Operating Instructions
OLED TV

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

For more detailed instructions, please refer to [eHELP] (Built-in Operating Instructions).

• How to use [eHELP] ⇒ (p. 18)
For information about the trademarks, refer to [eHELP] (Search by Purpose > Read first > Before use > Licence).

The illustration for TH-65EZ950U is used in this manual unless otherwise mentioned. Illustrations shown may be different between models and countries.
Important Notice

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 screen (“image retention”). This is not considered a malfunction and is not covered by the warranty.

- Typical still image parts:
  - Still images shown continuously on the same area (ex. channel number, channel logo, other logos or title image, etc.)
  - Still or moving pictures viewed in 4:3 or 14:9 aspect ratio, etc.
- Video games

- To avoid image retention, the screen saver may be activated (OLED logo moves) or the on-screen message may move after a few minutes if no signals are sent or no operations are performed.
- To avoid image retention, the screen may become dim when the motionless image is displayed. This is not a malfunction. The brightness of the screen returns to the previous level when the active image is displayed.

- Be sure to turn the TV off with the remote control to perform the panel maintenance. During the panel maintenance, LED turns to orange. (p. 16) The maintenance works as necessary.
- Set aspect ratio to [4:3 full] for 4:3 image. For details, refer to [eHELP] (Search by Purpose > Watching > For best picture).
- For more information ⇒ “Panel maintenance” (p. 16)

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- The recording and playback of content on this or any other device may require permission from the owner of the copyright or other such rights in that content. Panasonic has no authority to and does not grant you that permission and explicitly disclaims any right, ability or intention to obtain such permission on your behalf. It is your responsibility to ensure that your use of this or any other device complies with applicable copyright legislation in your country. Please refer to that legislation for more information on the relevant laws and regulations involved or contact the owner of the rights in the content you wish to record or playback.

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.

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Transport only in upright position.

This mark shows that the construction of the product is double-insulated.

This mark indicates the product operates under AC voltage.
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 remove the mains plug.

- This TV is designed to operate on AC ~ 220-240 V, 50 / 60 Hz.
- Insert the mains plug fully into the mains socket.
- To turn Off the apparatus completely, you must pull the mains plug out of the mains socket. Consequently, the mains plug should be easily accessible at all times.
- 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 mains socket.
  - Do not twist the lead, bend it excessively or stretch it.
  - Do not use a damaged mains plug or mains socket.
  - Ensure the TV does not crush the mains lead.

■ Take care

Warning

- Do not remove covers and never modify the TV yourself as live parts are accessible and risk of electric shock 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.
- If the TV is used in an area where insects may easily enter the TV.
  It is possible for insects to enter the TV, such as small flies, spiders, ants, etc. which may cause damage to the TV or become trapped in an area visible on the TV, e.g. within the screen.
- 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 any strong force or impact to the display panel.
- Ensure that children do not climb on the TV.
- Do not place the TV on sloping or unstable surfaces, and ensure that the TV does not hang over the edge of the base.

Important information

If the TV is not positioned in a sufficiently stable location, it can be potentially hazardous due to falling. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- Using cabinets or stands recommended by the manufacturer of the TV.
- Only using furniture that can safely support the TV.
- Ensuring the TV is not overhanging the edge of the supporting furniture.
- Not placing the TV on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the TV to a suitable support.
- Not standing the TV on cloth or other materials placed between the TV and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the TV or its controls.

- This TV is designed for indoor use.
- This TV is designed for table-top use.
- Do not expose the TV to direct sunlight and other sources of heat.
■ Built-in wireless LAN

**Caution**
- Do not use the built-in wireless LAN to connect to any wireless network (SSID*) for which you do not have usage rights. Such networks may be listed as a result of searches. However, using them may be regarded as illegal access.
  *SSID is a name for identifying a particular wireless network for transmission.
- Do not subject the built-in wireless LAN to high temperatures, direct sunlight or moisture.
- Data transmitted and received over radio waves may be intercepted and monitored.
- The built-in wireless LAN uses 2.4 GHz and 5 GHz frequency bands. To avoid malfunctions or slow response caused by radio wave interference when using the built-in wireless LAN, keep the TV away from other devices that use 2.4 GHz and 5 GHz signals such as other wireless LAN devices, microwave ovens, and mobile phones.
- When problems occur due to static electricity, etc., the TV might stop operating to protect itself. In this case, turn the TV off at the Mains power On / Off switch, then turn it back on.

■ Bluetooth® wireless technology

**Caution**
- The TV and Touch Pad Controller use the 2.4 GHz radio frequency ISM band (Bluetooth®). To avoid malfunctions or slow response caused by radio wave interference when using the built-in wireless LAN, keep the TV away from the devices such as other wireless LAN devices, other Bluetooth devices, microwaves, mobile phones and the devices that use 2.4 GHz signal.

■ Ventilation

**Caution**
- Allow sufficient space (at least 10 cm) 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 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.

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**To prevent the spread of fire, keep candles or other open flames away from this product at all times**

■ Suffocation / Choking Hazard

**Warning**
- The packaging of this product may cause suffocation, and some of the parts are small and may present a choking hazard to young children. 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 according to the specified procedure.

■ Radio waves

**Warning**
- Do not use the TV and Touch Pad Controller in any medical institutions or locations with medical equipment. Radio waves may interfere with the medical equipment and may cause accidents due to malfunction.
- Do not use the TV and Touch Pad Controller near any automatic control equipment such as automatic doors or fire alarms. Radio waves may interfere with the automatic control equipment and may cause accidents due to malfunction.
- Keep at least 15 cm away from the TV and Touch Pad Controller if you have a cardiac pacemaker. Radio waves may interfere with the operation of the pacemaker.
- Do not disassemble or alter the TV and Touch Pad Controller in any way.
■ Moving the TV

Caution
Before moving the TV, disconnect all cables.
- At least two people are required to move the TV.
  Support the TV as shown below to prevent injury that may be caused by the tipping or falling of TV.
- Do not hold the screen part when moving the TV.

- Transport only in upright position. Transporting the TV with its display panel facing upwards or downwards may cause damage to the internal circuitry.

■ 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 mains socket.
- 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 / Touch Pad Controller

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).
Accessories

Standard accessories

Remote Control
⇒ (p. 14)
  ● N2QAYB001120

Touch Pad Controller
⇒ (p. 15)
  ● N2QBYA000019

Pedestal
⇒ (p. 7)

Cable tie
⇒ (p. 13)

Batteries
  ● R6 (2)
    (For Remote Control)
  ⇒ (p. 15)
  ● R03 (2)
    (For Touch Pad Controller)
  ⇒ (p. 16)

AV2 (COMPONENT / VIDEO) adaptor
⇒ (p. 12)

Operating Instructions with Warranty statement

Fall-prevention parts
⇒ (p. 9)

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

Assembling / Removing the pedestal

A Assembly screw (4)

B Assembly screw (4)

C Cushioning material

D Bracket (2)

E Base (2)

F Cover (2)
Preparations

Take out the cushioning material from the packing case and put it onto a work table.

- Use a flat and firm table bigger than the cushioning material.
- Do not dispose the cushioning material which is also used for removing the pedestal when using the wall-hanging bracket or repacking the TV.

Assembling the pedestal

1

2

3
Removing the pedestal

Be sure to remove the pedestal in the following procedures when you repack the TV.
1. Remove the cover from the pedestal.
2. Remove the assembly screws from the TV.
3. Lift the TV from the pedestal.
4. Remove the assembly screws from the bracket.

Preventing the TV from falling over

It is recommended to secure the pedestal to a furniture as shown to prevent the TV from falling over.

- This information is designed to reduce the risk of injuries caused by the TV falling over. However, no measure can guarantee protection in all cases.

- Band (2)
- Screw (2)
- Wood screw (2)
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 for connection.
- Use a fully wired HDMI compliant 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.

Removing the terminal cover from the TV

- Be sure to remove the terminal cover before connecting or disconnecting cables.
- When the connections are completed, attach the terminal cover. ⇒ (p. 13)

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- Please also read the manual of the equipment being connected.
**Basic connections**

**Mains lead**

AC 220-240 V 50 / 60 Hz

**Cable tie** (Bundled the mains lead)

To loosen:

Keep pushing the knob

To remove from the TV:

Keep pushing both side snaps

**Aerial**

For Digital TV, Analogue TV
- Keep RF (aerial) cable away from the mains lead to avoid and minimise mains interference pickup.
- Do not place the RF cable under the TV.
- An aerial, correct cable (75 Ω coaxial) and correct terminating plug are required to obtain optimum quality picture and sound.
- If a communal aerial system is used, you may require the correct connection cable and plug between the wall aerial socket and the TV.
- Your local Television Service Centre or dealer may be able to assist you in obtaining the correct aerial system for your particular area and the accessories required.
- Any matters regarding aerial installation, upgrading of existing systems or accessories required, and the costs incurred, are the responsibility of you, the customer.

**AV devices**

**DVD Recorder / Blu-ray Recorder, etc.**

**Set top box**

A broadband network environment is required to be able to use internet services.
- If you do not have any broadband network services, please consult your retailer for assistance.
- Prepare the internet environment for wired connection or wireless connection.
- Setup of the network connection will start when first using the TV. *(p. 17)*

**Network**

A broadband network environment is required to be able to use internet services.
- If you do not have any broadband network services, please consult your retailer for assistance.
- Prepare the internet environment for wired connection or wireless connection.
- Setup of the network connection will start when first using the TV. *(p. 17)*

**Wired connection**

**LAN cable (Shielded)**
- Use Shielded Twist Pair (STP) LAN cable.
### Wireless connection

![Wireless connection diagram](image)

1. Built-in wireless LAN
2. Access point

### Connections for 4K compatible equipment

![Connections for 4K compatible equipment diagram](image)

1. HDMI cable
2. 4K compatible equipment
   - To watch high-definition 4K more accurately or HDR content, connect the 4K compatible equipment to HDMI1 or 2 terminal.
   - Connect the 4K compatible equipment to HDMI terminal using a 4K compatible cable and you can watch content in 4K format.

### [HDMI Auto Setting] (Setup Menu)

Reproduces the image more precisely with the expanded colour gamut when connecting the 4K compatible equipment. Select the mode depending on the equipment.

**[Mode1]:**
For better compatibility. Set to [Mode1] when the image or sound in HDMI input is not played properly.

**[Mode2]:**
For the 4K compatible equipment that has the function to output the image precisely with the expanded colour gamut

- To change the mode
  1. Select the HDMI input mode connected to the equipment.
  2. Display the menu and select [HDMI Auto Setting] (Setup Menu).
- For information about the valid format, refer to [eHELP] (Search by Purpose > Watching > 4K resolution > HDMI Auto Setting).

### Other connections

#### DVD Player

**COMPONENT equipment**

- **TV**
- **(Viewing)**
- **(Listening)**

![DVD Player diagram](image)

1. AV2 (COMPONENT / VIDEO) adaptor (supplied)
2. DVD Player

#### Camcorder / Game equipment

**VIDEO equipment**

- **TV**
- **(Viewing)**
- **(Listening)**

![Camcorder / Game equipment diagram](image)

1. AV2 (COMPONENT / VIDEO) adaptor (supplied)
2. Camcorder / Game equipment

#### Amplifier (listening with external speakers)

- Use HDMI2 to connect the TV to an amplifier which has ARC (Audio Return Channel) function.
- If connecting to an amplifier without ARC function, use DIGITAL AUDIO OUT.
To enjoy multi-channel sound from external equipment (e.g. Dolby Digital 5.1ch), connect the equipment to the amplifier. For information about the connections, read the manuals of the equipment and amplifier.

**Headphones**
- For information about the volume settings, refer to [eHELP] (Search by Purpose > Settings > Sound).

**USB HDD (for recording)**
- Use USB 1 port for connecting the USB HDD.
- For details, refer to [eHELP] (Search by Purpose > Recording).

**VIERA Link**
- Use HDMI1 - 4 for VIERA Link connection.
- For details, refer to [eHELP] (Search by Purpose > Functions > VIERA Link “HDAVI Control™”).

### Cable arrangement
Fix the cables using the cable tie, and then attach the terminal cover to the TV.

**Fixing the mains lead using the cable tie**

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**Attach the cable tie**
Insert the cable tie in a hole

**Bundle the cables**
Set the tip in the hooks

**To loosen:**
Keep pushing the knob

**To remove from the TV:**
Keep pushing both side snaps

**Attaching the terminal cover**
- Do not apply load to the terminal cover.
- Be careful not to nip the cables between the TV and the terminal cover.
- When using USB 2 port, USB 3 port, ETHERNET terminal, DIGITAL AUDIO, HDMI3 terminal or HDMI4 terminal, you cannot attach the terminal cover. Keep the removed terminal cover for future use.
Identifying Controls

Remote Control

1 [1]: Standby On / Off switch
2 TV Guide
3 [Main Menu]
   Press to access Picture, Sound, Network, Timer, Setup and Help Menus, etc.
4 Teletext button
   This button is not used for this model. Switches to teletext mode.
5 Information
   Displays channel and programme information.
6 Netflix
   Accesses NETFLIX service directly.
   A broadband network environment is required in order to fully use this function.
   This service may be stopped or changed without notice.
7 OK
   Confirms selections and choices.
   Press after selecting channel positions to quickly change channel.
   Displays channel list.
8 [Option Menu]
   Easy optional setting for viewing, sound, etc.
9 Coloured buttons (red-green-yellow-blue)
   Used for the selection, navigation and operation of various functions.
10 Volume Up / Down
11 Numeric buttons
   Changes channel.
   Changes channel and teletext pages.
   Sets characters.
   When in Standby mode, switches TV on.
12 [eHELP]
   Displays [eHELP] (Built-in Operating Instructions).
13 [My App]
   Assigns a favourite application. After setting, starts the application easily by pressing this button.
   For details, refer to [eHELP] (Search by Purpose > Home Screen > Apps > My App)
14 Input mode selection
   TV - switches to Digital TV / Analogue TV.
   AV - switches to AV input mode from Input Selection list.
15 Aspect
   Changes aspect ratio.
16 Subtitle / Audio Description
   Displays [Audio Description / Subtitle Menu].
17 Exit
   Returns to the normal viewing screen.
18 HOME
   Displays [Home Screen].
   For details, refer to [eHELP] (Search by Purpose > Read first > Features).
19 APPS
   Displays [Apps] (applications list).
20 Cursor buttons
   Makes selections and adjustments.
21 Return
   Returns to the previous menu / page.
22 Channel Up / Down
23 Sound Mute On / Off
24 Last view
   Switches to previously viewed channel or input mode.
25 Operations for contents, connected equipment, etc.
Touch Pad Controller

The Touch Pad Controller is designed for convenient and intuitive operation, especially with [Home Screen] or internet content.

- Touch Pad Controller can be used exclusively for controlling this TV.
- Register the Touch Pad Controller to this TV with Bluetooth wireless technology before using. The registration starts automatically when you press any buttons (except Standby On / Off switch) after installing batteries.
- After registering, you can operate the TV without pointing this controller at the TV (except Standby On / Off switch).
- To use Standby On / Off switch, point the controller directly at the TV’s remote control signal receiver because it works with the infrared sensors. (You can operate the switch without registration.)
- It is recommended to speak within approx. 15 cm from the microphone of Touch Pad Controller when using the Voice Control function.
- For details, refer to [eHELP] (Search by Purpose > Functions > Touch Pad Controller).

Installing / Removing batteries

Pull open

Hook

Close

Note the correct polarity (+ or -)

1 [□]: Standby On / Off switch
2 Volume Up / Down
3 On-screen remote control
  - Press to display the remote control GUI (Graphical User Interface).
4 Touch pad
  - For information about the operation, refer to [Operation Guide] in [VIERA Touch Pad Controller] (Setup Menu).
5 [Option Menu]
6 [My App]
  - Assigns a favourite application. After setting, starts the application easily by pressing this button.
  - For details, refer to [eHELP] (Search by Purpose > Home Screen > Apps > My App)
7 Coloured buttons
  (red-green-yellow-blue)
  - Used for the selection, navigation and operation of various functions.
8 Microphone
9 Channel Up / Down
10 Voice Control button
  - Press to use Voice Control function.
11 HOME
  - Displays [Home Screen].
  - For details, refer to [eHELP] (Search by Purpose > Read first > Features).
12 Return
  - Returns to the previous menu / page.
13 Cursor buttons
  - Makes selections and adjustments.
14 APPS
  - Displays [Apps] (applications list).
1 Installing / Removing batteries

2 Ambient sensor
- Senses brightness to adjust picture quality when [Ambient Sensor] in the Picture Menu is set to [On].

3 Power LED
Red: Standby
Green: On
Orange: Standby with some functions (recording, etc.) active or panel maintenance in progress
- The LED blinks when the TV receives a command from the remote control.

4 Input mode selection
- Press repeatedly until you reach the desired mode.

5 Channel Up / Down
- Cursor Up / Down (when in the menu system)

6 Volume Up / Down
- Cursor Left / Right (when in the menu system)

7 Mains power On / Off switch
- Use to switch the mains power.
- To turn Off the apparatus completely, you must pull the mains plug out of the mains socket.

Panel maintenance
Be sure to turn the TV off with the remote control to perform the panel maintenance. During the panel maintenance, LED turns to orange.

During panel maintenance, avoid touching and exerting any pressure on the screen. (e.g. wiping the screen, etc.)

There are two types of the maintenance as following.
1 Normal maintenance automatically starts, and it takes approx. 10 minutes.
2 Regular maintenance takes approx. 80 minutes.
   - When regular maintenance is necessary, the message appears on the screen after turning the TV off with the remote control. Follow the on-screen instructions.
   - During the panel maintenance, a white horizontal line appears on the screen for a while. This is not a malfunction.
   - For information about panel maintenance, refer to [eHELP] (Search by Purpose > Watching > For best picture > Screen Settings)

Note
- It is recommended to hold Touch Pad Controller with your hand when using.
- The battery power will be used whenever you use Touch Pad Controller (including the touch of the touch pad) even if not operating the TV. It may decrease the battery life.
- Some operations differ depending on the application.

Indicator / Control panel
- When pressing 4, 5, 6 buttons, the control panel guide appears on the right side of the screen for 3 seconds to highlight which button has been pressed.

1 Remote control signal receiver
- Do not place any objects between the TV remote control signal receiver and remote control.
First time Auto Tuning

When the TV is turned on for the first time, it will automatically search for available TV channels and give options to set up the TV.

- These steps are not necessary if the setup has been completed by your local dealer.
- Please complete connections (p. 10 - 13) and settings (if necessary) of the connected equipment before starting Auto Tuning. For information about the settings for the connected equipment, read the manual of the equipment.

1 Plug the TV into a live mains socket and turn the power on

Tick the TV signal mode to tune, and then select [Start Auto Tuning]

☑: tune (search for the available channels)
☐: skip tuning

Auto Tuning is now complete and the TV is ready for viewing.

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

Note
- The TV goes into Standby mode when no operation is performed for 4 hours if [Auto Standby] in the Timer Menu is set to [On].
- The TV goes into Standby mode when no signal is received and no operation is performed for 10 minutes if [No signal Power off] in the Timer Menu is set to [On].
- To retune all channels
  ➤ [Auto Tuning] in [Tuning Menu] (Setup Menu)
- To add the available TV signal mode later
  ➤ [Add TV Signal] in [Tuning Menu] (Setup Menu)
- To initialise all settings
  ➤ [Shipping Condition] in [System Menu] (Setup Menu)

2 Select the following items

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

Example:

<table>
<thead>
<tr>
<th>Please select your viewing environment.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
</tr>
</tbody>
</table>

- How to use the remote control

- Move the cursor
- Access the item / store the setting
- Return to the previous item (if available)

Select the language
Select [Home]
Select [Home] for use in a home viewing environment.
- [Shop] is for shop display.
- To change the viewing environment later on, the set will need to have all settings initialised by accessing Shipping Condition.

Set up the network connection
Select your country
Select your area [Australia]
**How to Use eHELP**

[eHELP] is the detailed operating instructions built into the TV, and gives a more detailed explanation for a better understanding of the operation of each feature.

1. **Display [eHELP]**

   ![eHELP icon]

   or

   ![Remote Control]

   ● Mains power On / Off switch should be on. (p. 16)

   Displays information bar on the edge of screen for several seconds.

   ● For information about the operation and settings, refer to [eHELP]. (Search by Purpose > Read first > Features)

2. **Select the menu**

   ![Menu icon]

   ● To access [How to use] (green)

3. **Select the item**

   Example:

   ![Select button]

   ● To return to the previous screen / field

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**Watching TV**

1. **Turn power on**

   ![Power button]

   or

   ![Remote Control]

   ● Mains power On / Off switch should be on. (p. 16)

   Displays information bar on the edge of screen for several seconds.

   ● For information about the operation and settings, refer to [eHELP]. (Search by Purpose > Read first > Features)

2. **Select Digital TV or Analogue TV**

3. **Select a channel**

   ![Channel up/down]

   or

   ![Channel list]

   ● To select a channel position with 2 or more-digit, e.g. 399

   ![Channel number]

   ![Example]
● To scroll the description (if more than 1 page)
   While the description is highlighted

● To open the reference screen (📖 → )

● To display the menu related to the description (only for some descriptions)
   📁 (red)

● To check the features of this TV
   Search by Purpose > Read first > Features
FAQs

Before requesting service or assistance, please follow these simple guides to solve the problem.

- For details, refer to [eHELP] (Support > FAQs).

It takes several seconds to display the image after turning the TV on
- When turning the TV on, the panel adjustment is performed. It is not a malfunction.

The TV does not switch on
- Check the mains lead is plugged into the TV and the mains socket.

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. 15)
- 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 so they do not shine on the TV's remote control signal receiver.

No image is displayed
- Check the TV is turned on.
- Check the mains lead is plugged into the TV and the mains socket.
- Check the correct input mode is selected.
- Check the setting of [AV] ([COMPONENT] / [VIDEO]) in [Input Selection] to match the signal being output by the external equipment.
- Is [Backlight], [Contrast], [Brightness] or [Colour] in the Picture Menu set to the minimum?
- Check all required cables and connections are firmly in place.

An unusual image is displayed
- This TV has a built-in Self Test. Makes a diagnosis of picture or sound problems.
  ➤ [TV Self Test] (Help Menu)
- Turn the TV off with Mains power On / Off switch, then turn it on again.
- If the problem persists, initialise all settings.
  ➤ [Shipping Condition] in [System Menu] (Setup Menu)

The image or sound from external equipment are unusual when the equipment is connected via HDMI
- Set [HDMI Auto Setting] (Setup Menu) to [Mode1] (p. 12)

Parts of the TV become hot
- Parts of the TV may become hot. These temperature rises do not pose any problems in terms of performance or quality.

When pushed with a finger, the display panel moves slightly and makes a noise
- There is a little gap around the panel to prevent damage to the panel. This is not a malfunction.

LED turns to orange
- Panel maintenance may be in progress.
  LED turns to orange again in standby mode when the TV is turned on / off before the panel maintenance is completed.
  (Be sure to turn the TV off with the remote control to perform panel maintenance.)
- During panel maintenance, avoid touching and exerting any pressure on the screen. (e.g. wiping the screen, etc.)
- For more information
  ➤ “Panel maintenance” (p. 16)

A white horizontal line appears in Standby mode.
- A white horizontal line may appear on the screen for a while to adjust the panel. This is not a malfunction.
Specifications

■ TV

Model No.

55-inch model: TH-55EZ950U
65-inch model: TH-65EZ950U

Dimensions (W × H × D)

55-inch model
1 230 mm × 766 mm × 280 mm (With Pedestal)
1 230 mm × 716 mm × 48 mm (TV only)

65-inch model
1 453 mm × 889 mm × 280 mm (With Pedestal)
1 453 mm × 839 mm × 48 mm (TV only)

Mass

55-inch model
18.5 kg Net (With Pedestal)
17.5 kg Net (TV only)

65-inch model
24.0 kg Net (With Pedestal)
23.0 kg Net (TV only)

Power Rating

Normal (Home) mode

55-inch model
AC 220-240 V, 50 / 60 Hz 1.70 A

65-inch model
AC 220-240 V, 50 / 60 Hz 2.28 A

Standby power consumption

0.50 W

Visible screen size (diagonal)

55-inch model
139 cm

65-inch model
164 cm

Display resolution

3 840 (W) × 2 160 (H)

Panel

OLED panel

Maintenance

First, remove the mains plug from the mains socket.

Display panel, Cabinet, Pedestal

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

For stubborn dirt:
(1) First clean the dust from the surface.
(2) Dampen a soft cloth with clean water or diluted neutral detergent (1 part detergent to 100 parts water).
(3) Wring out the cloth firmly. (Please note, do not let liquid enter the TV inside as it may lead to product failure.)
(4) Carefully wipe moisten and wipe away the stubborn dirt.
(5) 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 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 cause fire or electrical shock.
Sound

Speaker output
40 W (10 W × 2 + 10 W × 2)

Headphones
M3 (3.5 mm) stereo mini Jack × 1

Connection terminals

AV IN (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)

Pa/Cr, Pb/Cb
±0.35 V[p-p]

HDMI 1 / 2 / 3 / 4 input

TYPE A Connectors
HDMI1 / 3 / 4: 4K, Content Type, Deep Colour, x.v.Colour™
HDMI2: 4K, Content Type, Audio Return Channel, Deep Colour, x.v.Colour™

* This TV supports “HDAVI Control 5” function.

ETHERNET
10BASE-T / 100BASE-TX

USB 1 / 2 / 3

USB1: DC 5 V, Max. 900 mA [SuperSpeed USB (USB 3.0)]
USB2 / 3: DC 5 V, Max. 500 mA [Hi-Speed USB (USB 2.0)]

DIGITAL AUDIO OUT
PCM / Dolby Digital, Fibre optic

Receiving systems / Band name

Digital TV

Australia
7 MHz VHF / UHF (Australia) free-to-air TV broadcast reception

New Zealand
8 MHz VHF / UHF (New Zealand) free-to-air TV broadcast reception

PAL B / G
Reception of Off air broadcast

PAL 60 Hz
Playback of NTSC tape from some PAL Video recorders (VCR)

M.NTSC
Playback from M.NTSC Video recorders (VCR)

NTSC
Playback from NTSC Video recorders (VCR)

Aerial input
Standard Belling & Lee connector
VHF / UHF

Operating conditions

Temperature
0 °C - 35 °C

Humidity
20 % - 80 % RH (non-condensing)

Built-in wireless LAN

Standard compliance and Frequency range*1
IEEE802.11a/n
5.15 GHz - 5.35 GHz, 5.47 GHz - 5.85 GHz
IEEE802.11b/g/n
2.400 GHz - 2.4835 GHz

Security
WPA2-PSK (TKIP/AES)
WPA-PSK (TKIP/AES)
WEP (64 bit/128 bit)

Bluetooth wireless technology*2

Standard Compliance
Bluetooth 3.0

Frequency Range
2.402 GHz - 2.480 GHz

*1: The frequency and channel differ depending on the country.
*2: Not all the Bluetooth compatible devices are available with this TV. Up to 5 devices can be used simultaneously (except Touch Pad Controller).

Note

- Touch Pad Controller uses Bluetooth wireless technology.
- Design and Specifications are subject to change without notice. Mass and Dimensions shown are approximate.
- For information about the open source software, refer to [eHELP] (Search by Purpose > Read first > Before use > Licence).

Audio

Speaker output
40 W (10 W × 2 + 10 W × 2)

Headphones
M3 (3.5 mm) stereo mini Jack × 1
When using the wall-hanging bracket

Choosing to wall mount the TV shall be done at the owner's risk. Always use a qualified installer to perform a TV wall bracket installation. Incorrect fitting may cause equipment to fall, resulting in injury and product damage. Any such damage will void your warranty.

- Holes for wall-hanging bracket installation
  Rear of the TV

  ![Diagram of wall-hanging bracket installation holes](image)

  - **55-inch model**
    - a: 400 mm
    - b: 300 mm
  - **65-inch model**
    - a: 400 mm
    - b: 400 mm

  (View from the side)

  **Depth of screw**
  - minimum: 23 mm
  - maximum: 28 mm

  **Type of screw**: M6

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

Warning

- When optional accessories such as wall brackets, etc. are used, always read and follow the manufactures installation and usage instructions.
- 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.
- When installing wall brackets you must ensure the wall bracket is not electrically grounded to metal wall studs. Always ensure that there are no electrical cables, pipes, etc. in the wall before you begin the wall bracket installation.
Panasonic Warranty

1. The product is warranted for 12 months from the date of purchase. Subject to the conditions of this warranty Panasonic or its Authorised Service Centre will perform necessary service on the product without charge for parts or labour, if in the opinion of Panasonic, the product is found to be faulty within the warranty period.

2. This warranty only applies to Panasonic products purchased in Australia and sold by Panasonic Australia or its Authorised Distributors or Dealers and only where the products are used and serviced within Australia or its territories. Warranty cover only applies to service carried out by a Panasonic Authorised Service Centre and only if valid proof of purchase is presented when warranty service is requested.

3. This warranty only applies if the product has been installed and used in accordance with the manufacturer’s recommendations (as noted in the operating instructions) under normal use and reasonable care (in the opinion of Panasonic). The warranty covers normal domestic use only and does not cover damage, malfunction or failure resulting from use of incorrect voltages, incorrect installation, accident, misuse, neglect, build-up of dirt or dust, abuse, maladjustment of customer controls, mains supply problems, thunderstorm activity, infestation by insects or vermin, tampering or repair by unauthorised persons (including unauthorised alterations), introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, exposure to abnormally corrosive conditions or any foreign object or matter having entered the product.

4. This warranty does not cover the following items unless the fault or defect existed at the time of purchase:
   (a) Cabinet Part(s)
   (b) Video or Audio Tapes
   (c) SD cards or USB devices
   (d) User replaceable Batteries
   (e) DVD, Blu-ray, or Recordable Discs
   (f) Video / Audio Heads from wear and tear in normal use
   (g) Information stored on Hard Disk Drive, USB stick or SD card
   (h) DTV reception issues caused by TV Aerial / Cabling / Wall socket(s)
   etc

5. Some products may be supplied with Ethernet connection hardware. The warranty is limited on such products and will not cover:
   (a) Internet and or DLNA connection / setup related problems
   (b) Access fees and or charges incurred for internet connection
   (c) The use of incompatible software or software not specifically stipulated in the product operations manual; and
   (d) Any indirect or consequential costs associated with the incorrect use or misuse of the hardware, its connection to the internet or any other device.

6. To claim warranty service, when required, you should:
   • Telephone Panasonic’s Customer Care Centre on 132600 or visit our website referred to below and use the Service Centre Locator for the name/address of the nearest Authorised Service Centre.
   • Send or take the product to a Panasonic Authorised Service Centre together with your proof of purchase receipt as a proof of purchase date. Please note that freight and insurance to and / or from your nearest Authorised Service Centre must be arranged by you.
   • Note that home or pick-up/delivery service is available for the following products in the major metropolitan areas of Australia or the normal operating areas of the nearest Authorised Service Centres:
     - Plasma/LCD televisions / displays (screen size greater than 103 cm)
   • Panasonic Authorised Service Centres are located in major metropolitan areas and most regional centres of Australia, however, coverage will vary dependant on product. For advice on exact Authorised Service Centre locations for your product, please telephone our Customer Care Centre on 132600 or visit our website and use the Service Centre Locator.

In addition to your rights under this warranty, Panasonic products come with consumer guarantees that cannot be excluded under the Australian Consumer Law. If there is a major failure with the product, you can reject the product and elect to have a refund or to have the product repaired if you wish you may elect to keep the goods and be compensated for the drop in value of the goods. You are also entitled to have the product repaired or replaced if the product fails to be of acceptable quality and the failure does not amount to a major failure.

If there is a major failure in regard to the product which cannot be remedied then you must notify us within a reasonable period by contacting the Panasonic Customer Care Centre. If the failure in the product is not a major failure then Panasonic may choose to repair or replace the product and will do so in a reasonable period of time from receiving notice from you.

THIS WARRANTY CARD AND THE PURCHASE DOCKET (OR SIMILAR PROOF OF PURCHASE) SHOULD BE RETAINED BY THE CUSTOMER AT ALL TIMES

If you require assistance regarding warranty conditions or any other enquiries, please visit the Panasonic Australia website www.panasonic.com.au or contact by phone on 132 600

If phoning in, please ensure you have your operating instructions available.

Panasonic Australia Pty. Limited
ACN 001 592 187 ABN 83 001 592 187
1 Innovation Road, Macquarie Park NSW 2113
WARRANTY - New Zealand only

WE WARRANT that the Panasonic Television that you have purchased is free from defects in material and workmanship under normal home use and service. Accordingly, we undertake to repair, or at our option, replace without cost to the owner, either for material or labour, any part which within 12 months from the date of delivery is found to be defective, provided that the appliance has been used for domestic purposes only and in accordance with the instructions given in the Instruction Book and not been subjected to misuse, neglect or installed, dismantled, repaired or serviced by any other than an authorised Panasonic New Zealand Dealer or Panasonic New Zealand Authorised Service Centre.

NOTE
- Before reporting a fault, please ensure that you read the item “Troubleshooting” in the information section of your Panasonic Instruction Book.
- It is important to retain your proof of purchase as this will be required by the serviceman or retailer as proof of purchase date, should service be required.
- In the event of service being required, contact your Panasonic New Zealand retailer or Panasonic New Zealand Authorised Service Centre.

IMPORTANT
Any request for warranty service must be through an Authorised Panasonic New Zealand Service Centre who during the period of warranty, undertakes to make any necessary adjustment and fit any replacement part supplied by the manufacturer, during normal working hours, or alternatively will arrange for such service to be provided by some other Panasonic New Zealand Authorised Service Centre.

NEW ZEALAND
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www.panasonic.co.nz

Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

Customer’s Record

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

Model Number

Serial Number

Panasonic Corporation
Web Site: http://www.panasonic.com

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