

PHILIPS

Television

7428 Series

User Manual

43PUT7428

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Content

1 Home Screen	4	7 Connect Devices	18
1.1 Introduction	4	7.1 About Connections	18
1.2 Dashboard and Settings	4	7.2 Home Theatre System - HTS	19
1.3 Basic Mode and Full Mode	4	7.3 Video Device	19
1.4 Open the Home Screen	5	7.4 Audio Device	19
		7.5 USB Flash Drive	20
2 Setting Up	6	8 Bluetooth®	21
2.1 Read the Safety Instructions	6	8.1 What You Need	21
2.2 TV Stand and Wall Mounting	6	8.2 Pairing a Device	21
2.3 Tips on Placement	6	8.3 Select a Device	21
2.4 Power Cable	6	8.4 Rename a Device	21
2.5 Antenna Cable	7	8.5 Remove a Device	21
3 Remote Control	8	9 Connect your Google TV	22
3.1 Key Overview	8	9.1 Network and Internet	22
3.2 Voice Search	9	9.2 Google Account	23
3.3 IR Sensor	9		
3.4 Batteries and Cleaning	9	10 Apps	24
4 Switching On and Off	11	10.1 About Apps	24
		10.2 Google Play	24
5 Channel Installation	12	10.3 Start or Stop an App	25
5.1 First Time to Install Channels	12	10.4 Manage Apps	25
5.2 Analog Installation	12	11 Sources	26
5.3 Antenna Installation	12	11.1 Switch to a device	26
5.4 Update Channels	12	12 Settings	27
5.5 Reception Quality	12	12.1 TV options	27
5.6 Analog Manual Scan	12	12.2 Picture Settings	27
5.7 LCN - Logical Channel Number	13	12.3 Sound Settings	28
5.8 Channel Scan or Store Type	13	12.4 System	29
5.9 Channel Skip	13	12.5 Advanced Options	32
5.10 Channel Swap	13	13 Videos, Photos, Music & Text	34
5.11 Channel Move	13	13.1 From a USB Connection	34
5.12 Channel Edit	13	13.2 Play your Videos	34
5.13 Channel Delete	14	13.3 View your Photos	34
5.14 Channel Re-sort	14	13.4 Play your Music	35
5.15 Clear Channel List	14	13.5 View your Text	35
5.16 Analog Channel Fine Tune	14	14 TV Guide	36
6 Channels	15	14.1 What You Need	36
6.1 About Channels and Switch Channels	15	14.2 TV Guide Data	36
6.2 Channel Lists	15	15 Smartphones and Tablets	37
6.3 Favourite Channels	15		
6.4 Parental Controls	16		
6.5 Interactive TV	16		

15.1 Chromecast built-in	37
16 Netflix	38
17 Amazon Prime Video	39
18 Specifications	40
18.1 Power	40
18.2 Operating System	40
18.3 Reception	40
18.4 Display Type	40
18.5 Display Input Resolution	40
18.6 Connectivity	40
18.7 Sound	40
18.8 Multimedia	40
19 Help and Support	42
19.1 Register your TV	42
19.2 Troubleshooting	42
19.3 Online Help	44
19.4 Support and Repair	44
20 Safety and Care	45
20.1 Safety	45
20.2 Screen Care	46
21 Terms of Use	47
22 Copyrights	48
22.1 Google TV	48
22.2 HDMI	48
22.3 HEVC Advance	48
22.4 Dolby Vision and Dolby Atmos	48
22.5 Wi-Fi Alliance	48
22.6 Kensington	48
22.7 Other Trademarks	48
23 Disclaimer	50
Index	51

1. Home Screen

1.1. 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 centre 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 contents from your favourite apps. You can also add additional rows or find new apps to get more contents. Apps may populate their recommendation (if available) according to their own choice as an individual rows in the home screen.

Highlights on your home screen

With multiple tabs like **Home**, **Apps**, **Library** and **Search**, you can discover movies and shows from your services and popular apps. Sign in to your Google Account to get personalised 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 **Search** tab.

Apps

The **Apps** tab of Home screen contains all installed Apps that come with the TV and the Apps you have installed from Google Play™ Store. You can also install and add more apps as favourite from the **Apps** tab.

Navigation

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

Discover personalised recommendations

Browse shows and movies that you will love on all your favourite 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 two ways as follows:

- 1 - Navigating to the profile icon in the upper right of the home screen.
- 2 - Pressing **DASHBOARD** key on the remote control.

The dashboard contains following features.

- **Profile:** to display current user profile icon or to add new user profile
- **Settings:** to access all setting menus for adjusting the TV settings.
- **Clock and screensaver:** to indicate the system clock and press to activate screen saver immediately.
- **Source:** 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 the messages about the Google TV system; press **Clear all** to dismiss all notifications.

Adjust settings

You can access **Settings** menu via the dashboard at the top right corner. Alternately, you can access **Settings** menu directly from the remote control by pressing **DASHBOARD** key and select **Settings**.

1.3. Basic Mode and Full Mode

Difference of feature

You can set your Google TV to **Basic Mode** or **Full Mode**.

Basic Mode contains only Live TV and External devices (e.g. HDMI) features. Full Mode requires you to login with your Google account and Internet connection. With Full Mode, you can have all Basic Mode features and more Google's personalised services. For example, movies and TV shows from your favourite streaming apps, personalised recommendations, and Google Assistant to search and control your TV with your voice.

Difference of Home screen

The Home screen of Basic Mode has only two rows and without tabs. The first **Home** row contains **Live TV**, **Sources** and **Dashboard** icons for TV feature operations.

The second **App** row contains all pre-installed Apps. The **Dashboard** on Basic Mode does not include personal profile and can only perform setting change and displaying system notifications.

The Home screen of Full Mode 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 personalised 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 **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.

2. Setting Up

2.1. Read the Safety Instructions

Please read the safety instructions before you use the TV.

2.2. TV Stand and Wall Mounting

TV Stand

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

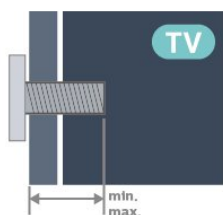
Use the model number of the TV to look for the **Quick Start Guide** to download.

Wall Mounting

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

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

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



- 43PUx7428
100x200, M6 (min.: 10 mm, max: 12 mm)
- 50PUx7428
200x100, M6 (min.: 8 mm, max: 10 mm)
- 55PUx7428
200x100, M6 (min.: 8 mm, max: 10 mm)
- 65PUx7428
400x300, M8 (min.: 12 mm, max: 22 mm)

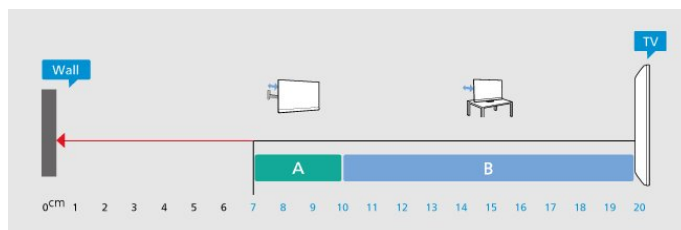
Caution

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.
- The ideal distance to watch TV is 2 to 5 times its diagonal screen size. When seated, your eyes should be level with the centre of the screen.
- Recommended distance to the wall:
A. When wall mounted, position the TV from 7 to 10 cm away from the wall.
B. When TV is with stand, position the TV from 10 to 20 cm away from the wall depends on the size of stand.

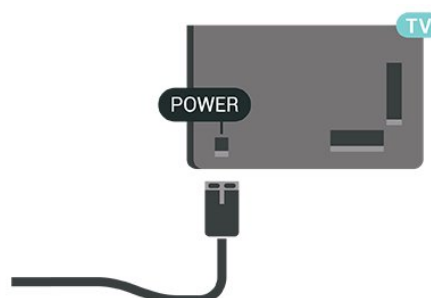


Note:

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.

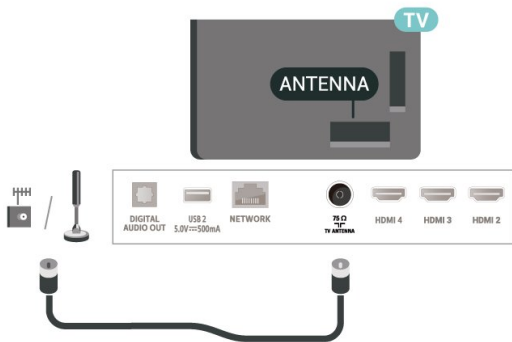


Although this TV has a very low standby power consumption, unplug the power cable to save energy if you do not use the TV for a long period of time.

2.5. Antenna Cable

Insert the antenna plug firmly into the **Antenna** socket at the side 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.



3. Remote Control

3.1. Key Overview

Top



1 - Power (Standby / On)

To switch the TV on or back to Standby.

2 - VOICE microphone

3 - Ambilight*

To select one of the Ambilight style.

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

4 - Amazon Prime Video

To launch the Amazon Prime Video App.

5 - NETFLIX

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

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

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

6 - SOURCES

To open the Sources menu.

7 - YouTube

To launch the YouTube App.

8 - Apps

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

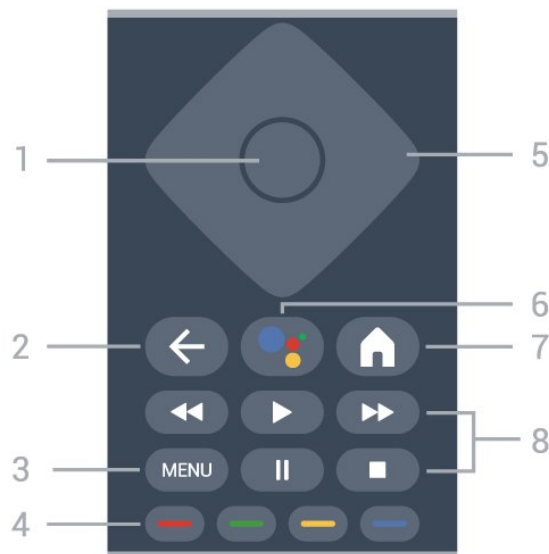
9 - INFO

Press to open the programme information screen. Long press to open or close Text/Teletext.

10 - TV GUIDE

To open or close the TV Guide.

Middle



1 - OK key

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

2 - Back

To return to previous menu.

3 - MENU

To open the TV Menu with typical TV functions.

4 - Colour keys

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

5 - Navigation keys

To navigate up, down, left or right.

6 - Google Assistant™

To launch the Google Assistant™.

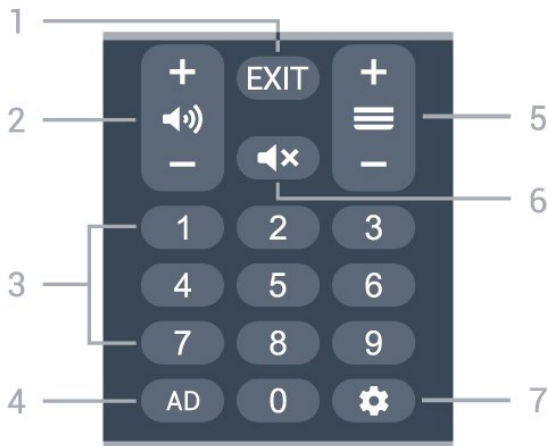
7 - Home

To open the Home menu. Long press to launch the Dashboard on side of screen.

8 - Playback

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

Bottom



1 - EXIT

To return to previous menu.

2 - Volume

Press + or - to adjust the volume level.

3 - Number keys

To select a channel directly.

4 - AD

To access the Audio Description and toggle to switch on and off. Long press to open Subtitle page.

5 - Channel

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

6 - Mute

Press to mute the sound or to restore it.

7 - DASHBOARD

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

Pair Your Remote Control to TV

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

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

When you start the initial TV installation, the TV invites you to press **Home + Back** key to pair the remote control. It is suggested to complete the pairing during the first TV installation.

Note:

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

2 - The remote control must be kept close to the TV (within 1m distance) during pairing in order to ensure success.

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

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

Pairing again

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

You can press **Home + Back** key or long press the **PAIR (SOURCES)** key (approximate for 3 seconds) for pairing.

3.2. Voice Search

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

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

To use Voice...

1 - Press **Google Assistant™** on remote control, the blue light on the remote control lights up and the search field opens, the microphone is active.

2 - Speak out what you are looking for with clear pronunciation. You can speak for 10 seconds before the microphone switches off. It might take some time for the results to appear.

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

3.3. IR Sensor

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

Warning

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

3.4. 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 on a key press on the remote control, the batteries might be empty.

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.

- 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.

4. Switching On and Off

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

Switch on

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

Switch to standby

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



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

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

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

5. Channel Installation

5.1. First Time to Install Channels

Install channels during the first TV installation

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

To install channels during the first TV installation:

1 - The first TV installation starts from Welcome screen with language setting options, follow on-screen instruction to complete multiple TV settings until the channel installation part.

2 - Select **Digital and analogue channels, Only analogue channels, or Only digital channels** to install channels.

3 - Follow on-screen instructions to complete one of the channel installation types as your selection. You can install other types of channel installation later on **Settings > Channels & Inputs > Channels**.

For more details about channel installation, please refer to respective installation instruction sections.

5.2. Analog Installation

To install Analog channels:

1 - Press **Settings > Channels & Inputs > Channels > Analog**.

2 - Select **Channel Scan** and press **OK**.

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

MENU > Navigation Keys up > Channels

5.3. Antenna Installation

To install Antenna channels:

1 - Press **Settings > Channels & Inputs > Channels > Antenna**.

2 - Select **Channel Scan** and press **OK**.

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

MENU > Navigation Keys up > Channels

5.4. Update Channels

Manual Channel Update

You can always start a channel update yourself.

To start a channel update manually:

1 - Press **Settings > Channels & Inputs > Channels** and press **OK**.

2 - Enter your PIN code if necessary.

3 - Select one of below options.

Channel Scan - this kind of scan will auto install digital channels or analogue channels depending on your current TV source setting.

Update Scan - refers to an incremental scan, which only scans the frequencies that Channel Scan has not scanned.

Single RF Scan - is digital manual scan, this allow user to scan specific frequency by pressing left or right Navigation Key on the RF Channel item.

Manual Service Update - is used to start background scan that new channels can be scanned without changing the existing channels.

4 - The channel scan will start immediately. This can take a few minutes to complete the channel update.

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

5.5. Reception Quality

You can check the quality and signal strength of a digital channel. If you have your own antenna, you can reposition the antenna to try and improve the reception.

To check the reception quality of a digital channel:

1 - Press **Settings > Channels & Inputs > Channels > Antenna > Single RF Scan** and press **OK**.

2 - Select **RF Channel**.

3 - Press **Navigation keys** left or right to select a channel and press **OK**. The signal level and signal quality is shown for this channel.

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

5.6. Analog Manual Scan

Analog TV channels can be manually installed.

To install analog channels manually:

1 - Press **Settings** > **Channels & Inputs** > **Channels** > **Analog** and press **OK**.

2 - Select **Analog Manual Scan** and press **OK**.

5.7. LCN - Logical Channel Number

To switch on/off the LCN:

1 - Press **Settings** > **Channels & Inputs** > **Channels** > **Antenna** and press **OK**.

2 - Select **LCN** and press **OK**.

3 - Select **On** or **Off** and press **OK**.

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

5.8. Channel Scan or Store Type

You can set the channel type for scanned or stored.

To set the channel scan type:

1 - Press **Settings** > **Channels & Inputs** > **Channels** > **Antenna** and press **OK**.

2 - Select **Channel Scan Type** and press **OK**.

3 - Select the scan type you want and press **OK**.

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

To set the channel store type:

1 - Press **Settings** > **Channels & Inputs** > **Channels** > **Antenna** and press **OK**.

2 - Select **Channel Store Type** and press **OK**.

3 - Select the store type you want and press **OK**.

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

5.9. Channel Skip

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

To set the skipped channels:

1 - While watching TV, press **MENU** > **Navigation Keys** up > **Channels** > **Channel Management** and

press **OK**.

2 - Select **Channel Skip** and press **OK**.

3 - Select the channels you want to skip and press **OK**.

The check mark is shown.

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

5.10. Channel Swap

You can swap the position on the channel list for each channel.

To set the skipped channels:

1 - While watching TV, press **MENU** > **Navigation Keys** up > **Channels** > **Channel Management** and press **OK**.

2 - Select **Channel Swap*** and press **OK**.

3 - Press **OK** to select a channel, and then press **Navigation keys** up or down to select another channel.

The position of first selected channel and the second selected channel will be swapped to each other.

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

* Note: Depending on your installation country or operator setting, **Channel Swap** option is not always available.

5.11. Channel Move

You can change the channels order as you like.

To move channels:

1 - While watching TV, press **MENU** > **Navigation Keys** up > **Channels** > **Channel Management** and press **OK**.

2 - Select **Channel Move** and press **OK**.

3 - Follow the on-screen description to select.

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

5.12. Channel Edit

You can edit the channels from the channel list.

To edit the channels:

1 - While watching TV, press **MENU** > **Navigation Keys** up > **Channels** > **Channel Management** and press **OK**.

2 - Select **Channel Edit** and press **OK**.

3 - Use the **Navigation keys** to select the channel and press **Yellow key** for **Select**.

- 4 - Follow the on-screen instruction.
 - 5 - Press **Back**, repeatedly if necessary, to close the menu.
-

5.13. Channel Delete

You can remove the channels from the channel list.

To remove the channels:

- 1 - While watching TV, press **MENU > Navigation Keys up > Channels > Channel Management** and press **OK**.
 - 2 - Select **Channel Delete** and press **OK**.
 - 3 - Follow the on-screen description to operate.
 - 4 - Press **Back**, repeatedly if necessary, to close the menu.
-

5.14. Channel Re-sort

If **LCN** (Logical Channel Number) is set to **Off**, you can re-sort the channels by genre.

To re-sort the channels:

- 1 - While watching TV, press **MENU > Navigation Keys up > Channels > Channel Management** and press **OK**.
 - 2 - Select **Channel Re-sort** and press **OK**.
 - 3 - Follow the on-screen description to select.
 - 4 - Press **Back**, repeatedly if necessary, to close the menu.
-

5.15. Clear Channel List

You can clear all channels and leave all other TV settings untouched.

To clear channel list:

- 1 - While watching TV, press **MENU > Navigation Keys up > Channels > Channel Management** and press **OK**.
- 2 - Select **Clear Channel List** and press **OK**.
- 3 - Select **OK** to clear the current channel list.
- 4 - Press **Back**, repeatedly if necessary, to close the menu.

5.16. Analog Channel Fine Tune

Analog TV channels can be manually fine tuned.

To fine tune a channel:

- 1 - While watching TV, press **MENU > Navigation Keys up > Channels > Channel Management** and press **OK**.
- 2 - Select **Analog Channel Fine-tune** and press **OK**.
- 3 - You can fine tune the channel.
- 4 - Press **Back**, repeatedly if necessary, to close the menu.

6. Channels

6.1. About Channels and Switch Channels

To watch TV channels

- Press **SOURCES**, select any TV source.
- Press **Home > Live TV** and press **OK**.
- Press **Channel +** or **Channel -** to switch channels.
- If you know the channel number, type in the number with the number keys. Press **OK** after you entered the number to switch channels.

To switch to a channel from a channel list

- While watching a TV channel, press **OK** to open the channel lists.
- The channel list can have several pages with channels. To view the next or previous page, follow the on-screen instruction.
- To close the channel lists without switching channels, press **Back**.

Radio channels

If digital broadcasting is available, digital radio stations are installed during installation. Switch to a radio channel just like you switch to a TV channel.

TV may not work properly with some operators of digital television, non-compliance with requirements of the standard in full.

6.2. Channel Lists

About Channel Lists

After a channel installation, all channels appear on the channel list. Channels are shown with their name if this information is available.

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

Radio stations

If digital broadcasting is available, digital radio stations are installed during installation. Switch to a radio channel just like you switch to a TV channel.

TV may not work properly with some operators of digital television, non-compliance with requirements of the standard in full.

Open a Channel List

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

To open the current channel list:

- 1 - While watching TV, press **OK** to open the current channel list. Alternatively, press **MENU > Navigation Keys up > Channels > Channel List**.
- 2 - Press **Back** to close the channel list.

Search for a Channel

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

To search for a channel:

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

Search results are listed as a channel list - see the list name at the top. The search results disappear once you select another channel list or close the list with search results.

Channel List sorting

You can do channel list sorting with all channels. You can set the channel list to show only TV channels or only Radio stations. For Antenna channels you can set the list to show the Free or the Encrypted channels. You can also select to only show your Favotites channels.

To set a filter on a list with all channels:

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

6.3. Favourite Channels

About Favourite Channels

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

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

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

Edit a Favourites List

To create a favourite channels list:

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - Press **Blue key** for **Add Favorite**.
- 3 - Select the list of **Favourites1** to **Favourites4** you want to add.

To remove a channel from the favourites list:

- 1 - While watching TV, press **OK** to open the current channel list.
- 2 - Press **Yellow key** for **Select Type**.
- 3 - Select **Favorites** and then select the list of **Favourites1** to **Favourites4** you want to edit.
- 4 - Press **Green key** for **Channel Operation**.
- 5 - Select **Move** and press **Navigation keys** up or down to move a channel to the position you want. Press **OK** to confirm.
- 6 - Select **Delete** to remove the channel from the favourite channel list.

6.4. Parental Controls

Channel Blocked

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

To lock or unlock a channel:

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

Programme Restrictions

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

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

To set a rating:

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

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

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

Inputs Blocked

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

To lock or unlock an input source:

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

Change PIN

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

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

6.5. Interactive TV

About iTV

With interactive TV, some digital broadcasters combine their normal TV programme with information or entertainment pages. On some pages, you can respond to a programme or vote, do online shopping or pay for a video-on-demand programme.

HbbTV

Interactive TV is sometimes referred to as Digital Text or Red button. But each system is distinct.

Visit the broadcaster's Internet website for more information.

What You Need

Interactive TV is only available on digital TV channels. To enjoy the full benefits of Interactive TV, you need a high-speed (broadband) Internet connection to the TV.

HbbTV

If a TV channel offers HbbTV pages, you must first switch on HbbTV in the TV settings to view the pages.

To switch on the HBBTV support

MENU > TV options > Advanced options > HbbTV settings

Use iTV

Open iTV pages

Most channels that offer HbbTV or iTV invite you to press the colour key or **OK** key to open their interactive programme.

Navigate iTV pages

You can use the arrow and colour keys, the number keys and the **Back** key to navigate the iTV pages.

You can use the **Play**, **Pause** and **Stop** keys to watch videos within iTV pages.

Close iTV pages

Most iTV pages inform you which key to use to close. To force an iTV page to close, switch to the next TV channel and press **Back**.

7. Connect Devices

7.1. About Connections

Connectivity Guide

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

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

Antenna port

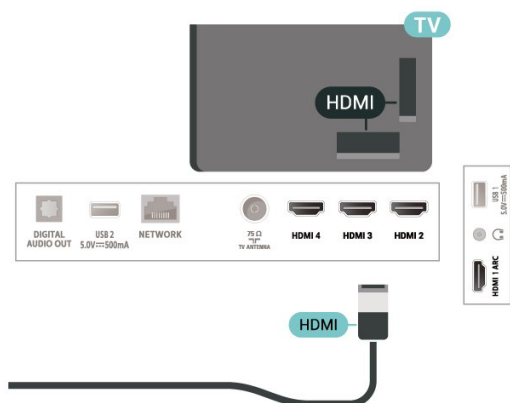
If you have a Set-top box (a digital receiver) or Recorder, connect the antenna cables to run the antenna signal through the Set-top box and/or Recorder first before it enters the TV. In this way, the antenna and the Set-top box can send possible additional channels to the Recorder to record.

HDMI ports

HDMI Quality

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

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



Copy protection

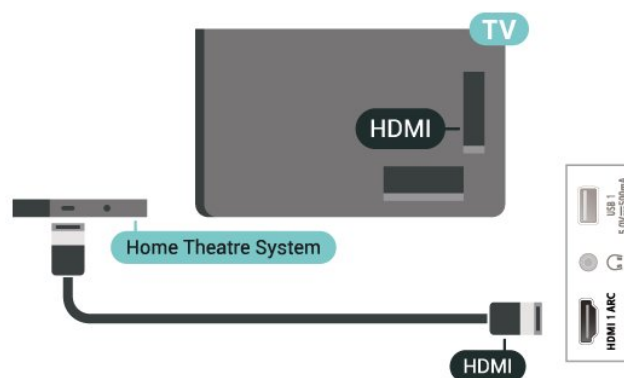
HDCP (High-bandwidth Digital Content Protection) is a copy protection signal that prevents copying content from a DVD disc or Blu-ray Disc. Also referred to as DRM (Digital Rights Management).

HDMI ARC

Only **HDMI 1** on the TV supports **HDMI ARC** (Audio Return Channel).

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

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



HDMI CEC

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



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

Switch on CEC

Allow the TV to control HDMI device.

Settings > Channels & Inputs > Inputs > HDMI control.

Device auto power off

Turn off the HDMI devices with the TV.

Settings > Channels & Inputs > Inputs > Device auto power off.

TV auto power on

Power on the TV with HDMI devices.

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

HDMI EDID Version

Check the HDMI EDID version number.

Settings > Channels & Inputs > Inputs > HDMI EDID Version.

CEC Device List

Check the connected HDMI CEC device list.

Settings > Channels & Inputs > Inputs > CEC device list.

Note:

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

7.2. Home Theatre System - HTS

Connect with HDMI ARC

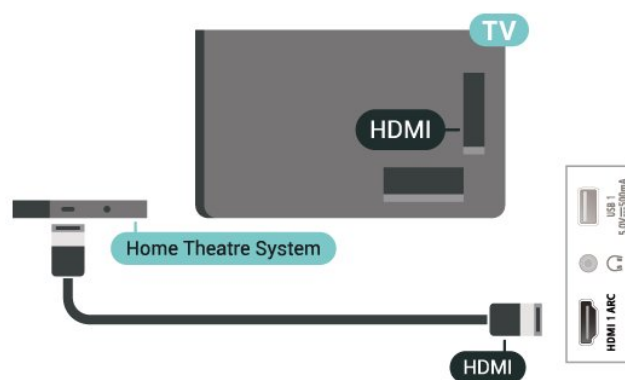
Use an HDMI cable to connect a Home Theatre System (HTS) to the TV. You can connect a Philips Soundbar or an HTS with a built-in disc player.

HDMI ARC

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

combines both signals.

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



Audio to video synchronisation (sync)

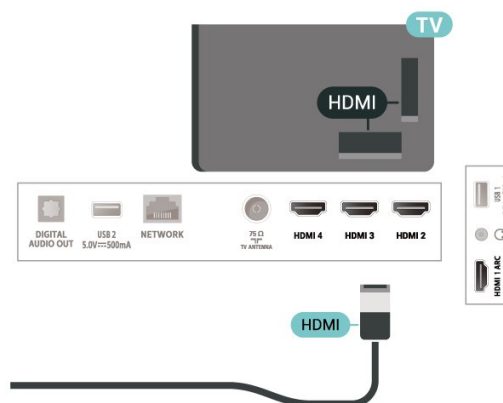
If the sound does not match the video on screen, you can set a delay on most Home Theatre Systems with a disc player to match the sound with the video.

7.3. Video Device

HDMI

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

For best signal quality transfer, use a High speed HDMI cable and do not use an HDMI cable longer than 5 m, and also connect devices supporting HDR on any one of HDMI connections.



7.4. Audio Device

Digital Audio Out - Optical

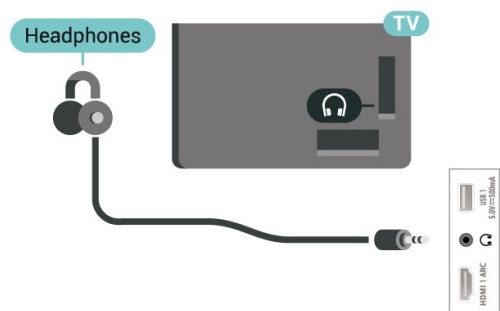
Audio Out - Optical is a high quality sound connection.

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



Headphones

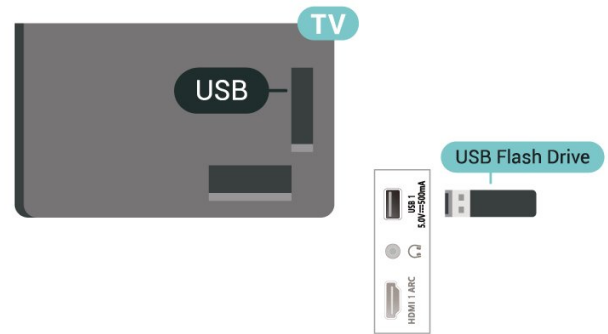
You can connect a set of headphones to the connection on the back of the TV. The connection is a mini-jack 3.5mm. You can adjust the volume of the headphones separately.



7.5. USB Flash Drive

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

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



To view the files from the USB flash drive, press **Home**, click the MMP (MultiMediaPlayer) app icon to start the app.

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

To remove the USB flash drive safely:

- 1 - Go to **Settings > System > Storage**.
- 2 - Select your flash drive and press **OK**.
- 3 - Select **Eject** and press **OK**.
- 4 - Wait until the eject procedure is finished and then pull out the flash drive.

Ultra HD on USB

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

8. Bluetooth®

8.1. What You Need

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

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

Attention

Before you purchase a wireless Bluetooth® speaker system, please find out more about the newest models and look for a device with a low latency rating. Ask your dealer for advice.

Disclaimer:

Due to the transmission limitations of Bluetooth® wireless technology, a slight sound delay might occur when you hear audio from your Bluetooth® headphone or Bluetooth® speakers.

When this occur, you might see the character moving his or her mouth but there is a slight delay in spoken dialog accompany it – commonly known as lip Sync error.

8.2. Pairing a Device

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

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

To pair a Bluetooth® device with the TV:

- 1 - Switch on the Bluetooth® device and place it within range of the TV.
- 2 - Press **Settings > Remotes & Accessories** and press **OK**.
- 3 - Select **Pair accessory** 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 **Back**, repeatedly if necessary, to close the menu.

Note:

Only one Bluetooth® sound output can be paired at a time, if you would like to pair another Bluetooth®

speaker or headphones, please un-pair the current one first.

8.3. Select a Device

To select a wireless device:

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

8.4. Rename a Device

To rename a wireless device:

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

8.5. Remove a Device

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

To remove or disconnect a wireless device:

- 1 - Press **Settings > Remotes & Accessories** and press **OK**.
- 2 - In the list, select the wireless device and press **OK**.
- 3 - Select **Forget** and press **OK**.
- 4 - Press **Back**, repeatedly if necessary, to close the menu.

9. Connect your Google 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) connection to the Internet.



Turn Wi-Fi On or Off

Settings > Network & Internet > Wi-Fi.

Make the Connection

Settings > Network & Internet > Wi-Fi.

1 - In the list of found networks, select on your wireless network. If your network is not in the list because the network name is hidden (you switched off the SSID broadcast of the router), select **Add new network** to enter the network name yourself.

2 - Follow the on-screen instruction.

3 - A message will be shown when the connection is successful.

Problems

Wireless network not found or distorted

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

Internet does not work

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

The PC and Internet connection are slow

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

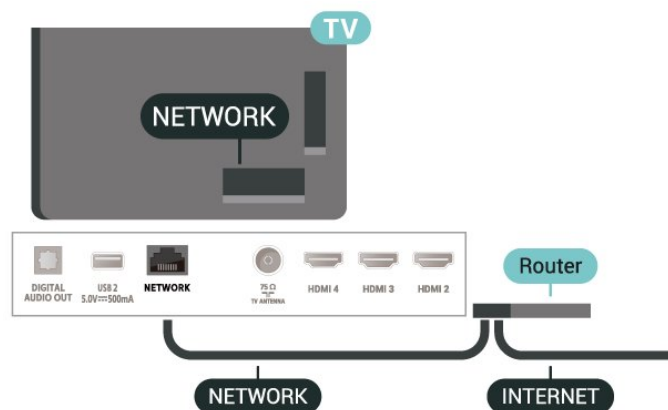
DHCP

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

Wired Connection

What You Need

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



Make the Connection

1 - Connect the router to the TV with a network cable (Ethernet cable**).

2 - Make sure that the router is switched on.

3 - The TV constantly searches for the network connection.

4 - A message will be shown when the connection is successful.

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

the router. DHCP should be switched on.

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

9.2. Google Account

Sign In Google Account

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 favourite games across phone, tablet and TV. You will also get customised video and music recommendations on your TV home screen as well as access to YouTube, Google Play and other apps.

Sign in Google account in Basic Mode

If you did not select to sign in Google account during the first TV installation, your TV is working with Basic Mode. You can sign in with Google account to switch your TV to Full Mode in anytime. Use your existing Google account to sign in to your TV. A Google Account consists of an email address and a password. If you don't have a Google Account yet, use your computer or tablet to create one (accounts.google.com).

To sign in after the TV installation:

- 1 - Select **Settings** > **Set up Google TV** and press **OK**.
- 2 - Alternately, press **Home** to go back to Home screen, select the Google TV banner and press **OK**.
- 3 - With the on-screen keyboard, enter your email address and press **OK**.
- 4 - Enter your password and press **OK** to sign in.

Google Account Settings

You can set or view several Google account specific settings or information. You can manage **Your services**, set your **Content preferences**, **Auto-play trailers**, **Hidden purchases and rentals**, **Payment and purchases**. Customise your **Google Assistant**, set to **Apps-only mode**, or **Remove** this Google account.

To open these settings...

- 1 - Sign in your Google account.
- 2 - Select **Settings** > **Account & Sign-in** and press **OK**.
- 3 - Explore the different Google account settings.
- 4 - Press **Back** if necessary, to close the menu.

10. Apps

10.1. About Apps

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

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

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

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

10.2. Google Play

Movies and TV

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

What You Need

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

To rent or buy a movie or TV show:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google TV**.
- 2 - Select a movie or TV show and press **OK**.
- 3 - Select the purchase you want and press **OK**. You will be taken through the purchase procedure.

To watch a rented or bought movie or TV show:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google TV**.
- 2 - Select the movie or TV show from your library in the app, select the title and press **OK**.
- 3 - You can use the **Stop, Pause, Rewind** or **Fast forward** keys on the remote control.
- 4 - To stop the Movies & TV app, press **Back** repeatedly or press **EXIT**.

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

Music

With **YouTube Music**, you can play your favourite 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 with the Internet
- you must sign in with your Google Account on TV
- add a credit card to your Google Account to take a music subscription

To start YouTube Music:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **YouTube Music**.
- 2 - Select the music you want and press **OK**.
- 3 - To stop the Music app, press **Back** repeatedly or press **EXIT**.

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

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

To start or stop a Google Play Game:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google Play Games**.
- 2 - Select a game to play or select a new game to install and press **OK**.
- 3 - When done, press **Back** repeatedly or press **EXIT** or stop the app with its dedicated exit/stop button.

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

To install a new app:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google Play Store** and press **OK**.
- 2 - Select the app you want to install and press **OK**.
- 3 - To close the **Google Play Store**, press **Back** repeatedly or press **EXIT**.

Parental controls

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

To set the parental control:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google Play Store** and press **OK**.
- 2 - Select **Settings > Parental controls**.
- 3 - Select the level of maturity you want.
- 4 - On request, enter the PIN code.
- 5 - To close the **Google Play Store**, press **Back** repeatedly or press **EXIT**.

Find more information on
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.

10.3. Start or Stop an App

You can start an app from the Home screen.

To start an app:

- 1 - Press **Home**.
- 2 - Move to **Your apps** row, select the app you want and press **OK**.
- 3 - Alternately, you can go to **Settings > Apps > See all apps** or **Show system apps** to select an app to open.
- 4 - To stop an app, press **Back** or press **EXIT** or stop the app with its dedicated exit/stop button.

10.4. 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 optimise 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.

11. 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 play the files from a connected USB Flash Drive. You can switch to your connected devices to watch their programme, a digital receiver or a Blu-ray Disc player.

To switch to a connected device:

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

One Touch Play

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

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

12. Settings

12.1. TV options

Press **MENU** to select one of below menus, then press **OK**.

Source

Select to open the Sources menu.

Picture

Select one of preset picture styles for ideal picture viewing.

Screen

Select one of preset picture format which fits the screen.

Sound

Select one of preset sound styles for ideal sound experience.

Power

Set the timers for saving energy.

Parental Controls

Set the parental rating for the programmes.

Manual OAD Download

Scan to search for an Over-the-air software update.
Note: OAD is for Thailand, Malaysia, and Vietnam only.

Advanced options

Adjust advanced settings.

Settings

View settings menu.

12.2. Picture Settings

Picture Mode

Select a style

Settings > Display & Sound > Picture > Picture mode.

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

- User - The picture preferences you set during the first start up.

- Standard - Most energy conscious setting
- Vivid - Ideal for daylight viewing
- Sport - Ideal for sport
- Movie - Ideal for watching movies with original studio effect
- Game* - Ideal for playing games
- Energy saving - Ideal for saving energy

* Picture style - Game is not available for some video sources.

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

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

When TV receives HDR10 signal, select a picture style below:

- User(HDR10)
- Standard(HDR10)
- Vivid(HDR10)
- Sport(HDR10)
- Movie(HDR10)
- Game(HDR10)
- Energy Saving(HDR10)

When TV receives HDR10+ signal, select a picture style below:

- User(HDR10Plus)
- Standard(HDR10Plus)
- Vivid(HDR10Plus)
- Sport(HDR10Plus)
- Movie(HDR10Plus)
- Game(HDR10Plus)
- Energy Saving(HDR10Plus)

When TV receives HLG (Hybrid Log Gamma) signal, select a picture style below:

- User(HLG)
- Standard(HLG)
- Vivid(HLG)
- Sport(HLG)
- Movie(HLG)
- Game(HLG)
- Energy Saving(HLG)

Other Picture Settings

Settings > Display & Sound > Picture and press OK.

Backlight

Adjust the video backlight intensity.

Brightness

Set the level of brightness of the picture signal.

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

Contrast

Adjust the contrast value of the picture.

Saturation

Adjust the colour saturation value of the picture.

HUE

Adjust the hue value of the picture.

Sharpness

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

Advanced settings

Set the advanced picture settings.

- **Color Temperature**

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

- **Dolby Vision Notification**

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

- **DNR**

Digital Noise Reduction, image noise reduction filters to reduces the image noise.

- **MPEG NR**

MPEG Noise Reduction feature to improve the quality of pictures by reducing the noise without compromising the picture resolution.

- **Adaptive Luma Control**

Dynamic video contrast enhancement to adjust the Luma level of the picture signal automatically.

- **Local Contrast Control**

Enhance the contrast level in local area for the image.

- **DI Film Mode**

When the film content is detected, TV will analyse and upgrade it to higher picture quality.

Gamma

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

Game Mode

Switch TV to Game mode to have fast response time.

- **HDMI Auto Game mode**

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

- **PC Mode**

Switch TV to PC mode to have original picture look.

- **HDMI RGB Range**

Set the RGB range of video to **Full**, **Limit** or **Auto** for HDMI sources.

Color Tuner

Fine tune the color setting yourself.

- **11 Point White Balance Alignment**

Customise the whitepoint balance based on the selected colour temperature of the picture.

Reset to default

Reset the current picture settings to default.

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:

Settings > Display & Sound > Screen.

Automatic

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

Full

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

Wide screen

Stretches the picture to a 16:9 format.

Super zoom

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

Original

Provide maximum detail for PC.

4:3

Display the classic 4:3 format.

Movie expand 14:9

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

Movie expand 16:9

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

12.3. Sound Settings

Sound Mode

Settings > Display & Sound > Sound > Sound mode.

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

- Game - Ideal for gaming
- Movie - Ideal for watching movies
- Music - Ideal for listening to music
- News - Ideal for speech
- Standard - Most neutral sound setting
- User - The sound preferences you set during the first start up.

Other Sound Settings

Settings > Display & Sound > Sound and press **OK**.

Dolby Atmos Notification

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

Speakers

Switch **On** or **Off** the TV speakers.

DTS Night Mode

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

Dolby audio processing

Set the advance settings.

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

Dialogue enhancer

Increase the intelligibility of dialogue and commentary.

Reset to default

Reset the current sound settings to default.

12.4. System

Accessibility Settings

Settings > System > Accessibility.

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

Captions

Settings > System > Accessibility > Captions.

Change the settings to display captions.

High contrast text

Settings > System > Accessibility > High contrast text.

Turn on/off or set the level of the text contrast.

Text to speech

Settings > System > Accessibility > Text to speech.

To enable and set up the text to speech function.

Accessibility shortcut

Settings > System > Accessibility > Accessibility shortcut.

To enable/disable the shortcut to Accessibility settings. When the shortcut is on, you can press both the back and down buttons for 3 seconds to start an accessibility feature.

About

System Update

Update Software

Update from Internet

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

1 - Press **Settings > System > About > System update** and press **OK**.

2 - Follow the instructions on screen.

Software Version

To view the current TV software version:

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

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 Licenses

To view the open source licenses:

- 1 - Select **Settings > System > About > Legal Information > Open source licenses** or press **MENU > TV options > Advanced Options > Open Source Licenses**.
- 2 - View the open source licenses information.
- 3 - Press **Back** if necessary, to close the menu.

Other Legal Information

Display other legal information

Settings > System > About > Legal Information > Google legal / System WebView licenses / Consumer Information.

To display other legal information about Google legal, System WebView licenses and Consumer Information.

System Information

View the information about current TV system

Settings > System > About > Model / Android TV OS version / Android security patch level / Kernel version / Android TV OS build / Netflix ESN / Software Version.

This will show the information about current system software version and the Netflix ESN Number information.

Date and Time

Settings > System > Date & Time.

Automatic date & time

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

Set to use network-provided time or turn off the Automatic date & time.

Set date

Settings > System > Date & Time > Set date.

Set current date.

Set time

Settings > System > Date & Time > Set time.

Set current 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.

Language

Change the language of the TV menu and messages

Settings > System > Language.

Select the language to display TV menu and messages.

Keyboard

Settings for the connected keyboard

Settings > System > Keyboard.

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.

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.

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, adjust the speed of slideshow.

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 power on the TV.

Set Energy saver

Settings > System > Power & Energy > Energy saver.

Set the time to turn off 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 Sleep timer

Settings > System > Power & Energy > Power > Sleep Timer.

TV switches to standby mode automatically after a preset time.

Set screen off to save energy consumption

Settings > System > Power & Energy > Power > Picture off.

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

Set TV switch off timer

Settings > System > Power & Energy > Power > Switch Off Timer.

Select **Switch off timer**, the TV switches off automatically at a preset time to save energy.

Set auto sleep timer

Settings > System > Power & Energy > Power > Auto Sleep.

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

Set to power on automatically

Settings > System > Power & Energy > Timer > Power On Time Type / Auto Power On Time.

First to set **Power On Time Type** to **On, Off** or **Once** and then set the actual time on **Auto Power On Time**. The TV will power on automatically on preset time once or regularly.

Set to power off automatically

Settings > System > Power & Energy > Timer > Power Off Time Type / Auto Power Off Time.

First to set **Power Off Time Type** to **On, Off** or **Once** and then set the actual time on **Auto Power Off Time**. The TV will power off automatically on preset time once or regularly.

Cast

Notification for your cast media

Settings > System > Cast.

Select **Always, While casting**, or **Never** to show a notification on all Android devices connected to your Wi-Fi and let them control media casting to your TV.

Note: this option is not available in Basic Mode.

System Sounds

Settings for system sound

Settings > System > System sounds.

Enable or disable the system sounds.

Retail Mode

Retail Mode

Settings > System > Retail Mode

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

Restart

Settings > System > Restart

Note:

- Disconnect the external USB hard disc before rebooting.
- Wait for few seconds, the TV restart 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 synchronised or the App is running slow, reboot your TV for better performance.

12.5. Advanced Options

Audio

MENU > TV options > Advanced Options > Audio.

Set the audio settings based on the channel audio.

Set audio preference language

MENU > TV options > Advanced Options > Audio > Audio Language / 2nd Audio Language.

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

Display the soundtracks

MENU > TV options > Advanced Options > Audio > Soundtracks.

Set to display the soundtracks information, this is only available with digital channels.

Set audio channel

MENU > TV options > Advanced Options > Audio > Audio Channel.

Set the Audio channel to **NICAM Dual I**, **NICAM Dual II**, **Mono**, or **NICAM Dual I+II**. This is only available with analog channels.

Set audio type

MENU > TV options > Advanced Options > Audio > Audio Type.

Set the Audio Type to **Normal**, **Audio Description**, **Spoken Subtitle**, **Hearing Impaired**, or **Audio Description and Spoken Subtitle**.

Accessibility for blind or partially sighted people

TV channels can broadcast special audio commentary describing what is happening on screen. You can set the audio type with different settings

MENU > TV options > Advanced Options > Audio > Audio Type > Audio description / Hearing Impaired.

Set the Audio type to Audio description or Hearing Impaired.

MENU > TV options > Advanced Options > Audio > Visually impaired.

When **Audio description** is on, more Visually Impaired options are available. Set the speaker volume of the normal audio with the audio commentary or set the extra audio effects in the commentary audio.

Subtitle

MENU > TV options > Advanced Options > Subtitle.

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

Teletext

MENU > TV options > Advanced Options > Teletext.

Some digital TV broadcasters have several Text languages available.

Blue Mute

MENU > TV options > Advanced Options > Blue Mute.

Switch the blue mute on or off.

No Signal Auto Power Off

MENU > TV options > Advanced Options > No signal auto power off.

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

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

Default Channel

MENU > TV options > Advanced Options > Default Channel.

Set the default channel mode.

HBBTV Settings

Note: This is for Singapore, Australia, Malaysia and New Zealand only.

MENU > TV options > Advanced Options > HBBTV Settings.

Switch on HbbTV

HBBTV settings > HBBTV Support.

Set the HbbTV History Tracking

HBBTV settings > Do Not Track.

Set the options according to your preference.

Set the HbbTV Cookies

HBBTV settings > Cookie Settings.

Set the options according to your preference.

Set other options

HBBTV settings > Persistent Storage, Block Tracking Sites, or Device ID.

Select one of the options and switch it to on or off.

Reset HbbTV Device ID

HBBTV settings > Reset Device ID.

You can reset your TV unique device identifier. A new identifier will be created. This will replace your Device ID with a new identifier.

OAD

MENU > TV options > Advanced Options > OAD.

Set the Over-the-air software update auto download to on or off.

Note: OAD is for Thailand, Malaysia, and Vietnam only.

System Information

MENU > TV options > Advanced Options > System information.

To check the system information, including Signal level, Frequency, Service ID, and etc.

Open Source Licenses

MENU > TV options > Advanced Options > Open Source Licenses.

To view the open source licenses information.

13. Videos, Photos, Music & Text

13.1. From a USB Connection

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

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

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

13.2. Play your Videos

Play a video

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

During the video playback...

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

Play, Pause

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

Repeat

Play videos repeatedly or once.

Show Info

Display the information of the video file.

Screen Mode

Adjust the screen mode.

Picture Settings

Adjust the picture settings.

Sound Settings

Adjust the sound settings.

Audio Output

Adjust the audio output settings.

Soundtracks

Display the soundtracks.

13.3. View your Photos

View Photos

View a photo

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

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

Sort

Sort the photo files by your preference.

Media type

Sort the files by media type.

Thumbnail size

Change the thumbnail viewing size.

Copy

Copy the file and place it to your preferred folder.

Paste

Place the copied file to your preferred folder.

Delete

Delete the selected file.

Recursive parser

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

Photo Frame

Select to start the Photo Frame mode.

Photo Options

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

Play

Press **OK** to play the photos.

Repeat

View the pictures repeatedly or once only.

Shuffle on, Shuffle off

View the pictures in sequential order, or at random.

Rotate

Rotate the image direction.

Zoom

Zoom in the image.

Show info

Display the information of the picture file.

Photo Frame image

Set the picture as Photo Frame image.

When playing slideshow, press **MENU** to...

Pause

Press **OK** to pause the photos.

Repeat

View the pictures repeatedly or once only.

Shuffle on, Shuffle off

View the pictures in sequential order, or at random.

Duration

Set the speed of the slideshow.

Effect

Set the transition from one picture to the next.

Show info

Display the information of the picture file.

Photo Frame image

Set the picture as Photo Frame image.

13.4. Play your Music

Play music

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

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

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

During the audio playback...

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

Play, Pause

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

Repeat

Play music repeatedly or once.

Shuffle On, Shuffle Off

Play audio in sequential order, or at random.

Show Info

Display the information of the music file.

Lyric Options

Select the options when the lyrics are available.

Picture Off

Close the screen when play the music for energy saving.

Sound Settings

Adjust the sound settings.

Audio Output

Adjust the audio output settings.

13.5. View your Text

View text

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

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

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

During the preview...

- Each file lasts 3 seconds for preview. Press **OK** to pause the preview to read.
- Press **MENU** to show the options.

Play, Pause

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

Repeat

Preview the text files repeatedly or once.

Shuffle On, Shuffle Off

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

Font

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

Show Info

Display the information of the text file.

14. TV Guide

14.1. What You Need

With the TV Guide you can view a list of the current and scheduled TV programmes of your channels. Depending on where the TV guide information (data) is coming from, analogue 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 for channels viewed from a digital receiver or decoder.

14.2. TV Guide Data

MENU > Navigation keys up > Channels > Program Guide.

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

15. Smartphones and Tablets

15.1. Chromecast built-in

What You Need

If an app on your mobile device has Chromecast built-in, 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. Chromecast built-in works on Android and iOS.

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

Chromecast-enabled apps

New Chromecast-enabled apps come available every day. You can already try it with YouTube, Chrome, Netflix, Photowall ... or Big Web Quiz for Chromecast. See also www.google.com/chromecast/built-in.

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

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

Cast From Apps to TV

To cast an app to the TV screen:

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

16. Netflix

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

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

www.netflix.com

17. Amazon Prime Video

With an Amazon prime membership, you gain access to thousands of popular movies and TV show, including exclusive Prime Originals.

Press the **prime video** key on your remote control or the app icon to open the Amazon Prime Video app. Your TV must be connected to the Internet to use the app. For more information about Amazon Prime Video, please visit www.primevideo.com.

18. Specifications

18.1. 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 110-240V +/-10%
 - Ambient temperature: 5°C to 35°C
-

18.2. Operating System

Android OS:

Android 11

18.3. Reception

- Aerial input: 75 ohm coaxial (IEC75)
 - Tuner bands: Hyperband, UHF, VHF
 - DVB: DVB-T/T2
 - Digital video playback: MPEG2 SD/HD (ISO/IEC 13818-2), MPEG4 SD/HD (ISO/IEC 14496-10)
 - Digital audio playback (ISO/IEC 13818-3)
-

18.4. Display Type

Diagonal screen size

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

Display resolution

- 3840 x 2160

18.5. Display Input Resolution

Supported Video only resolution

Resolution — Refresh rate

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

Supported Computer/Video resolution

Resolution — Refresh rate

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

18.6. Connectivity

TV Side

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

TV Bottom

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

18.7. Sound

Output power (RMS) : 20W

Dolby MS12 V2.5

- Dolby Atmos
- Surround Virtualizer + Height Virtualizer
- Dolby Bass Enhancement
- Dolby Dialogue Enhancement
- Dolby Volume (AVL/Night Mode)

18.8. Multimedia

Connections

- USB 2.0
- Ethernet LAN RJ-45
- Wi-Fi 802.11ac, Dual Band
- Bluetooth® 5.0

Supported USB file systems

- FAT 16, FAT 32

Playback formats

- Containers: PS, TS, M2TS, TTS, AVCHD, MP4, M4V, MKV, ASF, AVI, 3GP, Quicktime
- Video Codecs : AVI, MKV, HEVC, 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(Unicode), UTF-16, Simplified Chinese, Central Europe, Cyrillic, Western Europe, Greek, Turkish, Hebrew, Korean
- Maximum Supported Data Rate :
 - MPEG-4 AVC (H.264) is supported up to High Profile @ L5.1. 30Mbps
 - H.265 (HEVC) is supported up to Main / Main 10 Profile up to Level 5.1 40Mbps
- Image Codecs : JPEG, GIF, PNG, BMP, HEIF

19. Help and Support

19.1. Register your TV

Go to www.philips.com/TVsupport to 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.

19.2. Troubleshooting

Switch On and Remote Control

The TV does not switch on

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

Creaking sound at startup or switch off

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

TV does not respond to the remote control

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

If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.

If you do not notice the flickering, the remote control might be broken or its batteries are low.

This method of checking the remote control is not possible with remote controls which are wirelessly paired with the TV.

Channels

No digital channels found during the installation

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

Previously installed channels are not in the channel list

Make sure that the correct channel list is selected.

Picture

No picture / distorted picture

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

Sound but no picture

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

Poor antenna reception

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

Poor picture from a device

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

Picture settings change after a while

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

A commercial banner appears

Make sure that **Retail mode** is set to **Off**.

Select **Settings > System > Retail mode** and press **OK** to go to **Retail mode** settings.

Picture does not fit the screen

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

Picture position is incorrect

- Picture signals from some devices may not fit the

screen correctly. Check the signal output of the connected device.

- Change **Display mode** to **Automatic**.

Computer picture is not stable

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

Sound

No sound or poor sound quality

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

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

HDMI and USB

HDMI

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

HDMI EasyLink does not work

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

No volume icon shown

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

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

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

Choppy playback of USB files

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

Network

Wi-Fi network not found or distorted

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

Internet does not work

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

The PC and Internet connection are slow

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

DHCP

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

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 5 meters from the TV.

Bluetooth® Audio and Video synchronisation

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

Wrong Menu Language

Change the language back to your language

- 1 - Go to **Settings > System > Language** and press **OK**.
- 2 - Select on the language you need and press **OK**.
- 3 - Press **Back**, repeatedly if necessary, to close the menu.

19.3. Online Help

Go to www.philips.com/TVsupport to solve any Philips TV related problem, you can consult our online support. You can select your language and enter your product model number.

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.

19.4. Support and Repair

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

Find the telephone number in the printed documentation that came with the TV. Or consult our website www.philips.com/TVsupport and select your country if needed.

TV model number and serial number

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

Warning

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

20. Safety and Care

20.1. Safety

Important

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

Risk of Electric Shock or Fire

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

Risk of Injury or Damage to the TV

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

Risk of damage to the TV !

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

Stability Hazards

This product is designed and intended for consumers and personal use in a domestic home environment, unless agreed otherwise with the manufacturer in writing. Failure to follow this recommendation or the instructions provided in the product user manual and the product supportive documentation can cause damage to the product and will void the warranty for such cases.

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

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

Risk of Batteries

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

Risk of Overheating

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

Lightning Storms

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

Risk of Hearing Damage

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

Low Temperatures

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

Humidity

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

20.2. Screen Care

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

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

21. Terms of Use

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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 authorised in this manual, shall void the warranty.

Pixel characteristics

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

note this is not subjected to repair, exchange or refund within and/or out of the warranty period.

Backlight characteristics

All Philips TV have gone through stringent tests and checks before shipping to you. You can be rest assured that we place the quality of our TVs the utmost importance so that you do not suffer any viewing displeasure while watching your TV. However, please note that backlight bleeding ("Mura effect") and /or unevenness of background light that can only be observed in dark images or in a very dark and dim room are considered to be within TV specifications. Such occurrences do not represent a deterioration nor shall be regarded as a defect of the TV. Hence, we regret that claims of this nature for warranty, free of charge service, replacement or refund cannot be accepted within and/or out 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 standardisation for early integration in its products.

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22.2. HDMI

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Index

A	
Accessibility settings	29
Age Rating	16
Ambient Mode	31
Antenna	7
Antenna, Manual Installation	13
Apps	24
B	
Bluetooth®	21
Bluetooth®, Devices	21
Bluetooth®, Remove device	21
Bluetooth®, Select device	21
C	
Channel	15
Channel Install, Antenna	12
Channel List	15
Channel List sorting	15
Channel List, open	15
Channel Lists	15
Channel, age rating	16
Channel, Clear Channel List	14
Channel, Installation	12
Channel, TV guide	36
Channel, Update	12
Connectivity Guide	18
Consumer Care	44
Contact Philips	44
H	
HbbTV	17
I	
Input blocked	16
Interactive TV	17
Interactive TV, about	17
I	
iTV	17
K	
Keyboard	30
L	
Lock channel	16
M	
Manual Installation	13
Media	34
Media files, from a USB drive	34
N	
Network connection	22
Network, Wired	22
Network, Wireless	22
O	
Online support	44
P	
Parental Controls	16
Parental Rating	16
Photos, Videos and Music	34
Picture Setting	27
Problems, Channel	42
Problems, Connection, Internet	43
Problems, Connection, Wi-Fi	43
Problems, HDMI Connection	43
Problems, Picture	42
Problems, Remote control	42
Problems, Sound	43
Problems, USB Connection	43
Problems, Wrong menu language	44
R	
Radio station	15
Reception Quality	12
Register your product	42
Repair	44
S	
Safety Instructions	45
Search for a Channel	15
Set PIN Code	16
Software, Update	29
Sound settings	29
Storage	31
Switching On	11
T	
Test Reception	12
Troubleshooting	42
TV Guide	36
TV Guide Data	36
TV, standby	11
W	
Wi-Fi	22
Wired connection	22
Wireless connection	22



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