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Contact Information: cdrequest@unipf.jp

The source code and the copyright notice are also available for free in our website below.

http://www.unipf.jp/dl/DTV13ET/
Notice for DVB / Data broadcasting / IPTV functions

This TV is designed to meet the standards (as of August, 2013) of digital services.

- Not all the features are available depending on the country, area, broadcaster, service provider and network environment.
- The compatibility with future services is not guaranteed.
- Check the latest information on the available services at the following website.
  http://panasonic.net/viera/support

Important Notice

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.

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.

Transport only in upright position

Safety Precautions

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

- **Mains plug and lead**

  **Warning**

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

  ![Warning Icon]

  ![Mains Plug]

  IMPORTANT:

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

  This TV is supplied with a moulded 3-pin mains plug for your safety and convenience.

  A 5 amp fuse is fitted in this mains plug. Shall the fuse need to be replaced, please ensure that the replacement fuse has a 5 amp rating and that it is approved by ASTA or BSI to BS1362.

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

  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 authorised dealer.

  How to replace the fuse:

  **For plug type shown in example 1**

  Lift out the removable fuse cover with a screwdriver and replace the fuse, then refit it securely into the mains plug.

  **For plug type shown in example 2**

  Lift open the fuse cover in the mains plug with a screwdriver and replace the fuse, then press the fuse cover down securely.

  ![Example 1]

  ![Example 2]

- This TV is designed to operate on AC 220-240 V, 50 / 60 Hz.
To prevent the spread of fire, keep candles or other open flames away from this product at all times

**Dangerous part / Small object**

**Warning**
- 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.

**Pedestal**

**Warning**
- Do not disassemble or modify the pedestal.

**Caution**
- Do not use any pedestal other than the one provided with this TV.
- Do not use the pedestal if it becomes warped or physically damaged. If this occurs, contact your nearest Panasonic dealer immediately.
- During setup, make sure that all screws are securely tightened.
- Ensure that the TV does not suffer any impact during installation of the pedestal.
- Ensure that children do not climb onto the pedestal.
- Install or remove the TV from the pedestal with at least two people.
- Install or remove the TV by the specified procedure.

**Ventilation**

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

Minimum distance:

![Ventilation Diagram]

- Ventilation should not be impeded by covering the ventilation openings with items such as newspapers, tablecloths and curtains.
- Whether you are using a pedestal or not, always ensure the vents at the bottom of the TV are not blocked and there is sufficient space to enable adequate ventilation.

---

- Insert the mains plug fully into the socket outlet.
- Ensure that the mains plug is easily accessible.
- Disconnect the mains plug when cleaning the TV.
- Do not touch the mains plug with wet hands.

- 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.

- Do not use any mains lead other than that provided with this TV.

**Take care**

**Warning**
- 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 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.

- Do not place the TV on sloped or unstable surfaces, and ensure that the TV does not hang over the edge of the base.

- This TV is designed for table-top use.

- Do not expose the TV to direct sunlight and other sources of heat.
Moving the TV

Caution
Before moving the TV, disconnect all cables.

- Move the TV with at least two people. Support as shown to avoid injury by the TV tipping or falling.

When not in use for a long time

Caution
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

Caution

- Do not expose your ears to excessive volume from the headphones. Irreversible damage can be caused.
- If you hear a drumming noise in your ears, turn down the volume or temporarily stop using the headphones.

Battery for the Remote Control

Caution

- Incorrect installation may cause battery leakage, corrosion and explosion.
- Replace only with the same or equivalent type.
- Do not mix old and new batteries.
- Do not mix different battery types (such as alkaline and manganese batteries).
- Do not use rechargeable batteries (Ni-Cd, etc.).
- Do not burn or break up batteries.
- Do not expose batteries to excessive heat such as sunshine, fire or the like.
- Make sure you dispose of batteries correctly.
- Remove the battery from the unit when not using for a prolonged period of time to prevent battery leakage, corrosion and explosion.

Accessories

Remote Control

(p. 10)
N2QAYB000816 or N2QAYB000975

Pedestal

(p. 6)

Mains lead

(p. 7)

Batteries (2)

- R6
(p. 10)

Operating Instructions

Production Registration Leaflet

- Accessories may not be placed all together. Take care not to throw them away unintentionally.
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. Lift the TV from the pedestal.
3. Remove the assembly screws 🅱️ from the bracket.
Connections

- 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 cables.
- Check the terminal type and cable plugs are correct when connecting.
- Use a fully wired HDMI compliant cable.
- Use a fully wired SCART cable.
- 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 affected.
- Please also read the manual of the equipment being connected.

Terminals

Rear of the TV

1 DIGITAL AUDIO
2 HDMI1 - 2 (p. 8)
3 AV1 (SCART) (p. 7, 8)
4 ETHERNET (p. 9)
5 AV2 (COMPONENT / VIDEO) (p. 8)
6 Terrestrial / cable terminal (p. 7, 8)
7 Headphone jack (p. 8)
8 USB port
9 CI slot (p. 9)

Basic connections

Mains lead

- AC 220-240 V
- 50 / 60 Hz
- Mains lead (supplied)

Insert the mains plug firmly into place.
- When disconnecting the mains lead, be absolutely sure to disconnect the mains plug at the socket outlet first.

Aerial

TV

RF cable
Terrestrial aerial
- For DVB-T, Analogue

AV devices

DVD Recorder / VCR

TV

SCART cable
RF cable
Camcorder / Game equipment

(VIDEO equipment)

TV

Game equipment
Camcorder

Amplifier (to listen with speakers)
- Use HDMI2 for connecting an amplifier. This connection is applicable when using an amplifier that has ARC (Audio Return Channel) function.
- As for an amplifier without ARC function, use DIGITAL AUDIO.
- To enjoy multi-channel sound from external equipment (e.g. Dolby Digital 5.1ch), connect the equipment to the amplifier. For the connections, read the manuals of the equipment and amplifier.

Other connections

DVD Player

(COMPARTMENT equipment)

TV

Headphones

To adjust volume

[Headphone Volume] in the Sound Menu
**Common Interface**
- Turn the TV off with Mains Power On / Off switch whenever inserting or removing the CI module.
- If a smart card and a CI module come as a set, first insert the CI module, then insert the smart card into the CI module.
- Insert or remove the CI module completely in the correct direction as shown.
- Normally encrypted channels will appear. (The viewable channels and its features depend on the CI module.)
- If encrypted channels does not appear
  - [Common Interface] in the Setup Menu
- There might be some CI modules in the market with older firmware versions that do not work fully interoperable with this new CI+ v1.3 TV. In this case, please contact your content provider.
- For more information, read the manual of the CI module, or check with the content provider.

![Image of TV and CI module](image)

**Network connections**
Connect the TV and the Broadband network equipment (modem, hub, or router) by using a LAN cable.
- If you do not have a Broadband network services, please consult your retailer for assistance.
- Confirm the term and conditions of the contracts with your Internet Service Provider (ISP) or telecommunications company.
- Set up and connect any equipment required for the network environment.
- Read the manual of the network equipment, too.

![Image of network connections](image)

**LAN cable (Shielded)**
- Use the Shielded Twist Pair (STP) LAN cable.

**Note**
- Depending on the ISP or telecommunications company, the required equipment and the internet connection procedure are different. Ensure that you use the network equipment that are authorized by your ISP and telecommunications company.
- You cannot make settings for the network equipment on this TV. You may be required to make settings on your computer.
- Depending on the terms and conditions of the contracts with your ISP or telecommunications company, additional fees may be charged or multiple connections to the internet may be impossible.
- Please contact your ISP or telecommunications company if you require further assistance regarding the network equipment.
8 Coloured buttons
(red-green-yellow-blue)
- Used for the selection, navigation and operation of various functions.

9 Volume Up / Down

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

11 Still
- Freezes / unfreezes the picture.

12 Input mode selection
- TV - switches to DVB / Analogue.
- AV - switches to AV input mode from Input Selection list.

13 TV Guide
- Displays Electronic Programme Guide.

14 Subtitles
- Displays / hides subtitles. (if available)

15 Exit
- Returns to the normal viewing screen.

16 Cursor buttons
- Makes selections and adjustments.

17 Return
- Returns to the previous menu / page.

18 Aspect
- Changes aspect ratio.

19 Channel Up / Down

20 Sound Mute On / Off

21 Last view
- Switches to previously viewed channel or input mode.

Installing / Removing batteries

1 Standby On / Off switch
2 MEDIA PLAYER
3 [Main Menu]
- Press to access Picture, Sound, Timer and Setup.
4 Text service button
5 Information
- Displays channel and programme information.
6 OK
- Confirms selections and choices.
- Press after selecting channel positions to quickly change channel.
- Displays channel list.
7 [Option Menu]
- Easy optional setting for viewing, sound, etc.
1 Input mode selection
- Press repeatedly until you reach the desired mode.
  [Main Menu]
- Press and hold for about 3 seconds to display main menu.
  OK (when in the menu system)
2 Channel Up / Down
  Cursor Up / Down (when in the menu system)
3 Volume Up / Down
  Cursor Left / Right (when in the menu system)
4 Mains power On / Off switch
- Use to switch the mains power.
5 Remote control signal receiver
- Do not place any objects between the TV remote control signal receiver and remote control.
6 Ambient sensor
- Senses brightness to adjust picture quality when [Eco Mode] in the Picture Menu is set to [On].
7 Power LED
  Red: Standby
  Green: On
- The LED blinks when the TV receives a command from the remote control.

First time Auto Setup
Automatically sets up the TV and searches for available TV channels when the TV is turned on for the first time.
- These steps are not necessary if the setup has been completed by your local dealer.
- Please complete connections (p. 7 - 9) 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 turn power on
- Takes a few seconds to be displayed.

2 Select the following items
Set up each item by following the on-screen instructions.

Select your viewing environment.

How to use remote control
- Move the cursor
- Access the item / store the setting
- Return to the previous item
- Exit the item

Select your country
Select [Home]
Select [Home] viewing environment to use in your home environment.
- [Shop] is for shop display.
- To change viewing environment later on, you will need to initialise all settings by accessing Shipping Condition.
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.

- To retune all channels
  ➔ [Automatic Channel Search] (p. 21)
- To initialise all settings
  ➔ [Shipping Condition] (p. 21)

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## Watching TV

### 1 Turn power on

[ ]/ (TV)

or

[ ] (Remote Control)

- Mains power On / Off switch should be on. (p. 10)

### 2 Select the mode

### 3 Select a channel

- \( \uparrow \) up
- \( \downarrow \) down

- To select 2 or more-digit channel position number, e.g. 399

---

### Aspect

Change the aspect ratio (image size)

**ASPECT**

- **[Auto]:** The best ratio is selected automatically according to the "Aspect Control Signal" (p. 26).
- **[16:9]:** Directly displays the image at 16:9 without distortion (anamorphic).
- **[14:9]:** Displays the image at the standard 14:9 without distortion.
- **[Just]:** Displays a 4:3 image full-screen. Stretching is only noticeable at the left and right edges.
- **[4:3]:** Displays the image at the standard 4:3 without distortion.
- **[4:3 Full]:** Displays a 4:3 image enlarged horizontally to fit the screen.
- For HD (High definition) signals
  - **[Zoom 1]:** Displays a 16:9 letterbox or 4:3 image without distortion
  - **[Zoom 2]:** Displays a 16:9 letterbox (anamorphic) image full-screen without distortion.
  - **[Zoom 3]:** 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.

**Information banner**

Display Information banner
- Also appears when changing a channel.

![Banner Example]

Example: DVB

1 Channel position and name
2 Channel type ([Radio], [Data], [HDTV], etc.) / Encrypted channel (E) / TV mode
3 Programme
4 Current time
5 Programme Start / Finish time (DVB) / Channel number, etc. (Analogue)
6 Progress time indicator of the selected programme (DVB)
7 [All DVB Channels] or [All Analogue Channels]

*Features available / Message meanings*

- **Bad signal**
  Poor TV signal quality
- **[Dolby D+], [Dolby D], [HE-AAC]**
  Audio track
- **[Also in] (UK only)**
  Same programme available as HD broadcast
- **[AD]**
  Audio Description service available
- **[STTL]**
  Subtitle service available
- **[TEXT]**
  Text service available
- **[Multi Audio]**
  Multiple audio available
- **[Stereo], [Mono], [NICAM]**
  Audio mode
  
- 1 - 90
  Off Timer remaining time

- **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. 20)

**Note**
- [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.
Viewing Text Service

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

- The availability of text services for a programme is indicated by [TEXT] in the information banner.

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

Digital text (MHEG)

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

1 Select DVB
   -

1 Switch to Text service
   TEXT

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
- Coloured characters
- Coloured button
- When options with numbers are displayed

To exit from Text service

TEXT EXIT

Note

- As soon as you switch to a digital channel with links to a text service, software is downloaded in the background to enable the text 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 text services, you will find there is a short delay when moving between pages while the page downloads. There is often a prompt shown on the page (for example “Loading”) to let you know that this is happening.

Analogue teletext

What is FLOF (FASTEXT) mode?

In FLOF 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 TOP mode? (in case of TOP text broadcasting)

TOP is a particular improvement of the standard teletext service that enables easier search and effective guide.

- Fast overview of the teletext information available
- Easy to use step-by-step selection of the topical subject
- Page status information at the bottom of the screen
- Available page up / down
  - (red) (green)
- To select among subject blocks
  - (blue)
- To select next subject within the subject block
  (After the last subject, it moves to the next subject block.)
  - (yellow)

1 Switch to Teletext

TEXT

- Displays the index page (content varies depending on the broadcasters).

2 Select the page

Coloured buttons
(Corresponds to the colour bar)

To return to TV

EXIT

Reveal hidden data

Reveal hidden words e.g. quiz page answers

MENU (red)

- Press again to rehide.
Using TV Guide

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

- This function varies depending on the country you select.
- DVB-T and Analogue channels are displayed on the same TV Guide screen. 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

2 View TV Guide

Example:

1 Current date and time
2 TV Guide date
3 TV Guide time
4 Programme
5 Channel position and name

- It may cause slow response, when press the UP/DOWN keys for TV programme guide. This is due to programme data downloading.

To view the next programme

To the previous day (DVB)

To the next day (DVB)
Watching External Inputs

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

1 Turn the TV on

When connecting with SCART or HDMI
Receives input signals automatically when playback starts.

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

2 Display the input selection menu

3 Select the input mode connected to the equipment

<table>
<thead>
<tr>
<th>Input Selection</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
</tr>
<tr>
<td>AV1</td>
</tr>
<tr>
<td>AV2</td>
</tr>
<tr>
<td>HDMI 1</td>
</tr>
<tr>
<td>HDMI 2</td>
</tr>
</tbody>
</table>

① select
② watch

* You can also select the input by pressing the AV button repeatedly.
Using Menu Functions

1 Display the menu

2 Select the menu

3 Select the item

Choose from among alternatives

Adjust using the slide bar

Go to the next screen

Viewing Mode

Selects your favourite picture mode for each input.
- [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. 20)

In each viewing mode, [Contrast], [Brightness], [Colour], [Sharpness], [Tint], [Colour Balance], [P-NR], and [3D-COMB] can be adjusted and stored for each input.

Backlight / 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 (bluer - redder).

Eco Mode

Automatic Brightness Control function
Adjusts picture settings automatically depending on ambient lighting conditions.

P-NR

Picture Noise Reduction
Reduces unwanted picture noise and flicker noise in the contoured parts of a picture.

3D-COMB

Makes still or slow moving pictures more vivid.
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
**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.

**Balance**
Adjusts volume level of right and left speakers.

**Headphone Volume**
Adjusts the volume of headphones.

**Surround**
Provides a dynamic enhancer of width to simulate improved spatial effects.

**Auto Gain Control**
Automatically regulates large sound level differences between channels and inputs.

**Volume Correction**
Adjusts the volume of each 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.
- If the back space between the TV and wall is within 30 cm, [Up to 30cm] is recommended.
- If the back space between the TV and wall is over 30 cm, [Over 30cm] is recommended.

**Preferred Audio 1 / 2**
Selects the first and second preferred language for DVB multi audio (depending on the broadcaster).

**MPX**
Selects multiplex sound mode. (if available)
- **[Stereo]**: Use this normally.
- **[Mono]**: When stereo signal cannot be received.
- **[M1] / [M2]**: Available while mono signal is transmitted.
  - For Analogue mode
**SPDIF Selection**

SPDIF: A standard audio transfer file format

Selects the initial setting for digital audio output signal from DIGITAL AUDIO and HDMI2 (ARC function) terminals.

- **[Auto]:** Dolby Digital Plus, Dolby Digital and HE-AAC multi-channel are output as Dolby Digital Bitstream. MPEG is output as PCM. DTS is output as DTS for video contents of Media Player.
- **[PCM]:** Digital output signal is fixed to PCM.
  - ARC (Audio Return Channel): A function of digital audio output using HDMI cable

**MPEG Optical Level**

Adjusts the audio level output from DIGITAL AUDIO terminal as the initial setting.

- Normally, [PCM] sound is larger comparing with the other types of audio track.

**SPDIF Delay**

Adjusts the delay time of the sound output from DIGITAL AUDIO and HDMI2 (ARC function) terminals if the sound does not synchronise the image.

**HDMI 1 / 2 Input**

Selects to fit the input signal. (p. 26)

- **[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

**Downmix Mode**

Selects the output mode for listening to compressed music.

- For DVB mode

**Type**

Narration settings for impaired users (only available in some countries).

- [Hearing Impaired] → [Preferred Subtitle Type] (p. 20)
- Set to [Visually Impaired] to activate the narration sound track when available on the broadcast.
  - [Visually Impaired] appears after you have selected this option. (p. 19)
- For DVB mode

**Visually Impaired**

- **Speaker**
  - Narration sound track is output to the TV speakers.
- **Headphone**
  - Narration sound track is output to the headphone.
  - Connect a headphone before selecting this option.
- **Volume**
  - Adjusts the volume of the narration sound track.
- **Pan and Fade**
  - Sets the audio pan and fade effect.
  - **[On]:** Controls the level of the Main Audio Programme and controls the pan of the Associated Audio Programme
  - **[Off]:** Main Audio programme

**Reset to Defaults**

Resets the current [Bass], [Treble], [Balance], [Headphone Volume], [Surround], [MPEG Optical Level], [Type], and [Visually Impaired] to the default settings.

**Network**

**Interaction Channel**

Interaction channel provides an extension of broadcast interactive services via broadcast transmission or IP connection.

**MHEG PIN Protection**

Ask the viewer to enter the PIN to allow presentation.

**Internet Connection**

Set to [On] to enable network setting.

**Information**

Displays information of network connection.

**IP Setting**

Detect IP automatically or sets IP manually.

**Connection Test**

Check the TV connects to the network successfully or not.

**Timer**

**Off Timer**

Sets the duration of time until the TV automatically goes into Standby mode.
### Time Zone
Adjusts the time data.
- The time data will be corrected based on GMT.

### Auto Standby
Automatically turns the TV to Standby mode for energy saving when no operation is performed for 4 hours.
- 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.

### Display Settings
- **Preferred Teletext**
  Selects the preferred language for DVB teletext service. (depending on the broadcaster)
- **Teletext Character Set**
  Selects teletext language font.
  - **[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 Subtitles 1 / 2**
  Selects the first and second preferred language for DVB subtitles. (depending on the broadcaster)
- **Preferred Subtitle Type**
  Selects the preferred subtitle type [Hearing Impaired] / [Normal].
  - [Hearing Impaired] provides aids in understanding and enjoyment with DVB subtitles (depending on the broadcaster).
  - [Preferred Subtitles 1] / [Preferred Subtitles 2] are given priority.
- **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 [TV Selection] (p. 12), [Input Selection] (p. 16) or banner.
  - To skip the input mode, select [Skip].
- **Banner Display Timeout**
  Sets how long the Information banner stays on screen.
- **Playing Time Display**
  Sets to [On] to display a continuous record of time spent using [Game] mode in the top right of the screen every 30 minutes.
  - This function is available when [Viewing Mode] is set to [Game].
- **Radio Mode**
  Sets the timer for turning off the screen automatically when a radio channel is selected.
  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

### Setup

#### Link Settings
- **CEC**
  When set to [On], the TV will automatically switch to the appropriate HDMI input whenever an HDMI connected equipment is initially turned on and the Play mode is selected.
  - The HDMI CEC feature of connected HDMI CEC-compatible device must be turned on.
- **Power off Link**
  When set to [On], all HDMI connected equipment will be turned off automatically by turning off the TV.
  - A Panasonic DVD Recorder will not turn off if it is still in the Rec mode.
  - The TV remains on even if all the HDMI connected equipment are turned off.

#### Child Lock
Applies access control for channels or inputs to prevent unwanted access. (p. 23)

#### Tuning Menu
- **Automatic Channel Search**
  Automatically searches for the receivable channels. (p. 21)
- **Scan**
  Adds newly found channels while keeping existing channels. (p. 21)
- **Analogue Manual Tuning**
  Searches for the analogue channels manually. (p. 21)
- **DVB-T Signal Condition**
  Checks the DVB-T signal condition. (p. 21)
- **DVB-T Manual Tuning**
  Searches for the DVB-T channels manually. (p. 21)
- **Favourites Edit**
  Creates a list of favourite channels. (p. 22)
- **Skip**
  Skips unwanted channels. (p. 22)
- **Sort**
  Sorts channels. (p. 22)
- **Channel List Edit**
  Edits channels. (p. 22)
- **Clear block**
  Clears the channel lists. (p. 22)
Tuning and Editing Channels

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

MENU ➔ [Setup] ➔ [Tuning Menu]*

*The menu name varies depending on the TV mode.

- The settings in [Tuning Menu] are applicable only for the selected TV mode.

Retuning channels

- Only the selected mode is retuned. All the previous tuning settings are erased.

Select [Automatic Channel Search]

- Automatic Channel Search

Manual Tuning

- Analogue Manual Tuning

Set Analogue channel manually after [Automatic Channel Search].

1. Enter the frequency to start scanning

   Analogue Manual Tuning
   Searching channels
   Start Frequency (MHz) 48.00
   Scan up Scan down

2. Select the scanning method

   - [Scan up]: Scans ascendingly from the entered frequency to higher frequencies.
   - [Scan down]: Scans descendingly from the entered frequency to lower frequencies.

- DVB Manual Tuning

Normally use [Automatic Channel Search] or [Scan] to retune DVB channels.

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

- All channels found will be added to the [Channel List].

DVB-T

Select channel and start scan

- DVB-T Manual Tuning
- Antenna

Power Save

Reduces brightness of the picture to economise on power consumption.

- Note

  - A different menu will be displayed in the mode of Media Player. (p. 24)
  - Only available items can be selected.

System Menu

- Shipping Condition
  Resets all settings to the original condition.

- Common Interface
  Sets to watch encrypted channels, etc. (p. 12)

- System Update
  Downloads new software to this TV. (p. 23)

- Software License
  Displays the software licence information.

- System Information
  Displays the system information of this TV.
Check DVB signal condition

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

Editing channels

Favourites Edit
Create your favourite channel lists from various broadcasters.

Select a channel to list

<table>
<thead>
<tr>
<th>Favourites Edit</th>
<th>Analogue BBC ONE Wales</th>
<th>•</th>
<th>Analogue BBC THREE</th>
<th>•</th>
<th>Digital BBC</th>
<th>•</th>
<th>Digital CBBC Channel</th>
<th>•</th>
</tr>
</thead>
</table>

: [Add]

: [Remove]

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

Select a channel and reveal / hide

<table>
<thead>
<tr>
<th>Skip</th>
<th>Analogue BBC ONE Wales</th>
<th>•</th>
<th>Analogue BBC THREE</th>
<th>•</th>
<th>Digital BBC</th>
<th>•</th>
<th>Digital CBBC Channel</th>
<th>•</th>
</tr>
</thead>
</table>

: [Add]

: [Remove]

Sort
You can sort channels.

1 To swap the channel position (if available)

<table>
<thead>
<tr>
<th>Sort</th>
<th>Analogue BBC ONE Wales</th>
<th>•</th>
<th>Analogue BBC THREE</th>
<th>•</th>
<th>Digital BBC</th>
<th>•</th>
<th>Digital CBBC Channel</th>
<th>•</th>
</tr>
</thead>
</table>

: selected

: unselected

Channel List Edit
You can edit channel settings.

1 Select a channel to edit

<table>
<thead>
<tr>
<th>Channel List Edit</th>
<th>Analogue BBC ONE Wales</th>
<th>Analogue BBC THREE</th>
<th>Digital BBC</th>
<th>Digital CBBC Channel</th>
</tr>
</thead>
</table>

2 Swap

- To change page (page up) (red)
- To change page (page down) (green)
- To select (yellow)
- To exit (blue)

Channel List Edit
You can edit channel settings.

1 Select a channel to edit

<table>
<thead>
<tr>
<th>Channel List Edit</th>
<th>Analogue BBC ONE Wales</th>
<th>Analogue BBC THREE</th>
<th>Digital BBC</th>
<th>Digital CBBC Channel</th>
</tr>
</thead>
</table>

2 Edit the channel settings

- You cannot change [Network Name].
- [Frequency (MHz)], [Colour System] and [Sound System] edit is valid for analogue channels only.
- You can set characters by using numeric buttons. (When you select [Channel Name]).

<table>
<thead>
<tr>
<th>1 234567890</th>
<th>1 234567890</th>
</tr>
</thead>
</table>

backspace
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.

MENU ⇒ [Setup] ⇒ [Child Lock]

1 Enter the PIN number (4 digits)
   • Enter the PIN number twice at first setting.
   • Make a note of the PIN number in case you forget it.
   • “0000” may be stored as the default PIN number which depends on the country you select.

2 Select [Child Lock List] and set the channel / input to be locked

Child Lock List - TV and AV

To edit the list by using the coloured buttons
- Lock all: Locks all channels and input.
- Unlock all: Cancels all locks.

- To change the PIN number
Select [Change PIN] and enter a new PIN number twice

- To set Parental Rating
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.

Note
- Setting [Shipping Condition] (p. 21) erases the PIN number and all settings.

Updating the TV Software

A new version of software may be released for download to enhance the performance or operations of the TV.
- Download may take a few hours.
- During software download and update, DO NOT switch off the TV.

Update from Broadcasting

If there is an update available, a notification message is displayed when the channel has the update information.
- To update in next Standby mode, select [Standby].
- To update immediately, select [Now].
  (Select [Ignore] not to update.)

You can search new software automatically or update manually.

MENU ⇒ [Setup] ⇒ [System Menu] ⇒ [System Update]

- To update automatically
Set [Auto Download] and [Auto Install] to [Yes]

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 Install] to [No].

- Every time you set, the TV automatically performs a search in Standby and downloads an update, if any software updates are available.
- The automatic updating is performed in Standby mode (TV turned off with the remote control).

- To update immediately
1 Select [Manual OAD Download]
2 Searches for an update (for several minutes) and displays a corresponding message if any
3 Download

Note
- Download may take a few hours.
- During software download and update, DO NOT switch off the TV.
- The notification message might be a reminder. In this case, the schedule information (the date that the new version can be used) will appear. You can set the reservation for update. The update will not start when the TV is off.
Using Media Player

Media Player allows you to enjoy photo, video or music recorded on a USB Flash Memory.

Photo mode:
Digital photo data will be displayed.

Music mode:
Digital music data will be played back.

Movie mode:
Digital video data will be played back.

- Supported file format “Supported file format in Media Player” (p. 26)
- During the operation, audio signal is output from AV1, DIGITAL AUDIO and HDMI2 (ARC function) terminals. But no video signals are output. To use HDMI2 with ARC function, connect an amplifier that has ARC function.
- 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 USB Flash Memory

1 Insert the USB Flash Memory to the TV
2 Start [Media Player] and select the content (Photo / Music / Movie)

- Insert or remove straightly and completely.
- Connect the USB Flash Memory to the USB port.
- Check the type of terminals and devices are correct when connecting.

To change the contents
While the thumbnail is displayed, display the contents selection

(1) (blue)

Photo mode

Example: Thumbnail - [All photos]

Type1 - 3 are the fixed music each installed in this TV.

To sort by folder
1 Display the view selection in the thumbnail view
2 Select [Folder view] Displays the thumbnail grouped by folder.

Photo Settings

- Transition Effect
  Selects the transition effect for switching the photo during the slideshow.
- Screen Mode
  Selects enlarged or normal viewing on Single view and Slideshow.
  - Depending on the photo size, it may not be fully enlarged to fill the screen, e.g. portrait style picture.
- Interval
  Selects slideshow interval.
- Repeat
  Slideshow repeat
- Back Ground Music
  Selects the back ground music during Photo mode.
  - [Type1 - 3] are the fixed music each installed in this TV.
Note
- Picture quality may become lower depending on the slideshow settings.
- Picture setting may not work depending on the slideshow settings.

Music mode

Example: Thumbnail - [Folder view]

Music Setup

OPTION ➔ [Music Setup]

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

Movie mode

Example: Thumbnail - [Title view]

- To change aspect

Video Setup

OPTION ➔ Video Setup Menu

- Repeat
  Playback repeat within the selected file (depending on the content).
Technical Information

Aspect Control Signal
Programmes usually contain an “Aspect Control Signal” (Widescreen signal, Control signal through SCART / HDMI terminal).

In [Auto] mode, aspect mode will appear in the top left of the screen if a Widescreen signal (WSS) or a Control signal through SCART (pin8) / HDMI terminal is found. The aspect will switch to the appropriate ratio.

Available conditions for the Widescreen signal (WSS)

<table>
<thead>
<tr>
<th>Input terminal</th>
<th>Input signal format</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terrestrial</td>
<td>DVB</td>
</tr>
<tr>
<td>AV1 / AV2</td>
<td>PAL I</td>
</tr>
<tr>
<td>(Composite)</td>
<td></td>
</tr>
<tr>
<td>AV2 (Component)</td>
<td>625 (576) / 50i, 50p</td>
</tr>
</tbody>
</table>

Note
- If the screen size looks unusual when a widescreen-recorded programme is played back on a VCR, adjust the tracking of the VCR.

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

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

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” (p. 26)
- Match the output setting of the digital equipment.
- Content Type
- 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. When the DVI to HDMI adaptor cable is used, connect the audio cable to AV2 audio terminals.

Note
- Audio settings can be made on [HDMI Input] in the Sound Menu. (p. 18)
- If the connected equipment has an aspect adjustment function, set the aspect ratio to "16:9".
- 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.

*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.

Input signal that can be displayed

COMPONENT (AV2) / HDMI terminal

<table>
<thead>
<tr>
<th>Signal name</th>
<th>COMPONENT</th>
<th>HDMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>525 (480) / 60i, 60p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>625 (576) / 50i, 50p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>750 (720) / 60p, 50p</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1,125 (1,080) / 60i, 50i</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>1,125 (1,080) / 60p, 50p, 24p</td>
<td>○</td>
<td></td>
</tr>
</tbody>
</table>

○: Applicable input signal

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

Supported file format in Media Player
- Some files may not be played back even if they fulfil these conditions.
- Do not use two-byte characters or other special codes for file names.
- Connected devices may become unusable with this TV if the file or folder names are changed.

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

- AVI (.avi)
  Video codec: H.264 BP/MP/HP, MPEG1, MPEG2, MPEG4 SP/ASP, VC-1, Windows Media Video Ver. 9
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, DTS core, HE-AAC, LPCM, MPEG Audio, MP3
  - Some subtitles or chapter functions may not be available.
  - WMA Pro and WMA Lossless are not supported.

- MKV (.mkv)
  Video codec: H.264 BP/MP/HP, MPEG1, MPEG2, MPEG4 SP/ASP
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, DTS core, HE-AAC, MPEG Audio, MP3
  - Some subtitles or chapter functions may not be available.

- ASF (.asf / .wmv)
  Video codec: MPEG4 SP/ASP, VC-1, Windows Media Video Ver. 9
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, HE-AAC, LPCM, MP3, WMA
  - Copy-protected files cannot be played back.
  - WMA Pro and WMA Lossless are not supported.

- MP4 (.f4v / .m4v / .mp4)
  Video codec: H.264 BP/MP/HP, MPEG1, MPEG2, MPEG4 SP/ASP
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, HE-AAC, MPEG Audio, MP3
  - This TV supports this container recorded with Panasonic products. For details, read the manual of the products.

- FLV (.flv)
  Video codec: H.264 BP/MP/HP
  Audio codec: AAC, MP3

- 3GPP (.3gp / .3g2)
  Video codec: H.264 BP/MP/HP, MPEG4 SP/ASP
  Audio codec: AAC, HE-AAC

- PS (.mod / .mpg / .mpeg / .vob / .vro)
  Video codec: H.264 BP/MP/HP, MPEG1, MPEG2, VC-1
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, HE-AAC, LPCM, MPEG Audio, MP3

- TS (.mts / .m2ts / .tp / .trp / .ts / .tts)
  Video codec: H.264 BP/MP/HP, MPEG1, MPEG2, VC-1
  Audio codec: AAC, Dolby Digital, Dolby Digital Plus, DTS core, HE-AAC, MPEG Audio, MP3

Subtitles

- MicroDVD, SubRip, TMPlayer (.srt / .sub / .txt)
  - The 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".

Music

- 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.

- LPCM (.wav)

- FLAC (.flac)

Devices for playing back

- USB Flash Memory (for playing back in [Media Player])
  - USB Flash Memory format:
    - FAT16, FAT32, NTFS
  - USB Flash Memory compliance:
    - Supports only USB1.1 or USB2.0 standard
    - Maximum USB capacity supported is 32GB
    - USB Hub or card adapter is not supported

  Note
  - 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.

USB connection

- It is recommended to connect the USB Flash Memory directly to the TV's USB port.
- Some USB devices or USB HUB may not be used with this TV.
- You cannot connect any devices by using USB card reader.
- Additional information for USB devices may be on the following website:
  http://panasonic.net/viera/support
FAQs

Before requesting service or assistance, please follow these simple guides to solve the problem. When an error message appears, follow the message’s instructions. If the problem still persists, contact your local Panasonic dealer or the authorised service centre.

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 [DVB-T Signal Condition] (p. 20). If [Signal Condition] is poor, check aerial.
- 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.
- Consult your local dealer or service provider for the availability of services.

Picture quality problem
- Check the settings of the Picture Menu.
- Set [P-NR] to remove noise (p. 17).
- Check nearby electrical products (car, motorcycle, fluorescent lamp).
- Reset channels.
- 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.

Sound quality problem
- Check the volume level or sound mute.
- Check connections and setting of external equipment.
- Sound signal reception may be deteriorated.
- Set [MPX] to [Mono] (p. 18).

Picture or sound problems with HDMI connection
- Check the HDMI cable is connected properly.
- Turn the TV and equipment off, then turn them on again.
- Check an input signal from the equipment.
- Use equipment compliant with EIA/CEA-861/861D.
- Set the sound setting of the connected equipment to “2ch L.PCM”.
- Check the [HDMI 1 / HDMI 2] setting (p. 19).
- If digital sound connection has a problem, select analogue sound connection.

The TV does not switch on
- 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. 3)

The TV goes into Standby mode
- Auto power standby function is activated.

The remote control does not work or is intermittent
- Are the batteries installed correctly? ➔ (p. 10)
- Has the TV been switched on?
- The batteries may be running low. Replace them with new ones.
- Point the remote control directly at the TV’s remote control signal receiver (within about 7 m and a 30 degree angle of the signal receiver).
- Situate the TV away from sunshine or other sources of bright light not to shine on the TV’s remote control signal receiver.

No image can be displayed
- Check the TV is turned on.
- Check the mains lead is plugged into the TV and the socket outlet.
- Check the correct input mode is selected.
- Check the settings of the Picture Menu.
- Check all required cables and connections are firmly in place.

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. 21)

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

Parts of the TV become hot
- Even if 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.
The LCD panel moves slightly and clattered sound is heard when it is pushed with a finger
- There is a little gap around the panel to prevent damage to the panel. This is not a malfunction.

Overcurrent error message appears
- The connected USB device might cause this error. Remove the device and turn the TV to standby mode with Standby On / Off switch, then turn it on again.
- Check foreign objects are not inside the USB port.

Check you can get Freeview HD in your area. Text your postcode, followed by your house number or name to 80560*. Or visit freeview.co.uk
*e.g. NW96NY1 (Costs no more than a normal text.)

To get the most up to date service from Freeview it is important for Freeview customers to retune from time to time.

How do I re-tune my Freeview TV?
This is a quick reference. If you have any problems, check the Operating Instructions or ask a friend or family member to show you how. Alternatively, go to your local electrical retailer, contact your local Panasonic dealer or visit freeview.co.uk/retune

Re-tuning only takes a few minutes, just follow the steps below:
1. Press the TV button to select DVB mode.
2. Press the MENU button to open the main menu.
3. [Setup] ➔ [DVB-T Tuning Menu] ➔ [Auto Setup]

Please note: most digital TV recorders will keep your original recordings after running a re-tune but you will need to reset any future recordings.

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

TV

Model Name

- 39-inch model: TX-39A400B
- 42-inch model: TX-42A400B
- 50-inch model: TX-50A400B

Dimensions (W × H × D)

- 39-inch model:
  - 886 mm × 560 mm × 247 mm (With Pedestal)
  - 886 mm × 516 mm × 53 mm (TV only)
- 42-inch model:
  - 963 mm × 610 mm × 247 mm (With Pedestal)
  - 963 mm × 566 mm × 69 mm (TV only)
- 50-inch model:
  - 126 mm × 697 mm × 260 mm (With Pedestal)
  - 126 mm × 652 mm × 53 mm (TV only)

Mass

- 39-inch model:
  - 11.0 kg Net (With Pedestal)
  - 10.0 kg Net (TV only)
- 42-inch model:
  - 10.5 kg Net (With Pedestal)
  - 9.0 kg Net (TV only)
- 50-inch model:
  - 16.0 kg Net (With Pedestal)
  - 15.0 kg Net (TV only)

Power source

AC 220-240 V, 50 / 60 Hz

Panel

LED LCD panel

Sound

- Speaker output: 20 W (10 W + 10 W)
- Headphones: M3 (3.5 mm) stereo mini Jack × 1

Connection terminals

AV1 input / output

- SCART (Audio/Video in, Audio/Video out, RGB in)

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
  - 1.0 V[p-p] (including synchronisation)
  - P_b, P_r
  - ±0.35 V[p-p]

HDMI 1 / 2 input

- TYPE A Connectors
- HDMI1: Content Type
- HDMI2: Content Type, Audio Return Channel

Card slot

- Common Interface slot (complies with CI Plus) × 1

ETHERNET

- RJ45, IEEE802.3 10BASE-T / 100BASE-TX

USB

- USB2.0 DC 5 V, Max. 500 mA

DIGITAL AUDIO output

- PCM / Dolby Digital / DTS, Fibre optic

Receiving systems / Band name

Check the latest information on the available services at the following website.
http://panasonic.net/viera/support

DVB-T / T2

Digital terrestrial services

- UK
  - PAL I
    - UHF E21 -68
- Ireland
  - PAL I
    - VHF A -J
    - CATV S1 -S20
    - UHF E21 -E69
    - 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)

Note
- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
- For the information of power consumption, display resolution, etc., please refer to Product fiche.
- This equipment complies with the EMC standards listed below.
  - EN55013, EN61000-3-2, EN61000-3-3, EN55020

■ When using the wall-hanging bracket
- Please contact your local Panasonic dealer to purchase the recommended wall-hanging bracket.
- 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 the wall-hanging bracket, 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.
- Do not mount the unit directly below ceiling lights (such as spotlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.
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: 01289 8333
• Monday – Friday 9:00am – 5:00pm, (Excluding public holidays).
• 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 – Friday 9:00am – 5:00pm, (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.

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

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