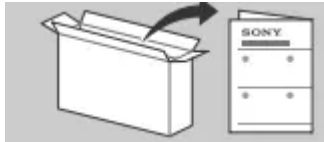


About Manuals

This TV comes with the following manuals. Please retain the manuals for future reference

- Setup Guide
 - TV installation and setup.



- Reference Guide (this manual) / Safety Documentation
 - Safety information, remote control, troubleshooting, wall-mount installation, specification, etc.



- Help Guide (On screen Manual)
 - Settings, Android TV functions, Internet connection, troubleshooting, etc.
 - To open it, press the HELP button on the remote control and select Help Guide.



- You can refer to the Help Guide with your smartphone.




IMPORTANT - Read the End User Software Licence Agreement before using your Sony product. Using your product indicates your acceptance of the End User Software Licence

Agreement. The software licence agreement between you and Sony is available online at Sony website ([http:// www.sony.net/tv-software-licenses/](http://www.sony.net/tv-software-licenses/)) or on your product screen. Go to [Settings] → [Device Preferences] → [About] → [Legal information] → [Notices and licences].

Note:

- Before operating the TV, please read the “Safety Information”.
- Read the supplied safety documentation for additional safety information.
- Images and illustrations used in the Setup Guide and this manual are for reference only and may differ from the actual product.

Location of the identification label

Labels for the TV Model No., Production Date (year/month) and Power Supply rating are located on the rear of the TV or package. They can be found by removing the terminal cover 

IMPORTANT NOTICE

Notice for Radio Equipment

Hereby, Sony Corporation declares that the radio equipment types KD-48A9, KE-48A9 are in compliance with Directive 2014/ 53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://www.compliance.sony.eu/>

For this radio equipment, the following restrictions on putting into service or of requirements for authorization of use apply in AT, BE, HR, CY, CZ, DK, EE, FI, FR, DE, EL, HU, IE, IT, LV, LT, LU, MT, NL, PL, PT, SK, SI, ES, SE, UK, UK (NI), IS, LI, NO, CH, BG, RO, TR, AL, BA, MK, MD, RS, ME, Kosovo : 5150 - 5350 MHz band is restricted to indoor operations only.

Safety Information

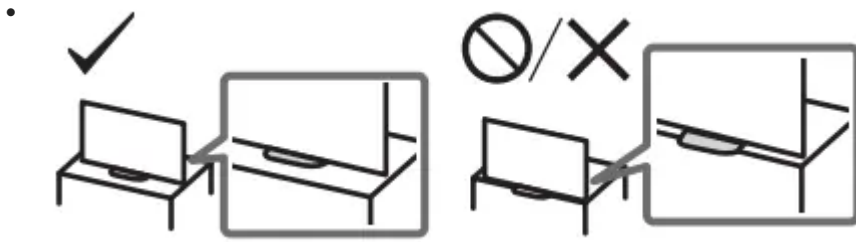
Installation/Set-up

Install and use the TV set in accordance with the instructions below in order to avoid any risk of fire, electric shock or damage and/or injuries.

Installation

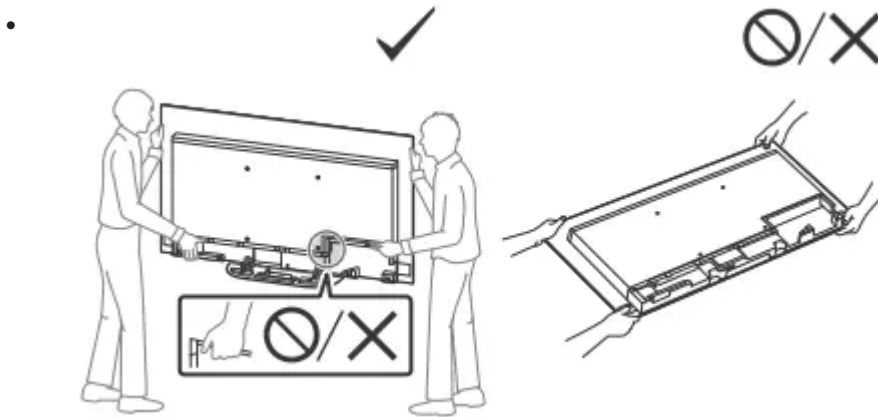
- The TV set should be installed near an easily accessible mains socket.
- Place the TV set on a stable, level surface to prevent it from falling over and causing personal injury or property damage.
- Install the TV where it cannot be pulled, pushed, or knocked over.
- Install the TV so that the TV's Table-Top Stand does not protrude out from the TV stand (not supplied). If the Table-Top Stand protrudes out from the TV stand, it may cause TV set to topple over, fall down, and cause personal injury or damage to the TV.



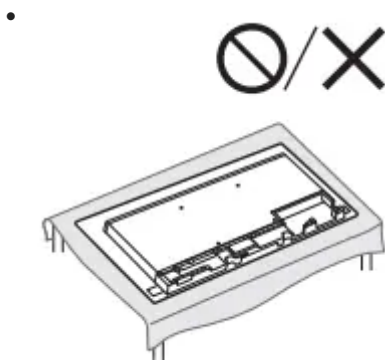


Transporting

- Before transporting the TV set, disconnect all cables.
- Before transporting the TV set, remove the stand cover and terminal covers.
- Two or more people are needed to transport a large TV set.
- When transporting the TV set by hand, hold it as shown below. Do not put stress on the panel and the frame around the screen.

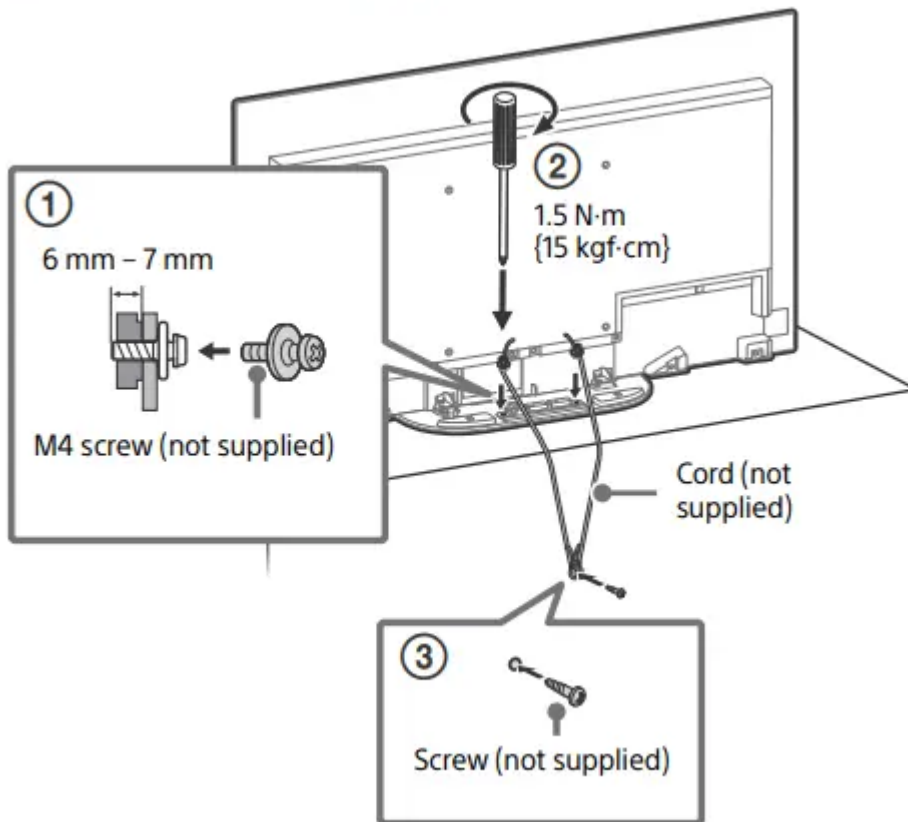


- When handling or mounting the TV set, do not lay down the TV.



- When transporting the TV set, do not subject it to jolts or excessive vibration.
- When transporting the TV set for repairs or when moving, pack it using the original carton and packing material.

Topple prevention



Protecting the TV Screen (OLED TV)

Precautions to Protect the Screen from Damage

Image retention



OLED TV's are susceptible to image retention (burn-in) due to the characteristics of the materials used. Image retention may occur if images are displayed in the same location on the screen repeatedly or over extended periods of time. This is not a malfunction of the TV. Avoid displaying images that may cause image retention.

The following are examples of images that may cause image retention:

- Content with black bars either on the top and bottom and/or the left and right sides of the screen. (for example, Letterboxed, 4:3 screen, Standard definition)
- Static images such as photos.
- Video games that might have static content in some part of the screen.
- On-screen menus, programme guides, channel logos etc.
- Static content from applications.
- On-screen tickers, such as those used for news and headlines.

To reduce the risk of image retention:

- Sony recommends that you turn off the TV normally by pressing the power button on the remote control or the TV.

- Fill the screen by changing [Wide mode] to eliminate the black bars. Select [Wide mode] other than [Normal].
- Turn off the OSD (On Screen Display) by pressing the  /  button, and turn off the menus from connected equipment. For details, refer to the instruction manuals for the connected equipment.
- Avoid displaying static images with bright colours (including white), clocks or logos on any portion of the screen.
- Set the picture settings based on the ambient conditions. The Standard Picture is recommended for home use and when viewing content that often displays the station logos, etc.

The TV has following features to help reduce/prevent image retention.

Panel refresh

A panel refresh will adjust the panel uniformity. Panel refresh can be performed and should only be used when image retention is very noticeable.

Caution:

- The Panel refresh function may affect the panel. Do not perform Panel refresh more than once a year as it may affect the usable life of the panel.
- Panel refresh takes about one hour to complete.
- A white line may be displayed on the screen during the Panel refresh, this is not a malfunction of the TV.
- Panel refresh will only work when the room temperature is between 10 °C and 40 °C.

Pixel shift

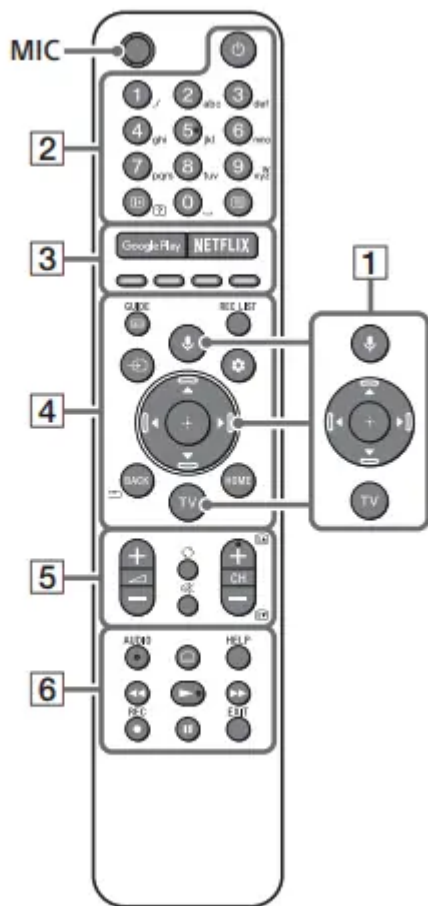
Automatically moves the image on the screen to prevent image retention.


Other feature



The screen brightness is automatically reduced when displaying still images, clocks, bright colours or logos etc.




Remote Control and TV

The remote control shape, location, availability and function of remote control buttons may vary depending on your region/ country/TV model.



1.  **(Microphone):** Use the Google Assistant*1 *2 or voice search*2. For hints on how


to control your TV press  (Microphone) button and speak the phrase “voice hints”.*1
 : On screen menu navigation and selection. **TV:** Display TV channel list or switch to input.

2.  **(Power)** **Number buttons**  (Info/Text reveal): Display information. 
(Text): Display text information


3. **Google Play / NETFLIX*1 / Colour buttons**

4. **GUIDE/**  : Display the digital programme guide of TV or TV box*1 *3.

- **REC LIST:** Display the Rec list of USB HDD/ DVR*3.

-  **(Input select):** Display and select the input source, etc.

-  **(Quick settings):** Display Quick Settings. **BACK/** 
HOME

5.  +/- (Volume)

 (Jump)

*4

CH +/-/▲/▼: Select the channel, or next (▲) / previous (▼) page.

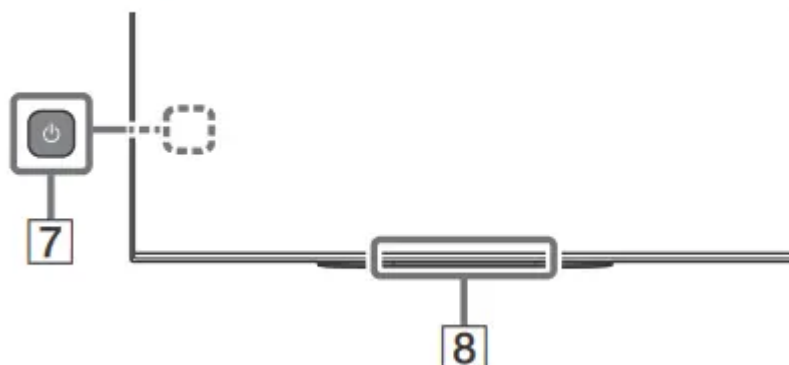
6. **AUDIO:** Select the sound of multilingual source or dual sound (depend on programme source).


◦  (Subtitle setting)

◦ **HELP:** Display the Help menu. 

◦  **REC:** Record the currently viewed programme on USB HDD/DVR*3.

◦ **EXIT**




7.  (Power)

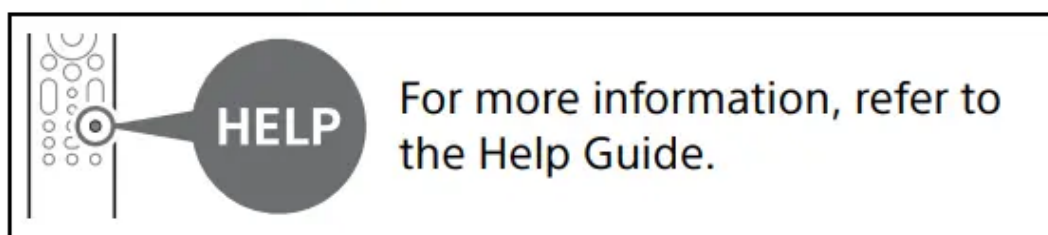
8. **Remote Control sensor / Light sensor / LED**

*1 Only on limited region/country/TV model/ language.

*2 The Google Assistant or voice search requires an Internet connection.

*3 [TV box setup] setting is required.

*4 Accessibility shortcut is available by pressing and holding  (Mute).



Installing the TV to the Wall

Using the optional Wall-Mount Bracket (SU-WL850 or SU-WL450)* (not supplied)

To Customers:

For product protection and safety reasons, Sony strongly recommends that installation of your TV be performed by Sony dealers or licensed contractors. Do not attempt to install it yourself.

To Sony Dealers and Contractors:

Provide full attention to safety during the installation, periodic maintenance and examination of this product.

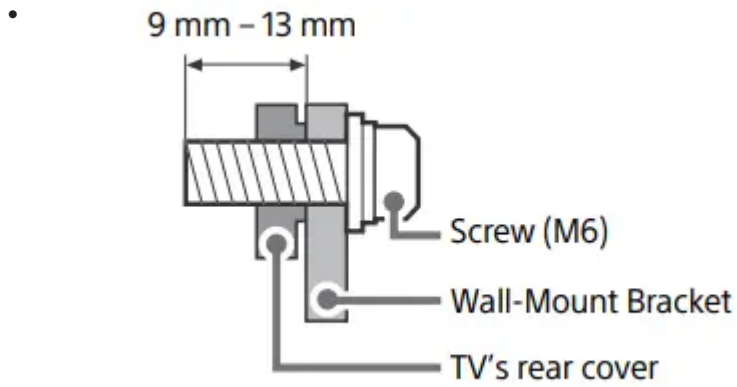
Wall-Mount Bracket Installation Information

This TV's instruction manual only provides the steps to prepare the TV for Wall-Mount installation before it is installed on the wall. For instructions on Wall-Mount Bracket installation, see the Installation Information (Wall-Mount Bracket) on the product page for your TV model. <https://www.sony.eu/support>

Preparing for Wall-Mount Installation

Make sure to attach the Table-Top Stand before installing the TV to the wall by referring to the Setup Guide.

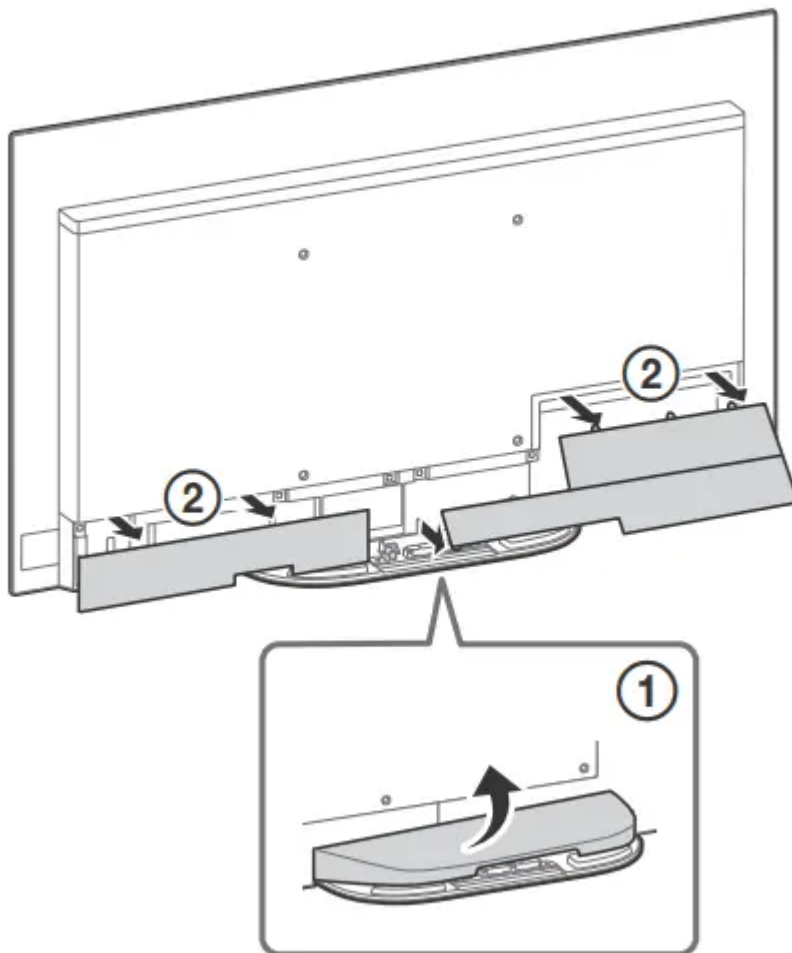
- Prepare the TV for the Wall-Mount Bracket before making cable connections.
- Follow the instruction guide provided with the Wall-Mount Bracket for your model. Sufficient expertise is required in installing this TV, especially to determine the strength of the wall for withstanding the TV's weight.
- Be sure to entrust the attachment of this product to the wall to Sony dealers or licensed contractors and pay adequate attention to safety during the installation. Sony is not liable for any damage or injury caused by mishandling or improper installation.
- The screws for Wall-Mount Bracket are not supplied.
- Only qualified service personnel should carry out wall-mount installations.
- For safety reasons, it is strongly recommended that you use Sony accessories, including:
 - Wall-Mount Bracket SU-WL850
 - Wall-Mount Bracket SU-WL450
- Be sure to use the screws supplied with the Wall-Mount Bracket when attaching the Wall-Mount Bracket to the TV set. The supplied screws are designed as indicated by illustration when measured from the attaching surface of the Wall-Mount Bracket. The diameter and length of the screws differ depending on the Wall-Mount Bracket model. Use of screws other than those supplied may result in internal damage to the TV set or cause it to fall, etc.



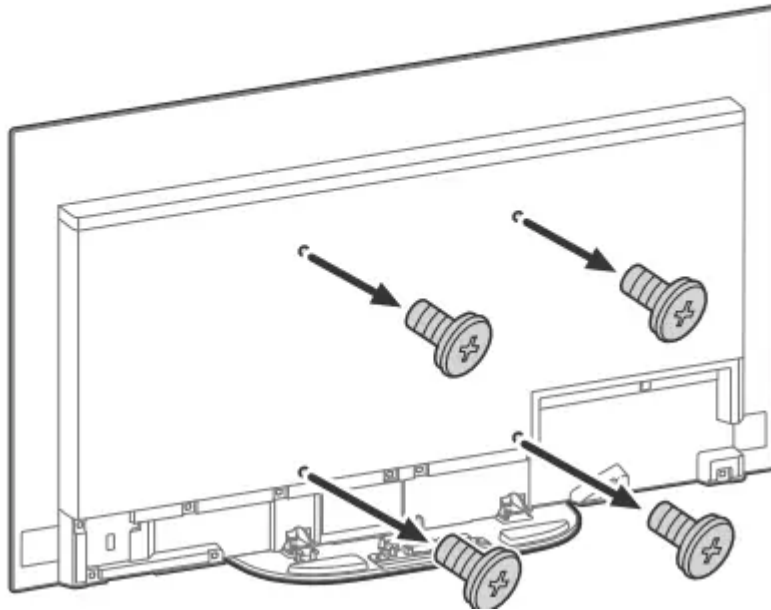
- Be sure to store the unused screws and Table-Top Stand in a safe place until you are ready to attach the Table-Top Stand. Keep the screws away from small children.

* Only on limited region/country/TV model.

1 Remove the stand cover and terminal covers.



2 Remove the screws from the rear of the TV.



Note:

- Be sure to store the removed screws and reuse when attaching the Wall-Mount Bracket to the TV set (SU-WL850 only). Keep the screws away from small children.

Troubleshooting

General troubleshooting for issues like: black screen, no sound, frozen picture, TV does not respond, or network is lost, do the following steps.

1. Restart your TV by pressing the power button on the remote control for about five seconds. The TV will restart. If the TV does not recover, try unplugging the mains lead. Then press the power button on the TV, and release it. Wait for two minutes, and plug in the mains lead.
2. Refer to the Help menu by pressing HELP on the remote control.
3. Connect your TV to the Internet and perform a software update. Sony recommends you to keep your TV software updated. Software updates provide new features and performance improvements.
4. Visit Sony support website (information provided at the end of this manual).

When you plug in the TV, the TV may not be able to turn on for a while even if you press the power button on the remote control or the TV.

It takes time to initialize the system. Wait for about one minute, then operate it again.

- **The remote control does not function.**

- Replace the batteries.
- The parental lock password has been forgotten.
 - Enter 9999 for the PIN and enter the new PIN
- The screen becomes darker while watching TV.
 - If the whole image or part of the image remains still, the screen brightness will be gradually reduced to prevent image retention. This is not a malfunction of the TV.

You are concerned about image retention.

If the same image is displayed repeatedly or for long periods of time, image retention may occur. To reduce image retention, we recommend that you turn off the TV normally by pressing the power button on the remote control or the TV.

Note:

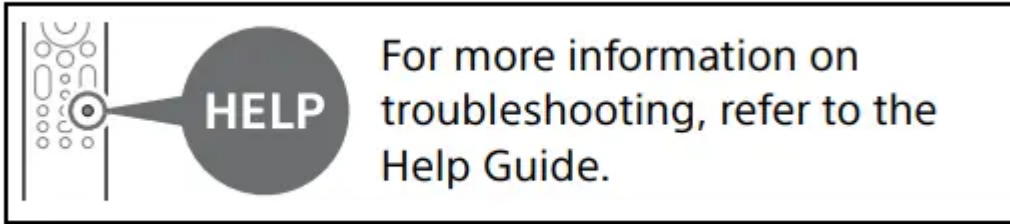
- Perform Panel refresh only when image retention is particularly noticeable. Avoid performing Panel refresh more than once a year because it may affect the usable life of the panel.
- Images that include clocks, logos and bright colours (including white) easily cause image retention. Avoid displaying these types of images for long periods of time, otherwise image retention may occur.

A white line appears on the screen.

- Panel refresh automatically runs after the TV has been used for long periods of time to reduce image retention. Panel refresh starts after the TV is turned off and takes about one hour to complete. A white line may be displayed on the screen during the Panel refresh. This is not a malfunction of the TV

The message [Panel refresh did not finish...] is displayed.

When i) the TV is turned on, ii) the mains lead is unplugged, or iii) the room temperature falls outside of the range between 10 °C and 40 °C during the Panel refresh, the Panel refresh is not completed. Please avoid the above three conditions during the Panel refresh.



Specifications

System

- Panel system: OLED (Organic Light Emitting Diode) Panel
- TV system: Depending on your country/area selection/TV model
 - Analogue: B/G, D/K, I
 - Digital: DVB-T/DVB-C/DVB-T2*1
 - Satellite*1 : DVB-S/DVB-S2
- Colour system: PAL/SECAM/NTSC3.58 (Video only)/NTSC4.43 (Video only)
- Channel coverage: Depending on your country/ area selection/TV model
 - Analogue: UHF/VHF/Cable
 - Digital: UHF/VHF/Cable
 - Satellite*1 : IF Frequency 950-2,150 MHz
- Sound output: 10 W + 10 W + 5 W
- Wireless technology
 - Protocol IEEE 802.11a/b/g/n/ac
 - Bluetooth® Version 4.2

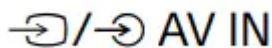
Frequency band(s)

- Wireless LAN (TV)
 - 2400-2483.5 MHz
 - < 20.0 dBm
 - 5150-5250 MHz
 - < 23.0 dBm
 - 5250-5350 MHz
 - < 20.0 dBm

- 5470-5725 MHz
 - < 20.0 dBm
- 5725-5850 MHz
 - < 13.9 dBm
- Bluetooth® (TV)
 - 2400-2483.5 MHz
 - < 10.0 dBm
- Bluetooth® (Remote control)
 - 2400-2483.5 MHz
 - < 10.0 dBm

Input/Output jacks

- Antenna (aerial)/cable
- 75 ohm external terminal for VHF/UHF
- Satellite antenna*1
- Female F Type Connector, 75 ohm.
- DiSEqC 1.0, LNB 13 V/18 V & 22 kHz tone, Single Cable Distribution EN50494



Video/Audio input (mini jack)

HDMI IN 1/2/3/4 (support 4K resolution, HDCP 2.3-compatible)

- Video:
 - 4096 × 2160p (50, 60 Hz)*2*3, 4096 × 2160p (24 Hz)*2, 3840 × 2160p (50, 60 Hz)*3, 3840 × 2160p (24, 25, 30 Hz), 1080p (30, 50, 60, 100, 120 Hz), 1080/24p, 1080i (50, 60 Hz), 720p (30, 50, 60 Hz), 720/24p, 576p, 480p, PC Formats*4
- Audio:
 - In eARC (Enhanced Audio Return Channel) mode Refer to the Help Guide for details. Except eARC mode 5.1 channel linear PCM: 32/44.1/48/88.2/96/176.4/192 kHz 16/20/24 bits, Dolby Audio, Dolby Atmos, DTS eARC/ARC (Enhanced Audio Return Channel/ Audio Return Channel) (HDMI IN 3 only)*5
 - In eARC mode
 - Refer to the Help Guide for details
 - In ARC mode
 - Two channel linear PCM: 48 kHz 16 bits, Dolby Audio, Dolby Atmos, DTS



DIGITAL AUDIO OUT (OPTICAL)

- Digital optical jack (Two channel linear PCM: 48 kHz 16 bits, Dolby Audio, DTS)



(Stereo mini jack) Headphone



USB device port (3 USB HDD device

for REC feature) USB port 1 and 2 support High Speed USB (USB 2.0) USB port 3 supports Super Speed USB (USB 3.1 Gen 1)



CAM (Conditional Access Module) slot



LAN


- 10BASE-T/100BASE-TX connector (Depending on the operating environment of the network, connection speed may differ. The communication rate and quality are not guaranteed.)

Power, Product Fiche and others


- Power requirements
 - 220 V – 240 V AC, 50 Hz
- Energy Efficiency Class
 - B
- Screen size (measured diagonally) (Approx.)
 - 120.7 cm / 48 inches
- Power consumption
 - In [Standard] mode
 - 114 W
 - In [Vivid] mode
 - 290 W
- Annual energy consumption*7
 - 158 kWh per year
- Standby power consumption*8*9
 - 0.50 W (30 W in software/EPG update mode)
- Display resolution
 - 3,840 dots (horizontal) × 2,160 lines (vertical)

- Output Rating

- USB 1/2

- 5 V  , 500 mA MAX

- USB 3

- 5 V  , 900 mA MAX

Dimensions (Approx.) (w × h × d) (cm)

- with Table-Top Stand (without Table-Top Stand) 106.9 × 62.9 × 25.5 (106.9 × 62.4 × 5.8)

Mass (Approx.) (kg)

- with Table-Top Stand (without Table-Top Stand) 17.6 (13.9)

Others

- Optional accessories Wall-Mount Bracket: SU-WL850 / SU-WL450
- Operating temperature: 0 °C – 40 °C
- Operating humidity: 10 % – 80 % RH (non-condensing)

*1 Not all the TV sets have DVB-T2 or DVB-S/S2 technology or satellite antenna terminal.

*2 When 4096 × 2160p is input and [Wide mode] is set to [Normal], the resolution is displayed as 3840 × 2160p. To display 4096 × 2160p, set [Wide mode] setting to [Full 1] or [Full 2].

*3 To support 18 Gbps, set [HDMI signal format] to [Enhanced format].

*4 Refer to the online Help Guide for details.

*5 Connect your audio system to the HDMI IN 3 to route TV audio to your audio system.

*6 Only on limited region/country/TV model.

*7 Energy consumption in kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption will depend on how the television is used.

*8 Specified standby power is reached after the TV finishes necessary internal processes.

*9 Standby power consumption will increase when your TV is connected to the network.

Note

- Optional accessories availability depends on countries/region/TV model/stock.
- Design and specifications are subject to change without notice.
- Subscriptions for services and applications may be required and additional terms, conditions and/or charges may apply when using the Google Assistant.

- Product fiche in this manual is for COMMISSION DELEGATED REGULATION (EU) 1062/2010. Refer to its website for (EU) 2019/2013 information.

Notes on Digital TV function

- Digital TV (DVB terrestrial, satellite and cable), interactive services and network functions may not be available in all countries or areas. Some functions might not be enabled or might not operate correctly with some providers and network environments. Some TV service providers may charge a fee for their services.
- This TV supports digital broadcasting using MPEG-2, H.264/MPEG-4 AVC and H.265/HEVC codecs, but compatibility with all operator/ service signals, which may change over time, cannot be guaranteed.

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- For DTS patents, see <http://patents.dts.com>. Manufactured under license from DTS, Inc. DTS, the Symbol, DTS and the Symbol together, and Digital Surround are registered trademarks or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved.
- Netflix is a registered trademark of Netflix, Inc.
- DiSEqC™ is a trademark of EUTELSAT. This TV supports DiSEqC 1.0. This TV is not intended for controlling motorized antennas.
- TUXERA is a registered trademark of Tuxera Inc. in the US and other countries.
- All other trademarks are the property of their respective owners.

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.

