Panasonic®

Operating Instructions
Plasma Television

VIEᴚ

Thank you for purchasing this Panasonic product.
Please read these instructions carefully before operating this product and
retain them for future reference.
The images shown in this manual are for illustrative purposes only.

English   UK and Ireland model

TQB0E2200

Features

DVB-T tuner built-in
Receives DVB (Digital Video Broadcasting) digital terrestrial broadcasts.

DVB-T2 tuner built-in [UK only]
DVB-T2 is an advanced digital terrestrial system for more efficient transmission.
Available DVB-T2 broadcasts will be tuned automatically when you perform DVB Auto Setup.

Using USB devices
Enjoy the photo, video and music in the USB Flash Memory on Media Player. (p. 51)

Timer Programming (p. 20, 42)
Timer Programming enables you to use functions such as programme reminder and programme recording to the external recorder.

SDXC Card
This TV supports SDXC Card. SDXC is the latest standard of SD Card and a higher storage capacity card.

Link up and control the connected equipment with "Q-Link" and "VIERA Link" (p. 59)
Q-Link and VIERA Link provide easy recording and playback, creation of a home theatre without complicated settings, etc.

VIERA TOOLS - Display special feature icons for easy accessibility (p. 27)
Special features (such as VIERA Link and Media Player) can be accessed easily by using the VIERA TOOLS button.

Dolby Digital Plus decoders
It is possible to decode Dolby Digital Plus audio track (multi-channel sound) and output as a Dolby Digital multi-channel sound signal from the DIGITAL AUDIO OUT / HDMI2 (ARC function) terminal.

Owner ID (p. 48)
Owner ID is an anti-theft function. Entering the PIN number and owner's personal information will help the Police to determine the owner in the case of theft.

Supports Audio Description signal (p. 17, 32)
[UK only]
Audio Description (when broadcast) adds an additional soundtrack to describe events on screen (narration) and aids understanding and enjoyment, particularly for visually-impaired users.

Digital Switchover for Terrestrial broadcasts [UK only]

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. Analogue channels are permanently turned off, it will not be possible to recover them.
● To retune your TV ➡ [Auto Setup] in [DVB Tuning Menu]-DVB mode (p. 38)
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.

Notice for DVB / Data broadcasting

This TV is designed to meet the standards (as of August, 2010) of digital services.
● Not all the features are available depending on the country, area, broadcaster, network environment and service provider.
● The compatibility with future services is not guaranteed.
● Check the latest information on the available services at the following website.
http://panasonic.jp/support/global/cs/tv/

Do not display any still part of the image for a long period

In such cases the still part of the image remains dimly on the plasma screen ("image retention"). This is not considered a malfunction and is not covered by the warranty.

Typical still image parts:
● Channel number, channel logo and other logos
● Still or moving pictures viewed in 4:3 or 14:9 aspect ratio
● Video games
● Images from PC

To avoid image retention, the contrast is lowered automatically and the screen becomes dim after a few minutes if no signals are sent or no operations are performed. (p. 74)

Panasonic does not guarantee operation and performance of peripheral devices made by other manufacturers; and we disclaim any liability or damage arising from operation and/or performance from usage of such other maker's peripheral devices.

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.

Contents

Enjoy your TV!

Basic

Advanced

Others

Safety Precautions

Warning

■ Mains plug and lead

To help avoid risk of electrical shock, fire, damage or injury, please follow the warnings below:
- This TV is designed to operate on AC 220-240 V, 50 / 60 Hz.
- Insert the mains plug fully into the socket outlet.
- Ensure that the mains plug is easily accessible.
- Remove the mains plug when cleaning the TV.

- Do not touch the mains plug with a wet hand.

If you detect anything unusual, immediately switch off the mains supply switch and remove the mains plug.

**AC 220-240 V
50 / 60 Hz**

- Do not damage the mains lead.

  - Do not place a heavy object on the lead.

  - Do not place the lead near a high temperature object.

  - Do not pull on the lead. Hold onto the mains plug body when disconnecting the plug.

  - Do not move the TV with the lead plugged into a socket outlet.
  - Do not twist the lead, bend it excessively or stretch it.
  - Do not use a damaged mains plug or socket outlet.
  - Ensure the TV does not crush the mains lead.
- Do not use any mains lead other than that provided with this TV.
- Ensure the earth pin on the mains plug is securely connected to prevent electrical shock.
  - An apparatus with CLASS I construction shall be connected to a mains socket outlet with a protective earthing connection.

IMPORTANT: THE MOULDED MAINS PLUG

FOR YOUR SAFETY, PLEASE READ THE FOLLOWING TEXT CAREFULLY.
This TV is supplied with a moulded three pin mains plug for your safety and convenience.
A 10 amp fuse is fitted in this mains plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a rating of 10 amps and that it is approved by ASTA or BSI to BS1362.

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

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

Do not cut off the mains plug.
Do not use any other type of mains lead except the one supplied with this TV.
The supplied mains lead and moulded plug are designed to be used with this TV to avoid interference and for your safety.
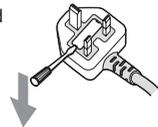
If the socket outlet in your home is not suitable, get it changed by a qualified electrician.
If the plug or mains lead becomes damaged, purchase a replacement from an authorized dealer.

WARNING: – THIS TV MUST BE EARTHED.
<u>How to replace the fuse.</u>
Open the fuse compartment with a screwdriver and replace the fuse.

Warning

■ Take care

To help avoid risk of electrical shock, fire, damage or injury, please follow the warnings below:

● Do not remove covers and never modify the TV yourself as live parts are accessible when they are removed. There are no user serviceable parts inside.

● Do not expose the 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 expose 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, and ensure that the TV does not hang over the edge of the base.

● Do not insert foreign objects into the TV through the air vents.
● Do not use an unapproved pedestal / mounting equipment. Be sure to ask your local Panasonic dealer to perform the setup or installation of approved wall-hanging brackets.
● Do not apply strong force or impact to the display panel.
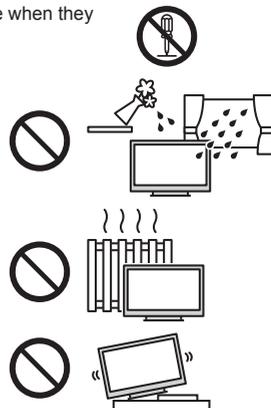
To prevent the spread of fire, keep candles or other open flames away from this product at all times

■ Small object

This product contains possibly dangerous parts that can be breathed in or swallowed by young children accidentally.

● Keep the dangerous parts out of reach of young children.
● Do not allow children to handle SD Card. As with any small object, the SD Card could be swallowed by young children. Please remove SD Card immediately after use and store out of reach of young children.

Caution

■ Ventilation

Allow sufficient space around the TV in order to help prevent excessive heat, which could lead to early failure of some electronic components.

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

● Whether you are using the pedestal or not, always ensure the vents in the bottom of the TV are not blocked and there is sufficient space to enable adequate ventilation.

Minimum distance

10
10   10   7

(cm)
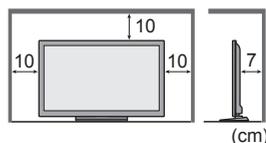
■ Moving the TV

Before moving the TV, disconnect all cables.

● The TV is heavy. Move the TV with at least two people. Support as shown to avoid injury by the TV tipping or falling.
● Transport only in upright position. Transporting the TV with its display panel facing upward or downward may cause damage to the internal circuitry.
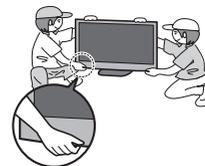
■ When not in use for a long time

This TV will still consume some power even in the Off mode, as long as the mains plug is still connected to a live socket outlet.

● Remove the mains plug from the wall socket when the TV is not in use for a prolonged period of time.

■ Excessive volume

Do not expose your ears to excessive volume from the headphones. Irreversible damage can be caused.

Accessories / Options

Standard accessories

Remote Control
● N2QAYB000717

Batteries for the Remote Control (2)
➡ **(p. 7)**
● R6

Pedestal
➡ **(p. 7)**
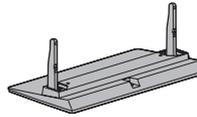
Mains lead
➡ **(p. 11)**
● K2CT3YY00061
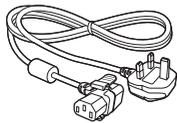
Ferrite core for LAN cable (2)
(Large size)
➡ **(p. 45)**
● J0KG00000146

Ferrite core for USB cable
(Middle size)
➡ **(p. 51)**
● J0KG00000036

Ferrite core for headphones
(Small size)
➡ **(p. 68)**
● J0KG00000011

Use the Ferrite cores to comply with the EMC standard.

Operating Instructions
Production Registration Leaflet

● Accessories may not be placed all together. Take care not to throw them away unintentionally.
● 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

Please contact your local Panasonic dealer to purchase the recommended optional accessories. For additional details, please read the manual of the optional accessories.

Wall-hanging bracket
● TY-WK4P1RW   ● Tilting angle for this TV: 0 (vertical) to 15 degrees

Rear of the TV

400 mm

300 mm

Depth of screw: minimum 17 mm, maximum 35 mm
Diametre: M8
Screw for fixing the TV onto the wall-hanging bracket (not supplied with the TV)

(View from the side)
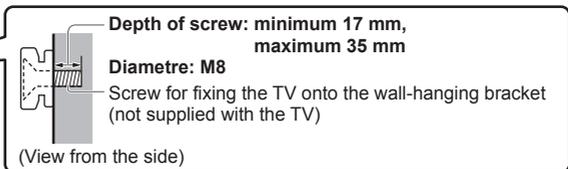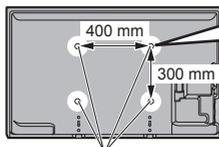
Holes for wall-hanging bracket installation

Warning

● Using other wall-hanging brackets, or installing a wall-hanging bracket by yourself have the risk of personal injury and product damage. In order to maintain the unit's performance and safety, be absolutely sure to ask your dealer or a licensed contractor to secure the wall-hanging brackets. Any damage caused by installing without a qualified installer will void your warranty.
● Carefully read the instructions accompanying optional accessories, and be absolutely sure to take steps to prevent the TV from falling off.
● Handle the TV carefully during installation since subjecting it to impact or other forces may cause product damage.
● 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.
● To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Installing / removing remote's batteries

1

Pull Open

Hook

2

Close

Note the correct
polarity (+ or -)
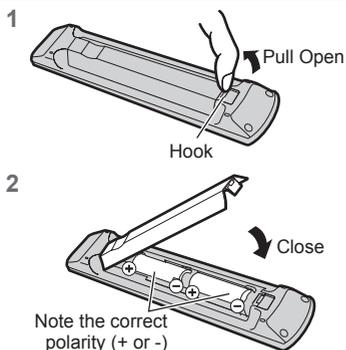
(Caution)

- 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 break up batteries.
 Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Do not disassemble or modify the remote control.

Attaching / removing 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 pedestal other than the one provided with this TV.
- 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 local Panasonic dealer immediately.
During set-up, make sure that all screws are securely tightened.
- If insufficient care is taken to ensure screws are properly tightened during assembly, the pedestal will not be strong enough to support the TV, and it might fall over and become damaged, and personal injury may result.
Ensure that the TV does not fall over.
- If the TV is knocked or children climb onto the pedestal with the TV installed, the TV may fall over and personal injury may result.
Two or more people are required to install and remove the TV.
- If two or more people are not present, the TV may be dropped, and personal injury may result.
When removing the pedestal from the TV, do not remove the pedestal by the methods other than the specified procedure. ➡ **(p. 8)**
- Otherwise the TV and / or pedestal may fall over and become damaged, and personal injury may result.

Quick Start Guide Accessories / Options

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Ⓐ **Assembly screw (4)** (silver) ● XYN5+F18FN	Ⓑ **Assembly screw (4)** (black) ● THE3DL001N	Ⓒ **Pole (2)** ● R: TBL5ZA3311 ● L: TBL5ZA3310	Ⓓ **Base** ● TBL5ZX0343 (TX-P42X50B) ● TBL5ZX0341 (TX-P50X50B)
M5 × 18	M5 × 30	Ⓛ Ⓡ	
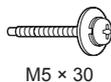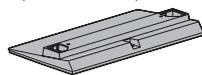
■ Assembling the pedestal

Use the assembly screws Ⓐ to fasten the poles Ⓒ to the base Ⓓ securely.
● Make sure that the screws are securely tightened.
● Forcing the assembly screws the wrong way will strip the threads.
● "L" or "R" mark is stamped on the bottom of the pole.
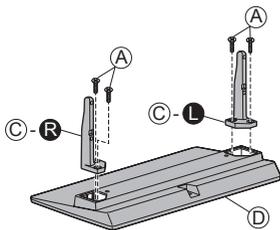
■ Securing the TV

Use the assembly screws Ⓑ to fasten securely.
● Tighten the four assembly screws loosely at first, then tighten them firmly to fix securely.
● Carry out the work on a horizontal and level surface.

Arrow mark
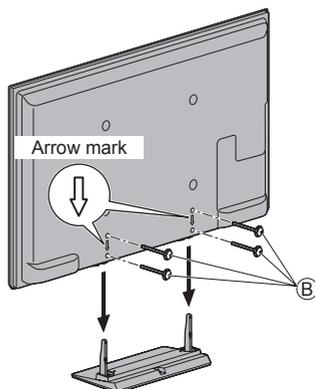
Removing the pedestal from the TV
Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

1 Remove the assembly screws Ⓑ from the TV.
2 Pull out the pedestal from the TV.
3 Remove the assembly screws Ⓐ from the poles.

Preventing the TV from falling over

Using the fall-prevent screw hole and a screw (commercially available), securely fix the body of the pedestal to the installation surface.
● The place where the pedestal is to be fixed should be thick enough and made of hard material.
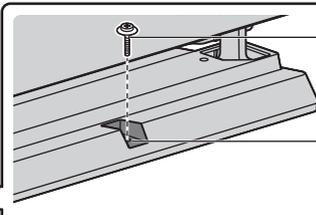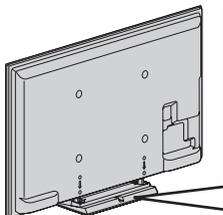
Screw (not supplied)
Diametre: 3 mm
Length: 25 - 30 mm

Screw hole

Identifying Controls

Remote Control

8 **OK**
  ● Confirms selections and choices.
  ● Press after selecting channel positions to quickly change channel.

9 **[Option Menu]** ➡ **(p. 17)**
  ● Easy optional setting for viewing, sound, etc.

10 **Coloured buttons**
   (red-green-yellow-blue)
   ● Used for the selection, navigation and operation of various functions.

11 **Teletext** ➡ **(p. 22)**
   ● Switches to teletext mode.

12 **Subtitles** ➡ **(p. 18)**
   ● Displays subtitles.

13 **Numeric buttons**
   ● Changes channel and teletext pages.
   ● Sets characters.
   ● When in Standby mode, switches TV on (Press for about 1 second).

14 **Sound Mute**
   ● Switches sound mute on or off.

15 **Volume Up / Down**

16 **Input mode selection**
   ● TV - switches DVB / Analogue mode. ➡ **(p. 15)**
   ● AV - switches to AV input mode from Input Selection list. ➡ **(p. 25)**

17 **Surround** ➡ **(p. 31)**
   ● Switches surround sound setting.

18 **Normalise** ➡ **(p. 28)**
   ● Resets picture and sound settings to their default levels.

19 **Exit**
   ● Returns to the normal viewing screen.

20 **TV Guide** ➡**(p. 19)**

21 **Cursor buttons**
   ● Makes selections and adjustments.

22 **Return**
   ● Returns to the previous menu / page.

23 **Hold**
   ● Freezes / unfreezes the picture. ➡ **(p. 17)**
   ● Holds the current teletext page (teletext mode). ➡ **(p. 23)**

24 **Index** ➡ **(p. 23)**
   ● Returns to the teletext index page (teletext mode).

25 **Last view** ➡ **(p. 16)**
   ● Switches to previously viewed channel or input mode.

26 **Channel Up / Down**

27 **Operations for contents, connected equipment, etc.** ➡ **(p. 26, 52, 65)**

1 **Standby On / Off switch**
  ● Switches TV on or off standby.

2 **Off Timer** ➡ **(p. 17)**
  ● Sets the time the TV automatically turns off.

3 **[Main Menu]** ➡ **(p. 28)**
  ● Press to access Picture, Sound and Setup Menus.

4 **Aspect** ➡ **(p. 18)**
  ● Changes aspect ratio.

5 **Information** ➡**(p. 16)**
  ● Displays channel and programme information.

6 **VIERA TOOLS** ➡ **(p. 27)**
  ● Displays some special feature icons and accesses easily.

7 **[Media Player]** ➡**(p. 51)**
  ● Switches to SD Card and USB device viewing / listening mode.

Indicator / Control panel

Rear side of the TV

5 6 7

1 — F

2 — ∧ + / − ∨

3 — TV / AV

4 — ⏻/|

1 Function select
● [Volume] / [Contrast] / [Brightness] / [Colour] / [Sharpness] / [Tint] (NTSC signal) / [Bass]* / [Treble]* / [Balance] / [Auto Setup] (p. 38)
*[Music] or [Speech] mode in the Sound Menu

2 Channel Up / Down, Value change (when using the F button), Switching the TV on (press either button for about 1 second when in Standby mode)

3 Changes the input mode

4 Mains power On / Off switch
● Use to switch the mains power.
If you turned the TV off during Standby mode by the remote control last time, the TV will be in Standby mode when you turn the TV on with Mains power On / Off switch.

When pressing the control panel button (1 - 4), the control panel guide appears on the left side of the screen for 3 seconds to highlight the pressed button.

5 Remote control signal receiver
● Do not place any objects between the TV remote control signal receiver and remote control.

6 C.A.T.S. (Contrast Automatic Tracking System) sensor
● Senses brightness to adjust picture quality when [C.A.T.S.] in the Picture Menu is set to [On].
➡ **(p. 29)**

7 Power and Timer LED
Red: Standby
Green: On
Orange: Timer Programming On
Orange (flash):
Recording of Timer Programming or Direct TV Recording in progress
Red with orange flash:
Standby with Timer Programming On or Direct TV Recording
● The LED blinks when the TV receives a command from the remote control.

Using the On Screen Displays - Operation guide

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

■ Operation guide
Operation guide will help you to operate by using the remote control.
Example: [Owner ID]

Owner ID
Please enter new PIN
PIN   * * * *
●EXIT   🔟 – 🔟 PIN entry
●RETURN
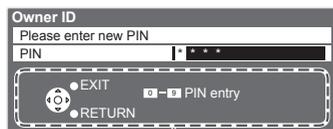
Operation guide

■ How to use remote control
MENU — Open the main menu

Move the cursor / select the menu item (up and down only) / adjust levels (left and right only) / select from a range of options (left and right only)

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

BACK/RETURN — Return to the previous menu

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

Auto power standby function

The TV will automatically go into Standby mode in the following conditions:
• No signal is received and no operation is performed for 30 minutes in Analogue TV mode.
• [Off Timer] is active in the Setup Menu. (p. 17)
• No operation is performed for the period selected in [Auto Standby] (p. 34).
● This function does not affect the recording of Timer Programming and Direct TV Recording.

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.

Terminals
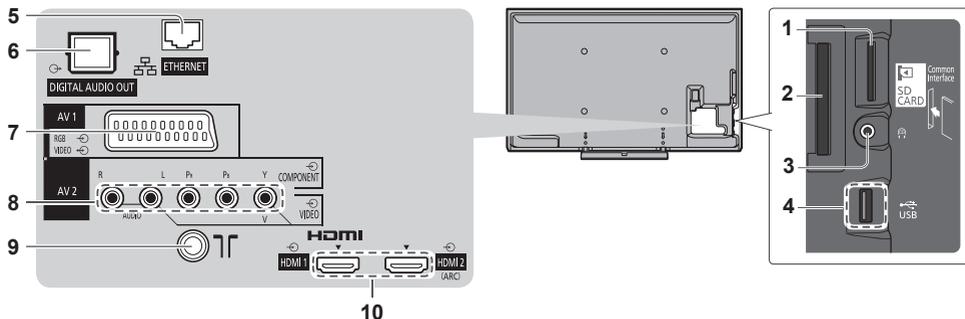
1 **SD Card slot** ➡ **(p. 51)**
2 **CI slot** ➡ **(p. 49)**
3 **Headphone jack** ➡ **(p. 68)**
4 **USB port** ➡ **(p. 51)**
5 **ETHERNET** ➡ **(p. 45)**

6 **DIGITAL AUDIO OUT** ➡ **(p. 67)**
7 **AV1 (SCART)** ➡ **(p. 12)**
8 **AV2 (COMPONENT / VIDEO)** ➡ **(p. 67)**
9 **Terrestrial terminal (see below)**
10 **HDMI1 / 2** ➡ **(p. 12, 67)**

Connections

Mains lead and aerial

■ **DVB, Analogue**

Terrestrial aerial

RF cable

Mains lead

Aerial input terminal

AC 220-240 V
50 / 60 Hz

■ **Mains lead**

Push until both side tabs click

Make sure that the mains lead is securely fixed.

To remove from the TV:

tabs

Press both tabs and pull on mains connector to release

11

AV devices

■ Player

TV

HDMI cable

Player

■ DVD Recorder / VCR

TV

Aerial input terminal

Terrestrial aerial

RF cable

RF cable

SCART cable
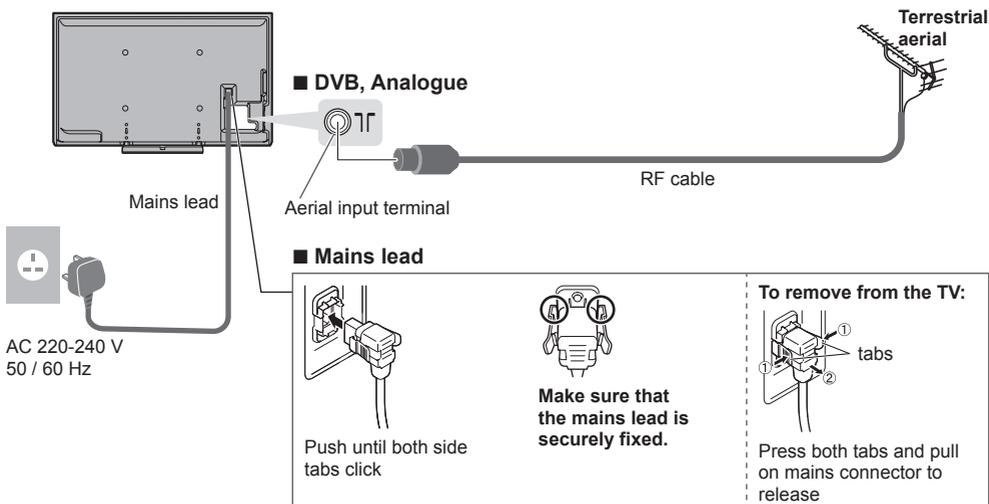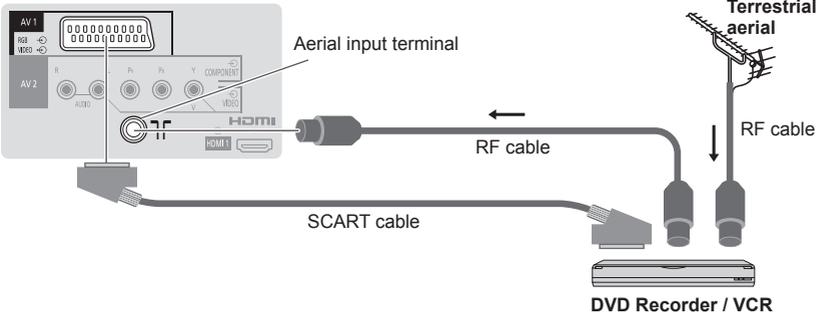
DVD Recorder / VCR

■ DVD Recorder / VCR and Satellite receiver

TV

Aerial input terminal

Satellite receiver

HDMI cable

SCART cable

RF cable

RF Cable

Terrestrial aerial

SCART cable

RF cable

RF Cable
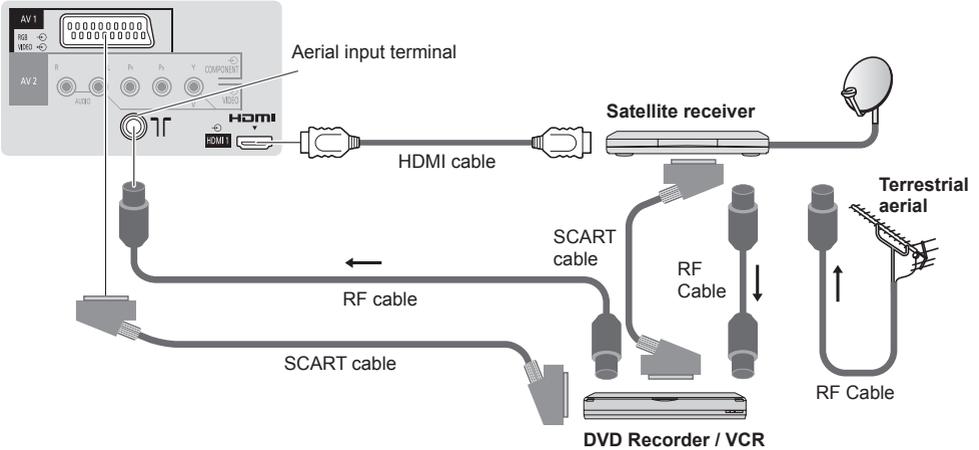
DVD Recorder / VCR

Note

● Connect to the TV's AV1 for a DVD Recorder / VCR supporting Q-Link (p. 61).
● Q-Link and VIERA Link connection ➡ **(p. 59, 60)**
● Please also read the manual of the equipment being connected.
● Keep the TV away from electronic equipment (video equipment, etc.) or equipment with an infrared sensor.
  Otherwise, distortion of image / sound may occur or operation of other equipment may be interfered.
● When using a SCART or HDMI cable, use the fully wired one.
● Check the type of terminals and cable plugs are correct when connecting.

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. 11, 12) and settings (if necessary) of the connected equipment before starting Auto Setup. For details of settings for the connected equipment, read the manual of the equipment.
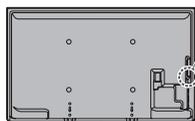
1 Plug the TV into mains socket and switch on

● Takes a few seconds to be displayed.
● If the red LED shows on the TV, press the Standby On / Off switch on the remote control for about 1 second.

2 Select your country

Country Selection

| United Kingdom | Ireland |

① select
② set

Example: [UK]

Auto Setup - DVB and Analogue

| DVB Scan | CH 21 | 68 |
| Analogue Scan | CH 21 | 88 |

This will take about 6 minutes.

CH	Channel Name	Type	Quality
62	CBBC Channel	Free TV	10
62	BBC Radio Wales	Free TV	10
62	E4	Free TV	10
62	Cartoon Nwk	Free TV	10
29		Analogue	-
33	BBC1	Analogue	-

Free TV: 8   Pay TV: 0   Radio: 0   Data: 0   Analogue: 2
Searching

Example: [Ireland]

Auto Setup - DVB and Analogue

| DVB Scan | CH 5 | 69 |
| Analogue Scan | CH 1 | 99H: 21 | 41 |

This will take about 6 minutes.

CH	Channel Name	Type	Quality
62	CBBC Channel	Free TV	10
62	BBC Radio Wales	Free TV	10
62	E4	Free TV	10
62	Cartoon Nwk	Free TV	10
CH29		Analogue	-
CH33	BBC1	Analogue	-

Free TV: 8   Pay TV: 0   Radio: 0   Analogue: 2
Searching

Auto Setup will start to search for TV channels and store them.
● Actual number of channels may differ due to channel duplication.

Sending Preset Data
Please wait!
0% 100%
Remote control unavailable
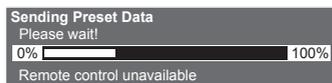
If Q-Link or similar technology (p. 61) compatible recorder with analogue tuner is connected, analogue channel setting is automatically downloaded to the recorder. (Digital channel setting is not downloaded.)
● If downloading has failed, you can download later through the Setup Menu.
➡ **"Q-Link Download" (p. 32)**

3 Input Owner ID

Owner ID

Please enter new PIN

| PIN | * * * * |

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. The PIN number cannot be reset.
● You can input or change the Owner ID later. ➡ **"Owner ID" (p. 48)**

● To skip this step
EXIT

● This step will be skipped in the Auto Setup after [Shipping Condition] (p. 47) is performed.

Panasonic
TV

3

■ How to input Owner ID

1 Enter the PIN number (4 digits)

Owner ID	
Please enter new PIN	
PIN	* * * *

● Enter the PIN number twice at first setting.

2 Select the item (NAME / HOUSE NO / POSTCODE)

Owner ID-Data Entry	
PIN	* * * *
NAME	
HOUSE NO	
POSTCODE	

① select
② access

3 Enter your name, house number and postcode
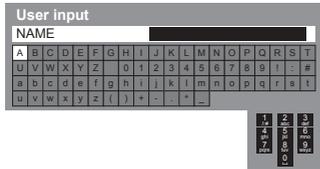
User input
NAME
A B C D E F G H I J K L M N O P Q R S T
U V W X Y Z _ 0 1 2 3 4 5 6 7 8 9 ! : #
a b c d e f g h i j k l m n o p q r s t
u v w x y z ( ) + - . * _

Set characters
① select
② set
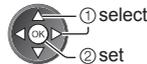
● You can set characters by using numeric buttons.
➡ **"Characters table for numeric buttons" (p. 73)**

Return to select other items
BACK/
RETURN

● Select the next item and repeat the operations.

4 Exit to go to next step
EXIT

4

Select [Home]

Select [Home] viewing environment to use in your home environment.

Please select your viewing environment.
Home	Shop

① select
② set

■ [Shop] viewing environment (for shop display only)

[Shop] viewing environment is the demonstration mode to explain main features of this TV.

Select [Home] viewing environment to use in your home environment.
● You can return to viewing environment selection screen at the stage of Shop confirmation screen.

1 Return to viewing environment selection screen

Shop
You have selected shop mode

BACK/
RETURN

Automatic Demo	
Off	On

2 Select [Home]

Please select your viewing environment.
Home	Shop
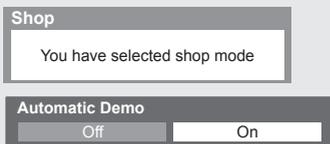
① select
② set

To change viewing environment later on, you will need to initialise all settings by accessing Shipping Condition. ➡ **[Shipping Condition] (p. 47)**

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

If tuning has failed, check the connection of the RF cable, and then, follow the on-screen instructions.

Note

● To check the channel list ➡ **"Using TV Guide" (p. 19)**
● To edit or hide (skip) channels ➡ **"Tuning and Editing Channels" (p. 39 - 41)**
● To retune all channels ➡ **[Auto Setup] (p. 38)**
● To initialise all settings ➡ **[Shipping Condition] (p. 47)**

Watching TV

1 Turn power on
- Press for about 1 second.
- Mains power On / Off switch should be on. (p. 10)

2 Select the mode
`TV`
- You can also select the mode pressing the TV button repeatedly on the remote control or the TV (p. 10).

3 Select a channel

∧ — up

∨ — down

or

DVB channel position numbers run from 1 onwards. Analogue channel position numbers run in the ranges 0 - 99.
- To select a more than two-digit channel position number, e.g. 399

Volume

It is possible to confirm the channel name and programme information by using the Information banner before changing channels.

1 Display Information banner if it is not displayed

2 While the banner is displayed, select the channel
- ① select channel
- ② watch

It is possible to confirm the channel and programme information by using the TV Guide (EPG) before changing channels.

1 Display TV Guide

2 Select the current programme or channel
- ① select
- ② access

3 Select [View] (DVB)

Das Erste
19:30- 20:00

| View | Timer Programming |
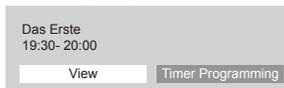
- ① select
- ② watch

Note
-

Other useful functions

Display Information banner

Display Information banner

ⓘ ● Also appears when changing a channel.

Example : DVB

7 **2** **8** **3** **4**

1 | **1 BBC ONE WALES** | **Radio** | **19:50** | **All DVB Channels** |
5 — Coronation Street — Also in 🆑 Select favourites ▭
6 — 19:30 - 20:00 ▭▬▭ ◄ Now ► For info press ⓘ
| Mute | Encrypted | AD STTL TEXT Multi Audio 45 |
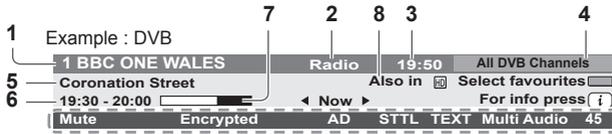
1 Channel position and name

2 Channel type ([Radio], [Data], [HDTV], etc.)

3 Current time

4 [All DVB Channels], [All Analogue Channels] or [Favourites]1 to 4 (p. 39) (DVB)
 ● To switch
 ▭ (blue)

5 Programme

6 Programme Start / Finish time (DVB)
 Channel number, etc. (Analogue)

7 Progress time indicator of the selected programme (DVB)

8 Same programme available as HD broadcast UK only
 ● To display the extra information for details
 ⓘ

Features available / Message meanings

[Mute]
Sound mute on

[Bad signal]
Poor TV signal quality

[Encrypted]
Scrambled programme

[AD] UK only
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. 32)**

[STTL]
Subtitle service available

[TEXT]
Teletext service available

[Multi Audio]
Multiple audio available

[Stereo], [Mono], [NICAM]
Audio mode

1 - 90
Off Timer remaining time
● For settings ➡ **(p. 17)**

● To confirm another tuned channel name

● To watch the channel listed in the banner

● Information on the next programme (DVB)

● To hide
EXIT
✕

● Extra information (DVB)
 ⓘ (Press again to hide the banner)

● To set display timeout
➡ **[Banner Display Timeout] (p. 33)**

● [AD], [STTL], [TEXT], [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:

1 BBC ONE WALES	19:50	All DVB Channels
Coronation Street		
19:30 - 20:00	◄ Now ►	Exit info ⓘ
I [AD] I		
	AD	

Last view

Switch to previously viewed channel or input mode easily

🔲 ● Press again to return to the current view.
LAST VIEW

Note
● Switching channel is not available while the recording of Timer Programming or Direct TV Recording is in progress.
● Watching less than 10 seconds is not regarded as the previously viewed channel or input mode.

Watching TV

Hold

Freeze / unfreeze picture
HOLD

Display the selectable settings for the current status

Confirm or change the current status instantly
OPTION
● To change
①select
②change

[Audio Description] [UK only] (DVB)
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. 32)**

[Multi Audio] (DVB)
Selects between alternative language for sound tracks (if available)
● This setting is not memorised and it will return to the default setting once you exit the current programme.

[Monaural Audio] (DVB)
Selects stereo / monaural (if available)
● This setting is not memorised and it will return to the default setting once you exit the current programme.

[Subtitle Language] (DVB)
Selects the language in which subtitles should appear (if available)
● This setting is not memorised and it will return to the default setting once you exit the current programme.

[Teletext Character Set]
[Ireland only]
Sets the teletext language font
➡ **(p. 33)**

[Teletext Language] [Ireland only] (DVB)
Selects between alternative language for teletext (if available)

[NICAM] (Analogue)
Switches NICAM sound (if available)
➡ **(p. 31)**

[Volume Correction]
Adjusts volume of individual channel or input mode

Off Timer

Turn the TV to Standby mode automatically after a fixed period [0] / [15] / [30] / [45] / [60] / [75] / [90] (minutes)
OFF TIMER   Press repeatedly until desired time appears.

● To cancel, set to [0] or turn the TV off.
● To confirm the remaining time ➡ **"Display Information banner" (p. 16)**
● When the remaining time is within 3 minutes, the remaining time will flash on the screen.

■ To set Off Timer using the menu item

1 Display the menu
MENU

2 Select [Setup]

VIErA Main Menu
⊑ Picture
♪ Sound
✿ Setup
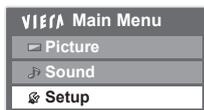
①select
②access

3 Select [Off Timer] and set the time in 15-minute increments

⧉ Setup Menu	1/2
Timer Programming	
TV Guide Settings	
Off Timer	Off
Eco Navigation	
Link Settings	
Child Lock	
DVB Tuning Menu	
Display Settings	
Network Setup	

①select
②set
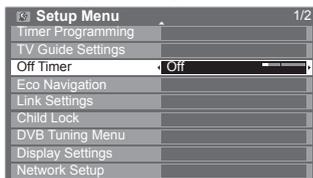
● To cancel, set to [Off] or turn the TV off.

Aspect

Change the aspect ratio (image size)

ASPECT
Enjoy viewing the image at its optimum size and aspect.
Programmes usually contain an "Aspect Control Signal" (Widescreen signal, etc.), and the TV will choose the aspect ratio automatically according to the "Aspect Control Signal" (p. 69).

■ To change the aspect ratio manually

1 Display Aspect Selection list

ASPECT

Aspect Selection
Auto
16:9
14:9
4:3
Zoom1
Zoom2
Zoom3
Select
EXIT
RETURN

Aspect Selection list

2 While the list is displayed, select the mode

① select
② store

● You can also change the mode only using the ASPECT button.

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. 69)**

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

[Zoom1]
Displays a 16:9 letterbox or 4:3 image without distortion.

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

[Zoom2]
Displays a 16:9 letterbox (anamorphic) image full-screen without distortion.

[4:3]
Displays the image at the standard 4:3 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
● Aspect is fixed to [16:9] when [Viewing Mode] is set to [Game] in the Picture Menu.
● Aspect cannot be changed in teletext service.
● Aspect mode can be memorised separately for SD (Standard definition) and HD (High definition) signals.

Display subtitles

■ DVB

Display / hide subtitles (if available)

STTL
● To change the language for DVB (if available) ➡ **[Preferred Subtitles] (p. 33)**

■ Analogue

Display subtitles   Hide subtitles
STTL   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.

Watching TV

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).
● DVB and Analogue channels are displayed on the same TV Guide screen. [D] means DVB channel and [A] means Analogue channel. There will be no programme listings for Analogue channels.
● 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 TV Guide is completely shown.

1 Select the mode
➡ (p. 15)

[TV]

2 View TV Guide

Example: [UK]

Freeview		TV Guide	Wed 26 Oct 2011 10:46	

1 Wed 26 Oct | Search | All Channels

1 BBC ONE
20:00 - 20:30 DIY SOS : We open in the Battersbys   Also in ⓘ

2 | Time: 19:30 | 20:00 | 20:30 | 21:00 | 21:30 |

D	1 BBC ONE	Das Erste	DIY SOS	Holiday News	
D	7 BBC THREE	Hot Wars		Holiday Program	
D	14 E4	Emmerdal.	Coronation Street	The Bill	
D	70 BBC FOUR	10 O' clock News BBC	Pepsi Char.	Good bye	
D	72 BBC 2W	Panorama	Spring watch	Coast	
D	105 BBCi	I'm A Celebrity	Pop Idol	News	
D	719 BBC Radi	Rugby	15 To 1	Sports	

1 TV Guide date
2 TV Guide time
3 [D]: DVB
    [A]: Analogue
4 Channel position and name

5 Some programmes may also be broadcast in HD [UK only]
● You can select HD or SD broadcast before viewing or setting Timer Programming.
6 Programme
7 Current date and time

■ To return to TV

EXIT or GUIDE

■ To change the layout of TV Guide ➡ [TV Guide View] (p. 32)

■ To watch the programme

1 Select the current programme or channel

① select
② access

or [1] [2] [3] [4] [5] [6] [7] [8] [9] [0]

2 Select [View] (DVB)

Das Erste
19:30- 20:00

View | Timer Programming
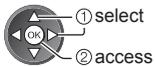
① select
② watch

● To use Timer Programming ➡ **(p. 20)**

● If a programme exists in both HD and SD broadcasts, the [View Options] screen will be displayed to select HD or SD broadcast. (DVB) [UK only]

View Options
DIY SOS

| | 101 | BBC ONE | 19:30-20:00 | Wed 26 Oct 2011 |
| HD | 119 | BBC HD | 19:30-20:00 | Wed 26 Oct 2011 |

① select
② watch

■ To the previous day (DVB)

◯ (red)

■ To the next day (DVB)

◯ (green)

■ View details of the programme (DVB)

1 Select the programme

2 View details

ⓘ ● Press again to return to TV Guide.

■ To view a channel list of the selected category

◻ (blue)

(Category list)

Category
All Channels
All Channels
All DVB Channels
All HD Channels
All Analogue Channels
Free DVB Channels
TV/Data DVB Channels
Favourites1
Favourites2
Favourites3
Favourites4

Only Analogue channels
are listed

① select category
② view

● To list favourite channels
 ➡ **(p. 39)**
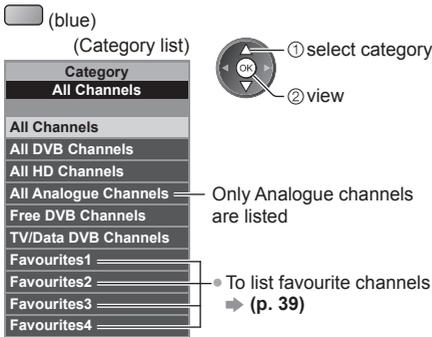
■ To search programme types and view a channel list of the searched programmes (DVB)

◻ (yellow)

UK (Search list)

Search
Search Titles...
Movie
News and Factual
⋮

Ireland (Type list)

Prog.Type
All Types
All Types
Movie
News
⋮

① select type
② view
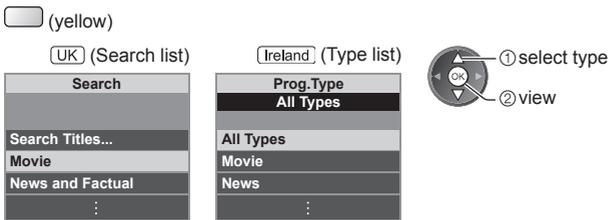
■ To search programme titles and view a list of the searched programmes (DVB) UK only

◻ (yellow)

(Search list)

Search
Search Titles...
Movie
News and Factual
⋮

**1 Select
[Search Titles...]**
  ① select
  ② access

2 Set characters
(maximum 19 characters)
  ① select
  ② set

● To use numeric buttons
 ➡ **"Characters table for
 numeric buttons" (p. 73)**

3 Start [Search]

◻ (green)

● All the programme titles including
 the word you set will be listed.
● Searching without any characters
 will list all programmes including
 current programmes.

Timer Programming (DVB)

The Timer Programming menu allows you to choose programmes that you want to remind watching or record to the
external recorder. At the correct time, the TV will tune to the correct channel even if the TV is in Standby mode.

1 Select the forthcoming programme
  ① select
  ② set

● LED will turn to orange if
 Timer Programming is set.
 (Orange LED will flash if the recording
 of Timer Programming is in progress.)
 ➡ **"Indicator / Control panel" (p. 10)**

2 Select the function ([Ext Rec.] or [Reminder])

(Timer Programming screen)

Timer Programming			Wed 26.10.2011 10:46		
Function	No.	Channel Name	Date	Start	End
Ext Rec.	1	BBC ONE <TIMER>	Wed 26.10.2011	20:00	20:30 (30 min.)
.	...		---	--:--	--:-- (--- min.)
.	...		---	--:--	--:-- (--- min.)
.	...		---	--:--	--:-- (--- min.)

[Ext Rec.] / [Reminder]

  ① select
  ② store

[Ext Rec.] / [Reminder]
 ➡ **"Set timer programming event details" (p. 42)**

■ **To check / change / cancel a timer programming event**
  ➡ **"Timer Programming" (p. 42, 43)**

■ **To return to TV Guide**

BACK/
RETURN
↩

■ **If you select the current programme**

A confirmation screen asking whether you want to watch or record the programme appears.
Select [Timer Programming] and set [Ext Rec.] to record from the time you finish the timer programming event setting.

Das Erste
19:30- 20:00

| View | Timer Programming |

① select
② access

■ **If a programme exists in both HD and SD broadcasts** UK only

The [Timer Options] screen will be displayed to select HD or SD broadcast.

Timer Options
DIY SOS

| | 101 | BBC ONE | 19:30-20:00 | Wed 26 Oct 2011 |
| HD | 119 | BBC HD | 19:30-20:00 | Wed 26 Oct 2011 |

① select
② set

(Timer Programming screen)

Timer Programming			Wed 26.10.2011 10:46
Function	No. Channel Name	Date	Start	End
Ext Rec.	D 1 BBC ONE	Wed 26 Oct	20:00	20:30
---	---	--/--	--:--	--:-- (--- min.)
---	---	--/--	--:--	--:-- (--- min.)

HD will be displayed if HD broadcast is set.

⎯ **Note** ⎯
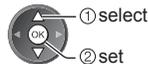● This function is not available in Analogue mode.
● Timer Programming reminder messages will remain displayed until one of the following occurs:
  • You press the OK button to view the programme or the EXIT button to cancel the reminder.
  • The timer programming event that the reminder is set for ends.
● No other channel can be selected while the recording of Timer Programming is in progress.
● When recording programmes to the external recorder, be sure to make the proper settings on the recorder connected to the TV.
  If a compatible recorder with Q-Link, VIERA Link or similar technologies is connected to the TV (p. 61, 62) and [Link Settings] (p. 32) are completed, no setting of the recorder is required. Also read the manual of the recorder.

Guide link programming (Timer Programming from the TV Guide signal) UK only

Guide link programming is Timer Programming which is controlled by information from the TV Guide; if programme start and end times are changed by the broadcaster, the timer programming event will follow the change.
A Split Programme programming is a Guide link programming which is interrupted by one or more other programmes. Note that Guide link programming (including Split Programme programming) only works reliably if correct information is received from broadcasters.

(Timer Programming screen)

Timer Programming			Wed 26 Oct 2011 10:46
Function	No. Channel Name	Date	Start	End
Ext Rec.	D 1 BBC ONE DIY SOS	Wed 26 Oct	20:00	20:30 (30 min.)
Reminder	D 14 E4 The Bill	Wed 26 Oct	21:00	22:30 (90 min.)
Ext Rec.	D 72 BBC 2W <TIMER>	Wed 26 Oct	22:45	23:00 (15 min.)
Ext Rec.	D 1 BBC ONE Red Cap	Thu 27 Oct	10:30	11:30 (60 min.)
---	---	--/--	--:--	--:-- (--- min.)

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

"Guide" is displayed if the timer is set from the TV Guide (Guide link programming)

Example: UK

Freeview		TV Guide	
Wed 26 Oct		Search	All Channels

1 BBC ONE
20:00 - 20:30 DIY SOS : We open in the Batterbys
Also in

Time:	19:30	20:00	20:30	21:00	21:30
D 1 BBC ONE	Das Erste	DIY SOS	Holiday News		
D 7 BBC THREE	Hot Wars		Holiday Program		
D 14 E4	Emmerdal.	Coronation Street		The Bill	
D 70 BBC FOUR	10 O' clock News	BBC	Pepsi Char.	Good bye	
D 72 BBC 2W	Panorama	Spring watch		…cast	
D 105 BBCi	I'm A Celebrity		Pop Idol	…ews	
D 719 BBC Radi	Rugby	5 To 1		…ports	

"⏱" or "⟳" will be displayed in the TV Guide if Timer Programming is set as the Guide link programming.

⎯ **Note** ⎯
● If you edit the start time or end time of a Guide link programming event by more than 10 minutes, it will no longer follow the broadcaster's changes to the start or end time. The start and end times will become fixed.
● While making the Split Programme programming event for [Ext Rec.], you cannot record any channels between the interrupted programmes.
● The Split Programme programming event for Reminder will be cleared by pressing the OK button once to view.
● The Split Programme programming event for Reminder will switch to the programmed channel by pressing the OK button even if it is between the interrupted programmes.
● The Split Programme programming does not work if the separated parts are broadcast on different channels.

Using TV Guide

21

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 [TEXT] in the information banner.

1 BBC ONE Wales	19:50	All DVB Channels
Coronation Street		Select favourites
19:30 - 20:00	◄ Now ►	For info press
	TEXT	
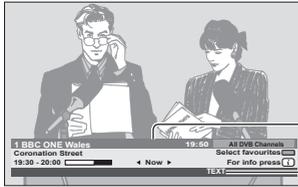
Information banner ➡ **(p. 16)**

Displayed if programme has teletext service

Ireland

Depending on the broadcaster, the digital teletext (MHEG) services may not be available. In this case, the operation of the teletext services may be the same as the analogue teletext services (p. 23).

Digital teletext (MHEG)

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

Example:

| BBC THREE | 17:51 28 Feb |

■ How to operate services

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.

● Select, go

● Symbol: ◄►▼▲

● Back key
BACK/
RETURN

● Coloured characters

Coloured button

● When options with numbers are displayed

■ 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, it will be ignored and you will have to press the TEXT button again when the download is complete.
● 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.

Analogue teletext

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

What is FASTEXT mode?

In FASTEXT mode, four differently coloured subjects are situated at the bottom of the screen. To access more information about one of these subjects, press the appropriate 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. 24)**

■ **To change mode** ➡ **[Teletext] (p. 33)**

1 Switch to Teletext
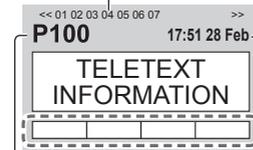
TEXT
● Displays the index page (content varies depending on the broadcasters).

Sub page number

```
<< 01 02 03 04 05 06 07        >>
```
P100   **17:51 28 Feb** — Time / date

TELETEXT
INFORMATION

— Colour bar

Current page number

2 Select the page

up / down

or

Coloured button
(Corresponds to the colour bar)

■ **To adjust contrast**

MENU
(Press twice)

As the blue bar is displayed

■ **To return to TV**

EXIT

Reveal hidden data

Reveal hidden words e.g. quiz page answers

MENU ➡ (red)
● Press again to rehide.

Subtitles

View a favourite page stored

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

INDEX

Return to the main index page

INDEX

HOLD

Stop automatic updating

(If you want to hold the current page without updating.)

HOLD
● Press again to resume.

23

FULL / TOP / BOTTOM

MENU ➡ ☐ (green)

(TOP)

P100
Broadcast

(Expand the TOP half)

➡

(BOTTOM)

➡

Normal (FULL)

P100
Broadcast

(Expand the BOTTOM half)

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 ⟵
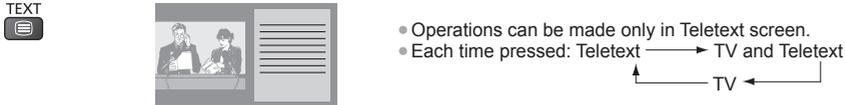
Store frequently viewed pages

Store frequently viewed pages in the colour bar (List mode only)
As page is displayed

☐
(Corresponding coloured button)
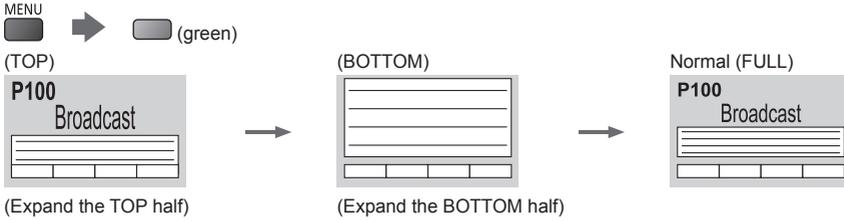
➡ ⊙ press and hold

P100
Broadcast

| 101 | 200 | 400 | 888 |
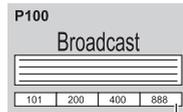
The number changes to white.

● 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

➡ ⊙ press and hold
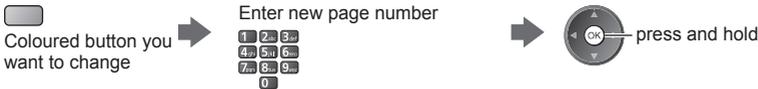
View sub page

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

◁⊙▷ <<01 02 03 04 05 ⟵ Appears at top of the screen

● 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.

■ To view specific sub page

MENU ➡ ☐ (blue)

T**
Broadcast

➡ Enter the 4-digit number
Example: P6
0 0 0 6

T0006

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
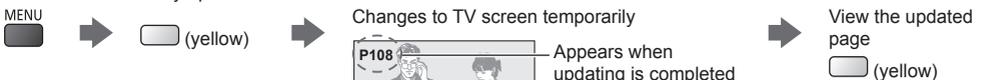
P108 ⟵ Appears when updating is completed

(You cannot change the channel.)

➡ View the updated page
☐ (yellow)

24
● The news page provides a function that indicates arrival of the latest news ("News Flash").

Watching External Inputs

Connect the external equipment (VCRs, DVD equipment, etc.) and you can watch through the input.
● To connect the equipment ➡ **(p. 11, 12, 67, 68)**
The remote control is capable of operating the contents or external equipment. ➡ **(p. 26)**

1 Turn the TV on

When connecting with SCART (p. 12)
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. 67).

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

2 Display the input selection menu
AV

3 Select the input mode connected to the equipment

Input Selection
AV1
AV2
HDMI1
HDMI2
TV
SD Card/USB
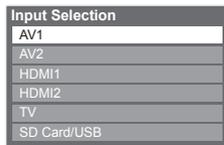
①select
②watch

● You can also select the input using the AV button on the remote control or the TV (except [SD Card/USB]).
Press the button repeatedly until the desired input is selected.
● [SD Card/USB]: Switches to Media Player. ➡ **"Using Media Player" (p. 51)**
● You can label or skip each input mode (except [SD Card/USB]).
➡ **"Input Labels" (p. 33)**
Skipped inputs will not be displayed when the AV button is pressed.

4 View

AV1 ——————————— Displays the selected mode
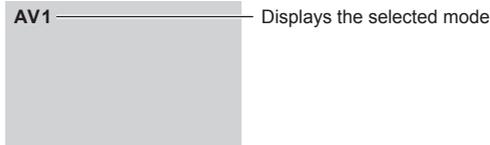
■ **To return to TV**
TV

Terminal	AV1	AV2	HDMI1	HDMI2
Manual input (default setting in "Input Labels")	AV1 AV1-RGB	AV2	HDMI1	HDMI2
Auto input	EC/AV1 EC/AV1-RGB	AV2 AV2-COMPONENT	EC/HDMI1 Applicable for EC mode and VIERA Link	EC/HDMI2 Applicable for VIERA Link

Note

● If the external equipment has an aspect adjustment function, set it to [16:9].
● For details, read the manual of the equipment or ask your local dealer.

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Operating the contents or equipment with the TV remote control

You can operate the contents in Media Player, recording functions or the connected equipment with the below buttons of this TV remote control.

⏻	**Standby** Set to Standby mode / Turn on
▶	**Play** Playback videocassette / DVD / video content
■	**Stop** Stop the operations
◄◄	**Rewind / Skip / Search** VCR: 　Rewind, view the picture rapidly in reverse DVD / video content: 　Skip to the previous track, title or chapter 　Press and hold to search backward
►►	**Fast-forward / Skip / Search** VCR: 　Fast-forward, view the picture rapidly forward DVD / video content: 　Skip to the next track, title or chapter 　Press and hold to search forward
❚❚/�	**Pause** Pause / Resume DVD: Press and hold to play at slow speed
PROGRAMME ∨ ∧	**Channel Up / Down** Select channel
REC ●	**[Direct TV Rec]** → (p. 61, 63)

How to change the code

Each type of the Panasonic equipment has its own remote control code.
To use in some features of this TV, you have to select the code "73".
Change to the appropriate code according to the equipment or features below.

Press and hold ⏻ during the following operations

Enter the appropriate code, see table below

Press ■

Type of the equipment, features	Code
DVD Recorder, DVD Player, Blu-ray Disc Player	70 (default)
Player theatre, Blu-ray Disc theatre	71
VCR	72
Using in Media Player (p. 52) Direct TV Recording (p. 61, 63) Equipment using in VIERA Link (p. 64)	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.

Watching External Inputs

How to Use VIERA TOOLS

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

● For [VIERA Link] function to operate correctly, ensure the connections and settings are completed.
  ➡ **"Summary of Q-Link and VIERA Link features" (p. 59), "Preparations" (p. 62)**
  After connection, turn the equipment on and then switch the TV on.
● For [Photo], [Video] and [Music] functions to operate correctly, ensure the device has photo, video or music data on it and insert it into the SD Card slot or USB port properly. ➡ **"Using Media Player" (p. 51)**

1 Display icons of the feature
VIERA TOOLS

2 Select a feature

| VIERA Link | Photo | Video | Music |

① select
② access
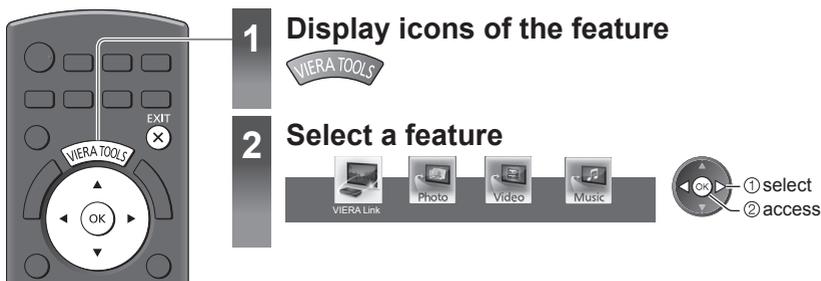
■ To return to TV
EXIT ⊗ or VIERA TOOLS

■ Follow the operations of each feature

[VIERA Link] ➡ **(p. 64)**

VIERA Link

[Photo]* ➡ **(p. 53)**

Photo

[Video]* ➡ **(p. 56)**

Video

[Music]* ➡ **(p. 58)**

Music

*If 2 devices are available, a selection screen will be displayed.
 Please select the correct description and access.

> **Note**
●If the selected feature is not available, the demonstration to explain how to use it can be displayed. Press the OK button to view the demonstration after selecting the unavailable feature.

How to Use Menu Functions

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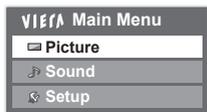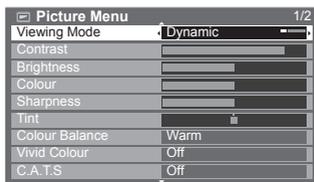
1 Display the menu

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

2 Select the menu

VIErA Main Menu
- Picture
- Sound
- Setup

① select
② access

3 Select the item

Picture Menu		1/2
Viewing Mode	◄ Dynamic	
Contrast		
Brightness		
Colour		
Sharpness		
Tint		
Colour Balance	Warm	
Vivid Colour	Off	
C.A.T.S	Off	

select

■ **To return to TV at any time**

EXIT

■ **To return to the previous screen**

BACK/
RETURN

■ **To change menu pages**

∧ — up

∨ — down

■ **Choose from among alternatives**

Number and positions of alternatives

Colour Balance	◄ Normal ►

Changed

① select
② store

■ **Adjust using the slide bar**

Sharpness	◄ ►

Moved

① change
② store

■ **Go to the next screen**

Child Lock	Access

Displays the next screen

access

■ **Enter characters by free input menu**

You can enter names or numbers freely for some items.

User input	
Name	

A B C D E F G H I J K L M N O P Q R S T
U V W X Y Z 0 1 2 3 4 5 6 7 8 9 ! : #
a b c d e f g h i j k l m n o p q r s t
u v w x y z ( ) + - . * _
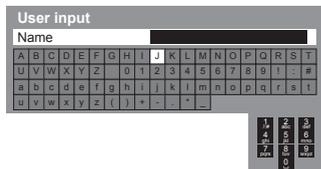
Set characters one by one

① select
② set

Store

BACK/
RETURN

- You can set characters by using numeric buttons.
  ➡ **"Characters table for numeric buttons" (p. 73)**

■ **To reset the settings**

- Picture or sound settings only
  ➡ **[Reset to Defaults] in the Picture Menu (p. 30) or Sound Menu (p. 32)**

- Picture and sound settings together

  N

  (Also volume level and aspect mode are reset)

- To initialise all settings ➡ **[Shipping Condition] (p. 34)**

> **Note**
> - If "Demo Settings" item is displayed in the Setup Menu, the TV is in "Shop" viewing environment. To return to "Home" viewing environment initialise all settings by accessing Shipping Condition. ➡ **(p. 47)**

Menu list

Menu	Item	Adjustments / Configurations (alternatives)
Picture	**Viewing Mode**	Selects your favourite picture mode for each input **[Dynamic] / [Normal] / [Cinema] / [True Cinema] / [Game]** **[Dynamic]:** Improves contrast and sharpness for viewing in a bright room. **[Normal]:** Normal use for viewing in a normal lighting condition. **[Cinema]:** Improves the performance of contrast, black and colour reproduction for watching movies in a darkened room. **[True Cinema]:** Reproduces the original image quality precisely without any revision. **[Game]:** Provides suitable images for fast response signal when playing games. ● Not valid on TV mode ● To display a continuous record of time spent using Game mode ➡ [Playing Time Display] (p. 33) In each Viewing Mode, [Contrast], [Brightness], [Colour], [Sharpness], [Tint], [Colour Balance], [Vivid Colour], [C.A.T.S.], [P-NR] and [3D-COMB] can be adjusted and stored.
	Contrast, Brightness, Colour, Sharpness	Adjusts the levels of these options according to your personal preference
	Tint	Adjusts the picture hue to suit your taste ● For NTSC signal reception
	Colour Balance	Sets the overall colour tone of the picture **[Cool] / [Normal] / [Warm]** ● Not valid when [Viewing Mode] is set to [True Cinema]
	Vivid Colour	Automatically adjusts colours to vivid ones **[Off] / [On]**
	C.A.T.S.	Contrast Automatic Tracking System (Automatic Brightness Control function) Adjusts picture settings automatically depending on ambient lighting conditions **[Off] / [On]** ● Set to [On] to make the suitable contrast setting automatically. The default setting is [On] when [Viewing Mode] is set to [Normal].
	P-NR	Picture Noise Reduction Reduces unwanted picture noise and flicker noise in the contoured parts of a picture **[Off] / [Min] / [Mid] / [Max]**
	3D-COMB	Makes still or slow moving pictures more vivid **[Off] / [On]** ● Occasionally, while viewing still or slow moving pictures, colour patterning may be seen. Set to [On] to display sharper and more accurate colours. ● For PAL / NTSC signal reception in TV mode or from composite
	Screen Display	Turns the screen off when you select [Off] **[Off] / [On]** ● The sound is active even if the screen turns off. ● Press any buttons (except Standby) to turn the screen on. ● This function is effective in reducing power consumption when listening to the sound without watching the TV screen.

Menu	Item		Adjustments / Configurations (alternatives)
Picture	**Advanced Settings**	**Side Panel**	Adjusts the brightness of the side panel **[Off]** / **[Low]** / **[Mid]** / **[High]** ● The recommended setting is [High] to prevent panel "image retention".
		16:9 Overscan	Selects the screen area displaying the image **[Off]** / **[On]** **[On]:** Enlarges the image to hide the edge of the image. **[Off]:** Displays 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 memorised separately for SD (Standard definition) and HD (High definition) signals.
		DVI Input Setting	Changes the black level of the image for HDMI input mode with DVI input signal manually **[Normal]** / **[Full]** ● When the DVI input signal from the external equipment (especially from PC) is displayed, the black level may not be suitable. In this case, select [Full]. ● The black level for HDMI input signal will be adjusted automatically. ● For HDMI input mode with DVI input signal
		Pixel Orbiter	Selects the mode for wobbling of the image to prevent panel "image retention" **[Auto]** / **[On]** **[Auto]:** Automatically works only for the appropriate images and you rarely recognise the wobbling.
		Scrolling Bar	Displays scrolling bar pattern to assist elimination of panel "image retention" ● Press the OK button to start scrolling and press any buttons (except Standby) to exit this mode. ● For positive effect to eliminate "image retention", it may be necessary to display for a long time.
	Reset to Defaults		Press the OK button to reset the current Picture Viewing Mode to the default settings
Sound	**Mode**		Selects your favourite sound mode **[Music]** / **[Speech]** / **[User]** ● The selected mode affects all input signals. **[Music]:** Improves sound quality for watching music videos, etc. **[Speech]:** Improves sound quality for watching news, drama, etc. ● In Music and Speech modes, you can adjust [Bass] and [Treble] settings, and those settings will be stored for each mode. **[User]:** Adjusts the sounds manually by using the equaliser to suit your favourite sound quality. ● For the User mode, [Equaliser] will appear on the Sound Menu instead of [Bass] and [Treble]. Select [Equaliser] and adjust the frequency. ➡ [Equaliser] (see below)
	Bass		Adjusts level to enhance or minimise lower, deeper sound output
	Treble		Adjusts level to enhance or minimise sharper, higher sound output
	Equaliser		Adjusts the frequency level to suit your favourite sound quality ● This function is available when [Mode] is set to [User]. ● Select the frequency and change the frequency level by using the cursor button. ● To enhance the bass sound, raise the level of the lower frequency. To enhance the treble sound, raise the level of the higher frequency. ● To reset the levels of each frequency to the default settings, select [Reset to Defaults] by using the cursor button, and then press the OK button.

Menu	Item	Adjustments / Configurations (alternatives)
Sound	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).
	Auto Gain Control	Automatically regulates large sound level differences between channels and inputs **[Off] / [On]**
	Volume Correction	Adjusts the volume of individual channel or input mode
	Speaker Distance to Wall	Compensates for the low frequency sound due to the distance between the speakers and the wall **[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) **[English] / [Welsh] / [Gaelic] / [Irish]**
	NICAM	Near Instantaneous Companded Audio Multiplex Reproduces NICAM stereo sound **[Off] / [On]** ● Off if reception is poor (FM monaural sound) ● For Analogue mode
	SPDIF Selection	SPDIF: A standard audio transfer file format Selects the initial setting for digital audio output signal from DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals **[Auto] / [PCM]** **[Auto]:** Dolby Digital Plus and Dolby Digital are output as Dolby Digital Bitstream. HE-AAC (48 kHz) multi-channel is output as DTS. MPEG is output as PCM. **[PCM]:** Digital output signal is fixed to PCM. ● For DVB mode or video contents of Media Player (p. 57) ● ARC (Audio Return Channel): A function of digital audio output using HDMI cable
	PCM Optical Level	Adjusts the audio level of PCM output from DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals as the initial setting **[-12] / [-10] / [-8] / [-6] / [-4] / [-2] / [0] (dB)** ● Normally, PCM sound is larger comparing with the other types of audio track. ● For DVB mode
	HDMI1 / 2 Input	Selects to fit the input signal **[Digital] / [Analogue]** (p. 72) **[Digital]:** When sound is carried via the HDMI cable connection **[Analogue]:** When sound is not carried via the HDMI-DVI adaptor cable connection ● For HDMI input

Menu	Item		Adjustments / Configurations (alternatives)
Sound	**Audio Description Menu** [UK only]	**Audio Description**	Narration settings for visually impaired users **[Off] / [Auto]** Set to [Auto] to activate the narration sound track when available on the broadcast. ● The availability of audio description sound track is indicated by [AD] in the information banner (p. 16). ● For DVB mode
		Volume	Adjusts the volume for Audio Description ● For DVB mode
		Speakers	Set to [On] to activate the description sound track from TV speakers **[Off] / [On]** ● For DVB mode
		Headphones	Set to [On] to activate the description sound track from headphones **[Off] / [On]** ● For DVB mode
	Reset to Defaults		Press the OK button to reset the current Sound Mode, [Balance], [Headphone Volume] and [Surround] to the default settings
Setup	**Timer Programming**		Sets a timer to record or remind forthcoming programmes (p. 42)
	TV Guide Settings	**TV Guide View**	Changes the layout of TV Guide **[Normal] / [Full] / [Info]** **[Normal]:** Default TV Guide screen **[Full]:** Displays channels and programmes full-screen without the operation guide **[Info]:** Displays details of the selected programme at the bottom without the operation guide
	Off Timer		Sets the duration of time until the TV automatically goes into Standby mode **[Off] / [15] / [30] / [45] / [60] / [75] / [90] (minutes)** (p. 17)
	Eco Navigation		Automatically sets the TV to the most suitable energy-saving mode ● If you press the OK button, the following items are set as below: [C.A.T.S.], [VIERA Link], [Standby Power Save], [Power Save] ➡ [On] [Intelligent Auto Standby] ➡ [On (No reminder)] [Auto Standby] ➡ [2 hours]
	Link Settings	**VIERA Link**	Sets to use VIERA Link functions **[Off] / [On]** (p. 62)
		AV1 out	Chooses the signal to be transmitted from the TV to Q-Link **[TV] / [AV2] / [Monitor]** **[Monitor]:** Image displayed on screen ● Component and HDMI signals cannot be output.
		Standby Power Save	Controls the connected equipment to reduce power consumption in Standby **[Off] / [On]** (p. 63) ● 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. 63) ● 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		Applies access control for channels or inputs to prevent unwanted access (p. 44)

How to Use Menu Functions

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Menu	Item	Adjustments / Configurations (alternatives)
Setup — *Tuning Menu**	**Favourites Edit**	Creates a list of favourite channels (p. 39) ● Not valid on Analogue mode
	Channel List	Skips the unwanted channels or edits channels (p. 40)
	Auto Setup	Automatically searches for the receivable channels (p. 38)
	Channel Sorting by Region [UK only]	Automatically sorts tuned channels according to the available region (p. 40) ● For DVB mode
	Manual Tuning	Searches for the channels manually (p. 41)
	Update Channel List	Updates the channel list while keeping your settings (p. 41) ● For DVB mode
	New Channel Message	Selects whether to give a notification message when a new channel is found **[Off] / [On]** (p. 41) ● For DVB mode
	Signal Condition	Checks the signal condition (p. 41) ● Not valid on Analogue mode
Setup — Display Settings	**Teletext**	Analogue teletext display mode **[FASTEXT] / [List]** (p. 22)
	Teletext Character Set [Ireland only]	Selects teletext language font **[West] / [East1] / [East2]** **[West]:** English, French, German, Greek, Italian, Spanish, Swedish, Turkish, etc. **[East1]:** Czech, English, Estonian, Lettish, Rumanian, Russian, Ukrainian, etc. **[East2]:** Czech, Hungarian, Lettish, Polish, Rumanian, etc.
	Preferred Teletext [Ireland only]	Selects the preferred language for digital channel teletext service (depending on the broadcaster) **[English] / [Welsh] / [Gaelic] / [Irish]**
	Preferred Subtitles	Selects the preferred language for digital channel subtitles (depending on the broadcaster) **[English] / [Welsh] / [Gaelic] / [Irish]** ● To display subtitles ➡ (p. 18) ● ☒ provides aids in understanding and enjoyment with DVB subtitles (depending on the broadcaster).
	Input Labels	Accesses the input labels list to select the label of each input mode or set to skip unconnected one for easier identification and selection in [Input Selection] (p. 25) or banner ● To name each input mode freely, select [User input] and set characters (maximum 10 characters). ● To skip the input mode, select [Skip].
	Banner Display Timeout	Sets how long the Information banner 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 in the top right of the screen every 30 minutes **[Off] / [On]** ● This function is available when [Viewing Mode] is set to [Game]. ➡ (p. 29)
	Radio Mode	Sets the timer for turning off the screen automatically when a radio channel is selected **[Off] / [5] / [10] / [15] / [20] (seconds)** ● The sound is active even if the screen turns off. This function is effective in reducing power consumption when listening to a radio channel. ● Press any buttons except Standby, Volume Up / Down and MUTE buttons to turn the screen on. ● Not valid on Analogue mode

How to Use Menu Functions

Menu		Item	Adjustments / Configurations (alternatives)
Setup	**Network Setup**	**Connection Test, IP/DNS Settings**	Sets the network setting to use in your network environment (p. 45)
		Software Update	Checks for available software updates from the Panasonic website
		MAC Address	Displays the MAC address of this TV
	DivX® VOD		Displays DivX VOD registration code (p. 71)
	System Menu	**Shipping Condition**	Resets all settings to the original condition (p. 47)
		Owner ID	Inputs the owner ID (p. 48)
		Common Interface	Sets for watching encrypted channels, etc. (p. 49)
		System Update	Downloads new software to this TV (p. 50)
		Software Licence	Displays the software licence information
		System Information	Displays the system information of this TV
	Other Settings	**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 the external equipment connected to the AV1 or HDMI1 terminal, e.g. satellite receiver. ● 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 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. ● Not valid on Analogue mode
		Auto Standby	Sets the duration of time that the TV will remain on when no operation is performed **[Off] / [2] / [4] (hours)** ● Starting Timer Programming automatically does not affect this function. ● Automatic input switching with the connected equipment affects this function and time-count will be reset. ● The notification message will appear 3 minutes before going into Standby mode.
		Power Save	Reduces brightness of the picture to economise on power consumption **[Off] / [On]**

∗The settings in [Tuning Menu] are applicable only for the selected TV mode. The menu name varies depending on the TV mode. ([DVB Tuning Menu] / [Analogue Tuning Menu])
● A different menu will be displayed in the mode of Media Player. (p. 51 - 58)
● Only available items can be selected.

Overview (Picture, Sound)

How to operate ⇒ **(p. 28)**

VIErA Main Menu
- **Picture**
- ♪ **Sound**
- ✿ **Setup**

☐ Picture Menu 1/2

Viewing Mode	Dynamic
Contrast	
Brightness	
Colour	
Sharpness	
Tint	
Colour Balance	Warm
Vivid Colour	Off
C.A.T.S.	Off

------ Available in NTSC

--- Not available when [Viewing Mode] is set to [True Cinema]

☐ Picture Menu 2/2

P-NR	Off
3D-COMB	Off
Screen Display	On
Advanced Settings	Access
Reset to Defaults	Reset

(p. 29, 30)

------ Available in NTSC / PAL

Advanced Settings

Side Panel	Off
16:9 Overscan	On
DVI Input Setting	Normal
Pixel Orbiter	Auto
Scrolling Bar	Start

(p. 30)

♪ Sound Menu 1/2

Mode	Music
Bass	
Treble	
Equaliser	Access
Balance	
Headphone Volume	
Surround	Off
Auto Gain Control	Off
Volume Correction	

------ Available when [Mode] is set to [Music] or [Speech]

Equaliser

Reset to Defaults

150 250 500 1k 2k 4k 8k 12k Hz

Available when [Mode] is set to [User]

♪ Sound Menu 2/2

Speaker Distance to Wall	Over 30cm
Preferred Multi Audio	English
NICAM	Off
SPDIF Selection	Auto
PCM Optical Level	0
HDMI1 Input	Digital
Audio Description	Access
Reset to Defaults	Reset

(p. 30 - 32)

------ Available in DVB

--- Available in Analogue

--- Available in DVB or Video mode

------ Available in HDMI input

Audio Description Menu

Audio Description	Off
Volume	
Speakers	Off
Headphones	Off

Available in DVB (p. 32)
UK only

Overview (Setup)

VIErA Main Menu
- Picture
- Sound
- **Setup**

Timer Programming				Wed 26.10.2111 10:46		
Function	No.	Channel Name		Date	Start	End
⏱ Ext Rec.	D 72	BBC 2W <TIMER>		Wed 26 Oct	20:00 (90 min.)	21:30
Reminder	D 14	E4 The Bill		Wed 26 Oct	21:00 (60 min.)	22:00
⏱ Ext Rec.	D 1	BBC ONE DIY SOS		Wed 26 Oct	22:45 (15 min.)	23:00
⏱ Ext Rec.	D 1	BBC ONE <TIMER>	STTL	Thu 27 Oct	10:30 (60 min.)	11:30
---	---			--/--	--:-- (-- min.)	--:--

(p. 42)

Setup Menu 1/2
Timer Programming	Access
TV Guide Settings	Access
Off Timer	Off
Eco Navigation	Access
Link Settings	Access
Child Lock	Access
DVB Tuning Menu	Access
Analogue Tuning Menu	Access
Display Settings	Access
Network Setup	Access

Setup Menu 2/2
DivX® VOD	Access
System Menu	Access
Other Settings	Access

(p. 32 - 34)

Child Lock-PIN Entry
Please enter new PIN
PIN	* * * *

(p. 44)

DVB Tuning Menu
Favourites Edit	Access
Channel List	Access
Auto Setup	Access
Channel Sorting by Region	Access
Manual Tuning	Access
Update Channel List	Access
New Channel Message	On
Signal Condition	Access

Available in DVB (p. 38 - 41)

DVB Update Channel List
Progress	CH 21			68

This will take about 3 minutes.
CH	Channel Name	Type	Quality

Free TV: 0   Pay TV: 0   Radio: 0   Data: 0
Searching

(p. 41)

Analogue Tuning Menu
Channel List	Access
Auto Setup	Access
Manual Tuning	Access

Available in Analogue (p. 38 - 41)

Other Settings
Power on Preference	TV
Power on Channel List	Last
Auto Standby	Off
Power Save	Off

---Available in DVB

(p. 34)

System Menu
Shipping Condition	Access
Owner ID	Access
Common Interface	Access
System Update	Access
Software Licence	Access
System Information	Access

(p. 34)

System Update
Auto Update Search in Standby	On
System Update Search Now	Access

(p. 50)

Common Interface
Slot 1:	Module inserted

Available in DVB (p. 49)

Owner ID
Please enter PIN for access
PIN	* * * *

(p. 48)

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

(p. 47)

How to Use Menu Functions

Link Settings

VIERA Link	On
AV1 out	TV
Standby Power Save	On
Intelligent Auto Standby	On (No reminder)
Q-Link Download	Access

(p. 32)

Sending Preset Data
Please wait!
0% ▮▮▮▮▮▮ 100%
Remote control unavailable

(p. 32)

TV Guide Settings Menu

TV Guide View	Normal

(p. 32)

Child Lock

Change PIN	Access
Child Lock List	Access
Parental Rating	No limit

Available in DVB (p. 44)
Ireland only

Child Lock List - TV and AV

Name	Input	Type	Lock
101 BBC 1 Wales	DVB	Free TV	🔒
7 BBC THREE	DVB	Free TV	🔒
14 E4	DVB	Free TV	
VCR	Analogue	Analogue	
1 BBC1	Analogue	Analogue	
2 *****	Analogue	Analogue	🔒
AV1	External	AV	
AV2	External	AV	

(p. 44)

DVB Manual Tuning

Frequency	[CH21]	474 MHz
Signal Quality	0	10
Signal Strength	0	10

No.	Channel Name	Type	New

Free TV: 0　　Pay TV: 0　　Radio: 0　　Data: 0
Searching

(p. 41)

All DVB Channels

☑	70　CBBC Channel
☑	72　Cartoon Nwk
☑	105　BBCi
☐	719　BBC Radio Wales
☐	720　BBC Radio Cymru
☐	1　BBC ONE Wales
☑	7　BBC THREE

(p. 40)

Channel Sorting by Region

GBR>
Best signal quality (All Regions)
England Regions>

Region choice available

(p. 40)

DVB Favourites Editor

All DVB Channels	Favourites1
1 BBC One Wales	
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi	
719 BBC Radio Wales	
720 BBC Radio Cymru	

(p. 39)

DVB Auto Setup

Progress	CH 21	68

This will take about 3 minutes.

CH	Channel Name	Type	Quality
62	CBBC Channel	Free TV	10
62	BBC Radio Wales	Free TV	10
62	E4	Free TV	10
62	Cartoon Nwk	Free TV	10

Free TV: 4　　Pay TV: 0　　Radio: 0　　Data: 0
Searching

UK only

(p. 38)

Analogue Manual Tuning

1 BBC1	CH33
Manual Tuning	21 68

(p. 41)

Analogue Auto Setup

Scan	CH 21	68

This will take about 3 minutes.

CH	Channel Name
29	
30	

Analogue: 2
Searching

(p. 38)

Analogue Channel List

☑	1　BBC1
☐	2　*****
☐	3　*****
☑	4　*****
☑	5　*****
☑	6　*****
☑	7　*****

(p. 40)

Display Settings

Teletext	FASTEXT
Teletext Character Set	West
Preferred Teletext	Irish
Preferred Subtitles	English
Input Labels	Access
Banner Display Timeout	3 seconds
Playing Time Display	On
Radio Mode	Off

Available in Analogue
Ireland only
Available in DVB Ireland only
Available in DVB

(p. 33)

Input Labels

AV1	DVD
AV2	AV2
HDMI1	HDMI1
HDMI2	HDMI2
DVB	DVB
Analogue	Analogue

(p. 33)

Retuning from Setup Menu

Automatically retune the channels received in the area.
● This function is available if channel tuning is already performed.
● Only the selected mode is retuned. All the previous tuning settings are erased.
● If Child Lock PIN number (p. 44) has been set, the PIN number is required.
● If tuning has not been done completely ➡ **[Manual Tuning] (p. 41)**

DVB or Analogue channels

1 Select the mode
➡ **(p. 15)**

TV

2 Display the menu and select [Setup]

MENU

VIErA Main Menu
- **Picture**
- **Sound**
- **Setup**

① select
② access

3 Select [DVB Tuning Menu] or [Analogue Tuning Menu]

Setup Menu

| DVB Tuning Menu | Access |
| Analogue Tuning Menu | Access |
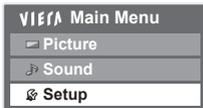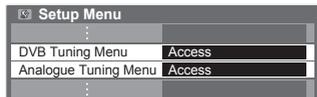
① select
② access

● The displayed item depends on the selected mode.

4 Select [Auto Setup]
Example:

DVB Tuning Menu

| Auto Setup | Access |

① select
② access

5 Start Auto Setup (Settings are made automatically)
Example: DVB

DVB Auto Setup

All DVB tuning data will be erased

DVB Auto Setup
Progress   CH 21 [   ] |68|
This will take about 3 minutes.

CH	Channel Name	Type	Quality
62	CBBC Channel	Free TV	10
62	BBC Radio Wales	Free TV	10
62	E4	Free TV	10
62	Cartoon Nwk	Free TV	10

Free TV: 4   Pay TV: 0   Radio: 0   Data: 0
Searching

Example: Analogue

Analogue Auto Setup

All analogue tuning data will be erased

Analogue Auto Setup
Scan   CH 21 [   ] |68|
This will take about 3 minutes.

CH	Channel Name
29	
30	

Analogue: 2
Searching

● 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 the lowest position will be displayed.

Retuning from Setup Menu

Auto setup using the buttons on the TV

For Auto Setup, using the buttons on the TV (p. 10)

1 Press the F button repeatedly until [Auto Setup] appears

▮ F

2 Access [Auto Setup]

▮ TV

3 Start [Auto Setup]

▮ TV

● To return to TV

▮ F

● Control panel OSD appears when pressing the control panel button.
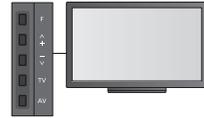
Tuning and Editing Channels
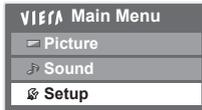
You can retune channels or make your favourite channel lists, skip unwanted channels, etc.
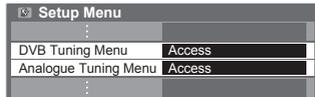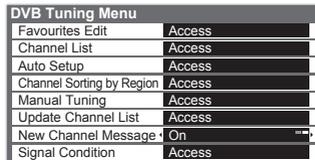
1 **Select the mode**
➡ **(p. 15)**

TV

2 **Display the menu and select [Setup]**

MENU

VIE*I*A **Main Menu**
▭ **Picture**
♪ **Sound**
⚙ **Setup**

① select
② access

3 **Select [DVB Tuning Menu] or [Analogue Tuning Menu]**

▧ **Setup Menu**

| DVB Tuning Menu | Access |
| Analogue Tuning Menu | Access |

① select
② access

4 **Select one of the following functions**

DVB Tuning Menu

Favourites Edit	Access
Channel List	Access
Auto Setup	Access
Channel Sorting by Region	Access
Manual Tuning	Access
Update Channel List	Access
New Channel Message	On
Signal Condition	Access

① select
② access

● [Auto Setup] ➡ **"Retuning from Setup Menu" (p. 38)**

List favourite DVB channels [Favourites Edit]

Create your favourite channel lists from various broadcasters (up to 4: [Favourites]1 to 4).
The DVB Favourites lists are available for switching in the Information banner (p. 16) and from [Category] in the TV Guide screen (p. 19).

1 Select a channel to list (⊶ : Encrypted channel)

DVB Favourites Editor

All DVB Channels	Favourites1
1 BBC One Wales	
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi ⊞	
719 BBC Radio Wales	
720 BBC Radio Cymru	

● To display other Favourites

▭ (green)

2 Add it to the Favourites list

DVB Favourites Editor

All DVB Channels	
1 BBC One Wales	1 BBC One Wales
7 BBC THREE	
14 E4	
70 CBBC Channel	
72 Cartoon Nwk	
105 BBCi ⊞	
719 BBC Radio Wales	
720 BBC Radio Cymru	

● To add all channels to the list

▭ (yellow)

■ To edit Favourites list

While the cursor is in the Favourites field to edit

● To move the channel

(green) ➡ Select the new position ➡ Select the turn
1	2	3
4	5	6
7	8	9
	0	
or

➡ Store (green)

● To delete the channel

(OK)

● To delete all channels

(yellow)

● To name the Favourites

(red) ➡ Set characters (maximum 10 characters)

User input
Name

● To use numeric buttons ➡ **(p. 73)**

➡ ① select
② set

➡ Store
BACK/
RETURN

3 Store

BACK/
RETURN ➡ (OK)

Note

● Channel position numbers (known as logical channel numbers) can be swapped in Channel List. To swap the channel position number ➡ **[Channel List] (see below)**

Skip unwanted channels, Edit Channels [Channel List]

You can hide (skip) unwanted channels. The hidden channels cannot be displayed except in this function.

Select a channel and reveal / hide

Example: DVB

All DVB Channels	
☑	70 CBBC Channel
☑	72 Cartoon Nwk
☑	105 BBCi
☐	719 BBC Radio Wales
☐	720 BBC Radio Cymru
☑	1 BBC ONE Wales
☑	7 BBC THREE

① select
② [Reveal] / [Hide]

☑ : [Reveal]
☐ : [Hide] (skip)

● To reveal all channels

(yellow)

■ To edit channels

● To swap the channel position number (logical channel number) (DVB)

(green) ➡ Enter the new position number
1	2	3
4	5	6
7	8	9
	0	

➡ Store (green)

Example: Analogue

```
─3 ITV─                      23:35  All Analogue Channels
itv
CH23
```
Channel name
Channel position

● To retune each channel ➡ **[Manual Tuning] (p. 41)** (only for the revealed channels)

(red)

● To rename the channel name (Analogue)

(blue) ➡ Set characters (maximum 5 characters)

Edit channel name
Name

● To use numeric buttons ➡ **(p. 73)**

➡ ① select
② set

➡ Store
BACK/
RETURN

Note

● If a VCR is connected only with the RF cable in Analogue mode, edit [VCR].

Sort DVB channels according to the region [Channel Sorting by Region] UK only

You can sort DVB channels so that those with the best signal quality, or those for your preferred region, appear nearer the top of your Channel List. Normally, you should select [Best signal quality (All Regions)].

Channel Sorting by Region
GBR>
Best signal quality (All Regions)
England Regions>
Region choice available

① select region (select repeatedly until you reach the available region)
② access

● If you choose to select your preferred region, you could find channels with a weaker signal appear nearer the top of your Channel List. If you have any image or sound problems, select [Best signal quality (All Regions)] instead.
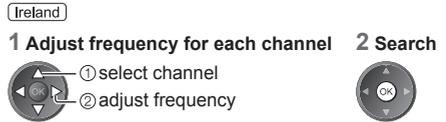
Set DVB channel manually [Manual Tuning]

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.

DVB Manual Tuning				
Frequency	CH21			474 MHz
Signal Quality	0			10
Signal Strength	0			10
No.	Channel Name		Type	New
Free TV: 0	Pay TV: 0	Radio: 0	Data: 0	
	Searching			

UK
① select frequency
② search

Ireland

1 Adjust frequency for each channel
① select channel
② adjust frequency

● Set where the level of [Signal Quality] becomes the maximum.

2 Search

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

Set Analogue channel manually [Manual Tuning]

[Fine Tuning]: Use to make small adjustments to the tuning of an individual programme (affected by weather conditions, etc.). Ireland only

[Manual Tuning]: Set Analogue channel manually after Auto Setup.
● If a VCR is connected only with the RF cable, select channel position [0].

Example: Ireland

Analogue Manual Tuning		
1 BBC1		CH33
Fine Tuning		
Manual Tuning	1	99 21 41

1 Select the channel position
1 2 3
4 5 6
7 8 9
0

2 Select the channel
∧ ∨

3 Search
◀ OK ▶

4 Select [Store]
① select
② store
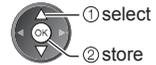
Update DVB channel automatically [Update Channel List]

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

Example: UK

DVB Update Channel List				
Progress	CH 21			68
This will take about 3 minutes.				
CH	Channel Name		Type	Quality

● The channel list is updated while keeping your settings in [Favourites Edit], [Channel List], [Child Lock], etc.
● Depending on the signal condition, the update may not work properly.

Display a notification message [New Channel Message] (DVB)

Selects whether to give a notification message when a new DVB channel is found.

> New channels found!
> Press OK to update channel list.
> Press EXIT to ignore.

● Selecting OK will perform [Update Channel List].

Check DVB signal [Signal Condition]

Selects a channel and checks the DVB signal condition.
A good Signal Strength is not an indication of suitable signal for DVB reception.
Use the Signal Quality indicator as follows.
● Green bar: Good
● Yellow bar: Poor
● Red bar: Bad (Check the Terrestrial aerial)

● To change the channel
∧ ∨

Example:

DVB Signal Condition	
Channel Name	70 CBBC Channel
Signal Quality	0 9
Signal Strength	0 8
Bit Error Rate	0.00E+00
Network Name	Wenvoe
Frequency	802.00 MHz, 64 QAM, 6940 kS/s

These bars show the maximum signal value of the selected channel.

Timer Programming

Timer Programming from Menu

The Timer Programming menu allows you to choose programmes that you want to remind watching or record to the external recorder. At the correct time, the TV will tune to the correct channel even if the TV is in Standby mode.
TV Guide may also be used to set timer programming event (p. 20).
● Timer Programming can store up to 15 events.
● Timer Programming only works reliably if correct time information is received via the signal from the broadcaster or service provider.
● For recording using Timer Programming, the TV must be either on or in Standby. For reminders to be displayed, the TV must be on.
● No other channel can be selected while the recording of Timer Programming is in progress.
● Recording an encrypted (copy-protected) programme may not be possible.
● When recording programmes to the external recorder, be sure to make the proper settings on the recorder connected to the TV. If a recorder compatible with Q-Link, VIERA Link or similar technologies is connected to the TV (p. 61, 62) and [Link Settings] (p. 32) are completed, no setting of the recorder is required. Also read the manual of the recorder.
● If the recorder is not compatible with Q-Link, VIERA Link or similar technologies, make timer programming of the recorder. For preparations of a recorder, read the manual of the recorder.
● Recording to the external equipment via SCART is always in standard definition (composite video), even if the original programme is in high definition.
● 2 minutes before the starting time, a reminder message appears if you are watching TV.
  • To remove the message and start the programming   • To cancel the programming

1 Select the tuner you want to use (DVB or Analogue)
➡ **(p. 15)**

TV

2 Display the menu and select [Setup]

MENU

VIEᴦA Main Menu
- ⊏ **Picture**
- ♪ **Sound**
- ⚙ **Setup**

① select
② access

3 Select [Timer Programming]

Setup Menu
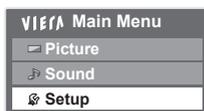
| Timer Programming | Access |
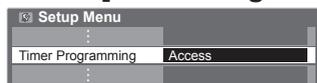
① select
② access

Set timer programming event details

1 Start making the settings

2 Select the function ([Ext Rec.] or [Reminder])

[Ext Rec.] ⏱ : Records the programme to the external recorder.
When the start time comes, the channel will be switched automatically and the video and audio signals will be output. 2 minutes before the starting time, a reminder message appears if you are watching TV.

[Reminder] 🔔 : Reminds you to watch the programme.
When you are watching TV, a reminder message appears 2 minutes before the start time.
Press the OK button to switch to the programmed channel.

3 Set the channel, date and time (repeat the operations as below)
Set items in the order of **1** to **4**.

select the item → set
● **1**, **3** and **4** can also be entered with numeric buttons.

Store

! : Displayed if the timer programming events are overlapped

Timer programming - Programmes according to the time setting

Records with subtitles (if available)
● To indicate this
◻ (yellow)   (Press again to remove subtitles)

Duration (automatic display)

Timer Programming				Wed 26. 10. 2011 10:46		
Function	No.	Channel Name		Date	Start	End
⊕ Ext Rec.	D 72	BBC 2W <TIMER>		Wed 26 Oct	20:00	21:30 (90 min.)
⏰ Reminder	D 14	E4 The Bill	Guide	Wed 26 Oct	21:00	22:00 (60 min.)
⊕ Ext Rec.	D 1	BBC ONE DIY SOS	S/P	Wed 26 Oct	22:45	23:00 (15 min.)
⊕ Ext Rec.	D 1	BBC ONE <TIMER>	STTL	Thu 27 Oct	10:30	11:30 (60 min.)
---	--			--/--	:--	:--

1 Channel number

D : DVB / A : Analogue
● You cannot change the mode within the menu.

2 Date

one day ahead

daily or weekly (press repeatedly)

● [Daily Sun-Sat]: Sunday to Saturday
● [Daily Mon-Sat]: Monday to Saturday
● [Daily Mon-Fri]: Monday to Friday
● [Weekly Sat/Fri/Thu/Wed/Tue/Mon/Sun]:
  Same time on the same day every week

3 Starting time

4 Ending time

UK only

Guide : Guide link programming - Programmes according to the TV Guide signal (p. 21)

S/P : Split Programme programming (p. 21)

● These functions are not available in Analogue mode.
Guide link programming is Timer Programming which is controlled by information from the TV Guide; if programme start and end times are changed by the broadcaster, the timer programming event will follow the change.
A Split Programme programming is a Guide link programming which is interrupted by one or more other programmes. Note that Guide link programming (including Split Programme programming) only works reliably if correct information is received from broadcasters.

■ **To edit a timer programming event**
Select the event

● To change a timer programming event

Correct as necessary (p. 42)

● To delete a timer programming event

◻ (red)

● To record with subtitles (if available)
◻ (yellow)
  • Each time pressed:
    auto ⟷ off

● To cancel a timer programming event temporarily
◻ (blue)
  • Each time pressed:
    cancel ⟷ stop cancelling

■ **To unlock the tuner and stop recording**

GUIDE → EXIT ✕

■ **To view details of the programming (only for Guide link programming)** UK only

Select the programme

● Press again to return to Timer Programming menu.

Note

● Check that the LED is orange. If not, timer programming events are not active or not stored.
● Timer Programming reminder messages will remain displayed until one of the following occurs:
  • You press the OK button to view the programme or the EXIT button to cancel the reminder.
  • The timer programming event that the reminder is set for ends.
● "!" identifies that two or more timer programming events are overlapped. [Ext Rec.] is given priority over [Reminder]. As for the overlapped recording events, the first event starts and finishes as programmed. The next event can then start.
● The recording of Timer Programming will automatically change to the programmed channel a few seconds before the start time.
● To stop recording the timer programming event, it may be necessary to stop the recorder manually.
● The recording of Timer Programming will be performed even if the TV is in [Pause Live TV] recording (p. 64). In this case, [Pause Live TV] recording will be cancelled.
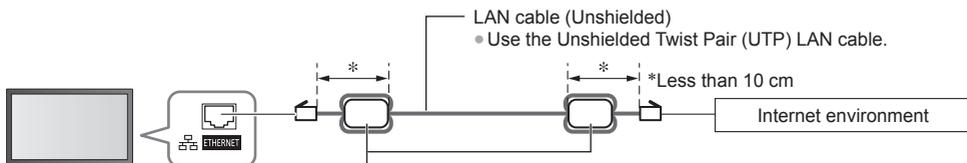
Child Lock

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

1 Display the menu and select [Setup]

MENU

VIErA Main Menu
- **Picture**
- **Sound**
- **Setup**

① select
② access

2 Select [Child Lock]

Setup Menu

Child Lock   Access

① select
② access

Control channel audience [Child Lock]

1 Enter the PIN number (4 digits)

Child Lock-PIN Entry
Please enter new PIN
PIN   * * * *

● 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]

Child Lock
Change PIN
Child Lock List   Access

① select
② access

3 Select the channel / input to be locked

Child Lock List - TV and AV

Name	Input	Type	Lock
101 BBC 1 Wales	DVB	Free TV	🔒
7 BBC THREE	DVB	Free TV	🔒
14 E4C	DVB	Free TV	
VCR	Analogue	Analogue	
1 BBC1	Analogue	Analogue	
2 *****	Analogue	Analogue	
AV1	External	AV	🔒
AV2	External	AV	

① select
② lock

🔒 : Appears when the channel / input is locked

● To cancel
Select the locked channel / input

● To lock all
☐ (green)

● To cancel all locks
☐ (yellow)

● To jump to the top of the next input
☐ (blue)

■ To change the PIN number

1. Select [Change PIN]

Child Lock
Change PIN   Access
Child Lock List
Parental Rating   No limit

① select
② access

2. Enter a new PIN number twice

■ To set Parental Rating [Ireland only]

To watch the DVB programme that has the rating information over the selected age, enter the PIN number to watch (depending on the broadcaster).
Select [Parental Rating] and set an age for the restriction of programmes.

Child Lock
Change PIN
Child Lock List
Parental Rating   ◄ No limit

① select
② set

Note
● Setting [Shipping Condition] (p. 47) erases the PIN number and all settings.

Child Lock

Setup for Internet Connection

The ETHERNET terminal is for TV's software update. You can download a newer version of software through the internet, if it is available. ➡ **(p. 46)**
● To update the TV's software without internet connection ➡ **"Updating the TV Software" (p. 50)**

Network connections

Connect the TV and the Broadband network equipment (modem, hub or router) by using a LAN cable.

LAN cable (Unshielded)
● Use the Unshielded Twist Pair (UTP) LAN cable.

＊ ＊ *Less than 10 cm

Internet environment

Ferrite core - Large size (supplied)

Installing the Ferrite core

① ② ③

Pull back the tabs (in two places)   Wind the cable twice   Close
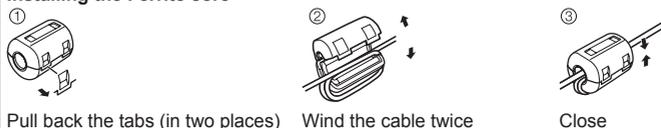
Note
● If you do not have any broadband network services, please consult your retailer for assistance.
● Ensure to use a LAN straight cable for this connection.
● Set up and connect any equipment required for the network environment. You cannot make settings for the equipment on this TV. Read the manual of the equipment.
● Contact your Internet Service Provider (ISP) or telecommunications company for further assistance regarding the network equipment.
● Confirm the terms and conditions of the contracts with your Internet Service Provider (ISP) or telecommunications company. Depending on the contracts, additional fees may be charged or multiple connections to the internet may be impossible.

[Network Setup]

Ensure the connections are completed before starting Network Setup.

1 **Display the menu and select [Setup]**

MENU

VIErA Main Menu
- Picture
- Sound
- Setup

① select
② access

2 **Select [Network Setup]**

Setup Menu
| Network Setup | Access |
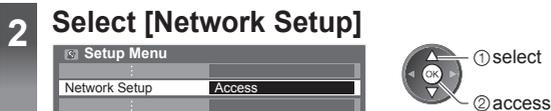
① select
② access

Note
[MAC Address]
● MAC address is a unique address that identifies hardware in the network. (for information only)

Network Setup
Connection Test	
IP/DNS Settings	
Software Update	
MAC Address	ab-cd-ef-gh-ij-kl
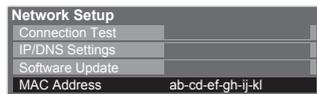
Connect to the network [Network Setup]

1 Select [IP/DNS Settings] and set the items

Network Setup	
Connection Test	
IP/DNS Settings	Access
Software Update	
MAC Address	ab-cd-ef-gh-ij-kl
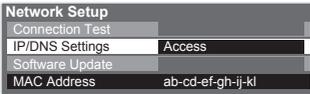
① select
② access

■ To set [Acquire IP Address] / [Acquire DNS Address]

Select [Acquire IP Address] / [Acquire DNS Address] and set to [Auto]

IP/DNS Settings	
Acquire IP Address	Auto
IP Address	. . .
Subnet Mask	. . .
Gateway	. . .
Acquire DNS Address	Auto
DNS Address	. . .
Proxy Settings	
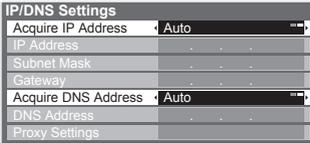
① select
② set

● The available settings are displayed automatically.
● For most users, the recommended method of connection to your network is by using [Auto] feature.

Manual settings

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

Select [IP Address], [Subnet Mask], [Gateway] or [DNS Address] ▸ select ▸ Move the cursor and enter the number ▸ move

---

2 Select [Proxy Settings] and set the items

IP/DNS Settings	
⋮	
Proxy Settings	Access
⋮	

① select
② access

After settings, return to [Network Setup] screen

BACK/ RETURN

■ To set [Proxy]

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

1. Select [Proxy]

Proxy Settings	
Proxy	
Proxy Port	0

① select
② access

2. Enter the address

Proxy	
Host	I
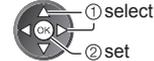
① select
② set

● To use numeric buttons ➡ **(p. 73)**

3. Store

BACK/ RETURN

■ To set [Proxy Port]

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

1. Select [Proxy Port]

Proxy Settings	
Proxy	
Proxy Port	0

select

2. Move the cursor and enter the number

move

3 Select [Connection Test] and access to test

Network Setup	
Connection Test	Access
IP/DNS Settings	
Software Update	
MAC Address	ab-cd-ef-gh-ij-kl

① select
② access

● Performs automatic testing of the network connection for the TV. (It takes a while to test.)

Connection Test
☑ Check network cable connection.
☑ Check acquired IP address.
☑ Check for devices using same IP address.
☑ Check gateway connection.
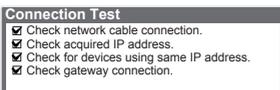
☑ **: succeeded**
The test is successful and the TV is connected to the network.

☒ **: failed**
Check the settings and connections. And then try again.

Update TV's software

Accesses the specific web site to update TV's software and search if any software updates are available.

Select [Software Update]

Network Setup	
Connection Test	
IP/DNS Settings	
Software Update	Access
MAC Address	ab-cd-ef-gh-ij-kl

① select
② access

● Follow the on screen instructions

Setup for Internet Connection
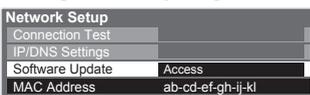
Shipping Condition

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.).
● To retune TV channels only, e.g. after moving house ➡ **"Retuning from Setup Menu" (p. 38)**

1 Display the menu and select [Setup]

MENU

VIErA Main Menu
- ▭ **Picture**
- ♪ **Sound**
- ⚙ **Setup**

① select
② access

2 Select [System Menu]

Setup Menu

System Menu	Access

① select
② access

3 Select [Shipping Condition]

System Menu

Shipping Condition	Access
Owner ID	
Common Interface	
System Update	
Software Licence	
System Information	

① select
② access

Restore Settings [Shipping Condition]

1 Check the message and initialise

Shipping Condition

All tuning data will be erased ─────── **1**
Are you sure ? ───────
Are you sure ? ───────

(Confirm)

2

(Confirm)

3

(Start [Shipping Condition])

2 Follow the on-screen instructions

Reset to Factory Shipping Condition
Completed.
TV will automatically restart.
Do not turn off

● [Auto Setup] will automatically start.
(p. 13)

Shipping Condition

Owner ID

Entry of the PIN number and personal information (your name, address and postcode).
In the unfortunate event of theft, the Owner ID will help the Police to determine the owner.

1 Display the menu and select [Setup]

MENU

VIERA Main Menu
- **Picture**
- **Sound**
- **Setup**

① select
② access

2 Select [System Menu]

Setup Menu

System Menu   Access

① select
② access

3 Select [Owner ID]

System Menu
Shipping Condition
Owner ID   Access
Common Interface
System Update
Software Licence
System Information
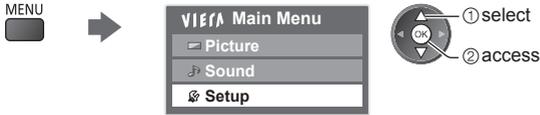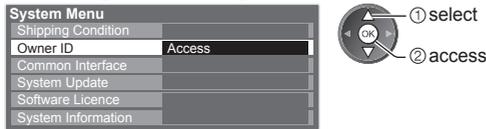
① select
② access

Input owner ID [Owner ID]

1 Enter the PIN number (4 digits)

Owner ID
Please enter new PIN
PIN   * * * *

- Enter the PIN number twice at first setting.
- Make a note of the PIN number in case you forget it. The PIN number cannot be reset.

2 Select the item (NAME / HOUSE NO / POSTCODE) and set characters

Owner ID-Data Entry
PIN   * * * * *
NAME
HOUSE NO
POSTCODE

User input
NAME

Return to select other items
BACK/RETURN

- Select the next item and repeat the operations.

① select
② access

① select
② set

- To use numeric buttons **(p. 73)**

3 Exit the menu

EXIT

■ To check the personal information stored

Hold down for about 5 seconds

F

Owner ID
NAME   * * * * *
HOUSE NO   * * * * *
POSTCODE   * * * * * *
EXIT
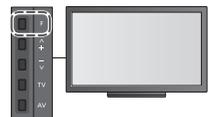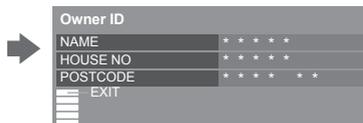
- The PIN number is not displayed.

■ To change the PIN number

1. Select [PIN]

Owner ID-Data Entry
PIN   * * * *
NAME
HOUSE NO
POSTCODE

① select
② access

2. Enter a new PIN number twice

Owner ID

48

Using Common Interface

The Common Interface Module menu provides access to software contained on Common Interface (CI) Modules.
This TV works only for Pay TV modules complying with CI standard.
●This function is not available for BskyB's Sky channels.
●Video and audio signals may not be output depending on broadcasts or services.

CI slot

Insert or remove completely

CI module

Side of the TV

Caution
●Turn off Mains power On / Off switch whenever inserting or removing the CI module.
●If a view card and a card reader come as a set, first insert the card reader, then insert the view card into the card reader.
●Insert the module in the correct direction.
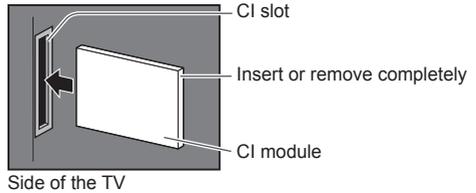
Insert the CI module (optional)
●The features that appear on screen are dependent on the contents of the selected CI module.
●Follow the instructions that came with the viewing card to tune in the encrypted channels. If encrypted channels do not appear, perform the below to verify the card is recognised by the TV.
●For more details, read the manual of the CI module, or check with the broadcaster.

1 Select DVB
➡ **(p. 15)**

TV

2 Display the menu and select [Setup]

MENU

VIErA Main Menu
- Picture
- Sound
- Setup

① select
② access

3 Select [System Menu]

Setup Menu
| System Menu | Access |
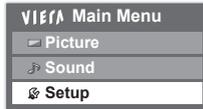
① select
② access

4 Select [Common Interface]

System Menu
Shipping Condition	
Owner ID	
Common Interface	Access
System Update	
Software Licence	
System Information	

① select
② access
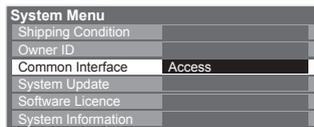
5 Access Common Interface and follow the on-screen instructions

Common Interface
| Slot 1: | Module inserted |

●On-screen instructions may not correspond to the remote control buttons.

Updating the TV Software

A new version of software may be released for download to enhance the performance or operations of the TV.
In DVB mode, a notification banner will appear when one of the BBC channels is turned to if a new available software is found.

● To download

(Press the EXIT button not to download)

You can update new software automatically or update manually.

1 Display the menu and select [Setup]

MENU

VIErA Main Menu
- **Picture**
- **Sound**
- **Setup**

① select
② access

2 Select [System Menu]

Setup Menu

System Menu   Access

① select
② access

3 Select [System Update]

System Menu
Shipping Condition
Owner ID
Common Interface
System Update   Access
Software Licence
System Information

① select
② access

Update TV's software system [System Update]

■ To update automatically
Select [Auto Update Search in Standby]

System Update
Auto Update Search in Standby ‹ Off ›
System Update Search Now

select
access / store

If System Update is performed, the software will be updated (it may change TV functions).
If you do not want to do so, set [Auto Update Search in Standby] to [Off]. The notification banner will keep appearing during the period of new software availability, usually 2 to 3 days.

● Automatically performs a search in standby and downloads an update, if any software updates are available.
● The automatic updating is performed at night under the following conditions:
　・Standby (TV turned off with the remote control)
　・Recording of Timer Programming or Direct TV Recording is not in progress.

■ To update immediately

1 Select [System Update Search Now]

System Update
Auto Update Search in Standby   Off
System Update Search Now   Access

① select
② access

2 Searches for an update (for several minutes) and displays a corresponding message if any

3 Download

Note

● Download may take up to 60 minutes.
● During software download and update, DO NOT perform any operations on the TV or switch Off the TV.

Using Media Player

Media Player allows you to enjoy photo, video or music recorded on an SD Card and a USB Flash Memory.
VIERA IMAGE VIEWER is the function of the easy viewing for photos or videos recorded on an SD Card on the TV screen by simply inserting into the SD Card slot.

Photo mode:
  Still pictures recorded by digital cameras will be displayed.

Video mode:
  Moving pictures recorded by digital video cameras will be played back.

Music mode:
  Digital music data will be played back.

● During the operation, audio signal is output from AV1, DIGITAL AUDIO OUT and HDMI2 (ARC function) terminals.
  But no video signals are output. AV1 can output audio signal if [AV1 out] is set to [Monitor] in the Setup Menu (p. 32).
  To use HDMI2 with ARC function, connect an amplifier that has ARC function (p. 60) and set to use theatre speakers (p. 66).
● [Date] shows the date on which the recording was made by the recording equipment. The file without record of the date is shown "**/**/****".
● 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.
● Partly degraded files might be displayed at a reduced resolution.
● Picture setting may not work depending on the conditions.
● The folder and file names may be different depending on the digital camera or digital video camera used.

■ To insert or remove the SD Card / USB Flash Memory

USB Flash Memory
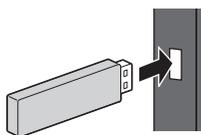
Connect the USB Flash Memory to the USB port.
● Insert or remove straightly and completely.
● It is recommended to connect the USB Flash Memory to the TV's USB port directly. USB HUB may not be used with this TV.
● You cannot connect any devices by using USB card reader.
● When using USB cable, use the supplied Ferrite core (Middle size) to comply with the EMC standard.
  As for installing the Ferrite core, refer to the installing of the Ferrite core for headphones. ➡ **(p. 68)**

SD Card

① Gently insert the SD Card with the label surface facing front.

② Push until a click is heard. To remove, push it again.

Cutout
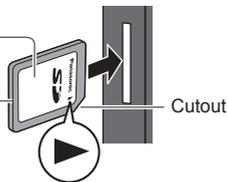
● Check the type of terminals and devices are correct when connecting.
● For the information of the devices ➡ **"Devices for recording or playing back" (p. 71)**
● For the supported file format ➡ **"Supported file format in Media Player" (p. 70)**

Starting Media Player

1 Insert the SD Card or USB Flash Memory to the TV
⇒ **(p. 51)**

2 Confirm the message and start Media Player

● You can also start by pressing following button.

MEDIA PLAYER

AV ⇒ **"Watching External Inputs" (p. 25)**

3 Select the device to access

Drive Select

●EXIT
Select
●RETURN
Access
SD Card

Selected device name

① select
② access

● If only 1 device is connected, this step will be skipped.

4 Select the content

Contents Select

●EXIT
Select
●RETURN
Access
Photo   Video   Music
SD Card

① select
② access

[Photo] ⇒ **(p. 53)**
[Video] ⇒ **(p. 56)**
[Music] ⇒ **(p. 58)**

5 Enjoy Media Player

Example: Thumbnail - [All photos]

Media Player Photo   All photos

View ●EXIT   Info   SD Card
Select ●RETURN   Option Menu
Slideshow   View Select   Drive Select   Contents Select

● To display the information of the highlighted content

1/48 — File number / Total file number
File name
p1010001.JPG
Date
23/10/2011
Size
1600X1200

Selected device name

Note

● You can also access each mode directly by using VIERA TOOLS. ⇒ **(p. 27)**
● Select the appropriate device and content for playing back each file.
● You can use the following buttons during playback. Set the code of the remote control to "73" (p. 26).

⏮ ⏭
⏪ ⏩ ▶ ■ ⏸/▷

Change the device

You can change to the other device (if connected) directly in the same mode.

**1 While the thumbnail is displayed,
display the device selection**

(yellow)

2 Select the device to access

Drive Select

●EXIT
Select
●RETURN
Access
SD Card

Selected device name

① select
② access

Using Media Player

Change the contents

You can switch to the other mode of Media Player from the thumbnail view.
● The mode can be switched in the current device.

1 **While the thumbnail is displayed, display the contents selection**

☐ (blue)

2 **Select the contents**

Contents Select

● EXIT
  Select
● RETURN
Access   Photo   Video   Music
SD Card

① select
② access

Photo mode

Photo mode will read all ".jpg" extension files in the SD Card or USB Flash Memory.

The thumbnail of all the photos in the SD Card or USB Flash Memory will be displayed.
Example: Thumbnail - [All photos]

Media Player ⊂ Photo   All photos

View — EXIT   Info   SD Card
Select RETURN   Option Menu
☐ Slideshow ☐ View Select ☐ Drive Select ☐ Contents Select

● To change the size of photos on a thumbnail screen

OPTION

① select [Change Size]
② change
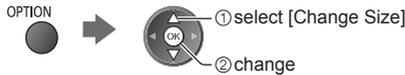
🖽 : Error display

[Single view] - Photos are displayed one at a time.

Select the file from the thumbnail of photos to be viewed

① select
② access

Example:

‖ Single view

‖ Single view
‖/▶ ● EXIT
      Select
      RETURN
Stop   Rotate

Operation guide

● To display / hide the operation guide

ⓘ

● To return to thumbnail

BACK/
RETURN
↩

● To operate Single view

To the previous photo
Slideshow
To the next photo
Stop
(return to thumbnail)
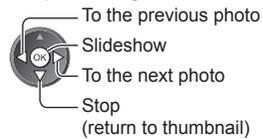
● To rotate 90°

☐ (blue)

[Slideshow] - Slideshow completes when all photos are viewed within the current thumbnail.

1 **Select the file from the thumbnail of photos for the first view**

2 **Start Slideshow**

☐ (red)

● To display / hide the operation guide

ⓘ

● To pause (return to Single view)

● To return to thumbnail

BACK/
RETURN
↩

● To change the back ground music ➡ **"Photo Settings" (p. 54)**

Using Media Player

■ To sort by folder, recorded date or recorded month

1 Display the view selection in the thumbnail view

☐ (green)

2 Select the sort type

—① select

—② access

[Folder view]:
Displays the thumbnail grouped by folder.
● The files which are not into a folder will be collected to the folder named "/".

[Sort by Date] / [Sort by Month]:
Displays the thumbnail grouped by the same date or month.
● The group of the photos without a recorded date is shown as [Unknown].

● To return to the thumbnail of all photos

☐ (green)   ➡   ① select [All photos]

② access
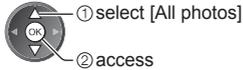
Photo Settings

Setup the settings for Photo mode.

1 Display the option menu

OPTION

2 Select [Slideshow Settings]

Option Menu
Slideshow Settings

3 Select the items and set

Slideshow Settings	
Frame	Off
Colour Effect	Off
Transition Effect	Fade
Aspect	Normal
Burst Playback	Off
Interval	5 seconds
Repeat	On
Back Ground Music	

—① select
② set
or
② access
[Back Ground Music]

Menu	Item	Adjustments / Configurations (alternatives)
Slideshow Settings	**Frame**	Selects the frame type of the slideshow **[Off]** / **[Multi]** / **[Collage]** / **[Drift (+ calendar)]** / **[Drift]** / **[Gallery (+ calendar)]** / **[Gallery]** / **[Cinema]** **[Multi]:** 9 photos are displayed orderly at once. **[Collage]:** Each photo is displayed at a random position and random scale. **[Drift (+ calendar)]** / **[Drift]:** Photos are displayed like flow images. ● You can select to display the calendar or not. The month of calendar is turned by pressing the left or right cursor button. **[Gallery (+ calendar)]** / **[Gallery]:** The various sizes of photos in the frame are displayed. ● You can select to display the calendar or not. The month of calendar is turned by pressing the left or right cursor button. **[Cinema]:** Photos are displayed like old films (sepia tone).
	Colour Effect	Selects the colour effect of photos on Single view and Slideshow **[Off]** / **[Sepia]** / **[Gray scale]** ● This function is not available when [Frame] is set to [Drift], [Gallery] or [Cinema].
	Transition Effect	Selects the transition effect for switching the photo during the slideshow **[Off]** / **[Fade]** / **[Slide]** / **[Dissolve]** / **[Motion]** / **[Random]** **[Fade]:** The next photo fades in gradually. **[Slide]:** The next photo slides and appears from the left side. **[Dissolve]:** Each photo is dissolved when switching to the next photo. **[Motion]:** Each photo is displayed with an effect of enlarging, reducing, moving up or moving down. **[Random]:** Each transition is selected at random. ● This function is available when [Frame] is set to [Off].
	Aspect	Selects enlarged or normal viewing on Single view and Slideshow **[Original]** / **[Zoom]** ● This function is not available when [Frame] is set to [Collage], [Drift], [Gallery] or [Cinema] or when [Transition Effect] is set to [Motion]. ● Depending on the photo size, it may not be fully enlarged to fill the screen, e.g. portrait style picture.
	Burst Playback	Selects whether to display burst photos in a fast-paced slideshow mode **[Off]** / **[On]** ● This function is not available when [Frame] is set to [Drift], [Gallery] or [Cinema] or when [Transition Effect] is set to [Motion].
	Interval	Selects slideshow interval **[5]** / **[10]** / **[15]** / **[30]** / **[60]** / **[90]** / **[120]** (seconds) ● This function is not available when [Frame] is set to [Drift], [Gallery] or [Cinema] or when [Transition Effect] is set to [Motion].
	Repeat	Slideshow repeat **[Off]** / **[On]**
	Back Ground Music	Selects the back ground music during Photo mode **[Off]** / **[Type1]** / **[Type2]** / **[Type3]** / **[User]** / **[Auto]** ● [Type1], [Type2] and [Type3] are the fixed music each installed in this TV. **[User]:** Music data in the device registered by yourself will be played back. **To register the music** 1. Select the music file Depending on the condition of the device, select folders until you reach the desired music file. **Back Ground Music** 📁 PRIVATE 📁 DCIM 📁 MISC 📁 001photo 📁 002photo 📁 003music 🎵 01 song.mp3 Type1 ①select ②access 2. Select [File] or [Folder] **Register Slideshow BGM?** File Folder ①select ②set [File]: The selected music file will be registered. [Folder]: All the music in the folder which contains the selected music file will be registered. ● If no music has been registered or the device which has the registered music is removed, no sound will be produced. **[Auto]:** Music data stored in the root folder of the current device will be played back randomly. ● If there is no available music data, no sound will be produced.
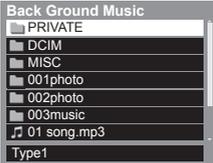
Note
● Picture quality may become lower depending on the slideshow settings.
● Picture setting may not work depending on the slideshow settings.

Video mode

● Supported file format ➡ **(p. 70)**

The thumbnail of video titles in the SD Card or USB Flash Memory will be displayed.

Example: Thumbnail - [Title view]

Media Player	Video					Title view
Trip1	Trip2	Trip3	Trip4	Trip5	Room	Nature1
Nature2	Nature3	Nature4	Nature5	Nature6	2011_4	2011_7
2011_9						

Access - EXIT / Select - RETURN / Info / Option Menu / SD Card
Play / Drive Select / Contents Select

The preview will start when the title / scene is highlighted if it supports a preview.
● To turn off the preview
  ➡ **"Video Setup" (p. 57)**

🖻 : Error display

▣ : The file does not support thumbnail view.

● To play back the selected title

Select the title　　　　　　　Start playback

　　　　　　　➡　　　(red)

■ Playback from the selected scene in the title (SD-Video or AVCHD)

Playback of the selected scene will start to the end of the title.

1 Select the title
① select
② access

2 Select the scene

3 Start playback
(red)

Note

● The structure of titles and scenes may vary depending on the digital video camera used.
● To repeat playback ➡ **"Video Setup" (p. 57)**

■ How to operate in the playback

Example: Playback

SD 19/02/2011 11:21　00:02:05　00:15:39

II/▶ EXIT / RETURN

Operation guide　　Information banner

● To display / hide the operation guide and information banner

　(i)

● To the previous title / scene

　(red)

● To the next title / scene

　(green)

● To change aspect
ASPECT
　⊞

● To return to thumbnail
BACK/
RETURN
　↰

● To operate the playback

◀◀ Rewind
II/▶ Pause / Playback
▶▶ Fast forward
■ Stop

Using Media Player

■ Video Setup

Setup the settings for Video mode.
● Menu items and selectable options vary depending on the content.

1 Display the option menu

OPTION

2 Select [Video Setup]

Option Menu
Video Setup

3 Select the items and set

① select
② set

Menu	Item	Adjustments / Configurations (alternatives)
Video Setup	**Video Preview**	Sets to start the preview of the title or scene in the thumbnail view **[Off] / [On]** ● Image may not be displayed for an instant in the thumbnail view. Set the preview [Off] to resolve this. ● Only available in the thumbnail view
	Multi Audio	Selects between selectable sound tracks (if available) ● It may take several seconds to change the sound. ● Only available during playback
	Subtitle	Subtitles On / Off (if available) ● Only available during playback
	Subtitle Text	Selects the font type to display subtitles correctly (if available) ● Only available during playback
	Aspect Change	**[Aspect1]:** Displays the content enlarged without distortion. **[Aspect2]:** Displays the content full-screen. **[Original]:** Displays the content original size. ● You can also change the aspect using the ASPECT button. ● Aspect change may not work depending on the content. ● Only available during playback
	Repeat	Playback repeat within the title or selected file (depending on the content) **[Off] / [On]**

Audio output Settings

You can enjoy the multi-channel sound via an amplifier connected to DIGITAL AUDIO OUT or HDMI2 (ARC function) terminal.
● To confirm or change the current sound status ➡ **(see above)**

1 Display the menu and Select [Sound]

MENU

VIEʌ **Main Menu**
- **Picture**
- **Sound**
- **Setup**
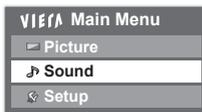
① select
② access

2 Select [SPDIF Selection] and set

Sound Menu   2/2
SPDIF Selection   Auto
Reset to Defaults   Reset

① select
② 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 and HDMI2 (ARC function) terminals **[Auto] / [PCM]** **[Auto]:** Dolby Digital is output as Dolby Digital Bitstream. MPEG is output as PCM. **[PCM]:** Digital output signal is fixed to PCM.

Music mode

● Supported file format ➡ **(p. 70)**

The thumbnail of music folders in the SD Card or USB Flash Memory will be displayed.
Example: Thumbnail - [Folder view]

| Media Player | Music | Folder view |

My Music_1 My Music_2 My Music_3

Access — ● EXIT   ▣ Info   SD Card
Select — 🎛 RETURN ▭ Option Menu
Play Folder   Drive Select   Contents Select
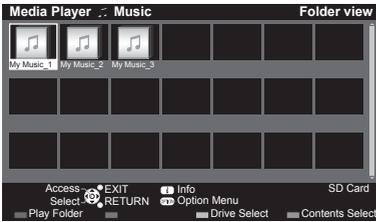
● To play back the selected folder
Select the folder   Start playback

▢ (red)

■ Playback from File view
Selected file will be played back.

1 Select the folder
　①select
　②access

2 Select the file

3 Start playback
▢ (red)

■ How to operate in the playback
Example: Playback

♪ My Song_9
♪ My Favourite
♪ My Music_1
▶   00:02.43 / 00:05.44

EXIT
RETURN
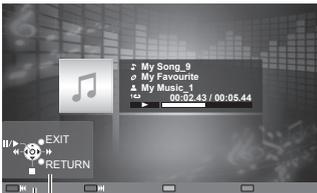
Operation guide

● To display / hide the operation guide

　ⓘ

● To operate the playback
　◀◀　Rewind
　❚❚/▶　Pause / Playback
　▶▶　Fast forward
　■　Stop

● To the previous track
　▢ (red)

● To the next track
　▢ (green)

● To return to thumbnail
　BACK/
　RETURN
　↩

Music Setup

Setup the setting for Music mode (only available in the thumbnail view).

1 Display the option menu
OPTION

2 Select [Music Setup]

| Option Menu |
| Music Setup |

3 Set

| Music Setup Menu |
| Repeat ◀ One ▶ |

　set

[Folder]: Playback repeat within the selected folder
[One]: Playback repeat of the selected one file

Using Media Player

Link Functions (Q-Link / VIERA Link)

Q-Link connects the TV and DVD Recorder / VCR, and enables easy recording, playback, etc.

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.

You can use Q-Link and VIERA Link functions together.
● This TV supports "HDAVI Control 5" function. But available features are depending on the connected equipment's version of HDAVI Control. Please read the manual of the equipment to confirm the version.
● VIERA Link features may be available even with other manufacturers' equipment supporting HDMI CEC.

Summary of Q-Link and VIERA Link features

Q-Link (SCART connection)

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

Connection

SCART cable

DVD Recorder / VCR with Q-Link function
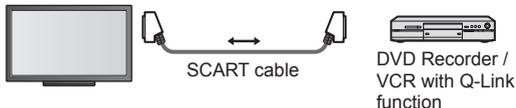
● Use fully wired SCART cable.
● Connect the DVD Recorder / VCR supporting Q-Link to the TV's AV1 terminal via a SCART cable.

VIERA Link (HDMI connection)

Connected equipment / Features	DIGA Recorder with VIERA Link function	DVD Player / Blu-ray Disc Player with VIERA Link function	HD Video Camera / LUMIX Camera with VIERA Link function
Analogue channel download	–	–	–
Easy playback	○	○	○
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	–	–	–
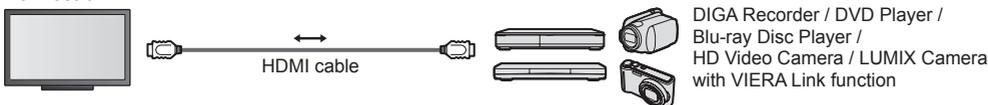
Connection

HDMI cable

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

● Use fully wired HDMI compliant cable.
● Connect the equipment supporting VIERA Link to the TV's HDMI1 or HDMI2 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)

Connected equipment / Features	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

HDMI cable

SCART cable

DIGA Recorder with VIERA Link function
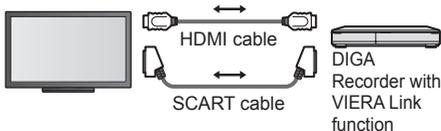
● Use a fully wired HDMI compliant cable.
● Connect the equipment supporting VIERA Link to the TV's HDMI1 or HDMI2 terminal via an HDMI cable.
● Use a fully wired SCART cable.
● Connect the equipment supporting VIERA Link to the TV's AV1 terminal via a SCART cable.

VIERA Link (HDMI and Audio out connections)

Connected equipment / Features	Player theatre with VIERA Link function	Blu-ray Disc theatre with VIERA Link function	Amplifier with VIERA Link function
Analogue channel download	–	–	–
Easy playback	◯*5	◯*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	◯	◯	◯
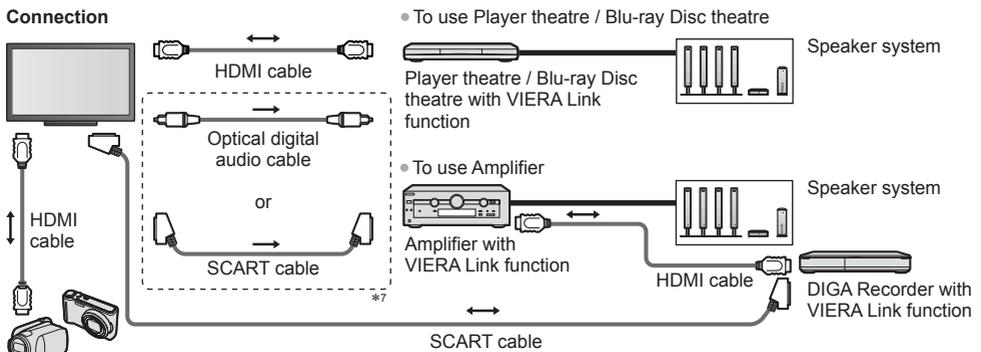
Connection

● To use Player theatre / Blu-ray Disc theatre

Player theatre / Blu-ray Disc theatre with VIERA Link function

Speaker system

● To use Amplifier

Amplifier with VIERA Link function

Speaker system

HDMI cable

DIGA Recorder with VIERA Link function

SCART cable

HD Video Camera / LUMIX Camera with VIERA Link function

- Use fully wired HDMI compliant cable.
- Connect the equipment supporting VIERA Link to the TV's HDMI2 terminal via an HDMI cable.
- Use fully wired SCART cable.
- If you use a SCART cable for audio output, connect the equipment supporting VIERA Link to the TV's AV1 terminal and set [AV1 out] to [Monitor] in the Setup Menu (p. 32).
- Use the optical digital audio cable or 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 or later" function.
*4: Available with a DIGA Recorder which has HDD.

*5: While playing a disc.
*6: Except for watching a disc.
*7: If the connected equipment has "HDAVI Control 5" function, you do not have to use this audio cable (Optical digital audio cable or SCART cable). In this case, connect the equipment to the TV's HDMI2 terminal via an HDMI cable.

VIERA Link Control of compatible equipment ➡[VIERA Link Control] (p. 64)

- Table below displays maximum number of compatible equipment that can be controlled by VIERA Link Control. This includes connections to equipment already connected to the TV.
  For example, DIGA Recorder connected to Amplifier which is connected to the TV via an HDMI cable.

Type of the equipment	Maximum number
Recorder (DIGA Recorder, etc.)	3
Player (DVD Player, Blu-ray Disc Player, HD Video Camera, LUMIX Camera, Digital Camera, Player theatre, Blu-ray Disc theatre, etc.)	3
Audio system (Player theatre, Blu-ray Disc theatre, Amplifier, etc.)	1
Tuner (Set top box, etc.)	4

Link Functions (Q-Link / VIERA Link)

Q-Link

Preparations
● Connect the DVD Recorder / VCR with the following logos:
  "Q-Link", "NEXTVIEWLINK", "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)"
● Q-Link connection ➡ **(p. 59)**
● 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 ➡ **[AV1 out] (p. 32)**
● Download Analogue channel setting ➡ **"Analogue channel download" (see below)**

Features available

Analogue channel download

Analogue channel settings can be downloaded to a recorder with an analogue tuner (where Analogue is still broadcast). Digital channel settings are not downloaded.
● To download the Analogue channel settings
  ➡ **[Q-Link Download] (p. 32), [Auto Setup] (p. 13, 38)**

Direct TV Recording - What you see is What you record

Recording the current programme on a DVD Recorder / VCR immediately.
● Set the code of the remote control to "73" (p. 26).

REC
● 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.
● You can change channel or turn the TV off 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

GUIDE ➡ Unlock the tuner

Tuner Locked
Press EXIT to unlock and stop recording

EXIT
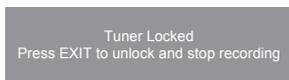
Power on link and Easy playback

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 works even if the TV enters Standby mode automatically by auto power standby function.

(Note)
● Some recorders are not applicable. Read the manual of the recorder.

Link Functions (Q-Link / VIERA Link)

61

VIERA Link "HDAVI Control™"*

*Enjoy additional HDMI Inter-Operability with Panasonic products which have "HDAVI Control" function.
This TV supports "HDAVI Control 5" 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. 59, 60).
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. 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.
- For information about applicable Panasonic equipment, consult your local Panasonic dealer or refer to www.panasonic.co.uk

Preparations

- Connect the equipment supporting VIERA Link.
- VIERA Link connection ➡ **(p. 59, 60)**
- Use fully wired HDMI compliant cable. Non-HDMI-compliant cables cannot be utilised.
  Recommended Panasonic's HDMI cable part number:
  - RP-CDHS15 (1.5 m)   - RP-CDHS30 (3.0 m)   - RP-CDHS50 (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 may need to be changed. For details, read the manual of the recorder.
- Download Analogue channel setting ➡ **"Analogue channel download" (see below)**
- Set [VIERA Link] to [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 from HDMI1 or HDMI2 (p. 25), 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 settings can be downloaded to a recorder with an analogue tuner (where Analogue is still broadcast). Digital channel settings are not downloaded.
- To download the Analogue channel settings
  ➡ **[Q-Link Download] (p. 32), [Auto Setup] (p. 13, 38)**

Easy playback

Automatic input switching - When the connected equipment is operated (during playback or menu operations, etc.), the input mode is switched automatically. When playback is stopped or menus are exited, the input mode returns to the original setting.

Power on link

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 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 auto power standby function.

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 synchronisation 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 of the connected equipment is automatically minimised.
When the TV is turned on, the connected equipment is still in Standby mode, but the power consumption is increased to make startup time fast.
● This function is effective if the connected equipment can change the power consumption in Standby mode and is set to higher consumption.

Auto standby for unnecessary equipment [Intelligent Auto Standby]

Set Intelligent Auto Standby [On (With reminder)] or [On (No reminder)] in the Setup Menu to use this function ➡ [Intelligent Auto Standby] (p. 32)
When the TV is on, non-watched or non-used connected equipment goes into Standby mode automatically to reduce the power consumption. For example, when the input mode is switched from HDMI, the connected equipment will go into Standby mode / or when Speaker Selection is changed to [TV] (except for watching a disc).
● If you select [On (With reminder)], the on-screen message will be displayed before the connected equipment turns to standby.
● This function may not work properly depending on the connected equipment. If required, set to [Off].

Direct TV Recording - What you see is What you record [Direct TV Rec]

Records the current programme in the DIGA Recorder immediately.
● If you connect a variety of recorders including other manufacturers' recorders at the same time, connect the DIGA Recorder to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, connect the DIGA Recorder to HDMI1.
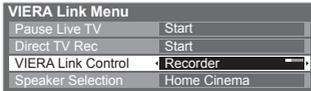● If you cannot operate, check the settings and the equipment.
   ➡ **"Summary of Q-Link and VIERA Link features" (p. 59, 60), "Preparations" (p. 62)**
● To record the programme which DIGA Recorder does not support, SCART connection is required and the programme is recorded by Q-Link function (p. 61).
● Depending on the programme, SCART connection may be required to record.
● You can change channel or turn the TV off while the recorder is recording from its own tuner.
● You can not change channel while the recorder is recording from the TV tuner.

1 Display [VIERA TOOLS] and select [VIERA Link]

VIERA TOOLS

VIERA Link　Photo　Video　Music

① select
② access

2 Select [Direct TV Rec] and start recording

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

① select
② start

● You can also start recording directly when the code of the remote control is "73" (p. 26).

REC

■ To stop recording

Select [Stop] in [Direct TV Rec]

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

① select
② stop

● You can also stop recording directly.

GUIDE

Unlock the tuner

Tuner Locked
Press EXIT to unlock and stop recording

EXIT
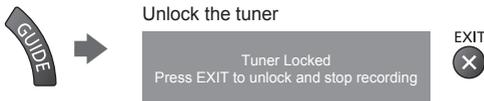
Pause Live TV programme [Pause Live TV]

You can pause the current TV programme and resume later.

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

●This function is available with a DIGA Recorder which has HDD.
●If you connect a variety of recorders including other manufacturers' recorders at the same time, connect the DIGA Recorder which has HDD to the TV's lower HDMI terminal number. For example, if you use HDMI1 and HDMI2 for two recorders, connect the 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. 59, 60), "Preparations" (p. 62)**

1 Display [VIERA TOOLS] and select [VIERA Link]

VIERA TOOLS ➡ VIERA Link   Photo   Video   Music

①select
②access

2 Select [Pause Live TV] and pause

The TV picture will be paused.

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

①select
②pause
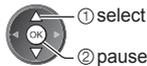
●The current TV programme is recorded on HDD from where it was paused.
●If the paused TV picture disappears after a few minutes, press OPTION button to restore the pause picture.
●Follow the operation guide to operate [Pause Live TV] function.

■ To operate [Pause Live TV]
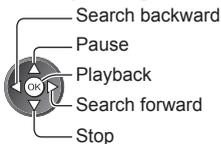
Search backward
Pause
Playback
Search forward
Stop
  ●If you stop playback, the recorded programme will be deleted from HDD.

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

■ To return to current TV (Stop playback of [Pause Live TV] / cancel pause)

Select [Yes]

TV ➡

Pause Live TV	
Stop Pause Live TV?	
Yes	No

①select
②stop

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

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 pointing 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. 59, 60), "Preparations" (p. 62)**
●For details of the operations for the connected equipment, read the manual of the equipment.

1 Display [VIERA TOOLS] and select [VIERA Link]

VIERA TOOLS ➡ VIERA Link   Photo   Video   Music

①select
②access

2 Select [VIERA Link Control]

VIERA Link Menu

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

select

3 Select the equipment to access

Select the type of the connected equipment and access.

VIERA Link Menu

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

① select
② access
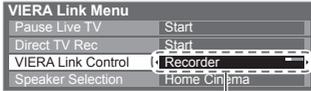
[Recorder] / [Player] / [Home Cinema] / [Video Camera] / [LUMIX] / [Digital Camera] / [Other]

● The displayed item may vary depending on the connected equipment.
● [Home Cinema] means Player theatre, Blu-ray Disc theatre or Recorder theatre.
● [Other] means Tuner set top box.

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

---

4 Operate the menu of the equipment

● Set the code of the remote control to "73" (p. 26).

Follow the operation guide

● To display the operation guide

OPTION

If other manufacturers' equipment is accessed, Setup / Contents Selection menu may be displayed.
● Available VIERA remote control buttons depend on the connected equipment.

> **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

VIERA Link Menu

Pause Live TV	Start
Direct TV Rec	Start
VIERA Link Control	◄ Recorder2 ▬ ►
Speaker Selection	Home Cinema

[Recorder1-3 / Player1-3]

The number is given from the TV's lower number of HDMI terminal connected to the same type equipment. For example, two recorders to HDMI1 and HDMI2, 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

VIERA Link Menu

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

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

Link Functions (Q-Link / VIERA Link)

Speaker control [Speaker Selection]

You can control the theatre speaker with this TV remote control pointing 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. 59, 60), "Preparations" (p. 62)**

1 Display [VIERA TOOLS] and select [VIERA Link]

VIERA TOOLS

VIERA Link   Photo   Video   Music

① select
② access

2 Select [Speaker Selection]

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

select

3 Set to [Home Cinema] or [TV]

set

[Home Cinema]:
The sound is from theatre speakers. Player theatre, Blu-ray Disc theatre or Amplifier will be automatically turned on if it is in Standby mode.

- Volume up / down

- Mute

MUTE

- The sound of TV speakers is mute.
- When the equipment is turned off, TV speakers will be active.

[TV]:
TV speakers are active.

Multi-channel sound

If you want to enjoy the multi-channel sound (e.g. Dolby Digital 5.1ch) via an Amplifier, connect it with HDMI cable and Optical digital audio cable (p. 60), and then select [Home Cinema]. If your Amplifier has "HDAVI Control 5" function, you only need to connect it with HDMI cable to the TV's HDMI2 terminal.
To enjoy the sound from the DIGA Recorder in multi-channel sound, connect an HDMI cable from the DIGA Recorder to the Amplifier (p. 60).

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.
- "HDAVI Control 5" is the newest standard (as of November, 2011) 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. 34)**

Link Functions (Q-Link / VIERA Link)

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 basic connection (p. 11, 12), the table (p. 68), and the specifications (p. 82, 83).
● Check the type of terminals and cable plugs are correct when connecting.

To watch DVDs

(Listening)

(Viewing)

DVD Player

HDMI equipment

Recorder / Player

Rear of the TV

Fully wired HDMI compliant cable

Camcorder

HDMI 1
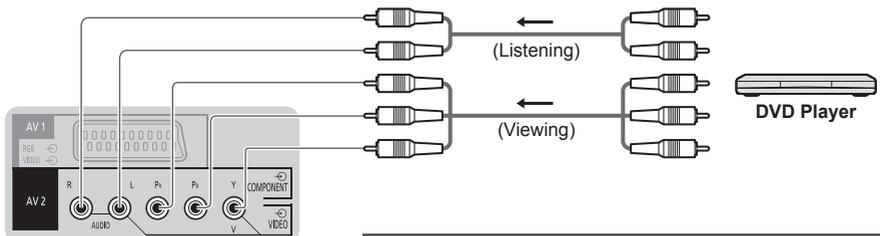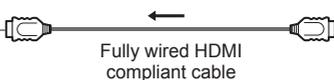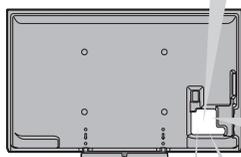
● HDMI connection ➡ **(p. 72)**

To listen with speakers

Optical digital audio cable

DIGITAL AUDIO OUT

Amplifier with speaker system

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.

Camcorder / Game equipment

(Viewing)

Camcorder

(Listening)

Game equipment

Rear of the TV

Less than 10 cm

(M3 stereo mini plug)

Ferrite core - Small size (supplied)

Installing the Ferrite core
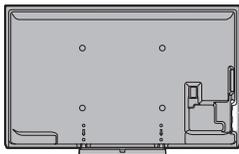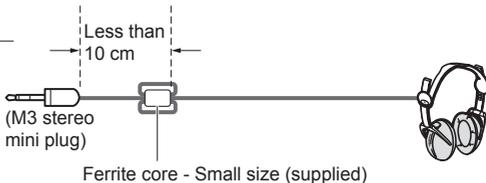
① Pull back the tab　② Wind the cable twice　③ Close
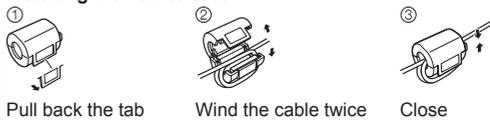
● To adjust volume
➡ **[Headphone Volume] (p. 31)**

Types of connectable equipment to each terminal

Features	AV1	AV2 COMPONENT	AV2 VIDEO	DIGITAL AUDIO OUT	HDMI 1 / 2
		Terminal			
To record / playback videocassettes / DVDs (VCR / DVD Recorder)	○				
To watch satellite broadcasts (Set top box)	○		○		○*1
To watch DVDs (DVD Player)	○	○	○		○
To watch camcorder images (Video camera)	○		○		○
To play games (Game equipment)	○		○		○
To use amplifier with speaker system				○	○*2
Q-Link	○				
VIERA Link	○ (with HDMI)				○
Direct TV Recording	○				○

○ : Recommended Connection
*1: Use HDMI1 for automatic input switching.
*2: Use HDMI2 for connecting an amplifier. This connection is applicable when using an amplifier that has ARC (Audio Return Channel) function.

External Equipment

Technical Information

Auto Aspect

The optimum size and aspect can be chosen automatically, and you can enjoy finer images. ➡ **(p. 18)**

■ 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 / AV2 (Composite)	PAL	◯	◯
	PAL 525/60	–	◯
	M.NTSC	–	◯
	NTSC	–	◯
AV2 (Component)	525 (480) / 60i, 60p	–	
	625 (576) / 50i, 50p	◯	
	750 (720) / 60p, 50p	–	
	1,125 (1,080) / 60i, 50i	–	
HDMI1 HDMI2	525 (480) / 60i, 60p	–	◯
	625 (576) / 50i, 50p	–	◯
	750 (720) / 60p, 50p	–	◯
	1,125 (1,080) / 60i, 50i	–	◯
	1,125 (1,080) / 60p, 50p, 24p	–	◯

■ Auto mode

Auto mode determines the best aspect ratio to fill the screen using a four step process (WSS, Control signal through SCART / HDMI terminal, Letterbox detection or Justify to fill the screen).
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.

Technical Information

Supported file format in Media Player

■ Photo

Format	File extension	Image resolution (pixel)	Details / Restrictions
JPEG	.jpg .jpeg	8 × 8 to 30,719 × 17,279	DCF and EXIF standards Sub-sampling: 4:4:4, 4:2:2, 4:2:0 ● Progressive JPEG is not supported.

■ Video

Container	File extension	Video codec	Audio codec	Details / Restrictions
AVCHD	.mts	H.264	Dolby Digital	AVCHD Standard Ver. 1.0 ● The data may not be available if a folder structure on the device is modified.
SD-Video	.mod	MPEG1 MPEG2	Dolby Digital MPEG Audio	SD-Video Standard Ver. 1.31 (Entertainment Video Profile) ● The data may not be available if a folder structure on the device is modified.
MOV	.mov	H.264 BP/MP/HP Motion JPEG	AAC Dolby Digital LPCM MP3	● This TV supports Motion JPEG recorded by Panasonic LUMIX Camera*1. *1: Some products of before the year 2004 may not be available. The compatibility with future products is not guaranteed.
MP4	.mp4	H.264 BP/MP/HP	AAC Dolby Digital MP3	● This TV supports this container recorded by Panasonic products. For details, read the manual of the products.
AVI	.avi .divx	DivX3 DivX4 DivX5 DivX6 MPEG4 SP/ASP	Dolby Digital MPEG Audio MP3	● Certified to play DivX HD video file in Media Player For details of DivX ➡ **(p. 71)**
ASF	.asf .wmv	VC-1 Windows Media Video Ver. 9	WMA	● Copy-protected files cannot be played back. ● WMA Pro and WMA Lossless are not supported.
MKV	.mkv	H.264 BP/MP/HP	AAC Dolby Digital MPEG Audio MP3	● Some subtitles or chapter functions may not be available.

■ Music

Codec	File extension	Restrictions
MP3	.mp3	–
AAC	.m4a	● Copy-protected files cannot be played back.
WMA	.wma	● Copy-protected files cannot be played back. ● WMA Pro and WMA Lossless are not supported.

(Note)
● Some files may not be played back even if they fulfil these conditions.
● Do not use two-byte characters or other special codes for data.
● The device may become unusable with this TV if the file or folder names are changed.

DivX

DivX Certified® to play DivX® video up to HD 1080p, including premium content.
ABOUT DIVX VIDEO:
DivX® is a digital video format created by DivX, LLC, a subsidiary of Rovi Corporation. This is an official DivX Certified® device that plays DivX video. Visit divx.com for more information and software tools to convert your files into DivX videos.

■ Subtitle text file of DivX
Subtitles format - MicroDVD, SubRip, TMPlayer
● The DivX video file and subtitles text file are inside the same folder, and the file names are the same except for the file extensions.
● If there are more than one subtitles text files inside the same folder, they are displayed in the following order of priority:
".srt", ".sub", ".txt".
● To confirm or change the current subtitle status while playing DivX content, press the OPTION button to display Option Menu.
● Depending on the methods used to create the file or the state of recording, only parts of the subtitles may be displayed, or the subtitles may not be displayed at all.

> **Note**
> ● Depending on how you make SD Card or USB Flash Memory, files and folders may not be displayed in the order you numbered.
> ● Depending on how you create the files and the structure of folders, the files and folders may not be displayed.
> ● When there are many files and folders, operation may take time to complete or some files may not be displayed or playable.

ABOUT DIVX VIDEO-ON-DEMAND:
This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in the Setup Menu. Go to vod.divx.com for more information on how to complete your registration.

■ To show DivX VOD registration code
➡ **[DivX® VOD] (p. 34)**
● If you want to generate the new registration code, you have to deregister the current registration code.
  After playing DivX VOD content once, the confirmation screen to deregister will be displayed in [DivX® VOD] in the Setup Menu. If you press the OK button on the confirmation screen, the deregistration code will be generated and you will not be able to play any contents that you purchased using the current registration code.
  You will obtain the new registration code by pressing the OK button on the deregistration code screen.
● If you purchase DivX VOD content using a registration code different from this TV's code, you will not be able to play this content. ([Your device is not authorized to play this DivX protected video.] is displayed.)

■ Regarding DivX content that can only be played a set number of times
Some DivX VOD content can only be played a set number of times.
When you play this content, the remaining number of plays is displayed. You cannot play this content when the number of remaining plays is zero. ([This DivX rental has expired.] is displayed.)
● When playing this content, the number of remaining plays is reduced by one in the following conditions:
  • If you exit the current application.
  • If you play the other content.
  • If you go to the next or previous content.

Devices for recording or playing back

■ SD Card
Card format:
  SDXC Card - exFAT
  SDHC Card / SD Card - FAT16 or FAT32
Compliant card type (maximum capacity):
  SDXC Card (64 GB), SDHC Card (32 GB), SD Card (2 GB), miniSD Card (2 GB) (requiring miniSD adaptor)

● If miniSD Card is used, insert / remove it together with the adaptor.
● Check the latest information on the card type at the following website.
  http://panasonic.jp/support/global/cs/tv/
● Use an SD Card which meets SD standards. If not, it may cause the TV to malfunction.

2.1 mm

32 mm

24 mm

■ USB Flash Memory
USB Flash Memory format: FAT16, FAT32 or exFAT
● A USB HDD formatted by PC is not guaranteed in Media Player.
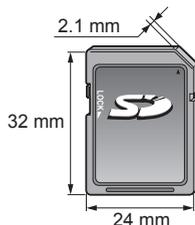
- Data modified with a PC may not be displayed.
- Do not remove the device while the TV is accessing data. Otherwise this can damage device or TV.
- Do not touch the pins on the device.
- Do not subject the device to a high pressure or impact.
- Insert the device in the correct direction. Otherwise this can damage device or TV.
- Electrical interference, static electricity, or erroneous operation may damage the data or device.
- 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.

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 DVD player, a set top box or game equipment, can be connected to the HDMI terminal using an HDMI compliant (fully wired) cable.
For more information about connections ➡ **(p. 12, 67)**

■ Applicable HDMI features

- Input audio signal:
  2ch Linear PCM (sampling frequencies - 48 kHz, 44.1 kHz, 32 kHz)
- Input video signal:
  ➡ **"Input signal that can be displayed" (see below)**
  Match the output setting of the digital equipment.
- Input PC signal:
  ➡ **"Input signal that can be displayed" (see below)**
  Match the output setting of the PC.

- VIERA Link (HDAVI Control 5)
  ➡ **[VIERA Link] (p. 62)**
- Deep Colour
- x.v.Colour™
- Audio Return Channel*[2]
  (HDMI2 terminal only)

■ DVI connection

If the external equipment has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adaptor cable*[3].
When the DVI to HDMI adaptor cable is used, connect the audio cable to AV2 audio terminals.

Note
- Audio settings can be made on [HDMI1 / 2 Input] in the Sound Menu. (p. 31)
- 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.
- Equipment having no digital output terminal may be connected to the input terminal of component or video to receive analogue signals.
- This TV incorporates HDMI™ technology.

*1: The HDMI logo is displayed on HDMI-compliant equipment.
*2: Audio Return Channel (ARC) is a function to send digital sound signals via an HDMI cable.
*3: Enquire at your local digital equipment retailer shop.

Input signal that can be displayed

■ COMPONENT (Y, P_B, P_R) (from AV2 terminal), HDMI

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

◯ : Applicable input signal

■ PC (from HDMI terminal)

Signal name	Horizontal frequency (kHz)	Vertical frequency (Hz)
640 × 480 @60 Hz	31.47	60.00
1,280 × 720 @60 Hz	45.00	60.00
1,920 × 1,080 @60 Hz	67.50	60.00

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

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 show fine detail with sufficient clarity.

Technical Information

Characters table for numeric buttons

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

User input

Name																			

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z		0	1	2	3	4	5	6	7	8	9	!	:	#
a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
u	v	w	x	y	z	(	)	+	-	.	*	_							
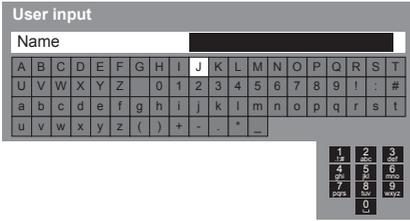
Press the numeric button repeatedly until you reach the desired character.

● The character is set automatically if you leave for 1 second.
● You can also set the character by pressing the OK button or other numeric buttons within 1 second.
● The characters may vary depending on the input items.

Characters table:

Numeric buttons	Characters	Numeric buttons	Characters
1	. 1 ! : # + - * _ ( )	**6**mno	m n o 6 M N O
2abc	a b c 2 A B C	**7**pqrs	p q r s 7 P Q R S
3def	d e f 3 D E F	**8**tuv	t u v 8 T U V
4ghi	g h i 4 G H I	**9**wxyz	w x y z 9 W X Y Z
5jkl	j k l 5 J K L	**0**	Space 0

SCART and HDMI terminal information

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

Socket Earth 21 — 20 CVBS in (video)
CVBS out (video) 19 — 18 RGB status earth
CVBS earth 17 — 16 Status RGB
Red in 15 — 14 Earth
Red earth 13 — 12 --
Green in 11 — 10 Q-Link data
Green earth 9 — 8 Status CVBS
Blue in 7 — 6 Audio in (L)
Blue earth 5 — 4 Audio earth
Audio out (L) 3 — 2 Audio in (R)
Audio out (R) 1

HDMI terminal

Hot Plug Detect 19 — 18 +5V Power
DDC/CEC Ground 17 — 16 SDA
SCL 15 — 14 Utility
CEC 13 — 12 TMDS Clock−
TMDS Clock Shield 11 — 10 TMDS Clock+
TMDS Data0− 9 — 8 TMDS Data0 Shield
TMDS Data0+ 7 — 6 TMDS Data1−
TMDS Data1 Shield 5 — 4 TMDS Data1+
TMDS Data2− 3 — 2 TMDS Data2 Shield
TMDS Data2+ 1

Technical Information

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FAQs

Before requesting service or assistance, please follow these simple guides to resolve the problem.
If the problem still persists, please contact your local Panasonic dealer for assistance.

Block noise, frozen or disappearing image occurs in DVB mode / White spots or shadow image (ghosting) occurs in Analogue mode / Some channels cannot be tuned
● Check the position, direction and connection of the aerial.
● Check [Signal Condition] (p. 41). If [Signal Quality] is displayed in red, the DVB signal is weak.
● 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 schedule 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.
● 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.
● Turn the TV off with the Mains power On / Off switch, and then on again.
● If problem persists, consult your local dealer or service provider for the availability of services.

Neither image nor sound is produced
● Check the TV is turned on.
● Check the mains lead is plugged into the TV and the socket outlet.
● Check the TV is in AV mode.
● Check the correct input mode is selected.
● Check the Picture Menu (p. 29, 30) and volume.
● Check all required 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. 69)**
● Press the ASPECT button if you want to change the aspect ratio manually. ➡**(p. 18)**

Black and white picture
● Check that the output of the external equipment matches the input of the TV.
  When connecting with SCART, ensure the output setting of the external equipment is not S-Video.

Q-Link function does not work
● Confirm SCART cable and connection.
  Also set [AV1 out] in the Setup Menu. ➡ **(p. 32)**

[VIERA Link] function does not work and an error message appears
● Confirm the connection. ➡**(p. 59, 60)**
● Turn the connected equipment on and then switch the TV on. ➡ **(p. 62)**

Recording does not start immediately
● Check the settings of the recorder. For details, read the manual of the recorder.

The screen becomes dim
● This occurs when the contrast is lowered automatically to avoid image retention in the following conditions without any user operation for a few minutes:
  · No signal in DVB or AV mode
  · Selected locked channel
  · Selected invalid channel
  · Selected radio channel
  · Displayed menu
  · Thumbnail or still picture

	Problem	Causes / Actions
Screen	**Chaotic image, noisy**	●Set [P-NR] in the Picture Menu to remove noise. ➡ **(p. 29)** ●Check nearby electrical products (car, motorcycle, fluorescent lamp).
	No image can be displayed	●Is [Contrast], [Brightness] or [Colour] in the Picture Menu set to the minimum? ➡ **(p. 29)**
	Blurry or distorted image (no sound or low volume)	●Reset channels. ➡ **(p. 38)**
	Unusual image is displayed	●Turn the TV off with Mains power On / Off switch, then turn it on again. ●If the problem persists, initialise all settings. ➡ **[Shipping Condition] (p. 47)**
Sound	**No sound is produced**	●Is "Sound mute" active? ➡**(p. 9)** ●Is the volume set to the minimum?
	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)
	Unusual sound from the TV	●When power is on, drive noise may be heard from inside the TV (not a sign of faulty operation).
Digital Channel	**No programmes shown on TV Guide**	●Reset channels. ➡ **(p. 38)** ●Check the digital transmission by contacting Digital UK on 08456 50 50 50 or at www.digitaluk.co.uk ●Check the analogue broadcast (if still available in your area). ●Consult an aerial or dish engineer to check the alignment of your aerial or dish.
	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. 19)** ●Channel position numbers may be changed by broadcasters. ●Reset channels. ➡**(p. 38)**
HDMI	**Sound is unusual**	●Set the sound setting of the connected equipment to "2ch L.PCM". ●Check the [HDMI1 / 2 Input] setting in the Sound Menu. ➡ **(p. 31)** ●If digital sound connection has a problem, select analogue sound connection. ➡ **(p. 72)**
	Pictures from external equipment are unusual when the equipment is connected via HDMI	●Check the HDMI cable is connected properly. ➡ **(p. 67)** ●Turn the TV and equipment off, then turn them on again. ●Check an input signal from the equipment. ➡ **(p. 72)** ●Use equipment compliant with EIA/CEA-861/861D.
Network	**Cannot connect to the network**	●Check the LAN cable is connected properly. ➡**(p. 45)** ●Check the connections and settings. ➡ **(p. 45, 46)** ●Check the network equipment and network environment. ●The router may not be set to issue IP address automatically. If the network administrator prefers to allocate an IP address, set an IP address manually. ➡ **(p. 46)** ●The router may be using MAC address filtering (security setting). Confirm the MAC Address of this TV (p. 45) and set the router to use it. ●If the problem persists, consult your Internet Service Provider or telecommunications company.

FAQs

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Problem		Causes / Actions
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 TV and 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	●Auto power standby function is activated. ➡**(p. 10)** ●The TV enters Standby mode about 30 minutes after analogue broadcasting ends.
	The remote control does not work or is intermittent	●Are the batteries installed correctly? ➡ **(p. 7)** ●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 about 7 m and 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.
	Parts of the TV become hot	●Even when the temperature of parts of the front, top and rear panels has risen, these temperature rises do not cause any problems in terms of performance or quality.
	Permanently lit spots on screen	●Due to production process involved in this technology this may result in some pixels which are permanently lit or unlit. This is not a malfunction.
	An error message appears	●Follow the message's instructions. ●If the problem persists, contact your local Panasonic dealer or the authorised service centre.

On-screen messages

Message	Meaning / Action
All tuning data will be erased	●[Shipping Condition] will erase all tuning data. ➡**(p. 47)**
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. 38)**
Child Lock is active! **Press OK to enter PIN.**	●The selected channel is locked in Child Lock (p. 44). You must enter the PIN number before the channel will be displayed.
External Recording Due to Start	●This message will appear 2 minutes before timer programming event for external recording due to start.
Feature not available.	●It is not possible to record from AV2 (COMPONENT) or HDMI. Connect the recorder to the TV using a fully wired SCART cable for recording from the TV tuner. ●Confirm Q-Link or VIERA Link settings. ➡ **(p. 59 - 62)**
Feature not available. **Press OK to view how it works.**	●The selected feature on VIERA TOOLS is not available. Press the OK button to view the demonstration to explain how to use it.
Found new software version **∗∗∗.** **Press OK to start update (may take over 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. 59 - 62)**

Message	Meaning / Action
Invalid system time. Please exit !	● Cannot get the time information and cannot edit Timer Programming screen. Check the connection of the RF cable.
Invalid system time, Timer Programming will not work. Please press TV button on remote control and check time display on Banner	● Cannot get the time information. If there is no time displayed on the Information banner, 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 perform [Update Channel List].
No channel found. Please check aerial or local signal availability. Press OK to start Auto Setup.	● Follow the on-screen instructions. ● Please also refer to p. 74. ● If channels are still not found, consult your local Panasonic dealer.
No module inserted	● Check the CI module is inserted completely (p. 49).
No recording - Already recording	● The equipment may already be recording.
No recording - Check media	● The tape or disc may be "write protected", full, missing or damaged.
No recording - Playing	● The equipment may be playing the tape or disc.
No recording - Unknown reason	● The recording may not be performed. Check the equipment.
No service	● The broadcaster has stopped the service. Check the channel in the TV Guide. (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. 62).
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. TV will automatically restart. Do not turn off	● [Auto Setup] will automatically start (p. 13).
Sending Preset Data	● Q-Link or VIERA Link channel download is in progress.
Software successfully updated. Press EXIT to continue.	● The software updating is finished.
Software update failed. Please try again later. Press EXIT to continue.	● Perform [System Update Search Now] in System Update (p. 50). If this is still unsuccessful, there may not be any new software available.

Message	Meaning / Action
This timer will not follow the TV Guide information. Press OK to continue, RETURN to restore original timer.	UK only ● If you edit the start time or end time of Guide link programming by more than 10 minutes, it will no longer be performed as Guide link programming. The programming will be performed according to the time setting.
Timer already expired !	● The starting time in Timer Programming has already passed. Set the timer correctly (p. 42).
Timer incorrect !	● Set the start and end times in Timer Programming correctly (p. 42).
Timer overlap. Press OK to keep, RETURN to edit.	● Timer programming events are overlapped. Press the OK button to keep the overlapped setting. [Ext Rec.] is given priority over [Reminder]. When two or more [Ext Rec.] overlap, the first timer programming event starts and finishes as programmed. The next timer programming event can then start.
Tuner Locked Press EXIT to unlock and stop recording	● If you want to unlock the tuner, cancel Direct TV Recording (p. 61, 63) or the recording of Timer Programming (p. 42).
Unable to download, please check equipment	● The tape or disc is active. Stop the equipment and try again.

■ Media Player / Network

Message	Meaning / Action
Cannot read file	● The file is broken or unreadable. Check applicable data format. (p. 70)
Ethernet cable not connected	● Check the connection of the LAN cable. If you use a hub, also check the light on the hub is lit. ● The LAN cable might be defective.
No Device Inserted	● Confirm the SD Card or USB device is inserted correctly.
No valid file to play	● The card has no data.
This operation is not possible	● The selected operation is not available.

Maintenance

First, remove the mains plug from the socket outlet.

Display panel, Cabinet, Pedestal

Regular care:
Gently wipe the surface of the display panel, cabinet, or pedestal by using a soft cloth to clean the dirt or fingerprints.

For stubborn dirt:
First clean the dust on the surface. Dampen a soft cloth with clean water or diluted neutral detergent (1 part detergent to 100 parts water). Wring the cloth and wipe the surface. Finally, wipe away all the moisture.

Caution
- Do not use a hard cloth or rub the surface too hard, otherwise this may cause scratches on the surface.
- Take care not to subject the TV's surfaces to water or detergent. Liquid inside the TV could lead to product failure.
- Take care not to subject the surfaces to insect repellent, solvent, thinner or other volatile substances. This may degrade surface quality or cause peeling of the paint.
- The surface of the display panel is specially treated and may be easily damaged. Take care not to tap or scratch the surface with your fingernail or other hard objects.
- Do not allow the cabinet and pedestal to make contact with a rubber or PVC substance for a long time. This may degrade surface quality.

Mains plug

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

Glossary

DVI
Digital Visual Interface - A high quality video interface standard to connect to the display

ETHERNET
One of the popular standards of LAN

EPG
Electronic Programme Guide - A digital guide showing scheduled programmes

HDMI
High-Definition Multimedia Interface - A digital audio and video interface for transmitting uncompressed digital signals on a single cable

LAN
Local Area Network

MAC Address
Media Access control Address

NICAM
Near Instantaneous Companded Audio Multiplex - A format for digital sound over television

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

RF
Radio Frequency - Signal received from terrestrial aerial

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. 14).

SPDIF
A standard audio transfer file format

USB
Universal Serial Bus - An interface specification to connect devices

VCR
Video Cassette Recorder

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Specifications

■ Product fiche

Manufacturer	Panasonic Corporation	
Model No.	**TX-P42X50B**	**TX-P50X50B**
Energy efficiency class	B	B
Visible screen size (diagonal)	107 cm / 42 inches	127 cm / 50 inches
On mode average power consumption	95 W	132 W
Annual energy consumption^{*1}	139 kWh	193 kWh
Rated power consumption	150 W	200 W
Standby power consumption^{*2}	0.40 W	
Off mode power consumption	0.30 W	
Display resolution	1,024 (W) × 768 (H)	

■ Other information

Model No.			TX-P42X50B	TX-P50X50B
Power source			AC 220-240 V, 50 / 60 Hz	
Panel			Plasma panel	
Dimensions (W × H × D)			1,007 mm × 657 mm × 231 mm (With Pedestal) 1,007 mm × 615 mm × 81 mm (TV only)	1,184 mm × 757 mm × 266 mm (With Pedestal) 1,184 mm × 716 mm × 81 mm (TV only)
Mass			17.5 kg Net (With Pedestal) 16.0 kg Net (TV only)	22.5 kg Net (With Pedestal) 21.0 kg Net (TV only)
Sound	Speaker		(160 mm × 40 mm) × 2, 8 Ω	
	Audio output		20 W (10 W + 10 W)	
	Headphones		M3 (3.5 mm) stereo mini Jack × 1	
Receiving systems / Band name Check the latest information on the available services at the following website. http://panasonic.jp/ support/global/cs/tv/	UK	**DVB-T / T2**	Digital terrestrial services.	
		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).	
	Ireland	**DVB-T**	Digital terrestrial services.	
		PAL I	VHF A - J UHF E21 - E69 CATV S1 - S20 CATV S21 - S41 (Hyperband)	
		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			UK UHF	Ireland VHF / UHF

Operating conditions		**Temperature:** 0 °C - 35 °C **Humidity:** 20 % - 80 % RH (non-condensing)		
Connection terminals	AV1 input / output	**SCART** (Audio/Video in, Audio/Video out, RGB in, Q-Link)		
	AV2 input (COMPONENT / VIDEO)	**VIDEO**	RCA PIN Type × 1	1.0 V[p-p] (75 Ω)
		AUDIO L - R	RCA PIN Type × 2	0.5 V[rms]
		Y **P$_B$, P$_R$**	1.0 V[p-p] (including synchronisation) ±0.35 V[p-p]	
	HDMI 1 / 2 input	TYPE A Connectors HDMI1: Deep Colour, x.v.Colour™ HDMI2: Audio Return Channel, Deep Colour, x.v.Colour™ ● This TV supports "HDAVI Control 5" function.		
	Card slot	SD Card slot × 1 Common Interface slot × 1		
	ETHERNET	RJ45, IEEE802.3 10BASE-T / 100BASE-TX		
	USB	USB2.0 DC 5 V, Max. 500 mA		
	DIGITAL AUDIO OUT	PCM / Dolby Digital / DTS, Fibre optic		

*1: Energy consumption XYZ kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.
*2: when the TV is turned off with the remote control and no function is active

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

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

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

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

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

For business users in the European Union

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

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

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

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

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

Sales and Support Information

Customer Communications Centre
- For customers within the UK: **0844 844 3899**
- For customers within Ireland: **01 289 8333**
- For further support on your product, please visit our website: **www.panasonic.co.uk**

Direct Sales at Panasonic UK
- Order accessory and consumable items for your product with ease and confidence by phoning our Customer Communications 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.pas-europe.com**.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution facilities are provided directly by Panasonic UK.
- 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.

C E

Declaration of Conformity (DoC)
Authorized Representative:
Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, Germany

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** _____

Printed in Czech Republic