Panasonic

Operating Instructions
LCD Television

Model No. **TX-L32S10B**
TX-L37S10B
TX-L42S10B
TX-L32S10BS

VIERA

VIERA Link

VIERA IMAGE VIEWER

Link

AVCHD

DVB

GUIDE plus+ GEMSTAR

OWNER I.D.

DOLBY DIGITAL

FULL HD 1920×1080p

HD ready 1080p

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

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

U.K. Standard

English

TQB0E0783-2

Features

■ **Receives DVB digital terrestrial broadcasts**
Select the programme or set Timer Programming easily by using TV Guide. (p. 18 - p. 20)
Register and instantly call up favourite channels with Favourites Edit. (p. 37)
● DVB - Digital Video Broadcasting

■ **VIERA TOOLS - Display special feature icons and accesses easily** (p. 14)
VIERA TOOLS is the easy way to access the special features with the VIERA TOOLS button.

■ **Sharp pictures with HDMI connection** (p. 64)
Enjoy high-definition digital picture and high-quality sound by using an HDMI cable.

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

■ **GUIDE Plus+** (p. 18)
This TV supports Gemstar-TV Guide sent from the GUIDE Plus+ system.

■ **Owner ID** (p. 43)
Owner ID is an anti-theft function. Entering the PIN number and owner's personal information will help the Police to determine the owner.

■ **AVCHD**
Possible to play the moving pictures recorded in SD Card by AVCHD format.
AVCHD is a high definition recording format. (p. 50-51)

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

■ **SD Card viewer - VIERA IMAGE VIEWER** (p. 48)
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. 52 - 59)
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 games.

■ **Supports Audio Description signal** (p. 15 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. 34 and 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
This TV uses a high definition panel to produce high definition pictures close to their original resolution.

Wide Viewing Angle
(TX-L32S10B, TX-L37S10B, TX-L32S10BS)
This LCD panel offers 178-degree viewing angle. This delivers beautiful images regardless of the viewing angle.

IPS panel
(TX-L32S10B, TX-L37S10B, TX-L32S10BS)
This TV uses IPS (In Plane Switching) panel.

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

Eco Mode
Adjusts picture settings automatically dependent on ambient lighting conditions.

V-Audio Surround
Utilises Panasonic's advanced digital amplification technology.

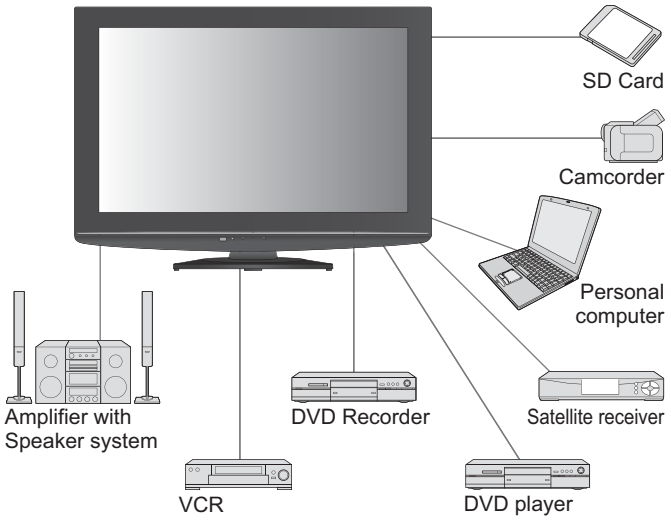
Up to 60,000 hours LCD Panel Lifetime
The LCD display panel used in the 2009 VIERA TV range is rated for up to 60,000 hours.*
*This measurement is based on the time taken for the brightness of the panel to reduce to half of it's maximum level.
The time taken to reach this level may vary depending on the image content and the environment where the TV is used. Malfunctions are not taken into account.

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!

Enjoy rich multi-media



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Safety Precautions

Warning & Caution

Handling the mains plug and lead

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

Do not expose to direct sunlight and other sources of heat

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

Do not place the TV on sloped or unstable surfaces

- The TV may fall off or tip over.

Power source

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

Do not remove the cover NEVER modify the TV yourself

(High-voltage components may cause serious electrical shock)

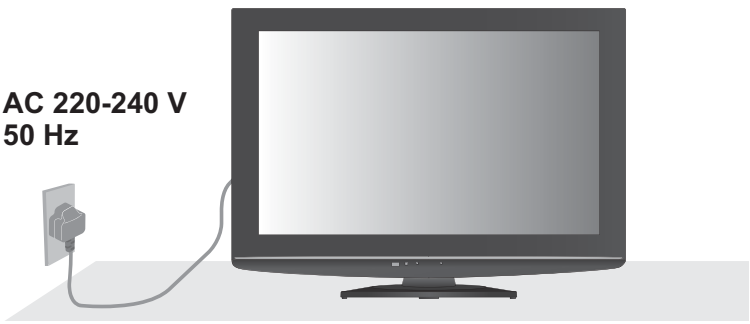
- Have the TV checked, adjusted, or repaired at your local Panasonic dealer.
- Do not remove the rear cover as live parts are accessible when it is removed. There are no user serviceable parts inside.

Do not expose your ears to excessive volume from the headphones

- Irreversible damage can be caused.

To prevent fall and injury, remove TV from its fixed wall position when it is no longer in use.

- Remove the mains plug from the wall socket before connecting or disconnecting leads.



IMPORTANT: THE MOULDED MAINS PLUG

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This TV is supplied with a moulded three pin mains plug for your safety and convenience. A 5 amp fuse is fitted in this mains plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362.
Check for the ASTA mark ◈ or the BSI mark ♡ on the body of the fuse.
If the mains plug contains a removable fuse cover, you must ensure that it is refitted when the fuse is replaced.
If you lose the fuse cover the mains plug must not be used until a replacement cover is obtained.
A replacement fuse cover may be purchased from your local Panasonic dealer.

If the fitted moulded mains plug is unsuitable for the socket outlet in your home, then the fuse shall be removed and the mains plug cut off and disposed of safety. There is a danger of severe electrical shock if the cut off mains plug is inserted into any 13 amp socket.
If a new mains plug is to be fitted, please observe the wiring code as shown below.
If in any doubt, please consult a qualified electrician.

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

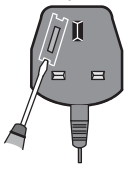
As the colours of the wire in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your mains plug, proceed as follows.
The wire which is coloured BLUE must be connected to the terminal in the mains plug which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal in the mains plug which is marked with the letter L or coloured RED.
Under no circumstances should either of these wires be connected to the Earth terminal of the three pin mains plug, marked with the letter E or the earth symbol ⏚.

How to replace the fuse

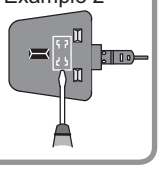
For plug type shown in example 1:
Lift out the removable fuse compartment with a screwdriver and replace the fuse, then refit securely into the mains plug (see example 1).

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

Example 1



Example 2



Notes

Do not expose to rain or excessive moisture

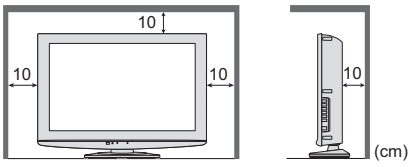
- To prevent damage which might result in electric shock or fire, do not expose this TV to rain or excessive moisture.
  This TV must not be exposed to dripping or splashing water and objects filled with liquid, such as vases, must not be placed on top of or above the TV.

Do not block the rear ventilation openings

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

Allow sufficient space around the TV for radiated heat

Minimum distance



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

Use only the dedicated pedestals / mounting equipment

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

Do not allow children to handle SD Card

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

■ Auto power standby function

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

■ Keep the TV away from these types of equipment

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

■ Transport only in upright position

Maintenance

First, remove the mains plug from the socket outlet.

Display panel

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

Caution

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

Cabinet, Pedestal

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

Caution

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

Mains plug

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

Accessories / Options

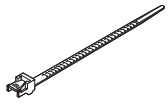
Standard accessories

Check that you have the accessories and items shown ☑

- ☐ Remote Control
  - N2QAYB000328

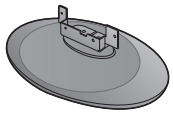
- ☐ Batteries for the Remote Control (2)
  - R6 (UM3)

- ☐ Clamper
  - TMM8E18048

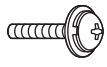


- ☐ Cleaning cloth
  - TXFPE01RLTB (TX-L32S10B, TX-L37S10B, TX-L42S10B)

- ☐ Operating Instructions
- ☐ Pan European Guarantee Card
- ☐ CRM (Customer Relationship Management)
- ☐ Pedestal
  - TBLA0408 (TX-L32S10B)
  - TBLA0412 (TX-L37S10B)
  - TBL0E0101 (TX-L42S10B)
  - TBLA0409 (TX-L32S10BS)



- ☐ Assembly screw for Pedestal (4)
  - TZS9EK085

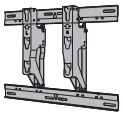


- This product contains possibly dangerous parts (such as plastic bags), that can be breathed in or swallowed by young children accidentally. Keep these parts out of reach of young children.

Optional accessories

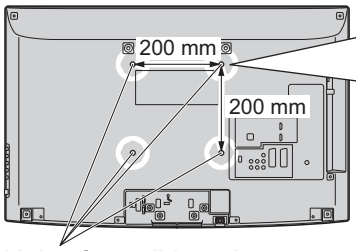
Wall-hanging bracket

- TY-WK3L2RW



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

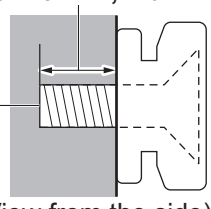
Rear of the TV



Holes for wall-hanging bracket installation

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

Depth of screw: minimum 9 mm, maximum 12 mm



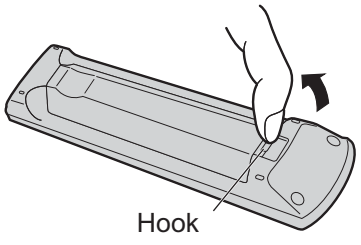
(View from the side)

WARNING!

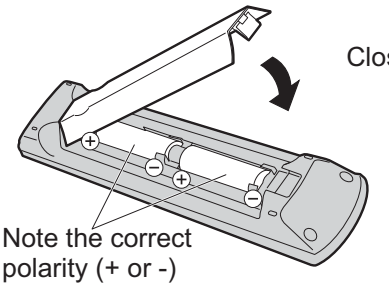
- Failure to use a Panasonic bracket or choosing to mount the unit yourself will be done at the risk of the consumer. Any damage resulting from not having a professional installer mount your unit will void your warranty.
- Always be sure to ask a qualified technician to carry out set-up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage.
- Do not mount the unit directly below ceiling lights (such as spotlights, floodlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- 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.

Installing / removing remote's batteries

1



2



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 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.

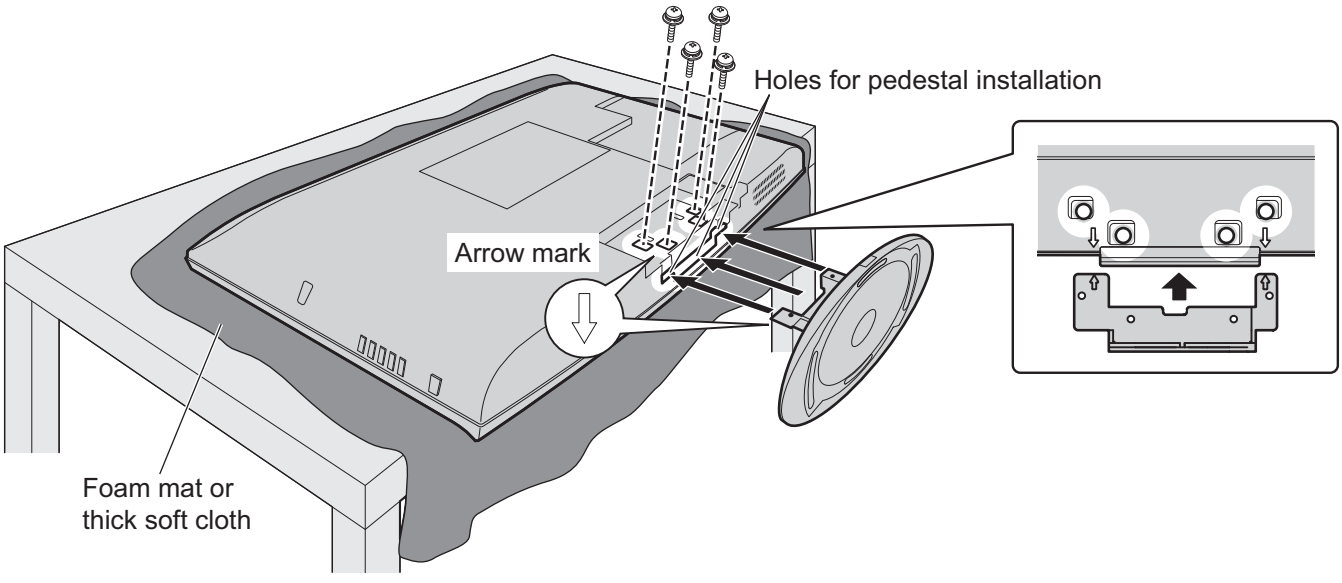
Two or more people are required to install and remove the TV.

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

■Securing the TV

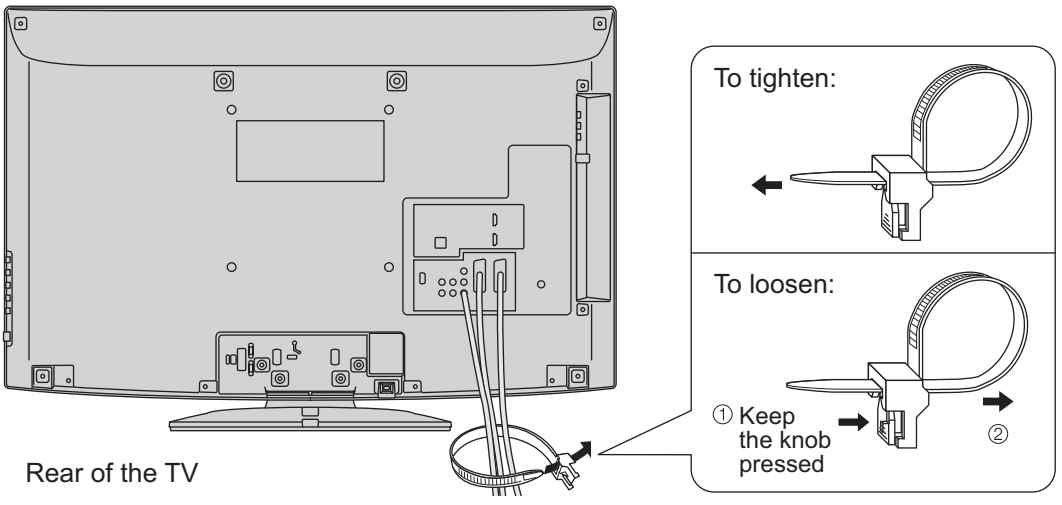
Use only the supplied assembly screws to fasten securely.

- Make sure that the screws are securely tightened.
- Carry out the work on horizontal and level surface.



Accessories / Options

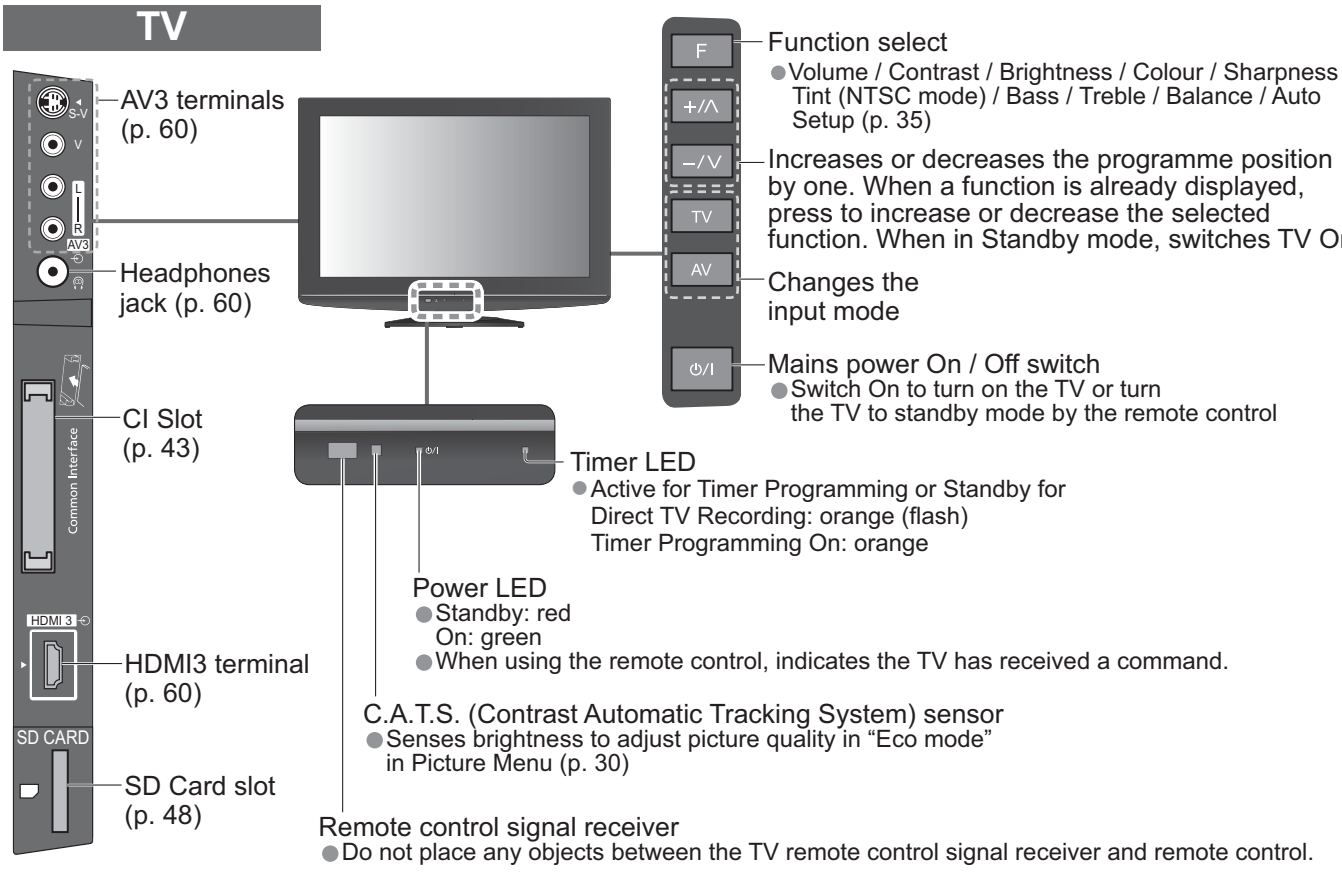
Using the clamper



- 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

TV



Identifying Controls

Remote Control

VIERA IMAGE VIEWER (p. 48)
- Switches to SD Card viewing mode

Standby On / Off switch
- Switches TV On or Off standby

Aspect (p. 17)
- Changes aspect ratio from Aspect Selection list
- Also possible by pressing this button repeatedly until you reach the desired aspect

Main Menu (p. 26)
- Press to access Picture, Sound and Setup Menus

Channel / Programme Information (p. 16)
- Displays channel and programme information

VIERA Link Menu (p. 56)
- Accesses VIERA Link Menu

OK
- Confirms selections and choices
- Press after selecting channel positions to quickly change channel

Option Menu (p. 17)
- Easy setting for viewing and sound options

Coloured buttons
- Used for the selection, navigation and operation of various functions

Teletext (p. 21)
- Switches to teletext mode / interactive services

Subtitles (p. 16)
- Displays subtitles

Numeric buttons
- Changes channel and teletext pages
- Sets characters
- When in Standby mode, switches TV On

Sound Mute
- Switches sound mute On or Off

Volume Up / Down

Input mode selection
- TV - switches DVB / Analogue mode (p. 15)
- AV - switches to AV input mode from Input Selection list (p. 24)

Direct TV Recording (p. 54 and p. 56)
- Records programme immediately in DVD Recorder / VCR with Q-Link or VIERA Link connection

Normalise (p. 26)
- Resets picture and sound settings to their default levels

Exit
- Returns to the normal viewing screen

VIERA TOOLS (p. 14)
- Displays some special function icons and accesses easily

Guide (p. 18)
- Displays TV Guide

Cursor buttons
- Makes selections and adjustments

Return
- Returns to the previous menu / page

Hold
- Freeze / unfreeze picture (p. 15)
- Holds the current teletext page (teletext mode) (p. 22)

Index (p. 23)
- Returns to the teletext index page (teletext mode)

Surround (p. 31)
- Switches Surround sound

Channel Up / Down
- Selects channel in sequence

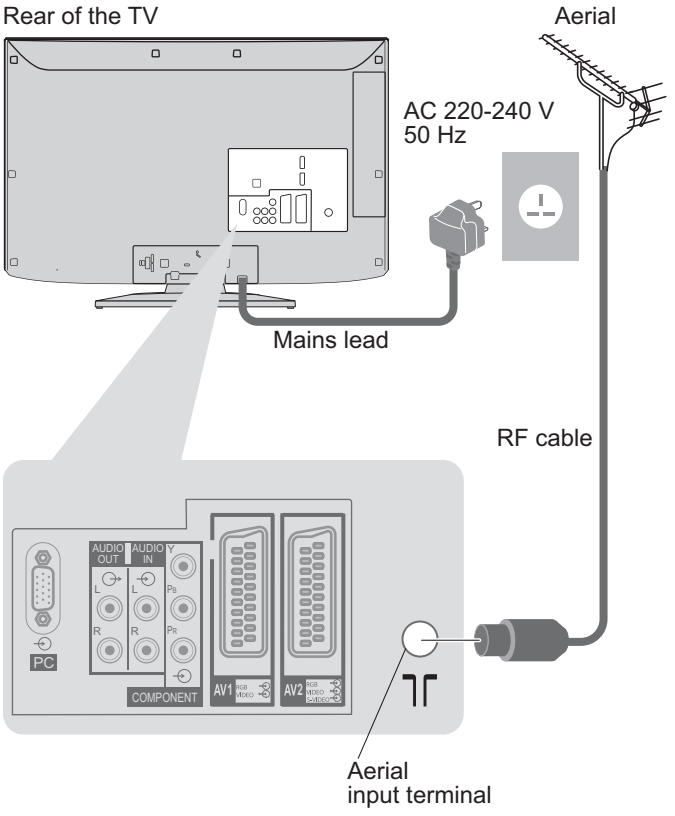
Connected equipment operations (p. 25 and p. 58)

Basic Connection

External equipment and cables shown are not supplied with this TV.
Please ensure that the unit is disconnected from the mains socket before attaching or disconnecting any leads.

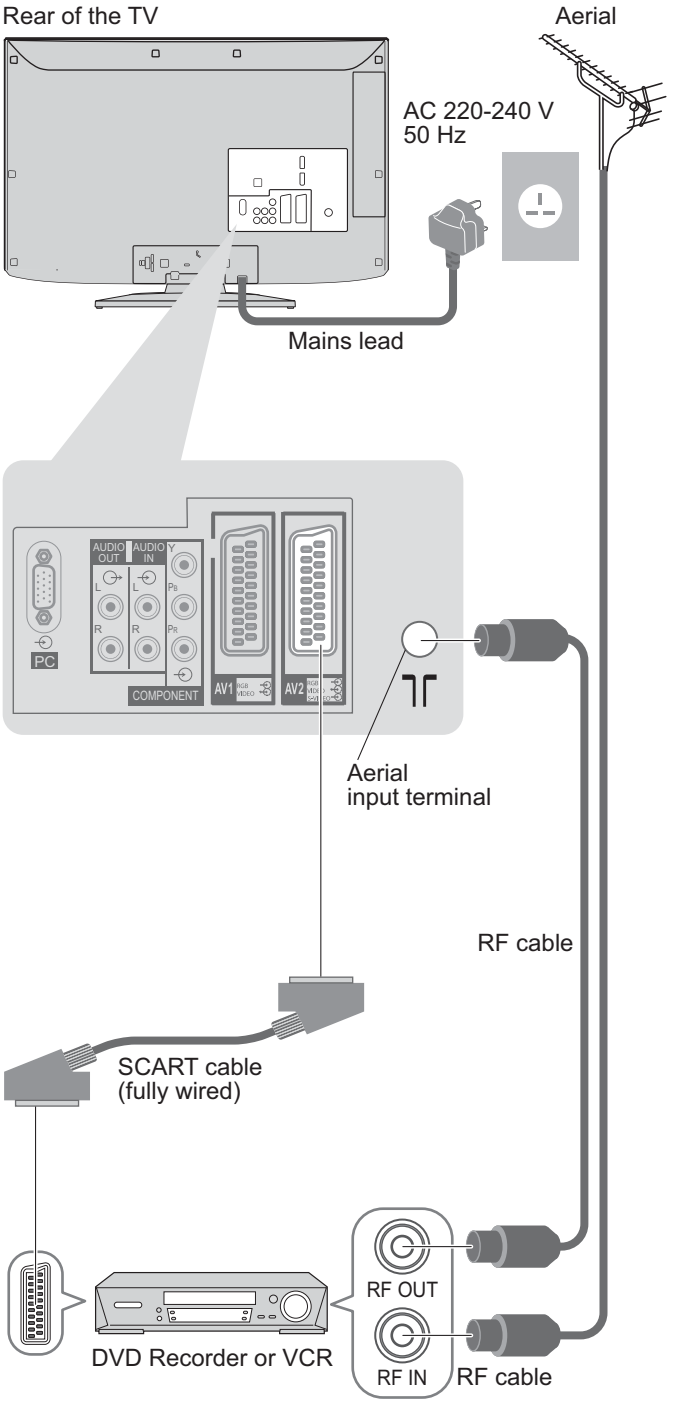
Example 1
Connecting aerial

TV only



Example 2
Connecting DVD Recorder / VCR

TV, DVD Recorder or VCR



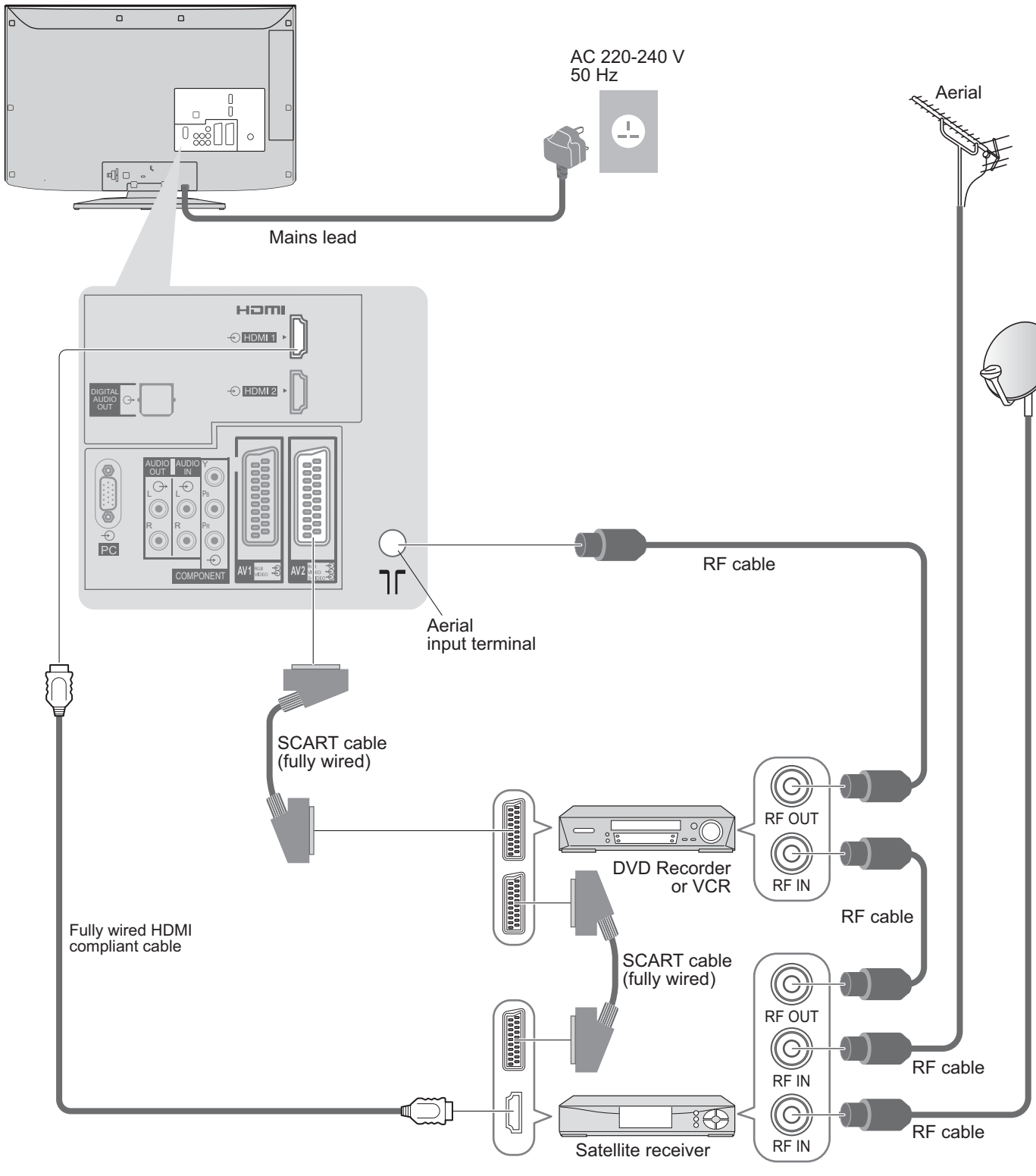
Note

- Connect to the TV"s AV2 for a DVD Recorder / VCR supporting Q-Link (p. 54).
- Connect to the TV"s AV1 for a Satellite Receiver.
- For HDMI-compatible equipment, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 60).
- Q-Link connection ➡ p. 52
- VIERA Link connection ➡ p. 52 and p. 53
- Read the manual of the equipment too.

Example 3
Connecting DVD Recorder / VCR and Satellite receiver

TV, DVD Recorder / VCR and Satellite receiver

Rear of the TV



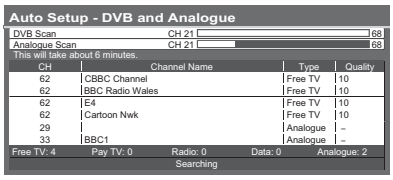
Auto Setup

Search and store TV channels automatically.

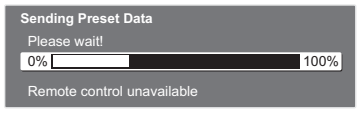
- These steps are not necessary if the setup has been completed by your local dealer.
- Please complete connections (p. 10 and p. 11) and settings (if necessary) of the connected equipment before starting Auto Setup. For details of settings for the connected equipment, read the appropriate manual.

1 Plug the TV into mains socket and switch On

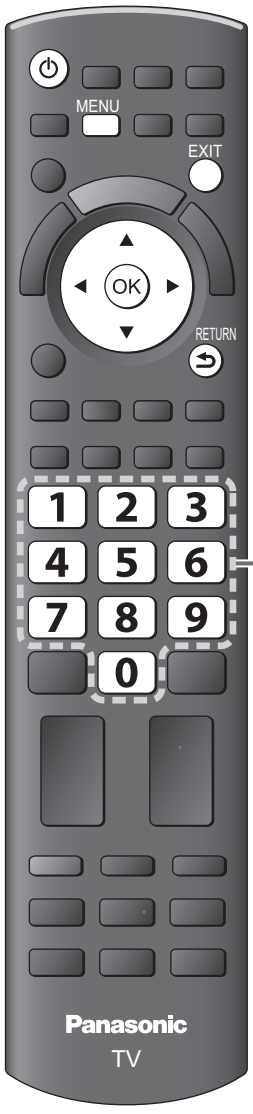
(Takes a few seconds to be displayed)



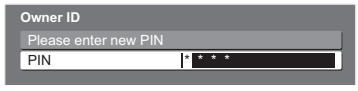
- Auto Setup will start to search for TV channels and store them in the numbered order as specified by the broadcasters.



- If Q-Link, or similar technology (p. 54), compatible recorder with analogue tuner is connected, analogue channel setting is automatically downloaded to the recorder. (Digital channel setting is not downloaded.)
- If downloading has failed, you can download later through the Setup Menu.
  ➡ “Q-Link Download” (p. 32)



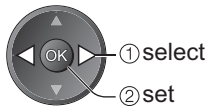
2 Input Owner ID



Please enter your own choice of PIN number, name, etc. to help the police to crack crime.

- Make a note of the PIN number in case you forget it.
- You can skip this step and input the Owner ID later.
  ➡ “Owner ID” (p. 43)

3 Select “Home”



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

- To check channel list at-a-glance
  ➡ “Using TV Guide” (p. 18)
- To edit channels
  ➡ “Tuning and Editing Channels” (p. 36 - 39)

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

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

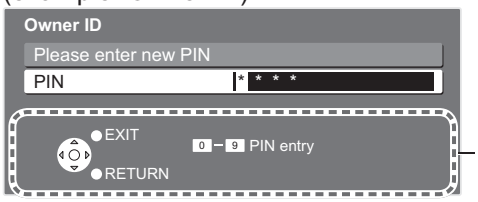
RETURN — Return to the previous menu

MENU — Open the main menu

EXIT — Exit the menu system and return to the normal viewing screen

■ ON SCREEN HELP Instructions box - Operation guide

(example: Owner ID)



Operation guide will help you.

Note

- If tuning has failed ➡ “Auto Setup” (p. 34 and p. 35)
- To initialize all settings ➡ “Shipping Condition” (p. 41)
- 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.

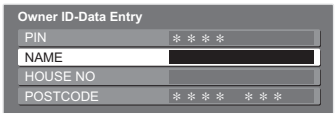
■ How to input Owner ID

Enter the PIN number (4 digits)

1 2 3 4 5 6 7 8 9 0

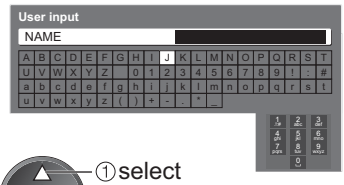
- Enter the PIN number twice at first setting.

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



①select ②access

Set characters one by one



①select ②set

- You can set characters by using numeric buttons.
  ➡ “Characters table for numeric buttons” (p. 63)

Return to select other items

RETURN

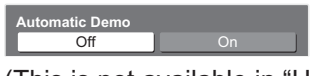
or

Exit the menu to go to next step

EXIT

■ “Shop” mode (for shop display use only)

Automatic Demo Off / On selection screen is displayed.



(This is not available in “Home” mode)

You can change the viewing environment at this stage

RETURN

Select “Home”

①select ②set

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. 70), and Auto Setup will be complete.
- 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. 41)

How to Use VIERA TOOLS

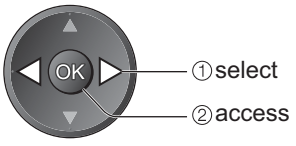
You can access some special features easily by using the VIERA TOOLS function.

- 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. 52 and p. 53), “Preparations” (p. 55)
  After connection, turn the equipment on and then switch the TV on.

1 Display icons of the feature

VIERA TOOLS

2 Select a feature



3 Follow the operations of each feature

- VIERA Link Control ➡ “VIERA Link Control” (p. 58)

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 ➡ “Pause Live TV” (p. 57)

- Slideshow ➡ “Slideshow” (p. 49)

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

- Photos ➡ “Photo View” (p. 48)

- Movies ➡ “Movie View” (p. 50 - p. 51)

■ To return to TV

EXIT

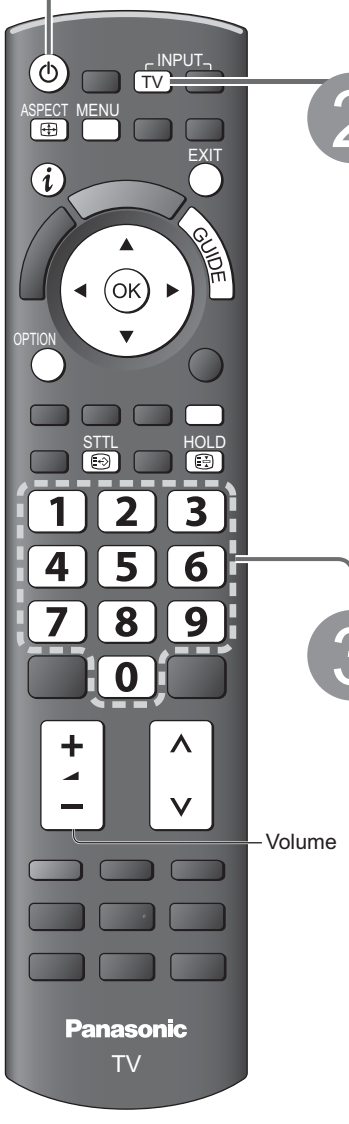
➡

■ To remove icons

➡ VIERA TOOLS

Watching TV

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



1 Turn power on

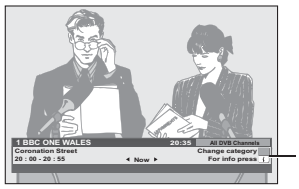
(Press for about 1 second)

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

2 Select the mode (DVB or Analogue)

TV

- Also possible to select the mode 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 channel

- For details ➡ p. 16

3 Select a channel

up / down or 1 2 3 / 4 5 6 / 7 8 9 / 0

DVB channel position numbers run from 1 onwards.
Analogue channel position numbers run in the ranges 0 - 99.

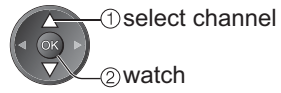
- To select a two or three-digit channel position number, e.g. 39
  ➡ 3 ➡ 9

■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

While the banner is displayed, select the channel



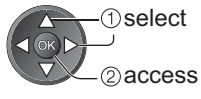
- Possible to set display timeout in "Banner Display Timeout" (p. 33).

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

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

Display TV Guide

Select the programme now on the air



Select "View"

Note

- To watch pay-TV
  ➡ "Common Interface" (p. 43)

■Other useful functions

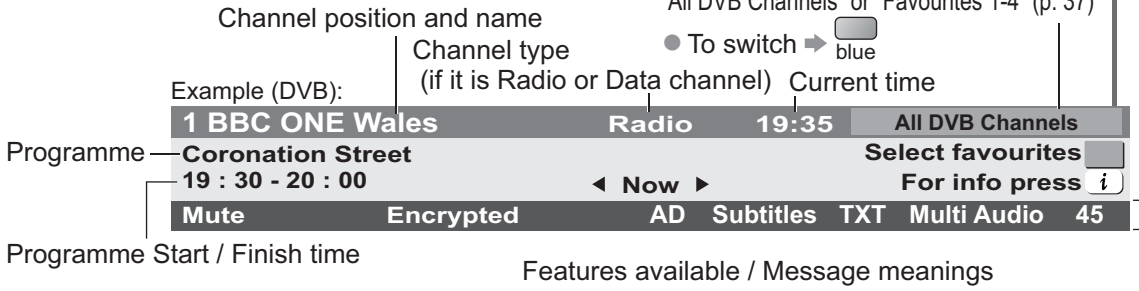
Hold	
Freeze / unfreeze picture	HOLD

Watching TV

Display Information banner

Display Information banner

- Also appears when changing a channel



Features available / Message meanings

Mute
Sound mute On

Bad signal
Poor TV signal quality

Encrypted
Scrambled programme

AD
Audio Description service available
- This function can aid visually-impaired viewers by adding an additional audio track to describe events on-screen.
- For settings ➡ p. 31

Subtitles
Subtitle service available

TXT
Teletext service available

Multi Audio
Multiple audio available

Stereo, Mono, NICAM
Audio mode

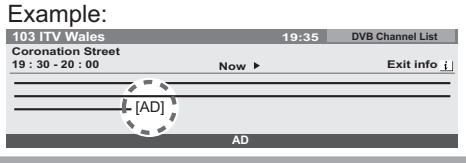
1 - 90
Off Timer remaining time
- For settings ➡ p. 17

Example (Analogue):

Channel number

- To confirm another tuned channel name ➡ OK
- To watch the channel listed in the banner ➡ OK
- To hide ➡ EXIT
- Information on the next programme ➡ OK (DVB)
- To set display timeout ➡ "Banner Display Timeout" (p. 33)
- Extra information ➡ i (press again to hide the banner) (DVB)
- "AD", "Subtitle", "TXT", "Multi Audio" indications are displayed as available on particular programmes, but may not be available for all individual programmes being broadcast.
  Display the extra information to confirm availability of these functions.

Example:



Display subtitles

■ DVB mode

Display / hide subtitles (if available) STTL

- To change the language for digital channel (if available) ➡ "Preferred Subtitles" (p. 33)

■ Analogue mode

Display subtitles STTL

- To hide subtitles ➡ EXIT

Note

- This is the same as switching to Analogue teletext service and selecting "P888" (subtitle service). (p. 23)
- You cannot change the channel when this function is active.

Aspect

Change the aspect ratio (image size)

ASPECT

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. 62).

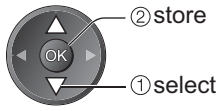
■ If you would like to change the aspect ratio manually

Display Aspect Selection list

ASPECT

Aspect Selection list

While the list is displayed, select the mode



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

Auto

The best ratio is chosen and the image expanded to fill the screen.
For details ➡ p. 62

16:9

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

4:3

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

Zoom2

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

14:9

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

Zoom1

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

Zoom3

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

Note

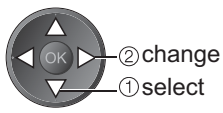
- Only “16:9” and “4:3” are available in PC input mode.
- Not available when the subtitle function is active.
- Not available in teletext service.
- Aspect mode can be memorized separately for SD (Standard definition) and HD (High definition) signals.

Display the selectable settings for the current programme

Check or change the current programme status instantly

OPTION

● To change ➡



Multi Audio (DVB mode)
Allows you to select between alternative language for sound tracks (if available)

Subtitle Language (DVB 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).

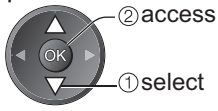
Off Timer

Turn the TV off automatically after a fixed period

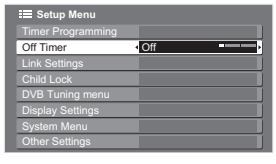
Display the menu

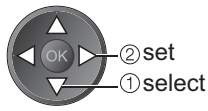
MENU

Select “Setup”



Select “Off Timer” and set the time





- To cancel ➡ Set to “Off” or turn the TV off.
- To display the remaining time ➡ Information banner (p. 16)

Note

- 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.

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 listings. “D” means DVB channel and “A” means Analogue channel.

1 Select DVB or Analogue

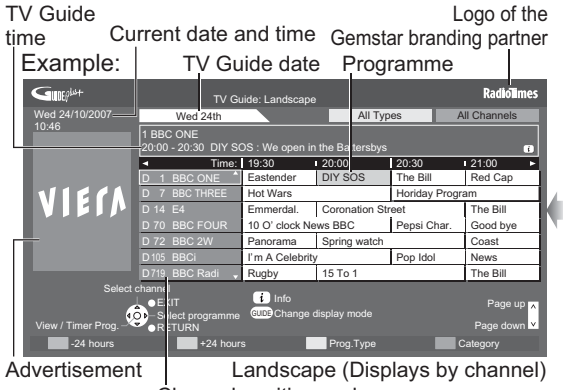
➡ p. 15

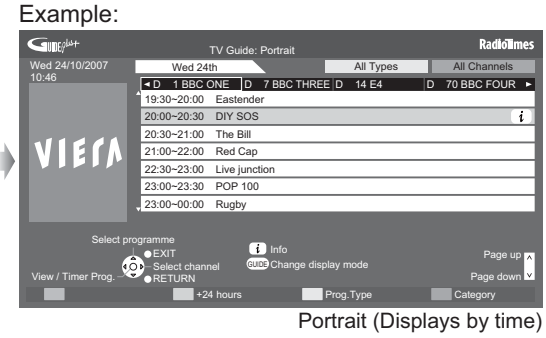
TV

2 View TV Guide

GUIDE

- To change the layout (Landscape / Portrait) ➡ GUIDE
  view “Landscape” to see many channels
  view “Portrait” to see one channel at a time

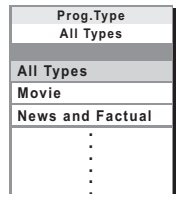




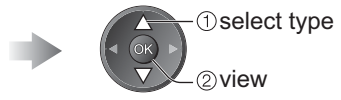
■ **To the previous day** (DVB mode)
➡ red

■ **To the next day** (DVB mode)
➡ green

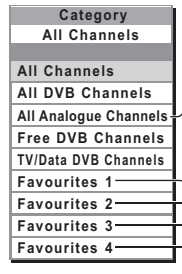
■ **To view a channel list of the selected type** (DVB mode)
➡ yellow



(Type list)

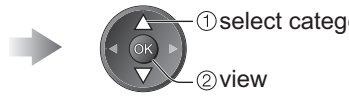


■ **To view a channel list of the selected category**
➡ blue



(Category list)

Only Analogue channels are listed



To list favourite channels ➡ p. 37

■ **To return to TV**
EXIT
➡

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.

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.

■ To change advertisements

➡ OK

■ To return to TV Guide

➡ OPTION or RETURN

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.

■ **Other useful functions** (Operate whilst viewing TV Guide)

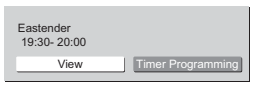
Watch the programme

Select the current programme or channel

OK ①select ②access

Select “View”

OK ①select ②watch



- Timer Programming
  ➡ see below

(TV screen)

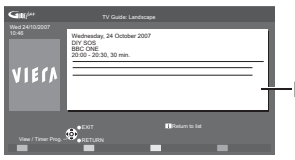
View details of the programme (DVB mode)

Select the programme

OK select

View details

ⓘ



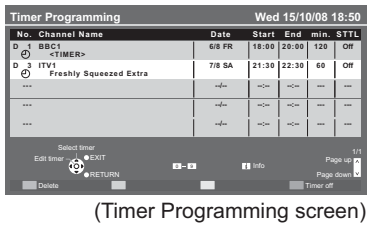
■ To return to the start page

➡ ⓘ

Timer Programming (DVB mode)

Select the forthcoming programme to output to external recorder

OK ①select ②set



(Timer Programming screen)

Timer LED will turn on if Timer Programming is set.

- Orange Timer LED (Blinking during timer active)

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. 54) 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.

■ To check / change / cancel a Timer Programming event

➡ “Timer Programming” (p. 45)

■ To return to TV Guide

➡ RETURN

Using TV Guide

■ **Other useful functions** (Operate whilst viewing TV Guide)

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

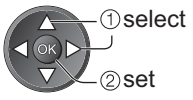
Guide link recording is a timer programme controlled by information from the TV Guide.

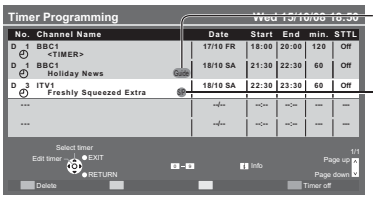
Programme start and end times may be changed by broadcasters and sent to the TV for timer programme to follow the change.

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



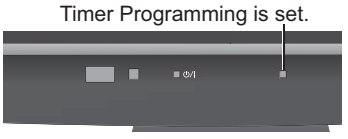


(Timer Programming screen)

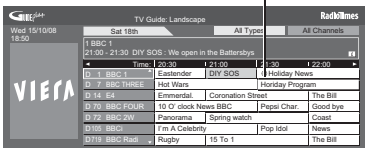
"Guide" is displayed if the timer is set from the TV Guide

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

Timer LED will turn on if Timer Programming is set.



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



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

➡ "Timer Programming" (p. 45)

- 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 ➡ RETURN

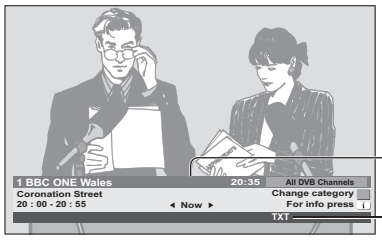
Note

- Not available in Analogue 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.



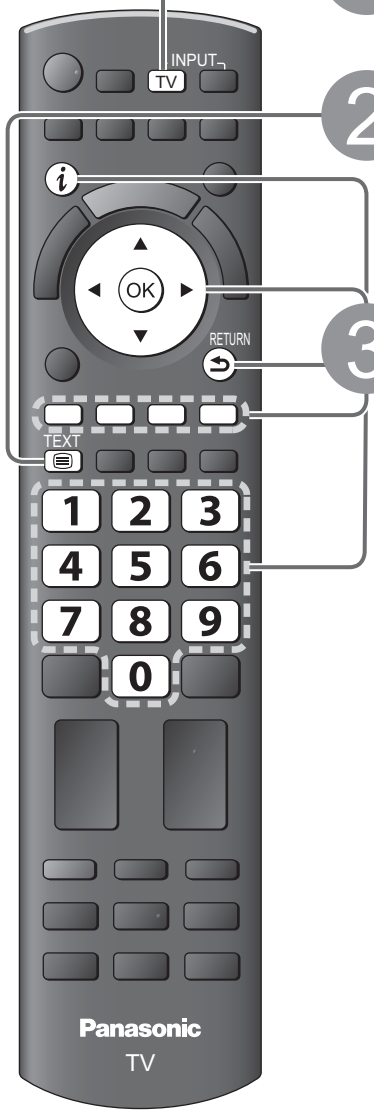
Information banner (p. 16)

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.



1 Select DVB

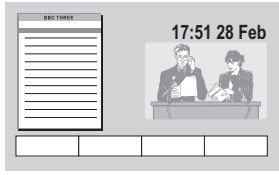
➡ p. 15

TV

- DVB programmes have digital teletext services (MHEG).

2 Switch to Teletext

TEXT



3 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
- When “◄”, “►”, “▲”, “▼” symbol is displayed ➡
- When “back key” is displayed ➡ RETURN
- When the key words are displayed on colour bar ➡ red green yellow blue
- When options with numbers are displayed ➡ 1 2 3 / 4 5 6 / 7 8 9 / 0
- When “i” is displayed ➡ i (information)

■ **To return to TV** ➡ TEXT

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

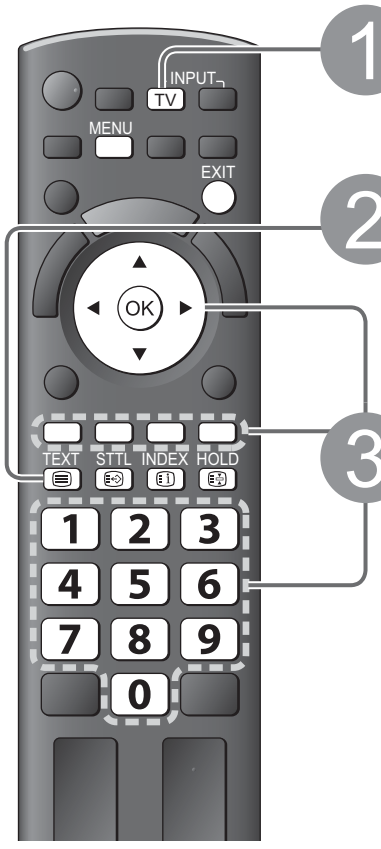
Analogue teletext

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

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.

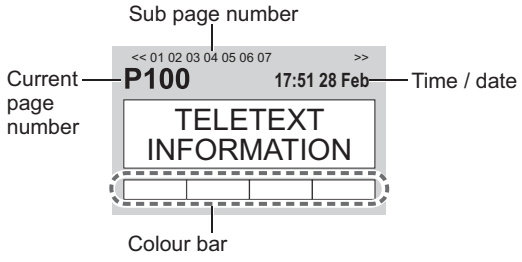
What is List mode?
In List mode, four differently coloured page numbers are situated at the bottom of the screen. Each of these numbers can be altered and stored in the TV's memory. ("Store frequently viewed pages", p. 23)

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



1 Select Analogue
➡ p. 15
TV

2 Switch to Teletext
TEXT
- Displays the index page (content varies depending on the broadcasters)



3 Select the page
1 2 3 / 4 5 6 / 7 8 9 / 0 or OK (up / down) or red green yellow blue (Corresponds to the colour bar)

■ **To adjust contrast** ➡ MENU (Press twice) ➡ As the blue bar is displayed, OK

■ **To return to TV** ➡ EXIT

Reveal hidden data

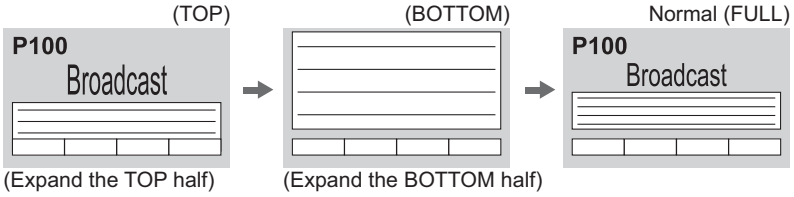
Reveal hidden words e.g. quiz page answers

MENU ➡ red

■ **Re-hide** ➡ red

FULL / TOP / BOTTOM

MENU ➡ red



(Expand the TOP half) (Expand the BOTTOM half)

HOLD

Stop automatic updating
(If you wish to hold the current page without updating)

HOLD

■ **To resume** ➡ HOLD

INDEX

Return to the main index page

INDEX

Subtitles

View a favourite page stored

STTL

- 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

TEXT

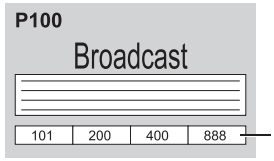
- Operations can be made only in Teletext screen.
- Each time pressed: Teletext → TV and Teletext → TV → Teletext

Store frequently viewed pages

Store frequently viewed pages in the colour bar

(List mode only)

As page is displayed → Corresponding coloured button → OK press and hold



The number changes to white.

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

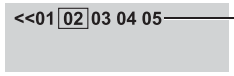
■ To change stored pages

Coloured button you want to change → Enter new page number (1 2 3 / 4 5 6 / 7 8 9 / 0) → OK press and hold

View sub page

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

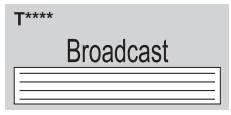
OK



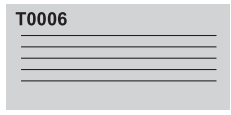
Appears at top of the screen

■ To view specific sub page

MENU → blue



Enter the 4-digit number
example: P6 (0 0 0 6)



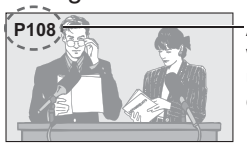
- Sub pages:
  The number of sub pages varies depending on the broadcasters (up to 79 pages).
  It may take some time for searching, during which time you can watch TV.

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.

MENU → yellow → Changes to TV screen temporarily



Appears when updating is completed

(You cannot change the channel.)

→ View the updated page → yellow

- 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. 10 - p. 11 and p. 60 - p. 61
The Remote Control is capable of operating some functions of selected external equipment.

1 Turn the TV on

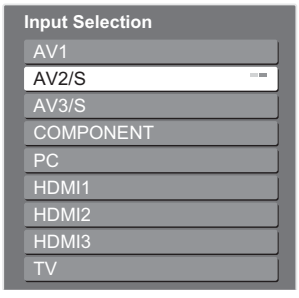
■ **When connecting with SCART as example 2 or 3** (p. 10 and p. 11)
➡ Receives input signals automatically when playback starts
● Input signals are automatically identified by the SCART (pin 8) terminal.
● This function is also available for HDMI connections (p. 60 - p. 61).

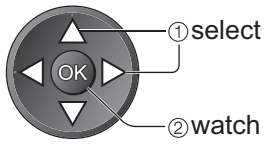
■ **If input mode is not switched automatically**
➡ Perform 2 and 3
● Check the setup of the equipment.

2 Display the Input select menu

AV

3 Select the input mode connected to the equipment

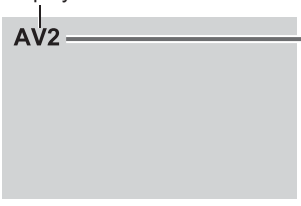




● You can also select the input using the AV button on the remote control or the side panel of the TV.
Press the button repeatedly until the desired input is selected.
● In order to switch between AV2/AV3 and AV2S/AV3S, move the indicator by pressing left and right cursor button.
● You can label or skip each input mode ➡ “Input Labels” (p. 46)
Skipped inputs will not be displayed when the AV button is pressed.

4 View

Displays the selected mode



■ **To return to TV**
➡ 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
Manual input (default setting in "Input Labels")	AV1 AV1-RGB	AV2 AV2-S-Video AV2-RGB	AV3 AV3-S-Video	COMPONENT	PC	HDMI1	HDMI2	HDMI3
Auto input (EC mode or VIERA Link)	EC/AV1 EC/AV1-RGB	EC/AV2 EC/AV2-S-Video EC/AV2-RGB	—	—	—	EC/HDMI1 ● Applicable for EC mode and VIERA Link	EC/HDMI2 ● Applicable for VIERA Link	EC/HDMI3 ● Applicable for VIERA Link

● 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.

	Standby Set to Standby mode / Turn on
	Play Playback videocassette / DVD
	Stop Stop the operations
	Rewind / Skip / Search VCR: Rewind, view the picture rapidly in reverse DVD: Skip to the previous track or title Press and hold to search backward
	Fast-forward / Skip / Search VCR: Fast-forward, view the picture rapidly forward DVD: Skip to the next track or title Press and hold to search forward
	Pause Pause / Resume DVD: Press and hold to play at slow speed
	Channel Up / Down Select channel
	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.
If you operate the connected equipment in VIERA Link (p. 58), select the code 73.

Press and hold ⏻ during the following operations

Enter the appropriate code, see table below ➡ Press ■

Type of the equipment	Code
DVD Recorder, DVD Player	70 (default)
Player theatre, Blu-ray Disc theatre	71
VCR	72
The equipment using in VIERA Link ➡ "VIERA Link Control" (p. 58)	73

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

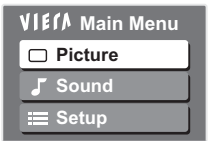
Various menus allow you to make settings for the picture, sound, and other functions.

1 Display the menu

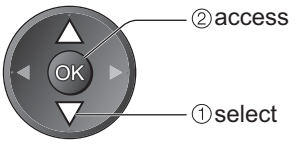
MENU

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

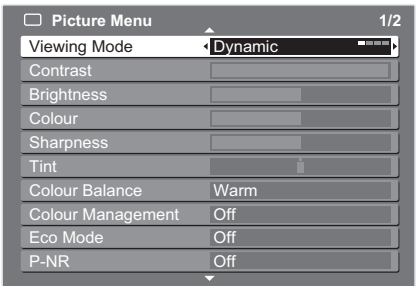
2 Select the menu



(example: Picture Menu)

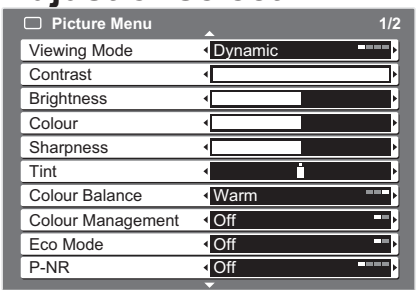


3 Select the item

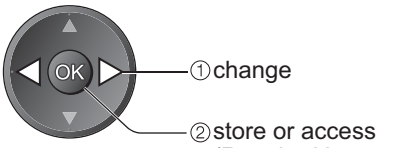


(example: Picture Menu)

4 Adjust or select



(example: Picture Menu)



■ To return to TV at any time

EXIT

■ To return to the previous screen

RETURN

■ To change menu pages

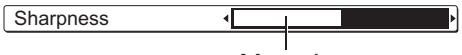
up / down

■ Choose from among alternatives

Number and positions of alternatives

Changed

■ Adjust using the slide bar



Moved

■ Go to the next screen

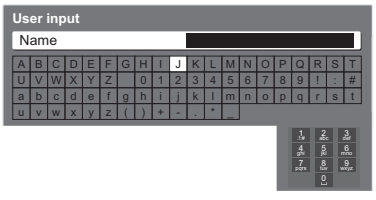
Displays the next screen

■ To reset the settings

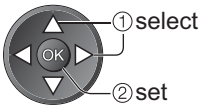
- To reset the picture settings only
  ➡ "Reset to Defaults" in the Picture Menu (p. 30)
- To reset the sound settings only
  ➡ "Reset to Defaults" in the Sound Menu (p. 31)
- To reset the picture and sound settings together
  ➡ N (Also volume level and aspect mode are reset)
- To initialize all settings
  ➡ "Shipping Condition" in the Setup Menu (p. 41)

■ Enter characters by free input menu

You can enter names or numbers freely for some items.



Set characters one by one



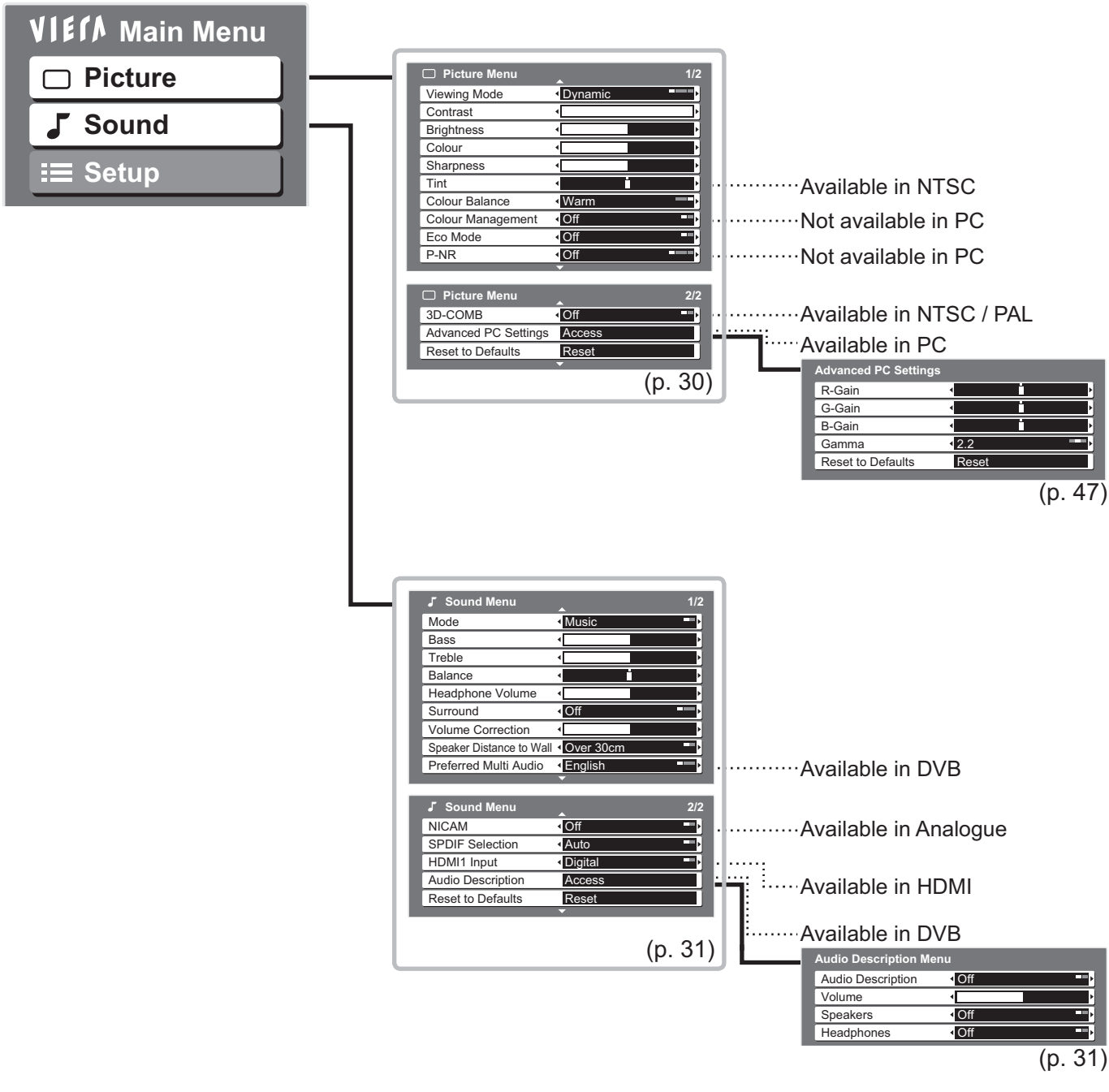
Store

RETURN

- You can set characters by using numeric buttons.
  ➡ "Characters table for numeric buttons" (p. 63)

■ **Overview** (Picture, Sound)

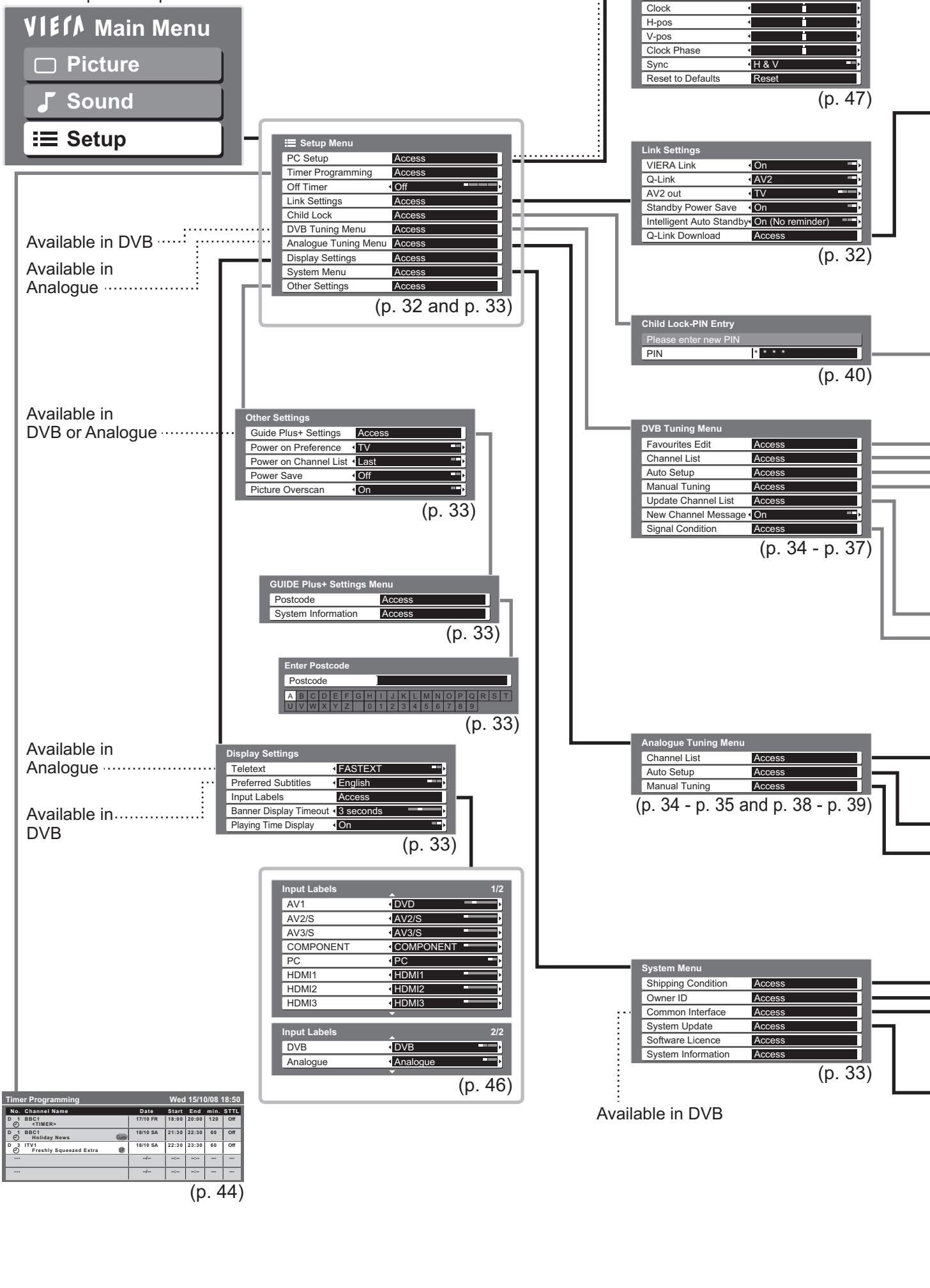
● How to operate ➡ p. 26

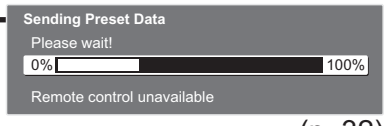


How to Use Menu Functions

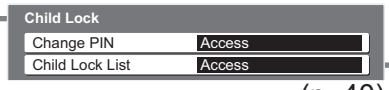
■ **Overview** (Setup)

● How to operate ➡ p. 26

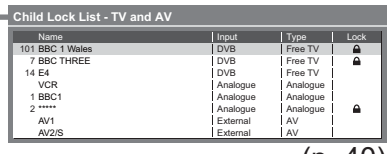




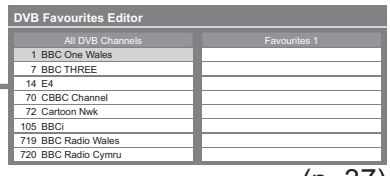
(p. 32)



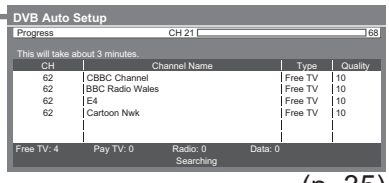
(p. 40)



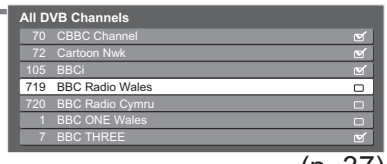
(p. 40)



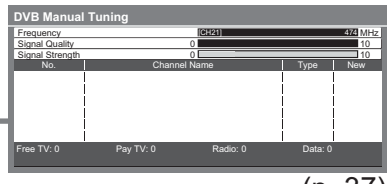
(p. 37)



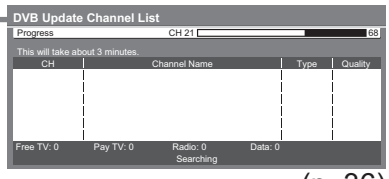
(p. 35)



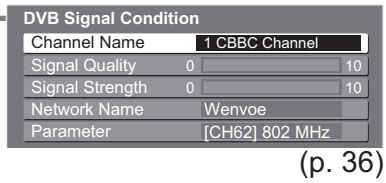
(p. 37)



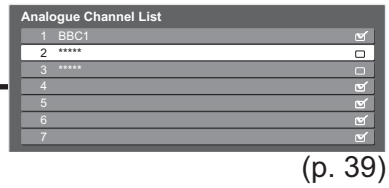
(p. 37)



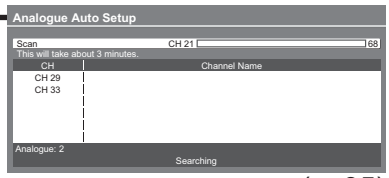
(p. 36)



(p. 36)

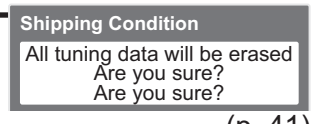


(p. 39)

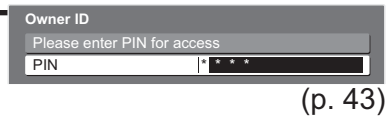


(p. 35)

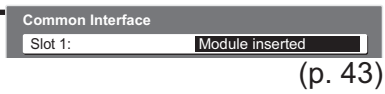
(p. 39)



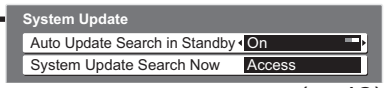
(p. 41)



(p. 43)



(p. 43)



(p. 42)

How to Use Menu Functions

■ Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Picture	**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
	Colour Balance	Allows you to set the overall colour tone of the picture **(Cool / Normal / Warm)**
	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)
Sound	**Mode**		Select two different sound settings **(Music / Speech)** In each Sound Mode setting, Bass and Treble can be adjusted and stored to suit your particular sound requirement ● Changes to any settings in a mode will affect all signal sources ● Sound quality can be improved
	Bass		Increases or decreases level to enhance or minimise lower, deeper sound output
	Treble		Increases or decreases level to enhance or minimise sharper, higher sound output
	Balance		Adjusts volume level of right and left speakers
	Headphone Volume		Adjusts the volume of the headphones
	Surround		Surround sound settings **(Off / 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).
	Volume 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.
	Preferred Multi Audio		Selects the preferred language for digital channel multi audio (depending on the broadcaster)
	NICAM		NICAM (Near Instantaneous Companded Audio Multiplex) A format for digital sound over television Reproduces stereo sound **(Off / On)** ● Off if reception is poor (FM monaural sound) ● Analogue mode only
	SPDIF Selection		Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT terminal **(Auto / PCM)** Auto : Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM. PCM : Digital output signal is fixed to PCM. ● Movie View mode only
	HDMI1 / 3 Input		Select to fit the input signal **(Digital / Analogue)** (p. 64) 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 ● DVB mode only ● The availability of audio description sound track is indicated by “AD” in the information banner (p. 16).
		Volume	Adjusts the volume for Audio Description ● DVB mode only
		Speakers	Set to “On” to activate the description sound track from TV speakers **(Off / On)** ● DVB mode only
		Headphones	Set to “On” to activate the description sound track from headphones **(Off / On)** ● DVB mode only
	Reset to Defaults		Press the OK button to reset the present Sound Mode to the default settings ● Effective to Bass, Treble, Balance, Headphone Volume and Surround

● A different menu will be displayed while PC or SD Card is used. (p. 47 and p. 48)
● Only available items can be selected.

How to Use Menu Functions

■ Menu list

Menu	Item		Adjustments / Configurations (alternatives)
Setup	**Timer Programming**		Records forthcoming channels (p. 44)
	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. 55)
		Q-Link	Selects which AV terminal is to be used for data communication between this TV and a compatible recorder **(AV1 / AV2)** (p. 54) ● 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. 56) ● 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. 56) ● 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
	Child Lock		Locks a channel / AV input to prevent access to it (p. 40)
	DVB Tuning Menu	**Favourites Edit**	Creates list of favourite DVB channels (p. 37)
		Channel List	Skips the unwanted DVB channels or edits DVB channels (p. 37)
		Auto Setup	Automatically sets the DVB channels received in the area (p. 34 and p. 35)
		Manual Tuning	Sets the DVB channels manually (p. 37)
		Update Channel List	Updates DVB Channel List with keeping your settings (p. 36)
		New Channel Message	Selects whether to give a notification message when a new DVB channel is found (p. 36)
		Signal Condition	Checks the DVB signal condition (p. 36)
	Analogue Tuning Menu	**Channel List**	Skips the unwanted Analogue channels or edits Analogue channels (p. 39)
		Auto Setup	Automatically sets the Analogue channels received in the area (p. 34 and p. 35)
		Manual Tuning	Sets the Analogue channels manually (p. 39)

Menu	Item		Adjustments / Configurations (alternatives)
Setup	Display Settings	**Teletext**	Analogue teletext display mode **(FASTEXT / List)** (p. 22)
		Preferred Subtitles	Selects the preferred language for digital channel subtitles (depending on the broadcaster) ● To display subtitles ➡ p. 16
		Input Labels	Labels or skips each input terminal (p. 46)
		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)
		Playing Time Display	Set to “On” to display a continuous record of time spent using Game mode **(Off /On)** ● This function is available when “Game” is selected in “Viewing Mode” (p. 30).
	System Menu	**Shipping Condition**	Resets all settings, for example, when moving house (p. 41)
		Owner ID	Inputs the owner ID (p. 43)
		Common Interface	Uses include to watch pay-TV (p. 43)
		System Update	Downloads new software to TV (p. 42)
		Software Licence	Displays the software licence information
		System Information	Displays the system information of this TV
	Other Settings	GUIDE Plus+ Settings **Postcode**	Sets your postcode to display advertisements in the GUIDE Plus+ system (p. 19)
		GUIDE Plus+ Settings **System Information**	Displays the system information of the GUIDE Plus+ system
		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 SCART terminal, e.g. cable TV box. ● The external equipment must be switched on and sending a control signal for automatic switching at power on to occur.
		Power on Channel List	Automatically selects All Channels or Favourites list in the Information banner (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.
		Power Save	Reduces brightness of picture to economise on power consumption **(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 only) or 16:9. ● This function can be memorized separately for SD (Standard definition) and HD (High definition) signals.

● A different menu will be displayed while PC or SD Card is used. (p. 47 and p. 48)
● 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.
➡”Shipping Condition” (p. 41)

Retuning from Setup Menu

Auto Setup retunes all channels automatically.

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. 40) has been set, it must be entered.

1 Select DVB or Analogue

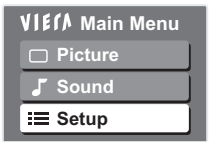
➡ p. 15

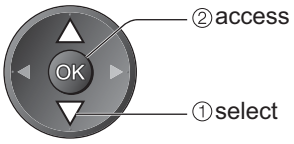
TV

2 Display the menu

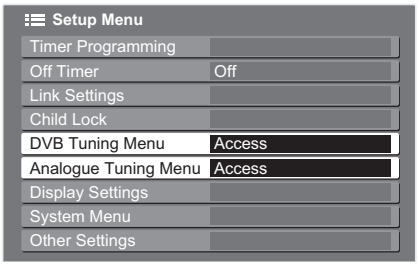
MENU

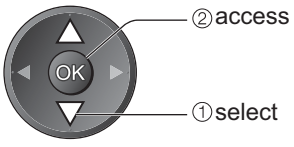
3 Select “Setup”





4 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.

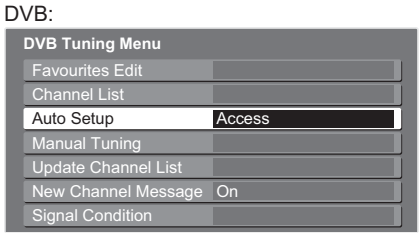
■ To return to TV

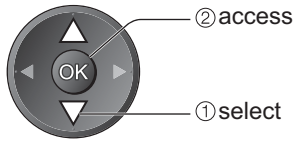
EXIT

DVB or Analogue channels

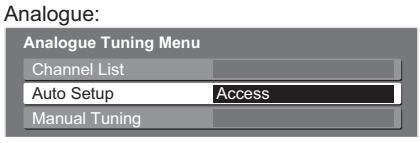
5 Select “Auto Setup”

DVB:



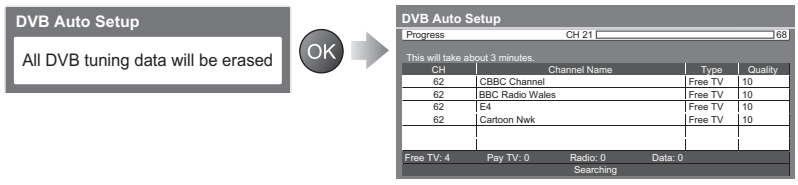


Analogue:

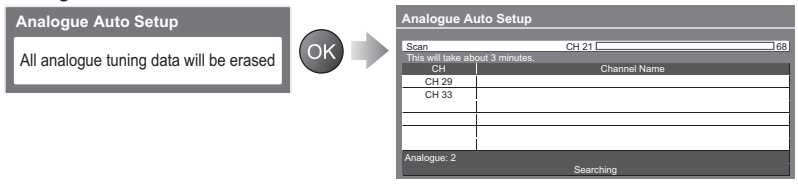


6 Start Auto Setup

DVB:



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.

■ To return to TV

EXIT ➡

■ For Auto Setup, using the buttons on the side panel of the TV (p. 8)

① Press repeatedly until “Auto Setup” appears

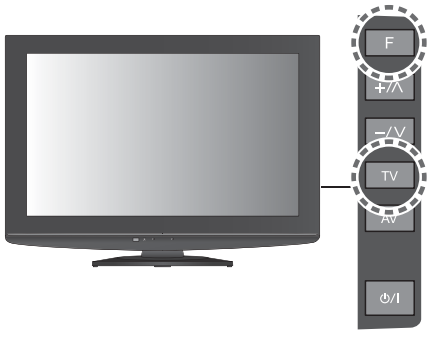
F

② Access “Auto Setup”

TV

③ Start “Auto Setup”

TV



● To return to TV ➡ F

Note

● If tuning has not been done completely ➡ “Manual Tuning” (p. 37 and p. 39)

Tuning and Editing Channels

(DVB)

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

1 Select DVB

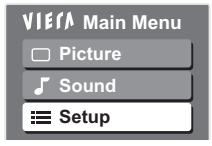
➡ p. 15

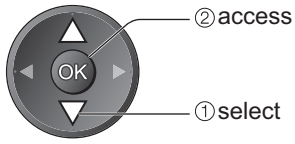
TV

2 Display the menu

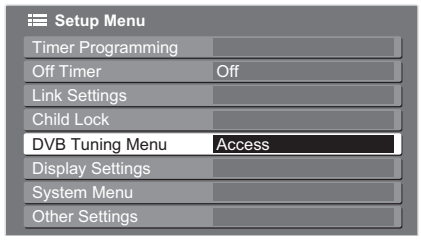
MENU

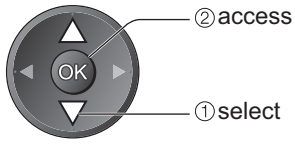
3 Select “Setup”



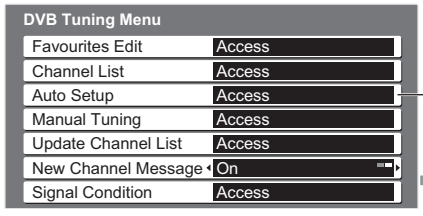


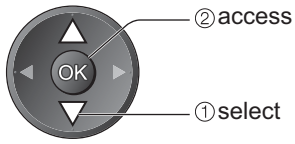
4 Select “DVB Tuning Menu”





5 Select one of the following functions





➡ “Retuning from Setup Menu” (p. 34)

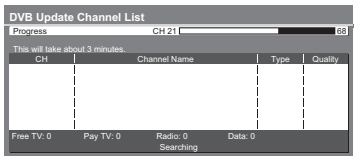
■ **To return to TV**

EXIT ➡

6 Set

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

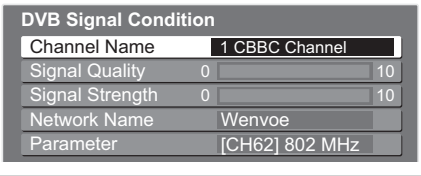
Selects whether to give a notification message when a new DVB channel is found. **(Off / On)**

- 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:

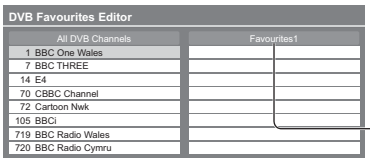
Signal Quality:

- 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 from “Category” in the TV Guide (p. 19).

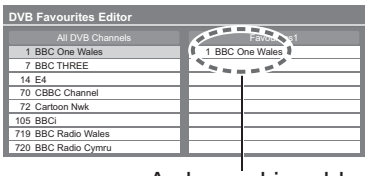
① Select a channel to list



OK → select

- To display other Favourites ➡ green

② Add it to the Favourites list



A channel is added

OK

- To add all channels to the list ➡ yellow

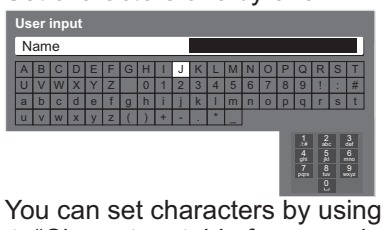
Note

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

■ To edit Favourites list

OK Select the field of Favourites to edit and:

- To delete the channel ➡ OK
- To delete all channels ➡ yellow
- To name the Favourites ➡ red ➡ Set characters one by one



①select ②set ➡ Store RETURN

You can set characters by using numeric buttons.
➡ “Characters table for numeric buttons” (p. 63)

- To move the channel ➡ green ➡ Select the new position ➡ Confirm green

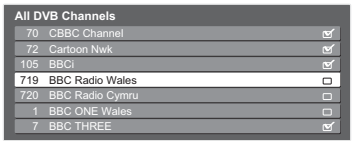
③ Store

RETURN → OK

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



OK → ②reveal / hide, ①select

☑: reveal
☐: hide (skip)

- To reveal all channels ➡ yellow

■ To edit channels

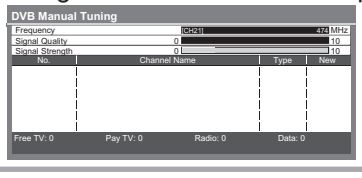
You can also edit each channel in Channel List.

OK Select a channel to edit and:

- To retune each channel (Manual Tuning) ➡ red (see below)
- To swap the channel position ➡ green ➡ Enter the new position number 1 2 3 / 4 5 6 / 7 8 9 / 0 ➡ Store green

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.



OK → ①select frequency, ②search

- 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.

1 Select Analogue

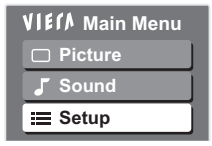
➡ p. 15

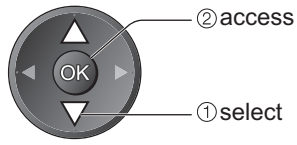
TV

2 Display the menu

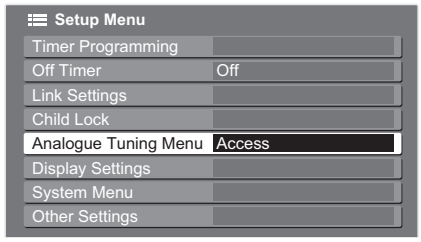
MENU

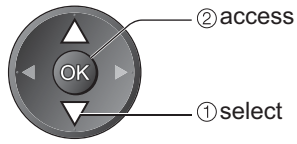
3 Select “Setup”



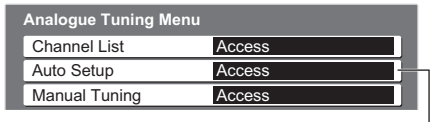


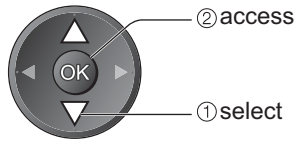
4 Select “Analogue Tuning Menu”





5 Select one of the following functions





➡ “Retuning from Setup Menu” (p. 34)

6 Set

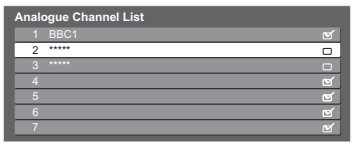
■ **To return to TV**

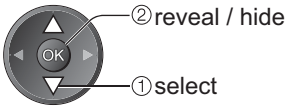
EXIT

Skip unwanted Analogue channels, Edit Analogue channels **Channel List**

You can hide unwanted Analogue channels.
The hidden channels cannot be displayed except in this function. Use this function to skip unwanted channels.

Select a channel and reveal / hide





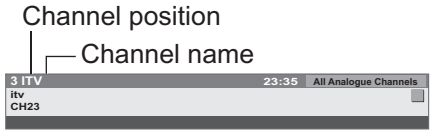
☑: reveal
☐: hide (skip)

● To reveal all channels ➡ yellow

■ To edit channels

You can also edit each channel in Channel List.

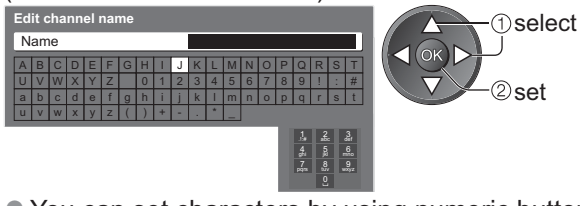
Select a channel to edit and:



● To retune each channel (Manual Tuning) ➡ red (see below)

● To move the channel position ➡ green ➡ Select the new position ➡ Store green

● To rename the channel name ➡ blue ➡ Set characters one by one (maximum: five characters) ➡ Store



RETURN

● You can set characters by using numeric buttons.
➡ “Characters table for numeric buttons” (p. 63)

Note

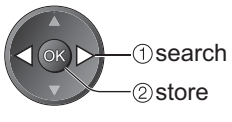
● If a VCR is connected only with the RF cable, edit “VCR”.

Set Analogue channel manually **Manual Tuning**

Set Analogue channel manually after Auto Setup.

● If a VCR is connected only with the RF cable, select channel position “0”.

Select the channel position ➡ Select the channel ➡ Search and store



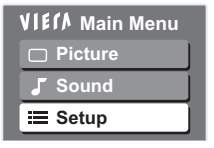
Child Lock

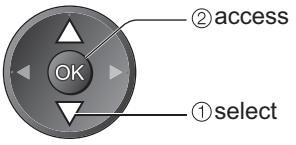
You can lock specific channels / AV input terminals and control who watches them.
When the locked channel / input is selected, a message appears; by entering the PIN number, you can watch it.

1 Display the menu

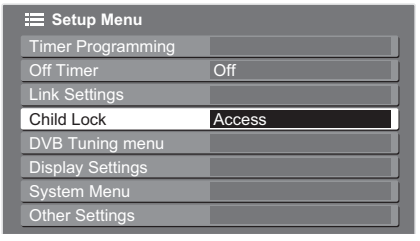
MENU

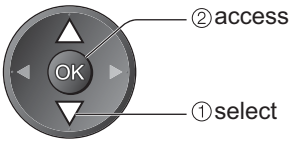
2 Select “Setup”





3 Select “Child Lock”





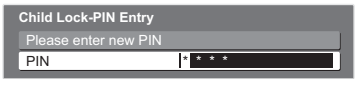
4 Set

■ **To return to TV**

EXIT

Control channel audience — Child Lock

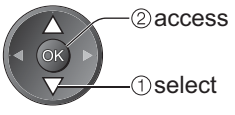
① Enter the PIN number (4 digits)



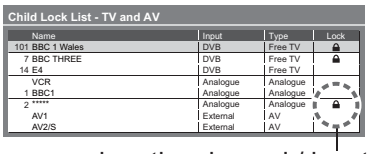
1 2 3
4 5 6
7 8 9
0

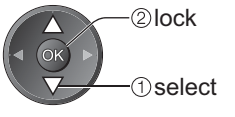
- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

② Select “Child Lock List”



③ Select the channel / input to be locked



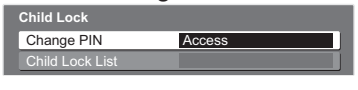


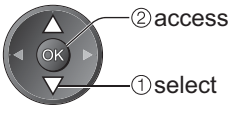
Appears when the channel / input is locked

- To cancel ➡ Select the locked channel / input ➡ OK
- To jump to the top of the next input ➡ red
- To lock all ➡ green
- To cancel all locks ➡ yellow

■ To change the PIN number

Select “Change PIN”





Enter a new PIN number twice

1 2 3
4 5 6
7 8 9
0

Note

- Setting “Shipping Condition” (p. 41) erases the PIN number and all settings.

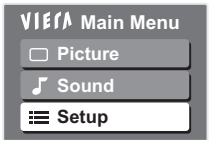
Shipping Condition

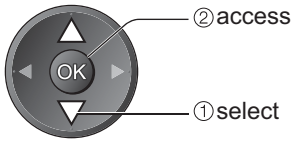
Resets the TV to its original condition, i.e. no channels tuned in.
All settings other than “Owner ID” are reset (channels, picture, sound settings, etc.).

1 Display the menu

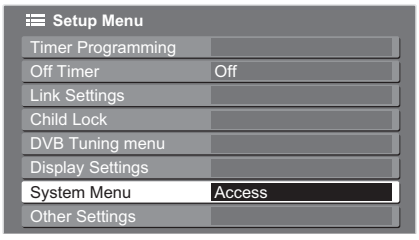
MENU

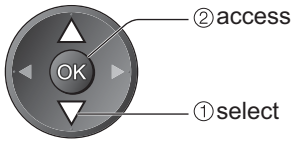
2 Select “Setup”



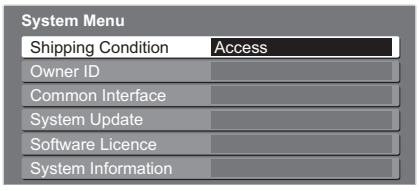


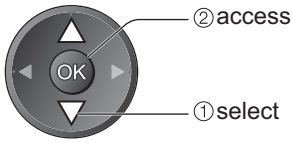
3 Select “System Menu”





4 Select “Shipping Condition”





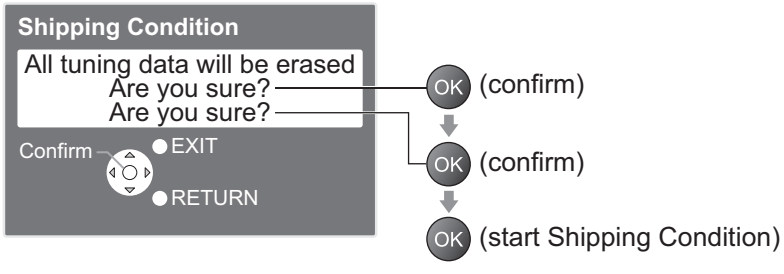
■ **To return to TV**

EXIT

5 Set

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.

1 Select DVB or Analogue

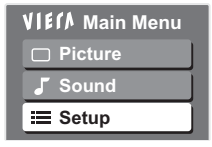
➡ p. 15

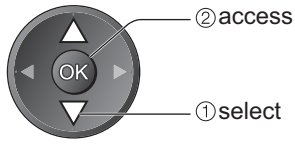
TV

2 Display the menu

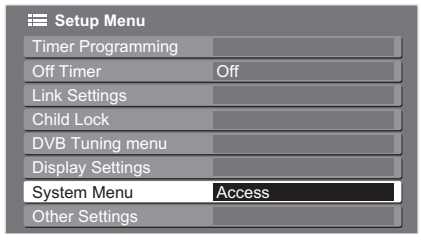
MENU

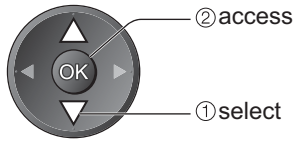
3 Select “Setup”



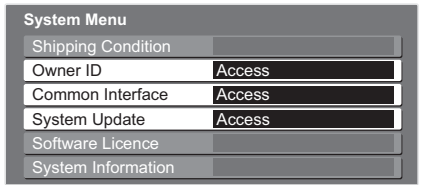


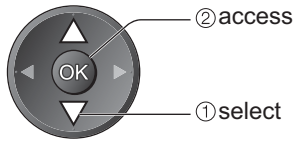
4 Select “System Menu”





5 Select one of the following functions





- “Common Interface” is available in DVB mode only.

■ To return to TV

EXIT

6 Set

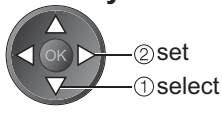
Update TV’s software system — System Update

Download new software to TV.

- For details ➡ p. 65

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

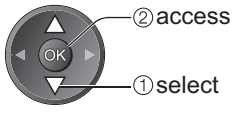
Select “Auto Update Search in Standby” and then set “On” or “Off”



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

■ To update immediately

Select “System Update Search Now”



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

Download

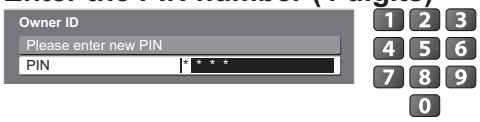
OK

- Download may take for about 60 mins.

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.

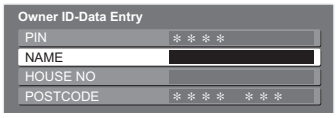
① **Enter the PIN number (4 digits)**

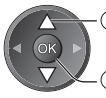


- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it.

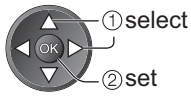
② **Enter your name, address, and postcode, in that order**

Select NAME / HOUSE NO / POSTCODE





Set characters one by one



- You can set characters by using numeric buttons.
  ➡ "Characters table for numeric buttons" (p. 63)

Return to select other items

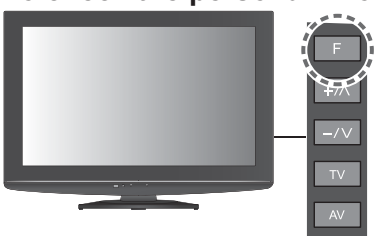
RETURN

or

Exit the menu

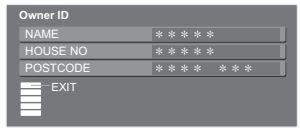
EXIT

■ To check the personal information stored



Hold down for about 6 sec.

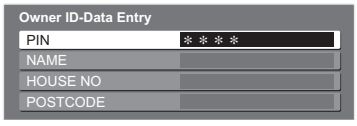
F

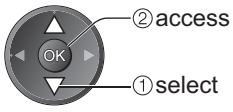


- The PIN number is not displayed.

■ To change the PIN number

Select "PIN"





Enter a new PIN number twice

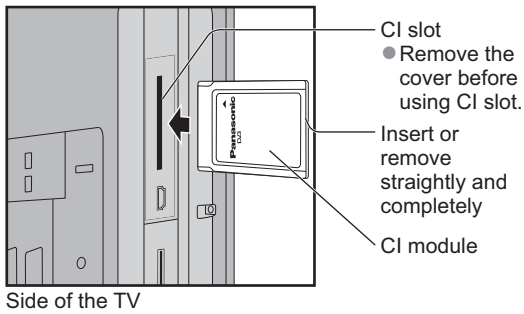
1 2 3
4 5 6
7 8 9
0

Pay-TV **Common Interface**

The Common Interface Module menu provides access to software contained on Common Interface (CI) Modules.
This TV receiver works only Pay TV modules complying with CI standard.

Caution

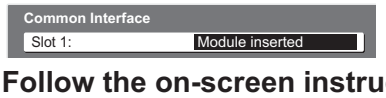
- Turn Off Mains power On / Off switch whenever inserting or removing the CI module.
- If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
- Do not insert the module up side down.



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"**



OK

③ **Follow the on-screen instructions**

example: select, go ➡ OK ◀▶▼▲ ➡

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

Coloured characters ➡ red green yellow blue

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. 54), and setup / connection are done completely (p. 52 and p. 54), 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.

1 Select the mode you want to set a recording

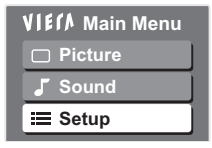
➡ p. 15

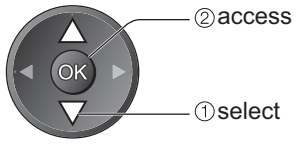
TV

2 Display the menu

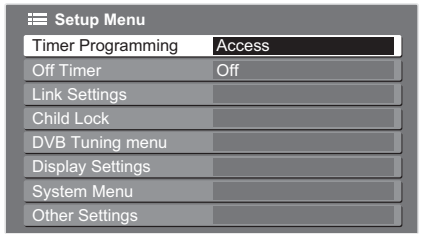
MENU

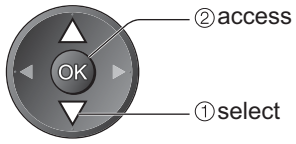
3 Select “Setup”





4 Select “Timer Programming”





5 Set

6 Store

OK

■ **To return to TV**

EXIT

■ **To stop recording**

GUIDE → EXIT

Caution

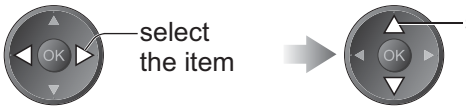
- The TV must either be On or in standby.
- For preparations of a recorder, read the manual of the recorder.
- No other channel can be selected during recording.
- It may not be possible to record an encrypted programme (which is copy-protected).

Set timer programming details **Timer Programming**

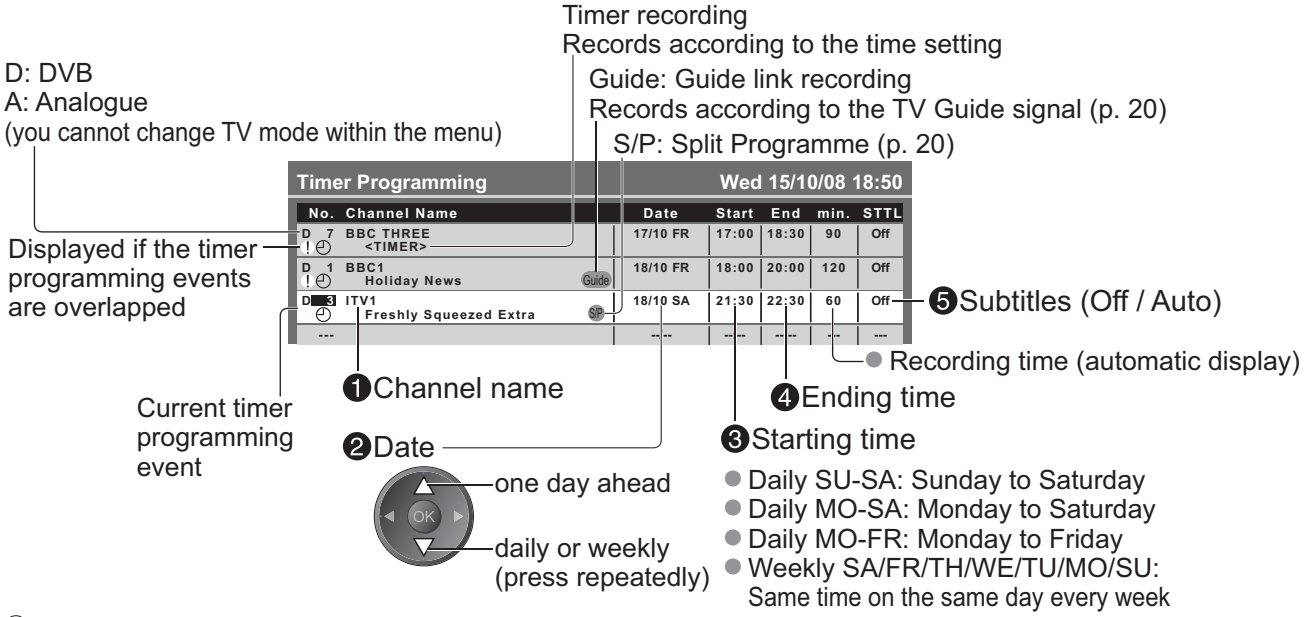
① **Start making the settings**

OK

② **Repeat the operations as below, and set items in the order of ❶ to ❺**



● ❶, ❸ and ❹ can also be entered with numeric buttons.



③ **Store**

OK

■ To change a timer programming event

➡ Select the programme to be changed ➡ ②access ①select ➡ Correct as necessary (as above)

■ To cancel a timer programming event

➡ Select the programme to be deleted ➡ red ➡ OK

■ To cancel a timer programming event temporarily

➡ Select the programme to be cancelled ➡ blue

● Each time pressed:
cancel ⟷ stop cancelling

■ To view details of the programming

➡ Select the programme to be viewed ➡ *i*

● Press again to return to Timer Programming menu.

■ Guide link recording (Timer Programming according to the TV Guide signal) ➡ p. 20

● Not available in Analogue.

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. 54 and p. 56

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

Note

- Check that the Timer LED (Orange) is lit. If not, timer programmes are not active or not stored.
- "!" will identify any timer 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. 57). In this case, Pause Live TV recording will be cancelled.

Input Labels

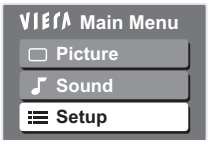
For easier identification and selection of the input mode, you can label each input mode or skip terminal that is not connected to any equipment.

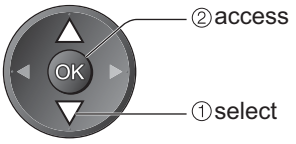
● To select the input mode ➡ p. 24

1 Display the menu

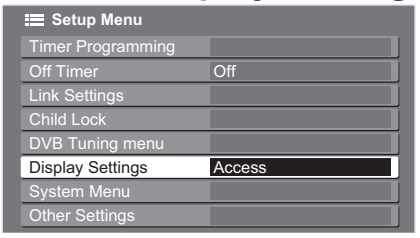
MENU

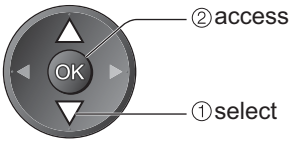
2 Select “Setup”



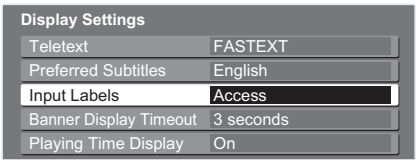


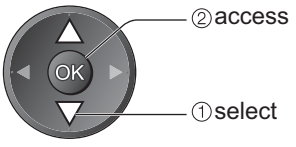
3 Select “Display Settings”



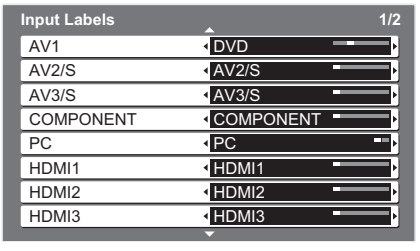


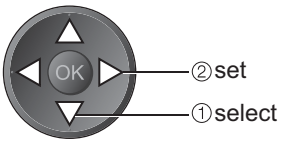
4 Select “Input Labels”

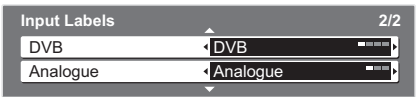




5 Select a input terminal and set







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.

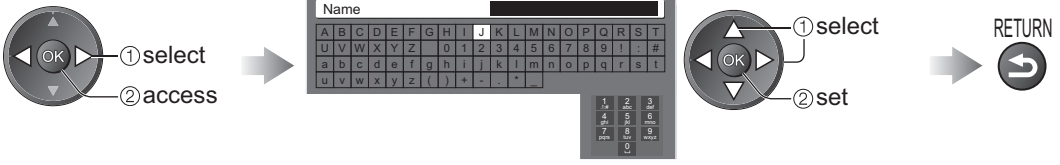
■ To return to TV

EXIT

■ User input

You can name each input mode freely.

Select “User input” → Set characters one by one (maximum: ten characters) → Store



● You can set characters by using numeric buttons.
➡ “Characters table for numeric buttons” (p. 63)

Displaying PC Screen on TV

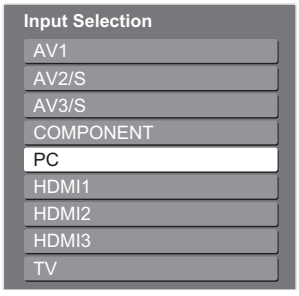
The screen of the PC connected to the TV can be displayed on the TV.
You can also listen to PC sound with the audio cable connected.

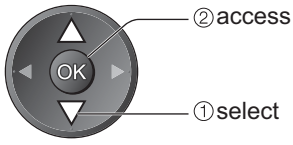
● To connect PC ➡ p. 60

1 Select the external input

AV

2 Select “PC”





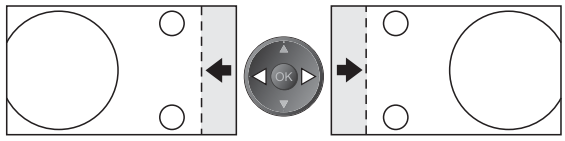
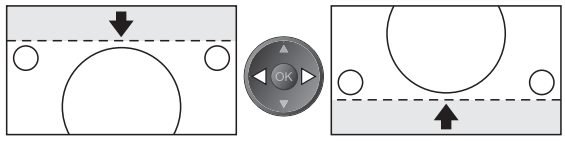
● Corresponding signals ➡ p. 66
● If “H-freq.” or “V-freq.” is shown in red, the signals may not be supported.

■ To return to TV

➡ TV

■ PC menu setting (changed as desired)

● To make settings ➡ “How to Use Menu Functions” 1 to 4 (p. 26)

Menu	Item		Adjustments / Configurations (options)
Picture	Advanced PC Settings	R-Gain	Adjusts the white balance for red areas
		G-Gain	Adjusts the white balance for green areas
		B-Gain	Adjusts the white balance for blue areas
		Gamma	Switches the gamma curve **(2.0 / 2.2 / 2.5)**
		Reset to Defaults	Press the OK button to reset to the default Advanced PC Settings
Setup	PC Setup	Input Resolution	Switches to a wide view ● VGA (640 × 480 pixels), WVGA (852 × 480 pixels), XGA (1,024 × 768 pixels), WXGA (1,280 × 768 pixels, 1,366 × 768 pixels) ● Options change depending on signals
		Clock	Set to the minimum level if noise occurs
		H-pos	Adjusts horizontal position 
		V-pos	Adjusts vertical position 
		Clock Phase	Eliminates flicker and distortion ● Adjust after Clock adjustment ● Set to the minimum level if noise occurs
		Sync	Chooses another synchronous signal if the image is distorted **(H & V / On 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

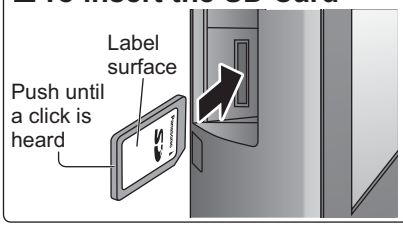
● For HDMI-compatible PC, possible to connect to HDMI terminals (HDMI1 / HDMI2 / HDMI3) by using HDMI cable (p. 64).

Viewing from SD Card
(VIERA IMAGE VIEWER)

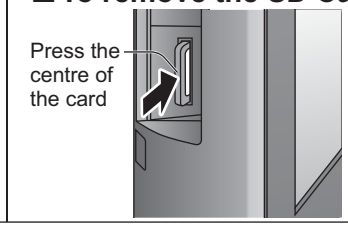
Photo View: Still images recorded by digital cameras will be displayed.
Movie View: Moving pictures recorded by digital video cameras will be played back.

- 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. 63

■ To insert the SD Card



■ To remove the SD Card



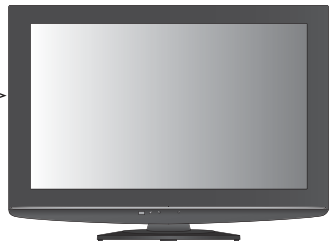
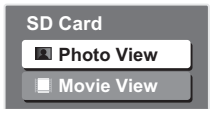
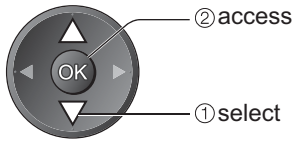


Photo View

1 Insert the SD Card

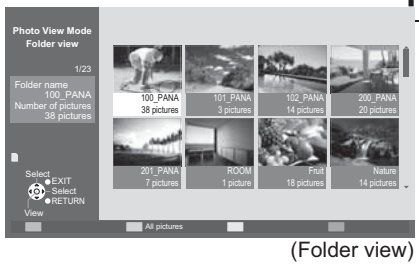
2 Select "Photo View"



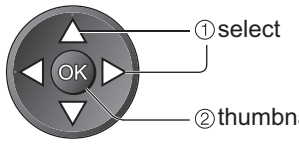


- You can also access directly by using VIERA TOOLS
  ➡ "How to Use VIERA TOOLS" (p. 14)

3 Select the folder to display the thumbnail

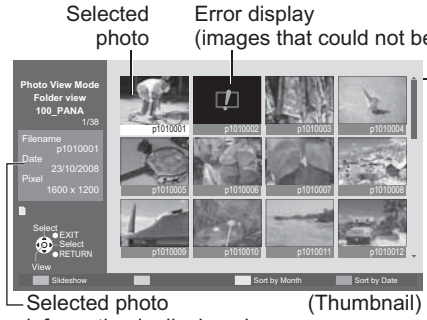


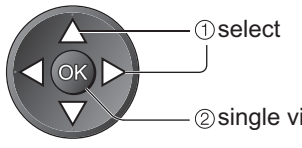
(Folder view)



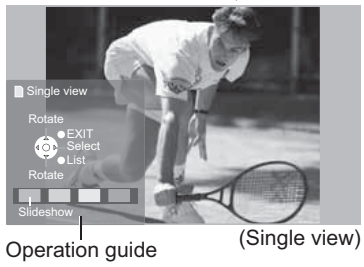
- The files which are not into a folder will be collected to the folder named "/".

4 Select the file from the thumbnail to be viewed





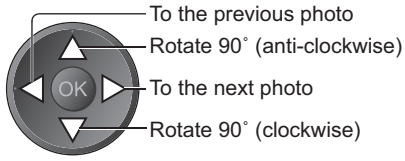
- Slideshow ➡ p. 49



Operation guide (Single view)

Displayed one at a time

- To display / hide the operation guide
  OPTION
  ➡ i or



- To return to thumbnail ➡ RETURN

■ To return to TV

EXIT or SD

■ To return to the previous screen

RETURN

Slideshow

■ Start Slideshow (operate in step ④)

Select the photo for the first view → Start Slideshow

● To pause ➡

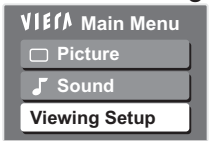
● To return to Single view ➡

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)

Display the menu → Select "Viewing Setup" → Select the items and set

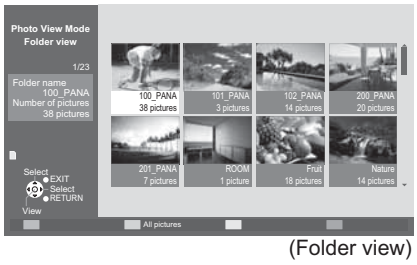


● Other Items ➡ p. 30 and p. 31

Menu	Item	Adjustments / Configurations (alternatives)
Viewing Setup	**Back Ground Music**	Selects the back ground music during the slideshow **(Off / Type1 / Type2 / Type3)**
	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
	Interval	Selects slideshow interval **(5 / 10 / 15 / 30 / 60 / 90 / 120 seconds)**
	Repeat	Slideshow repeat **(Off / On)**

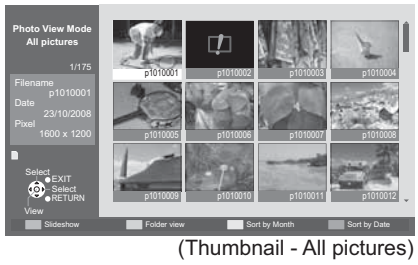
■ To display all the photos

Display the thumbnail of all the photos in SD Card.

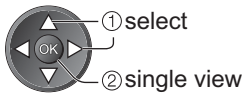


(Folder view)

green



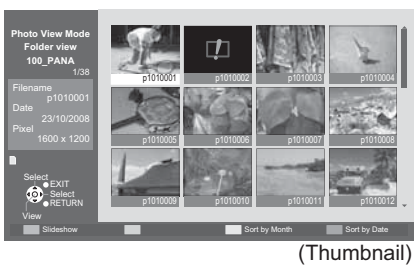
(Thumbnail - All pictures)



■ To sort by date or month recorded

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

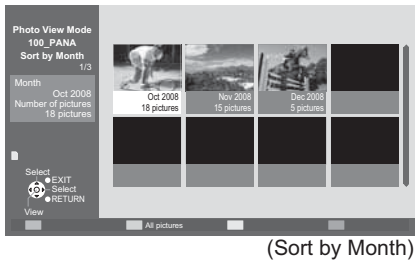
- The group of the photos without record of the date is shown as "Unknown".



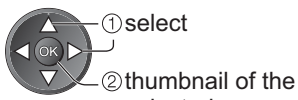
(Thumbnail)

yellow

green

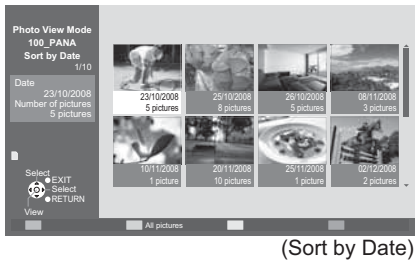


(Sort by Month)

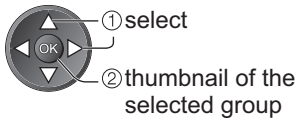


blue

green



(Sort by Date)

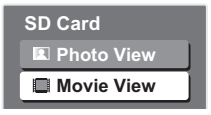


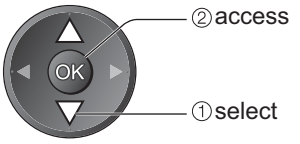
Viewing from SD Card
(VIERA IMAGE VIEWER)

Movie View

1 Insert the SD Card

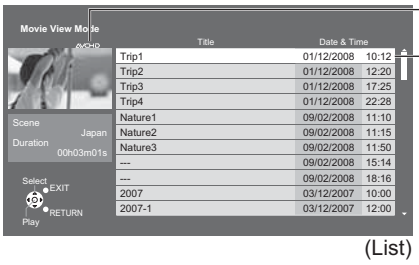
2 Select "Movie View"





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

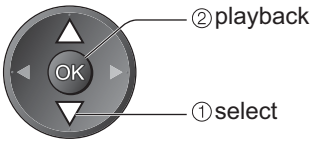
3 Select the file to be viewed

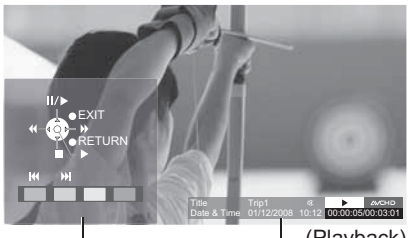


File format:
Only AVCHD or MPEG2 are supported.
- For details ➡ p. 63

Selected movie

(List)



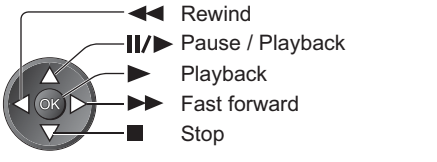


Operation guide

(Playback) information banner ➡

Playback will start

- To display the operation guide
  ➡ red green yellow blue or OK
- To hide the operation guide ➡ RETURN



- To return to list ➡ OK (stop)
- To change aspect ratio
  (only for the 4:3 movie content)
  ➡ ASPECT
- To the previous movie ➡ red
- To the next movie ➡ green

■ To return to TV

➡ EXIT or SD

■ To return to the previous screen

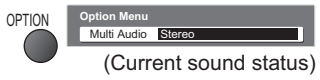
➡ RETURN

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



(Current sound status)

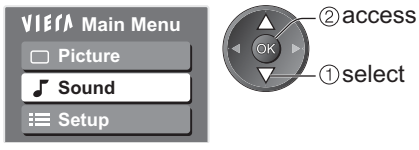
Change the sound (if the movie has multiple audio signals)

change ● It may take several seconds to change the sound.

■ **Audio output settings** (operate in step ❸)

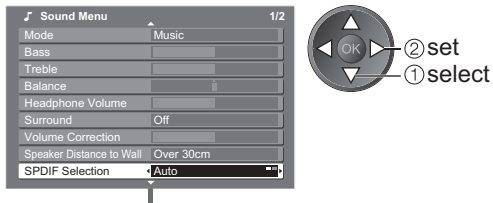
Display the menu

Select “Sound”



● Other items ➡ p. 30 - 33

Select “SPDIF Selection” and set



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.

Link Functions (Q-Link VIERA Link)

Q-Link connects the TV and DVD Recorder / VCR, and enables easy recording, playback, etc. (p. 54)
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. 55 - 59)
You can use Q-Link and VIERA Link functions together.

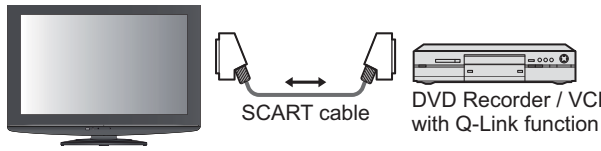
- This TV supports “HDAVI Control 4” function. But available features are depending on the connected equipment’s version of HDAVI Control. Please refer to the manual of the equipment to confirm the version.

Summary of Q-Link and VIERA Link features

■ Q-Link (SCART connection only)

Features \ Connected equipment	DVD Recorder / VCR with Q-Link connection
Analogue channel download	○
Easy playback	○
Power on link	○
Power off link	○
Direct TV Recording	○

Connection

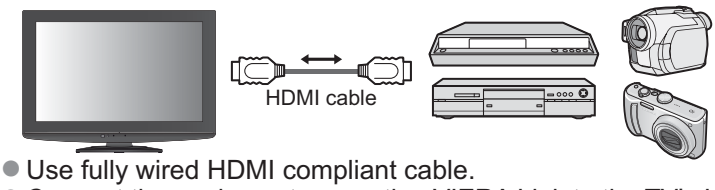


- Use fully wired SCART cable.
- Connect the DVD Recorder / VCR supporting Q-Link to the TV’s AV1 or AV2 terminal via a SCART cable.

■ VIERA Link (HDMI connection only)

Features \ Connected equipment	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	○	○	○
Power on link	○	○	○
Power off link	○	○	○
Reduce unnecessary power consumption in standby	○*3	○*3	–
Auto standby for unnecessary equipment	○*3	○*3	–
Pause Live TV programme	○*3 *4	–	–
Direct TV Recording	○*3	–	–
Control the menu of the connected equipment by VIERA remote control	○*1	○*1	○*1
Speaker control	–	–	–

Connection

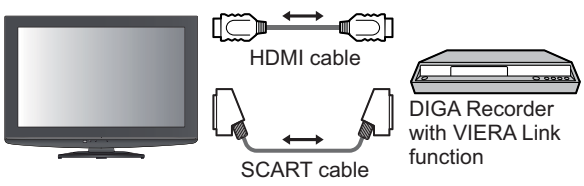


- Use fully wired HDMI compliant cable.
- Connect the equipment supporting VIERA Link to the TV’s HDMI1, HDMI2 or HDMI3 terminal via an HDMI cable.
- About HDMI cable for connecting Panasonic HD Video Camera or LUMIX Camera, read the manual of the equipment.

■ VIERA Link (HDMI and SCART connections)

Features \ Connected equipment	DIGA Recorder with VIERA Link function
Analogue channel download	○
Easy playback	○
Power on link	○
Power off link	○
Reduce unnecessary power consumption in standby	○*3
Auto standby for unnecessary equipment	○*3
Pause Live TV programme	○*2 *4
Direct TV Recording	○*2
Control the menu of the connected equipment by VIERA remote control	○*1
Speaker control	–

Connection



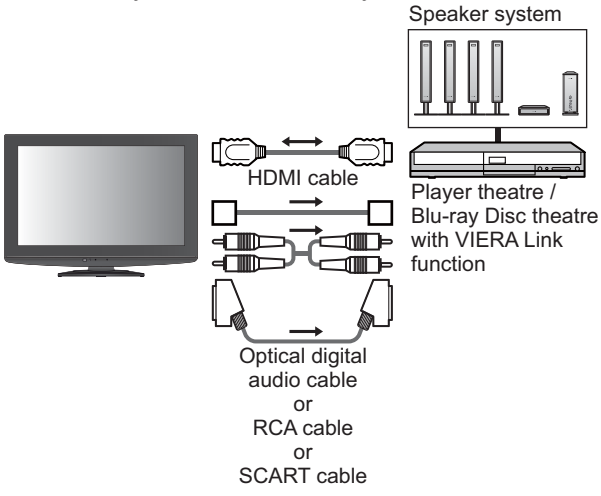
- Use fully wired HDMI compliant cable.
- Connect the equipment supporting VIERA Link to the TV’s HDMI1, HDMI2 or HDMI3 terminal via an HDMI cable.
- Use fully wired SCART cable.
- Connect the equipment supporting VIERA Link to the TV’s AV1 or AV2 terminal via a SCART cable.

■ VIERA Link (HDMI and Audio out connections)

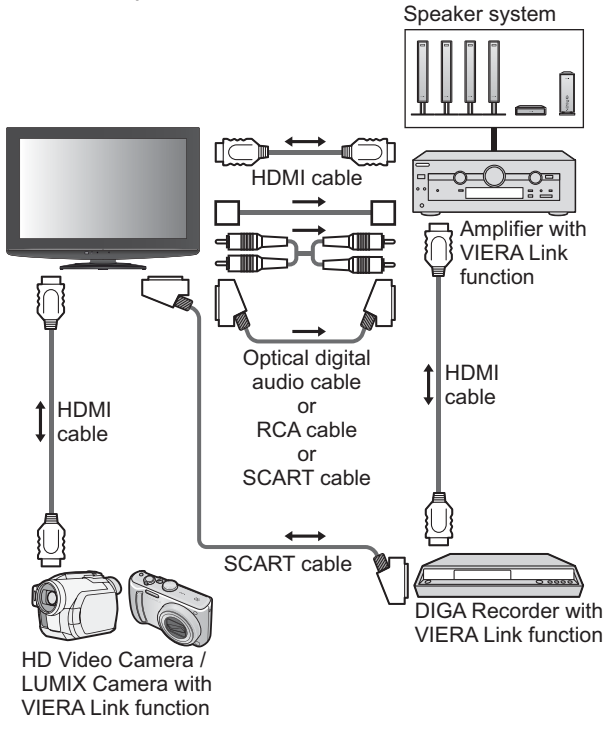
Features \ Connected equipment	Player theatre with VIERA Link function	Blu-ray Disc theatre with VIERA Link function	Amplifier with VIERA Link function
Analogue channel download	–	–	–
Easy playback	○*5	○*5	–
Power on link	○	○	–
Power off link	○	○	○
Reduce unnecessary power consumption in standby	–	○*3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

Connection

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



● To use Amplifier:



- 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. 52
- 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.

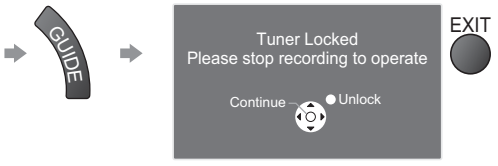
- Available conditions:

Picture source	Mode	Recording from
Analogue	TV	TV monitor out
	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. 52 and p. 53).
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. 52 and p. 53
- Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilized.
  Recommended Panasonic's HDMI cable part number:
  - RP-CDHG10 (1.0 m)
  - RP-CDHG15 (1.5 m)
  - RP-CDHG20 (2.0 m)
  - RP-CDHG30 (3.0 m)
  - RP-CDHG50 (5.0 m)
- Use fully wired SCART cable.
- Set up the connected equipment. Read the manual of the equipment.
- For optimal recording, the settings of the recorder might be required. For details, read the manual of the recorder.
- Download Analogue 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.

- 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)

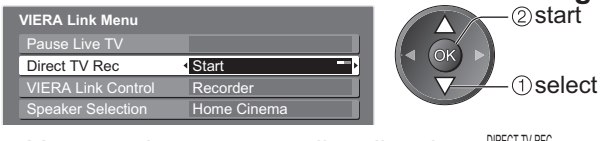
Direct TV Recording - What you see is What you record **Direct TV Rec**

Recording the current programme in DIGA Recorder immediately.

- If you connect plural 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. 52 and p. 53), "Preparations" (p. 55)
- 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.

1 Display "VIERA Link Menu"

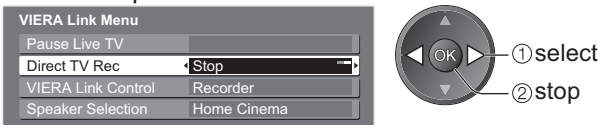
2 Select "Direct TV Rec" and start recording



- You can also start recording directly ➡ DIRECT TV REC

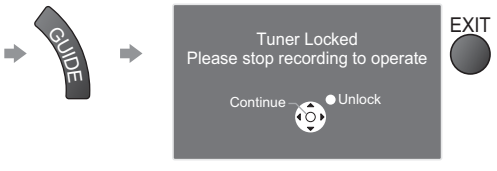
■ **To stop recording**

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



- You can also stop recording directly.

Unlock the tuner



■ **Features available** (Using VIERA Link Menu)

Pause Live TV programme **Pause Live TV**

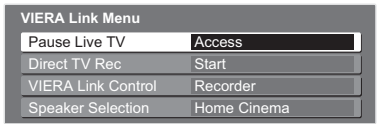
You can pause the live TV programme and resume later.
Live TV programme will be recorded on HDD of the connected DIGA Recorder.

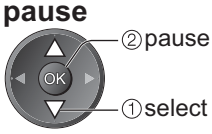
- This function is available with DIGA Recorder which has HDD.
- If you connect plural recorders including other manufacturers' recorders at the same time, please connect DIGA Recorder which has HDD to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, in 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.52 and p. 53), "Preparations" (p. 55)

Access and pause the live TV programme

1 Display "VIERA Link Menu"

2 Select "Pause Live TV" and pause

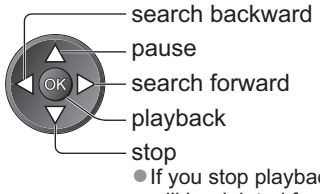




The TV picture will be paused.

- 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
  ➡ OPTION (the paused picture will be restored)
- Follow the operation guide to operate Pause Live TV function.

■ To operate Pause Live TV



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

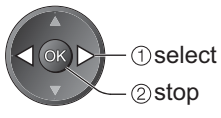
- Operations may be different depending on the recorder. In this case, follow the operation guide or read the manual of the recorder.

■ To return to Live TV

(stop playback of Pause Live TV / cancel pause)

Select "Yes"

➡ TV ➡



- 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

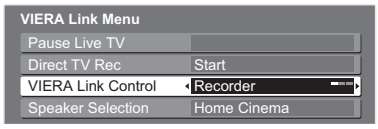
You can control some functions of the connected equipment with this TV remote control (point the remote control at the TV's signal receiver).

- If you cannot operate, check the settings and the equipment
  ➡ "Summary of Q-Link and VIERA Link features" (p.52 and p. 53), "Preparations" (p. 55)
- For details of the operations for the connected equipment, read the manual of the equipment.

Access and operate the menu of the equipment

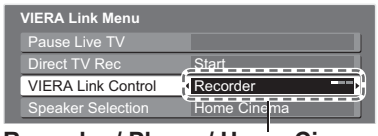
1 Display "VIERA Link Menu"

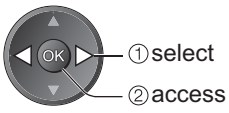
2 Select "VIERA Link Control"



3 Select the equipment you want to access

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





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)

4 Operate the menu of the equipment

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

① **Set the code of the remote control to "73"**

➡ "How to change the code for the type of the equipment" (p. 25)

② **Follow the operation guide**

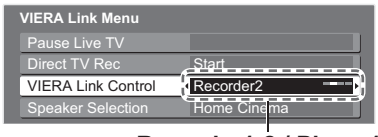
- To display the operation guide ➡ OPTION
  If other manufacturers' equipment is accessed, Setup / Contents Selection menu may be displayed.
- When the key words are displayed on colour bar
  ➡ red green yellow blue

Note

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

■ If multiple recorders or players are connected

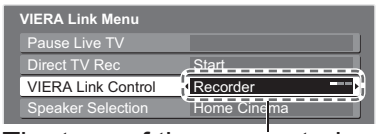
You can connect up to two recorders or players at the same time.



Recorder1-2 / Player1-2

The number is given from the TV's lower HDMI terminal number connected to the same type equipment. For example, two recorders to HDMI1 and HDMI2, in this case the recorder connected to HDMI1 is displayed as "Recorder1", and the recorder connected to HDMI2 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.

■ **Features available** (Using VIERA Link Menu)

Speaker control — Speaker Selection

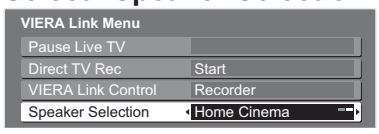
You can control the theatre speaker with this TV remote control (point the remote control at the TV's signal receiver).

- If you cannot operate, check the settings and the equipment
  ➡ "Summary of Q-Link and VIERA Link features" (p. 52 and p. 53), "Preparations" (p. 55)

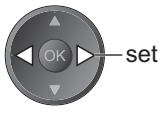
Access and control the speaker volume

1 **Display "VIERA Link Menu"**

2 **Select "Speaker Selection"**



3 **Set to "Home Cinema" or "TV"**



■ **Home Cinema**
Player theatre, Blu-ray Disc theatre or Amplifier will be automatically turned on if it is in Standby mode and the sound is from theatre speakers connected to the equipment.

- Volume up / down
  ➡ (Volume slide bar will be displayed when adjusting the volume of the equipment.)
- Mute ➡
  - The sound of TV speakers is mute.
  - When the equipment is turned off, TV speakers will be active.

■ **TV**
TV speakers are active.

Note

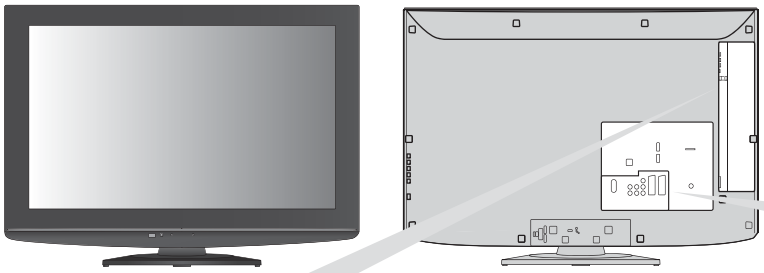
- If you wish to enjoy the multi-channel sound (e.g. Dolby Digital 5.1ch) via an Amplifier, connect with HDMI cable and Optical digital audio cable (p. 53), and then select "Home Cinema".
- To enjoy the sound from the DIGA Recorder in multi-channel sound, connect an HDMI cable from the DIGA Recorder to the Amplifier (p. 53).

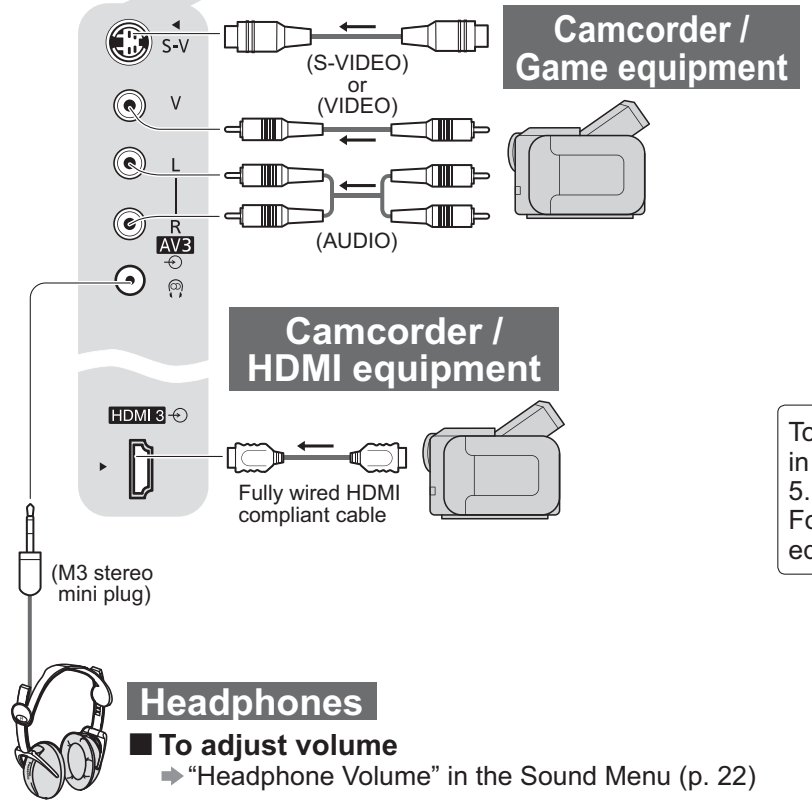
Note

- 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.
- "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

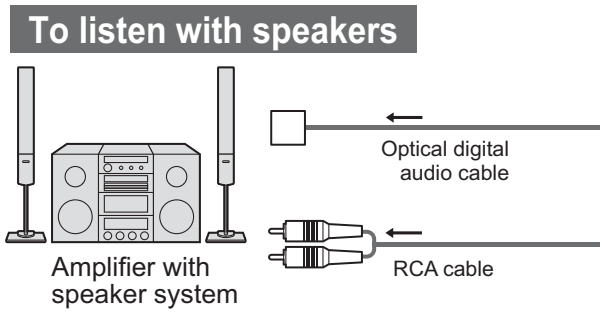
These diagrams show our recommendations for connection of your TV to various pieces of equipment. For other connections, consult the instructions for each piece of equipment, the table below, and the specifications (p. 71).



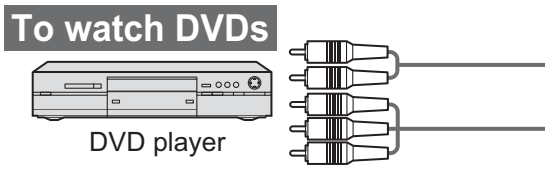


■ **To adjust volume**

➡"Headphone Volume" in the Sound Menu (p. 22)



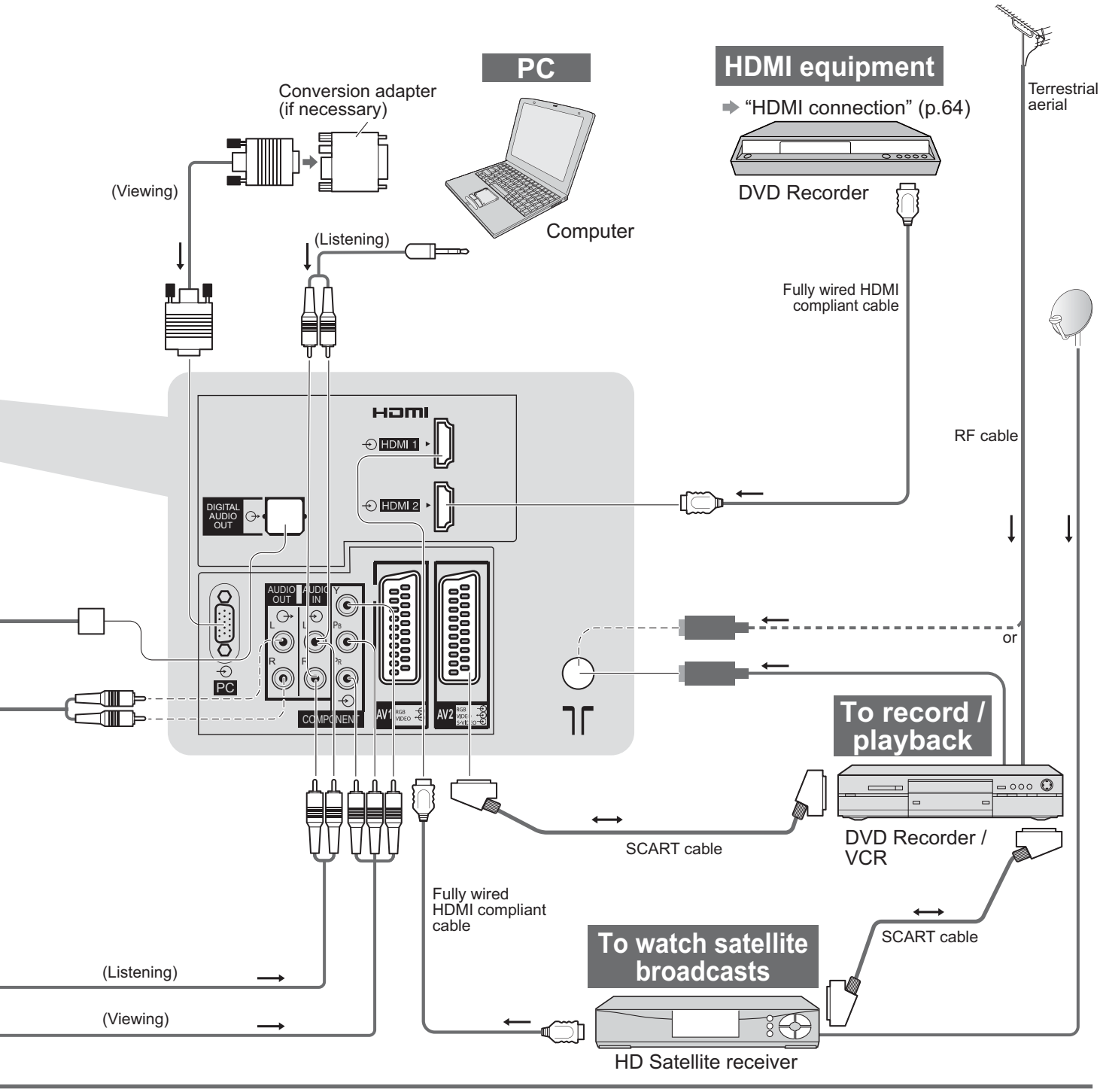
To enjoy the sound from the external equipment in multi-channel sound (e.g. Dolby Digital 5.1ch), connect the equipment to the amplifier. For the connections, read the manuals of the equipment and amplifier.



■ 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)	○	○		
To watch DVDs (DVD player)	○	○	○	
To watch camcorder images (Video camera)	○	○	○	
To watch cable broadcasts (Set top box)	○	○	○	
To play games (Game equipment)	○	○	○	
To use amplifier with speaker system				
Q-Link	○	○		
VIERA Link	○ (with HDMI)	○ (with HDMI)		
Direct TV Recording	○	○		

○: Recommended Connection



COMPONENT	AUDIO OUT	DIGITAL AUDIO OUT	HDMI		
			1	2	3
○			○	○	○
			○	○	○
			○		
			○	○	○
	○	○			
			○	○	○
			○	○	○

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.

Input terminal	Input signal format	Aspect Control Signal	
		Widescreen signal (WSS)	Control signal through SCART (pin8) / HDMI terminal
RF	DVB	○	
	PAL I	○	
	PAL 525/60 6.0 MHz	–	
	M.NTSC 6.0 MHz	–	
AV1 (Composite) AV2 (Composite or S-Video) AV3 (Composite or S-Video)	PAL	○	○
	PAL 525/60	–	○
	M.NTSC	–	○
	NTSC	–	○
COMPONENT	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	–	
HDMI1 HDMI2 HDMI3	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	–	○

■ 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: S D-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).

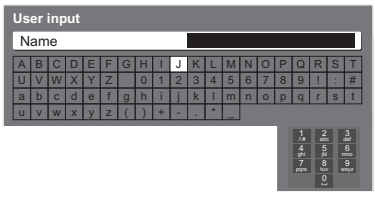
Note

- 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.

- The character is set automatically if you leave for one second.
- You can also set the character by pressing the OK button within one second.



Characters table:

The number of times to press / Numeric buttons	1	2	3	4	5	6	7	8	9	10	11
1	.	1	!	:	#	+	-	*	_	(	)
2	a	b	c	2	A	B	C				
3	d	e	f	3	D	E	F				
4	g	h	i	4	G	H	I				
5	j	k	l	5	J	K	L				
6	m	n	o	6	M	N	O				
7	p	q	r	s	7	P	Q	R	S		
8	t	u	v	8	T	U	V				
9	w	x	y	z	9	W	X	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. 60).

■ 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. 66)
  Match the output setting of the digital equipment.
- Input PC signal : ➡ "Input signal that can be displayed" (p. 66)
  Match the output setting of the PC.
- VIERA Link (HDAVI Control 4) : ➡ "VIERA Link" (p. 55)

■ 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.

(∗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.

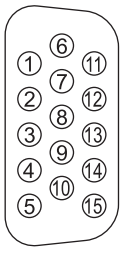
- PC signals that can be inputted: Horizontal scanning frequency 31 to 69 kHz; vertical scanning frequency 59 to 86 Hz (more than 1,024 signal lines could result in incorrect display of the image).
- A PC adapter is not necessary for the DOS/V-compliant D-sub 15-pin connector.

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. 61)
- 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. 66)
- Max. display resolution

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

- D-sub 15-pin connector signal



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

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. 42).
In DVB mode, a notification banner will appear when one of the BBC channels is tuned if a new available software is found.

To start downloading press 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. 42).
The TV will then download new software automatically at night if it is left in standby without any timer programming in progress.

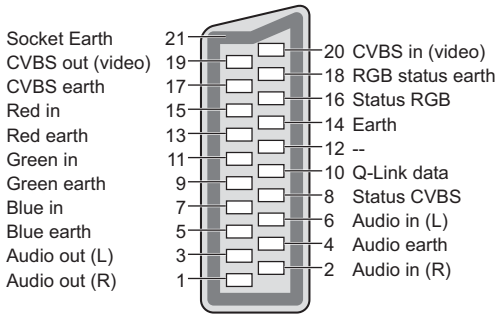
Note

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

SCART, S-VIDEO and HDMI terminal information

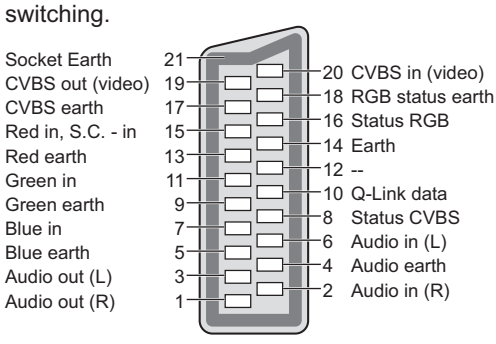
■ **AV1** SCART terminal (RGB, VIDEO, Q-Link)

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

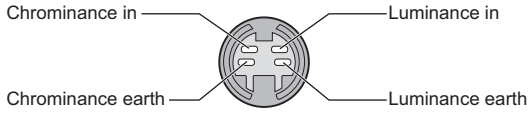


■ **AV2** SCART terminal (RGB, VIDEO, S-VIDEO, Q-Link)

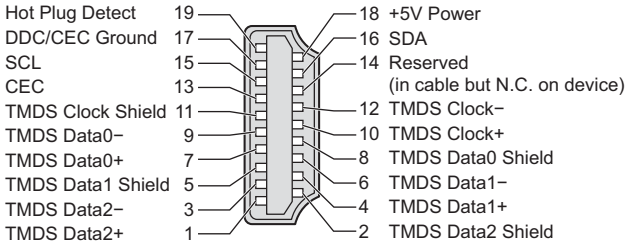
AV2 - Pins 15 and 20 are dependent on AV2 S-VHS / VIDEO switching.



■ **AV3** S-VIDEO 4 pin terminal



■ **HDMI** terminal



Technical Information

Input signal that can be displayed

COMPONENT (Y, P_B, P_R)**, HDMI**

* Mark: Applicable input signal

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

PC (from D-sub 15P)

Applicable input signal for PC is basically compatible to VESA standard timing.

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

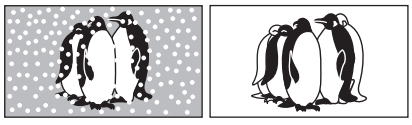
Note

- 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.

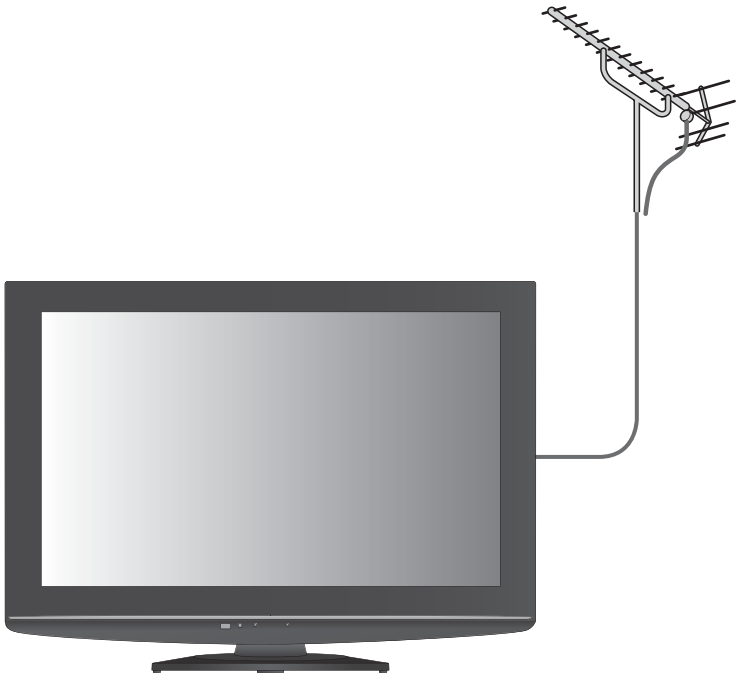
FAQs

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. 72)

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.

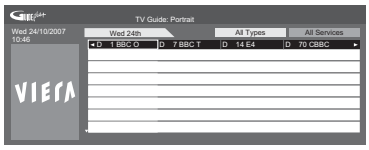
Auto aspect

- Auto aspect is designed to provide you with the best ratio to fill the screen. (p. 62)
- 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 aerial to another transmitter installed nearby.
- Check the analogue broadcast. If the image quality is poor, check the aerial and consult your nearest dealer.

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. 52 and p. 53)
- Turn the connected equipment on and then switch the TV on. (p. 55)

Recording does not start immediately

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

FAQs

	Problem	Actions
Screen	**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, microwaves, etc.).
	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. 67)
	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. 67)
	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. 41).
Sound	**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. 67)
	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. 67)
Digital Channel	● 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.	
	Interference or frozen / disappearing image in DVB mode	● Check “Signal Condition” (p. 36). If “Signal Quality” or “Signal Strength” are displayed in red, the signal is weak. ● Check the aerial. ● 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)
	Some channels cannot be tuned	● Check the aerial.
	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)
HDMI	**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. 64)
	Pictures from external equipment are unusual when the equipment is connected via HDMI	● Check the HDMI cable is connected properly. (p. 60) ● Turn the TV and equipment Off, then turn them On again. (p. 55) ● Check an input signal from the equipment. (p. 66) ● Use an equipment compliant with EIA/CEA-861/861B.
Other	**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.
	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.
	There may be red spots, blue spots, green spots and black spots on the screen	● This is a characteristic of liquid crystal panels and is not a problem. The liquid crystal panel is built with very high precision technology giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of red, green, blue or black. Please note this does not affect the performance of your LCD.
	The LCD panel moves slightly when it is pushed with a finger Clattered sound might be heard	● There is some flexibility around the panel to prevent damage to the panel. ● The panel might move slightly when it is pushed with a finger, and clattered sound might be heard. This is not a malfunction.
	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. 41).
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. 40). You must enter the PIN number before the channel will be displayed.
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 and VIERA Link settings (p. 52 - p. 55)
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.
Invalid operation - Please check settings and connections.	● Check the Q-Link or VIERA Link connection and setting (p. 52 - 55).
Invalid system time. Please exit !	● Cannot get the time information. Check the connection of the RF cable.
Max. number of Timers already set !	● The maximum number of timer programming events is 15.
New 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 be performed “Update Channel List”.
No channel found. Please check aerial or local channel 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. 43).
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.
PIN incorrect!	● The PIN number you entered is wrong.
Please check settings and connections on HDMI devices.	● Communication error in VIERA Link function (p. 55).
Please wait.	● A function is in progress.
Recording this channel now	● The recorder is recording the programme from its own tuner. You can turn 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. 42). If this is still unsuccessful, there may not be any new software available.

On screen messages

Message	Meaning / Action
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. 44).
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. 44).
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. 54 and p. 56) or Timer Programming (p. 44).
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. 63)
Please confirm the SD card is OK	● The inserted SD card has a problem.
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.
This operation is not possible	● Your operation is not available.

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Glossary

■ **DVB**
Digital Video Broadcasting

■ **DVD**
Digital Versatile Disc

■ **DVI**
Digital Visual Interface

■ **EPG**
Electronic Programme Guide

HDMI
High-Definition Multimedia Interface

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

■ **RF**
Radio Frequency - Signal received from terrestrial 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

Specifications

			TX-L32S10B, TX-L32S10BS	TX-L37S10B	TX-L42S10B
Power Source			AC 220-240 V, 50 Hz		
Power Consumption			115 W	130 W	180 W
Power Consumption in Standby mode			0,3 W (Without monitor out recording) 13 W (With monitor out recording)		0,45 W (Without monitor out recording) 14 W (With monitor out recording)
Display panel	**Aspect Ratio**		16:9		
	Visible screen size		80 cm (diagonal) 697 mm (W) × 392 mm (H)	94 cm (diagonal) 819 mm (W) × 460 mm (H)	106 cm (diagonal) 930 mm (W) × 523 mm (H)
	Number of pixels		2,073,600 (1,920 (W) × 1,080 (H))		
Sound	**Speaker**		160 mm × 42 mm × 2 pcs, 8 Ω		
	Audio Output		20 W (10 W + 10 W), 10% THD		
	Headphones		M3 (3.5 mm) stereo mini Jack × 1		
PC signals			VGA, SVGA, XGA SXGA ····· (compressed) Horizontal scanning frequency 31 - 69 kHz Vertical scanning frequency 59 - 86 Hz		
Receiving Systems / Band name			**DVB-T** : Digital terrestrial services via UHF aerial input. **PAL I** : UHF E21-68 **PAL 525/60** : Playback of NTSC tape from some PAL Video recorders (VCR) or NTSC disc playback from DVD player and recorder. **M.NTSC** : Playback from M.NTSC Video recorders (VCR). **NTSC (AV input only)** : Playback from NTSC Video recorders (VCR).		
Aerial input			UHF		
Operating Conditions			**Temperature** : 0 °C - 35 °C **Humidity** : 20 % - 80 % RH (non-condensing)		
Connection Terminals	**AV1 (Scart terminal)**		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, Q-Link)		
	AV2 (Scart terminal)		21 Pin terminal (Audio/Video in, Audio/Video out, RGB in, S-Video in, Q-Link)		
	AV3	**VIDEO**	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)	
		S-VIDEO	Mini DIN 4-pin	Y:1.0 V[p-p] (75 Ω) C:0.286 V[p-p] (75 Ω)	
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]	
	COMPONENT	**VIDEO**	**Y** **P_B, P_R**	1.0 V[p-p] (including synchronization) ±0.35 V[p-p]	
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]	
	Others	**HDMI 1 / 2 / 3**	TYPE A Connectors	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 slot × 1		
	Output	**AUDIO L - R**	RCA PIN Type × 2	0.5 V[rms] (high impedance)	
		DIGITAL AUDIO OUT	PCM / Dolby Digital, Fiber optic		
Dimensions (W × H × D)			798 mm × 551 mm × 217 mm (With Pedestal) 798 mm × 511 mm × 93 mm (TV only)	915 mm × 620 mm × 287 mm (With Pedestal) 915 mm × 577 mm × 97 mm (TV only)	1021 mm × 679 mm × 310 mm (With Pedestal) 1021 mm × 636 mm × 115 mm (TV only)
Mass			13.0 kg Net (With Pedestal) 11.5 kg Net (TV only)	16.5 kg Net (With Pedestal) 14.5 kg Net (TV only)	21.0 kg Net (With Pedestal) 18.5 kg Net (TV only)

Note

- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
- This equipment complies with the EMC standards listed below.
  EN55013, EN61000-3-2, EN61000-3-3, EN55020, EN55022, EN55024.

This product is licensed under the AVC patent portfolio license for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC Standard (“AVC Video”) and/or (ii) decode AVC Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC. See http://www.mpegla.com.

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).
- Or go on line through our Internet Accessory ordering application at **www.panasonic.co.uk**.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct shopping for a wide range of finished products, take a browse on our website for further details.

Interested in purchasing an extended guarantee?
Please call 0870 240 6284 or visit ***www.panasonic.co.uk/guarantee****.*

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DVB Digital Video Broadcasting

Trade Mark of the DVB Digital Video Broadcasting Project (1991 to 1996)
TX-L32S10B Declaration of Conformity No. 6147, 5 December 2008
TX-L37S10B Declaration of Conformity No. 6146, 5 December 2008
TX-L42S10B Declaration of Conformity No. 6145, 5 December 2008
TX-L32S10BS Declaration of Conformity No. 6750, 8 April 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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