

User Manual

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PHILIPS

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What's new

1.1

Home and channels

The new Home launcher

Press  **HOME** on your remote control to get your new Android Home screen. 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 favourite apps. You can also add additional channels or find new apps to get more contents.

“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.

Accessing settings from Home

You can access **All Settings** menu via the icon at the top right corner. You can also find the **Frequent settings** menu and common menu items in the Philips TV Menu, which can be invoked directly from the remote control.

System bar on Home screen

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

- Search button: to trigger Google search with voice or text input.
- Input source: to launch the input source list and switch to any of the connected devices.
- Notifications: to provide you the messages about your Smart TV system.
- Settings: to access all setting menu and adjust the TV settings.
- Clock: to indicate the system clock.

1.2

Apps and Philips TV Collection

Favourite Apps on the first row

You can find more apps in the Apps page which can be opened by clicking the Apps icon at the left end of the **Apps** row. You can also add more apps as favourite from the Apps page.

Philips TV Collection

All your premium apps are available within the Philips TV Collection app. Launch it using the banner on the **Apps** row. The Philips TV Collection app will also contain recommendations for new Apps and more.

Setting Up

2.1

Read Safety

Read the safety instructions first before you use the TV.

To read the instructions, in **Help**, press the colour key **Keywords** and look up **Safety Instructions**.

2.2

TV Stand and Wall Mounting

TV Stand

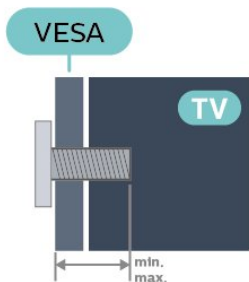
You can find the instructions for mounting the TV stand in the Quick Start Guide that came with the TV. In case you lost this guide, you can download it from www.philips.com.

Use the product type 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 . . .



- 50PUN8215, 50PUN8235, 50PUN8245
VESA MIS-F 200x200, M6 (min.: 18mm, max.: 22mm)
- 55PUN8215, 55PUN8235, 55PUN8245
VESA MIS-F 200x200, M6 (min.: 20mm, max.: 24mm)
- 65PUN8215, 65PUN8235, 65PUN8245
VESA MIS-F 300x300, M6 (min.: 18mm, max.: 20mm)
- 70PUN8215, 70PUN8235, 70PUN8245
VESA MIS-F 300x300, M8 (min.: 12mm, max.: 20mm)

Preparation

Make sure that the metal screws, to mount the TV to the VESA-compliant bracket, go about 10mm deep

inside the threaded bushes of the TV.

Caution

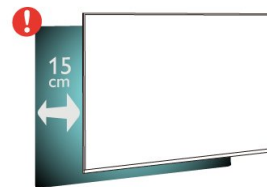
Wall mounting the TV requires special skills and should only be performed by qualified personnel. The TV wall mounting should meet safety standards according to the TV's weight. Also read the safety precautions before positioning the TV.

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 centre of the screen.
- When wall mounted, position the TV up to 15 cm away from the wall.



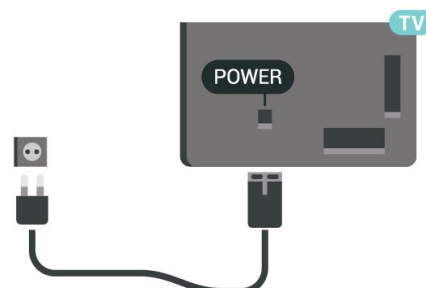
Note:

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.

For more information, in **Help**, press the colour key  **Keywords** and look up **Switching On** for more information on switching the TV on or off.

2.5

Antenna Cable

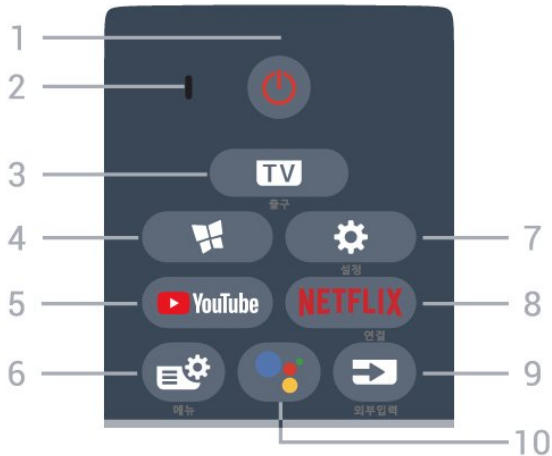
Insert the antenna plug firmly into the **Antenna** socket at the back of the TV.

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

Remote Control

Key Overview

Top



1 - ⏻ Standby / On

To switch the TV on or back to Standby.

2 - VOICE microphone

3 - TV - EXIT

To switch back to watch TV or to stop an interactive TV application.

4 - Philips TV Collection

To launch Philips TV Collection App.

5 - YouTube

To open the YouTube App directly.

6 - Quick Menu

To open the Quick Menu with typical TV functions.

7 - Settings

To open the settings menu.

8 - NETFLIX

To open the Netflix App directly. With the TV switched on or from standby.

- If you have a Netflix membership subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet.

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

www.netflix.com

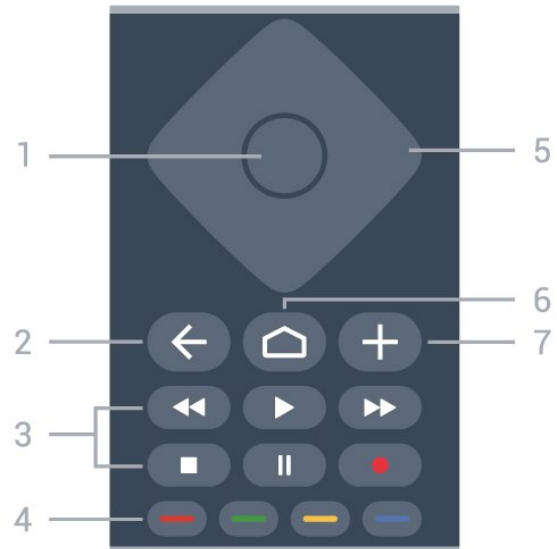
9 - SOURCES

- 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 switch back to the previous channel you selected.

To return to previous menu.

To go back to the previous App/Internet page.

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 - Colour keys

Direct selection of options. Blue key ■, opens Help.

5 - Arrow / navigation keys

To navigate up, down, left or right.

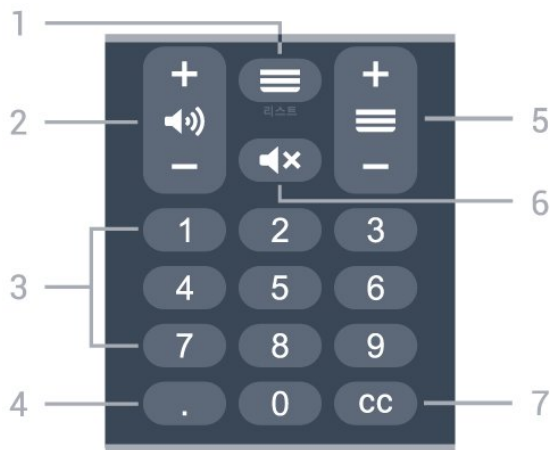
6 - HOME

To open the Home menu.

7 - + OPTIONS

To open or close the options menu.

Bottom



1 - **≡ Channel list**

To open the channel list.

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. To open the next or previous page in Text/Teletext.

6 - **🔇 Mute**

To mute the sound or to restore it.

7 - **CC**

To switch cc on, off or to show automatically.

3.2

Pair Your Remote Control to 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, and 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 1m distance) during pairing in order to ensure success.

3 - If the TV does not launch the voice control field when press **PAIR**, 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 or pairing again

If the pairing with the remote control was lost, you can pair the TV with the remote control again.

You can simply long press the **PAIR** key (approximate for 3 seconds) for pairing.

Alternatively, go **⚙ Settings > Wireless and networks > Remote control > Pair remote control**, then follow the on-screen instructions.

A message appears when the pairing is successful.

Remote Control Software

⚙ Settings > Wireless and networks > Remote control > Remote control info

Once the remote control is paired, you can check the current remote control software version.

⚙ Settings > Wireless and networks > Remote control > Update remote control software

Check available remote control software for updates.

3.3

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 **PAIR** 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.

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

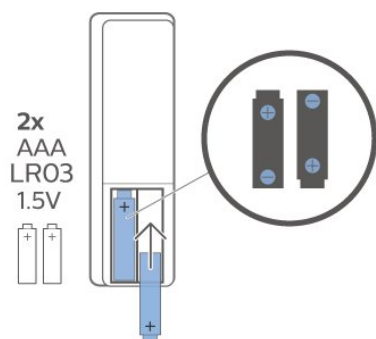
Do not put any objects in front of IR sensor of the TV, it may block the IR signal.

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 Alkaline, type AAA-LR03-1.5V 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**.

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



Switching On and Off

4.1


On or Standby

Make sure the TV is connected to the mains AC power. Connect the supplied power cord to the AC in connector at the back of the TV. The indicator light at the bottom of the TV lights up.

Switch on

Press  on the remote control to switch the TV on. Alternatively, press  HOME. You can also press the small joystick key on the bottom of the TV to switch the TV on in case you can't find the remote control or its batteries are empty.

Switch to standby

To switch the TV to standby, press  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.

4.2





Keys on TV

If you lost the remote control or its batteries are empty, you can still do some basic TV operations.

To open the basic menu...


1 - With the TV switched on, press the joystick key on

the bottom of the TV to bring up the basic menu.

2 - Press left or right to select  Volume,  Channel or  Sources. Select  Demo, to start a demo movie.

3 - Press up or down to adjust the volume or tune to the next or previous channel. Press up or down to go through the list of sources, including the tuner selection. Press the joystick key to start the demo movie.

4 - The menu will disappear automatically.

To switch the TV on standby, select  and press the joystick key.



Channels

5.1

Watching channels

Tune to a Channel

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

Switch Channels

To switch channels, press **TV +** or **TV -**.

If you know the channel number, type in the number with the number keys. Press **OK** after you entered the number to switch immediately.

If the information is available from the Internet, the TV shows the current programme name and details followed by the next programme name and details.

Previous channel

To switch back to the previously tuned channel, press **← BACK**.

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

Lock a Channel

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 **Child Lock** PIN code first. You cannot lock programmes from connected devices.

To lock a channel...

- 1 - Press **TV**.
- 2 - Press **OK** to open the channel list. If necessary change the channel list.
- 3 - Select the channel you want to lock.
- 4 - Press **+ OPTIONS** and select **Lock Channel** and press **OK**.
- 5 - Enter your 4 digit PIN code if the TV asks for it. A locked channel is marked with a **🔒** (lock).
- 6 - Press **◀** (left) to go back one step or press **← BACK** to close the menu.

To unlock a channel...

- 1 - Press **TV**.
- 2 - Press **OK** to open the channel list. If necessary change the channel list.
- 3 - Select the channel you want to unlock.
- 4 - Press **+ OPTIONS** and select **Unlock Channel** and press **OK**.
- 5 - Enter your 4 digit PIN code if the TV asks for it.
- 6 - Press **◀** (left) to go back one step or

press **← BACK** to close the menu.

If you lock or unlock channels in a channel list, you only have to enter the PIN code just once until you close the channel list.

For more information, in **Help**, press the colour key **— Keywords** and look up **Child Lock** for more information.

Channel Options

Open options

While watching a channel, you can set some options.

Depending on the type of channel you are watching (analogue or digital) or depending on the TV settings you made, some options are available.

To open the options menu...

- 1 - While watching a channel, press **+ OPTIONS**.
- 2 - Press **+ OPTIONS** again to close.

Closed Caption

Switch **Closed caption on** or **off** with this options. Select **On during mute** to show closed captions only when the sound is muted with **🔇**.

Caption Service

Select the correct type of closed caption services.

Audio Language

For digital broadcast, you can select an available audio language temporarily if none of your preferred languages are available.

Mono / Stereo

You can switch the sound of an analogue channel to Mono or Stereo.

To switch to Mono or Stereo...

- 1 - Tune to an analogue channel.
- 2 - Press **+ OPTIONS**, select **Mono/Stereo** and press **▶** (right).
- 3 - Select **Mono** or **Stereo** and press **OK**.
- 4 - Press **◀** (left) to go back one step or press **← BACK** to close the menu.

Picture-in-picture

While watching a TV channel or a video from a connected HDMI device, you can shrink the video to a corner and then browse Home screen or apps.

To launch the Picture-in-picture window...

- 1 - Tune to a TV channel or watch a video from a connected HDMI device.
- 2 - Press **+** **OPTIONS**, select **Picture-in-picture**, and press **OK**.
- 3 - The channel or video you are watching appears in a small window, in a corner of the screen chosen by the system.
- 4 - You can continue watching TV or video while using other apps.
- 5 - On the top row of the Home screen, you can select **Open** or **Stop** to switch back or close the small screen.

Note:

- You can only watch a video, e.g. of a TV channel, in the Picture-in-picture mode. The audio itself will be mute.
- The Picture-in-picture window will be closed when you initiate playback of another video content since there can only be a single playback happening at a time. Some apps may additionally close the Picture-in-picture window on their own in the instances in which its presence would impede your use of them.
- The “Picture-in-picture” menu option can only be activated if the Home screen is running in the background. If you see the option disabled, please go to the Home screen first.

5.2

Favourite Channels

About Favourite Channels

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

You can create 4 different lists of favourite channels for easy channel zapping. You can name each Favourites List individually. Only in a Favourites List you can reorder channels.

With a Favourites List selected, press the arrows **▲** (up) or **▼** (down) to select a channel, then press **OK** to watch the selected channel. You only tune to the channels in that list when using **TV** **+** or **TV** **-** keys.

Create a Favourites List

To create a favourite channels list...

- 1 - Press **TV**, to switch to TV.
- 2 - Press **OK** to open the current channel list.
- 3 - Press **+** **OPTIONS**.
- 4 - Select **Create Favourites List** and press **OK**.
- 5 - In the list at the left, select a channel you want as a favourite and press **OK**. Channels come in the list at the right in the order you add them. To undo, select the channel in the list at the left and press **OK** again.
- 6 - If necessary, you can go on selecting and adding channels as favourites.
- 7 - To finish adding channels, press **←** **BACK**.

The TV will ask to rename the **Favourites List**. You can use the on-screen keyboard.

- 1 - Use the on-screen keyboard to delete the current name and enter a new name.
- 2 - When done, select **Close** and press **OK**.

The TV will switch to the newly created **Favourites List**.

You can add a range of channels in one go or start a **Favourites List** by duplicating the channel list with all channels and removing the channels you do not want.

The channels in the **Favourites List** are renumbered.

Edit Favourites

To add a consecutive range of channels to a **Favourites List** in one go, you can use **Edit favourites**.

To add a range of channels...

- 1 - Open the **Favourites List** where you want to add a range of channels.
- 2 - Press **+** **OPTIONS**, select **Edit favourites** and press **OK**.
- 3 - In the list at the left select the first channel of the range you want to add and press **OK**.
- 4 - Press **▼** (down) to select the last channel of the range you want to add. The channels are marked at the right.
- 5 - Press **OK** to add this range of channels and confirm.

You can also start creating a **Favourites List** from **Edit favourites**.

Rename a Favourites List

To rename a Favourites List...

- 1 - Open the Favourite List you want to rename.
- 2 - Press **+** **OPTIONS**, select **Rename Favourites List** and press **OK**.
- 3 - Use the on-screen keyboard to delete the current name and enter a new name.
- 4 - When done, select **Close** and press **OK**.
- 5 - Press **←** **BACK** to close the channel list.

Remove a Favourites List

To remove a Favourites List...

- 1 - Open the Favourites List you want to remove.
- 2 - Press **+** **OPTIONS**, select **Remove Favourites List** and press **OK**.
- 3 - Confirm to remove the list.
- 4 - Press **←** **BACK** to close the channel list.

5.3

Closed captioning (CC) and language

Closed Caption

You can display closed captions at all times or only when the TV is muted.

Note:

- Not all TV programmes, commercials and features include closed captioning information. See your local TV programme listings about channels with closed captions. The captioned programmes are typically listed with service marks, such as 'CC', in the TV listings.

Switch on closed caption

- 1 - While you watch TV, press **+** **OPTIONS**.
- 2 - Select **Closed caption** > **Closed caption on** and press **OK**.

Select type of closed caption

- 1 - While you watch TV, press **+** **OPTIONS**.
- 2 - Select **Caption service**.
- 3 - Select the correct type of closed captions and press **OK**.

Audio Language

If the TV channel broadcasts multiple or dual audio languages, you can select your preferred audio language.

- 1 - While you watch TV, press **+** **OPTIONS**.
- 2 - For digital channels, select **Audio Language**. For analogue channels, select **Alternate Audio**. Press **OK** to confirm your selection.
- 3 - Select from the available languages, then press **OK**.

Note:

If you have selected **Alternate Audio** for analogue channels, select between:

- **Main**: Primary audio language or
- **SAP**: Secondary audio language

Menu Language

Change the language of the TV menus and messages

- 1 - Select **⚙ Settings** > **Region and language** > **Menu language** and press **OK**.
- 2 - Select on the language you need and press **OK**.
- 3 - Press **←** **BACK** to close the menu.

Channel Installation

6.1

Antenna/Cable Installation

Manual channel update

You can always start an channel update yourself.

To start a channel update manually...

- 1 - Select **⚙️Settings > Channels > Antenna/Cable Installation** and press **OK**.
- 2 - Enter your PIN code if necessary.
- 3 - Select **Antenna/cable connection** and press **OK**.
- 4 - Select **Antenna or Cable** and press **OK**.
- 5 - Press **⬅️ BACK** to close the menu.

6.2

Channel List Copy

Introduction

Channel List Copy is intended for dealers and expert users.

With Channel List Copy, you can copy the channels installed on one TV onto another Philips TV of the same range. With Channel List Copy, you avoid the time-consuming channel search by uploading a predefined channel list on a TV. Use a USB flash drive of minimum 1 GB.

Conditions

- Both TVs are from the same year range.
- Both TVs have the same hardware type. Check the hardware type on the TV type plate on the back of the TV.
- Both TVs have compatible software versions.

Current channel version

To check the current version of the channel list...

- 1 - Select **⚙️Settings > Channels**, select **Channel List Copy**, select **Current Version** and press **OK**.
- 2 - Press **OK** to close.

Current software version

To check the current version of the TV software...

- 1 - Select **⚙️Settings > Update Software** and press **➡️ (right)** to enter the menu.
- 2 - Select **Current Software Info** and press **OK**.
- 3 - The version, release notes and creation date are shown. Also, the Netflix ESN Number is shown if available.
- 4 - Press **⬅️ (left)** repeatedly if necessary, to close

the menu.

Copy a Channel List

To copy a channel list...

- 1 - Switch on the TV. This TV should have channels installed.
- 2 - Plug in a USB flash drive.
- 3 - Select **⚙️Settings > Channels > Channel List Copy** and press **OK**.
- 4 - Select **Copy to USB** and press **OK**. You might be asked to enter the Child Lock PIN code to copy the channel list.
- 5 - When copying is done, unplug the USB flash drive.
- 6 - Press **⬅️ (left)** repeatedly if necessary, to close the menu.

Now you can upload the copied channel list onto another Philips TV.

Channel List Version

Check the current version of the channel list...

- 1 - Select **⚙️Settings > Channels** and press **➡️ (right)** to enter the menu.
- 2 - Select **Channel List Copy** and select **Current Version**, then press **OK**.
- 3 - Press **⬅️ (left)** repeatedly if necessary, to close the menu.

Upload a Channel List

To not Installed TVs

Depending on whether your TV is already installed or not, you must use a different method to upload a channel list.

To a TV that is not yet installed

- 1 - Plug in the power plug to start the installation and select language and country. You can skip the channel search. Finish the installation.
- 2 - Plug in the USB flash drive that holds the channel list of the other TV.
- 3 - To start the channel list upload, select **⚙️Settings > Channels > Channel List Copy > Copy to TV** and press **OK**. Enter your PIN code if necessary.
- 4 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB flash drive.

To Installed TVs

Depending on whether your TV is already installed or not, you must use a different method to upload a channel list.

To an already installed TV

1 - Verify the country setting of the TV. (To verify this setting, see chapter Reinstall All Channels. Start this procedure until you reach the country setting.

Press **← BACK** to cancel the installation.)

If the country is correct continue with step 2.

If the country is not correct, you need to start a reinstallation. See chapter Reinstall All Channels and start the installation. Select the correct country and skip the channels search. Finish the installation. When done, continue with step 2.

2 - Plug in the USB flash drive that holds the channel list of the other TV.

3 - To start the channel list upload, select **⚙Settings** > **Channels** > **Channel List Copy** > **Copy to TV** and press **OK**. Enter your PIN code if necessary.

4 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB flash drive.

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 TV signal.

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

If a device connected with HDMI is not working correctly, check if a different **HDMI Ultra HD** setting can solve this problem. In Help, press the colour key  **Keywords** and look up **HDMI Ultra HD**.

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

All of the HDMI connections on the TV have **HDMI ARC** (Audio Return Channel).

If the device, typically a Home Theatre System (HTS), also has the HDMI ARC connection, connect it to any of the HDMI connections 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.

You can use any HDMI connection on this TV to connect the HTS but ARC is only available for 1 device/connection at a time.


HDMI CEC - EasyLink

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.


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

EasyLink HDMI CEC must be switched on on the TV and the connected device.

Switch on EasyLink

 **Settings** > General settings > EasyLink > EasyLink > On.

Operate HDMI CEC-compatible devices with TV remote control

 **Settings** > General settings > EasyLink > EasyLink remote control > On.

Note:

- EasyLink 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.

Home Theatre System - HTS

Connect with HDMI ARC

Use an HDMI cable to connect a Home Theatre 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 Theatre System has an HDMI ARC connection, you can use any HDMI 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.

All HDMI connections on the TV can offer the Audio Return Channel (ARC) signal. But once you have connected the Home Theatre System, the TV can only send the ARC signal to this HDMI connection.

Audio to video synchronisation (sync)

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

Connect with HDMI

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

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

Audio to video synchronisation (sync)

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

Problems with HTS sound

Sound with loud noise

If you watch a video from a plugged in USB flash drive or connected computer, the sound from your Home Theatre System might be distorted. This noise is heard when the audio or video file has DTS sound but the Home Theatre System has no DTS sound processing. You can fix this by setting the **Digital Out Format** of the TV to **Stereo**.

Select **Settings**

> **Sound** > **Advanced** > **Digital Out Format** .

No sound

If you cannot hear the sound from the TV on your Home Theatre System, check if you connected the HDMI cable to an **HDMI ARC** connection on the Home Theatre System. All HDMI connections on the TV are HDMI ARC connections.

Smartphones and Tablets

To connect a smartphone or tablet to the TV, you can use a wireless connection. For a wireless connection, on your smartphone or tablet download the Philips TV Remote App from your favourite app store.

Blu-ray Disc Player

Use a **High speed HDMI** cable to connect the Blu-ray Disc player to the TV.

If the Blu-ray Disc player has EasyLink HDMI CEC, you can operate the player with the TV remote control.

In **Help**, press the colour key **Keywords** and look up **EasyLink HDMI CEC** for more information.

Bluetooth

Pairing a Device

Position the wireless speaker within a distance of 5 meters from 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 switched on.

Once a wireless gamepad is paired, you can use it. When 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 - Switch on the bluetooth device and place it within range of the TV.
- 2 - Select **Settings** > **Wireless and Networks** and press **➤** (right) to enter the menu.
- 3 - Select **Bluetooth** > **Search Bluetooth Device**, and press **OK**.
- 4 - Select **Search** and press **OK**. 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.
- 5 - Select the type of device and press **OK**.

6 - Press ◀ (left) repeatedly if necessary, to close the menu.

Select a Device

To select a wireless device...

- 1 - Select ⚙️ **Settings** > **Wireless and Networks** and press **OK**.
- 2 - Select **Bluetooth** > **Search Bluetooth Device** and press **OK**.
- 3 - In the list, select the wireless device and press **OK**.
- 4 - Press ◀ (left) repeatedly if necessary, to close the menu.

Remove a Device

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

To remove or disconnect a wireless device...

- 1 - Select ⚙️ **Settings** > **Wireless and Networks** and press **OK**.
- 2 - Select **Bluetooth** > **Remove Bluetooth device** and press **OK**.
- 3 - In the list, select the wireless device and press **OK**.
- 4 - Select **Disconnect** or **Remove** and press **OK**.
- 5 - Select **OK** and press **OK** to confirm.
- 6 - Press ◀ (left) repeatedly if necessary, to close the menu.

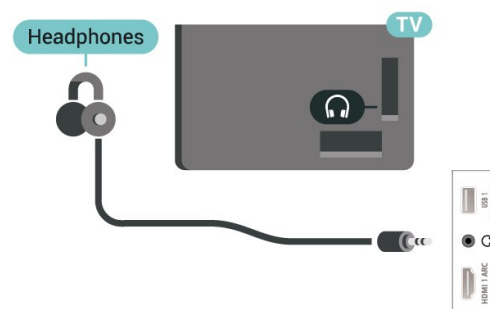
7.6

Headphones

You can connect a set of headphones to the 🎧 connection on the back of the TV. The connection is a mini-jack 3.5mm. You can adjust the volume of the headphones separately.

To adjust the volume...

- 1 - Select ⚙️ **Settings**, select **Sound** > **Headphone Volume** and press **OK**.
- 2 - Press the arrows ▲ (up) or ▼ (down) to adjust the value.
- 3 - Press ◀ (left) repeatedly if necessary, to close the menu.

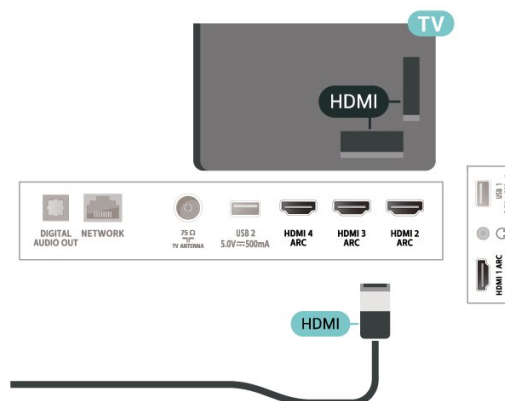


7.7

Game Console

HDMI

For best quality, connect the game console with a High speed HDMI cable to the TV.



7.8

USB Hard Drive

What You Need

If you connect a USB Hard Drive, you can pause or record digital TV broadcasts (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.

For more information on how to install a USB Hard Drive, in **Help**, press the colour

key **— Keywords** and look up **USB Hard Drive**.

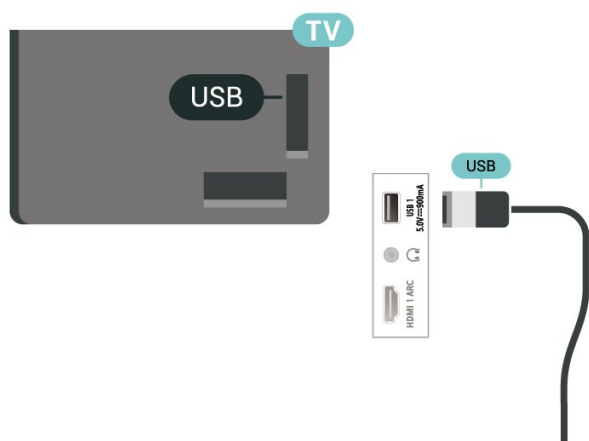
Installation

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. If you want to record broadcasts with TV Guide data from the Internet, you must setup the Internet connection first before you install 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. 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.

* Connect the USB Hard Drive with size less than 2TB.

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 - Select **Recordings** if you want to perform Pause TV and Recordings, otherwise, select **Apps** to store apps. Follow the instructions on screen.
- 4 - All files and data will be removed after formatting.
- 5 - When the USB Hard Drive is formatted, leave it connected permanently.

For more information, in **Help**, press the colour key **— Keywords** and look up **Pause TV**, **Recording**, or **Apps**.

7.9

USB Keyboard

Connect

Connect a USB keyboard (USB-HID type) to enter text on your TV.

Use one of the **USB** connections to connect.

Configure

Install the keyboard

To install the USB keyboard, switch on the TV and connect the USB keyboard to one of the **USB** connections on the TV. When the TV detects the keyboard for the first time, you can select your keyboard lay-out and test your selection. If you select a Cyrillic or Greek keyboard layout first, you can select a secondary Latin keyboard layout.

To change the keyboard layout setting when a layout was selected...

- 1 - Select **⚙ Settings > General Settings** and press **➤** (right) to enter the menu.
- 2 - Select **USB Keyboard Settings**, and press **OK** to start the keyboard setup.

Special Keys

Keys for entering text

- Enter key = OK
- Backspace = delete character before cursor
- Arrow keys = navigate within a text field
- To switch between keyboard layouts, if a secondary layout is set, press the **Ctrl + Spacebar** keys simultaneously.

Keys for apps and Internet pages

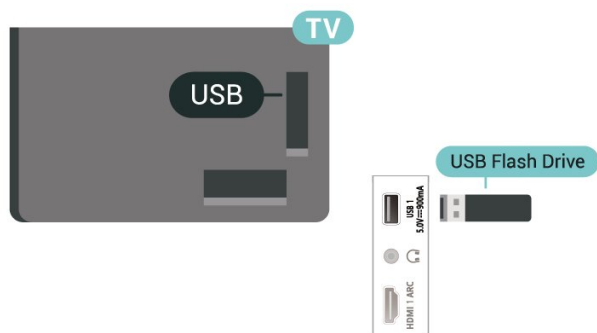
- Tab and Shift + Tab = Next and Previous
- Home = scroll to the top of the page
- End = scroll to the bottom of the page
- Page Up = jump one page up
- Page Down = jump one page down
- + = zoom in one step
- - = zoom out one step
- * = fit the web page to the screen width

7.10

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.



The TV detects the flash drive and opens a list showing its content.

If the contents list does not appear automatically, press **➡ SOURCES** and select **USB**.

To stop watching the USB flash drive content, press **tv EXIT** or select another activity.

To disconnect the USB flash drive, you can pull out the flash drive anytime.

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 to Ultra HD if the resolution of the photo is higher.

For more information on watching or playing content

from a USB flash drive, in **Help**, press the colour key **— Keywords** and look up **Photos, Videos and Music**.

7.11

Photo Camera

To view photos stored on your digital photo camera, you can connect the camera directly to the TV.

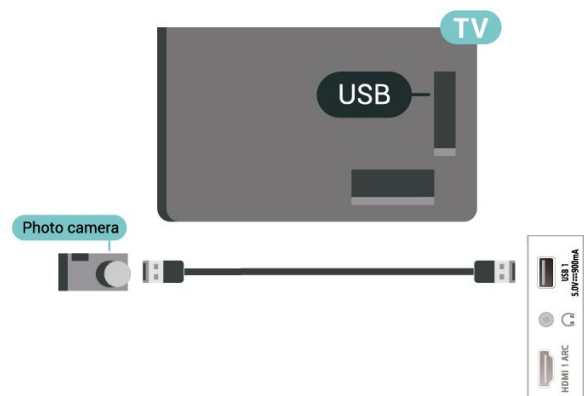
Use one of the **USB** connections on the TV to connect. Switch on the camera after you made the connection.

If the contents list does not appear automatically, press **➡ SOURCES**, and select **USB**.

Your camera might need to be set to transfer its content with PTP (Picture Transfer Protocol). Read the user manual of the digital photo camera.

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 to Ultra HD if the resolution of the photo is higher. You cannot play a video with native resolution higher than Ultra HD on any of the USB connections.

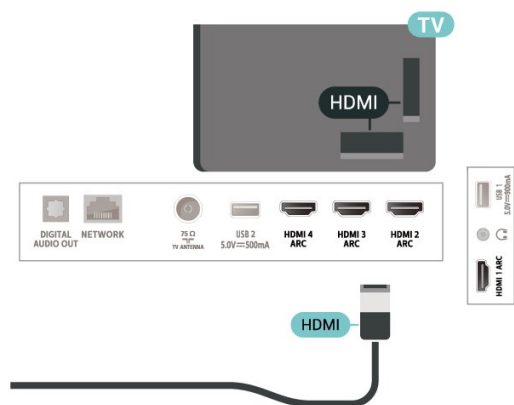


For more information on viewing photos, in **Help**, press the colour key **— Keywords** and look up **Photos, Videos and Music**.

7.12

Camcorder

For best quality, use an HDMI cable to connect the camcorder to the TV.



7.13

Computer

You can connect your computer to the TV and use the TV as a PC monitor. Use an HDMI cable to connect the computer to the TV.

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) connection to the Internet.



Turn Wi-Fi On or Off

⚙ Settings > Wireless and Networks > Wired or Wi-Fi > Wi-Fi On/Off.

Make the Connection

⚙ Settings > Wireless and Networks > Wired or Wi-Fi > Connect to Network > Wireless.

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 - Depending on the type of router, enter your encryption key - WPA or WPA2. If you entered the encryption key for this network before, you can

select OK to make the connection immediately.
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/ac 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

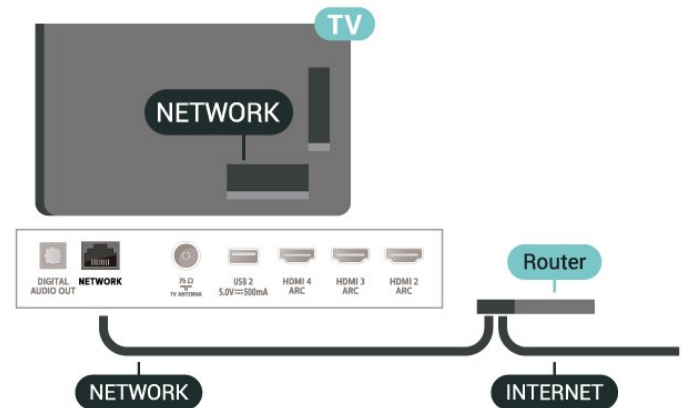
- If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be switched on.

In Help, press the colour key **Keywords** and look up **Troubleshooting** for more information.

Wired Connection

What You Need

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



Make the Connection

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Connect to Network > Wired.

- 1 - Connect the router to the TV with a network cable (Ethernet cable**).
- 2 - Make sure that the router is switched 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 switched on.

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

Network Settings

View Network Settings

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > View Network Settings.

You can view all current network settings here. The IP and MAC address, signal strength, speed, encryption method, etc.

Network Configuration - Static IP

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Network Configuration > Static IP.

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

Network Configuration - Static IP Configuration

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Network Configuration > Static IP Configuration.

- 1 - Select Static IP Configuration and configure the connection.
- 2 - You can set the number for IP Address, Netmask, Gateway, DNS 1, or DNS 2.

Switch On with Wi-Fi (WoWLAN)

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Switch On with Wi-Fi (WoWLAN).

You can switch this TV on from your smartphone or tablet if the TV is in Standby. The setting Switch On with Wi-Fi (WoWLAN) must be switched on.

Switch on with Chromecast

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Switch on with Chromecast.

Set it On to allow this TV to be switched on from a Chromecast app on your mobile device. Power consumption of the TV in standby status will be higher when switched this on. The Wi-Fi (WoWLAN) setting should be turned on firstly before you can change the setting of Switch on with Chromecast.

Switch on Wi-Fi connection

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Wi-Fi On/Off.

You can switch on or off Wi-Fi connection on your TV.

Digital Media Renderer - DMR

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Digital Media Renderer - DMR.

If your media files do not play on your TV, make sure that the Digital Media Renderer is switched on. As a factory setting, DMR is switched on.

TV Network Name

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > TV Network Name.

If you have more than one TV in your home network, you can give the TV a unique name.

Clear Internet Memory

⚙ **Settings** > Wireless and Networks > Wired or Wi-Fi > Clear Internet Memory.

With Clear Internet Memory you clear your Philips server registration and parental rating settings, your video store app logins, all Philips TV Collection favourites, Internet bookmarks and history. Interactive MHEG applications can also save so-called 'cookies', on your TV. These files will also be cleared.

8.2

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 favourite games across phone, tablet and TV. You'll also get customised 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 an 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 you did the TV installation...

- 1 - Select **Settings** > **Android Settings** and press **OK**.
- 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 **◀** (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 set the language you like to use with Voice Search. 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** > **Android Settings**, and press **OK**.
- 2 - Explore the different Android settings.
- 3 - Press **←** **BACK** if necessary, to close the menu.

8.3

Home Screen

About the Home Screen

To enjoy the benefits of your Android TV, connect the TV to the Internet.

Like on your Android smartphone or tablet, the Home screen is the centre of your TV. From the Home screen 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 favourite apps. You can also add additional

channels or find new apps to get more contents.

The Home screen is organised in channels...

Apps

Your favourite Apps are placed on the first row. In this row you will also find the Apps for TV, like **Philips TV Collection**, **Watch TV**, **TV Guide**, **Media** and others. You can find more apps in the Apps page which can be opened by clicking the **Apps** icon at the left end of the **Apps** row. You can also add more apps as favourite from the Apps page.

The Apps page contains all installed Apps that come with the TV and the Apps you install from **Philips TV Collection** or **Google Play™ Store** yourself.

Live TV

Live TV channel shows the currently running programmes from the installed channels.

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**.

Help channel

This channel contains "How to..." tutorial videos to let you know how to unbox, how to connect external devices, how to install channel, etc.

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

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** can 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.

8.4

Philips TV Collection App



Featured Apps page

All your premium apps are available within the Philips TV Collection app, under Featured apps section. Launch it using the banner on the **Apps** row.

Philips TV Collection apps are made specially for TV. Downloading and installing Philips TV Collection apps are free of charge. The Philips TV Collection of apps can differ per country or region. The Philips TV Collection will also contain recommendations for new Apps and more.

Some Philips TV Collection apps are pre-installed on your TV. To install other apps from Philips TV Collection, you will be asked to agree to the Terms of Use. You can set the Privacy Settings according to your preference.

To install an app from the Philips TV Collection...



- 1 - Press  **HOME**.
- 2 - Select  **Philips TV Collection** and press **OK**. It will open the Featured apps section.
- 3 - Select the "All" tab and press **OK**. It will display all the apps that are available to the user, including the installed ones.
- 4 - Browse through the apps and select the app icon that you want to install, and press **OK**. It will open the App info page.
- 5 - Select the **Install** button and press **OK** to install the app.

The installed app found in the Apps page, which can be opened from the Android Home screen by pressing the Apps icon at the left end of the **Apps** row.

Terms of Use

To install and use the Philips TV Collection apps, you must agree to the Terms of Use. If you did not agree to these terms during the first TV installation, you can always agree to them later. The moment you agree to the Terms of Use, some apps will be available immediately and you can browse the Philips TV Collection to install other apps.

To agree on the Terms of Use after you did the TV installation...

- 1 - Press  **HOME**, select  **Philips TV Collection** and press **OK**. Press the **Options** key to open the Options menu.
- 2 - You can select **Terms of Use**, then press **OK** to

read.

3 - Select **Accept** and press **OK**. You cannot undo this approval.




4 - Press  **BACK** to close the menu.

Privacy Settings

You can set some privacy settings for the Philips TV Collection apps.

- You can allow technical statistics to be send to Philips.
- You can allow personal recommendations.
- You can allow cookies.
- You can switch on the Child Lock for 18+ rated apps.

To set the Philips TV Collection privacy settings...

- 1 - Press  **HOME**, select  **Philips TV Collection** and press **OK**. Press the **Options** key to open the Options menu.
- 2 - You can select **Privacy setting**, then press **OK**.
- 3 - Select each setting and press **OK** to allow or disallow. You can read about each setting in detail.
- 4 - Press  **BACK** to close the menu.

Apps

9.1

About Apps

You can find your favourite 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.). You can use the Internet Browser app to surf the Internet.

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

To install apps from the **Philips TV Collection** or the **Google Play™ Store**, the TV must be connected to the Internet. You must agree to the Terms of Use to use apps from the **Philips TV Collection**. You must sign in with a Google Account to use the Google Play apps and Google Play™ Store.

9.2

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 with the Internet
- you must sign in with your Google Account on 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 bought 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 your Home screen, you can add

via the Apps page or by the **Add app to favourites** 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 Google Play Music, you can play your favourite music on TV.

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

What You Need

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

To start Google Play Music...

- 1 - Press  **HOME**.
- 2 - Select **Google Play 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 your Home screen, you can add via the Apps page or by the **Add app to favourites** 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 with the Internet
- you must sign in with your Google Account on 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 your Home screen, you can add via the Apps page or by the **Add app to favourites** 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 with the Internet
- you must sign in with your Google Account on 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 - On request, enter the PIN code.
- 6 - To close the **Google Play Store**, press  BACK repeatedly or press  **EXIT**.

If the App is not on your Home screen, you can add via the Apps page or by the **Add app to favourites** 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.

9.3

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.

9.4

Lock Apps

About App Locks

You can lock apps unsuited for children. You can lock 18+ rated apps or set up a restricted profile in the Home menu.

18+

The 18+ app lock will ask for a PIN code when you try to start an 18+ rated app. This lock is only valid for 18+ rated apps from the Philips apps.

Restricted profile

You can set up a restricted profile for the Home menu where only the apps you allow are available. You need to enter a PIN code to set up and switch on the restricted profile.

Google Play Store – Maturity


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. The level of maturity will determine which apps are available for installation.

Lock 18+ rated apps

You can lock 18+ rated apps from the Philips apps. This setting controls the 18+ setting in the Philips apps Privacy Settings.

To lock 18+ rated apps...

- 1 - Select  **Settings** > **Child Lock**, select **App Lock** and press **OK**.
- 2 - Select **On** and press **OK**.
- 3 - Press **←** (left) repeatedly if necessary, to close the menu.

For more information, in **Help**, press the colour key  **Keywords** and look up **Child Lock**, **App Lock** for more information.

Restricted Profile

About Restricted Profile

You can restrict the use of certain apps by switching the TV to a restricted profile. The Home menu will only show the apps you allowed. You need a PIN code to switch out of the restricted profile.

With the TV switched to a restricted profile you cannot...

- Find or open apps which are marked as Not allowed
- Access the Google Play Store
- Purchase through Google Play Movies & TV, nor Google Play Games
- Use third-party apps that don't use the Google sign-in


With the TV switched to a restricted profile you can...


- Watch content already rented or purchased from Google Play Movies & TV
- Play games already purchased and installed from Google Play Games
- Access the following settings: Wi-Fi network, Speech and Accessibility
- Add Bluetooth accessories

The Google Account on TV will stay logged in. Using a restricted profile doesn't change the Google Account.

Set Up

To set up the restricted profile...

- 1 - Select  **Settings** > **Android Settings** and press **OK**.



- 2 - Press **▼** (down) and select **Device Preferences** > **Security & restrictions** and press **OK**.
- 3 - Select **Restricted Profile** and press **OK**.
- 4 - Select **Settings** and press **OK**.
- 5 - Enter a PIN code with the remote control.
- 6 - Select **Allowed apps** and press **OK**.
- 7 - In the list of available apps, select an app and press **OK** to allow or not allow this app.
- 8 - Press **← BACK** to go back one step or press  **EXIT** to close the menu.


Now you can enter the restricted profile.

With the PIN code, you can always change the PIN code or edit the list of allowed or not allowed apps.

Enter


To enter (switch to) the restricted profile...

- 1 - Select  **Settings** > **Android Settings** and press **OK**.
- 2 - Press **▼** (down) and select **Device Preferences** > **Security & restrictions** and press **OK**.
- 3 - Select **Enter restricted profile** and press **OK**.
- 4 - Enter a PIN code with the remote control.
- 5 - Press **← BACK** to go back one step or press  **EXIT** to close the menu.

You can see when a restricted profile is entered if an icon appears in the Home screen. Scroll down to  **Settings** and scroll to the far right.

Delete

To delete the restricted profile...

- 1 - Select  **Settings** > **Android Settings** and press **OK**.
- 2 - Press **▼** (down) and select **Device Preferences** > **Security & restrictions** and press **OK**.
- 3 - Select **Delete restricted profile** and press **OK**.
- 4 - Enter the PIN code. The TV will delete the restricted profile.

9.5




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 optimise 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.

Storage


You can see how much storage space – the internal TV memory – you are using for your apps, videos, music, etc. You can see how much free space you still have available for installing new apps. Check your storage if apps start to run slow or in case of app trouble.

To see how much storage you are using...

- 1 - Select  **Settings** > **Android Settings** and press **OK**.
- 2 - Select **Device Preferences** > **Storage** and press **OK**.
- 3 - View the storage usage of the TV memory.
- 4 - Press  **BACK** to go back one step or press  **EXIT** to close the menu.

USB Hard Drive

If you connect a USB Hard Drive, you can use the drive to extend the TV memory to store more apps. Allow the USB Hard Drive to be used as an additional TV memory during the formatting process. The TV will try to store new apps on the USB Hard Drive first. Some apps do not allow to be stored on a USB Hard Drive.

To migrate your existing data, go to  **Settings** > **Android Settings** > **Device Preferences** > **Storage** and select the USB Hard Drive.

Internet




10.1

Start Internet

You can browse the Internet on your TV. You can view any Internet website but most of them are not prepared for a TV screen.

- Some plug-ins (e.g. to view pages or videos) are not available on your TV.
- You cannot send or download files.
- Internet pages are shown one page at a time and full screen.

To start the Internet browser...

- 1 - Press  HOME.
- 2 - Select **Apps > Internet Browser** and press **OK**.
- 3 - Enter an Internet address and select to confirm.
- 4 - To close Internet, press  HOME or  EXIT.

* Note: If **Internet Browser** is not on your **Apps** row, you can press + icon on the end of the row to add the app.

10.2

Options on Internet

Some extras are available for the Internet.



To open the extras...

- 1 - With the website open, press **+** **OPTIONS**.
 - 2 - Select one of the items and press **OK**.
- Open Link in New Tab: To open a link in new tab.
 - Close Current Tab: To close current tab.
 - Add to speed dial: To enter a new Internet address.
 - Add to bookmarks: Add the page as bookmark
 - Page security: To view the security level of the current page.
 - New private tab: Open new private tab, and have private browsing
 - Settings: Settings for Zoom, Text size, Accessibility mode, Always show menu bar, and clear (browsing) history
 - Help: Internet browser information
 - Exit Internet browser: Close Internet browser

Quick Menu

You can use the Quick Menu as your Home menu. In the Quick Menu, you will find a quick way to access TV functions.

To open Quick Menu and open an item...

- 1 - Press  to open Quick Menu.
- 2 - Select an item and press **OK** to open or start it.
- 3 - Press  **BACK** to close Quick Menu without starting anything.

Sources

12.1

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, open the content of a connected USB Flash Drive or see the recordings you made on a connected USB Hard Drive. You can switch to your connected devices to watch their programme, 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 item in the source list and press **OK**. The TV will show the programme 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.

12.2

Options for a TV Input

Some TV input devices offer specific settings.

To set the options for a specific TV input...

- 1 - Press **SOURCES**.
- 2 - Select the TV input in the list and press **OK**.
- 3 - Press **+ OPTIONS**. You can set the options for the selected TV input here.
- 4 - Press **+ OPTIONS** again to close the Options menu.

Possible options...

Picture-in-picture

While watching a TV channel or a video from a connected HDMI device, you can shrink the video to a corner and then browse Home screen or apps.

Controls

With this option you can operate the connected device with the TV remote control. The device must be connected with an HDMI cable and both TV and device must have HDMI CEC switched on

Device Info

Open this option to view information on the

connected device.

12.3

Device Name and Type

When you connect a new device to the TV and the TV detects the device, you can assign an icon that fits the device type. If you connect a device with an HDMI cable and HDMI CEC, the TV detects the device type automatically and the device gets an appropriate icon.

The device type determines picture and sound styles, resolution values, specific settings or the position within the Sources menu. You don't have to worry about the ideal settings.

Rename or Change Type

You can always change the name or change the type of a connected device. Look for the **+** icon at the right of the device name in the Sources menu. Some TV input sources do not allow a name change.

To change the device type...

- 1 - Select the device in the Sources menu and press **+ OPTIONS**.
- 2 - Press **← BACK** to hide the on-screen keyboard.
- 3 - Press **▼ (down)** to find all available device types. Select the type you want and press **OK**.

- 4 - If you want to reset the type of the device to the original connector type, select **Reset** and press **OK**.
- 5 - Select **Close** and press **OK** to close this menu.

To change the device name...

- 1 - Select the device in the Sources menu and Press **+ OPTIONS**.
- 2 - Use the on-screen Keyboard to delete the current name and enter a new one. Press **✓** to confirm.
- 3 - Press **← BACK** to hide the on-screen keyboard.
- 4 - If you want to reset the name of the device to the original connector name, select **Reset** and press **OK**.
- 5 - Select **Close** and press **OK** to close this menu.

12.4

Rescan Connections

You can rescan all TV connections to update the Sources menu with recently connected devices.

To rescan the connections...

- 1 - Press **SOURCES** to open the Sources menu.
- 2 - Press **▲ (up)** to select the **🔍** icon at the top right of the Sources menu.
- 3 - Press **OK** to start scanning the connections.

Newly connected devices will be added to the Sources menu.

Networks

13.1

Network

For more information, in **Help**, press the colour key **Keywords** and look up **Network**, for more information on connecting the TV to a network.

13.2

Bluetooth

Pairing a Device

For more information, in **Help**, press the colour key **Keywords** and look up **Bluetooth**, **Pairing** for more information on pairing wireless devices.

Select a Device

For more information, in **Help**, press the colour key **Keywords** and look up **Bluetooth**, **Select device** for more information on how to select a wireless device.

Remove a Device

For more information, in **Help**, press the colour key **Keywords** and look up **Bluetooth**, **Remove device** for more information on how to unpair (remove) a wireless Bluetooth device.

Settings


14.1

Picture






Picture Settings

Picture Style

Select a style

 Quick Menu > Frequent Settings > Picture > Picture style.



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

- Personal - The picture preferences you set during the first start up.
- Vivid - Ideal for daylight viewing
- Natural - Natural picture settings
-  Standard - Most energy conscious setting - Factory setting
- Movie - Ideal for watching movies with original studio effect
- Game* - Ideal for playing games
- Monitor** - Ideal for PC display
-  Day - For ISF Calibration, you can press the colour key  **APPLY ALL** to copy the calibrated settings to all sources.
-  Night - For ISF Calibration, you can press the colour key  **APPLY ALL** to copy the calibrated settings to all sources.

* Picture style - Game is only available in HDMI video source.

** Picture style - Monitor is only available when HDMI source video is applicable for PC application. HDR is not supported in Monitor mode. The TV is able to play HDR video in Monitor mode but no HDR processing will be applied.


When TV receives HDR signal (Hybrid Log Gamma, HDR10 and HDR10+), select a picture style below:

- HDR Personal
- HDR Vivid
- HDR Natural
- HDR Movie
- HDR Game
-  Day - For ISF Calibration
-  Night - For ISF Calibration

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

- HDR Personal
- HDR Vivid
- Dolby Vision Bright
- Dolby Vision Dark
- HDR Game

Restore a Style

- 1 - Select the picture style you want to restore.
- 2 - Press the colour key  Restore style, and press OK. The style is restored.



Customise a Style

Any picture setting you adjust, like Colour or Contrast, is stored in the currently selected Picture Style. It allows you to customise each style. Only the style **Personal** can save its settings for each source in the Sources menu.


Colour, Contrast, Sharpness, Brightness



Adjust the picture colour

 Settings > Picture > Colour.

Press the arrows  (up) or  (down) to adjust the colour saturation value of the picture.

Adjust the picture contrast


 Settings > Picture > Backlight contrast or OLED contrast.

Press the arrows  (up) or  (down) to adjust the contrast value of the picture.

You can decrease contrast value to reduce power consumption.



Adjust the picture sharpness

 Settings > Picture > Sharpness.

Press the arrows  (up) or  (down) to adjust the sharpness value of the picture.

Adjust brightness

 Settings > Picture > Brightness.

Press the arrows  (up) or  (down) to set the level of brightness of the picture signal.

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

Advanced Picture Settings

Colour Settings

Advanced Colour Settings

⚙ Settings > Picture > Advanced > Colour.

Adjust the tint setting

⚙ Settings > Picture > Advanced > Colour > Tint.

Press the arrows ▲ (up) or ▼ (down) to adjust the value of tint setting.

Adjust the colour enhancement

⚙ Settings
> Picture > Advanced > Colour > Colour enhancement.

Select **Maximum**, **Medium**, or **Minimum** to set the level of the colour intensity and the details in bright colours.

Note: Not available when Dolby Vision signal is detected.

Select the preset colour temperature

⚙ Settings > Picture > Advanced > Colour > Colour temperature.

Select **Normal**, **Warm**, or **Cool** to set the colour temperature for your preference.

Whitepoint alignment

⚙ Settings > Picture > Advanced > Colour > Whitepoint alignment.

Customise the whitepoint alignment based on the selected colour temperature of the picture. Press the arrows ▲ (up) or ▼ (down) to adjust the value.

Colour control (Hue and Saturation)

⚙ Settings
> Picture > Advanced > Colour > Colour control.

Press the arrows ▲ (up) or ▼ (down) to adjust the value of **Hue** and **Saturation** for the colour **Red**, **Yellow**, **Green**, **Cyan**, **Blue** and **Magenta**. Or select **Reset all** to reset all value to default.

Note: Available only when picture style is **ISF Day** or **ISF Night**.

RGB only mode

⚙ Settings
> Picture > Advanced > Colour > RGB only mode.

Select **Red**, **Green** or **Blue** to switch picture as selected colour only, or select **Off** to turn off RGB mode.

Note: Available only when picture style is **ISF Day** or **ISF Night**.

Advanced Contrast Settings

Contrast Modes

⚙ Settings >
Picture > Advanced > Contrast > Contrast mode.

Select **Normal**, **Optimized for picture**, or **Optimized for energy savings** to set the TV automatically reduces the contrast, for best power consumption or for best picture experience, or select **Off** to switch off the adjustment.

HDR Settings

If you are watching HDR programmes – programmes recorded in HDR – there is no need to upscale to HDR and the HDR Upscaling Control is unavailable. The TV will automatically switched to HDR mode with indication.

TV supports following HDR formats: Hybrid Log Gamma, HDR10, HDR10+, and Dolby Vision but it is subject to the availability of such HDR format in content providers.

HDR Upscaling

⚙ Settings >
Picture > Advanced > Contrast > HDR upscaling.

Select **On** to boost the brightness and contrast of the picture. The picture is much brighter and has a higher level of contrast between lighter and darker parts. HDR upscaling keeps colours rich and saturated. Not available when video content is supported HDR.

HDR Plus

⚙ Settings
> Picture > Advanced > Contrast > HDR Plus.

Select **HDR Plus** for superior contrast and brightness effect.

Note: Available when HDR (High-Dynamic Range) signal is detected.

Dynamic Contrast

⚙ Settings >

Picture > Advanced > Contrast > Dynamic contrast.

Select Maximum, Medium, or Minimum to set the level at which the TV automatically enhances the details in the dark, middle and light areas of the picture.

Note: Not available when HDR signal is detected. Not available in **Monitor** mode.

Video Contrast, Gamma

Video contrast

⚙ Settings

> Picture > Advanced > Contrast > Video contrast.

Press the arrows **▲** (up) or **▼** (down) to adjust the video contrast level.

Gamma

⚙ Settings

> Picture > Advanced > Contrast > Gamma.

Press the arrows **▲** (up) or **▼** (down) to set a non-linear setting for picture luminance and contrast.

Advanced Sharpness Settings

Ultra Resolution

⚙ Settings >

Picture > Advanced > Sharpness > Ultra Resolution.

Select On to have a superior sharpness in line edges and details.

Picture Clean

Noise reduction

⚙ Settings > Picture > Advanced > Picture clean > Noise reduction.

Select Maximum, Medium, or Minimum to set the level for removing the noise in video content. Noise is mostly visible as small moving dots in on-screen picture.

MPEG Artefact Reduction

⚙ Settings > Picture > Advanced > Picture clean > MPEG Artefact Reduction.

Select Maximum, Medium, or Minimum to have different degrees of smoothing the artefacts in digital video content.

MPEG artefacts are mostly visible as small blocks or jagged edges in on-screen images.

Motion Settings

Motion Styles

Motion Styles

⚙ Settings >

Picture > Advanced > Motion > Motion styles.

Motion styles provides optimised motion setting modes for different video content.

Select one of the motion styles to have different viewing experience on motion video. (Off, Pure Cinema, Movie, Standard, Smooth, Personal)

Not available for below cases:

- ⚙ Settings > Picture > Picture style > Monitor
- ⚙ Settings > Picture > Picture style > Game

Natural Motion

Natural Motion

⚙ Settings

> Picture > Advanced > Motion > Natural Motion.

Natural Motion makes any movement smooth and fluent.

Select Maximum, Medium, or Minimum to have different degrees for reducing the motion judder, visible in movies on TV. Select Minimum or Off when noise appears in playing moving picture on-screen.

Note: Only available when Motion styles set to Personal.

Picture Format

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...

1 - While watching a TV channel, select ⚙ **Settings > Picture Format > Fill Screen**, **Fit to Screen**, **Wide Screen** and **Original**, and press **OK**.

2 - Press **◀** (left) repeatedly if necessary, to close the menu.

- **Fill Screen** – 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.

- **Fit to Screen** – automatically zooms in the picture to fill the screen without distortion. Black bars may be visible. Not suitable for PC input.

- **Wide Screen** – automatically zooms in the picture to 16:9 full screen. Picture content aspect ratio may change.

- **Original** – automatically zooms in the picture to fit the screen with original aspect ratio. No content lost visible.

To format the picture manually...

1 – While watching a TV channel, select  **Settings** > **Picture Format** > **Advanced** and press **OK**.

2 – Use **Shift**, **Zoom**, and **Stretch** to adjust the picture.

3 – Or select **Undo** to return to the setting the picture had when you opened **Picture Format**.


- **Shift** – Select on the arrows to shift the picture. You can only shift the picture when it is zoomed in.

- **Zoom** – Select on the arrows to zoom in.

- **Stretch** – Select on the arrows to stretch the picture vertically or horizontally.

- **Undo** – Select to return to the picture format you started with.

Dolby Vision Notification

 **Settings** > **Picture** > **Dolby Vision notification**.

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

Quick Picture Setting

During the first installation, you did some picture settings in a few easy steps. To do these steps, make sure the TV can tune to a TV channel or can show a programme from a connected device.

14.2

Sound

Sound Style

Select a style

 **Settings** > **Sound** > **Sound style**.

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

- **AI mode** – There are ideal styles for watching

movies, listening to music or playing a game. Select **AI** mode for intelligent switching of sound style base on audio content.

- **Original** – Most neutral sound setting

- **Movie** – Ideal for watching movies

- **Music** – Ideal for listening to music

- **Game** – Ideal for gaming

- **News** – Ideal for speech

- **Personal mode** – Access to a more in depth sound settings.

Restore Personal mode

1 – Set the sound style to **Personal** mode.

2 – Press the colour key  **Restore Style**, and press **OK**. The style is restored.


Customise Personal mode



1 – Set the sound style to **Personal** mode.

2 – Press the colour key  **Customise**, and press **OK** to change **Personal** mode settings.

Headphone Volume


Headphone volume

 **Settings** > **Sound** > **Headphone volume**.

Press the arrows  (up) or  (down) to adjust the volume of a connected headphone separately.


Personal mode settings

Speaker virtualizer

 **Settings** > **Sound** > **Personal mode settings** > **Speaker virtualizer**.


Select **On** or **Auto (Dolby Atmos)** 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.

Clear dialogue

 **Settings** > **Sound** > **Personal mode settings** > **Clear dialogue** > **On**.

Select **On** to get an improved sound quality for speech programme.

AI Equalizer

 **Settings** > **Sound** > **Personal mode settings** > **AI Equalizer**.

Select **On** to enable intelligent equalizer adjustment based on audio content and custom settings.

Custom AI Equalizer

⚙ Settings > Sound > Personal mode settings > Custom AI Equalizer.

Press the arrows **▲** (up) or **▼** (down) to adjust the level of AI Equalizer.

TV placement

TV placement

⚙ Settings > Sound > TV placement.

Select **On a TV stand** or **On the wall** to have best sound reproduction according to the setting.

Advanced Sound Settings

Volume Control

Auto volume

⚙ Settings > Sound > Advanced > Auto volume.

Select **On** or **Off** to switch on or off the auto volume adjustment.

Select **Night Mode** for a more comfortable quiet listening experience.

Delta volume

⚙ Settings > Sound > Advanced > Delta volume.

The Delta volume setting can be used to adjust to balance the sound level difference between the TV channel and the HDMI source input. Press the arrows **▲** (up) or **▼** (down) to adjust the delta value for TV speaker volume.

* Note: Delta volume is available when the input source is set to HDMI or Analogue sources and the Audio out is set to **TV speakers** or **HDMI sound system**.

Audio Out Settings

⚙ Settings > Sound > Advanced > Audio out.

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.

Digital Output Settings

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

Digital out format

⚙ Settings > Sound > Advanced > Digital out format.

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

- **Stereo (uncompressed)**: If your audio playback devices have no multichannel sound processing, select to only output stereo content to your audio playback devices.
- **Multichannel**: Select to output multichannel audio content (compressed multichannel sound signal) or stereo audio content to your audio playback devices.
- **Multichannel (bypass)**: Select to output Dolby Digital Plus or DTS content to your audio playback devices or Home theatre system.

– Make sure your audio playback devices support Dolby Atmos feature.

– SPDIF output (DIGITAL AUDIO OUT) will be disabled when streaming Dolby Digital Plus content.

Digital out levelling

⚙ Settings > Sound > Advanced > Digital out levelling.

Adjust the loudness level from device which is connected to digital audio output (SPDIF) or HDMI.

- Select **More** to have louder volume.
- Select **Less** to have softer volume.

Digital out delay

⚙ Settings > Sound > Advanced > Digital out delay.

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

Digital out offset (Only available when Digital out delay set to On)

⚙ Settings > Sound > Advanced > Digital out offset.

If you cannot set a delay on the Home Theatre

System, you can set the TV to sync the sound. You can set an offset that compensates for the time necessary for the Home Theatre System to process the sound of the TV picture. You can set the value in steps of 5ms. Maximum setting is 60ms.

Dolby Atmos Notification

⚙ Settings > Sound > Dolby Atmos notification.

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

14.3

Eco Settings

Set energy saving level

⚙ Settings > Eco settings > Energy saving.

Select Maximum, Medium, or Minimum to have different degrees for energy saving, or select Off to switch off energy saving mode.

Set screen off to save energy consumption

⚙ Settings > Eco settings > Screen off.

Select Screen off, the TV screen is switched off, to switch the TV screen back on, press any key on the remote control.

Set TV switch off timer

⚙ Settings > Eco settings > Switch off timer.

Press the arrows **▲** (up) or **▼** (down) to adjust the value. The value 0 (Off) deactivates the automatic switch off.

Select Switch off timer, the TV switches off automatically to save energy.

* TV switches off if receiving a TV signal but you don't press a key on the remote control during a 4 hour period.

* TV switches off if not receiving a TV signal nor a remote control command for 10 minutes.

* 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 0.

14.4

General Settings

USB Hard Drive

You need to set up and format a USB Hard Drive before you record a channel.

⚙ Settings > General settings > USB Hard Drive.

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. If you want to record broadcasts with TV Guide data from the Internet, you must setup the Internet connection first before you install 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. 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.

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 - Select **Recordings** if you want to perform Pause TV and Recordings, otherwise, select **Apps** to store apps. Follow the instructions on screen.
- 4 - All files and data will be removed after formatting.
- 5 - When the USB Hard Drive is formatted, leave it connected permanently.

USB Keyboard Settings

Set the keyboard layout for installed USB keyboard

⚙ Settings > General settings > USB keyboard settings.

Connect the USB keyboard to one of the USB connections on this TV. When the TV detects the keyboard for the first time, you can select your keyboard lay-out and test your selection.

Home or Shop

Select the location of your TV

⚙ Settings > General settings > Location.

Select Shop, the picture style is switched back to Vivid, and can adjust shop settings. Shop mode is for in-store promotion.

Shop Setup

Adjust shop settings

⚙ Settings > General settings > Shop setup.

If the TV is set to Shop, you can set the availability of a specific demo for in store use.

Adjust Picture and audio

⚙ Settings > General settings > Shop setup > Picture and audio.

Select **Optimized for shop** or **custom** for picture and audio settings.

Set Logos and banner

⚙ Settings > General settings > Shop setup > Logos and banner.

Set to display **Feature logos** and **Promotional banner**.

Demo Me autostart

⚙ Settings > General settings > Shop setup > Demo Me autostart.

Turn On/Off the Demo Me autostart.

EasyLink - HDMI CEC

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

EasyLink HDMI CEC must be switched on on the TV and the connected device.

Switch on EasyLink

⚙ Settings > General settings > EasyLink > EasyLink > On.

Operate HDMI CEC-compatible devices with TV remote control

⚙ Settings > General settings > EasyLink > EasyLink remote

control > On.

Note:

- EasyLink 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.

HDMI Ultra HD

This TV can display Ultra HD signals. Some devices – connected with HDMI – do not recognise a TV with Ultra HD and might not work correctly or show distorted picture or sound.

To avoid the malfunctioning of such a device, you can adjust **HDMI Ultra HD** setting when TV is in the HDMI source. Recommended setting for legacy device is **Standard**.

Set the signal quality for each HDMI connectors

⚙ Settings > General settings > HDMI Ultra HD > HDMI (port) > Standard, Optimal.

To change the settings, switch to the HDMI source first. Select **Optimal** to enable the highest quality HDMI signal for 4K Ultra HD and HDR content (4K60 4:4:4, 4K60 10-bit HDR).

- The setting **Optimal** allows maximum up to Ultra HD (50 Hz or 60Hz) RGB 4:4:4 or YCbCr 4:4:4/4:4:2/4:2:0 signals.
- The setting **Standard** allows maximum up to Ultra HD (50 Hz or 60Hz) YCbCr 4:2:0 signals.

Maximum supported video timing format for HDMI Ultra HD options:

- Resolution: 3840 x 2160
- Frame rate (Hz): 50Hz, 59.94Hz, 60Hz
- Video data sub-sampling (bit-depth)
 - 8 bit: YCbCr 4:2:0, YCbCr 4:2:2*, YCbCr 4:4:4*, RGB 4:4:4*
 - 10 bit: YCbCr 4:2:0*, YCbCr 4:2:2*
 - 12 bit: YCbCr 4:2:0*, YCbCr 4:2:2*

* Supported only when HDMI Ultra HD is set to **Optimal**.

Select **Standard** if the picture or sound are distorted.

Note:

To watch HDR10+ or Dolby Vision content from HDMI source, you may need to power off your player and power on again when the player connected to TV playing such content for the first time. HDR10+ or

Dolby Vision content is supported only when HDMI Ultra HD is set to Optimal .

HDMI Auto Game Mode

Set the HDMI Auto game mode

⚙ Settings > General settings > HDMI Auto game mode.

Set HDMI Auto game mode to On, if you want TV to automatically set Picture style to **Game** whenever it is informed by the HDMI device connected to TV. This feature is only selectable when HDMI Ultra HD set to Optimal.

Auto Movie Mode

Set the Auto movie mode

⚙ Settings > General settings > Auto movie mode.

Set Auto movie mode to On, if you want TV to automatically set Picture style to **Movie** whenever it is informed by the HDMI device connected to TV.

Digital Caption Options

This allows you to modify how digital captions are displayed.

⚙ Settings > General settings > Digital caption options

- **Size:** Select to choose a caption display size according to your own preference.
- **Style:** Select to choose a caption font style according to your own preference.
- **Text colour:** Select a caption display text colour.
- **Text opacity:** Select the text opacity.
- **Background colour:** Select a caption display character background colour.
- **Background opacity:** Select the background opacity options.
- **Edge type:** Select the edge type.
- **Edge colour:** Select the caption display edge colour.

Reset TV Settings and Reinstall TV

Reset all settings value to original TV settings

⚙ Settings > General settings > Factory settings.

Redo full TV installation , and set TV status back to the first time you switch on

⚙ Settings > General settings > Reinstall TV.

Enter PIN code and select Yes, the TV will reinstall completely.

All settings will be reset and installed channels will be replaced.

The installation can take a few minute

14.5

Clock, Region, and Language Settings

Language

⚙ Settings > Region and language > Language.

Change the language of the TV menu and messages

⚙ Settings > Region and language > Language > Menu language.

Set audio preference language

⚙ Settings > Region and language > Language > Primary audio, Secondary audio.

Digital TV channels can broadcast audio with several spoken languages for a programme. 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.

Set subtitle preference language

⚙ Settings > Region and language > Language > Primary subtitle, Secondary subtitle.

Digital channels can offer several subtitle languages for a programme. You can set a preferred primary and secondary subtitle language. If subtitles in one of these languages are available, the TV will show the subtitles you selected.

Set teletex preference language

⚙ Settings > Region and language > Language > Primary text, Secondary text.

Some digital TV broadcasters have several Text languages available.

Clock

⚙ Settings > Region and language > Clock.

Correct clock automatically

⚙ Settings > Region and language > Clock > Auto clock mode.

- The standard setting for the TV clock is **Automatic**. The time information comes from the broadcasted UTC – Coordinated Universal Time information.
- If the clock is not correct, you can set the TV clock manually.

Correct clock manually

⚙ Settings > Region and language > Clock > Auto clock mode > Manual.

⚙ Settings > Region and language > Clock > Date, Time.

Go to previous menu, and select Date and Time to adjust the value.

Note:

- If none of the automatic settings display the time correctly, you can set the time manually.
- If you schedule recordings from the TV Guide, we recommend not to change the time and date manually.

Set the TV to switch to Standby automatically after a preset time

⚙ Settings > Region and language > Clock > Sleep timer.

14.6

Android Settings

⚙ Settings > Android settings.

View the list of installed Apps, check out the free space to download more or uninstall an App.

14.7

Lock Settings

Set Code and Change Code

Set a new code or reset the change code

⚙ Settings > Child lock > Set code / Change code.

The child lock code is used to lock or unlock channels or programmes.

Note:

If you forgot your PIN code, you can override the current one by using the code **8888** and entering a new one.

Lock for App

Set lock on Philips apps

⚙ Settings > Child lock > App lock.

You can lock apps unsuited for children. You can lock 18+ rated apps from the Philips apps or set up a restricted profile in the Home menu.

18+

The 18+ app lock will ask for a PIN code when you try to start an 18+ rated app. This lock is only valid for 18+ rated apps from the Philips apps.

Restricted profile

You can set up a restricted profile for the Home menu where only the apps you allow are available. You need to enter a PIN code to set up and switch on the restricted profile.

Google Play Store – Maturity

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. The level of maturity will determine which apps are available for instalation.

Videos, Photos and Music

15.1

From a Computer or NAS

You can view your photos or play your music and videos from a computer or a NAS (Network Attached Storage) in your home network.

The TV and computer or NAS must be in the same home network. On your computer or NAS, you need to install Media Server Software. Your Media Server must be set to share your files with the TV. The TV shows your files and folders as they are organised by the Media Server or as they are structured on your computer or NAS.

The TV does not support subtitles on video streams from a computer or NAS.

If the Media Server supports searching for files, a search field is available.

To browse and play the files on your computer...

- 1 - Press SOURCES, select Network and press OK.
- 2 - Select SimplyShare Devices and press (right) to select the device you need.
- 3 - Once a SimplyShare device is connected, the SimplyShare Devices item will be replaced by connected device name.
- 4 - You can browse and play your files.
- 5 - To stop playing videos, photos and music, press EXIT.

15.2

Favourites Menu

Add a folder or a file to favourites menu

- 1 - Press SOURCES, select USB and press OK.
- 2 - Select USB Devices and select a folder or a file.
- 3 - Press Mark favourite (green) to add the selected folder or file to the favourite menu.

View favourite files

- 1 - Press SOURCES, select USB and press OK.
- 2 - Select Favourites.
- 3 - You can view all favourite files in the list.

15.3

Most Popular Menu and Last Played Menu

View most popular files or clear the list

- 1 - Press SOURCES, select USB and press OK.
- 2 - Select USB Devices and select Most popular.
- 3 - Select one of the file and press OK to view files or press Clear all to clear the list.

View last played files

- 1 - Press SOURCES, select USB and press OK.
- 2 - Select USB Devices and select Last played.
- 3 - Select one of the file and press OK to view files or press Clear all to clear the list.

15.4

From a USB Connection

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

With the TV switched on, plug in a USB flash drive or a USB Hard Drive to one of the USB connections. The TV detects the device and will list your media files.

If the list of files does not appear automatically...

- 1 - Press SOURCES, select USB and press OK.
- 2 - Select USB Devices and press (right) to select the USB device you need.
- 3 - You can browse your files in the folder structure you have organised on the drive.
- 4 - Press Play all to play all files in the USB folder or press Mark favourite to add the selected folder to favourite menu - Favourites.
- 5 - To stop playing videos, photos and music, press EXIT.

Warning

If you try to pause or record a programme with a USB Hard Drive connected, the TV will ask you to format the USB Hard Drive. This formatting will delete all current files on the USB Hard Drive.

Play your Videos

Play Videos

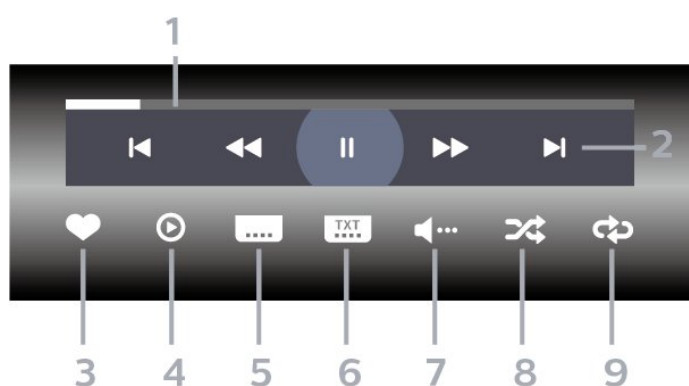
Open video folder

- 1 - Press **SOURCES**, select **USB** and press **OK**.
- 2 - Select **USB Devices** and press **>** (right) to select the USB device you need.
- 3 - Select **Videos**, you can press **Mark favourite** to add the video folder to favourite menu - **♥ Favourites**.

Play a video

- 1 - Press **SOURCES**, select **USB** and press **OK**.
- 2 - Select **USB Devices** and press **>** (right) to select the USB device you need.
- 3 - Select **Videos** and select one of video, you can press **Play all** to play all files in the folder or press **Mark as favourite** to add the selected video to favourite menu - **♥ Favourites**.

Control bar



- 1 - Progress bar
- 2 - Playback control bar
 - **⏮**: Jump to the previous video in a folder
 - **⏭**: Jump to the next video in a folder
 - **⏮⏮**: Rewind
 - **⏭⏭**: Fast forward
 - **⏸**: Pause the playback
- 3 - Mark as favourites
- 4 - Play all videos
- 5 - Subtitle: switch subtitles On, Off or On During Mute.
- 6 - Subtitle language: select a Subtitle Language
- 7 - Audio language: select an audio language
- 8 - Shuffle: play your files in a random order
- 9 - Repeat: plays all videos in this folder once or continuously

Video Options

Browse video files...

- **List/Thumbnails** – List or thumbnails views
- **Shuffle** – Play your files in a random order
- **Repeat** – Plays all videos in this folder once or continuously

- **Info** – Show video information

Playing video files...

- **Mark as favourites** – Mark the video as favourites
- **Subtitle setting** – Set subtitle font size, colour, position...etc

- **Info** – Show video information

View your Photos

View Photos

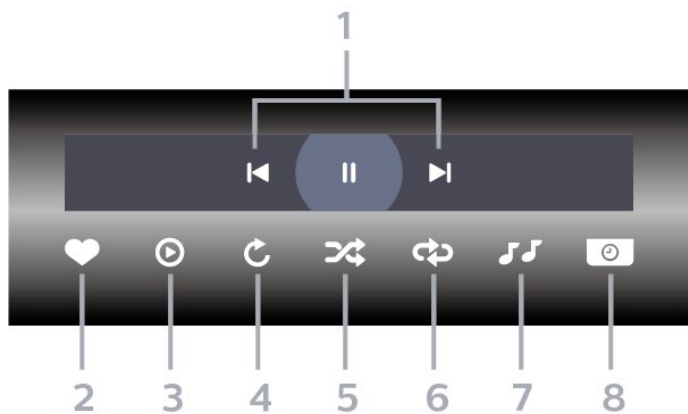
Open photo folder

- 1 - Press **SOURCES**, select **USB** and press **OK**.
- 2 - Select **USB Devices** and press **>** (right) to select the USB device you need.
- 3 - Select **Photos**, you can press **Mark favourite** to add the photo folder to favourite menu.

View a photo

- 1 - Press **SOURCES**, select **USB** and press **OK**.
- 2 - Select **USB Devices** and press **>** (right) to select the USB device you need.
- 3 - Select **Photos** and select one of photos, you can press **Slide show** to play all files in the folder or press **Mark favourite** to add the selected photo to favourite menu - **♥ Favourites**.

Control bar



1 - Playback control bar

- ◀: Jump to the previous photo in a folder
- ▶: Jump to the next photo in a folder
- ||: Pause the slideshow playback

2 - Mark as favourites

3 - Start a slideshow

4 - Rotate the photo

5 - Shuffle: play your files in a random order

6 - Repeat: plays all photos in this folder once or continuously

7 - Stop the music playing in the background

8 - Set the speed of the slide show

Photo Options

Browse photo files...

- List/Thumbnails – List or thumbnails views
- Shuffle – Play your files in a random order
- Repeat – Play the slide show once or continuously

- Stop music – Stop background music playing
- Slide Show Speed – Set the speed of the slide show

- Info – Show photo information

Playing photo files...

- Mark as favourites – Mark the photo as favourites
- Info – Show photo information

View 360 Photos

Open 360 Photos folder

1 - Press **SOURCES**, select **USB** and press **OK**.

2 - Select **USB Devices** and press **>** (right) to select the USB device you need.

3 - Select **360 Photos**, you can press **Mark favourite** to add the 360 photos folder to favourite menu.

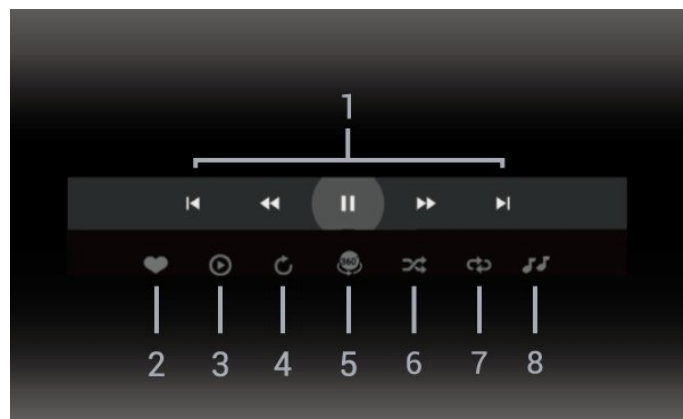
View a 360 photo

1 - Press **SOURCES**, select **USB** and press **OK**.

2 - Select **USB Devices** and press **>** (right) to select the USB device you need.

3 - Select **360 Photos** and select one of photos, you can press **Play All** to play all files in the folder or press **Mark favourite** to add the selected photo to favourite menu - **Favourites**.

Control bar



1 - Playback control bar

- ◀: Jump to the previous photo in a folder
- ▶: Jump to the next photo in a folder
- ◀◀: Rewind playback at 2x, 4x, 32x speed
- ▶▶: Wind playback at 2x, 4x, 32x speed
- ||: Pause the playback

2 - Mark as favourites

3 - Play one / Play all: play one photo or play all photos in this folder.

4 - Manual mode /Auto mode: when the 360 player is started, it will auto pan the selected 360 photo from left to right (0 to 360 degrees) in 360 view. When manual mode is entered, the 360 player will stop auto panning/rotating to allow manually panning/rotating with the remote control keys.

5 - Little Planet view: Little Planet is an alternate and fun view of 360 photo. When Little Planet view is started, the 360 photo will be rendered in a wrapped around view like a planet.

6 - Shuffle: play your files in a random order.

7 - Repeat: plays all photos in this folder once or continuously.

8 - Stop the music playing in the background.

360 Photo Options

Browse 360 photo files...

- List/Thumbnails – List or thumbnails views
- Shuffle – Play your files in a random order
- Repeat – Play your files once or continuously
- Stop music – Stop background music playing

Playing 360 photo files...







- Reset view – Reset the angle of view
- Info – Show 360 photo information

15.7








Play your Music

Play Music

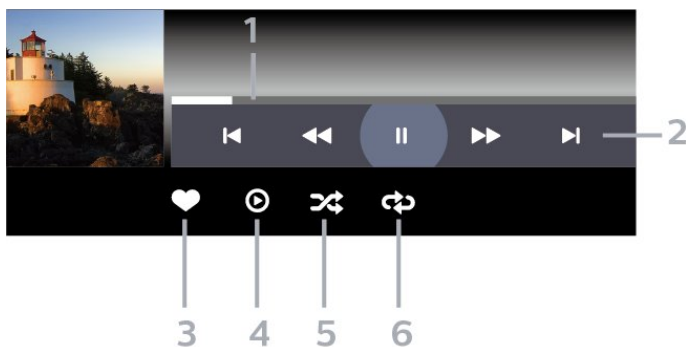
Open music folder

- 1 - Press , select  USB and press OK.
- 2 - Select  USB Devices and press  (right) to select the USB device you need.
- 3 - Select Music, you can press  Mark favourite to add the music folder to favourite menu
 -  Favourites.
- 4 - You can quickly find a music using classification
 - Genres, Artists, Albums, Tracks.

Play music






- 1 - Press , select  USB and press OK.
- 2 - Select  USB Devices and press  (right) to select the USB device you need.
- 3 - Select Music and select one of classifications to view music files.
- 4 - Select a music and you can press  Play all to play all files in the folder or press  Mark favourite to add the selected music to favourite menu
 -  Favourites.

Control bar



1 - Progress bar

2 - Playback control bar

- : Jump to the previous music in a folder
- : Jump to the next music in a folder
 - : Rewind
 - : Fast forward
 - : Pause the playback

3 - Mark as favourites

4 - Play all music

5 - Shuffle: play your files in a random order

6 - Repeat: plays all music in this folder once or continuously

Music Options

Browse music files...

- Shuffle – Play your files in a random order.

- Repeat – Plays all songs in this folder once or continuously.

Playing music files...

- Mark as favourites – Mark the music as favourites

Recording and Pause TV

Recording

What You Need

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

To record a TV programme you need...

- a connected USB Hard Drive formatted on this TV
- digital TV channels installed on this TV

You cannot record when you are using Pause TV.

In terms enforcement of copyright legislation, some DVB 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.

For more information on installing a USB Hard Drive, in **Help**, press the colour key **Keywords** and look up **USB Hard Drive**.

Note:

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

Record a Programme

Record Now

To record the programme you are watching right now, press **●** (Record) on the remote control. The recording will start immediately.

To stop the recording, press **■** (Stop).

The recording will only last 30 minutes. You can adjust the end time of the recording in the list of **Recordings**.

List of Recordings

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

To open the list of recordings...

- 1 - Press **SOURCES** and select **Recordings**.
- 2 - In the list of recordings, select the tabs **New**, **Watched** or **Expired** and press **OK** to filter your view.
- 3 - With a recording selected in the list, you can remove the recording with the colour key **Remove** or stop an ongoing recording with the colour key **Stop Recording**. You can rename a recording with the colour key **Rename**.
- 4 - Press **BACK** to close the menu.

Broadcasters can limit the number of days a recording can be viewed. When this period expires, the recording will be marked as expired. A recording in the list can show the number of days before it expires.

Watch a Recording

To watch a recording...

- 1 - Press **SOURCES** and select **Recordings**.
- 2 - In the list of recordings, select the recording you need and press **OK** to start watching.
- 3 - You can use the keys **||** (pause), **▶** (play), **◀◀** (rewind), **▶▶** (fast forward) or **■** (stop).
- 4 - To switch back to watch TV, press **TV EXIT**.

Pause TV

What You Need

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

To pause a TV programme you need...

- a connected USB Hard Drive formatted on this TV
- digital TV channels installed on this TV

With the USB Hard Drive 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 Pause TV when you are recording.

For more information, in **Help**, press the colour key **Keywords** and look up **USB Hard Drive**.

Pause a Programme

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 mostly replay the broadcast for a few seconds.

To replay a current broadcast...

- 1 - Press **⏸** (Pause)
- 2 - Press **◀◀** (Rewind). You can press **◀◀** 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

17.1

Philips TV Remote App

The new Philips TV Remote App on your smartphone or tablet is your new TV buddy.

With the TV Remote App, you master your media around you. Send photos, music or videos to your big TV screen. Look up what you want to watch on the TV Guide and watch it on your TV. With the TV Remote App you can use your phone as a remote control, TV can be switched on or off via your phone.

Download the Philips TV Remote App from your favourite app store today.

The Philips TV Remote App is available for iOS and Android and is free of charge.

17.2

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 - Tab 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.

Games

18.1

What You Need

On this TV, you can play games...

- from the Philips TV Collection in the Home menu
- from the Google Play Store in the Home menu
- from a connected Game Console

Games from the Philips TV Collection or the Google Play Store must be downloaded and installed on TV before you can play them. Some games need a gamepad to play.

To install game apps from the Philips TV Collection or the Google Play Store, the TV must be connected to the Internet. You must agree to the Terms of Use to use apps from the Philips TV Collection. You must sign in with a Google Account to use the Google Play apps and Google Play Store.

18.2




Gamepads


To play games from the Internet on this TV, you can connect a selected range of wireless Gamepads. The TV can support 2 connected Gamepads at a time. When you connect the Gamepad, you can use it immediately.

18.3

Play a Game From Game Console

To start a game from a Game Console...

- 1 - Switch on the Game Console.
- 2 - Press  **SOURCES** and select a game console or the name of the connection.
- 3 - Start the game.
- 4 - Press  **BACK** repeatedly or press  **EXIT** or stop the app with its dedicated exit/stop button.

For more information on connecting a Game Console, in **Help**, press the colour key  **Keywords** and look up **Game Console, connect**.

Top Picks

19.1

About Top Picks

With  Top Picks your TV recommends...



- current TV programmes in **Now on TV**
- online TV services (Catch Up TV) in **TV on Demand**
- the latest rental videos in **Video on Demand**
- online TV services (Catch Up TV) from Freeview in **Freeview Play***

To enjoy Top Picks, connect your TV to the Internet. Make sure you agree to the Terms of Use. The Top Picks information and services are only available in selected countries.

Terms of Use

To allow the TV to make these recommendations, you must agree to the Terms of Use. To get personalised recommendations based on your viewing habits, make sure you checked the box for **Personalized Recommendations Service Opt-In**.

To open the Terms of Use...

- 1 - Press  to open Quick Menu.
- 2 - Select  Top Picks.
- 3 - Press **+** **OPTIONS**, select **Terms of Use** and press **OK**.
- 4 - Select **Privacy Settings** and press **OK**.
- 5 - Select **Personalized Recommendations Service Opt-In** and press **OK** to check the box. Press **OK** again to uncheck.
- 6 - Press **←** **BACK** to close the menu.

* Freeview Play is only for UK models.

19.2

Now on TV

About Now on TV

With  **Now on TV**, the TV recommends the 10 most popular programmes to watch at this moment.

The TV recommends programmes on TV now or starting within 15 minutes. The recommended programmes are selected from the channels you installed. The selection is made from channels of your country. Also, you can let **Now on TV** do some personalised recommendations for you, based on programmes you watch regularly.

To make the Now on TV information available...

- the Now on TV information must be available in your country.




- the TV must have channels installed.
- the TV must be connected to the Internet.
- the TV Clock must be set to Automatic or Country Dependent.
- you must accept the Terms of Use (You might have accepted already when you connected to the Internet.).

The icon  will only appear at the top of the screen when Now on TV is available.

The TV does not store former recommendations.

Using Now on TV

To open Now on TV...

- 1 - Press  to open Quick Menu.
- 2 - Select  **Top Picks** to open the Top Picks menu.
- 3 - Select  **Now on TV** at the top of the screen and press **OK**.
- 4 - Press **←** **BACK** to close.

When you open **Now on TV**, the TV may need a few seconds to refresh the page information.

In Now on TV you can...

- select and press **OK** on a programme icon to tune to the ongoing programme.
- select and press **OK** on a scheduled programme icon to tune to the channel already.


You can use the colour keys on the remote control to start, stop or clear a scheduled recording. You can also set or remove a reminder that warns you when a programme starts.

To leave Now on TV without tuning to another channel, press **←** **BACK**.


19.3

TV on Demand

About TV on Demand






With  **TV on Demand**, you can watch TV programmes you missed or watch your favourite programmes whenever it suits you best. This service is also called Catch Up TV, Replay TV or Online TV. Programmes available on TV on Demand are free to watch.

You can let TV on Demand do some personalised recommendations of programmes, based on the TV installation and the programmes you watch regularly.



The icon  will only appear at the top of the screen when TV on Demand is available.

Using TV on Demand

To open TV on Demand...



- 1 - Press  to open Quick Menu.
- 2 - Select  **Top Picks** to open the Top Picks menu.
- 3 - Select  **TV on Demand** at the top of the screen and press **OK**.
- 4 - Press  (down) to open the page full screen.
- 5 - You can select a specific broadcaster if more than one is available.
- 6 - Select a programme icon and press **OK** to start watching.
- 7 - Press  **BACK** to close.

When you open **TV on Demand**, the TV may need a few seconds to refresh the page information.

Once a programme started, you can use the  (Play) and  (Pause) keys.

You can select a specific video store if more than one is available.

To rent a movie...

- 1 - Navigate the highlight on a movie poster. Limited info will show after some seconds.
- 2 - Press **OK** to open the movie page of the video store for a synopsis of the movie.
- 3 - Confirm your order.
- 4 - Make the payment on TV.
- 5 - Start watching. You can use the  (Play) and  (Pause) keys.


19.4

Video on Demand

About Video on Demand

With  **Video on Demand**, you can rent movies from an online rental video store.

You can let Video on Demand do some personalised recommendations of movies, based on your country, the TV installation and the programmes you watch regularly.

The icon  will only appear at the top of the screen when **Video on Demand** is available.

Payment





When you rent or buy a movie, you can pay the video store securely with your credit card. Most video stores ask you to create a login account the first time you rent a movie.

Internet Traffic

Streaming a lot of videos may cause you to exceed your monthly Internet traffic limit.

Using Video on Demand

To open Video on Demand...

- 1 - Press  to open Quick Menu.
- 2 - Select  **Top Picks** to open the Top Picks menu.
- 3 - Select  **Video on Demand** at the top of the screen and press **OK**.
- 4 - Use the navigation keys to select a movie poster.
- 5 - Press  **BACK** to close.

When you open **Video on Demand**, the TV may need a few seconds to refresh the page information.

Netflix

If you have a Netflix membership 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** to open the Netflix App. You can open Netflix immediately from a TV in standby.

www.netflix.com

Alexa

About Alexa

Your TV supports Amazon Alexa* voice control operations.

About Alexa

Alexa is a cloud-based voice service available on Alexa Echo devices from Amazon and device manufacturers. With Alexa working on your TV, you can switch on/off TV, change channels, change volume and more.

To control your TV with Alexa, you will need...

- Philips Android Smart TV that supports Alexa
- Amazon Echo device
- Google account
- Mobile device such as your phone or tablet
- Wi-Fi network

About Alexa Skill

Alexa uses the Alexa Skills to extend the voice control operations. Skills add new capabilities that create a more personalised experience with your Alexa enabled TV. "Philips Smart TV Voice Control" skill can be found on Alexa Skills store, it offers various voice control commands to work with your Philips Android Smart TV.

* Alexa is not available in all languages and countries. Amazon, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.


Note: The supported Ambilight styles may depend on specific TV models. Please refer the user manual of your TV to know the supported Ambilight styles. Ambilight setting is only for models which support Ambilight function.

Using Alexa

To use Alexa, you need to first setup the Alexa client service on your Philips Android Smart TV. Start the setup by launching the "Amazon Alexa" app from the Home screen of your TV. Follow the instructions and complete the following steps:

- Select a name for your Android Smart TV for Alexa to recognize.
- Select a Google account and sign-in.
- Return to this skill in the Alexa App on your phone to enable it, link accounts, and discover your devices.
- Return to your TV to complete setup.

Setup on TV for Alexa

- 1 - Press  **HOME** and open "Amazon Alexa" app.
- 2 - You need Amazon Echo device and Alexa companion app (on mobile device or web version) be ready to start the setup.
- 3 - Follow the instructions on screen to accept Privacy Policy terms, name your TV and sign in your Google account. The Google account is needed to pair with Alexa device.
- 4 - On your mobile device, sign in with the same Google account in the Amazon Alexa companion app.
- 5 - Complete following steps in the Amazon Alexa companion app. The first is to enable "Philips Smart TV Voice Control" skill. The second is to link your Google account and then the final is to discover devices.
- 6 - Select **Enable** or **Disable** for the TV switch on setting. You can use Alexa to turn your TV On/Off by voice command.
- 7 - At the end of setup screen, you can select **Done** to start to use Alexa. Select **Manage TVs** to do the management of Alexa-paired TVs or un-pair the TVs with Alexa.

Go to alexa.amazon.com, click on Skills, and search for "Philips Smart TV Voice Control". The skill will be listed in the results.

Software

22.1


Update Software

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 to carry out the update.

With the message on screen, select **Update** and follow the instructions on-screen.

You can also look for a software update yourself.

During the software update, there is no picture and the TV will switch off and on again. This might happen several times. The update can take a few minutes. Wait until the TV picture comes back up. Do not press the power switch  on the TV or on the remote control during the software update.

To look for a software update yourself...


- 1 - Select  **Settings** > **Update Software** > **Search for Updates** and press **OK**.
- 2 - Select **Internet (recommended)** and press **OK**.
- 3 - The TV will look for an update on the Internet.
- 4 - If an update is available, you can update the software right away.
- 5 - A software update can take several minutes. Do not press the  key on the TV or remote control.
- 6 - When the update is done, the TV will return to the channel you were watching.

Update from USB

It might be necessary to update the TV software.

You need a computer with an 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.

To update the TV software...

- 1 - Select  **Settings** > **Update Software** > **Search for Updates** and press **OK**.
- 2 - Select **USB** and press **OK**.


Identify the TV

- 1 - Insert the USB flash drive into one of the USB connections of the TV.
- 2 - Select **Write to USB** and press **OK**. An identification file is written on the USB flash drive.

Download the software

- 1 - Insert the USB flash drive into your computer.
- 2 - On the USB flash drive, locate the file **update.htm** and double click it.
- 3 - Click **Send ID**.
- 4 - If new software is available, download the .zip file.
- 5 - After the download, unzip the file and copy the file **autorun.upg** onto the USB flash drive. Do not place this file in a folder.

Update the TV software

- 1 - Insert the USB flash drive into the TV again. The update starts automatically.
- 2 - A software update can take several minutes. Do not press the  key on the TV or remote control. Do not remove the USB flash drive.
- 3 - When the update is done, the TV will return to the channel you were watching.


If a power cut occurs during the update, never remove the USB flash drive from the TV. When the power returns, the update will continue.

To prevent an accidental update of the TV software, delete the autorun.upg file from the USB flash drive.

Look for OAD Updates

Scan to search for an OAD (Over-the-air Download) software update.

To look for OAD updates...



- 1 - Select  **Settings** > **Update Software** > **Search for Updates** > **Look for OAD updates**.
- 2 - Follow the instructions on screen.

* Note: The OAD software update is only available in selected countries.

22.2

Software Version

To view the current TV software version...

- 1 - Select  **Settings** > **Update Software** > **Current Software info**, and press **OK**.
- 2 - The version, release notes and creation date are shown. Also, the Netflix ESN Number is shown if available.
- 3 - Press  (left) repeatedly if necessary, to close the menu.

Automatic Software Update

To switch on Automatic software update to update your TV software automatically. Leave the TV in standby.

- 1 - Select **⚙️Settings > Update Software > Automatic Software Update > On**, and press **OK**.
- 2 - Follow the on-screen instruction.
- 3 - Press **⬅️** (left) repeatedly if necessary, to close the menu.

When the setting is enabled, the upgrade gets downloaded when the TV is powered ON and installed 15min after the TV has gone to standby (as long as there are no recordings or other alarms scheduled).

When the setting is disabled, the "Upgrade Now" / "Later" OSD will be shown.

View Software Update History

Display the list of software versions that are successfully update on the TV.

To view the software update history...

- 1 - Select **⚙️Settings > Update Software > View software update history** and press **OK**.
- 2 - The software update history on this TV will be listed.

Open Source Software

This television contains open source software. TP Vision Europe B.V. hereby offers to deliver, upon request, a copy of the complete corresponding source code for the copyrighted open source software packages used in this product for which such offer is requested by the respective licences.

This offer is valid up to three years after product purchase to anyone in receipt of this information. To obtain the source code, please write in English to .

open.source@tpv-tech.com

Open Source License

About Open Source License

README for the source code of the parts of TP Vision Netherlands B.V. TV software that fall under open source licenses.

This is a document describing the distribution of the source code used on the TP Vision Netherlands B.V. TV, which fall either under the GNU General Public License (the GPL), or the GNU Lesser General Public License (the LGPL), or any other open source license. Instructions to obtain copies of this software can be found in the Directions For Use.

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Specifications

23.1

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 the 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 to 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 to prevent negative consequences for the environment and human health.

23.2

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 220–240V +/-10%
- Ambient temperature : 5°C to 35°C
- Power saving features : Eco mode, Screen off, Auto switch-off timer, Eco settings menu.

Power consumption

- 50PUN8215, 50PUN8235, 50PUN8245: 115W
- 55PUN8215, 55PUN8235, 55PUN8245: 154W
- 65PUN8215, 65PUN8235, 65PUN8245: 180W
- 70PUN8215, 70PUN8235, 70PUN8245: 228W

23.3

Operating System

Android OS :

Android Pie 9

23.4

Reception

- Aerial input : 75 ohm coaxial (F-type)
- Tuner bands : UHF, VHF
- ATSC
- Analogue video playback : SECAM, PAL
- Digital video playback : MPEG2 SD/HD (ISO/IEC 13818-2), MPEG4 SD/HD (ISO/IEC 14496-10), HEVC*
- Digital audio playback (ISO/IEC 13818-3)

23.5

Display Type

Diagonal screen size

- 126 cm / 50 inch
- 139 cm / 55 inch
- 164 cm / 65 inch
- 178 cm / 70 inch

Display resolution

- 3840 x 2160

23.6

Display Input Resolution

Supported input resolution - Video

Resolution — Refresh rate

- 480i – 60 Hz
- 480p – 60 Hz
- 576i – 50 Hz
- 576p – 50 Hz
- 720p – 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz
- 1080i – 50 Hz, 60 Hz
- 1080p – 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz
- 2160p – 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

Note:

- Video supported timings also include field/frame rate 23.976Hz, 29.97Hz and 59.94Hz
- Some resolutions may not be supported in all input sources.

Supported input resolution - Computer (HDMI Input only)

Resolutions (amongst others)

- 640 x 480p - 60 Hz
- 800 x 600p - 60 Hz
- 1024 x 768p - 60 Hz
- 1280 x 1024p - 60 Hz
- 1920 x 1080p - 60 Hz
- 3840 x 2160p - 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

23.7

Connectivity

TV Side

- USB 1 - USB 3.0
- Headphones - Stereo mini-jack 3.5mm
- HDMI 1 in - ARC - Ultra HD - HDR

TV Bottom

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

23.8

Sound

Output power (RMS) : 16W

Dolby Atmos (DDP/DTHD)

- Dolby MS12 V2.3
- Dolby AC-4
- DTS - HD (M6)
- Dolby Atmos Virtualizer

23.9

Multimedia

Connections

- USB 2.0 / USB 3.0
- Ethernet LAN RJ-45
- Wi-Fi 802.11a/b/g/n
- BT 4.2

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, H.264/MPEG-4 AVC, MPEG1, MPEG2, MPEG4, WMV9/VC1, VP9, HEVC (H.265)
- Audio Codecs : MP3, WAV, AAC, WMA (v2 up to v9.2), WMA-PRO (v9 and v10)
- Subtitles :
 - Formats : SRT, SUB, TXT, SMI
 - Character encodings : UTF-8, Central Europe and Eastern Europe (Windows-1250), Cyrillic (Windows-1251), Greek (Windows-1253), Turkish (Windows-1254), Western Europe (Windows-1252)
- 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
 - VC-1 is supported up to Advanced Profile @ L3
- Image Codecs : JPEG, GIF, PNG, BMP, HEIF, 360 Photo

Supported media server software

- You can use any DLNA V1.5 certified media server software.
- You can use the Philips TV Remote app (iOS and Android) on mobile devices.

Performance may vary, depending on the capabilities of the mobile device and the software used.

Help and Support

24.1

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

24.2

Using Help


This TV offers help on screen .

Open Help

Press the  key (blue) to open Help immediately. Help will open on the chapter that is most relevant to what you are doing or what is selected on TV. To look up topics alphabetically, press the colour key  **Keywords**.

To read the Help as a book, select **Book**.

You can also open  **Help** in the Quick menu.

Before you execute the Help instructions, close Help. To close Help, press the colour key  **Close**.

For some activities, like Text (Teletext), the colour keys have specific functions and cannot open Help.

TV Help on your tablet, smartphone or computer

To carry out extended sequences of instructions more easily, you can download the TV Help in PDF format to read on your smartphone, tablet or computer. Alternatively, you can print the relevant Help page from your computer.

To download the Help (user manual) go to www.philips.com/TVsupport

Quick Menu > Help

You can use more Help functions to diagnose and get more information about your TV.

- **TV information** – View the Model name, Serial number and Software version of your TV.
- **How to** – You can see instructions on how to install channels, sort channels, update TV software, connect external devices and use Smart functions on your TV.
- **Check the TV** – You can check if the picture, sound,

Ambilight* are working fine.

- **Check the network** – Check the network connection.
- **Check the remote control** – Perform the test to verify the TV bundled remote control functionality.
- **View weak signal history** – Display the list of channel numbers that were automatically saved when signal strength was weak.
- **Optimize internal storage** – Free up space in TV's internal storage for optimal performance.
- **Update software** – Check available software updates.
- **User manual** – Read the user manual for TV information.
- **Troubleshooting** – Find a solution for frequent ask questions.
- **Factory settings** – Reset all settings to factory settings.
- **Reinstall TV** – Reinstall and redo the complete TV installation.
- **Contact info** – Show the telephone number or web address for your country or region.

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

24.3

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 switching 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 behaviour.

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 behaviour. When the TV is disconnected and reconnected to the power supply, the startup screen is displayed at the next startup. To switch on the TV from standby, press **⏻** 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.

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 **Location** is set to **Home**. You can change and save settings in this mode.

A commercial banner appears

Make sure that **Location** is set to **Home**.

Picture does not fit the screen

- Change to a different picture format.
- Change **Picture format** to **Original**.

Picture position is incorrect

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

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 Theatre 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 recognise 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 the picture and sound of a device connected with HDMI is distorted, check if a different **HDMI Ultra HD** setting can solve this problem. In Help, press the colour key  **Keywords** and look up **HDMI Ultra HD**.
- If there are intermittent sound disruptions, make sure that output settings from the HDMI device are correct.
- If you use an HDMI-to-DVI adapter 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 behaviour 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/ac 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 switched on.

Wrong Menu Language

Wrong menu language

Change the language back to your language.

- 1 - Press  **HOME** to go to Home screen .
- 2 - Select the  icon (Settings) from System bar on the top of Home screen and press **OK**.
- 3 - Press 5 times  (down).
- 4 - Press 3 times  (right), select your language and press **OK**.
- 5 - Press  **BACK** to close the menu.

24.4

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.

24.5

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

25.1

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 spilt 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 use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set 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 set is going to be retained and relocated, the same considerations as above should be applied.

Risk of Batteries

- Risk of explosion if the battery is replaced by an incorrect type.
- Replacement of a BATTERY with an incorrect type that can defeat a SAFEGUARD (for example, 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.
- The remote control may contain coin-type batteries which can easily be swallowed by small children. Keep these batteries out of reach of children at all

times.

Risk of Overheating

Never install the TV in a confined space. Always leave a space of at least 10 cm or 4 inches 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.

25.2

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 colour 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.

25.3

Leather Care and Maintenance

For regular cleaning of a fully finished leather, simply vacuum and then take a soft cloth and wring it out in a warm soap solution.

This should be mild soap never a detergent.

Wipe the leather using a light circular motion, taking care not to soak the leather.

Repeat using clean water.

Do not attempt to feed the leather in any way.

In particular, the use of spray polishes, saddle soaps, waxes and so-called hide foods may well create a sticky surface, attracting dirt and, in time, causing irreversible damage.

Terms of Use

26.1

Terms of Use – TV

2020 © TP Vision Europe B.V. All rights reserved.

This product was brought to the market by TP Vision Europe B.V. or one of its affiliates, hereinafter referred to as TP Vision, which is the manufacturer of the product. TP Vision is the warrantor in relation to the TV with which this booklet was packaged. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V.

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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.

The material in this manual is believed adequate for the intended use of the system. If the product, or its individual modules or procedures, are used for purposes other than those specified herein, confirmation of their validity and suitability must be obtained. TP Vision warrants that the material itself does not infringe any United States patents. No further warranty is expressed or implied. TP Vision cannot be held responsible neither for any errors in the content of this document nor for any problems as a result of the content in this document. Errors reported to Philips will be adapted and published on the Philips support website as soon as possible.

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 authorised in this manual, shall void the warranty.

Pixel characteristics

This TV product has a high number of colour 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 standardisation for early integration in its products.

26.2

Terms of Use – Smart TV

You can see the terms of use, privacy policy, and also set privacy settings of your Smart TV.

To open the terms of use of Smart TV page...

- 1 – Press  HOME to open the Home menu.
- 2 – Select Apps to open apps.

26.3

Terms of Use – Philips TV Collection

In Help, press the colour key  Keywords and look up Terms of Use, Philips TV Collection for more information.

Copyrights

27.1

HDMI

HDMI

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27.2

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Dolby Audio

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Dolby Vision and Dolby Atmos

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27.4

DTS-HD (italics)

DTS-*HD*

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Wi-Fi

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