

PHILIPS

Television

7406 Series

User Manual

43PUD7406
50PUD7406
55PUD7406

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Home Screen

Home Screen and Channels

The Home launcher

To enjoy the benefits of your Android TV, connect the TV to the Internet. Press **Home** on your remote control to get your new Android Home screen. Like on your Android smartphone or tablet, the Home screen is the center of your TV. From here you can decide what to watch by browsing entertainment options from app and live TV. Your Home has channels to let you discover great contents from your favorite apps. You can also add additional channels or find new apps to get more contents.

The Home screen is organized in channels. Apps may populate their recommendation (if available) according to their own choice as an individual channels in the home screen.

Apps

Your favorite Apps are placed on the first row. This row contains a number of pre-installed apps. The order of these apps is according to business agreements with content service providers. You can also add more apps as favorite from the Apps page, such as the Live TV and MMP (MultiMediaPlayer). The Apps page can be opened by clicking the Apps icon at the left end of the **Apps** row.

Live TV

The Live TV row shows the currently running programs from the installed channels. It contains up to 10 channels as the recommendation for you to select the TV channels. The first channel on Live TV row is the channel you are watching, and the following channels will be the channels on your favorites list*.

* Note: If there are still more spaces available on Live TV row, it will include the channels from your DTV (digital TV) source.

Play Next channel

You can always know what to watch next from **Play Next** channel on the Home screen. Start watching from where you left off and get notifications about new episodes in the **Play Next** channel. Press and hold Select on a movie or TV show to add it directly to the **Play Next** channel.

Google Play Movies & TV channel

Rent movies or TV shows on this channel from **Google Play Movies & TV**.

YouTube channel

This channel contains your Recommended, Subscriptions or Trending YouTube videos.

Customize channels

Click the **Customize channels** button to add and remove channels from your Home screen.

See also www.support.google.com/androidtv

Accessing settings from Home

You can access the **Settings** menu via the icon at the top right corner.

Accessing USB flash drive from Home

To view the files from the USB flash drive, you need to add the MMP (MultiMediaPlayer) app to the Home page first. Press **Home**, clicking the Apps icon at the left end of the Apps row. You can add **MMP** apps from the Apps page.

System bar on Home screen

The System bar on the top of Home screen contains the following features.

- Search button: to trigger Google search with voice* or text input. The search result and its order are rendered according to business agreements with content service providers.
- Notifications: to provide you the messages about your Smart TV system.
- Input source: to launch the input source list and switch to any of the connected devices.
- Settings: to access all setting menu and adjust the TV settings.
- Clock: to indicate the system clock.

* Note: In order to take advantage of Google Assistant in case of a remote control without a microphone, please use the Android TV Remote Control app available in the Google Play Store for Android and Apple App store for iOS devices.

Open the Home Screen

To open the Home screen and open an item...

- 1 - Press **Home**.
- 2 - Select an item and press **OK** to open or start it.
- 3 - Press **Back** continuously or press **Home** to go back to Home screen.

When opening the Home screen, the background application/content playback will stop. You have to select the application or content from the Home screen to resume.

Home Screen Update

You may receive the update notification from Google and have a new version of Home launcher installed. With the new Home launcher, you will have a new look and features on your TV's Home screen.

New highlights on your home screen

With multiple tabs like **Home**, **Discover**, **Apps** and **Search**, you can discover movies and shows from your services and popular apps. Sign in to your Google Account to get personalized recommendations from your streaming services based on what you have watched and what interests you.

New look, new navigation

Decide what to watch next with easy-to-use navigation. Browse your personalized recommendations, pick up where you left off, or quickly find a certain app using the new tab system.

Discover personalized recommendations

Browse shows and movies that you will love on all your favorite media services. Sign in to your Google Account to get started.

Get recommendations across Google

Your services are saved to your Google Account so you can get better recommendations across Google.

Setting Up

2.1

Read Safety

Read the safety instructions first before you use the TV.

To read the safety instructions, go to **Safety and Care** section on this Help manual for the information.

2.2

TV Stand and Wall Mounting

TV Stand

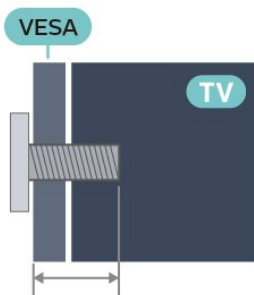
You can find the instructions for mounting the TV stand in the Quick Start Guide that came with the TV. In case you lose this guide, you can download it from www.philips.com/TVsupport.

Use the model number of the TV to look for the **Quick Start Guide** to download.

Wall Mounting

Your TV is also prepared for a VESA-compliant wall mount bracket (sold separately).

Use the following VESA code when purchasing the wall mount . . .



- 43PUx7406
VESA MIS-F 100x200, M6 (Min.: 10mm, Max.: 12mm)
- 50PUx7406
VESA MIS-F 200x200, M6 (Min.: 18mm, Max.: 22mm)
- 55PUx7406
VESA MIS-F 200x200, M6 (Min.: 14mm, Max.: 16mm)
- 65PUx7406
VESA MIS-F 300x300, M6 (Min.: 18mm, Max.: 22mm)
- 70PUx7406
VESA MIS-F 300x300, M8 (Min.: 10mm, Max.: 22mm)

Caution

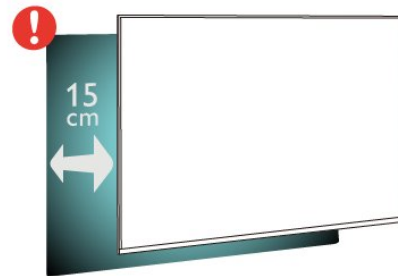
Wall mounting the TV requires special skills and should only be performed by qualified personnel. The TV wall mounting should meet safety standards according to the TV's weight. Also read the safety precautions before positioning the TV.

TP Vision Europe B.V. bears no responsibility for improper mounting or any mounting that results in accident or injury.

2.3

Tips on Placement

- Position the TV where light does not shine directly on the screen.
- The ideal distance to watch TV is 2 to 5 times its diagonal screen size. When seated, your eyes should be level with the center of the screen.
- When wall mounted, position the TV up to 6 inches away from the wall.



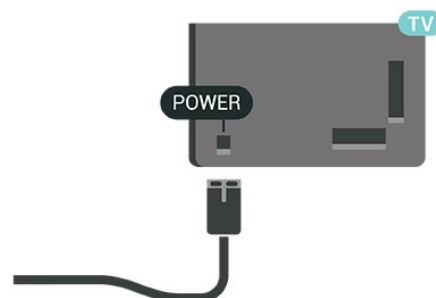
Note:

Please keep the TV away from dust-producing sources such as stoves. It is suggested to clean the dust regularly to avoid getting dust into the TV.

2.4

Power Cable

- Insert the power cable into the **POWER** connector on the back of the TV.
- Make sure the power cable is securely inserted in the connector.
- Make sure that the power plug, in the wall socket, is accessible at all times.
- When you unplug the power cable, always pull the plug, never pull the cable



Although this TV has a very low standby power consumption, unplug the power cable to save energy if you do not use the TV for a long period of time.

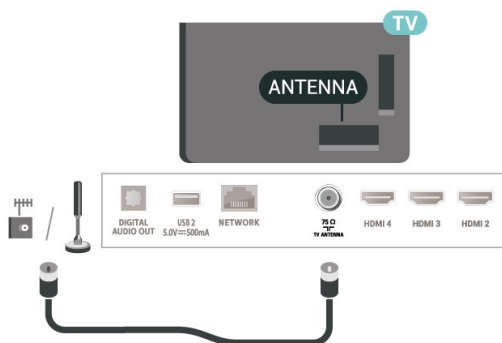
2.5

Antenna Cable

Insert the antenna plug firmly into the **Antenna** socket at the back of the TV.

You can connect your own antenna or an antenna signal from an antenna distribution system. Use an IEC Coax 75 Ohm RF antenna connector.

Use this antenna connection for antenna digital or analog input signals.

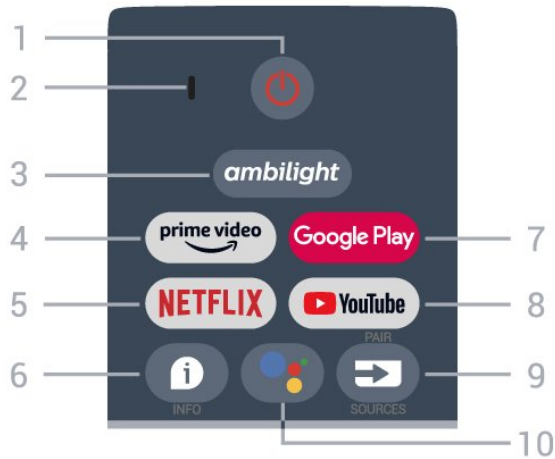


Remote Control

3.1

Key Overview (Type 1)

Top



1 - Power (Standby / On)

To switch the TV on or back to Standby.

2 - VOICE microphone

3 - Ambilight

This function is not supported.

4 - Amazon Prime Video

To launch the Amazon Prime Video App.

5 - NETFLIX

To launch the Netflix App with the TV switched on or from standby.

- If you have a Netflix subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet.
- To open Netflix, press the **NETFLIX** key to open the Netflix App. You can open Netflix immediately from a TV in standby.

6 - INFO

Press to open the program information screen. Press once to show brief channel information, press again to show expanded screen with program title and more information, press again to show full program information. Keep pressing the key can switch to different views of the information.

7 - Google Play

To launch the Google Play App.

8 - YouTube

To launch the YouTube App.

9 - SOURCES

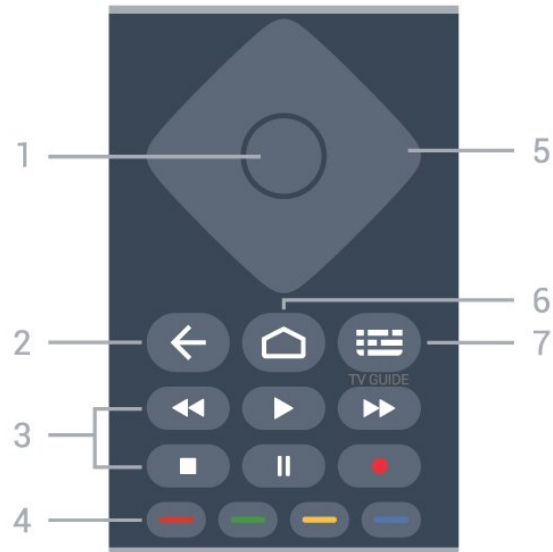
- To open or close the Sources menu.

- To pair the remote control to the TV.

10 - Google Assistant™

To launch the Google Assistant™.

Middle



1 - OK key

To confirm a selection or setting. To open the channel list while watching TV.

2 - Back

- To return to previous menu or TV source.
- To go back to the previous App.

3 - Playback and Record

- Play, to playback.
- Pause, to pause playback
- Stop, to stop playback
- Rewind, to rewind
- Fast forward, to go fast forward
- Record, to start recording

4 - Color keys

Follow the on-screen instructions to select more options or operations.

Press **Blue key** on Home screen to open the **Help**.

5 - Navigation keys

To navigate up, down, left or right.

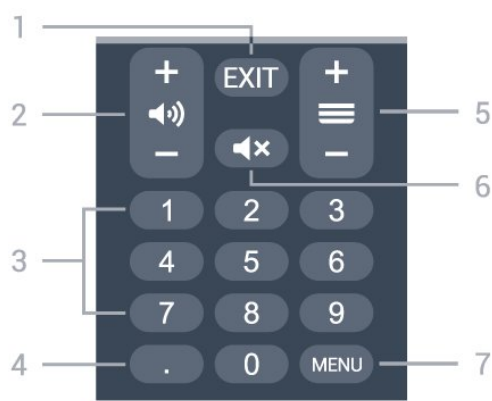
6 - Home

To open the Home menu.

7 - TV GUIDE

To open or close the TV Guide.

Bottom



1 - EXIT

To leave from current menu or App.

2 - Volume

Press + or - to adjust the volume level.

3 - Number keys

To select a channel directly.

4 - (Dot)

To enter digital sub-channels.

5 - Channel

Press + or - to switch to the next or previous channel in the channel list.

6 - Mute

Press to mute the sound or to restore it.

7 - MENU

To open the TV Menu with typical TV functions.

2 - VOICE microphone

3 - MENU

To open the TV Menu with typical TV functions.

4 - Amazon Prime Video

To launch the Amazon Prime Video App.

5 - NETFLIX

To launch the Netflix App with the TV switched on or from standby.

- If you have a Netflix subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet.
- To open Netflix, press the **NETFLIX** key to open the Netflix App. You can open Netflix immediately from a TV in standby.

6 - INFO

Press to open the program information screen. Press once to show brief channel information, press again to show expanded screen with program title and more information, press again to show full program information. Keep pressing the key can switch to different views of the information.

7 - Google Play

To launch the Google Play App.

8 - YouTube

To launch the YouTube App.

9 - SOURCES

- To open or close the Sources menu.
- To pair the remote control to the TV.

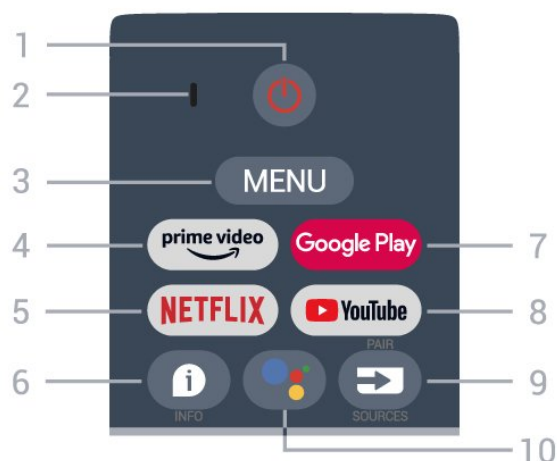
10 - Google Assistant™

To launch the Google Assistant™.

3.2

Key Overview (Type 2)

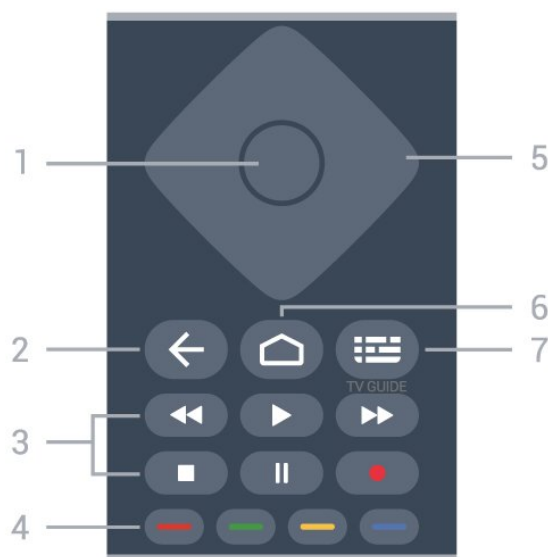
Top



1 - Power (Standby / On)

To switch the TV on or back to Standby.

Middle



1 - OK key

To confirm a selection or setting. To open the channel

list while watching TV.

2 - Back

- To return to previous menu or TV source.
- To go back to the previous App.

3 - Playback and Record

- **Play**, to playback.
- **Pause**, to pause playback
- **Stop**, to stop playback
- **Rewind**, to rewind
- **Fast forward**, to go fast forward
- **Record**, to start recording

4 - Color keys

Follow the on-screen instructions to select more options or operations.

Press **Blue key** on Home screen to open the **Help**.

5 - Navigation keys

To navigate up, down, left or right.

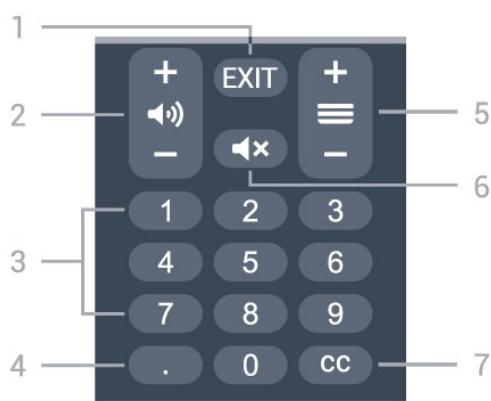
6 - Home

To open the Home menu.

7 - TV GUIDE

To open or close the TV Guide.

Bottom



1 - EXIT

To leave from current menu or App.

2 - Volume

Press + or - to adjust the volume level.

3 - Number keys

To select a channel directly.

4 - (Dot)

To enter digital sub-channels.

5 - Channel

Press + or - to switch to the next or previous channel in the channel list.

6 - Mute

Press to mute the sound or to restore it.

7 - CC

To enable/disable Closed Caption, or to show it on

mute.

3.3

Pair Your Remote Control to the TV

This remote control uses both Bluetooth and IR (infrared) to send its commands to the TV.

- You can use this remote control via IR (infrared) for most operations.
- To use advanced operation like voice search and remote control keyboard, you need to pair (link) the TV with the remote control.

When you start the initial TV installation, the TV invites you to long press the **PAIR** key until you see the light pulsing on the remote. By doing so, the pairing will be done.

Note:

1 - Once the remote control has entered pairing mode successfully, the blue LED indicator ring around the microphone on the front side of the remote control starts blinking.

2 - The remote control must be kept close to the TV (within 3 feet) during pairing in order to ensure success.

3 - If the TV does not launch the voice control field when you press **Google Assistant™**, pairing was unsuccessful.

4 - It is advisable to wait until the set has fully started up and launched all background processes before pairing mode is entered as the toast message containing further instructions may appear too late, thereby negatively impacting the pairing procedure.

Pairing again

If the pairing with the remote control was lost, you can pair the TV with the remote control again. Press the **PAIR** key until you see the light pulsing on the remote for pairing.

Unpair

Press and hold **0** and **Mute** key on the remote control until you see the light pulsing on the remote.

3.4

Voice Search

You can search for videos, music or anything else on the Internet by simply using your voice. You can speak into the microphone on the remote control.

You need to pair the remote control to the TV before use voice search.

To use Voice...

- 1 - Press **Google Assistant™** on remote control, the blue light on the remote control lights up and the search field opens, the microphone is active.
- 2 - Speak out what you are looking for with clear pronunciation. You can speak for 10 seconds before the microphone switches off. It might take some time for the results to appear.
- 3 - In the list of search results, you can select the item you want.

3.5

IR Sensor

The TV can receive commands from a remote control that uses IR (infrared) to send commands. If you use such a remote control, always make sure you point the remote control at the infrared sensor on the front of the TV.



Warning

Do not put any objects in front of IR sensor of the TV as it may block the IR signal.

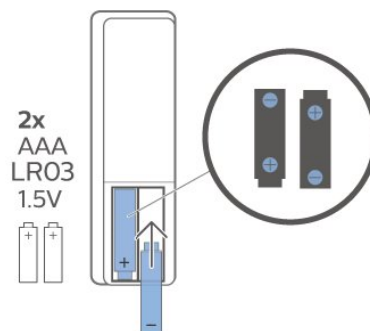
3.6

Batteries

If the TV does not react on a key press on the remote control, the batteries might be empty.

To replace the batteries, open the battery compartment on the back-bottom of the remote control.

- 1 - Slide the battery door in the direction shown by the arrow.
- 2 - Replace the old batteries with 2 type **AAA-1.5V** batteries. Make sure the + and the - ends of the batteries line up correctly.
- 3 - Reposition the battery door and slide it back until it clicks.



Remove the batteries if you are not using the remote control for a long time.

Safely dispose of your old batteries according to the end of use directions.

For more information, in **Help**, select **Keywords** and look up **End of use**.

3.7

Cleaning

Your remote control is treated with a scratch-resistant coating.

To clean the remote control, use a soft damp cloth. Never use substances such as alcohol, chemicals or household cleaners on the remote control.

Switching On and Off

Make sure the TV is connected to the mains AC power. The indicator light at the bottom of the TV lights up.

Switch on

Press **Power** on the remote control to turn the TV on. You can also press the small joystick key on the bottom of the TV to turn the TV on in case you can't find the remote control or its batteries are dead.

Switch to standby

To turn the TV to standby, press **Power** on the remote control. You can also press the small joystick key on the bottom of the TV.



In standby mode, the TV is still connected to the mains power but consumes very little energy.

To switch off the TV completely, disconnect the power plug.

When disconnecting the power plug, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

Channel Installation

5.1

First Time to Install Channels

Install channels during the first TV installation

On the first TV installation, you can follow on-screen instructions to set the menu language, network connection, sign in Google account, select your country and complete other basic settings for the TV. Moreover, you can also install channels during the first TV installation.

To install channels during the first TV installation...

- 1 - The first TV installation starts from Welcome screen with language setting options, follow on-screen instruction to complete multiple TV settings until the channel installation part.
- 2 - Select **Antenna** or **Cable** to install channels. Select **Skip** to skip the channel installation.
- 3 - Follow on-screen instructions to complete one of the channel installation types as your selection. You can install other types of channel installation later on **MENU > TV options > Settings > Channel**.

For more details about **Antenna** or **Cable** channel installation, please refer to respective installation instruction sections.

5.2

Antenna

Antenna Installation

Please note that before installing channels, you should first change the **Channel Installation Mode** to the one you want to install. For the Antenna channel installation, you need to change **Channel Installation Mode** to **Antenna** first and then start the installation.

To install Antenna channels...

- 1 - Press **Home > Settings > Channel > Channel Installation Mode** and press **OK**.
- 2 - Select **Antenna** and then go back to **Channel**.
- 3 - Select **Channels > Channel Scan** and press **OK**.

Alternatively, while watching a TV channel, you can perform the channel scan by...

MENU > Navigation Keys up > Channels > Channel

5.3

Cable Installation

Please note that before installing channels, you should first change the **Channel Installation Mode** to the one you want to install. For the Cable channel installation, you need to change **Channel Installation Mode** to **Cable** first and then start the installation.

To install Cable channels...

- 1 - Press **Home > Settings > Channel > Channel Installation Mode** and press **OK**.
- 2 - Select **Cable** and then go back to **Channel**.
- 3 - Select **Channels > Channel Scan or Update Scan**, then press **OK**.

Alternatively, while watching a TV channel, you can perform the channel scan by...

MENU > Navigation Keys up > Channels > Channel

5.4

Channel Installation Options

Channel Skip

You can skip the channels you do not want to watch.

To set the skipped channels ...

- 1 - While watching TV, press **MENU > TV options > Settings > Channel > Channels** and press **OK**.
- 2 - Select **Channel Skip*** and press **OK**.
- 3 - Select the channels you want to skip and press **OK**. The check mark is shown.
- 4 - Press **Back**, repeatedly if necessary, to close the menu.

* Note: You cannot skip the current watching channel.

Channel Edit

You can edit the channels from the channel list.

To edit the channels ...

- 1 - While watching TV, press **MENU > TV options > Settings > Channel > Channels** and press **OK**.
- 2 - Select **Channel Edit** and press **OK**.
- 3 - Use the **Navigation** keys to select the channel and press **Yellow key** for **Select**.
- 4 - Edit the channel number* and channel name.
- 5 - Press **Back**, repeatedly if necessary, to close the menu.

* Note: Depending on your installation country or operator setting, channel number editing is not always available.

Channels

6.1

About Channels and Switch Channels

To watch TV channels

- Press **SOURCES** and select **TV** to watch channels.
- Alternatively, you can Press **Home > Live TV** and press **OK** to watch TV channels. If Live TV is not on your Apps row, you can press **+** icon on the end of the row to add the app.

To change TV channels

- Press **Channel +** or **Channel -** to switch channels.
- If you know the channel number, type in the number with the number keys. Press **OK** after you entered the number to change channels.

To change to a channel from a channel list

- While watching a TV channel, press **OK** to open the channel lists. The channel list only includes the channels from current broadcast source.
- To view a different channel list from another broadcast source, press **MENU > Navigation Keys up > Channels > Channel > Channel Installation Mode** and select other broadcast source you want to watch channels and view the channel list.
- The channel list can have several pages with channels. To view the next or previous page, follow the on-screen instruction.
- To close the channel lists without changing channels, press **Back**.

6.2

Channel Lists

About Channel Lists

After a channel installation, channels appear on the channel list. The channels displayed in All Channel list is listed based on TV source. Channels are shown with their name if this information is available.

With a channel list selected, press **Navigation keys** up or down to select a channel, then press **OK** to watch the selected channel.

The TV may not work properly with some digital television operators that are non-compliant with the full requirements of the standard.

Open a Channel List

Next to the list with all channels, you can select a filtered list or you can select one of the favorite lists you created.

To open the current channel list...

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - The channel list only includes the channels from current broadcast source.
- 3 - To view a different channel list from another broadcast source, press **MENU > Navigation Keys up > Channels > Channel > Channel Installation Mode** and select other broadcast source you want to watch channels and view the channel list.
- 4 - Press **Back** to close the channel list.

To change the type of channel list...

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - Press **Yellow key** for **Select More** and then select **Select Type** (for example, **Broadcast** or **Favorites**) to immediately change the channel list to your preferred list.
- 3 - Press **Back** to close the channel list.

Search for a Channel

You can search for a channel to find it in a long list of channels.

To search for a channel...

- 1 - Press **OK** to open the current channel list.
- 2 - Press **Yellow key** for **Select More**.
- 3 - Select **Operation > Find** and press **OK** to open a text field. You can use the remote control keyboard (if available) or the on-screen keyboard to enter text.
- 4 - Enter a number, a name or part of a name and press **OK**. The TV will search for matching channel names in the list you selected.

Search results are listed with current channel list type you have selected (for example, **Broadcast** or **Favorites**). The search will return the matching channel name with the result arranged in alphabetical order. The search results disappear once you select another channel list or close the list with search results.

Channel List Sorting

You can do channel list sorting with all channels. You can set the channel list to show only TV channels or only Radio stations. For Antenna channels you can set the list to show the Free or the Scrambled channels.

To set a filter on a list with all channels...

- 1 - Press **OK** to open the current channel list.
- 2 - Press **Yellow** key for **Select More**.
- 3 - Select **Operation > Sort** and press **OK**.
- 4 - Select the filter you want and press **OK** to activate. The name of the filter appears as part of the channel list name on top of the channel list.
- 5 - Press **Back** to close the channel list.

6.3

Watching channels

Tune to a Channel

To start watching TV channels, press **SOURCES**. The TV tunes to the channel you last watched.

Alternatively, you can select **Live TV** from the Home screen.

Change Channels

To switch channels, press **Channel +** or **Channel -**. If you know the channel number, type in the number with the number keys. Press **OK** after you entered the number to change immediately.

You can also tune to channels from a **Channel List** by pressing **OK**.

Parental Controls

Lock and Unlock a Channel

To prevent children from watching a channel, you can lock a channel. To watch a locked channel, you must enter the 4 digit PIN code first. You cannot lock programs from connected devices.

To lock or unlock a channel...

- 1 - Press **MENU > Settings > Channel > Parental Controls** and press **OK**.
- 2 - Enter your PIN code if necessary.
- 3 - Select **Channels Blocked** and press **OK**.
- 4 - Press **Navigation** keys up or down to select the channel you want to lock or unlock, and press **OK**.
- 5 - A locked channel is marked with a lock icon.
- 6 - Press **Back**, repeatedly if necessary, to close the menu.

Program Restrictions

To prevent children from watching a program that may not be suitable for them, you can set a rating.

Digital channels can have their programs rated. When the rating of a program is equal to or higher than the rating you have set, the program will be locked. To watch a locked program, you must enter the PIN code first.

To set a rating...

- 1 - Press **MENU > Settings > Channel > Parental Controls** and press **OK**.
- 2 - Enter your PIN code if necessary.
- 3 - Select **Program Restrictions** and press **OK**.
- 4 - Select **On** to set the rating.
- 5 - Select **Ratings** and press **OK**.
- 6 - Set the restrictions for your children.
- 7 - Press **Back**, repeatedly if necessary, to close the menu.

To turn off the parental rating, select **None**. However, in some countries you must set a rating.

For some broadcasters/operators, the TV only locks programs with a higher rating. The parental rating is set for all channels.

Inputs Blocked

To prevent from using connected devices, you can lock an input source. To connect a locked input source, you must enter the 4 digit PIN code first.

To lock or unlock an input source...

- 1 - Press **MENU > Settings > Channel > Parental Controls** and press **OK**.
- 2 - Enter your PIN code if necessary.
- 3 - Select **Input Blocked** and press **OK**.
- 4 - Press **Navigation** keys up or down to select the source you want to lock or unlock, and press **OK**.
- 5 - A locked source is marked with a lock icon.
- 6 - Press **Back**, repeatedly if necessary, to close the menu.

Change PIN

Set new or reset PIN code. The PIN code is used to lock or unlock channels or programs.

- 1 - Press **MENU > Settings > Channel > Parental Controls** and press **OK**.
- 2 - Enter your PIN code if necessary.
- 3 - Select **Change PIN** and press **OK**.
- 4 - Enter the current PIN code and new PIN code.
- 5 - Press **Back**, repeatedly if necessary, to close the menu.

Favorite Channels

About Favorite Channels

In a favorite channel list, you can collect the channels you like.

You can create 4 different lists of favorite channels for easy channel zapping.

With a Favorites List selected, press the Navigation keys up or down to select a channel, then press **OK** to watch the selected channel.

Edit a Favorites List

To add a channel to the favorite list...

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - Press **Navigation** keys up or down to select a channel.
- 3 - Press **Blue** key to add the channel to a favorites list (default list is **Favorites1**). Press **Blue** key again will remove the channel from the favorite list.
- 4 - Press **Back** to close the menu.

To create a favorite channels list...

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - Press **Yellow** key for **Select More**.
- 3 - Select **Select Type > Favorites** and then press **Navigation** keys up or down to select a list of **Favorites1** to **Favorites4** that you want to add.
- 4 - Press **Yellow** key for **Select More** and then select **Select Type** to change the channel list to your preferred list.
- 5 - Press **Blue** key to add the channel to the favorites list you just selected. Press **Blue** key again will remove the channel from the favorite list.
- 6 - Press **Back** to close the menu.

To move or remove a channel from the favorites list...

- 1 - Select a list of **Favorites1** to **Favorites4** you want to edit.
- 2 - Press **Yellow** key for **Select More**.
- 3 - Select **Operation > Move** to move the channel positions on the favorites channel list.
- 4 - Select **Operation > Delete** to remove the channels from the favorites channel list.
- 5 - Press **Back**, repeatedly if necessary, to close the menu.

Connect Devices

7.1

About Connections

Connectivity Guide

Always connect a device to the TV with the highest quality connection available. Also, use good quality cables to ensure a good transfer of picture and sound.

When you connect a device, the TV recognizes its type and gives each device a correct type name. You can change the type name if you wish. If a correct type name for a device is set, the TV automatically switches to the ideal TV settings when you switch to this device in the Sources menu.

Antenna port

If you have a Set-top box (a digital receiver) or Recorder, connect the antenna cables to run the antenna signal through the Set-top box and/or Recorder first before it enters the TV. In this way, the antenna and the Set-top box can send possible additional channels to the Recorder to record.

HDMI ports

HDMI Quality

An HDMI connection has the best picture and sound quality. One HDMI cable combines video and audio signals. Use an HDMI cable for High Definition (HD) TV signals.

For best signal quality transfer, use a High speed HDMI cable and do not use an HDMI cable longer than 5 m.

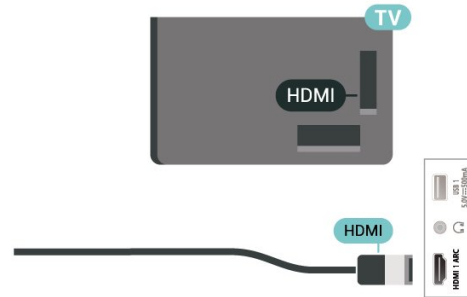
Copy protection

HDMI ports support HDCP 2.2 (High-bandwidth Digital Content Protection). HDCP is a copy protection signal that prevents copying content from a DVD disc or Blu-ray Disc. Also referred to as DRM (Digital Rights Management).

HDMI ARC

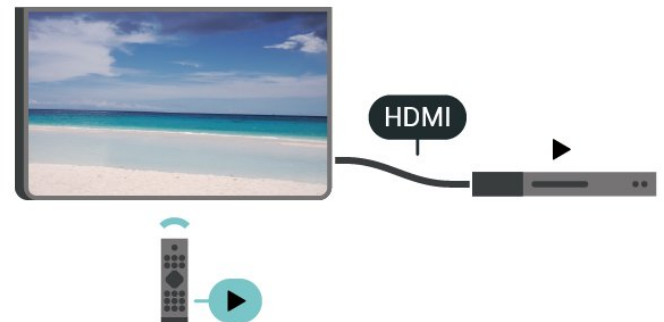
Only HDMI 1 connection on the TV has HDMI ARC (Audio Return Channel).

If the device, typically a Home Theater System (HTS), also has the HDMI ARC connection, connect it to HDMI 1 on this TV. With the HDMI ARC connection, you do not need to connect the extra audio cable that sends the sound of the TV picture to the HTS. The HDMI ARC connection combines both signals.



HDMI CEC

Connect HDMI CEC-compatible devices to your TV, you can operate them with the TV remote control.



HDMI CEC (Consumer Electronic Control) must be turned on on the TV and the connected device.

Turn on CEC

Allow the TV to control the HDMI device.

Home > Settings > Device Preferences > Inputs > HDMI control.

Device Auto Power Off

Turn off the HDMI devices with the TV.

Home > Settings > Device Preferences > Inputs > Device auto power off.

TV Auto Power On

Power on the TV with HDMI devices.

Home > Settings > Device Preferences > Inputs > TV auto power on.

HDMI EDID Version

Check the HDMI EDID version number.

Home > Settings > Device Preferences > Inputs > HDMI EDID Version.

CEC Device List

Check the connected HDMI CEC device list.

Home > Settings > Device Preferences > Inputs > CEC device list.

Note:

- HDMI CEC might not work with devices from other brands.
- The HDMI CEC functionality has different names on different brands. Some examples are: Anynet, Aquos Link, Bravia Theatre Sync, Kuro Link, Simplink and Viera Link. Not all brands are fully compatible with EasyLink. Example HDMI CEC branding names are property of their respective owners.

7.2

Home Theater System – HTS

Connect with HDMI ARC

Use an HDMI cable to connect a Home Theater System (HTS) to the TV. You can connect a Philips Soundbar or an HTS with a built-in disc player.

HDMI ARC

If your Home Theater System has an HDMI ARC connection, you can use HDMI ARC connection on the TV to connect. With HDMI ARC, you do not need to connect the extra audio cable. The HDMI ARC connection combines both signals.

Since HDMI 1 on the TV can offer the Audio Return Channel (ARC) signal, the TV can only send the ARC signal to this HDMI connection.

Audio to video synchronization (sync)

If the sound does not match the video on screen, you can set a delay on most Home Theater Systems with a disc player to match the sound with the video.

Connect with HDMI

Use an HDMI cable to connect a Home Theater System (HTS) to the TV. You can connect a Philips Soundbar or an HTS with a built-in disc player.

If the Home Theater System has no HDMI ARC connection, add an optical audio cable to send the sound of the TV picture to the Home Theater System.

Audio to video synchronization (sync)

If the sound does not match the video on screen, you can set a delay on most Home Theater Systems with a disc player to match the sound with the video.

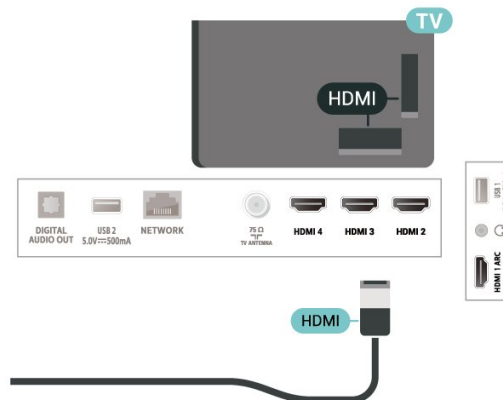
7.3

Video Device

HDMI

Use a **High speed HDMI** cable to connect with best picture and sound quality.

For best signal quality transfer, use a high-speed HDMI cable. Do not use an HDMI cable longer than 16 feet (5 meters). You can connect devices supporting HDR to any of the HDMI connectors.



Copy protection

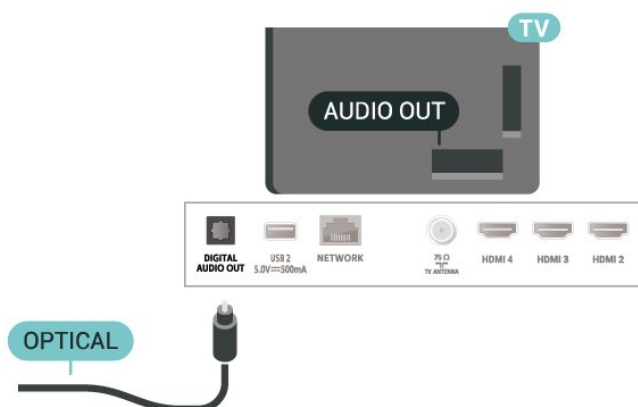
HDMI ports support HDCP (High-bandwidth Digital Content Protection). HDCP is a copy protection signal that prevents copying content from a DVD disc or Blu-ray Disc. Also referred to as DRM (Digital Rights Management).

Audio Device

Digital Audio Out - Optical

Audio Out - Optical is a high quality sound connection.

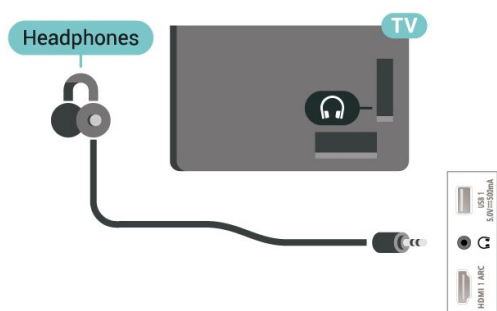
This optical connection can carry 5.1 audio channels. If your device, typically a Home Theater System (HTS), has no HDMI ARC connection, you can use this connection with the Audio In - Optical connection on the HTS. The Audio Out - Optical connection sends the sound from the TV to the HTS.



Headphones

You can connect a set of headphones to the headphone connector on the back of the TV. The connection is a mini-jack 3.5mm.

* Note: TV Speakers will be muted when the Headphones are plugged in.



USB Hard Drive

What You Need

If you connect a USB Hard Drive, you can pause or record digital TV broadcasts. The TV broadcast must be a digital broadcast (DVB broadcasts or similar).

Minimum Disk Space

- To Pause

To pause a broadcast, you need a USB 2.0 compatible Hard Drive with a minimum of 4GB disk space.

- To Record

To pause and record a broadcast, you need a minimum of 250GB disk space.

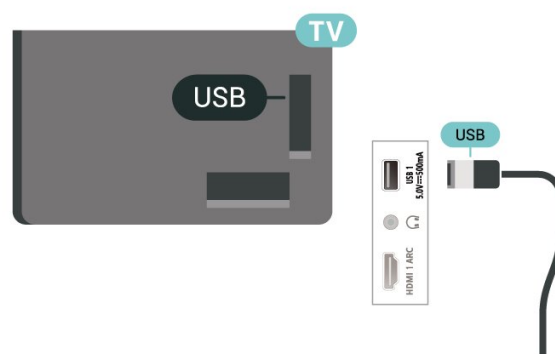
Installation

Before you can pause or record a broadcast, you must connect and format a USB Hard Drive. Formatting removes all files from the USB Hard Drive.

- 1 - Connect the USB Hard Drive to one of the **USB** connections on the TV. Do not connect another USB device to the other USB ports when formatting.
- 2 - Switch on the USB Hard Drive and the TV.
- 3 - When the TV is tuned to a digital TV channel, press **Pause**. Trying to pause will start the formatting.

Follow the instructions on screen.

When the USB Hard Drive is formatted, leave it connected permanently.



Warning

The USB Hard Drive is formatted exclusively for this TV, you cannot use the stored recordings on another TV or PC. Do not copy or change recording files on the USB Hard Drive with any PC application. This will corrupt your recordings. When you format another USB Hard Drive, the content on the former will be lost. A USB Hard Drive installed on your TV will need reformatting for use with a computer.

Formatting

Before you can pause or record a broadcast, or store apps, you must connect and format a USB Hard Drive*. Formatting removes all files from the USB Hard Drive.

Warning

The USB Hard Drive is formatted exclusively for this TV, you cannot use the stored recordings on another TV or PC. Do not copy or change recording files on the USB Hard Drive with any PC application. This will corrupt your recordings.

* Connect the USB Hard Drive with size less than 2TB and make sure the available space is more than 1 GB.

To format a USB Hard Drive...

- 1 - Connect the USB Hard Drive to one of the **USB** connections on the TV. Do not connect another USB device to the other USB ports when formatting.
- 2 - Switch on the USB Hard Drive and the TV.
- 3 - Press **MENU** while watching TV, then press **Navigation keys** down to **Record > Device info**.
- 4 - Select the device you want to format and press **OK**.
- 5 - Select **Format** to start the formatting. All files and data will be removed after formatting.
- 6 - When the USB Hard Drive is formatted, it is recommended to leave it connected permanently.

To assign the storage device for PVR and Time shift...

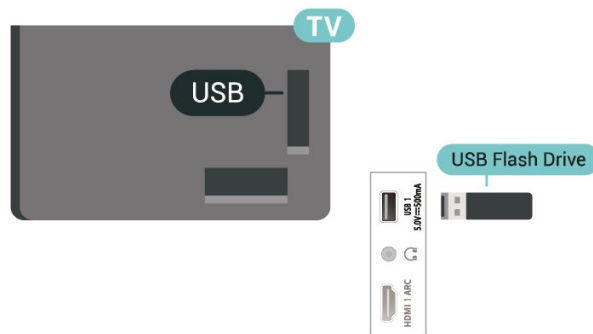
- 1 - Once the formatting is done, you can assign the storage device for PVR or Time shift functions.
- 2 - Press **MENU** while watching TV, then press **Navigation keys** down to **Record > Device info**.
- 3 - Select the device you want to assign and press **OK**.
- 4 - Select **Set timeshift** to assign the device for Time shift data storage. The device will be marked with **TSHIFT** on **Device info** list.
- 5 - Select **Set PVR** to assign the device for recording data storage. The device will be marked with **PVR** on **Device info** list.

7.6

USB Flash Drive

You can view photos or play your music and videos from a connected USB flash drive.

Insert a USB flash drive in one of the **USB** connections on the TV while the TV is switched on.



To view the files from the USB flash drive, you need to add the MMP (MultiMediaPlayer) app to the Home screen first. Press **Home**, clicking the Apps icon at the left end of the Apps row. You can add MMP apps from the Apps page.

To stop watching the USB flash drive content, press **EXIT** or select another activity. Exit the MMP app before you disconnect the flash drive.

To remove the USB flash drive safely...

- 1 - Press **HOME**.
- 2 - Select the **Notifications** icon from the top-right corner and press **OK**.
- 3 - Select your flash drive and press **OK**.
- 4 - Select **Eject** and press **OK**.
- 5 - Wait until the eject procedure is finished and then pull out the flash drive.

Ultra HD on USB

You can view photos in Ultra HD resolution from a connected USB device or flash drive. The TV will downscale the resolution if the resolution of the photo is higher.

7.7

Computer

You can connect your computer to the TV using a high quality HDMI cable and use the TV as a PC monitor.

* Note for AMD Graphics card users:

If you connect your computer to the TV via HDMI, make sure you apply the right settings in the graphics card in order to ensure proper performance.

- If graphics card output video is 4096 x 2160p or 3840 x 2160p and RGB pixel format is used, RGB 4:4:4 pixel format studio (limited RGB) shall be set in the computer graphics card.

Bluetooth

8.1

What You Need

You can connect a wireless device with Bluetooth® to this TV – a wireless speaker or headphones*.

To play the TV sound on a wireless speaker, you must pair the wireless speaker with the TV. The TV can only play the sound on one speaker at a time.

Attention – Audio to Video synchronization

Many Bluetooth speaker systems have a high, so called, 'latency.' High latency means that the audio lags behind the video, causing unsynchronized 'lip sync.' Before you purchase a wireless Bluetooth speaker system, become familiar with the newest models and look for a device with a low latency rating. Ask your dealer for advice.

* Note: The Bluetooth on TV may not work properly with cable free true wireless headphones.

8.2

Pairing a Device

Position the wireless speaker within 15 feet of the TV. Read the user manual of the device for specific information on pairing and on wireless range. Make sure the Bluetooth setting on TV is turned on.

Once a wireless speaker is paired, you can select it to play the TV sound. When a device is paired, you do not need to pair it again unless you remove the device.

To pair a Bluetooth device with the TV...

- 1 – Turn on the Bluetooth device and place it within range of the TV.
- 2 – Press **MENU > TV options > Settings > Remote & Accessories** and press **OK**.
- 3 – Follow the instructions on screen. You will pair the device with the TV and the TV will store the connection. You might need to unpair a paired device first if the maximum number of paired devices was reached.
- 4 – Press **Back**, repeatedly if necessary, to close the menu.

8.3

Select a Device

To select a wireless device...

- 1 – Press **MENU > TV options > Settings > Remote & Accessories** and press **OK**.
- 2 – In the list, select the wireless device and press **OK**.
- 3 – Press **Back**, repeatedly if necessary, to close the menu.

8.4

Rename a Device

To rename a wireless device...

- 1 – Press **MENU > TV options > Settings > Remote & Accessories** and press **OK**.
- 2 – In the list, select the wireless device and press **OK**.
- 3 – Select **Change name** and press **OK**.
- 4 – Enter a new name for the device.
- 5 – Press **Back**, repeatedly if necessary, to close the menu.

8.5

Remove a Device

You can disconnect a wireless Bluetooth device. Once the Bluetooth device is disconnected, the audio output device will go back to TV speakers.

To disconnect a wireless device...

- 1 – Press **MENU > TV options > Settings > Remote & Accessories** and press **OK**.
- 2 – In the list, select the wireless device and press **OK**.
- 3 – Select **Disconnect** and press **OK**.
- 4 – Press **Back**, repeatedly if necessary, to close the menu.

You can also remove a wireless Bluetooth device. If you remove a Bluetooth device, the device will be unpaired.

To remove a wireless device...

- 1 – Press **MENU > TV options > Settings > Remote & Accessories** and press **OK**.
- 2 – In the list, select the wireless device and press **OK**.
- 3 – Select **Unpair** and press **OK**.

4 - Press **Back**, repeatedly if necessary, to close the menu.

Connect your Android TV

Network and Internet

Home Network

To enjoy the full capabilities of your Philips Android TV, your TV must be connected to the Internet.

Connect the TV to a home network with a high-speed Internet connection. You can connect your TV wirelessly or wired to your network router.

Connect to Network

Wireless Connection

What You Need

To connect the TV to the Internet wirelessly, you need a Wi-Fi router with a connection to the Internet.

Use a high-speed (broadband) Internet connection.



Turn Wi-Fi On or Off

MENU > TV options > Settings > Network & Internet > Wi-Fi.

Make the Connection

MENU > TV options > Settings > Network & Internet > Wi-Fi.

- 1 - In the list of found networks, select on your wireless network. If your network is not in the list because the network name is hidden (you switched off the SSID broadcast of the router), select **Add new network** to enter the network name yourself.
- 2 - Follow the on-screen instruction.
- 3 - A message will be shown when the connection is successful.

Problems

Wireless network not found or distorted

- Microwave ovens, DECT phones or other Wi-Fi 802.11b/g/n devices in your proximity might disturb the wireless network.
- Make sure that the firewalls in your network allow access to the TV's wireless connection.
- If the wireless network does not work properly in your home, try the wired network installation.

Internet does not work

- If the connection to the router is OK, check the router connection to the Internet.

The PC and Internet connection are slow

- Look in your wireless router's user manual for information on indoor range, transfer rate and other factors of signal quality.
- Use a high-speed (broadband) Internet connection for your router.

DHCP

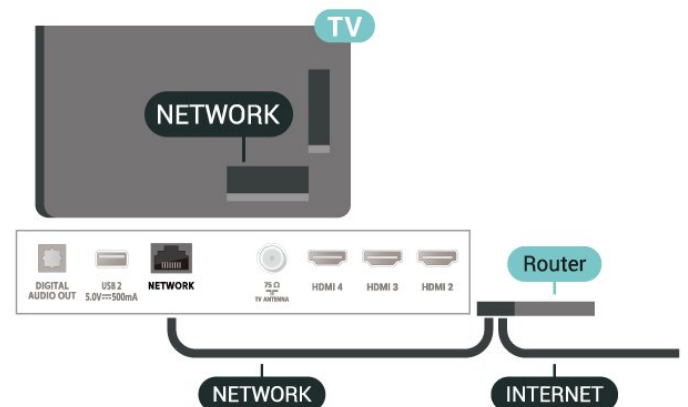
- If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be turned on.

Wired Connection

What You Need

What You Need

To connect the TV to the Internet, you need a network router with an Internet connection. Use a high-speed (broadband) Internet connection.



Make the Connection

- 1 - Connect the router to the TV with a network cable (Ethernet cable**).
- 2 - Make sure that the router is turned on.
- 3 - The TV constantly searches for the network connection.
- 4 - A message will be shown when the connection is successful.

If the connection fails, you can check the DHCP setting of the router. DHCP should be turned on.

**To fulfill EMC regulations, use a shielded FTP Cat. 5E Ethernet cable.

Network settings

Proxy Settings

MENU > TV options > Settings > Network & Internet > Proxy settings.

Enter a valid proxy hostname manually by selecting Manual.

Network Configuration - IP settings

MENU > TV options > Settings > Network & Internet > IP settings.

If the connection fails, you can check the DHCP setting of the router.

Alternatively, if you are an advanced user and want to install your network with static IP addressing, set the TV to Static IP.

9.2

Google Account

Sign In

To enjoy the full capabilities of your Philips Android TV, you can sign in to Google with your Google Account.

By signing in you'll be able to play your favorite games across phone, tablet and TV. You'll also get customized video and music recommendations on your TV home screen as well as access to YouTube, Google Play and other apps.

Sign In

Use your existing **Google Account** to sign in to Google on your TV. A Google Account consists of an email address and a password. If you don't have a Google Account yet, use your computer or tablet to create one (accounts.google.com). To play games with Google Play, you need a Google+ profile. If you did not sign in during the first TV installation, you can always sign in later.

To sign in after completing the TV installation...

- 1 - Select **Settings**.
- 2 - Select **Account & Sign-In** and press **OK**.
- 3 - Select **Sign In** and press **OK**.
- 4 - Select **Use your remote** and press **OK**.

5 - With the on-screen keyboard, enter your email address and press **OK**.

6 - Enter your password and press **OK** to sign in.

7 - Press **Navigation keys** left repeatedly if necessary, to close the menu.

Android Settings

You can set or view several Android specific settings or information. You can find the list of apps installed on your TV and the storage space they need. You can configure the onscreen keyboard or allow apps to use your location. Explore the different Android settings. You can go

to www.support.google.com/androidtv for more information on these settings.

To open these settings...

- 1 - Select **Settings** and press **OK**.
- 2 - Explore the different Android settings.
- 3 - Press **Back** if necessary, to close the menu.

Apps

10.1

About Apps

You can find your favorite Apps on **Apps** row in the Home menu.

Like apps on your smartphone or tablet, the apps on your TV offer specific functions for an enriched TV experience. Apps like YouTube, games, video stores or weather forecasts (a.o.).

Apps can come from the Google Play™ Store. To get you started, some practical apps are pre-installed on your TV.

To install apps from the Google Play™ Store, the TV must be connected to the Internet. You must sign in with a Google Account to use the Google Play apps and Google Play™ Store.

10.2

Google Play

Movies and TV

With **Google Play Movies & TV**, you can rent or buy movies and TV shows to watch on TV.

What You Need

- your TV must be connected to the Internet
- you must sign in with your Google Account on the TV
- add a credit card to your Google Account to purchase movies and TV shows

To rent or buy a movie or TV show...

- 1 - Press **Home**.
- 2 - Select **Google Play Movies & TV**.
- 3 - Select a movie or TV show and press **OK**.
- 4 - Select the purchase you want and press **OK**. You will be taken through the purchase procedure.

To watch a rented or purchased movie or TV show...

- 1 - Press **Home**.
- 2 - Select **Google Play Movies & TV**.
- 3 - Select the movie or TV show from your library in the app, select the title and press **OK**.
- 4 - You can use the **Stop**, **Pause**, **Rewind** or **Fast forward** keys on the remote control.
- 5 - To stop the Movies & TV app, press **Back** repeatedly or press **EXIT**.

If the App is not on you Home screen, you can add via the Apps page or by the **Add app to favorites** item on the **Apps** row. Some Google Play products and features aren't available in all countries.

Find more information
on www.support.google.com/androidtv

Music

With YouTube Music you can play your favorite music on TV and buy new music on your computer or mobile device. Or, on your TV, you can sign up for All Access, the YouTube Music subscription. Alternatively, you can play the music you already own, stored on your computer.

What You Need

- your TV must be connected to the Internet
- you must sign in with your Google Account on the TV
- add a credit card to your Google Account to add a music subscription

To start YouTube Music...

- 1 - Press **Home**.
- 2 - Select **YouTube Music**.
- 3 - Select the music you want and press **OK**.
- 4 - To stop the Music app, press **Back** repeatedly or press **EXIT**.

If the App is not on you Home screen, you can add via the Apps page or by the **Add app to favorites** item on the **Apps** row. Some Google Play products and features aren't available in all countries.

Find more information
on www.support.google.com/androidtv

Games

With Google Play Games, you can play games on TV. Online or offline.

You can see what your friends are playing currently or you can join the game and compete. You can track your achievements or start wherever you left off.

What You Need

- your TV must be connected to the Internet
- you must sign in with your Google Account on the TV
- add a credit card to your Google Account to purchase new games

Start the Google Play Games app to select and install new game apps on your TV. Some games are free of charge. A message appears if a particular game needs a gamepad to play the game.

To start or stop a Google Play Game...

- 1 - Press **Home**.
- 2 - Select **Google Play Games**.
- 3 - Select a game to play or select a new game to install and press **OK**.

4 - When done, press **Back** repeatedly or press **EXIT** or stop the app with its dedicated exit/stop button.

If the App is not on you Home screen, you can add via the Apps page or by the **Add app to favorites** item on the **Apps** row. Some Google Play products and features aren't available in all countries.

Find more information
on www.support.google.com/androidtv

Google Play Store

From the Google Play Store you can download and install new apps. Some apps are free of charge.

What You Need

- your TV must be connected to the Internet
- you must sign in with your Google Account on the TV
- add a credit card to your Google Account to purchase apps

To install a new app...

- 1 - Press **Home**.
- 2 - Select **Google Play Store** and press **OK**.
- 3 - Select the app you want to install and press **OK**.
- 4 - To close the **Google Play Store**, press **Back** repeatedly or press **EXIT**.

Parental Controls

In the Google Play Store, you can hide apps according to users/buyers maturity. You need to enter a PIN code to select or change the level of maturity.

To set the parental control...

- 1 - Press **Home**.
- 2 - Select **Google Play Store** and press **OK**.
- 3 - Select **Settings > Parental controls**.
- 4 - Select the level of maturity you want.
- 5 - When prompted, enter the PIN code.
- 6 - To close the **Google Play Store**, press **Back** repeatedly or press **EXIT**.

If the App is not on you Home screen, you can add via the Apps page or by the **Add app to favorites** item on the **Apps** row. Some Google Play products and features aren't available in all countries.

Find more information
on www.support.google.com/androidtv

Payments

To make a payment on Google Play on TV, you must add a form of payment - a credit card (outside the United States) - to your Google Account. When you purchase a movie or TV show, you will be charged on this credit card.

To add a credit card ...

- 1 - On your computer, go to accounts.google.com and sign in with the Google Account you will use with Google Play on TV.
- 2 - Go to wallet.google.com to add a card to your Google Account.
- 3 - Enter your credit card data and accept the terms and conditions.

10.3

Start or Stop an App

You can start an app from the Home screen.

To start an app...

- 1 - Press **Home**.
- 2 - Move to **Apps** row, select the app you want and press **OK**.
- 3 - To stop an app, press **Back** or press **EXIT** or stop the app with its dedicated exit/stop button.

When opening the Home screen, the background application/content playback will stop. You have to select the application or content from the Home screen to resume.

A note to start the Live TV app

If you have installed the Live TV app on Home screen, please note that the HDMI sources are regarded as App's sources. When the Live TV app is started, it will open with current source, which includes TV and HDMI sources.

10.4

Manage Apps

If you stop an app and return to the Home menu, the app is not really stopped. The app is still running in the background to be readily available when you start it again. To run fluently, most apps need to save some data in the cache memory of the TV. It might be good to stop an app completely or clear the cache data of a particular app to optimize the overall performance of apps and to keep memory usage low on your Android TV. Also, it is best to uninstall apps that you are not using anymore.

Sources

11.1

Switch to a device

From the list of Sources, you can switch to any of the connected devices. You can switch to a tuner to watch TV or switch to your connected devices to watch their program, a digital receiver or a Blu-ray Disc player.

To switch to a connected device...

- 1 - Press **SOURCES** to open the Sources menu.
- 2 - Select one of the items in the source list and press **OK**. The TV will show the program or content of the device.

One Touch Play

With the TV in standby, you can switch on a disc player with your TV remote control.

To switch on both disc player and TV from standby and start playing the disc immediately, press **Play** on the TV remote control. The device must be connected with an HDMI cable and both TV and device must have HDMI CEC switched on.

Settings

12.1

TV Options

Press **MENU** while watching TV, press **Navigation keys** up or down to select one of below menus. Press **Navigation keys** right or left to view more options from the selected menu.

Picture

Adjust the picture settings.

Sound

Adjust the sound settings.

Closed Captions

To enable/disable Closed Caption, or to show it on mute.

Power

Set the timers for saving energy.

Advanced Options

Adjust advanced settings.

Settings

View settings menu.

12.2

Picture Settings

Picture Mode

Select a style

MENU > TV options > Picture > Picture mode.

For easy picture adjustment, you can select a preset picture style.

- User – The picture preferences you set during the first start up.
- Standard – Most energy conscious setting – Factory setting
- Vivid – Ideal for daylight viewing
- Sport – Ideal for sport
- Movie – Ideal for watching movies with original studio effect
- Game* – Ideal for playing games

* Picture mode – Game is not available for some video sources.

When TV receives Dolby Vision HDR signal, select a picture style below:

- Dolby Vision Bright
- Dolby Vision Dark
- Dolby Vision Vivid

Dolby Vision Notification

MENU > TV options > Picture > Dolby Vision Notification and press **OK**.

Turn **On** or **Off** the Dolby Vision notification when Dolby Vision content begins to play on your TV.

Display Mode

If the picture is not filling the whole screen, if black bars are showing on the top or bottom or at both sides, you can adjust the picture to fill the screen completely.

To select one of the basic settings to fill the screen...

MENU > TV options > Picture > Display mode.

Automatic

Automatically zooms in the picture to fit the screen with original aspect ratio. No content lost visible.

Super zoom

Remove the black bars on the sides of 4:3 broadcasts. Not recommended for HD or PC.

4:3

Display the classic 4:3 format.

Movie expand 14:9

Scale 4:3 format to 14:9. Not recommended for HD or PC.

Movie expand 16:9

Scale 4:3 format to 16:9. Not recommended for HD or PC.

Wide screen

Stretches the picture to a 16:9 format.

Full

Automatically enlarges the picture to fill the screen. Picture distortion is minimal, subtitles remain visible. Not suitable for PC input. Some extreme picture content can still show black bars. Picture content aspect ratio may change.

Original

Provide maximum detail for PC.

Other Picture Settings

MENU > TV options > Picture and press OK.

Backlight

Adjust the video backlight intensity.

Brightness

Set the level of brightness of the picture signal.

Note: Setting of brightness much away from reference value (50) may result lower contrast.

Contrast

Adjust the contrast value of the picture.

Saturation

Adjust the color saturation value of the picture.

Hue

Adjust the hue value of the picture.

Sharpness

Adjust the level of sharpness in fine detail of the picture.

Gamma

Set a non-linear setting for picture luminance and contrast. This is a setting intended for expert users.

Color Temperature

Set the picture to a preset color temperature or adjust the setting yourself.

Light sensor

Select **On** to adjust the picture settings automatically to the lighting conditions of the room.

Advanced Video

Set the advance settings.

- DNR
Digital Noise Reduction, image noise reduction filters to reduces the image noise.
- MPEG NR
MPEG Noise Reduction feature to improve the quality of pictures by reducing the noise without compromising the picture resolution.
- Adaptive Luma Control
Dynamic video contrast enhancement to adjust the Luma level of the picture signal automatically. If the PC Mode setting is On, this feature will be off.
- Local Contrast Control
Enhance the contrast level in local area for the image.
- Game Mode
Switch TV to Game mode to have fast response time.
- PC Mode
Switch TV to PC mode to have original picture look.

- HDMI Auto Game Mode
Allow TV to automatically switch to Game mode when the game content is notified by source.

Color Tuner

Fine tune the color setting yourself.

11 Point White Balance Alignment

Customize the whitepoint balance based on the selected color temperature of the picture.

Reset to Default

Reset the current picture settings to default.

12.3

Sound Settings

Sound Mode

MENU > TV options > Sound > Sound Mode > and press OK.

For easy sound adjustment, you can select a preset setting with sound mode.

- Game – Ideal for gaming
- Movie – Ideal for watching movies
- Music – Ideal for listening to music
- Dialog – Ideal for speech
- AI mode – Select AI mode for intelligent switching of sound mode base on audio content.
- User – The sound preferences you set during the first start up

Other Sound Settings

MENU > TV options > Sound and press OK.

Speakers

Set the TV to play the sound on TV or on the connected audio system.

You can select where you want to hear the TV sound and how you want to control it.

- If you select **TV speakers off**, you permanently switch off the TV speakers.
- If you select **TV speakers**, the TV speakers are always on.

With an audio device connected with HDMI CEC, select **HDMI sound system**. The TV will switch off the TV speakers when the device is playing the sound.

* Note: TV Speakers will be muted when the Headphones are plugged in.

USB Audio

Turn **On** or **Off** for the audio output through USB audio device if there is a USB audio peripheral attached to the TV USB port.

Digital Output

Digital output settings are available for optical and HDMI ARC sound signals.

Set the audio out signal of the TV to fit the sound capabilities of the connected Home Theater System.

Digital Output Delay

For some Home Theater Systems you might need to adjust the audio sync delay to synchronize the audio to the video. Select **0** if a sound delay is set on your Home Theater System.

DTS night mode

Select DTS night Mode for a more comfortable quiet listening experience when watching content with DTS Master Audio.

Dolby Audio Processing

Set the advance settings.

- Volume Leveler: select **On** to adjust the volume automatically.
- Dialogue Enhancer: select to get an improved sound quality for speech program.
- Surround Virtualizer: select **On** to create a virtual surround sound experience.
- Dolby Atmos: select **On** to enable Dolby Atmos, which can add height dimension in sound. With height dimension, sound can be precisely placed and moved in three-dimensional space.

Reset to Default

Reset the current sound settings to default.

12.4

Power Settings

MENU > TV options > Power.

Set Sleep timer

Power > Sleep timer.

TV switches to standby mode automatically after a preset time. You can stop the timer when the notification pops to say that two minutes are left.

Set screen off to save energy consumption

Power > Picture off.

Select Picture off, the TV screen is turned off, to turn the TV screen back on, press any key on the remote control.

Set TV switch off timer

Power > Switch off timer.

Select Switch off timer, the TV switches off automatically at a preset time to save energy. The timer will not stop unless the setting is changed to **Off**.

No Signal Auto Power Off

Power > No signal auto power off.

Press **Navigation keys** up or down to set the value. Select **Off** to deactivate the automatic turn off.

* If you use the TV as a monitor or use a digital receiver to watch TV (a Set-Top Box - STB) and you do not use the remote control of the TV, you should deactivate this automatic switch off, to set the value to **Off**.

Set auto sleep timer

Power > Auto sleep.

The TV switches to standby mode automatically after a preset time if the TV does not receive any command from the remote control.

12.5

Advanced Options

Audio

Set the audio language

MENU > TV options > Advanced Options > Audio Language.

The TV channels can broadcast audio with several spoken languages for a program. You can set a preferred audio language. If audio in one of these languages is available, the TV will switch to this audio.

MTS

MENU > TV options > Advanced Options > MTS.

You can switch the sound of an analog channel to **Mono**, **SAP** or **Stereo**.

* Note: MTS is for analog channel only.

Other settings

Device Preferences

Home > Settings > Device Preferences.

System Update

Update TV software from local update or from the Internet.

About

To show the information about this TV or perform Factory reset operation for the TV.

Date & Time

Adjust the date and time settings.

Timer

Set TV switch on or off timer.

Language

Set or change the menu language.

Keyboard

Set the on-screen keyboard type.

Inputs

Rename the Inputs name and adjust the settings for Consumer Electronic Control (CEC).

Power

Set the timers for saving energy.

Picture

Adjust the picture settings.

Sound

Adjust the sound settings.

Ambilight

Adjust the Ambilight settings.

* Ambilight setting is only for models which support

Ambilight function.

Storage

Check the device storage.

Home Screen

Customize the home screen. You can enable or disable the video and audio previews. Reorder the apps and games. Read the Open-source licenses.

Retail Mode

Switch **On** or **Off** the retail mode. If you set the retail mode to on. You can set the retail message type and demo.

Google Assistant

Adjust the settings for Google Assistant. You can also view the Open-source licenses.

Chromecast built-in

Adjust the settings for Chromecast built-in. You can view the Open-source licenses and the version number.

Screen Saver

Adjust the screen saver setting for your preference.

Location

Set the location status.

Usage & Diagnostics

Set to on for automatically send diagnostic information to Google, such as crash reports and usage data from your device, apps and Chromecast built in.

Accessibility

Activate special functions for hearing and visually impaired people.

Reboot

Reboot your TV for better performance when needed.

Remote and Accessories

Home > Settings > Remote and Accessories.

You can select the stored bluetooth connection from the list.

If you cannot find your accessory, select **Add accessory** to search for bluetooth connections.

12.7

Reboot

Home > Settings > Device Preferences > Reboot.

Note:

- Disconnect the external USB hard disc before rebooting.
- Wait for few seconds, the TV restarts automatically.

This will remove unnecessary data and information in the memory.

If your TV runs low performance when using Apps, such as the video and audio are not synchronized or the App is running slow, reboot your TV for better performance.

12.8

Factory Reset

Reset all settings value to original TV settings

Home > Settings > Device Preferences > About > Factory reset.

This will erase all data from your device's internal storage, including: your Google account, system app data, download apps and settings. All settings will be reset and installed channels will be erased.

12.9

Clock and Language Settings

Menu Language

Change the language of the TV menu

Home > Settings > Device Preferences > Language.

- 1 - Press **Home** to go to Home screen.
- 2 - Select **Device Preferences > Language**.
- 3 - Select your language and press **OK**.
- 4 - Press **Back** or **EXIT** repeatedly to close the menu.

Audio Language

Set audio preference language

MENU > TV options > Advanced Options > Audio Language/Primary Audio/Secondary Audio or Audio Channel.

The TV channels can broadcast audio with several spoken languages for a program. You can set a preferred primary and secondary audio language. If audio in one of these languages is available, the TV will switch to this audio.

Clock

Home > Settings > Device Preferences > Date & time.

Correct clock automatically

Automatic date & time > Use network-provided time.

- The standard setting for the TV clock is automatic. The time information comes from the broadcasted UTC - Coordinated Universal Time information.

Correct clock manually

Automatic date & time > Off.

Select **Set date** and **Set time** to adjust the value.

Note:

If none of the automatic settings display the time correctly, you can set the time manually.

Set time zone or set a time offset for your region

Date & time > Set time zone.

Select the time zone of your preference.

Set the time format to 24-hour

Date & time > Use 24-hour format.

Enable to show the system time in 24-hour format, else show in 12-hour format time.

Timer

Set TV switch on or off timer

Home > Settings > Device Preferences > Timer.

Set Power on time type or Power off type to On or Once.

12.10

Accessibility Settings

The TV is prepared for use of the deaf, hard of hearing, blind or partially sighted people.

Accessibility for blind or partially sighted people

Home > Settings > Device Preferences > Accessibility > Audio Description.

Digital TV channels can broadcast special audio commentary describing what is happening on screen. Select to enable or disable the audio description.

Visually Impaired

Accessibility > Visually Impaired.

When Audio Description is on, more Visually Impaired options are available. Set the speaker, headphone volume of the normal audio with the audio commentary or set the extra audio effects in the commentary audio. You can adjust the effect with below settings.

- Speaker
- Headphone
- Volume
- Pan and Fade
- Audio for Visually Impaired
- Fader Control

Audio Hearing Impaired

Accessibility > Audio Hearing Impaired.

Turn on/off the text to describe the sound or visual information on screen.

Videos, Photos, Music & Text

From a USB Connection

You can view your photos or play your music and videos from a connected USB flash drive.

With the TV turned on, plug in a USB flash drive to one of the USB connections.

- 1 - Press **Home**, select **MMP** from the Apps list and press **OK**.
- 2 - Use **Navigation keys** to select the file type.
- 3 - Follow the on-screen instructions to play the files.

Play your Videos

Play a video

- 1 - Press **Home**, select **MMP** from the Apps list and press **OK**.
- 2 - Use **Navigation keys** to select **Video**.
- 3 - Select one of the videos, and press **OK** to play.

During the video playback...

- Press **MENU** to show the options.

Play, Pause

Press **OK** to play or pause the video.

Repeat

Play videos repeatedly or once.

Show Info

Display the information of the video file.

Display Mode

Adjust the display mode.

Picture

Adjust the picture settings.

Sound

Adjust the sound settings.

Sound Tracks

Display the soundtracks.

Last Memory

When set to **On**, you can play the video where you left last time. Set to **Off** to turn off the function.

View your Photos

View Photos

View a photo

- 1 - Press **Home**, select **MMP** from the Apps list and press **OK**.
- 2 - Use **Navigation keys** to select **Photo**.
- 3 - Select one of the photos, and press **OK**.

When browsing photo thumbnails, press **MENU** to...

Sort

Sort the photo files by your preference.

Media Type

Sort the files by media type.

Thumbnail Size

Change the thumbnail viewing size.

Copy

Copy the file and place it in your preferred folder.

Paste

Place the copied file to your preferred folder.

Delete

Delete the selected file.

Recursive parser

Select from the **Recursive parser** or **Normal parser**.

Photo Frame

Select to start the Photo Frame mode.

Photo Options

When viewing photo files, press **MENU** to...

Pause

Press **OK** to pause the photos.

Repeat

View the pictures repeatedly or once only.

Shuffle on, Shuffle off

View the pictures in sequential order, or at random.

Duration

Set the speed of the slideshow.

Effect

Set the transition from one picture to the next.

Show info

Display the information of the picture file.

Photo Frame image

Set the picture as Photo Frame image.

Picture

Adjust the picture settings.

13.4

Play your Music

Play music

1 - Press **Home**, select **MMP** from the Apps list and press **OK**.

2 - Use **Navigation keys** to select **Audio**.

3 - Select one of the audio, and press **OK** to play.

During the audio playback...

• Press **MENU** to show the options.

Play, Pause

Press **OK** to play or pause the music.

Repeat

Play music repeatedly or once.

Shuffle On, Shuffle Off

Play audio in sequential order, or at random.

Show Info

Display the information of the music file.

Lyric Options

Select the options when the lyrics are available.

Picture Off

Close the screen when play the music for energy saving.

Sound

Adjust the sound settings.

13.5

View your Text

View text

1 - Press **Home**, select **MMP** from the Apps list and press **OK**.

2 - Use **Navigation keys** to select **Text**.

3 - Select one of the text file, and press **OK** to preview.

During the preview...

• Each file lasts 3 seconds for preview. Press **OK** to pause the preview to read.

• Press **MENU** to show the options.

Play, Pause

Press **OK** to play or pause the text file preview.

Repeat

Preview the text files repeatedly or once.

Shuffle On, Shuffle Off

Preview the text files in sequential order, or at random.

Font

Adjust the text **Size**, **Style** and **Color**.

Show Info

Display the information of the text file.

TV guide

TV Guide Data

With the TV Guide you can view a list of the current and scheduled TV programs of your channels. Not all channels offer TV Guide information.

The TV Guide receives information (data) from broadcasters. The TV can collect TV Guide information for the channels that are installed on the TV. The TV cannot collect the TV Guide information for channels viewed from a digital receiver or decoder.

Using the TV Guide

To open the TV Guide, press **TV GUIDE** key on the remote control. The TV Guide shows the channels of the selected tuner. Press **TV GUIDE** again to close

Alternately, while watching TV, press **MENU** > **Navigation keys up** > **Channels** > **Program Guide** to open the TV Guide.

The TV Guide receives information (data) from broadcasters. In some regions and for some channels, TV Guide information might not be available.

Recording and Time Shift

15.1

Record Options

Press **MENU** while watching TV, then press **Navigation** keys down and select one of below menus.

Record List

You can view and manage your recordings in the list of recordings.

Device Info

Check the information about the storage device for TV recording. You can also format or test the speed of the device.

Schedule List

You can schedule a recording of an upcoming program and view the scheduled list.

Time Shift Mode

Turn on/off Time Shift Mode. When the mode is on and your storage device is ready for the time shift recording, you can pause a TV broadcast and resume watching it a bit later.

15.2

Recording

What You Need

You can record a digital TV broadcast and watch it later.

To record a TV program, you need...

- a connected USB storage device formatted to FAT32
- digital TV channels installed on this TV
- to receive channel information for the on-screen TV Guide
- a reliable TV clock setting. If you reset the TV clock manually, recordings may fail.

A storage device need to be assigned as the recording data storage before you can start the recording.

To assign a storage device for recording...

- 1 - Press **MENU** while watching TV, then press **Navigation** keys down to **Record > Device info**.
- 2 - Select the device you want to assign and press **OK**.

- 3 - Select **Set PVR** to assign the device for recording data storage. The device will be marked with **PVR** on **Device info** list.

You cannot record when you are using Time shift function.

In terms of enforcement of copyright legislation, some channel providers can apply different restriction by means of DRM (Digital Right Management) technology. In case of broadcasting protected channels, recording, record validity or number of views may be restricted. Recording may be completely prohibited. In case of trying to record a protected broadcasting or play back an expired recording, an error message can appear.

Note:

Recording function is only for digital TV broadcast. It is not possible to record content from external devices (e.g. HDMI).

Record a program

Record Now

To record the program you are watching right now, press **Record** key on the remote control. The recording will start immediately.

To stop the recording, press **Stop** key on the remote control.

* Note: The instant recording will be stopped when a reminder or scheduled recording is triggered.

Schedule a Recording or Reminder

You can schedule a recording or reminder of an upcoming program for today or a few days from today (maximum of 8 days away). The TV will use the data from the TV Guide to start and end the recording.

To record a program...

- 1 - Press **MENU > Navigation** keys down > **Record > Schedule list** and press **OK**.
- 2 - Press **Record** key on the remote control.
- 3 - Follow the on-screen instruction. Use **Navigation** keys to select and set the settings.
- 4 - Select **Add** and press **OK**.
- 5 - If you need to set a reminder, go to **Schedule Type** and change the setting to **Reminder**.

List of Recordings

You can view and manage your recordings in the list of recordings.

To open the list of recordings...

- 1 - Press **MENU** > **Navigation keys** down > **Record** > **Record list** and press **OK**.
- 2 - With a recording selected in the list, you can use the color keys to remove the recording or show the recording information.
- 3 - Press **Back** to close the menu.

Watch a Recording

To watch a recording...

- 1 - Press **MENU** > **Navigation keys** down > **Record** > **Record list** and press **OK**.
- 2 - In the list of recordings, press **OK** to play the recording.
- 3 - You can use the **Playback keys** for pause, play, rewind, fast forward or stop.
- 4 - To switch back to watch TV, press **EXIT**.

15.3

Time Shift

What You Need

You can pause a digital TV broadcast and resume watching later.

To pause a TV program, you need...

- a connected USB storage device formatted to FAT32
- digital TV channels installed on this TV

A storage device need to be assigned as the Time shift data storage before you can start the Time shift.
To assign a storage device for Time shift...

- 1 - Press **MENU** while watching TV, then press **Navigation keys** down to **Record** > **Device info**.
- 2 - Select the device you want to assign and press **OK**.
- 3 - Select **Set timeshift** to assign the device for Time shift data storage. The device will be marked with **TSHIFT** on **Device info** list.

With the USB storage device connected and formatted, the TV continuously stores the TV broadcast you are watching. When you switch to another channel, the broadcast of the former channel is cleared. Also when you switch the TV to standby, the broadcast is cleared.

You cannot use Time shift function when you are recording.

Pause a program

To pause and resume a broadcast...

- To pause a broadcast, press **Pause**. A progress bar at the bottom of the screen appears briefly.
- To call up the progress bar, press **Pause** again.
- To resume watching, press **Play**.

With the progress bar on screen, press **Rewind** or press **Forward** to select from where you want to start viewing the paused broadcast. Press these keys repeatedly to change speed.

You can pause a broadcast for a maximum time span of 90 minutes.

To switch back to the live TV broadcast, press **Stop**.

Replay

Since the TV stores the broadcast you are watching, you can replay the broadcast for a few seconds.

To replay a current broadcast...

- 1 - Press **Pause**
- 2 - Press **Rewind**. You can press it repeatedly to select from where you want to start viewing the paused broadcast. Press these keys repeatedly to change speed. At one point you will reach the start of the broadcast storage or the maximum time span.
- 3 - Press **Play** to watch the broadcast again.
- 4 - Press **Stop** to watch the broadcast live.

Smartphones and Tablets

Google Cast

What You Need

If an app on your mobile device has Google Cast, you can cast your app on this TV. On the mobile app, look for the Google Cast icon. You can use your mobile device to control what's on TV. Google Cast works on Android and iOS.

Your mobile device must be connected to the same Wi-Fi home network as your TV.

Apps with Google Cast

New Google Cast apps come available every day. You can already try it with YouTube, Chrome, Netflix, Photowall ... or Big Web Quiz for Chromecast. See also google.com/cast

Some Google Play products and features aren't available in all countries.

Find more information on www.support.google.com/androidtv

Cast to Your TV

To cast an app to the TV screen...

- 1 - On your smartphone or tablet, open an app that supports Google Cast.
- 2 - Tap the Google Cast icon.
- 3 - Select the TV you would like to cast to.
- 4 - Press play on your smartphone or tablet. What you selected should start playing on TV.

Netflix

If you have a Netflix subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet. In your region, Netflix might only come available with future software updates.

To open Netflix, press **NETFLIX** on the remote control to open the Netflix App. You can open Netflix immediately from a TV in standby.

www.netflix.com

Software

18.1

Update Software

Local Updates

You need a computer with a high-speed Internet connection and a USB flash drive to upload the software on the TV. Use a USB flash drive with at least 2GB free space. Make sure that write protection is switched off.

- 1 - Press **Home > Settings > Device Preferences > System update > Local Updates** and press **OK**.
- 2 - Follow the instructions on screen.

Update from Internet

If the TV is connected to the Internet, you may receive a message to update the TV software. You need a high-speed (broadband) Internet connection. If you receive this message, we recommend you carry out the update.

- 1 - Press **Home > Settings > Device Preferences > System update > Internet** and press **OK**.
- 2 - Follow the instructions on screen.

18.2

Software Version

To view the current TV software version...

- 1 - Select **Home > Settings > Device Preferences > About > Software version**.
- 2 - The version, release notes and creation date are shown. Also, the Netflix ESN Number is shown if available.
- 3 - Press **Back** if necessary, to close the menu.

18.3

Open Source Licenses

To view the Open-source licenses...

- 1 - Select **Home > Settings > Channel**, or select **Home > Settings > Device Preferences > Google Assistant**.
- 2 - Select **Open-source licenses** and press **OK**.
- 3 - Press **Back** if necessary, to close the menu.

Specifications

Environmental

End of Use

Disposal of your old product and batteries

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused.



When this crossed-out wheeled bin symbol is attached to a product, it means that the product is covered by European Directive 2012/19/EU.



Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. Correct disposal of your old product helps prevent potential negative consequences for the environment and human health.

Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed with normal household waste.



Please find out for yourself about the local rules on separate collection of batteries because correct disposal will help prevent negative consequences for the environment and human health.

Power

Product specifications are subject to change without notice. For more specification details of this product, see www.philips.com/TVsupport

Power

- Mains power: AC 110–240V +/-10%
- Ambient temperature: 5°C to 35°C (40°F to 95°F)
- Power saving features: Sleep timer, Switch off timer, Picture off, No Signal Auto Power Off, Auto sleep.

Operating System

Android OS:

Android 10

Reception

- Antenna input: 75 ohm coaxial (F-type)
- Tuner bands: Hyperband, UHF, VHF
- ISDBT
- Analog video playback: NTSC, PAL, SECAM
- Digital video playback: MPEG2 SD/HD (ISO/IEC 13818-2), MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)

Display Type

Diagonal screen size

- 108 cm/43 inch
- 126 cm/50 inch
- 139 cm/55 inch
- 164 cm/65 inch
- 177 cm/70 inch

Display resolution

- 3840 x 2160

Display Input Resolution

Supported Video only resolution

Resolution — Refresh rate

- 480i – 60 Hz
- 576i – 50 Hz
- 1080i – 50 Hz, 60 Hz

Supported Computer/Video resolution

Resolution — Refresh rate

- 640 x 480 – 60Hz
- 576p – 50Hz
- 720p – 50 Hz, 60 Hz
- 1920 x 1080p – 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz
- 2560 x 1440 – 60 Hz
- 3840 x 2160p – 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

19.7

Connectivity

TV Side

- USB 1: USB 2.0
- Headphones: Stereo mini-jack 3.5mm
- HDMI 1 in: ARC – Ultra HD – HDR

TV Bottom

- Digital Audio out: Optical
- USB 2: USB 2.0
- Network LAN: RJ45
- Antenna (75 ohm)
- HDMI 2 in: Ultra HD – HDR
- HDMI 3 in: Ultra HD – HDR
- HDMI 4 in: Ultra HD – HDR

19.8

Sound

Output power (RMS): 20W

Dolby MS12 V2.5

- Dolby Atmos
- DTS – HD (M6)
- Surround Virtualizer + Height Virtualizer
- Dolby Bass Enhancement
- Dolby Dialogue Enhancement
- Dolby Volume (AVL/Night Mode)
- AI Sound

19.9

Multimedia

Connections

- USB 2.0
- Ethernet LAN RJ-45
- Wi-Fi 802.11n Dual Band (built-in)
- BT 5.0

Supported USB file systems

- FAT 16, FAT 32, NTFS

Playback formats

- Containers: PS, TS, M2TS, TTS, AVCHD, MP4, M4V, MKV, ASF, AVI, 3GP, QuickTime
- Video Codecs: AVI, MKV, HEVC, H264/MPEG-4 AVC, MPEG-1, MPEG-2, MPEG-4, VP9, HEVC (H.265), AV1

- Audio Codecs: MP3, WAV, AAC, WMA (v2 up to v9.2), WMA-PRO (v9 and v10)
- Subtitles :
 - Formats : SRT, SMI, SSA, SUB, ASS, TXT
 - Character encodings : UTF-8(Unicode), UTF-16, Simplified Chinese, Central Europe, Cyrillic, Western Europe, Greek, Turkish, Hebrew, Korean
- Maximum Supported Data Rate :
 - MPEG-4 AVC (H.264) is supported up to High Profile @ L5.1. 30Mbps
 - H.265 (HEVC) is supported up to Main / Main 10 Profile up to Level 5.1 40Mbps
- Image Codecs: JPEG, GIF, PNG, BMP, HEIF

Help and Support

20.1

Register your TV

Register your TV and enjoy a range of benefits including full support (including downloads), privileged access to information about new products, exclusive offers and discounts, the chance to win prizes and even participate in special surveys about new releases.

Go to www.philips.com/TVsupport

20.2

Troubleshooting

Switch On and Remote Control

The TV does not switch on

- Disconnect the power cable from the power outlet. Wait for one minute then reconnect it.
- Make sure that the power cable is securely connected.

Creaking sound at startup or switch off

When you are turn the TV on, off or to standby, you hear a creaking sound from the TV chassis. The creaking sound is due to the normal expansion and contraction of the TV as it cools and warms up. This does not affect performance.

TV does not respond to the remote control

The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behavior. If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked. If you do not notice the flickering, the remote control might be broken or its batteries are low. This method of checking the remote control is not possible with remote controls which are wirelessly paired with the TV.

The TV goes back to standby after showing the Philips startup screen

When the TV is in standby, a Philips startup screen is displayed, then the TV returns to standby mode. This is normal behavior. When the TV is disconnected and

reconnected to the power supply, the startup screen is displayed at the next startup. To turn on the TV from standby, press power key on the remote control or on the TV.

The standby light keeps on blinking

Disconnect the power cable from the power outlet. Wait 5 minutes before you reconnect the power cable. If the blinking reoccurs, contact Philips TV Consumer Care.

Channels

No digital channels found during the installation

See the technical specifications to make sure that your TV supports digital channels in your country. Make sure that all cables are properly connected and that the correct network is selected.

Previously installed channels are not in the channel list

Make sure that the correct channel list is selected.

PIN Code

The PIN code can be set to lock channels or protect against unauthorized operations, e.g. the TV being reinstalled or the PIN code being reset. If you forget your PIN code, you can override the current one by using the code 8888 and entering a new one.

Picture

No picture/distorted picture

- Make sure that the antenna is properly connected to the TV.
- Make sure that the correct device is selected as the display source.
- Make sure that the external device or source is properly connected.

Sound but no picture

- Change to other video sources and then change back to current source, then do picture style restore in Picture settings or do Factory reset in General settings option.

Poor antenna reception

- Make sure that the antenna is properly connected to the TV.
- Loud speakers, unearthed audio devices, neon lights, high buildings and other large objects can influence reception quality. If possible, try to improve the reception quality by changing the antenna direction or moving devices away from the TV.
- If reception on only one channel is poor, fine-tune

this channel with Manual Installation.

Poor picture from a device

- Make sure that the device is connected properly. Make sure the device's output video setting is the highest possible resolution if applicable.
- Restore picture style or change to other picture styles.

Picture settings change after a while

Make sure that **Retail mode** is set to **Off**. You can change and save settings in this mode.

A commercial banner appears

Make sure that **Retail mode** is set to **Off**. Press **Home > Settings > Device Preferences > Retail mode** and press **OK**.

Picture does not fit the screen

- Change to a different picture format.
- Change **Display mode** to **Automatic**.

Picture position is incorrect

- Picture signals from some devices may not fit the screen correctly. Check the signal output of the connected device.
- Change **Display mode** to **Automatic**.

Computer picture is not stable

- Make sure that your PC uses the supported resolution and refresh rate.
- Make sure HDMI video source is not supported HDR content.

Sound

No sound or poor sound quality

If no audio signal is detected, the TV automatically switches the audio output off — this does not indicate malfunction.

- Make sure that the sound settings are correctly set.
- Make sure that all cables are properly connected.
- Make sure that the volume is not muted or set to zero.
- Make sure that the TV audio output is connected to the audio input on the Home Theater System. Sound should be heard from the HTS speakers.
- Some devices may require you to manually enable HDMI audio output. If HDMI audio is already enabled, but you still do not hear audio, try changing the digital audio format of the device to PCM (Pulse Code Modulation). Refer to the documentation accompanying your device for instructions.

HDMI and USB

HDMI

- Note that HDCP (High-bandwidth Digital Content Protection) support can delay the time taken for a TV to display content from an HDMI device.
- If the TV does not recognize the HDMI device and no picture is displayed, switch the source from one device to another and back again.
- If the picture and sound of a device connected to HDMI is distorted, connect the device to another HDMI port on TV and power reboot your source device.
- If there are intermittent sound disruptions, make sure that output settings from the HDMI device are correct.
- If you use an HDMI-to-DVI adaptor or HDMI-to-DVI cable, make sure that an additional audio cable is connected to AUDIO IN (mini-jack only), if available.

HDMI EasyLink does not work

- Make sure that your HDMI devices are HDMI-CEC compatible. EasyLink features only work with devices that are HDMI-CEC compatible.

No volume icon shown

- When an HDMI-CEC audio device is connected and you use the TV Remote Control to adjust the volume level from the device, this behavior is normal.

Photos, videos and music from a USB device do not show

- Make sure that the USB storage device is set to Mass Storage Class compliant, as described in the storage device's documentation.
- Make sure that the USB storage device is compatible with the TV.
- Make sure that the audio and picture file formats are supported by the TV.

Choppy playback of USB files

- The transfer performance of the USB storage device may limit the data transfer rate to the TV which causes poor playback.

Network

Wi-Fi network not found or distorted

- Microwave ovens, DECT phones or other Wi-Fi 802.11b/g/n devices in your proximity might disturb the wireless network.
- Make sure that the firewalls in your network allow access to the TV's wireless connection.
- If the wireless network does not work properly in your home, try the wired network installation.

Internet does not work

- If the connection to the router is OK, check the router connection to the Internet.

The PC and Internet connection are slow

- Look in your wireless router's user manual for

information on indoor range, transfer rate and other factors of signal quality.

- Use a high-speed (broadband) Internet connection for your router.

DHCP

- If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be turned on.

Bluetooth

Unable to pair

- Make sure the device is in pairing mode. Read the user manual of the device.
- Keep the wireless speaker as close to the TV as possible.
- Trying to pair several devices with the TV at the same time may not work.

Bluetooth lost connection

- Always position the wireless speaker within a range of 15 feet from the TV.

Bluetooth Audio and Video synchronization

- Before you purchase a wireless Bluetooth speaker, learn about its quality of Audio to Video synchronization, commonly called 'lip sync.' Not all Bluetooth devices perform correctly. Ask your dealer for advice.

Wrong Menu Language

Change the language back to your language

- 1 - Press **Home** to go to Home screen.
- 2 - Press **MENU**.
- 3 - Press **Navigation key - down** for 4 times and press **OK**.
- 4 - Press **Navigation key - down** for 4 times and press **OK**.
- 5 - Select your language and press **OK**.
- 6 - Press **Back** or **EXIT** repeatedly to close the menu.

20.3

Online Help

To solve any Philips TV related problem, you can consult our online support. You can select your language and enter your product model number.

Go to www.philips.com/TVsupport

On the support site you can find your country's telephone number to contact us as well as answers to frequently asked questions (FAQs). In some countries, you can chat with one of our collaborators and ask

your question directly or send a question by email. You can download new TV software or the manual to read on your computer.

20.4

Support and Repair

For support and repair, call the Consumer Care hotline in your country. Our service engineers will take care of a repair, if necessary.

Find the telephone number in the printed documentation that came with the TV.

Or consult our

website www.philips.com/TVsupport and select your country if needed.

TV model number and serial number

You might be asked to provide the TV product model number and serial number. Find these numbers on the packaging label or on the type label on the back or bottom of the TV.

Warning

Do not attempt to repair the TV yourself. This may cause severe injury, irreparable damage to your TV or void your warranty.

Safety and Care

21.1

Safety

Important

Read and understand all safety instructions before you use the TV. If damage is caused by failure to follow instructions, the warranty does not apply.

Risk of Electric Shock or Fire

- Never expose the TV to rain or water. Never place liquid containers, such as vases, near the TV. If liquids are spilled on or into the TV, disconnect the TV from the power outlet immediately. Contact Philips TV Consumer Care to have the TV checked before use.
- Never expose the TV, remote control or batteries to excessive heat. Never place them near burning candles, naked flames or other heat sources, including direct sunlight.
- Never insert objects into the ventilation slots or other openings on the TV.
- Never place heavy objects on the power cord.
- Avoid force coming onto power plugs. Loose power plugs can cause arcing or fire. Ensure that no strain is exerted on the power cord when you swivel the TV screen.
- To disconnect the TV from the mains power, the power plug of the TV must be disconnected. When disconnecting the power, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

Risk of Injury or Damage to the TV

- Two people are required to lift and carry a TV that weighs more than 25 kg or 55 lbs.
- If you mount the TV on a stand, only use the supplied stand. Secure the stand to the TV tightly. Place the TV on a flat, level surface that can support the weight of the TV and the stand.
- When wall mounted, ensure that the wall mount can safely bear the weight of the TV set. TP Vision bears no responsibility for improper wall mounting that results in accident, injury or damage.
- Parts of this product are made of glass. Handle with care to avoid injury or damage.

Risk of damage to the TV!

Before you connect the TV to the power outlet,

ensure that the power voltage matches the value printed on the back of the TV. Never connect the TV to the power outlet if the voltage is different.

Stability Hazards

A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television.
- ALWAYS use furniture that can safely support the television.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television or its controls.
- ALWAYS route cords and cables connected to the television so that they cannot be tripped over, pulled or grabbed.
- NEVER place a television in an unstable location.
- NEVER place the television on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and television to a suitable support.
- NEVER place the television on cloth or other materials that may be located between the television and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.

If the existing television is going to be retained and relocated, the same considerations as above should be applied.

Risk of Batteries

- Do not ingest the battery. Chemical burn hazard.
- The remote control may contain a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- Keep new and used batteries away from children.
- If the battery compartment does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.
- Risk of fire or explosion if the battery is replaced by an incorrect type.
- Replacement of a battery with an incorrect type that can defeat a safeguard (e.g. in the case of some lithium battery types).

- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

Risk of Overheating

Never install the TV in a confined space. Always leave a space of at least 10 cm or 4 in around the TV for ventilation. Ensure curtains or other objects never cover the ventilation slots on the TV.

Lightning Storms

Disconnect the TV from the power outlet and antenna before lightning storms.
During lightning storms, never touch any part of the TV, power cord or antenna cable.

Risk of Hearing Damage

Avoid using earphones or headphones at high volumes or for prolonged periods of time.

Low Temperatures

If the TV is transported in temperatures below 5°C or 41°F, unpack the TV and wait until the TV temperature reaches room temperature before connecting the TV to the power outlet.

Humidity

In rare occasions, depending on temperature and humidity, minor condensation can occur on the inside of the TV glass front (on some models). To prevent this, do not expose the TV to direct sunlight, heat or extreme humidity. If condensation occurs, it will disappear spontaneously while the TV is playing for a few hours.

The condensation moisture will not harm the TV or cause malfunction.

21.2

Screen Care

- Never touch, push, rub or strike the screen with any object.
- Unplug the TV before cleaning.
- Clean the TV and frame with a soft damp cloth and wipe gently. Avoid touching the Ambilight* LEDs on the backside of the TV. Never use substances such as alcohol, chemicals or household cleaners on the TV.
- To avoid deformations and color fading, wipe off water drops as quickly as possible.
- Avoid stationary images as much as possible. Stationary images are images that remain onscreen for extended periods of time. Stationary images include onscreen menus, black bars, time displays, etc. If you must use stationary images, reduce screen contrast and brightness to avoid screen damage.

* Ambilight LED is only for models which support Ambilight function.

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The written material packaged with the TV and the manual stored in the memory of the TV or downloaded from the Philips website www.philips.com/TVsupport are believed to be adequate for the intended use of the system.

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Terms of warranty – Risk of injury, damage to TV or void of warranty!

Never attempt to repair the TV yourself. Use the TV and accessories only as intended by the manufacturer. The caution sign printed on the back of the TV indicates risk of electric shock. Never remove the TV cover. Always contact Philips TV Customer Care for service or repairs. Find the telephone number in the printed documentation that came with the TV. Or consult our website www.philips.com/TVsupport and select your country if needed. Any operation expressly prohibited in this manual, or any adjustments and assembly procedures not recommended or authorized in this manual, shall void the warranty.

Pixel characteristics

This TV product has a high number of color pixels. Although it has effective pixels of 99.999% or more, black dots or bright points of light (red, green or blue) may appear constantly on the screen. This is a structural property of the display (within common industry standards) and is not a malfunction.

TP Vision is committed to developing, producing and marketing products that cause no adverse health effects. TP Vision confirms that, as long as its products are handled properly for their intended use, they are safe to use according to scientific evidence available today. TP Vision plays an active role in the development of international safety standards, enabling TP Vision to anticipate further developments in standardization for early integration in its products.

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HDMI

HDMI

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Dolby Vision and Dolby Atmos

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23.3

DTS-HD

DTS-HD

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