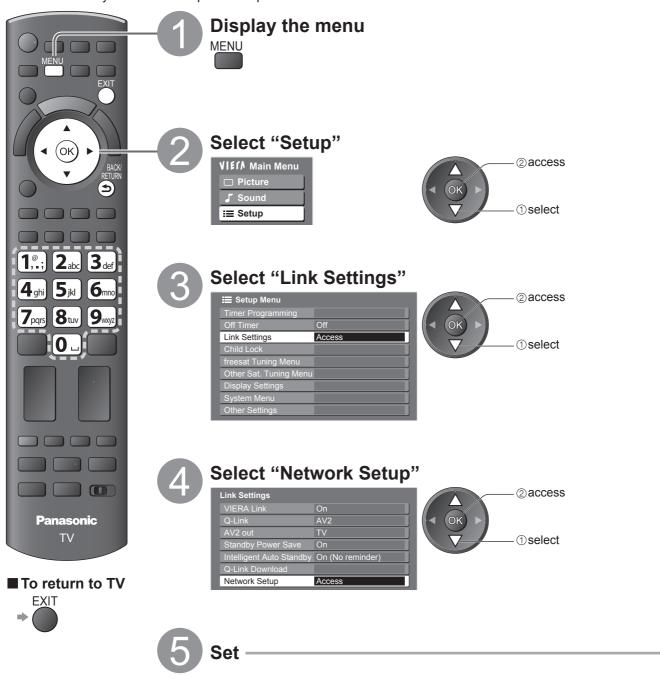


Setting "Shipping Condition" (p. 49) erases the PIN number and all settings.

Network Settings

Network settings are for applications from broadcasters to enable greater interactivity and added features for freesat services.

To connect to your network ⇒ p. 66 and p. 71



Connect to the Broadband network Network Setup

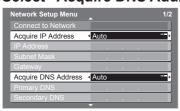
- ① Set the network setting items
 - Acquire IP Address
 - Acquire DNS Address

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"





Manual settings

If you wish to set these functions manually, select "Manual". Select "IP Address", "Subnet Move the cursor and Mask", "Gateway", "Primary enter the number DNS" or "Secondary DNS"



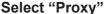


 The available settings are displayed automatically.

■ Proxv

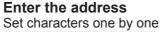
Sets Proxy address.

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. **Store**













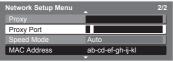
 You can set characters by using numeric buttons. → "Characters table for numeric buttons" (p. 69)

■ Proxy Port

Sets Proxy port number.

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

Select "Proxy Port"









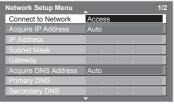
- Speed Mode (Auto / 10base half / 10base duplex / 100base half / 100base duplex)
 - Sets the LAN speed setting.
 - Set to "Auto" normally.
 - If "Connect to Network" test fails, try the other speed modes.

Select "Speed Mode" and then set the speed mode





2 Select "Connect to Network" and access 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.

Performs automatic testing of the network connection for the TV.

It takes a while to test.

Note

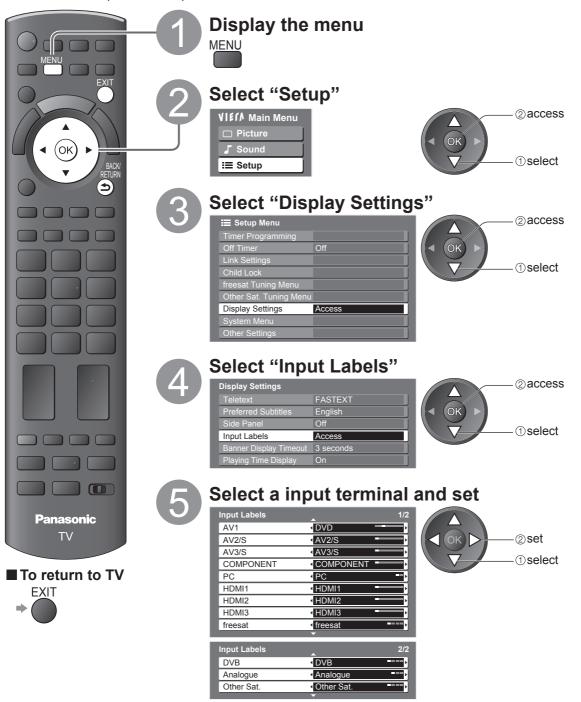
MAC Address

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

Input Labels

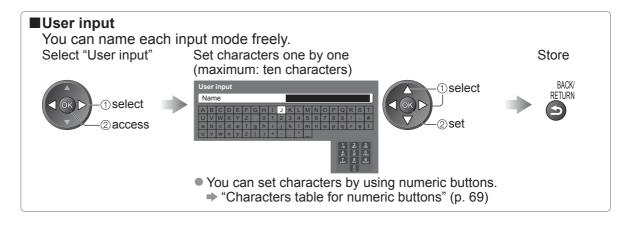
For easier identification and selection of the input mode, you can label each input mode or skip terminal that is not connected to any equipment.

To select the input mode ⇒ p. 24



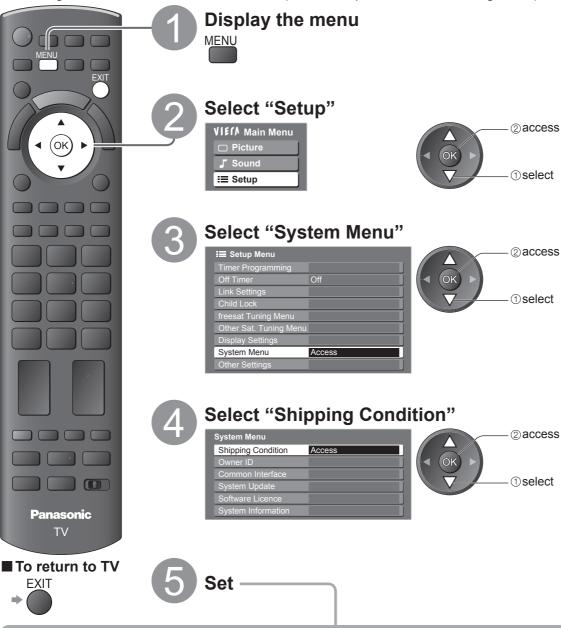
The labels you set will be displayed in "Input Selection" menu (p. 24),

- "TV Selection" menu (p. 15) or banner.
- If "Skip" is selected, you cannot select the mode.



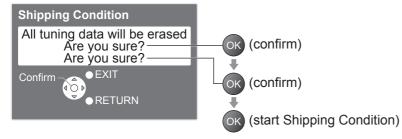
Shipping Condition

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



Restore Settings Shipping Condition

1 Check the message and initialise



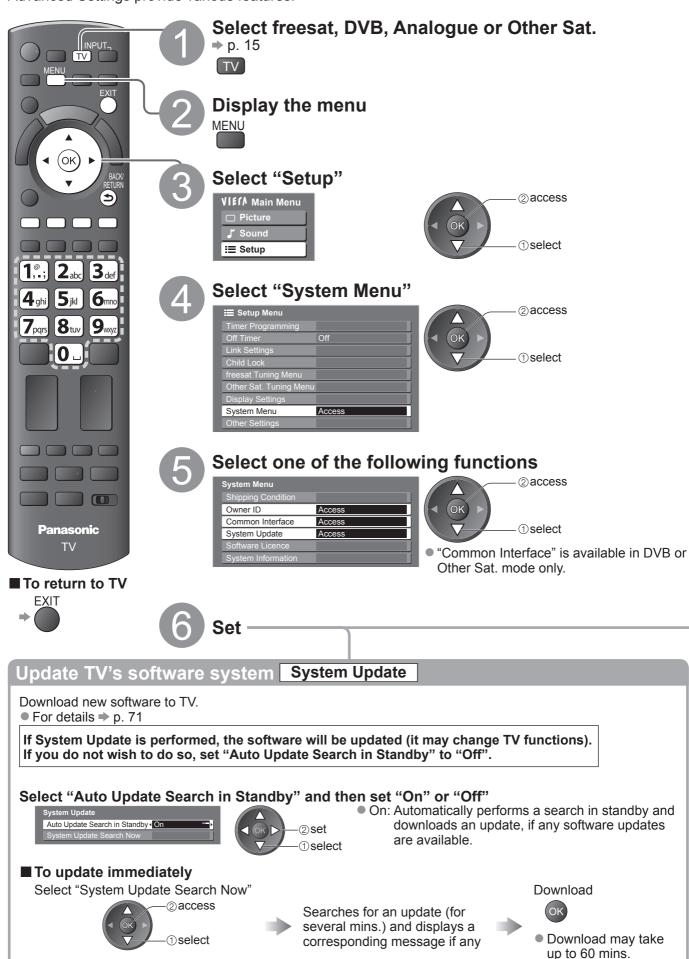
2 Follow the on-screen instructions

Reset to Factory Shipping Condition Completed. Please switch off TV.

- "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 12)
- To retune TV channels only, e.g. after moving house
 - *Retuning from Setup Menu" (p. 34 and p. 35)

Advanced Settings

Advanced Settings provide various features.



Input owner ID Owner ID

Entry of the 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.

① Enter the PIN number (4 digits)

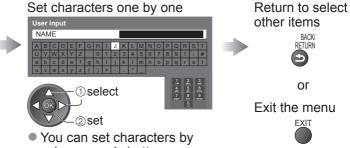


- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

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

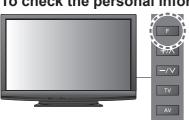






- using numeric buttons.
- "Characters table for numeric buttons" (p. 69)

■ To check the personal information stored







The PIN number is not displayed.

■ To change the PIN number







Common Interface

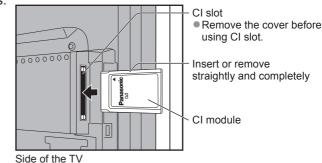
The Common Interface Module menu provides access to software contained on Common Interface (CI)

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

This function is not available for BSkyB's Sky channels.

Caution

- Turn Off Mains power On / Off switch whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
- Insert the module in the correct direction.



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 channels will appear without ② and ③. If pay-TV channel 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 operation guide

For example: select, go ⇒ (ok





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









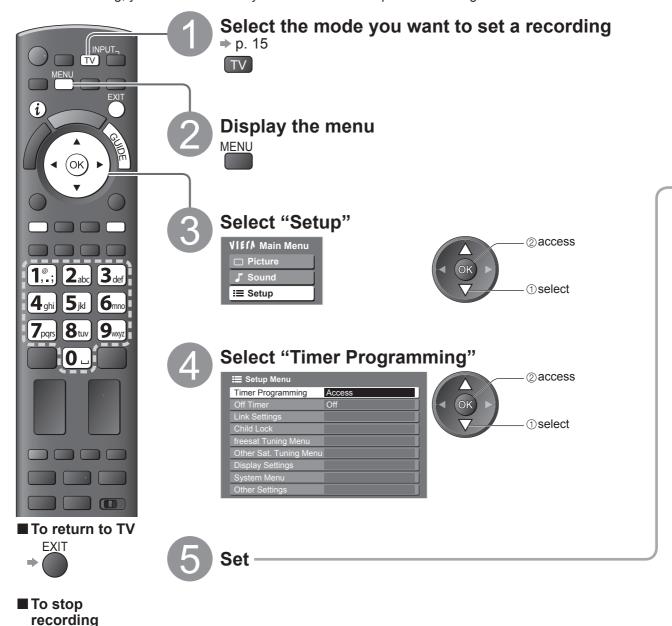
Recording Controls

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 channel (even if the TV is in Standby mode).

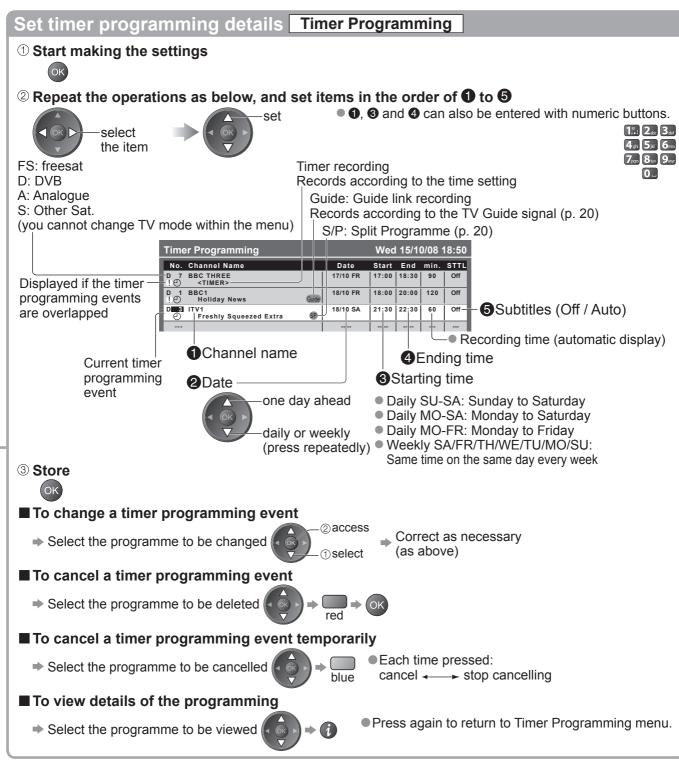
TV Guide may also be used to set timer programming. (p. 20)

- If the recorder is compatible with Q-Link or similar technologies (p. 60), and setup / connection are done completely (p. 58 and p. 60), 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 the Setup Menu (p. 32) 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 channels except the one being recorded.



Caution

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



■ Guide link recording (Timer Programming from the TV Guide signal) ⇒ p. 20

Not available in Analogue or Other Sat. mode.

Guide link 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 programmes.

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

■ Direct TV Recording → p. 60 and p. 62

You can record the current programme to DVD Recorder / VCR immediately using Q-Link or VIERA Link.

Note

- Check that the Timer LED (Orange) is lit. If not, timer programmes are not active or not stored.
- "!" will identify any timer programming events that have been set and overlap. If this occurs then the first timer programming event will start and finish as programmed. The next timer programming 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 channel 10 seconds before the start time.
- To stop Timer Programming event directly prior to the start time, it is necessary to stop the recorder manually.
- Timer Programming will be performed even if the TV is in Pause Live TV recording (p. 63). In this case, Pause Live TV recording will be cancelled.

Viewing from SD Card

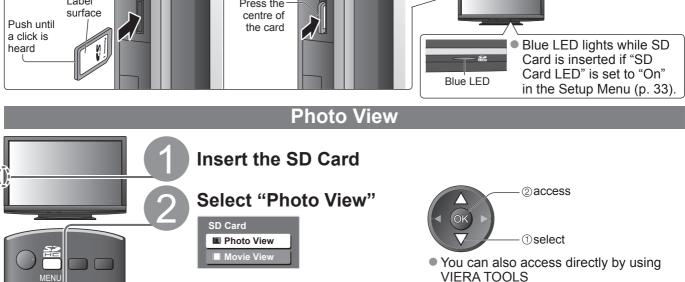
(VIERA IMAGE VIEWER)

Photo View: Still images recorded by digital cameras will be displayed.

Movie View: Moving pictures recorded by digital video cameras will be played back.

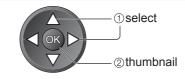
- During the operation, sound signal is output from AV1, AV2, AUDIO OUT and DIGITAL AUDIO OUT terminals. But no video signals are output.
- "Date" shows the date on which the recording was made by the digital camera or digital video camera. The file without record of the date is shown "**/**/****
- For details on SD Cards ⇒ p. 69







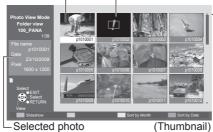


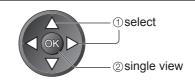


The files which are not into a folder will be collected to the folder named "/".

Select the file from the thumbnail to be viewed

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





Slideshow ⇒ p. 55



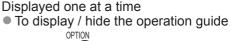
(1)

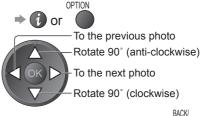
(ok

■ To return to the previous screen

> BACK/ RETURN







To return to thumbnail ⇒

Slideshow

■ Start Slideshow (operate in step 4)

Select the photo for the first view









To return to Single view ⇒ green



Note

- Slideshow is done within the thumbnail.
- You can also start slideshow directly by using VIERA TOOLS ⇒ "How to Use VIERA TOOLS" (p. 14).
- Slideshow settings (operate in Photo View Mode)



Viewing Setup

1) select



Other Items ⇒ p. 30 and p. 31

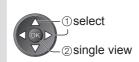
		Action Reme 7 p. 66 and p. 61
Menu	Item	Adjustments / Configurations (alternatives)
	Back Ground Music	Selects the back ground music during the slideshow (Off / Type1 / Type2 / Type3)
Viewing Setup	Effect	Selects the effect for switching the photo during the slideshow (Off / Fade / Slide / Dissolve / Random) Fade : The next photo fades in gradually Slide : The next photo slides and appears from the left side Dissolve: The photo is replaced by an indefinite block unit Random: Selects each effect at random
두	Interval	Selects slideshow interval (5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)
	Repeat	Slideshow repeat (Off / On)

■To display all the photos

Display the thumbnail of all the photos in SD Card.



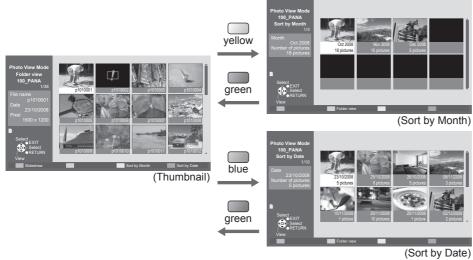




■To sort by date or month recorded

Display the list of groups sorted by the same date or the same month.

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





①select

thumbnail of the selected group

Viewing from SD Card

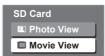
(VIERA IMAGE VIEWER)





Insert the SD Card

Select "Movie View"





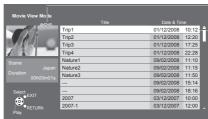
- You can also access directly by using **VIERA TOOLS**
 - → "How to Use VIERA TOOLS" (p. 14)





■ To return to the previous screen

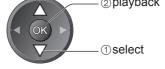


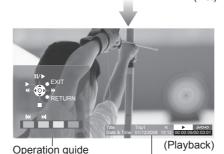


Select the file to be viewed

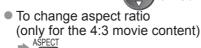








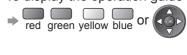






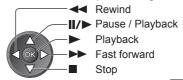
To display the operation guide

To hide the operation guide



BACK/

②set



- To the previous movie ⇒ red
- To the next movie ⇒ green

Audio Settings

You can enjoy the multi-channel sound via an amplifier connected to DIGITAL AUDIO OUT terminal.

■ To confirm or change the current sound status (during playback)

Display the Option menu Change the sound (if the movie has multiple audio signals)

Other items > p. 30 - 33

-change

■ Audio output settings (operate in step ③)





(Current sound status)

Multi Audio Stereo





Select "SPDIF Selection" and set

It may take several seconds to change the sound.

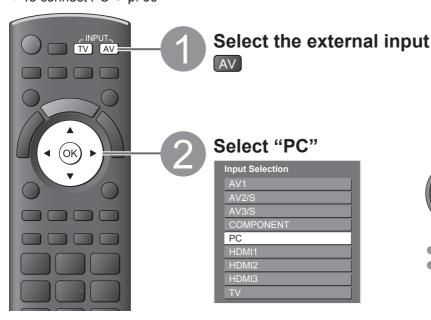


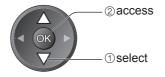
Menu	Item	Adjustments / Configurations (alternatives)
Sound	SPDIF Selection	SPDIF: A standard audio transfer file format Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal (Auto / PCM) Auto: Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM. PCM: Digital output signal is fixed to PCM.

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. 66





- Corresponding signals ⇒ p. 72
- If "H-freq." or "V-freq." is shown in red, the signals may not be supported.

- To return to TV
 - ⇒ TV

■ PC menu setting (changed as desired)

• To make settings → "How to Use Menu Functions" 1 to 4 (p. 26)

N.A	14		Adinatoranta (Osofinometicos (osticos)
Menu	It	em	Adjustments / Configurations (options)
		W/B High R	White balance of bright red area
T		W/B High B	White balance of bright blue area
Picture	Advanced	W/B Low R	White balance of dark red area repeatedly adjusted
 	PC	W/B Low B	White balance of dark blue area
	Settings	Gamma	Switches the gamma curve (S Curve / 2.0 / 2.2 / 2.5)
(D)		Reset to Defaults	Press the OK button to reset to the default Advanced PC Settings
		Input Resolution	Switches to a wide view VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,280 × 768 pixels, 1,366 × 768 pixels) Options change depending on signals
Setup		Clock	Set to the minimum level if noise occurs
		H-pos	Adjusts horizontal position
	PC Setup	V-pos	Adjusts vertical position
		Clock Phase	Eliminates flicker and distortion Adjust after Clock adjustment Set to the minimum level if noise occurs
		Sync	Chooses another synchronous signal if the image is distorted (H & V / On Green) H & V : by the horizontal and vertical signals from your PC On Green: by the green signal from your PC (if available)
		Reset to Defaults	Press the OK button to reset to the default PC Setup settings

Other items ⇒ p. 30 - 33

Note

 For HDMI-compatible PC, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 70).

Link Functions

Q-Link connects the TV and DVD Recorder / VCR, and enables easy recording, playback, etc. (p. 60) VIERA Link (HDAVI Control™) connects the TV and the equipment with VIERA Link function, and enables easy control, convenient recording, playback, energy saving, creating home theatre, etc., without complicated setting. (p. 61 - 65)

You can use Q-Link and VIERA Link functions together.

• This TV supports "HDAVI Control 4" function. But available features are depending on the connected equipment's version of HDAVI Control. Please refer to the manual of the equipment to confirm the version.

Summary of Q-Link and VIERA Link features

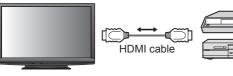
■ Q-Link (SCART connection only)

Connected equipment	DVD Recorder / VCR with	Connection
Features	Q-Link function	
Analogue channel download	0	
Easy playback	0	SCART cable DVD Recorder / VCR with Q-Link function
Power on link	0	Use fully wired SCART cable.
Power off link	0	Connect the DVD Recorder / VCR supporting Q-Link
Direct TV Recording	0	to the TV's AV1 or AV2 terminal via a SCART cable.

■ VIERA Link (HDMI connection only)

VIETA LITE (TIDINI CONTICUTORIY)									
Connected equipment Features	DIGA Recorder with VIERA Link function	DVD Player / Blu-ray Disc Player with VIERA Link function	HD Video Camera / LUMIX Camera with VIERA Link function						
Analogue channel download	_	_	_						
Easy playback	0	0	0						
Power on link	0	0	0						
Power off link	0	0	0						
Reduce unnecessary power consumption in standby	* 3	* 3	-						
Auto standby for unnecessary equipment	○*1	<u></u> *1	_						
Pause Live TV programme	○ * 3	_	_						
Direct TV Recording	○ *3	_	_						
Control the menu of the connected equipment by VIERA remote control	<u></u> *1	<u></u> *1	○* 1						
Speaker control	-	_	-						

Connection





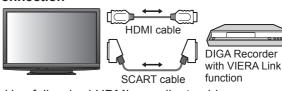
DIGA Recorder / DVD Player / Blu-ray Disc Player / HD Video Camera / LUMIX Camera with VIERA Link function

- Use fully wired HDMI compliant cable.
- Connect the equipment supporting VIERA Link to the TV's HDMI1, HDMI2 or HDMI3 terminal via an HDMI
- About HDMI cable for connecting Panasonic HD Video Camera or LUMIX Camera, read the manual of the equipment.

■ VIERA Link (HDMI and SCART connections)

Connected equipment	DIGA Recorder with	Connection
Features	VIERA Link function	
Analogue channel download	0	
Easy playback	0	
Power on link	0	
Power off link	0	
Reduce unnecessary power consumption in standby	○ *3	Use fullyConnect
Auto standby for unnecessary equipment	○*1	the TV's
Pause Live TV programme	○*2 *4	an HDMI
Direct TV Recording	○*2	Use fully
Control the menu of the connected equipment by VIERA remote control	<u></u> *1	Connect the TV's
Speaker control	_	

n



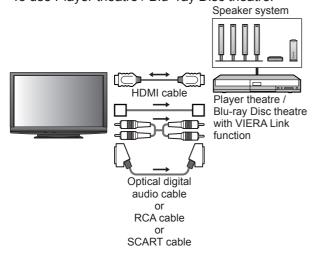
- wired HDMI compliant cable.
- the equipment supporting VIERA Link to HDMI1, HDMI2 or HDMI3 terminal via II cable.
- wired SCART cable.
- the equipment supporting VIERA Link to AV1 or AV2 terminal via a SCART cable.

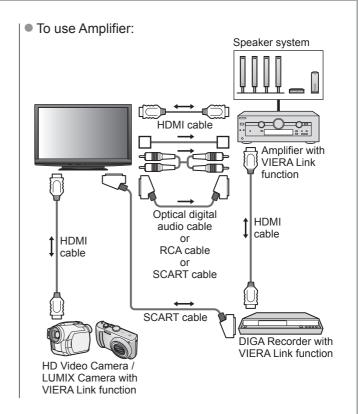
■ VIERA Link (HDMI and Audio out connections)

Connected equipment Features	Player theatre with VIERA Link function	Blu-ray Disc theatre with VIERA Link function	Amplifier with VIERA Link function
Analogue channel download	_	_	-
Easy playback	○* 5	<u></u> *5	_
Power on link	0	0	_
Power off link	0	0	0
Reduce unnecessary power consumption in standby	_	○* 3	-
Auto standby for unnecessary equipment	○*1 *6	○*1 *6	○*1
Pause Live TV programme	_	_	_
Direct TV Recording	_	-	_
Control the menu of the connected equipment by VIERA remote control	○* 1	<u></u> →*1	_
Speaker control	0	0	0

Connection

• To use Player theatre / Blu- ray Disc theatre:





- Use fully wired HDMI compliant cable.
- Connect the equipment supporting VIERA Link to the TV's HDMI2 or HDMI3 terminal via an HDMI cable.
- Use fully wired SCART cable.
- Connect the equipment supporting VIERA Link to the TV's AV1 or AV2 terminal via a SCART cable.
- Use any one of the optical digital audio cable, RCA cable and SCART cable for audio output from the TV.
- *1: Available with the equipment which has "HDAVI Control 2 or later" function.
- *2: Available with the equipment which has "HDAVI Control 3 or later" function.
- *3: Available with the equipment which has "HDAVI Control 4" function.
- *4: Available with DIGA Recorder which has HDD.
- *5: while playingback a disc
- *6: except for watching a disc

Note

VIERA Link features may be available even with other manufacturers' equipment supporting HDMI CEC.

Link Functions (Q-Link VIERA Link)

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. 58
- Use fully wired SCART cable.
- Set up the DVD Recorder / VCR. Read the manual of the recorder.
- Q-Link terminal setup in the Setup Menu → "Q-Link" (p. 32), "AV1 / AV2 out" (p. 32)
- Download Analogue channel setting ⇒ "Analogue channel download" (see below)

■ Features available

Analogue channel download

Analogue channel setting can be downloaded to the recorder with analogue tuner. Digital channel setting is not downloaded.

To download Analogue channel setting → "Q-Link Download" (p. 32) or "Auto Setup" in Analogue mode (p. 35) or "Auto Setup" - when first using the TV (p. 12)

Direct TV Recording - What you see is What you record

Recording the current programme in DVD Recorder / VCR immediately.



Available conditions:

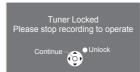
Picture source	Mode	Recording from
Analogue	TV	TV monitor out
Analogue	AV	Recorder's tuner
DVB	TV	TV monitor out
AV (watching recorder's tuner)	AV	Recorder's tuner
AV (watching recorder's external input)	AV	Recorder's external input
AV (watching TV's external input)	AV	TV monitor out

- When Direct TV Recording is performed, the recorder is automatically turned on if it is in Standby mode.
- Changing channel or turning off the TV is available while the recorder is recording from its own tuner.
- Changing channel is not available while the recorder is recording from the TV tuner.

■ To stop recording

Unlock the tuner







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 the 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 disc 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)

Note)

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

VIERA Link "HDAVI Control™"*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function. This TV supports "HDAVI Control 4" 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 (p. 58 and p. 59).

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. 58 and p. 59
- Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilized.
 Recommended Panasonic's HDMI cable part number:
 - RP-CDHG10 (1.0 m)
- RP-CDHG30 (3.0 m)
- RP-CDHG15 (1.5 m)
- RP-CDHG50 (5.0 m)
- RP-CDHG20 (2.0 m)
- Use fully wired SCART cable.
- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder may need to be changed. For details, read the manual of the recorder.
- ■Download Analogue channel setting ⇒ "Analogue channel download" (see below)
- Set VIERA Link On in the Setup Menu → "VIERA Link" (p. 32)
- 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. 24), 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

Analogue channel download

Analogue channel setting can be downloaded to the recorder with analogue tuner. Digital channel setting is not downloaded.

To download Analogue channel setting ⇒ "Q-Link Download" (p. 32) or "Auto Setup" in Analogue mode (p. 35) or "Auto Setup" - when first using the TV (p. 12)

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 the TV is in Standby mode.)

Power off link

When the TV is set to Standby mode, the connected equipment is also automatically set to Standby.

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

Link Functions (Q-Link VIERA Link)

■ Features available

Reduce unnecessary power consumption in standby Standby Power Save

Set Standby Power Save "On" in the Setup Menu to use this function

⇒ "Standby Power Save" (p. 32)

The power consumption in Standby mode of the connected equipment is controlled higher or lower in synchronization with the TV On / Off state to reduce the consumption.

When the TV is set to Standby mode, the connected equipment is automatically set to Standby and the power consumption in Standby mode of the connected equipment is automatically minimized.

When the TV is turned on, the connected equipment is still in Standby mode, but the power consumption is increased to make startup time early.

 This function is effective if the connected equipment can change the power consumption in Standby mode and is set to higher consumption.

Auto standby for unnecessary equipment Intelligent Auto Standby

Set Intelligent Auto Standby "On (With reminder)" or "On (No reminder)" in the Setup Menu to use this function

"Intelligent Auto Standby" (p. 32)

When the TV is On, non-watched or non-used connected equipment goes into Standby mode automatically to reduce the power consumption. For example, when the input mode is switched from HDMI, when Speaker Selection is changed to "TV" (except for watching a disc).

- If you select "On (With reminder)", the on screen message will be displayed to be noticed before working this function.
- This function may not work properly depending on the connected equipment. If required, set to "Off".

■ Features available (Using VIERA Link Menu)

Recording the current programme in DIGA Recorder immediately.

- If you connect a variety of recorders including other manufacturers' recorders at the same time, please connect DIGA Recorder to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, in this case connect DIGA Recorder to HDMI1.
- If you cannot operate, check the settings and the equipment
 - → "Summary of Q-Link and VIERA Link features" (p. 58 and p. 59), "Preparations" (p. 61)
- Changing channel or turning off the TV is available while the recorder is recording from its own tuner.
- Changing channel is not available while the recorder is recording from the TV tuner.



■ Features available (Using VIERA Link Menu)

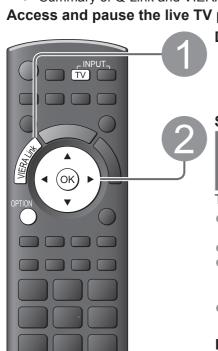
Pause Live TV programme Pause Live TV

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.
- If you connect a variety of recorders including other manufacturers' recorders at the same time, please connect DIGA Recorder which has HDD to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, in this case connect DIGA Recorder which has HDD to HDMI1.
- If you cannot operate, check the settings and the equipment
 - Summary of Q-Link and VIERA Link features" (p. 58 and p. 59), "Preparations" (p. 61)

Access and pause the live TV programme



Panasonic

TV

Display "VIERA Link Menu"



Select "Pause Live TV" and pause

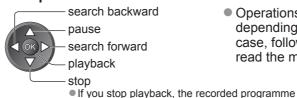




The TV picture will be paused.

- You can also pause directly by using VIERA TOOLS
 - → "How to Use VIERA TOOLS" (p. 14)
- 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.

will be deleted from HDD.

■ To return to Live TV

(stop playback of Pause Live TV / cancel pause)





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

Link Functions (Q-Link VIERA Link)

■ Features available (Using VIERA Link Menu)

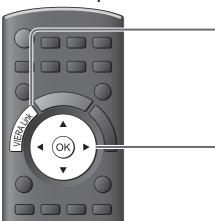
Control the menu of the connected equipment by VIERA remote control

VIERA Link Control

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

- If you cannot operate, check the settings and the equipment
 - ⇒ "Summary of Q-Link and VIERA Link features" (p. 58 and p. 59), "Preparations" (p. 61)
- For details of the operations for the connected equipment, read the manual of the equipment.

Access and operate the menu of the equipment



Display "VIERA Link Menu"



Select "VIERA Link Control"





Select the equipment you want to access

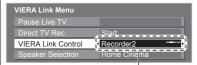
The type of the connected equipment is displayed. Select the type of the equipment and access.





If multiple recorders or players are connected

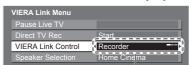
You can connect up to three recorders or players at the same time.



Recorder1-3 / Player1-3

The number is given from the TV's lower HDMI terminal number connected to the same type equipment. For example, two recorders to HDMI2 and HDMI3, in this case the recorder connected to HDMI2 is displayed as "Recorder1", and the recorder connected to HDMI3 is displayed as "Recorder2".

■ If you access non-VIERA Link equipment



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

Recorder / Player / Home Cinema / Video Camera / LUMIX / Other

- You can also access directly by using VIERA TOOLS
 - → "How to Use VIERA TOOLS" (p. 14)
- "Home Cinema" means Player theatre, Blu-ray Disc theatre or Recorder theatre.
- "Other" means Tuner set top box.



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

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



-1 Set the position to "TV"



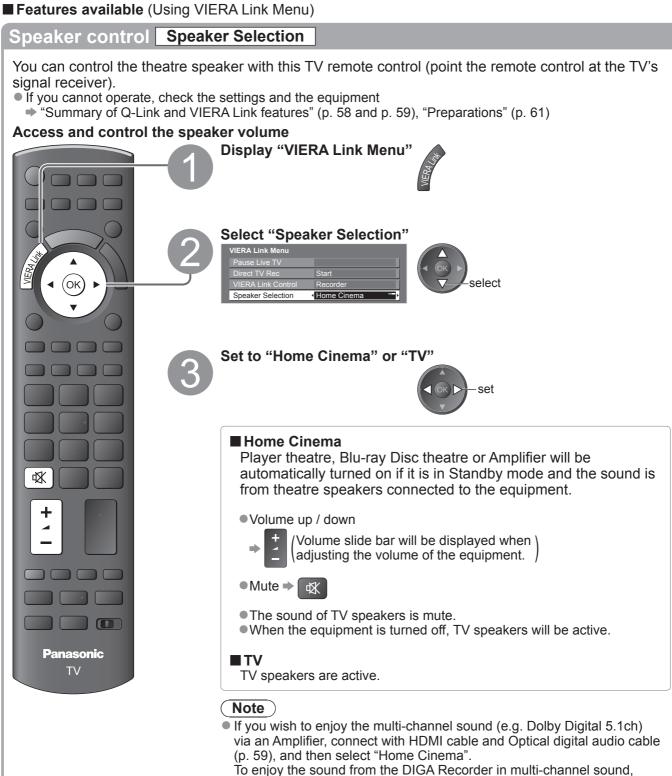
2 Follow the operation guide

- To display the operation guide ⇒ If other manufacturers' equipment is accessed, Setup / Contents Selection menu may be displayed.
- When the key words are displayed on colour bar
 - red green yellow blue

Note)

 Some operations may not be available depending on the equipment. In this case use its own remote control to operate the equipment.





Note

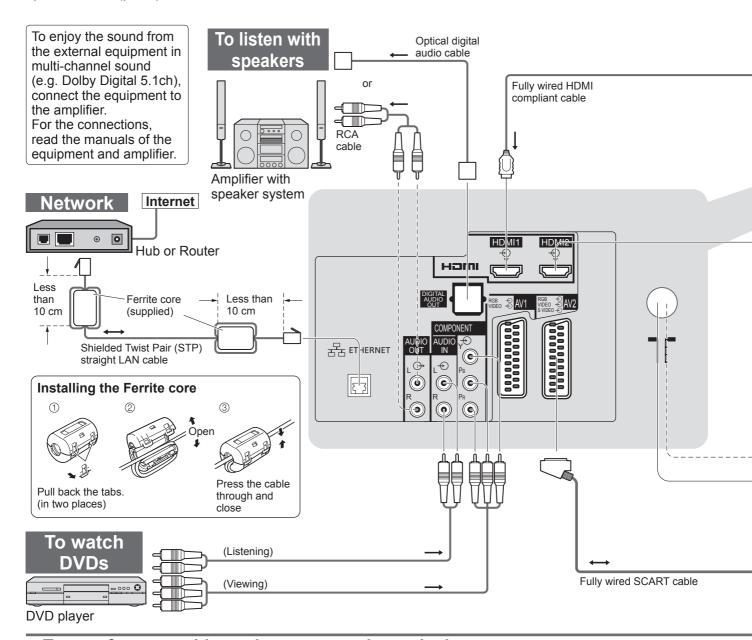
- These functions may not work properly depending on the connected equipment.
- Image or sound may not be available for the first few seconds when Input mode is switched.
- Easy playback may be available by using the remote control for Player theatre. Blu-ray Disc theatre or Amplifier. Read the manual of the equipment.

connect an HDMI cable from the DIGA Recorder to the Amplifier (p. 59).

- "HDAVI Control 4" is the newest standard (current as of December, 2008) 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. 33)

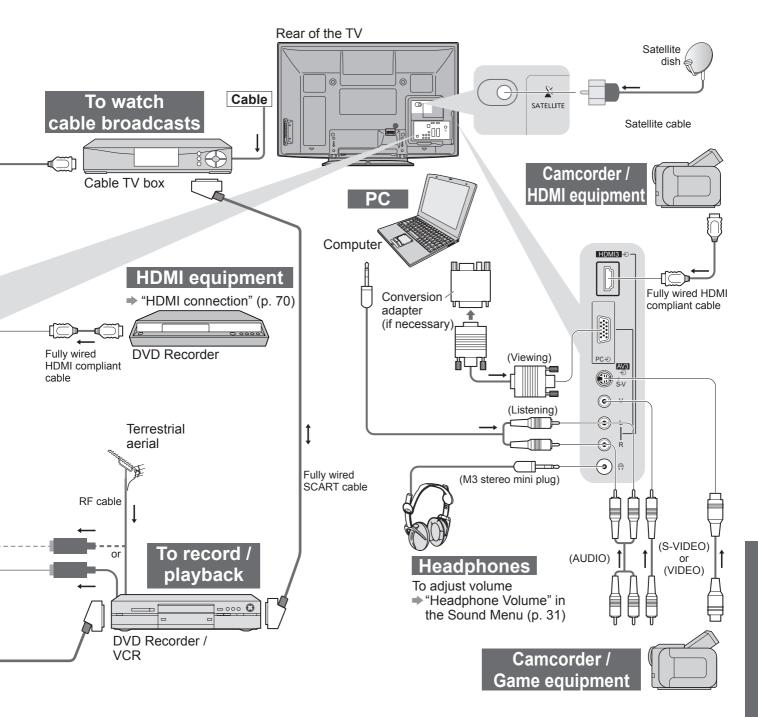
External Equipment

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. 79).



■ Types of connectable equipment to each terminal

Terminal Recording / Playback (equipment)	AV1	AV2	AV3 (Side panel of TV)	
To record / playback videocassettes / DVDs (VCR / DVD recorder)	0	0		
To watch DVDs (DVD player)		0	0	
To watch camcorder images (Video camera)		0	0	
To watch cable broadcasts (Set top box)		0	0	
To play games (Game equipment)	0	0	0	
To use amplifier with speaker system				
To use Network services for freesat				
Q-Link	0	0		
VIERA Link	(with HDMI)	(with HDMI)		
Direct TV Recording				



COMPONENT O L P O O	AUDIO OUT	DIGITAL AUDIO OUT	ETHERNET	HDMI		I
R PR				1	2	3
0				0	0	0
				0	0	0
				0	0	0
	0	0				
			0			
				0	0	0
				0	0	0

Technical Information

Auto Aspect

The optimum size and aspect can be chosen automatically, and you can enjoy finer images. (p. 17)

■ Aspect Control Signal

"WIDE" will appear in the top left of the screen if a Widescreen signal (WSS) or a Control signal through SCART / HDMI terminal is found.

The aspect will switch to the appropriate 16:9 or 14:9 widescreen ratio.

This function will work in any aspect mode.

			Aspect Control Signal
Input terminal	Input signal format	Widescreen signal (WSS)	Control signal through SCART (pin8) / HDMI terminal
	DVB	0	
RF	PAL I	0	
KF	PAL 525/60 6.0 MHz	_	
	M.NTSC 6.0 MHz	_	
Satellite	freesat, Other Sat.	0	
AV/1 (Composito)	PAL	0	0
AV1 (Composite)	PAL 525/60	_	0
AV2 (Composite or S-Video)	M.NTSC	_	0
AV3	NTSC	_	0
	525 (480) / 60i	_	
	525 (480) / 60p	_	
	625 (576) / 50i	0	
COMPONENT	625 (576) / 50p	0	
COMPONENT	750 (720) / 60p	_	
	750 (720) / 50p	_	
	1,125 (1,080) / 60i	_	
	1,125 (1,080) / 50i	_	
	525 (480) / 60i	_	0
	525 (480) / 60p	_	0
	625 (576) / 50i	_	0
	625 (576) / 50p	_	0
HDMI1	750 (720) / 60p	_	0
HDMI2	750 (720) / 50p	_	0
HDMI3	1,125 (1,080) / 60i	_	0
	1,125 (1,080) / 50i	_	0
	1,125 (1,080) / 60p	_	0
	1,125 (1,080) / 50p	_	0
	1,125 (1,080) / 24p	_	0

■ Auto mode

Auto mode determines the best aspect ratio to fill the screen. It does this using a four step process (WSS, Control signal through SCART / HDMI terminal, Letterbox detection, or Justify to fill the screen) to determine. This process may take several minutes, depending on the darkness of the image.

Letterbox detection: If black bands at the top and bottom of the screen are detected, Auto mode chooses the best ratio and expands the image to fill the screen.

If no aspect signals are detected, Auto mode enhances the image for optimum viewing pleasure.

Note

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

SD Card

■ 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.)

■ 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

- Movie: SD-Video Standard Ver. 1.2 [MPEG-2 (PS format)] and AVCHD Standard compatible files with an audio format that is either MPEG-1/Layer-2 format or Dolby Digital format (A modified data with a PC may not be displayed correctly.)
- Compliant card type (maximum capacity): SDHC Card (32 GB), SD Card (2 GB), 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

- Format the card with the recording equipment.
- The picture may not appear correctly on this TV depending on the recording equipment used.
- Display may take some time when there are many files and folders.
- This function cannot display Motion JPEG and still image not DCF formatted (i.e. TIFF, BMP).
- A data 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.
- All ".JPG" extension datas in the card will be read in Photo View Mode.
- 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.

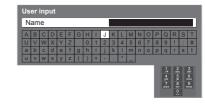
Characters table for numeric buttons

You can enter characters by using numeric buttons for free input items.

Press the numeric button repeatedly until you reach the desired character.

1. 2 3 • The character is set automatically if you leave for one second.

You can also set the character by pressing the OK button or other numeric buttons within one second.



Characters table:

0 _

The number of times to press Numeric buttons	1	2	3	4	5	6	7	8	9	10	11
1,2;		1	!	:	#	+	-	*	_	()
2 _{abc}	а	b	С	2	Α	В	С				
3 _{def}	d	е	f	3	D	Е	F				
4 _{ghi}	g	h	i	4	G	Н	I				
5 _{jkl}	j	k	I	5	J	K	L				
6 _{mno}	m	n	О	6	М	N	0				
7 pqrs	р	q	r	S	7	Р	Q	R	S		
8 _{tuv}	t	u	V	8	Т	U	V				
9 _{wxyz}	W	Х	у	z	9	W	Х	Y	Z		
0_	Space	0									

Technical Information

HDMI connection

HDMI (high-definition multimedia interface) is the world's first complete digital consumer AV interface complying with a non-compression standard.

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

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

About connections, see "External Equipment" (p. 66).

■ Applicable HDMI features

- Input audio signal: 2ch Linear PCM (sampling frequencies 48 kHz, 44.1 kHz, 32 kHz)
- Input video signal: 480i, 480p, 576i, 576p, 720p, 1080i and 1080p
 - → "Input signal that can be displayed" (p. 72)
 - Match the output setting of the digital equipment.
- Input PC signal : → "Input signal that can be displayed" (p. 72)
 - Match the output setting of the PC.
- VIERA Link (HDAVI Control 4): → "VIERA Link" (p. 61)
- x.v.Colour[™]

■ DVI connection

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).

Note

- Audio settings can be made on the "HDMI1 / 3 Input" in the Sound Menu. (p. 31)
- HDMI2 terminal is for digital audio signal only.
- 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.
- This TV incorporates HDMI™ (Version 1.3a with x.v.Colour™) technology.

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

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

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.
- To listen to PC sound from the TV, connect the audio cable to COMPONENT-AUDIO terminals. (p. 66)
- When using PC, set the colour display quality of PC to the highest position.
- For details of the applicable PC signals
 - "Input signal that can be displayed" (p. 72)
- Max. display resolution

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

D-sub 15-pin connector signal

\

Pin No.	Signal Name	Pin No.	Signal Name	Pin No.	Signal Name
1	R	6	GND (Ground)	11)	NC (not connected)
2	G	7	GND (Ground)	12	NC (not connected)
3	В	8	GND (Ground)	13	HD
4	NC (not connected)	9	NC (not connected)	(14)	VD
(5)	GND (Ground)	10	GND (Ground)	15	NC (not connected)

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. 50).

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.

Found new software version ***.

Press OK to start update (may take 40 mins)

or Press EXIT to ignore

and you can update when TV is in standby.

To start downloading press the OK button, this may take up to 60 minutes to complete.

To ignore the new software press the EXIT button.

You can update later automatically when the TV is in Standby mode

"To download any new software automatically" (see below)

If you do not wish to update, set "Auto Update Search in Standby" to "Off", but the notification banner will keep appearing during the period of new software availability, usually 2 to 3 days.

■ To download any new software automatically

Ensure that the "Auto Update Search in Standby" function in the System Update menu is set to "On" (p. 50). The TV will then download new software automatically at night if it is left in standby without any timer programming in progress.

Note

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

Network connection (ETHERNET)

If you do not have a Broadband network service, please consult your retailer for assistance. About connections, see "External Equipment" (p. 66).

■ 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.

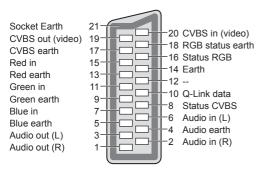
Note

- 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.

SCART, S-VIDEO and HDMI terminal information

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

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



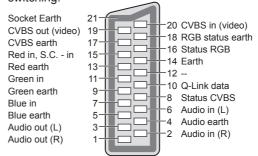
■ AV3 S-VIDEO 4 pin terminal



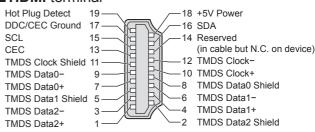
AV2 SCART terminal

(RGB, VIDEO, S-VIDEO, Q-Link)

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



■ HDMI terminal



Technical Information

Input signal that can be displayed

COMPONENT (Y, PB, PR), HDMI

* Mark: Applicable input signal

Signal name	COMPONENT	HDMI
525 (480) / 60i	*	*
525 (480) / 60p	*	*
625 (576) / 50i	*	*
625 (576) / 50p	*	*
750 (720) / 60p	*	*
750 (720) / 50p	*	*
1,125 (1,080) / 60i	*	*
1,125 (1,080) / 50i	*	*
1,125 (1,080) / 60p		*
1,125 (1,080) / 50p		*
1,125 (1,080) / 24p		*

PC (from D-sub 15P) Applicable input signal for PC is basically compatible to VESA standard timing.

- (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.,
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 × 768 @60 Hz	47.70	60.00
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

PC (from HDMI terminal) Applicable input signal for PC is basically compatible to HDMI standard timing.

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @60 Hz	31.47	60.00
750 (720) / 60p	45.00	60.00
1.125 (1.080) / 60p	67.50	60.00

(Note)

- Signals other than above may not be displayed properly.
- The above signals are reformatted for optimal viewing on your display.
- 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. 80)

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?
- Check the correct AV input mode is selected.
- Check the mains lead is plugged into the socket outlet.
- Has the TV been turned On?
- Check the Picture Menu (p. 30) 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 ratio to fill the screen. (p. 68)
- Press the ASPECT button if you would like to change the aspect ratio manually (p. 17).

S-Video / black and white picture

Check that the output of the external equipment matches the input of the TV. If the output of the external equipment is set to S-Video, the TV must also be set to S-Video (p. 24).

No programmes shown on TV Guide

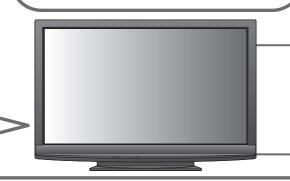


- Reset channels. (p. 34 and p. 35)
- Check the digital transmitter.
- Adjust the direction of the dish or aerial to another transmitter installed nearby.
- Check the analogue broadcast.
 If the image quality is poor, check the aerial and consult your nearest dealer.

freesat Auto Setup cannot be done completely

- 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







Remains channel number, input mode, etc. on the TV screen -I.e. EC/AV1

Press the *i* button to clear these.
 Press again to redisplay.

Q-Link function does not work

Confirm SCART cable and connection.
 Also set "AV1 / AV2 out" in the Setup Menu (p. 32).

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

- Confirm the connection. (p. 58 and p. 59)
- Turn the connected equipment on and then switch the TV on. (p. 61)

Recording does not start immediately

- Check the settings of the recorder. For details, read the manual of the recorder.
- Timer Programming might be performed.

Contrast is reduced

- Contrast is lowered in the following conditions without any user operation for a few minutes:
 - no signal in freesat, DVB, Other Sat. or AV mode
 - selected locked channel
 - selected invalid channel
 - selected radio channel
 - displayed menu
 - Digital teletext (no video contents)
 - Thumbnail, list or still picture in SD Card mode

FAQs

	Problem		Actions		
	Chaotic image, noisy	 	 Set "P-NR" in the Picture Menu (to remove noise). (p. 30) Check nearby electrical products (fluorescent lamp, DECT phones, mobile phones, microwave, etc.). 		
Scr	No image can be displayed		 Is "Colour" or "Contrast" in the Picture Menu set to the minimum? (p. 30) Please also refer to "Neither image nor sound is produced" (p. 73). 		
Screen	Blurry or distorted image (no sound or low volume)	 	 Reset channels. (p. 34 and p. 35) Please also refer to "Neither image nor sound is produced" (p. 73). 		
	Unusual image is displayed	 	 Turn the TV Off with Mains power On / Off switch, then turn it On again. If the problem persists, perform "Shipping Condition" (p. 49). 		
	No sound is produced	 	 Is "Sound mute" active? (p. 9) Is the volume set to the minimum? Please also refer to "Neither image nor sound is produced" (p. 73). 		
Sound	Sound level is low or sound is distorted		 Sound signal reception may be deteriorated. Set "NICAM" (p. 31) in the Sound Menu to "Off". (Analogue only) Please also refer to "Neither image nor sound is produced" (p. 73). 		
	Whirring sound is heard		• The sound is from built-in cooling fan (not a sign of faulty operation).		
	 Due to the digital reception technologies involved, quality of the digital signals may be relatively low in some cases, despite good reception of analogue channels. 				
Digita	Interference or frozen / disappearing image in freesat, DVB or Other Sat. mode	>	 Check "Signal Condition" (p. 37, 38 and 42). If "Signal Quality" or "Signal Strength" are displayed in red, the signal is weak. Check aerial or dish. Check your postcode area is able to receive the Freeview channels at www.freeview.co.uk Digital signals may be relatively low to prevent interference with analogue signals for the period of Digital Switchover. Check the plan of Digital Switchover at www.digitaluk.co.uk Weather conditions will affect signal reception (heavy rain, snow, etc.), in particular in poor reception areas. Even during good weather the high pressure can cause poor reception of some channels. Turn the TV off with the Mains power On / Off switch, then turn it On again. Reset channels. (p. 34 and p. 35) 		
Digital Channel	Some channels cannot be tuned	 	Check the aerial or dish.		
inel	Cannot find a channel you have previously watched		 The channel may broadcast for part of the day. Check the channel in the TV Guide. (p. 18 and p. 19) Channel position numbers may be changed by broadcasters. Reset channels. (p. 34 and p. 35) 		
	In freesat mode, not possible to adjust the volume and set Speakers / Headphones for Audio Description sound track (unlike DVB)	>	This is due to broadcast limitations. (p. 31)		
	Some freesat channels do not produce the sound in English by default	•	• This is due to broadcasts even if they have English sound. In this case, press the OPTION button and set "Multi Audio" (p. 17). Please note that this setting cannot be memorized if the TV is turned Off with Mains power On / Off switch.		

	Problem		Actions
Ŧ	Sound is unusual	>	 Set the sound setting of the connected equipment to "2ch L.PCM". Check the "HDMI1 / 3 Input" setting in the Sound Menu. (p. 31) If digital sound connection has a problem, select analogue sound connection. (p. 70)
HDMI	Pictures from external equipment are unusual when the equipment is connected via HDMI	>	 Check the HDMI cable is connected properly. (p. 66) Turn the connected equipment on and then switch the TV on. (p. 61) Check an input signal from the equipment. (p. 72) Use an equipment compliant with EIA/CEA-861/861B.
	The TV does not switch On	>	 Press and hold the standby On / Off switch on the remote control for about 1 second if Power LED is red. Check the mains lead is plugged into the socket outlet. The fuse in the mains plug may have blown. Replace it with one of an identical rating (p. 4).
	The TV goes into "Standby mode"	>	 Off Timer function is activated. The TV enters "Standby mode" about 30 mins. after analogue broadcasting ends.
Other	The remote control does not work or is intermittent	>	 Are the batteries installed correctly? (p. 6) Has the TV been switched On? The batteries may be running low. Replace them. Point the remote control directly at the front of the TV (within a 30 degree angle of the front of the TV). Situate the TV away from sunshine or other sources of bright light not to shine on the TV's remote control signal receiver.
	Permanently lit spots on screen	>	• Due to production process involved in this technology this may result in some pixels which are permanently lit or unlit. This is not a malfunction.
	An error message appears	>	 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. 49).
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 is plugged in properly. It may be necessary to have an aerial installer check the signal and aerial alignment. Reset channels. (p. 34 and p. 35)
Child Lock is active! Press OK to enter PIN.)	• The selected channel is locked in Child Lock (p. 45). You must enter the PIN number before the channel will be displayed.
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. The LAN cable might be defective.
Faulty dish	 	 The satellite cable might be short-circuited or there might be connection problems of the cable. Check the cable and connection and then turn the TV Off with the Mains power On / Off switch, and turn it On again. If the message still persists, it may be necessary to have a dish installer check the dish and cable.
Feature not available	•	 It is not possible to record from COMPONENT, HDMI or PC. Connect the recorder to the TV using a fully wired SCART cable for recording from the TV tuner. Confirm Q-Link or VIERA Link settings (p. 58 - 61).
Found new software version ***. Press OK to start update (may take 40 mins) or Press EXIT to ignore and you can update when TV is in standby.	 	There is a new software available.
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. Turn the TV and the router Off with the Mains power On / Off switch, and turn them On again.
Invalid operation - Please check settings and connections.	 	• Check the Q-Link or VIERA Link connection and setting (p. 58 - 61).
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)	 An IP address is required to use interactive content through the internet. Enter an IP address.
Manual IP setting not correct)	 The system is unable to set the IP address. Consult your Internet Service Provider or telecommunications company.
Max. number of Timers already set !)	The maximum number of timer programming events is 15.
New channels found! Press OK to update channel list Press EXIT to ignore.	 	 There may be new channels available. This message will appear each time a change is made by the broadcasters. This message can be deactivated by setting "New Channel Message" to Off in "DVB Tuning Menu". Selecting OK will perform "Update Channel List".
No channel found. Please check aerial or local signal 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. 51).
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.
No service		 The broadcaster has stopped the service. Check the channel in the TV Guide. (p. 18 and p. 19)
No signal)	• The TV cannot detect the signal. Check the connection of the RF cable.

Message	Meaning / Action
PIN incorrect!	● The PIN number you entered is wrong.
Please check settings and connections on HDMI devices.	Communication error in VIERA Link function (p. 61).
Please choose a frequency between 9750 and 12750 MHz	 The frequency you entered is out of range. Consult the received satellite broadcasting company. (p. 42)
Please wait.	• A function is in progress.
Recording this channel now	• The recorder is recording the programme from its own tuner. You can tur the TV off and leave the equipment recording in the normal way.
Reset to Factory Shipping Condition Completed. Please switch off TV.	 "Auto Setup" will automatically start when Mains power On / Off switch is next turned On. (p. 12)
Sending Preset Data Please wait!	Q-Link or VIERA Link channel download is in progress.
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. 50). If this is still unsuccessful, there may not be any new software available.
This timer will not follow the TV Guide information Press OK to continue, RETURN to restore original timer	 If you edit the start time or end time of Guide link recording more than 10 minutes, it will no longer be performed as Guide link recording. The recording will be performed according to the time setting.
Timer already expired !	Starting time in Timer Programming is already past. Set correctly (p. 53).
Timer Event Due to Start DVB 1: BBC1 has been programmed for recording at **:**	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. 53).
Timer overlap Press OK to keep, RETURN to edit	 Timer programming events are overlapped. If you press the OK button, the first timer programming event will start and finish, the next timer programming event can then start.
Tuner Locked Please stop recording to operate	• If you want to unlock, cancel Direct TV Recording (p. 60 and p. 62) or Timer Programming (p. 53).
Unable to acquire IP address	 Unable to obtain the IP address. Check the settings and connections of the router.
Unable to download, please check equipment	● The tape or disc is active. Stop the equipment and try again.
■ SD Card	
Cannot read file	 The file is broken or unreadable. The TV does not support the format. (For the applicable formats and data ⇒ p. 69)
No SD card inserted	Confirm SD Card is inserted correctly.
No valid file to play	▶ •The card has no data.
Over 9999 pictures found (max. is 9999)	▶ • Maximum valid number of photos is 9,999.
Please confirm the SD card is OK	● The inserted SD Card has a problem.
This operation is not possible	Your operation is not available.

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)

Shop viewing environment Shop viewing environment is the demonstration mode to explain main features of this TV in an easy understandable way. This mode will work if you select

"Shop" in "Auto Setup" (p. 12).

■ VCR

Video Cassette Recorder

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HDMI ······

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Specifications

			TX-l	P42G10B	TX-	P46G10B	TX-P50G10B	
Power Source		AC 220-240	V, 50 / 60 Hz	•				
Power Consumption		350 W		410 W		435 W		
Power Consumption in		0.4 W (Without monitor out recording)						
	dby mode		32 W (With monitor out recording)					
pa D	Aspect Rati	0	16:9					
Display panel	Aspect Rati	en size	106 cm (diag 921 mm (W)		117 cm (diag 1,019 mm (\	gonal) W) × 573 mm (H)	127 cm (diagonal) 1,105 mm (W) × 622 mm (H)	
\	Number of p	oixels	2,073,600 (1,920 (W) × 1,080 (H)) [5,760 × 1,080 dots]					
တ	Speaker		160 mm × 40 mm × 2 pcs, 6 Ω					
Sound	Audio Outp	ut	20 W (10 W + 10 W), 10% THD					
p	Headphone	5	M3 (3.5 mm) stereo mini Jack × 1					
PC signals		VGA, SVGA, WVGA, XGA SXGA, WXGA ······ (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz						
Receiving Systems / Band name		Treesat Cother Sat. Coth						
	llite dish inp	<u>ut </u>	Female F-ty	pe 75 Ω				
Aeria	al input		UHF					
Operating Conditions		Temperature: 0 °C - 35 °C Humidity: 20 % - 80 % RH (non-condensing)						
Connecti	AV1 (SCAR		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)					
3	AV2 (SCAR		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)					
90		VIDEO	RCA PIN Ty		1.0 V[p-p] (
tion	AV3	S-VIDEO	Mini DIN 4-p		Y:1.0 V[p-p]	(75Ω) C:0.	286 V[p-p] (75 Ω)	
		AUDIO L - R		pe × 2	0.5 V[rms]			
Terminals	COMPONENT	VIDEO	Y Рв, Рк		1.0 V[p-p] (i ±0.35 V[p-p	ncluding synchron]	ization)	
na		AUDIO L - R	RCA PIN Ty		0.5 V[rms]			
S	Others	HDMI	TYPE A Con			ersion 1.3a with x.v	.Colour™)	
		1/2/3	● This TV supports "HDAVI Control 4" 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 slo					
		ETHERNET		302.3 10BASE-T /				
		AUDIO L - R	RCA PIN Ty	pe × 2	0.5 V[rms] (high impedance)		
	Output	DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber optic					
Dimensions (W × H × D)			(With Pedes 1,029 mm × (TV only)	tal) 661 mm × 106 mm	(With Pedest 1,132 mm × (TV only)	tal) 722 mm × 106 mm	1,218 mm × 814 mm × 401 mm (With Pedestal) 1,218 mm × 769 mm × 106 mm (TV only)	
Mass		28.0 kg Net (25.0 kg Net ((With Pedestal) (TV only)	32.0 kg Net 29.0 kg Net	(With Pedestal) (TV only)	35.0 kg Net (With Pedestal) 32.0 kg Net (TV only)		

Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
 EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.
- Pedestal: ST-42CS3WG / ST-50CS3WG (For safety approval)

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



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



By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling. For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



For business users in the European Union

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



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

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

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

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

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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- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
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Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)

TX-P42G10B Declaration of Conformity No. 6380, 8 January 2009

TX-P46G10B Declaration of Conformity No. 6381, 8 January 2009

TX-P50G10B Declaration of Conformity No. 6382, 8 January 2009

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.

Willoughby Road, Bracknell, Berks RG12 8FP

Web Site: http://www.panasonic.net

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