

User Manual

50PUD8528 55PUD8528 65PUD8528

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Home Screen

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Introduction

To enjoy the benefits of your Google TV, connect the TV to the Internet. Press • HOME on your remote control to get your Home screen. Like on your Android smartphone or tablet, the Home screen is the center of your TV. From the Home screen you can decide what to watch by browsing entertainment options from app and live TV.

The Home screen is organized in rows to let you discover great content from your favorite apps. You can also add additional rows or find new apps to get more content. Apps may populate their recommendation (if available) with their own choices as an individual row on the home screen.

Highlights on your home screen

With multiple tabs like Search, For you, Films, TV Shows, Apps and Library, you can discover movies and shows from your services and popular apps. Sign in to your Google Account to get personalized recommendations from your streaming services based on what you have watched and what interests you. You can also trigger Google search with voice or text input in the Search tab.

Apps

The Apps tab of the Home screen contains all installed Apps that come with the TV and the Apps you have installed from Google Play $^{\text{TM}}$ Store. You can also install and add more apps as favorites from the Apps tab.

Navigation

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

Discover personalized recommendations

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

Get recommendations across Google

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

See also www.support.google.com/googletv

1.2

Dashboard and Settings

Dashboard

The Dashboard is a side panel in Google TV that provides access to Settings, device controls, notifications and more.

The Dashboard can be accessed in three ways as follows:

- 1 Navigating to the profile icon in the upper right of the home screen.
- 2 Press the **ASHBOARD** key on the remote control.
- 3 Long press the **A** HOME key on the remote control.

The dashboard contains the following features.

- Profile: to display the current user profile icon or to add a new user profile
- Settings: to access all setting menus for adjusting the TV settings.
- Clock and screensaver: to indicate the system clock and to activate screen saver immediately.
- Sources: to launch the input source list for switching to any of the connected devices.
- · Picture: quick link to adjust picture settings.
- Notifications: to provide you messages about the Google TV system; press Clear all to dismiss all notifications.

Adjust settings

You can access the **Settings** menu via the dashboard in the top-right corner. Alternatively, you can access the **Frequent settings** menu and common menu items in the Philips TV Menu, which you can do directly from the remote control.

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Google TV and Basic Mode

Feature differences

You can set your TV to Google TV mode or Basic Mode.

Basic Mode contains only Live TV and External devices (e.g. HDMI) features. Google TV requires you to log in with your Google account and Internet connection. With Google TV, you can enjoy all Basic Mode features and other Google personalized services. For example, movies and TV shows from your favorite streaming apps, personalized recommendations, and Google Assistant to search and control your TV with your voice.

For more information, please refer to Google support

Home screen differences

The Home screen in Basic Mode has only two rows with no tabs. The first Home row contains Watch TV, TV Guide, Sources and Dashboard icons for TV feature operations. The second App row contains all pre-installed Apps. The Dashboard in Basic Mode does not include personal profiles and can only perform setting changes and display system notifications.

The Home screen of Google TV has multiple tabs like Home, Apps, Library and Search. Each tab contains rows of apps, movies and shows from your services and popular apps. You can get personalized recommendations from your streaming services based on what you have watched and what interests you. You can also trigger Google search with voice or text input in the Search tab.

1.4

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.

っ

Setting Up

2.1

Read the Safety Instructions

Please read the safety instructions before you use the TV

To read the instructions, in Help > User manual, press the color 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. If you lose this guide, you can download it from www.philips.com/TVsupport.

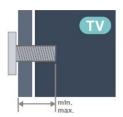
Use the product type number of the TV to look for the **Quick Start Guide** to download.

Wall Mounting

Your TV is also prepared for the wall mount bracket (sold separately).

The wall mount size may vary depending on the different types of back cases; refer to the **Quick Start Guide** in your product package to see which size is for your TV.

Use the following wall mount dimensions when purchasing the wall mount.



· 50PUx8528

200x300, M6 (min.: 10 mm, max.: 16 mm)

· 55PUx8528

200x300, M6 (min.: 10 mm, max.: 16 mm)

· 65PUx8528

300x300, M6 (min.: 12 mm, max.: 20 mm)

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 TVs 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.
- Dim lighting conditions in the room for best Ambilight effect.
- The ideal distance to watch TV is 2 to 5 times its diagonal screen size. When seated, your eyes should be level with the center of the screen.
- · Recommended distance to the wall:

A. When wall mounted, position the TV from 7 to 10 cm away from the wall.

B. If the TV has a stand, position it 10 to 20 cm away from the wall depending on the size of the stand.



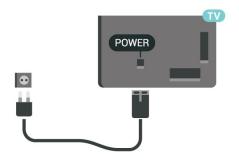
Note:

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.

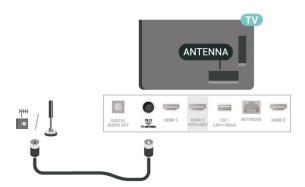
For more information, in Help, press the color key — Keywords and look up Switching On for more information on switching the TV on or off.

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.

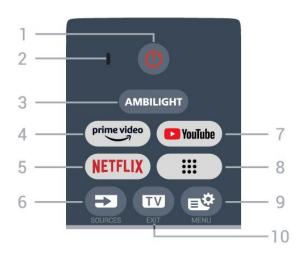


Remote Control

3.1

Key Overview

Top



1 - (Standby/On)

To switch the TV on or back to Standby. Long press for three seconds to reboot the TV.

2 - VOICE microphone

3 - AMBILIGHT

To select one of the Ambilight styles.

4 - prime video

To launch the Amazon prime video App.

5 - NETFLIX

- If you have a Netflix subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet.
- To launch Netflix, press **NETFLIX** to open Netflix immediately with the TV switched on or in standby. www.netflix.com

6 - **⇒** (SOURCES)

To open or close the Sources menu.

7 - YouTube

To launch the YouTube App.

8 - Apps

To launch the **Your apps** page to display the list of Apps that are pre-installed or installed by the user.

9 - 🕸 (Quick Menu/MENU)

To open the Quick Menu with typical TV functions. Hold the MENU key to show the Gaming control bar when a game signal is detected and Game Mode enabled.

10 - W (EXIT)

To switch back to watching TV or to stop an

interactive TV application. However, it might not work with some applications; behavior depends on third-party TV apps.

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 the previous menu.

To go back to the previous App/Internet page.

3 - + (OPTIONS)/(INFO)

To open or close the options menu. Long press to open program info.

4 - **— — —** Color keys

Direct selection of options. Press Blue key — to open the Help.

5 - Arrow/navigation keys

To navigate up, down, left or right.

6 - •: (Google Assistant™)

To launch Google Assistant™.

7 - **(HOME)**

To open the Home menu. Long press to access the Dashboard.

8 - Playback

- · Play ▶, to playback.
- · Pause II, to pause playback
- · Stop ■, to stop playback
- · Rewind ◀, to go back quickly
- · Fast forward ▶▶, to go forward quickly

Bottom



1 - **:** (TV Guide)

To open or close the TV Guide. Long press 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.

$5 - \blacksquare (Channel)$

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 - **∢**x (Mute)

To mute the sound or to restore it.

7 - 🏚 (DASHBOARD)

To launch Dashboard on the side of the screen to access Settings, device controls, notifications and more.

3.2

Pair Your Remote Control to the TV

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

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

When you start the initial TV installation, the TV invites you to press the Home + Back key to pair with the remote control. It is best to complete the pairing when you first install the TV.

Note:

- 1 Once the remote control has entered pairing mode successfully, the LED indicator ring around the microphone on the front side of the remote control starts blinking.
- 2 The remote control must be kept close to the TV (within 3 feet) during pairing in order to ensure success.
- 3 If the TV does not launch the voice control field when you press ♠; , 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 press the Home + Back key or long press the PAIR (SOURCES) key (for about 3 seconds) for pairing.

Alternatively, go to Settings > Remote & accessories > Remote control settings > Pair remote control, then follow the on-screen instructions.

A message appears when the pairing has been successful.

Remote Control Software

♦ Settings > Remote & accessories > Remote control settings > Remote control info

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

❖ Settings > Remote & accessories > Remote control settings > 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 and hold the •; key on the remote control; the blue light on the remote control lights up, the search field opens, and the microphone is active.
- 2 Speak out what you are looking for with clear pronunciation. Once you have finished your voice

input, release the •; key to start the search. It might take some time for the results to appear.

3 - In the list of search results, you can select the item you want.

3.4

IR Sensor

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

Warning

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

3.5

Batteries and Cleaning

Replace batteries

Refer to the **Quick Start Guide** in your product package for detailed information about the remote control batteries.

If the TV does not react to a button being pressed on the remote control, the batteries might be dead.

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

- 1 Slide the battery door in the direction shown by the arrow.
- 2 Replace the old batteries with new 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.
- $\boldsymbol{\cdot}$ 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.

Cleaning

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

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

Switching On and Off

41

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

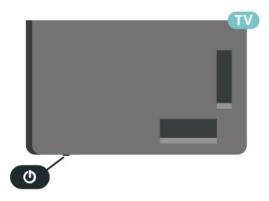
Press • on the remote control to switch the TV on. You can also press the small joystick button on the bottom of the TV to turn the TV on in case you can't find the remote control or its batteries are dead.

Reboot

Long press **O** on the remote control for 3 seconds to reboot the TV.

Switch to standby

To switch the TV to standby, press **o** on the remote control. You can also press the small joystick button on the bottom of the TV.



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

To turn 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

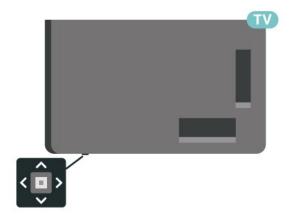
Keys on TV

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 open 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 tuner selection. Press the joystick key to start the demo movie.
- 4 The menu will disappear automatically.

To switch the TV to standby, select **o** and press the joystick key.



Channel Installation

5

Antenna/Cable Installation

Manual channel update

You can always start a channel update yourself.

To start a channel update manually:

- 1 Select Settings > Channels & Inputs > 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 \leftarrow Back to close the menu.

5.2

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 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.
- For the Netherlands or any of these cable operators (Switzerland: Sunrise/Austria: Magenta/Poland: UPC/Romania: Vodafone/Hungary:

Vodafone/Ireland: Virgin Media), the channel list copy is limited to satellite channel list copy. The terrestrial and cable channels list will not be copied or erased.

Current channel version

To check the current version of the channel list:

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

Current software version

You can go to **☆** Settings > System > About > SW

version to view the version number of current TV software

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 & Inputs > 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 & Inputs > 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 TV

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 & Inputs > 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 & Inputs > 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.

Channels

6

Watching channels

Tune to a Channel

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

Change Channels

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

If the information is available from the Internet, the TV shows the current program name and details followed by the next program 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 programs 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 **1** (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 color key — Keywords and look up Child Lock for more information.

Age Rating

To prevent children from watching a program not suitable for their age, you can set an age rating.

Digital channels can have their programs age rated. When the age rating of a program is equal to or higher than the age you have set as age rating for your child, the program will be locked. To watch a locked program, you must enter the **Child Lock** code first.

To set an age rating:

- 1 Select Settings > System > Child Lock > Age rating lock and press OK.
- 2 Enter a 4-digit Child lock code. If you have not set a code yet, select **Set code** in **Child lock**. Enter a 4-digit Child lock code and confirm. Now you can set an age rating.
- 3 Back in **Age rating lock**, select the age and press **OK**.
- 4 Press **(**left) repeatedly, if necessary, to close the menu.

To switch off the parental age rating, select **Free**. However, in some countries you must set an age rating.

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

Content rating

To set a content rating that will lock rated programs:

- 1 Select Settings > System > Child lock > Content rating lock and press OK.
- 2 Set the content and press **OK**. The selected content is blocked.
- 3 Press **(**left) repeatedly, if necessary, to close the menu.

Channel Options

Open options

While watching a channel, you can set some options.

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

To open the options menu:

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

Mono / Stereo

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

To switch to Mono or Stereo:

- 1 Tune to an analog 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.

Audio Language

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

Universal Access

Settings > Channels & Inputs > Channels > Universal access.

With Universal Access switched on, the TV is prepared for use for the deaf, hard of hearing, blind or partially sighted people.

Universal access for blind or partially sighted people

Settings > Channels & Inputs > Channels > Universal access > Audio description.

Digital TV channels can broadcast special audio commentary describing what is happening on screen.

Settings > Channels & Inputs > Channels > Universal access > Audio description > Mixed volume, Audio effects, Speech.

• Select Mixed volume, you can mix the volume of the normal audio with the audio commentary.

- Switch Audio effects on for extra audio effects in the commentary audio, like stereo or fading sound.
- Select **Speech** to set speech preference, **Descriptive** or **Subtitles**.

Dialog Enhancement

Settings > Channels & Inputs > Channels > Universal access > Dialog enhancement.

Increase the intelligibility of dialog and commentary, if available. Only available when sound setting Clear dialog is On and audio stream is AC-4.

Service navigation

Service navigation

> Channels & Inputs > Channels > Service navigation.

Switch the availability to navigate through primary channels only or all channels, on or off.

Channel Logos

Switch off channel logos

Channels & Inputs > Channels > Channel logos.

The channel logo can be hidden or shown.

6.2

Favorite Channels

About favorite Channels

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

You can create 8 different lists of favorite channels for easy channel zapping. You can name each Favorites List individually. You can only reorder channels in a Favorites List.

With a Favorites List selected, press the arrows \wedge (up) or \vee (down) to select a channel, then press OK to watch the selected channel. You only tune to the channels in that list when using the \square + or \square - keys.

Create a favorites List

To create a favorite channels list:

- 1 Press **to** to switch to TV.
- 2 Press OK to open the current channel list.
- 3 Press + OPTIONS.
- 4 Select Create Favorites List and press OK.
- 5 In the list at the left, select a channel you want as a favorite 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 favorites.
- 7 To finish adding channels, press \leftarrow Back.

The TV will ask you to rename the Favorites 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 Favorites List.

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

The channels in the Favorites List are renumbered.

Edit Favorites

To add a consecutive range of channels to a Favorites List in one go, you can use Edit favorites.

To add a range of channels:

- 1 Open the **Favorites List** where you want to add a range of channels.
- 2 Press + OPTIONS, select Edit favorites 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 Favorites List from Edit favorites.

Rename a Favorites List

To rename a Favorites List:

- 1 Open the Favorites List you want to rename.
- 2 Press + OPTIONS, select Rename Favorites 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 Favorites List

To remove a Favorites List:

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

TV guide

7.

TV Guide Data

With the TV Guide you can view a list of the current and scheduled TV programs of your channels. Depending on where the TV guide information (data) is coming from, analog and digital channels or only digital channels are shown. Not all channels offer TV Guide information. The TV can collect TV Guide information for the channels that are installed on the TV. The TV cannot collect the TV Guide information from channels viewed from a digital receiver or decoder.

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Using the TV Guide

Open the TV Guide

To open the TV Guide, press **III** TV GUIDE. The TV Guide shows the channels of the selected tuner.

Press TV GUIDE again to close.

The first time you open the TV Guide, the TV scans all TV channels for program information. This may take several minutes. TV Guide data is stored on the TV.

Tune to a program

From the TV Guide, you can tune to a current program.

To switch to the program (channel), select the program and press **OK**.

View program details

To call up the details of the selected program:

- 1 Press + OPTIONS, select Program Info and press OK.
- 2 Press ← Back to close.

Change Day

The TV Guide can show the scheduled programs for the upcoming days (maximum up to 8 days).

Press the color key — Day and select the day you need.

Search by Genre

If the information is available, you can look up scheduled programs by genre like movies, sports, etc.

To search for programs by genre:

- 1 Press III TV GUIDE.
- 2 Press + OPTIONS.
- 3 Select Search by genre and press OK.
- 4 Select the genre you want and press **OK**. A list with the found programs appears.
- 5 Press \leftarrow Back to close the menu.
- * Note: The Search by genre function is only available for certain countries.

Connect Devices

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About Connections

Connectivity Guide

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

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

Antenna port

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

HDMI ports

HDMI Quality

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

For the best signal quality transfer, use an Ultra High Speed certified 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 resolve this problem. In Help, press the color key — Keywords and look up HDMI Ultra HD.

Copy protection

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

HDMI ARC and eARC

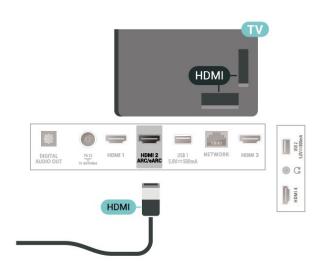
Only HDMI 2 on the TV supports HDMI ARC (Audio Return Channel) and HDMI eARC.

If the device, typically a Home Theater System (HTS), soundbar or AV receiver, also has the HDMI ARC connection, connect it to **HDMI 2** 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 to the HTS, but ARC is only available for 1 device/connection at a time.

HDMI eARC (Enhanced Audio Return Channel) is an advancement over the previous ARC. It covers all ARC features but with higher bandwidth and speed. eARC supports high-quality audio transmission up to192kHz, 24-bit, uncompressed 5.1 and 7.1, and 32-channel uncompressed audio.

Note: HDMI eARC is only available on HDMI 2. Use Ultra High-speed HDMI cable for eARC. Only one eARC device is available at a time.



HDMI CEC - EasyLink

Connect HDMI CEC-compatible devices to your TV, you can operate them with the TV remote control. EasyLink HDMI CEC must be switched on in the TV and the connected device.

Switch on EasyLink

❖ Settings > Channels &Inputs > Inputs > EasyLink > EasyLink > On.

Operate HDMI CEC-compatible devices with TV remote control

Settings > Channels &

Inputs > Inputs > EasyLink > EasyLink remote control > On.

To turn on or off the EasyLink remote control function. Note that you can always control the volume of connected HDMI CEC-compatible devices irrespective of this setting.

Power off HDMI devices with the TV

❖ Settings > Channels &
Inputs > Inputs > EasyLink > EasyLink auto
device off.

Select On to allow the TV to turn the HDMI devices to standby. Select Off to disable this function.

Power on the TV with HDMI devices

Settings > Channels & Inputs > Inputs > EasyLink > EasyLink auto TV on.

Select **On** to allow HDMI devices to wake up the TV from standby status. Select **Off** to disable this function.

Power on the HDMI sound system with TV

❖ Settings > Channels &Inputs > Inputs > EasyLink > EasyLink auto ARCon.

Select **On** to allow the TV to wake up the connected HDMI sound system from standby status. Select **Off** to disable this function.

EasyLink 2.0 sound control

❖ Settings > Channels &Inputs > Inputs > EasyLink > EasyLink ≥ 2.0 soundcontrol.

Select On to control the sound settings of the HDMI sound system. You can adjust these settings via Frequent settings or Settings > Display & Sound > Sound. This is only applicable to EasyLink 2.0—compliant HDMI sound systems.

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 Theater 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 recognize 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 the adjust HDMI Ultra HD setting when the TV is in the HDMI source. The recommended setting for legacy devices is Standard.

Set the signal quality for each HDMI connector

Settings > Channels & Inputs > Inputs > INPUT DEVICES > HDMI (port) > HDMI Ultra HD > Standard, Optimal, or Optimal (Auto Game)/Optimal (Auto Game xxxHz Pro).

To change the settings, switch to the HDMI source first. Select **Optimal** to enable the highest quality HDMI signal for 4K program or movie watching (such as Ultra HD 4K set-top box, 4K Blu-ray player or streaming box).

- The setting **Optimal** allows maximum up to Ultra HD (50Hz or 60Hz) RGB 4:4:4 or YCbCr 4:4:4/4:2:2/4:2:0 signals.
- The setting **Standard** allows maximum up to Ultra HD (50Hz 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*, RGB 4:4:4*
- 12 bit: YCbCr 4:2:0*, YCbCr 4:2:2*
- * Supported only when HDMI Ultra HD is set to Optimal, Optimal (Auto Game), or Optimal (Auto Game 120Hz Pro).

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

- Set Optimal (Auto Game) to enable TV to support the HDMI Variable Refresh Rate* and FreeSync Premium* video (on some models only) and set Sound style to Game whenever it is informed by the HDMI device connected to the TV.
- Select Optimal (Auto Game xxxHz Pro) to enable HDR10+ gaming and 120Hz high frame rate gaming (including 48-120Hz variable refresh rate) with maximum input resolution up to 3840 x 2160p (HDMI 1 and HDMI 2 only) and 1920 x 1080p.

When video input frame rate is more than 60Hz (include max frame rate 120Hz VRR video), the TV will automatically set **Ultra motion clarity** enabled. In this mode, the TV supports high refresh rate with effective display vertical resolution limited to 1080p. It is recommended to use it with new gaming computer or

console.

* With HDMI Variable Refresh Rate and FreeSync Premium supported, the TV changes its refresh rate in real time according to the frame rate signal on top of all features supported in Optimal (Auto Game) to synchronize with every picture. It is applied to reduce the lag, judder and frame tearing for better gaming experience.

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 the TV is playing such content for the first time. HDR10+ content is supported only when HDMI Ultra HD is set to Optimal or Optimal (Auto Game 120Hz Pro). Dolby Vision content is supported only when HDMI Ultra HD is set to Optimal , Optimal (Auto Game), or Optimal (Auto Game 120Hz Pro).

8.2

Home Theater System - HTS

Connect with HDMI ARC/eARC

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

HDMI ARC

Only HDMI 2 on the TV can offer the Audio Return Channel (ARC) signal. Once you have connected the Home Theater System, the TV can only send the ARC signal to this HDMI connection. With HDMI ARC, you do not need to connect the extra audio cable. The HDMI ARC connection combines both signals.

HDMI eARC

HDMI eARC (Enhanced Audio Return Channel) is an advancement over the previous ARC. It supports the latest high-bitrate audio formats up to192kHz, 24-bit, uncompressed 5.1 and 7.1, and 32-channel uncompressed audio. HDMI eARC is only available on HDMI 2.

Audio to video synchronization (sync)

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

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 Theater System might be distorted. This noise is heard when the audio or video file has DTS sound but the Home Theater System has no DTS sound processing. You can fix this by setting the Digital Out Format of the TV to Stereo.

Select Settings > Display & Sound > Audio out > Digital out format.

No sound

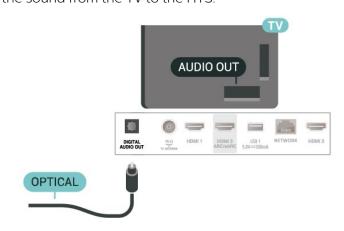
If you cannot hear the sound from the TV on your Home Theater System, check if you connected the HDMI cable to an HDMI ARC/eARC connection on the Home Theater System. HDMI ARC/eARC is only available on HDMI 2.

8.3

Digital Audio Out - Optical

Audio Out - Optical is a high quality sound connection.

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



8.4

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 favorite app store.

8.5

Blu-ray Disc Player

Use a **High speed HDMI** cable to connect the Bluray 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 color key — Keywords and look up EasyLink HDMI CEC for more information.

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Headphones

You can connect a set of headphones to the Ω 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 Press **◄•)** Volume, select the headphones icon by arrows **<** (left) or **>** (right).
- 2 Press the arrows \wedge (up) or \vee (down) to adjust the volume.

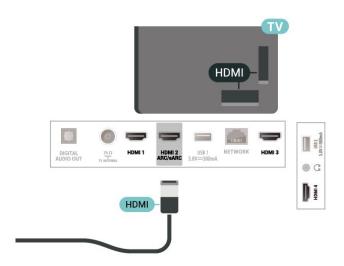


8.7

Game Console

HDMI

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



8.8

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 > System > Keyboard.
- 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
- * = fit the web page to the screen width

8.9

USB Storage Device

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

Insert a USB storage device into one of the USB connectors on the TV while the TV is switched on.



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

If the content list does not appear automatically, press SOURCES and select USB.

To stop watching the USB storage device content, press **W** EXIT or select another activity.

To remove the USB storage device safely:

- 1 Press ♠ HOMF
- 2 Select the USB drive under Dashboard > Notifications from top-right corner and press OK.
- 3 Select your device and press OK.
- 4 Select Eject and press OK.
- 5 Wait until the eject procedure is finished and then pull out the USB storage device.

Ultra HD on USB

You can view photos in Ultra HD resolution from a connected USB storage device. 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 storage device, in Help, press the color key — Keywords and look up Photos, Videos and Music.

8 10

Photo Camera

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

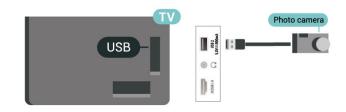
Use one of the USB connections on the TV to connect. Switch on the camera after you have made the connection.

If the content 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.

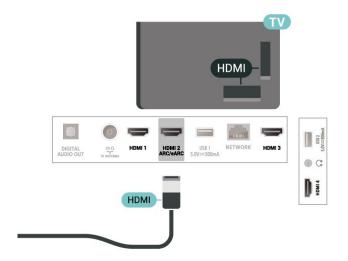


For more information on viewing photos, in Help, press the color key — Keywords and look up Photos, Videos and Music.

8 11

Camcorder

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



Computer

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

- * Note for Nvidia Graphics card users: If you connect your computer to the TV via HDMI, an Nvidia card may automatically output Variable Refresh Rate (VRR) video to TV when TV's HDMI Ultra HD setting is Optimal (Auto Game) or Optimal (Auto Game 120Hz Pro). Always make sure to turn off the VRR function in graphics card before you change the TV's HDMI Ultra HD to Optimal or Standard; the TV UI selection Optimal or Standard will turn off VRR support in the TV.
- * Note for AMD Graphics card users: If you connect your computer to the TV via HDMI, make sure to follow the settings in the graphics card used for proper performance.
- If the graphics card output video is $4096 \times 2160p$ or $3840 \times 2160p$ and RGB pixel format is used, the RGB 4:4:4 pixel format studio (limited RGB) must be set in the computer graphic card.

Connect Your TV

9.1

Network and Internet

Home Network

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

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

Connect to Network

Wireless Connection

What You Need

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

Use a high-speed (broadband) Internet connection.



Turn Wi-Fi On or Off

Settings > Network & Internet > Wi-Fi > On/Off.

Make the Connection

- 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 WPA2 or WPA3. 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

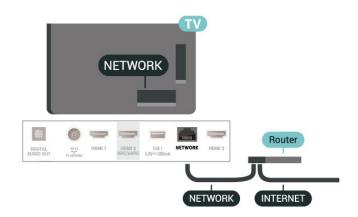
• If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be turned on.

In Help, press the color 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 an Internet connection. Use a high-speed (broadband) Internet connection.



Network and Internet Settings

View Network Settings

Settings > Network & Internet > View network settings.

You can view all current network settings here. The IP and MAC addresses, signal strength, speed,

encryption method, Address/Netmask/Gateway/DNS of IPv4 or IPv6, etc.

Switch On with Wi-Fi (WoWLAN)

Settings > Network & Internet > 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 > Network & Internet > 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 this is switched on. The Wi-Fi (WoWLAN) setting should be turned on first before you can change the setting **Switch on with Chromecast**.

Digital Media Renderer - DMR

Settings > Network & Internet > 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.

9.2

Google Account

Sign In

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

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

Sign In

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

To sign in after completing the TV installation:

- 1 Select Settings > Account & Sign-in and press OK.
- 2 Select Sign In and press OK.
- 3 Select Use your remote and press OK.
- 4 With the on-screen keyboard, enter your email address and press **OK**.
- 5 Enter your password and press **OK** to sign in.
- 6 Press **(**left) repeatedly, if necessary, to close the menu.

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 Your apps > WEB BROWSER (second row of icons in Basic mode) and press OK.
- 3 Enter an Internet address and select to confirm.
- 4 To close Internet, press ← Back and then confirm to leave on message screen.
- * Note: If WEB BROWSER is not in the Your Apps row, you can add the app manually.

Sources

11.1

Switch to a device

From the list of Sources, you can switch to any of the connected devices. You can switch to a tuner to watch TV or open the content of a connected USB storage device. You can switch to your connected devices to watch programs on that device, a digital receiver or a Blu-ray Disc player.

To switch to a connected device:

- 1 Press **SOURCES** to open the Sources menu.
- 2 Select one of the items in the source list and press **OK**. The TV will show the program or content of the device.
- * Note: A HDMI device listed in Source list as Unregistered cannot be controlled with the TV's remote control, as the communication protocol is limited.

Quick Menu and Frequent Settings

In the Quick Menu and Frequent settings, you will find a quick way to access TV functions and setting menus.

To open Quick Menu/Frequent settings and open an item:

- 1 Press Quick Menu/MENU to open Quick Menu.
- 2 Press the arrows **<** (Left) or **>** (right) to switch between **Quick Menu** and **Frequent settings**.
- 3 Select an item and press **OK** to open or start it.
- * Note: Quick Menu and Frequent settings are not available on third-party TV apps.

Display and Sound

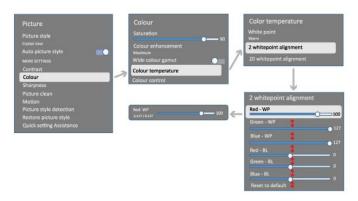
13.1

Picture

Picture Settings

About the Picture Settings Menu

The picture setting menu provides an easy flow to access multi-level picture settings from general to advanced. For some picture settings, values can be changed by breakaway menu to let you view all the setting values and preview the effects that will be applied.



On the first level of the Picture setting menu, you can always select an item and press the OK key to go to the next level of options. If a breakaway menu appears, you can slide or select a box to choose the setting values and preview the effect and then press OK to confirm the change. If there are other setting options on the same level, you can press the (up) or (down) key to scroll to them without leaving the breakaway menu. Once you have finished changing the settings, you can keep pressing the Back key to leave or close the setting menus.

Picture Style

Select a style

Alternatively, select

from **\hat{\hat{h}}** HOME > Dashboard > 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.
- · Crystal Clear Ideal for daylight viewing.
- · Home Cinema Ideal for daily movie home

entertainment experience.

- · ECO Most energy conscious setting.
- Movie Ideal for watching movies with original studio effect.
- · Game* Ideal for playing games.
- Monitor** Ideal for computer application display.
 Original video is displayed with minimum processing.
- · Calman For Calman color Calibration.
- * Picture style Game is only available in HDMI video and streaming video apps.
- ** Picture style Monitor is only available when HDMI source video is applicable for PC application.

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

- · HDR Personal
- · HDR Crystal Clear
- · HDR Home Cinema
- HDR Movie
- · HDR Game
- HDR Monitor
- HDR Calman For Calman color Calibration, only available for applicable models.

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

- · HDR Personal
- · HDR Crystal Clear
- · Dolby Vision Bright
- · Dolby Vision Dark
- Dolby Vision Game

Restore Picture style

Settings > Display & Sound > Picture > Restore picture style.

Select to restore the picture style.

Auto Film Picture style

Preferred Film Picture style

♦ Settings > Display & Sound > Picture > Auto Film Picture style > Preferred Film Picture style.

You can select which Picture style will be automatically set when film content is detected. The preferred Film Picture style option depends on the availability of Settings > Display & Sound > Picture > Picture style.

*Note: To automatically detect film content and set your preferred Picture style, you need to switch on Auto Film Picture style in \$\frac{1}{4}\$ Settings > Display & Sound > Picture > Auto Film Picture style > Auto Film Picture style.

Switch on/off Auto Film Picture style

♦ Settings > Display & Sound > Picture > Auto Film Picture style > Auto Film Picture style.

Switch on or off to detect film content automatically and set your preference in the Settings > Display & Sound > Picture > Auto Film Picture style > Preferred Film Picture style.

More Picture Settings

Contrast

Brightness

Ambient Light Level Optimization

Settings > Display & Sound > Picture > Contrast > Brightness > Ambient light level optimization.

Switch on to adjust the picture settings automatically to the lighting conditions of the room.

Backlight Contrast

Settings > Display & Sound > PictureContrast > Brightness > Backlight contrast.

Adjust the contrast value of the picture. You can decrease contrast value to reduce power consumption.

Contrast Modes

Settings > Display & Sound > PictureContrast > Brightness > Contrast mode.

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

Video Level

Settings > Display & Sound > PictureContrast > Brightness > Video level.

Adjust the video contrast level.

Dark Details

Gamma

Settings > Display & Sound > Picture > Contrast > Dark details > Gamma.

To set a nonlinear setting for picture luminance and

contrast.

Note: Not available in some models when Ambient dark detail optimization or Dark detail optimization is set to On.

Black Level

Settings > Display & Sound > PictureContrast > Dark details > Black level.

To set the black level of the picture.

Note: Setting the black level far from reference value (50) may result in lower contrast (dark detail disappears or black picture becomes gray).

Contrast Enhancement

Dynamic Enhancement Level

Settings > Display & Sound > Picture
 Contrast > Contrast enhancement > Dynamic enhancement level.

Select Off, 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 an HDR signal is detected. Not available in **Monitor** mode.

HDR Control

HDR Tone Mapping

Settings > Display & Sound > PictureContrast > HDR control > HDR tone mapping.

Set the method used in HDR tone mapping processing. Off, Off/HGiG is for disabling TV internal tone mapping or for following the HGiG (HDR Gaming Interest Group) gaming HDR standard in a matching gaming device. Standard is for following HDR standard metadata.

Note: Available when an HDR10 or HDR10+ signal is detected.

HDR Effect Settings

Settings > Display & Sound > Picture
 Contrast > HDR control > HDR10 effect/HDR10+ effect/HLG effect.

When an HDR10/HDR10+/HLG signal is detected and HDR tone mapping is not set to Off or Off/HGiG, you can adjust the HDR effect level to Minimum, Medium or Maximum for each type of HDR content.

Color

Settings > Display & Sound > Picture > Color.

Saturation

Settings > Display & Sound > Picture > Color > Saturation

To adjust the value of saturation for the colors.

Note: not available when the picture style is **Monitor** or **HDR Monitor**.

Adjust the tint setting

Settings > Display & Sound > Picture > Color > Tint.

To adjust the tint setting value.

Adjust the color enhancement

Settings > Display & Sound > Picture > Color > Color enhancement.

Select Maximum, Medium, Minimum or Off to set the level of the color intensity and the details in bright colors.

Note: not available when a Dolby Vision signal is detected and the picture style is Monitor/HDR Monitor

Adjust the wide color gamut

Settings > Display & Sound > Picture > Color > Wide color gamut.

To switch wide color gamut on/off. Applicable to some TV models only.

Adjust color temperature

Settings > Display & Sound > Picture > Color > Color temperature > Whitepoint.

Select Warm, Normal, Cool or Custom to set the color temperature for your preference.

Settings > Display & Sound > Picture > Color > Color temperature > 2 whitepoint alignment or 20 whitepoint alignment.

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

Color control

Settings

> Picture > Advanced > Color > Color control.

The Color control setting is only available when Color enhancement is set to Off. To adjust or reset to the default values for Hue, Saturation and Intensity for the colors Red, Yellow, Green, Cyan, Blue and Magenta respectively. If you want to reset all values to default, select Reset all to default.

Sharpness

Enhancement

Settings > Display & Sound > Picture > Sharpness > Enhancement.

To adjust the sharpness value of the picture.

Texture enhancement

Settings > Display & Sound > Picture > Sharpness > Texture enhancement.

Switch on to have superior sharpness in line edges and details. Not available when **Picture format** is set to **Fill Screen**.

Picture Clean

Noise reduction

Settings > Display & Sound > Picture > Picture clean > Noise reduction.

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

MPEG Artifact Reduction

Settings > Display & Sound > Picture > Picture clean > Artifact Reduction.

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

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

Motion

Motion Styles

❖ Settings > Display & Sound > Picture > Motion> Motion styles.

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

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

Not available for below cases:

· ❖ Settings > Display &

Sound > Picture > Picture style > Monitor

· ★ Settings > Display &

Sound > Picture > Picture style > Game

Smoothness

Settings > Display & Sound > Picture > Motion > Smoothness.

To make picture movement smooth by minimizing judder.

Select from 0 to 10 to have different degrees of reducing motion judder visible in movies on the TV. Select 0 when noise appears in the moving picture on-screen.

Note: Only available when Motion styles is set to Personal.

Quick Picture Setting

During the first installation, you made some picture settings in a few easy steps. You can redo these steps with **Quick Picture Setting**.

To set the picture in a few easy steps:

- 1 Select **A** Settings > Display & Sound > Picture.
- 2 Select Quick Picture Setting and press OK.
- 3 Use the navigation keys to select your preferred source, sharpness, contrast, color and motion settings.
- 4 Select Finish or press **<** (left) repeatedly, if necessary, to close the menu.

13.2

Screen

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 Press Settings > Display & Sound > Screen > 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 on the picture to fill the screen without distortion. Black bars may be visible. Not suitable for PC input.
- Wide Screen automatically zooms in on the picture to 16:9 full screen. Picture content aspect ratio may change.
- Original automatically zooms in on the picture to fit the screen at the original aspect ratio. No content lost visible.

To format the picture manually:

- 1 Press Settings > Display & Sound > Screen > 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.

Some Picture format setting selections may not be available in some conditions. For example, in video streaming, Android app application, gaming mode, etc.

13 3

Sound

Sound Style

Select a style

☆ Settings > Display & Sound > 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 based on audio content.
- · Original Most neutral sound setting
- Entertainment Ideal for watching movies
- Music Ideal for listening to music
- · Spatial Music Ideal for gaming
- · Dialog Ideal for speech
- Personal Access to more in-depth sound settings.

Customize personal settings

- 1 Set the sound style to Personal.
- 2 Go to 🌣 Settings > Display &

Sound > Sound > Personal settings to change personal sound settings.

Restore personal settings

Settings > Display &

Sound > Sound > Personal settings > Restore personal mode.

Select to restore personal sound settings.

Personal Settings

Speaker virtualizer

Settings > Display &

Sound > Sound > Personal 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. Select **Off** to turn the function off.

Clear dialog

Settings > Display &

Sound > Sound > Personal settings > Clear dialog.

Select On to get an improved sound quality for speech program.

AI Equalizer

Settings > Display &

Sound > Sound > Personal settings > AI Equalizer.

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

Custom AI Equalizer

Settings > Display &

Sound > Sound > Personal settings > Custom AI Equalizer.

Press the **Arrow/navigation keys** to adjust the level of AI Equalizer.

Restore personal settings

Settings > Display &

Sound > Sound > Personal settings > Restore personal mode.

Select to restore personal sound settings.

TV Placement

TV placement

Settings > Display & Sound > Sound > TV placement.

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

DTS Play-Fi

DTS Play-Fi Wireless Surround

DTS Play-Fi

Settings > Display & Sound > Sound > DTS Play-Fi.

With DTS Play-Fi on your Philips TV, you can connect to compatible speakers to stream audio wirelessly to other rooms in your house.

Note: Settings for Multiroom TV Audio are not available when connected to the DTS Play-Fi Headphones app or playing music from the DTS Play-Fi app.

To stream audio wirelessly to speakers, you will need:

- · Philips Smart TV that supports DTS Play-Fi
- · DTS Play-Fi compatible device
- · DTS Play-Fi app on your Philips TV
- · Mobile device, such as your smartphone or tablet
- · Philips Sound app installed on your phone or tablet
- · Wi-Fi network

Setup to connect DTS Play-Fi compatible device

- 1 Download Philips Sound app and install the App on your phone or tablet.
- 2 Use the Philips Sound app to search and set up a DTS Play-Fi compatible device. Make sure the DTS Play-Fi device is connected to the same Wi-Fi network of your TV.
- 3 On your Philips TV, open the pre-installed DTS Play-Fi app and select **Connect Speakers** to search for DTS Play-Fi compatible devices.
- 4 When DTS Play-Fi devices are successfully connected to your TV, you can select the devices from the device list and adjust the volume.
- 5 Now you can start to stream audio from your TV to multiple DTS Play-Fi devices.

DTS Play-Fi Wireless Surround

With the Play-Fi app on your TV, you can set up surround sound with TV speakers, soundbar and subwoofer.

1 - Launch the DTS Play-Fi App on the TV

- 2 Move to the DTS Play-Fi Wireless Surround tab and select 'Begin Setup...'
- 3 Follow the on-screen instructions to set the TV speakers and DTS Play-Fi compatible devices as a surround sound system.

DTS Play-Fi Home Theater

Experience immersive home theater audio with Play-Fi wireless subwoofers, soundbars, front speakers, surround speakers, or a Play-Fi receiver that powers home theater speakers.

Play-Fi Speakers as Front TV Speakers

- You may output TV audio to a pair of Play-Fi speakers, such as the TAW6205, TAW6505 or TAFW1.
- TV speakers will be muted when connected to Play-Fi speakers.
- Use the Play-Fi app on the TV to set up the Play-Fi speakers.
- 1 Select Play-Fi Wireless Home Theater
- 2 Select Two as the Front Speakers
- 3 Follow the setup wizard to complete the setup. Set up Home Theater system with your TV and Play-Fi Speakers
- 1 In the Play-Fi app, select DTS Play-Fi Home Theater > Setup > Connect Speakers to connect all of your Play-Fi devices. If the devices are already connected, you can select My speakers are connected... to go to the next step.
- 2 Setup to assign the Front Speaker, Surround Speakers, and Subwoofer to connected Play-Fi devices. The graphic on the left will show the positions of the speakers.
- 3 It is suggested to use **TV+ Two**, as it provides a dedicated center channel for dialog clarity.
- 4 Once the devices are assigned, select **Continue**... to complete the Home Theater System setup.

Settings menu of Home Theater System. You can select Distance to Speakers to choose proper distance or select Disable Home Theater, Disband Setup, if necessary.

Note:

- 1. Wireless surround/Stereo pair should proceed under Play-Fi Home Theater.
- 2. The features depend on the TV model and Play-Fi speakers in use.

Mimi Sound Personalization settings

Mimi Sound Personalization settings

Settings > Display & Sound > Sound > Mimi sound personalization.

Mimi Sound Personalization

Mimi Sound Personalization is a technology that

adapts the audio signal of the TV in real time to the user's hearing ability. It restores details in the audio signal that would otherwise not be heard by users with less-than-perfect hearing, so that they hear more and experience better sound, thereby enhancing the TV viewing experience.

How do I test my hearing and set up my hearing profile?

Open Mimi Sound Personalization under Settings > Display & Sound > Sound > Mimi sound personalization > Configure. Create your Hearing ID with a short hearing test with the Mimi Hearing Test app, or create a profile based on your year of birth. The Hearing ID can be added to the television with a QR code, which will sync your Hearing Test app with the TV.

EasyLink 2.0

Control the sound settings of the HDMI sound system via EasyLink 2.0

You can adjust the individual sound settings of the HDMI sound system via Frequent settings or Display & Sound > Sound. This is only applicable to EasyLink 2.0—compliant HDMI sound systems. To switch on the control, make sure the EasyLink 2.0 sound control menu item is set to On under Channels and inputs > Inputs.

Select sound style

♦ Settings > Display & Sound > Sound > EasyLink 2.0 > Sound style.

Switch between the preset sound styles. There are ideal styles for watching movies, listening to music and other sound content.

- · Movie Ideal sound style for watching movies.
- · Music Optimized for listening to music.
- · Voice Enhances the dialog in the vocals.
- Stadium Gives the feel of a large open-air stadium.
- Custom Personalized sound mode. This setting is only available when the connected device is compatible with the TV.

Adjust bass level

❖ Settings > Display &

Sound > Sound > EasyLink 2.0 > Bass.

Press the Arrow/navigation keys to adjust the bass level.

Adjust treble level

Settings > Display &

Sound > Sound > EasyLink 2.0 > Treble.

Press the Arrow/navigation keys to adjust the treble level.

Custom Equalizer

Settings > Display &

Sound > Sound > EasyLink 2.0 > Custom Equalizer.

Adjust the frequency bands when the **Sound style** is set to **Custom**. Press the **Arrow/navigation keys** to adjust the AI Equalizer levels. This setting is only available when the connected device is compatible with the TV.

Surround Sound

Select a surround effect from the preset types.

- Upmix Upmix to take full advantage of all speakers.
- · Standard Speaker output through the original channels.
- Surround AI Optimum surround effect using AI analysis.

DRC

Settings > Display &

Sound > Sound > EasyLink 2.0 > DRC.

Select the preferred Dynamic Range Control (DRC).

- · Auto Dynamic range is automatically adjusted.
- · On Optimize the dynamic range.
- · Off Turn off dynamic range adjustment.

Height speakers

Settings > Display & Sound > Sound > EasyLink 2.0 > Height speakers.

Select the preferred movement of the height speakers. This setting is only available when the connected device is compatible with the TV.

- · Auto Dynamic movement depending on content.
- · On Always elevated.

· Off - Flat position.

Select sound stage

Settings > Display &

Sound > Sound > EasyLink 2.0 > Sound stage.

Select a listening experience. This setting is only available when the connected device is compatible with the TV.

- · Auto Dynamic setting changes depending on content.
- On Immersive Sound Stage, good for watching movies.
- Off Crystal Sound Stage, good for listening to music and dialog.

Reset all to default

Settings > Display &

Sound > Sound > EasyLink 2.0 > Reset all to default.

Reset all the EasyLink 2.0 sound settings back to the original factory settings.

Room Calibration

Room calibration

Settings > Display & Sound > Sound > Room calibration.

This calibration will allow the TV to determine the acoustics in your room and provide optimized sound quality through the TV speakers that best matches the acoustics.

You need to pair your remote control with the TV before starting the setup and make sure the TV Audio out setting is TV speakers. For a more accurate result, please keep the room quiet.

To start the room calibration:

- 1 Hold your remote control at the listening position and point it toward the TV during the tuning process.
- 2 Select Calibrate now or Calibrate again to start the calibration.
- 3 A test sound will be played and measured through your remote control. Hold your remote control and point it toward the TV; this can take several seconds.
- 4 Once your TV speakers are successfully calibrated, select **Test** to listen to the sound before and after the TV speakers are calibrated. Select **Apply** to accept the setting or select **Try again** to redo the calibration.
- 5 When room calibration setup is successful and applied, the TV returns to the Settings menu. Now go

to 🌣 Settings > Display &

Sound > Sound > Room calibration and select Apply calibration to tune the audio output from the TV speakers.

Advanced Sound Settings

Volume Control

Auto volume

Settings > Display & Sound > Sound > Advanced > Auto volume.

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

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

Delta volume

Settings > Display &Sound > Sound > Advanced > Delta volume.

The Delta volume setting can be used to balance the sound level difference between the TV channel and the HDMI source input. Press

the Arrow/navigation keys to adjust the delta value for TV speaker volume.

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

Dolby Atmos Notification

Settings > Display & Sound > Sound > Dolby Atmos notification.

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

13.4

Audio Output

Speakers and eARC

Audio out

Settings > Display & Sound > 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.

When the DTS Play-Fi compatible device is configured correctly and switched on, you can select Play-Fi Wireless Home Theater to set it as the audio out device.

eARC

Settings > Display & Sound > Audio output > eARC.

Set eARC mode to Automatic or Off.

Digital Output Settings

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

Digital out format

Settings > Display & Sound > Audio output > Digital out format.

Set the audio out signal of the TV to fit the sound capabilities of the connected Home Theater 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 theater system.
- Make sure your audio playback devices support Dolby Atmos feature.
- SPDIF output (DIGITAL AUDIO OUT) will be enabled when streaming Dolby Digital Plus content.

Digital out leveling

❖ Settings > Display & Sound > Audio output> Digital out leveling.

Adjust the loudness level of the HDMI sound system.

- · Select More to have higher volume.
- · Select Less to have lower volume.

Digital out delay

❖ Settings > Display & Sound > Audio output> Digital out delay.

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

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

Settings > Display & Sound > Audio output > Digital out offset.

If you cannot set a delay on the Home Theater System, you can set the TV to sync the sound. You can set an offset that compensates for the time necessary for the Home Theater System to process the sound of the TV picture. You can set the value in steps of 5ms. Maximum setting is 60ms.

13 5

Ambilight

Turn Ambilight On or Off

Turn on Ambilight

Press AMBILIGHT to turn on, or you can turn it on by selecting Settings > Display & Sound > Ambilight > Ambilight style > Enable.

To switch off Ambilight:

- 1 Press AMBILIGHT.
- 2 Press **OK** on the **Enable** option to switch Ambilight on or off.
- 3 Press **〈** (left) to go back one step or press **←** Back to close the menu.

Ambilight Style

Follow Video

You can set Ambilight to follow the video or the audio dynamics of a TV program. Alternatively, you can set Ambilight to show a preset color style or you can switch Ambilight off.

If you select **Follow Video**, you can select one of the styles that follow the dynamics of the picture on your TV screen.

To set the Ambilight Style:

- 1 Press AMBILIGHT.
- 2 Scroll to Follow Video.
- 3 Select the style you want and press OK.
- 4 Press **<** (left) to go back one step or press **←** Back to close the menu.

The available Follow Video styles are:

- · Standard time Ideal for day-to-day TV watching
- Natural Follows the picture or sound as truthfully as possible
- · Sports Ideal for sports program
- · Vivid Ideal for daylight viewing
- · Gaming Ideal for gaming

Follow Audio

You can set Ambilight to follow the video or the audio dynamics of a TV program. Alternatively, you can set Ambilight to show a preset color style or you can switch Ambilight off.

If you select Follow Audio, you can select one of the styles that follow the dynamics of the sound.

To set the Ambilight Style:

- 1 Press AMBILIGHT.
- 2 Scroll to Follow Audio.
- 3 Select the style you want and press OK.
- 4 Press **〈** (left) to go back one step or press **←** Back to close the menu.

The available Follow Audio styles are:

- · Lumina Ideal for watching music videos
- · Disco Ideal for listening to loud retro music
- · Rhythm Ideal for listening to rhythmic music

Follow Color

You can set Ambilight to follow the video or the audio dynamics of a TV program. Alternatively, you can set Ambilight to show a preset color style or you can switch Ambilight off.

If you select Follow color, you can select one of the preset color styles.

To set the Ambilight Style:

- 1 Press AMBILIGHT.
- 2 Scroll to Follow color.
- 3 Select the style you want and press OK.
- 4 Press **(** (left) to go back one step or

press \leftarrow Back to close the menu.

The available Follow color styles are:

- · Red lava static Red color
- · Blue ocean static Blue color
- · Green nature static Green color
- · Warm white static Warm White color
- · Cool white static Cool White color
- Personal color Static color of your choice. To set the color for Ambilight static light, go

to 🌣 Settings > Display &

Sound > Ambilight > Personal color and pick a color you like.

Support Your Team

You can set Ambilight to follow the team flag you select.

To set the Ambilight Style:

- 1 Press AMBILIGHT.
- 2 Select Support your team and press OK.
- 3 Go to Settings > Display &

Sound > Ambilight > Support your team, select the flag you want and press OK.

4 - Press **〈** (left) to go back one step or press **←** Back to close the menu.

Follow App

The Follow App setting is available when you control Ambilight with the Philips TV Remote app.

Personal Color

Personal color

Settings > Display & Sound > Ambilight > Personal color.

To set the color for Ambilight static light of your choice. You can pick a color you like from the color palette. This setting is only available when Ambilight style is set to Follow color and then Personal color is selected.

Ambisleep

Ambisleep simulates sunset to help you unwind before you fall asleep. At the end of simulation, the TV will automatically switch to standby.

Start Ambisleep

❖ Settings > Display &Sound > Ambilight > Ambisleep > StartAmbisleep.

Select to turn on Ambisleep.

Duration

Set the duration (in minutes) of Ambisleep.

Brightness

Settings > Display &

Sound > Ambilight > Ambisleep > Brightness.

Set the starting brightness of Ambisleep.

Color

Settings > Display &

Sound > Ambilight > Ambisleep > Color.

Select the light color of your preference.

Sound

Settings > Display &Sound > Ambilight > Ambisleep > Sound.

Select the nature sound you want to use during Ambisleep.

The available nature sounds are:

- \cdot Campfire
- · Rain
- · Rainforest
- · Tropical beach
- · Waterfall
- Silent

Lounge Light Mode

The lounge light mode of your TV allows you to switch on the Ambilight when the TV is in standby. So you can light up your room with Ambilight.

Enable lounge light mode

❖ Settings > Display & Sound > Ambilight > Lounge light > Enable on standby.

Switch on to allow lounge light mode to be activated when TV is on standby.

After putting your TV on standby, if you want to switch on the Ambilight lounge light, follow these steps:

- 1 Press the AMBILIGHT key on the remote control to activate the Ambilight lounge light.
- 2 Press the navigation keys **〈** (left) or **〉** (right) to change different light effects.
- 3 Press the navigation keys \wedge (up) or \vee (down) to adjust the brightness.
- 4 To switch off the Ambilight lounge light, press the AMBILIGHT key again.

Duration

Settings > Display &

Sound > Ambilight > Lounge light > Duration.

Set the duration (in minutes) of Lounge light mode.

Advanced Ambilight Settings

Brightness

Settings > Display &

Sound > Ambilight > Advanced > Brightness.

Press the Arrow/navigation keys to set the level of Ambilight brightness.

Saturation

Settings > Display &

Sound > Ambilight > Advanced > Saturation.

Press the Arrow/navigation keys to set the level of Ambilight saturation.

Neutralize the influence of a colored wall on the Ambilight colors

Settings > Display &

Sound > Ambilight > Advanced > Wall color.

Select the color of the wall behind the TV and the TV will modify the Ambilight colors to appear as they are intended.

Set Ambilight to switch off immediately or slowly fade out when you switch off the TV

Settings > Display &

Sound > Ambilight > Advanced > TV switch off > Fade out to off/Immediate switch off.

Warm white tuning

Settings > Display &

Sound > Ambilight > Advanced > Warm white tuning.

The Warm white tuning tunes and locks your preferred color for Ambilight. When Ambilight style > Follow color > Warm white is unlocked, you can tune and lock white color variations of Ambilight.

Ambilight Extension

Philips Wireless Home Speakers

Note: Before starting the setup, make sure the TV and your Philips Wireless Home Speakers are connected to the same Wi-Fi network.

With Ambilight extension, you can set up your Philips Wireless Home Speakers to follow the colors of Ambilight. Before starting the setup, make sure your Philips Wireless Home Speakers are turned on and connected to the same Wi-Fi network as the TV. Please give some time for the speakers to be ready if you just turned them on before starting.

Press and hold the LED link button on the speaker for 3 seconds to start linking. If you have more than 1 speaker, repeat the same action for each speaker and press the BACK key when you are done. The LED link button is located on the Philips Wireless Home Speakers.

Switch on/off Philips Wireless Home Speakers working with Ambilight

Settings > Display & Sound > Ambilight > Philips Wireless Home Speakers > Enable/Disable.

Configure

Settings > Display & Sound > Ambilight > Philips Wireless Home Speakers > Configure.

Configure the Philips Wireless Home Speakers to work with Ambilight. Follow the instructions onscreen to link up to 10 Speaker LEDs to your TV. For each linked Speaker LED, you can select the color zone to follow relative to the TV and adjust the brightness of the light.

View configuration

Settings > Display & Sound > Ambilight > Philips Wireless Home Speakers > View configuration.

View the current setup of the Philips Wireless Home Speakers working with Ambilight, the network and Speaker LEDs.

Reset configuration

Settings > Display & Sound > Ambilight > Philips Wireless Home Speakers > Reset configuration.

Reset current setup of Philips Wireless Home Speakers.

Sunrise Alarm

Sunrise alarm uses Ambilight, music and weather information for a new wake-up experience.

- TV wakes up at the selected time and day set by you.
- Lights up Ambilight with fade-in colored screen and music.
- Slowly transit to weather forecast with matching backdrop.

To enter the Sunrise alarm setting menu:

- 1 Press Quick Menu/MENU to open Quick Menu.
- 2 Select Sunrise alarm and press OK to open it.
- Alarm: set up to 5 alarms, for repeat/select days, On/Off settings.
- Backdrop: follow weather or select from photo categories.
- Music: music track to play during wake-up.
- **Switch on volume**: music volume to set during wake-up.
- Weather: settings for local weather forecast.
- Preview: you can preview the wake-up effect.

If the TV is in standby and the alarm time is reached, the TV wakes up from standby. Wake-up screen fades in, Ambilight turns On, music fades in and then weather information with backdrop appears.

To exit Sunrise alarm, press the ♥ Standby/On, ← Back or ♠ HOME key on the remote control.

- **O** Standby/On: exits the Sunrise app and switches TV to standby.
- ← Back : exits the Sunrise app and switches to last-viewed TV source.
- \triangle HOME : exits the Sunrise app and switches to launcher.
- If Sunrise alarm is not exited to other application after 30 minutes since Sunrise wake-up, the TV performs auto shutdown to standby.

Note:

Keep the network connection alive for Sunrise alarm to function properly. Sunrise alarm cannot operate when the TV clock mode is set to manual. Go to the settings menu and change the clock mode to automatic. Alarm will not work if Location is set to Shop.

Aurora

The Aurora App is an application that enhances the ambience of the TV living space with showpieces and colorful Ambilight. Aurora uses imagery, animation, audio and Philips signature Ambilight to augment the living area to suit your new lifestyle.

To launch the Aurora app:

- 1 Press **Quick Menu/MENU** to open **Quick Menu**, select **Aurora** and press **OK** to open.

Categories

There are four categories of themes: Ambience, Scenes, Gallery, and Clocks. You can download more themes when your TV is connected to the Internet. Use the navigation keys to browse horizontally/vertically on the menu. Press OK on a theme to start the playback. Press OK on Play all to play all items in this category list, starting with the first. Press

Back to exit the Aurora application.

Put the TV in standby

You can set the duration of Aurora theme playback; the TV will go into standby when the time limit is reached.

To put the TV on standby:

- 1 When the Aurora app is activated, press + OPTIONS.
- 2 Select 1 hour, 2 hours, or 4 hours to put the TV on standby.
- 3 At two minutes before timer expiration, the TV will show a dialog to provide the options to go into standby immediately or postpone it to 1 or 2 hours later. The timer set to countdown or postpone cannot exceed the maximum allowed 4 hours.

Apps

14.

About Apps

You can find your favorite Apps on the Your apps row on the Home menu.

Like apps on your smartphone or tablet, the apps on your TV offer specific functions for an enriched TV experience. You can use the WEB BROWSER app to surf the Internet.

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

To install apps from the Google Play™ Store, the TV must be connected to the Internet. You must sign in with a Google Account to use the Google Play apps and Google Play™ Store. Select the app you want to install and select the Install button to start the installation. Once the app installation is done, you can select the Open button to open the app or Uninstall button to uninstall the app.

14.2

Google play

Movies and TV

With the Google TV app, you can rent or buy movies and TV shows to watch on TV.

What You Need

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

To rent or buy a movie or TV show:

- 1 Press **n** HOME and select the Apps tab.
- 2 Select the Google TV app and open it.
- 3 Select a movie or TV show and press OK.
- 4 Select the purchase you want and press **OK**. You will be taken through the purchase procedure.

To watch a rented or purchased movie or TV show:

- 1 Press A HOME and select the Apps tab.
- 2 Select the Google TV app and open it.
- 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** buttons on the remote control.
- 5 To stop the Movies & TV app, press Back repeatedly or press EXIT.

* Note: If Google TV is not on the Your Apps row, you can search for it using the search field to Open or Install it.

Find more information at www.support.google.com/googletv

Music

With YouTube Music, you can play your favorite music on TV.

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 to the Internet
- $\boldsymbol{\cdot}$ you must sign in with your Google Account on the TV
- add a credit card to your Google Account to add a music subscription

To start YouTube Music:

- 1 Press **n** HOME and select the Apps tab.
- 2 Select the YouTube Music app and open it.
- 3 Select the music you want and press **OK**.
- 4 To stop the Music app, press Back repeatedly or press EXIT.
- * Note: If YouTube Music is not on the Your Apps row, you can search for it using the search field to Open or Install it.

Find more information at www.support.google.com/googletv or support.google.com/youtubemusic

Games

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

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

What You Need

- · your TV must be connected to the Internet
- · you must sign in with your Google Account on the
- 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 **n** HOME and select the Apps tab.
- 2 Select the Google Play Games app and open it.
- 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.
- * Note: If Google Play Games is not on the Your Apps row, you can search for it using the search field to Open or Install it.

Find more information at www.support.google.com/googletv

Google Play Store

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

What You Need

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

To install a new app:

- 1 Press f HOME and select the Apps tab.
- 2 Select the Google Play Store app and open it.
- 3 Select the app you want to install and press **OK**.
- 4 To close 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 parental control:

- 1 Press **n** HOME and select the Apps tab.
- 2 Select the Google Play Store app and open it.
- 3 Select Settings > Parental controls.
- 4 Select the level of maturity you want.
- 5 When prompted, enter the PIN code.
- 6 To close Google Play Store,

press Back repeatedly or press **EXIT**.

* Note: If Google Play Store is not on the Your Apps row, you can search for it using the search field to Open or Install it.

Find more information at www.support.google.com/googletv

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.

14.3

Start or Stop an App

You can start an app from the Home screen.

To start an app:

- 1 Press A HOME.
- 2 Move to the **Your apps** row, select the app you want and press **OK**.
- 3 You can also search for the app using the search field to **Open** or **Install** it.
- 4 Alternatively, you can go to Settings > Apps > See all apps or Show system apps to select an app to open.
- 5 To stop an app, press ← Back or press **■** EXIT or stop the app with its dedicated exit/stop button.

14.4

Manage Apps

Settings > Apps.

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

For each installed app, you can also set the permissions for Manage updates, App permissions, Special app access and Security.

Find more information at www.support.google.com/googletv

System

15

Accessibility

Settings > System > Accessibility.

With Accessibility switched on, the TV is prepared for use by deaf, hard of hearing, blind or partially sighted people.

High-contrast text

Settings > System > Accessibility > High-contrast text.

Turn on to make texts displayed with higher contrast for easier reading.

Text to Speech

Settings > System > Accessibility > Text to speech.

Set to convert the text into speech for blind or partially sighted people.

Accessibility shortcut

Settings > System > Accessibility > Accessibility shortcut.

Quick access to Accessibility settings.

There are more services provided by Google, e.g., Captions, TalkBack, and Switch Access, to make your TV more accessible. To find more information about the services, visit www.support.google.com/googletv/answer/10070337

15.2

About

System Software Update

Update from Internet

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

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 on. Do not press the power switch \bullet on the TV or on the remote control during the software update.

To look for a software update yourself:

- 1 Select Settings > System > About > System update > Internet (recommended) and press OK.
- 2 The TV will look for an update on the Internet.
- 3 If an update is available, you can update the software right away.
- 4 A software update can take several minutes. Do not press the **b** key on the TV or remote control.
- 5 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 a high-speed Internet connection and a USB flash drive to upload the software on the TV. Use a USB flash drive with at least 2Gb of free space. Make sure that write protection is switched off.

To update the TV software:

- 1 Select Settings > System > About > System update.
- 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 **b** 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.

Automatic Software Update

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

- 1 Select Settings > System > About > System update > Automatic Software Update.
- 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 15 minutes after the TV has gone into standby (as long as there are no 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 updated on the TV.

To view the software update history:

- 1 Select Settings > System > About > System update > View software update history.
- 2 The software update history on this TV will be listed.

Reset

Reinstall TV

Settings > System > About > Reset > Factory reset.

Reset and redo the complete TV installation.

Reset all settings value to original TV settings

Settings > System > About > Reset > Factory settings.

Reset all settings to factory settings.

Status

Display TV status information

Settings > System > About > Status.

To display the TV status about IP address, Device, MAC address, Bluetooth® address, Serial Number, etc.

Legal Information

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 licenses.

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 Europe 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 Europe B.V. TV, which falls 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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System Information

To view the current TV software version:

- 1 Select Settings > System > About > Model, Android TV OS version, Android security patch level, Kernel version, Android TV OS build, SW version, Netflix ESN, Nagra device ID.
- 2 The version, release notes and creation date are shown. Also, the Netflix ESN Number and other information are shown if available.
- 3 Press **〈** (left) repeatedly, if necessary, to close the menu.

<u>15 3</u>

Date and Time

Settings > System > Date & Time.

Automatic Date & Time

Settings > System > Date & Time > Automatic date & time.

Set to use network-provided time or Off to use system time.

Set Date

Settings > System > Date & Time > Set date.
Set current date.

Set Time

Set current time. Set vime > Set time.

Set Time Zone

Settings > System > Date & Time > Set time zone.

Set current time zone.

Use 24-Hour Format

Settings > System > Date & Time > Use 24-hour format.

Set to use 24-hour format to display the time.

15.4

Language

Change the language of the TV menu and messages

Settings > System > Language.

Select the language to display the TV menu and messages.

15.5

USB Keyboard Settings

Set the keyboard layout for the installed USB keyboard

Settings > System > Keyboard > 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.

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Storage

Internal shared 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.

Select Settings > System > Storage to see how much storage you are using.

15.7

Ambient Mode

Settings for Ambient mode

Settings > System > Ambient Mode.

Ambient mode is the screen saver to avoid displaying still images for a longer period of time. You can set the photo source, display weather or time information, and adjust the slideshow speed.

15.8

Power and Energy

Set the Power on behavior

Settings > System > Power & Energy > Power on behavior.

Set the TV to stay on Home screen or on Last input when powering on the TV.

Set Energy saver

Settings > System > Power & Energy > Energy saver.

Set the time to turn off the TV display automatically to

save energy. You can set the time to 15 minutes, 30 minutes, 1 hour, 4 hours, 8 hours, 12 hours, 24 hours, or Never.

Set screen off to save energy consumption

■ Quick Menu/MENU > Frequent Settings > Screen off.

Alternatively, go to Settings > System > Power & Energy > Screen off. You can also press the + OPTIONS key to access Screen off under TV and HDMI sources.

Select Screen off, and the TV screen is switched off. To switch the TV screen back on, press any key (except AMBILIGHT*, (1)) Volume + or -, and navigation keys) on the remote control.

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

Quick Menu/MENU > Frequent Settings > Sleep timer.

Alternatively, go to Settings > System > Power & Energy > Sleep timer.

TV switches to standby mode automatically after a preset time. You may stop the timer when the notification pop-up is at the last two minutes.

Set TV switch off timer

Settings > System > Power & Energy > Switch off timer.

Press the Arrow/navigation keys to adjust the value. The value 0 (Off) deactivates the automatic switch off feature.

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**.

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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 at www.support.google.com/googletv

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.

15.10

System Sounds

Settings for system sound

Settings > System > System sounds.

Enable or disable the system sounds.

15.11

Child Lock

Set Code and Change Code

Set a new code or reset the change code

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

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

Note:

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

15.12

Retail Mode Settings

Home or Shop

Select the location of your TV

Settings > System > Retail mode settings > Location.

Select **Shop** and the picture style settings will be restored to default and you can adjust shop settings. Shop mode is for in-store promotion.

Shop Setup

Adjust shop settings

Settings > System > Retail mode 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 > System > Retail mode settingsShop setup > Picture and audio.

Select Optimized for shop or Custom for picture and audio settings.

Set Logos and banner

Settings > System > Retail mode settingsShop setup > Logos and banner.

Set to display Feature logos or Promotional Banner, or Off to turn off.

Demo Me autostart and Ambilight Demo autostart

Settings > System > Retail mode settingsShop setup > Demo Me autostart/Ambilight Demo autostart.

Turn On/Off the Demo Me or Ambilight Demo autostart.

15 13

Restart

Settings > System > Restart

Note

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

This will remove unnecessary data and information in the memory.

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

Remote and Accessories

16.1

Bluetooth® On or Off

Pair Accessory

Position the Bluetooth® device within 5 meters of the TV. Read the user manual of the device for specific information on pairing and on wireless range. Make sure the Bluetooth® setting on TV is switched on.

Once a Bluetooth® device 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 > Remote & accessories > Pair accessory.
- 3 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.
- 4 Press **(**left) repeatedly, if necessary, to close the menu.

Device Operation

To connect or disconnect a Bluetooth® device:

- 1 Select Settings > Remote & accessories.
- 2 In the list, select a Bluetooth® device.
- 3 Select **Connect** or **Disconnect** to connect or disconnect a Bluetooth® device.
- 4 Press **(**left) repeatedly, if necessary, to close the menu.

To rename a Bluetooth® device:

- 1 Select Settings > Remote & accessories.
- 2 In the list, select a Bluetooth® device.
- 3 Select Rename to rename a Bluetooth® device.
- 4 Press **(**(left) repeatedly, if necessary, to close the menu.

You can connect or disconnect a wireless Bluetooth® device. You can also remove a paired Bluetooth® device. If you remove a Bluetooth® device, the

device will be unpaired.

To remove Bluetooth® device:

- 1 Select **Settings** > Remote & accessories.
- 2 In the list, select a Bluetooth® device.
- 3 Select Forget to remove the Bluetooth® device.
- 4 Press **(**(left) repeatedly, if necessary, to close the menu.

To view the Bluetooth® device information:

- 1 Select Settings > Remote & accessories.
- 2 In the list, select a Bluetooth® device.
- 3 The Bluetooth® device information is listed on the bottom
- 4 Press **(**left) repeatedly, if necessary, to close the menu.

16.2

Remote Control

Pair Remote Control

Pairing or pairing again

When you start the initial TV installation, the TV invites you to press the Home + Back key to pair the remote control. If the pairing with the remote control is lost, you can pair it again by pressing the Home + Back key.

Alternatively, go to Settings > Remote & accessories > Remote control settings > Pair remote control, then follow the on-screen instructions.

A message appears when the pairing has been successful.

Remote Control Info

View the remote control information

Settings > Remote & accessories > Remote control settings > Remote control info.

You can select **Version** to check the embedded software version of the remote control or select **Battery level** to see current battery percentage.

Update Remote Control Software

Update remote control software

Settings > Remote & accessories > Remote control settings > Update remote control software.

Check available remote control software for updates. If a new software update is available for your remote control, you can start the software update. Install new batteries or fully charge the battery, and then position your remote control within one meter of the TV to update the software.

Videos, Photos and Music

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 on 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 organized 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 Network Devices and press > (right) to select the device you need.
- 3 Once a Network device is connected, the Network Devices item will be replaced by the connected device name.
- 4 You can browse and play your files.
- 5 To stop playing videos, photos or music, press WEXIT.

17 2

Favorites Menu

Add a folder or a file to the favorites menu

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

View favorite files

- 1 Press SOURCES, select USB and press OK.
- 2 Select ♥ Favorites.
- 3 You can view all your favorite files in the list.

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 files 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 files and press OK to view files or press — Clear all to clear the list.

17.4

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 organized on the drive.
- 4 Press Play all to play all files in the USB folder or press — Mark favorite to add the selected folder to favorites menu -Favorites.
- 5 To stop playing videos, photos or music, press **W** EXIT.

Play your Videos

Play Videos

Open video folder

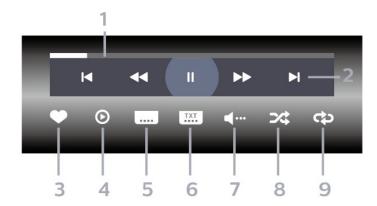
- 1 Press **SOURCES**, select **USB** and press **OK**.
- 2 Select **USB Devices** and press (right) to select the USB device you need.
- 3 Select Videos, and you can press Mark favorite to add the video folder to the favorites menu Favorites.

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 the videos, and you can press Play all to play all files in the folder or press Mark as favorite to add the selected video to the favorites menu
- **•** Favorites.

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
- >> : Fast forward
- II: Pause the playback
- 3 Mark as favorite
- 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

Playing video files:

- · Mark as favorite Mark the video as a favorite
- Subtitle setting Set subtitle font size, color, position, etc.

17.6

View your Photos

View Photos

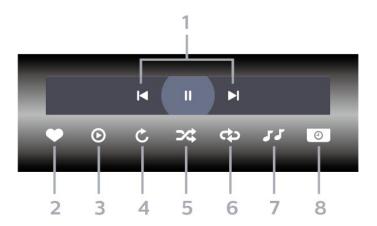
Open photo folder

- 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, and you can press Mark favorite to add the photo folder to the favorites 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, and you can press Slide show to play all files in the folder or press Mark favorite to add the selected photo to the favorites menu Favorites.

Control bar



- 1 Playback control bar
- lacktriangle : Jump to the previous photo in a folder
- ▶: Jump to the next photo in a folder
 - **II**: Pause the slideshow playback
- 2 Mark as favorite
- 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:

- · Shuffle Play your files in a random order
- · Repeat Play the slide show once or continuously
- · Stop music Stop the background music playing
- Slide Show Speed Set the speed of the slide show
- · Info Show photo information

Playing photo files:

- · Mark as favorite Mark the photo as favorite
- · Info Show photo information

View 360 Photos

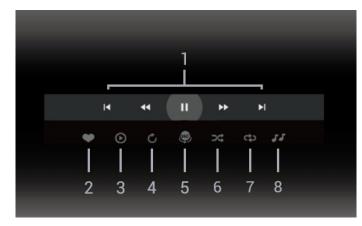
Open 360 Photos folder

- 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 favorite to add the 360 photos folder to the favorites 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 the photos, and you can press Play All to play all files in the folder or press Mark favorite to add the selected photo to the favorites menu ▼ Favorites.

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

>>

- II: Pause the playback
- 2 Mark as favorite
- 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 alternative and fun 360 view of the photo. When Little Planet view is started, the 360 photo will be rendered in a wrap-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.
- * Note: When a 360 photo file is browsed or viewed in a regular photo viewer, it will be treated as a regular picture and displayed as equirectangular (or "flattened") when opened.

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 the background music playing

Playing 360 photo files:

· Reset view – Reset the angle of view

17.7

Play your Music

Play Music

Open music folder

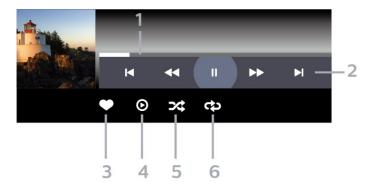
- 1 Press **SOURCES**, select USB and press OK.
- 2 Select **USB Devices** and press **>** (right) to select the USB device you need.
- 3 Select Music, and you can press Mark favorite to add the music folder to favorites menu
- Favorites.
- 4 You can quickly find music using classification
- Genres,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

Play music

1 - Press SOURCES, 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 the classifications to view music files.
- 4 Select music and you can press Play all to play all files in the folder or press Mark favorite to add the selected music to the favorites menu — Favorites.

Control bar



- 1 Progress bar
- 2 Playback control bar
- **⋈**: Jump to the previous music file in a folder
- ▶ : Jump to the next music file in a folder
 - **◄** : Rewind
 - >> : Fast forward
 - **II**: Pause the playback
- 3 Mark as favorite
- 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:

- · List/Thumbnails List or thumbnails views
- · Shuffle Play your files in a random order.
- Repeat Play all songs in this folder once or continuously.

Playing music files:

· Mark as favorite – Mark the music as favorite

<u>18</u>

Smartphones and Tablets

18.1

Philips TV Remote App

The Philips TV Remote App on your smartphone or tablet is your new TV buddy. The app lets you switch channels and adjust the volume — just like a remote control.

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

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

Alternatively, you can go to Settings > Network & Internet > Remote app QR code and press OK; a QR code will be presented on the TV screen. Scan the QR code with your mobile device and follow the instructions to download and install the Philips TV Remote App. When using the app, your mobile device and Philips TV need to connect to the same Wi-Fi network.

Games

19.1

What You Need

On this TV, you can play games:

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

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

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

19.2

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.

19 3

Play a Game from a Game Console or Computer

To start a game from a Game Console or Computer the first time:

- 1 Connect the Game Console or Computer to the TV with an Ultra High Speed HDMI cable before powering on the console or computer.
- 2 Press SOURCES and select a game console or the name of the connection.
- 3 Set HDMI Ultra HD to Optimal for standard gaming or to Optimal (Auto Game) for HDMI Variable Refresh Rate (on some models only).
- 4 Power on the Game Console or Computer.
- 5 Start the game.

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

94

Gaming Control Bar

The Gaming control bar is an integrated center for information display and settings control while playing games. It is applicable to HDMI sources as long as the Picture style is set to Game/HDR Game/Dolby Vision Game/Monitor/HDR Monitor.

When TV auto switch to Game mode (via game detection) is activated, the TV will show a message to inform you that Game mode is enabled and the gaming control bar can be enabled by long pressing the MENU key.

Activation and deactivation

Long press the MENU key to launch the gaming control bar while in Game mode or Monitor mode. To deactivate the gaming control bar, you can press
Back or it will close automatically after 20 seconds without interaction.

The Gaming control bar contains an information bar or setting bar and a Toggle button to switch between information bar and settings bar.

Information bar

The information bar will show the key information for gaming:

Input lag: current input lag status

Frame rate: current FPS (frame per second)

Resolution: video source resolution

Content type: video content is General or Movie or

VRR/Freesync/G-Sync

SDR/HDR format: the supported source HDR or SDR

type

Color space: supported source color space type

Settings bar

The settings bar contains related settings that can improve your gaming experience. Select and press OK on the setting icons to change the following settings:

Crosshair: select On/Off to show or hide the dial point.

Shadow control: select Off to use current black level in Picture settings; select On to change the setting to a higher black level.

Whitepoint: select your preferred color temperature. Speakers: select the device to output the sound. Ambilight* style: select On to turn on the Ambilight with gaming style; select Off to turn off the Ambilight.

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

Netflix

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

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

www.netflix.com

Note for Netflix Spatial Audio

Some Netflix content offers Spatial Audio sound effects. To enjoy this feature on your TV, follow these steps:

- 1 Go to Settings > Display & Sound > Audio output > Digital out format and set the option to Stereo (uncompressed).
- 2 Go to Settings > Display & Sound > Sound
- > Sound style and set the style to Personal.
- 3 Go to Settings > Display &
 Sound > Sound > Personal settings > Speaker
 virtualizer and select Off to turn off the Speaker
 virtualizer.

Alexa

21.1

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 the TV on/off, change channels, adjust the volume and more.

To control your TV with Alexa, you will need:

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

About Alexa Skills

Alexa uses Alexa Skills to extend the voice control operations. Skills add new capabilities that create a more personalized experience with your Alexaenabled TV. The "Philips Smart TV Voice Control" skill can be found in the Alexa Skills store. It offers various voice control commands that work with your Philips 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.

21.2

Using Alexa

To use Alexa, you need to first set up the Alexa client service on your Philips Smart TV. Follow the instructions and complete the following steps:

- Select a name for your 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 - Go to Settings > Network & Internet > Advanced > TV control with Amazon Alexa to start the setup process.

- 2 You need an Amazon Echo device and Alexa companion app (on mobile device or web version) to start the setup.
- 3 Follow the instructions on-screen to accept the Privacy Policy terms, name your TV and sign in to your Google account. The Google account is needed to pair with the Alexa device.
- 4 On your mobile device, sign in with the same Google account in the Amazon Alexa companion app.
- 5 Complete the following steps in the Amazon Alexa companion app. The first is to enable the "Philips Smart TV Voice Control" skill. The second is to link your Google account, and 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 the setup screen, select **Done** to start using Alexa. Select **Manage TVs** to manage Alexa-paired TVs or unpair TVs.

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

Specifications

22.1

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 (40°F to 95°F)
- Power saving features: Eco mode, Picture mute (for radio), Auto switch-off timer, Eco settings menu.

22.2

Operating System

Android OS:

Android 12

22.3

Reception

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

22.4

Display Type

Diagonal screen size

- · 105 cm/42 inch
- · 108 cm/43 inch
- · 121 cm/48 inch
- · 126 cm/50 inch
- · 139 cm/55 inch
- · 164 cm/65 inch
- · 189 cm/75 inch
- · 194 cm/77 inch
- · 215 cm/85 inch

Display resolution

· 3840 x 2160

22.5

Display Input Resolution

Supported Computer/Video resolution

Resolution — Refresh rate

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

Supported Video only resolution

Resolution — Refresh rate

- \cdot 480i 60Hz (when **HDMI Ultra HD** is set to **Standard**)
- \cdot 576i 50Hz (when **HDMI Ultra HD** is set to **Standard**)
- · 1080i 50Hz, 60Hz
- Variable refresh rate video 1080p, 1440p, 2160p with frame rate up to 48-60Hz when HDMI Ultra HD is set to Optimal (Auto Game).

22.6

Connectivity

TV Side

- USB 2 USB 3.0
- · Headphones Stereo mini-jack 3.5mm
- · HDMI 4 in Ultra HD HDR

TV Bottom

- · Digital audio out Optical Toslink
- · Antenna (75 ohm)
- · HDMI 1 in Ultra HD HDR
- · HDMI 2 in ARC/eARC Ultra HD HDR
- USB 1 USB 2.0
- · Network LAN RJ45
- · HDMI 3 in Ultra HD HDR

22.7

Sound

Output power (RMS): 20W

Dolby MS12 V2.6

- Dolby Atmos
- · DTS Play-Fi
- · DTS:X
- · Surround Virtualizer + Height Virtualizer
- · Dolby Bass Enhancement
- · Dolby Dialogue Enhancement
- Dolby Volume (AVL/Night Mode)
- · Al Sound
- \cdot AI EQ

22.8

Multimedia

Connections

- · USB 2.0/USB 3.0
- · Ethernet LAN RJ-45
- · Wi-Fi 802.11a/b/g/n/ac, Dual Band
- · Bluetooth® 5.0

Supported USB file systems

• FAT 16, FAT 32, NTFS

Playback formats

- Containers: PS, TS, M2TS, TTS, AVCHD, MP4, M4V, MKV, ASF, AVI, 3GP, QuickTime
- · Video Codecs: AVI, MKV, H.264/MPEG-4 AVC, MPEG1, MPEG2, MPEG4, VP9, HEVC (H.265), AV1
- · Audio Codecs: MP3, WAV, AAC, WMA (v2 up to v9.2), WMA-PRO (v9 and v10), FLAC
- · Subtitles:
- Formats: SRT, SMI, SSA, SUB, ASS, TXT
- Character encodings: UTF-8, Central Europe and Eastern Europe (Windows-1250), Cyrillic (Windows-1251), Greek (Windows-1253), Turkish (Windows-1254), Western Europe (Windows-1252), Hebrew (CP-1255), Arabic (CP-1256), Baltic (CP-1257), Korean (Windows-949)
- · Maximum Supported Data Rate:
- MPEG-4 AVC (H.264) supported up to High Profile
 L5.2 80Mbps
- H.265 (HEVC) supported up to main 10 high profile
 L5.1 with 100Mbps
- AV1 supported up to main profile L5.1 with 80Mbps
- Image Codecs: JPEG, GIF, PNG, BMP, HEIF, 360 Photo

Wifi Certified

This TV is a Wi-Fi Certified device.

Help and Support

23.1

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

23.2

Using Help

Open Help

Press the — key (blue) to open Help immediately. To look up topics alphabetically, press the color key — Keywords.

To read the Help as a book, select Book.

You can also open 2 Help in the Quick menu.

Before you execute the Help instructions, close Help. To close Help, press the color key — Close.

For some activities, like Text (Teletext), the color 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

> ? 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.
- \cdot TV diagnose Run TV diagnose to check the condition of your TV.
- Self-diagnose You can check if the picture, sound, network and other settings are working OK.
- · Update software Check available software

updates.

- User manual Read the user manual for TV information
- Settings list copy Copy the TV settings to a USB Flash Drive.
- Troubleshooting Find a solution for frequently asked questions.
- Factory settings Reset all settings to factory settings.
- Reinstall TV Reinstall and redo the complete TV installation.
- Contact info Shows the telephone number or web address for your country or region.

23.3

TV Diagnose and Self-diagnose

TV diagnose

You can run the TV diagnose test to check the condition of your TV. At the end of the diagnosis, the TV will clear the cache memory and close any unused apps to continue the smooth functioning of your TV.

To run the TV diagnose test:

- 1 Select

 Quick Menu/MENU > ② Help > TV diagnose and press OK.
- 2 Select **Start** to run a series of diagnostic tests.
- 3 When the test is completed, you can view the status of the following items.
- Remote control
- Power
- Picture
- Sound
- External devices
- Network
- Tuner
- Storage
- Clear cache memory
- Apps
- 4 Select Close to close the result page and go back to the TV diagnose wizard.
- 5 Select Done to exit from TV diagnose, select Self-diagnose to do other diagnostic checks, select View results to view the results page again.

Self-diagnose

Self-diagnose can help you to troubleshoot your TV by checking the configuration of the TV.

To run Self-diagnose:

- 1 Select Quick Menu/MENU > Help > Self-diagnose and press OK.
- 2 Select the following items to check the configurations.

- Check the TV You can check if the picture, sound and other settings are working OK.
- Check the Network Check the Network Connection
- Check the remote control Perform the test to verify the functionality of the remote control bundled with the TV.
- View weak signal history Display the list of channel numbers that were automatically saved when the signal strength was weak.
- Optimize internal storage Free up space in the TV's internal storage for optimal performance.

23.4

Troubleshooting

Switch On and Remote Control

The TV does not switch on

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

Creaking sound at startup or switch off

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

TV does not respond to the remote control

The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behavior.

If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any button 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 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 DVB-T or DVB-C 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

- $\boldsymbol{\cdot}$ 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.

Sound

No sound or poor sound quality

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

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

HDMI and USB

HDMI

- Note that HDCP (High-bandwidth Digital Content Protection) support can delay the time taken for a TV to display content from an HDMI device.
- If the TV does not recognize the HDMI device and no picture is displayed, switch the source from one device to another and back again.
- If the picture and sound of a device connected to HDMI is distorted, connect the device to another HDMI port on TV and power reboot your source device.
- If the picture and sound of a device connected with HDMI is distorted, check if a different HDMI Ultra HD setting can resolve the problem. In Help, press the color 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 adaptor or HDMI-to-DVI cable, make sure that an additional audio cable is connected to AUDIO IN (mini-jack only), if available.

HDMI EasyLink does not work

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

HDMI eARC is not working well

· Make sure the HDMI cable is connected to HDMI 2.

- Make sure an **Ultra High-Speed HDMI cable** is used for eARC connection.
- · Only one eARC device is available at a time.

No volume icon shown

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

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

- Make sure that the USB storage device is set to Mass Storage Class compliant, as described in the storage device's documentation.
- $\boldsymbol{\cdot}$ 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 turned on.

Poor quality when watching streaming video

- The image/sound quality of streaming videos depends on the original video content provided by streaming video apps.
- To ensure the best experience watching streaming videos, a fast and stable network connection is essential. The recommended network connection speed for streaming videos are as follows:
- Standard image quality (SD): 5 Mbps
- High image quality (HD): 10 Mbps
- 4K/Ultra HD (UHD): 25 Mbps

Bluetooth®

Unable to pair

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

Bluetooth® lost connection

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

Bluetooth® Audio and Video synchronization

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

Wrong Menu Language

Wrong menu language

Change the language back to your language in Google TV mode.

- 1 Press the **DASHBOARD** key on the remote control to launch the **Dashboard** menu.
- 2 Select the **t** icon and press **OK** to open the **Settings** menu.
- 3 Press 6 times **∨** (down) and press **OK** to enter the **System** menu.
- 4 Press 3 times **∨** (down) and press **OK** to enter the **Language** menu
- 5 Select your language and press OK.

Change the language back to your language in Basic Mode.

- 1 Press the **DASHBOARD** key on the remote control to launch the **Dashboard** menu.
- 2 Select the **t** icon and press **OK** to open the **Settings** menu.
- 3 Press 7 times **∨** (down) and press **OK** to enter the **System** menu.
- 4 Press 3 times **∨** (down) and press **OK** to enter the **Language** menu
- 5 Select your language and press OK.
- 6 Press ← Back to close the menu.

23.5

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.

23.6

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 <u>www.philips.com/TVsupport</u> 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

24.1

Safety

Important

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

Risk of Electric Shock or Fire

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

Risk of Injury or Damage to the TV

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

Risk of damage to the TV!

Before you connect the TV to the power outlet,

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

Stability Hazards

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

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

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

Risk of Batteries

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

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

Risk of Overheating

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

Lightning Storms

Disconnect the TV from the power outlet and antenna before lightning storms.

During lightning storms, never touch any part of the TV, power cord or antenna cable.

Risk of Hearing Damage

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

Low Temperatures

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

Humidity

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

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

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Screen Care

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

Terms of Use

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Terms of Use - TV

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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 authorized in this manual, shall void the warranty.

Pixel characteristics

This TV product has a high number of color pixels. Although it has effective pixels of 99.999% or more,

black dots or bright points of light (red, green or blue) may appear constantly on the screen. This is a structural property of the display (within common industry standards) and is not a malfunction. Therefore, please note that this is not subject to repair, exchange or refund within and/or out of the warranty period.

Backlight characteristics

All Philips TVs have undergone stringent tests and checks before shipment to you. You can rest assured that we place utmost importance on the quality of our TVs so you don't suffer any viewing displeasure while watching your TV. However, please note that backlight bleeding (the 'Mura effect') and/or background light unevenness that can only be observed in dark images or in a very dark and dim room are considered to be within normal TV specifications. Such occurrences do not represent deterioration nor should be regarded as a defect of the TV. Hence, we regret that claims of this nature for warranty cover, free-of-charge service, replacements or refunds cannot be accepted within and/or outside of the warranty period.

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

25.2

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 on the Smart TV page:

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

Copyrights

26.1

Google TV

Google TV is the name of this device's software experience and a trademark of Google LLC. Google, YouTube and other marks are trademarks of Google LLC.

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HDMI

The terms HDMI, HDMI High-Definition Multimedia Interface, HDMI Trade Dress and the HDMI Logos are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.



26.3

HEVC Advance

Covered by one or more claims of the HEVC patents listed at patentlist.accessadvance.com. Future proof with advanced HEVC decoding.



26.4

AMD FreeSync Premium

No Stuttering. No Tearing. Fluid Gaming.



26.5

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Wi-Fi Alliance

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