

**PHILIPS**

Smart Display

7428 Series

# User Manual

43PUH7428/96

Register your product and get support at  
[www.philips.com/TVsupport](http://www.philips.com/TVsupport)

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# 1. Home Screen

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## 1.1. Introduction

To enjoy the benefits of your Google Display, connect the display 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 display. 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 display 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](http://www.support.google.com/googletv)

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## 1.2. Dashboard and Settings

### Dashboard

The Dashboard is a side panel in Google Display 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 display 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 Display 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 Display 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 display shows from your favourite streaming apps, personalised recommendations, and Google Assistant to search and control your display 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 display 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.

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## 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

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## 2.1. Read the Safety Instructions

Read the safety instructions first before you use the display.

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## 2.2. Display Stand and Wall Mounting

### Display Stand

You can find the instructions for mounting the display stand in the Quick Start Guide that came with the display. In case you lost this guide, you can download it from [www.philips.com/TVsupport](http://www.philips.com/TVsupport).

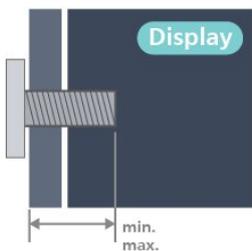
Use the model number of the display to look for the **Quick Start Guide** to download.

### Wall Mounting

Your display 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 display.

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



- 43PUH7428  
100x200, M6 (min.: 10 mm, max: 12 mm)

### Caution

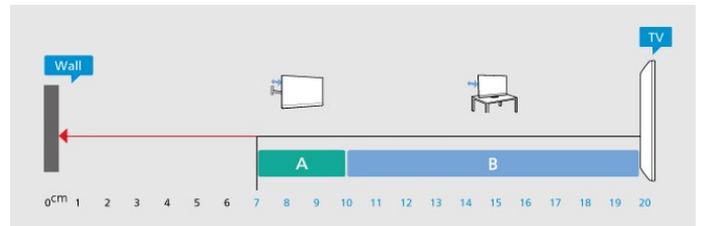
Wall mounting the display requires special skills and should only be performed by qualified personnel. The display wall mounting should meet safety standards according to the displays weight. Also read the safety precautions before positioning the display.

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

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## 2.3. Tips on Placement

- Position the display where light does not shine directly on the screen.
- The ideal distance to watch display 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 display from 7 to 10 cm away from the wall.
  - B. When display is with stand, position the display from 10 to 20 cm away from the wall depends on the size of stand.



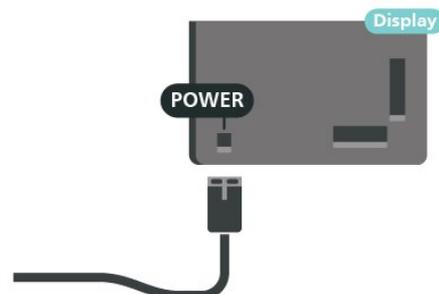
### Note:

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

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## 2.4. Power Cable

- Insert the power cable into the **POWER** connector on the back of the display.
- 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.

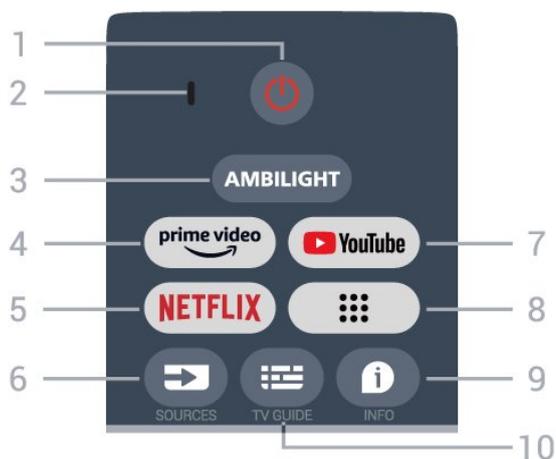


Although this display has a very low standby power consumption, unplug the power cable to save energy if you do not use the display for a long period of time.

# 3. Remote Control

## 3.1. Key Overview

### Top



#### 1 - Power (Standby / On)

To switch the display 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 display switched on or from standby.

- If you have a Netflix membership subscription, you can enjoy Netflix on this display. Your display 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 display 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.

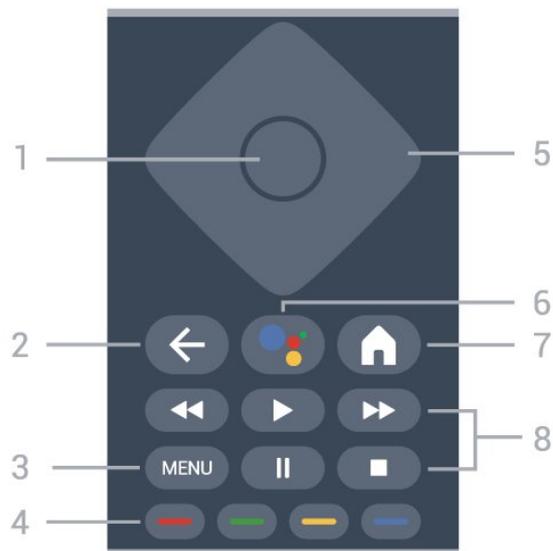
#### 9 - INFO

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

### 10 - GUIDE

To open or close the display Guide.

### Middle



#### 1 - OK key

To confirm a selection or setting. To open the program list while watching display.

#### 2 - Back

To return to previous menu.

#### 3 - MENU

To open the display Menu with typical display 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™.

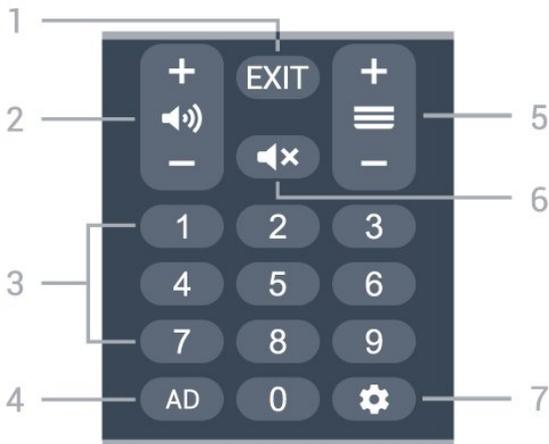
#### 7 - Home

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 program directly.

### 4 - AD

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

### 5 -

Press + or - to switch to the next or previous page.

### 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 Display

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

- 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 display with the remote control.

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

(within 1m distance) during pairing in order to ensure success.

3 - If the display 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 display 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 display 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 display 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 display.



### Warning

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

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## 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 display 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

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

## Switch on

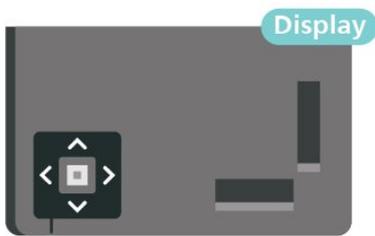
Press **Power** on the remote control to switch the display on. You can also press the small joystick key on the bottom of the display to switch the display on in case you can't find the remote control or its batteries are empty.



## Switch to standby

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

-Schematic diagram of joystick position



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

To switch off the display 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. Connect Devices

## 5.1. About Connections

### Connectivity Guide

Always connect a device to the display 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 display 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 display automatically switches to the ideal display settings when you switch to this device in the Sources menu.

### Internet

Data input from the Internet.

LAN transfer rate:

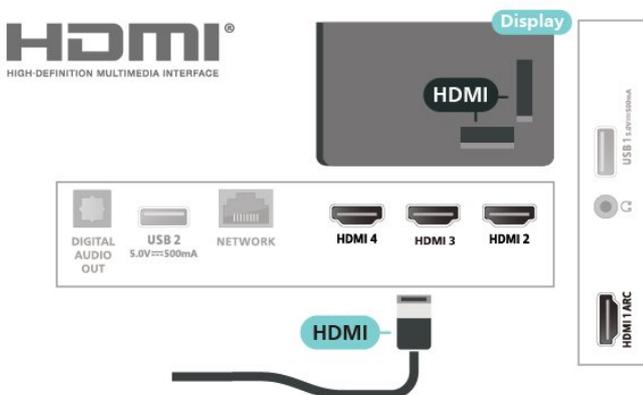
Supports networks with a speed up to 100/10 Mbps.

### 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) display 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

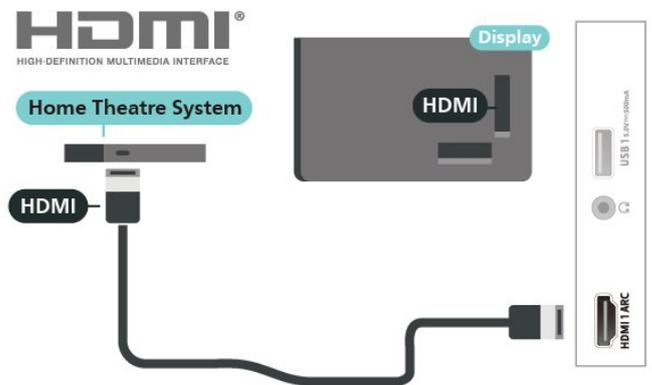
from a DVD disc or Blu-ray Disc. Also referred to as DRM (Digital Rights Management).

#### HDMI ARC

Only **HDMI 1** on the display 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 display. With the HDMI ARC connection, you do not need to connect the extra audio cable that sends the sound of the display picture to the HTS. The HDMI ARC connection combines both signals.

You can use any HDMI connection on this display 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 display, you can operate them with the display remote control.



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

#### Switch on CEC

Allow the display to control HDMI device.

**Settings > Channels & Inputs > Inputs > HDMI control.**

### Device auto power off

Turn off the HDMI devices with the display.

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

### Display auto power on

Power on the display with HDMI devices.

Settings > Channels & Inputs > Inputs > Display 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.

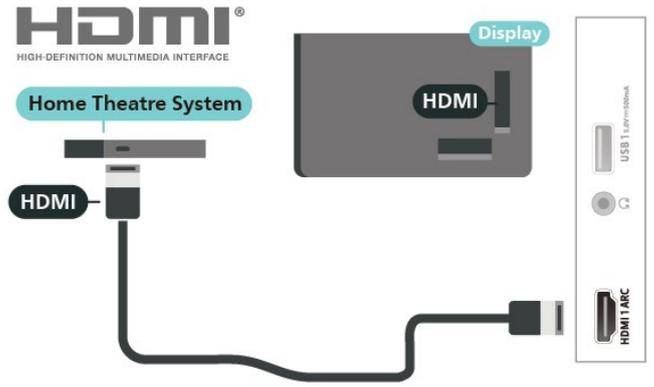
## 5.2. Home Theatre System - HTS

### Connect with HDMI ARC

Use an HDMI cable to connect a Home Theatre System (HTS) to the display. You can connect a 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 display 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 display can offer the Audio Return Channel (ARC) signal, the display can only send the ARC signal to this HDMI connection.



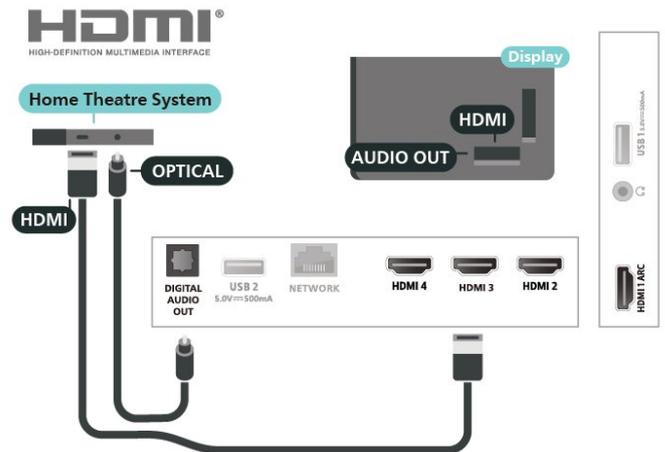
### Audio to video synchronisation (sync)

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

### Connect with HDMI

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

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



### Audio to video synchronisation (sync)

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

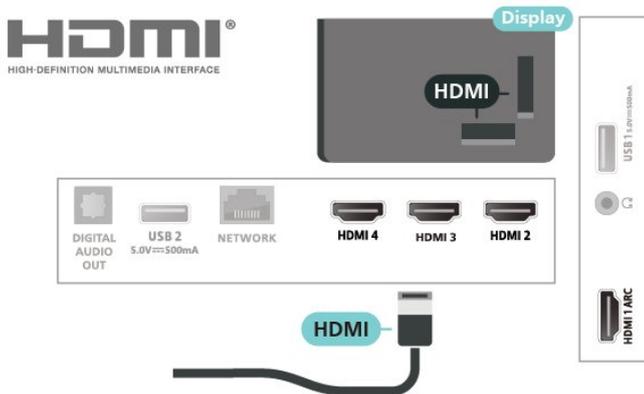
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## 5.3. Video Device

### HDMI

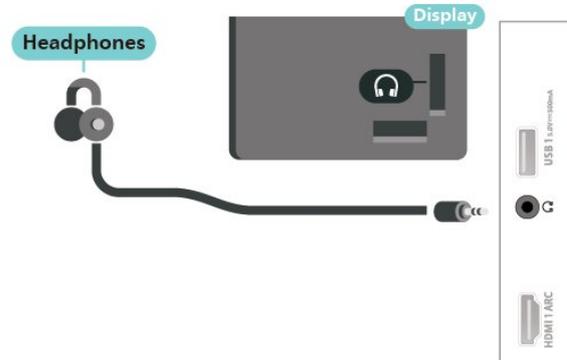
Use a **High speed HDMI** cable to connect with best picture and sound quality.

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.



### Headphones

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



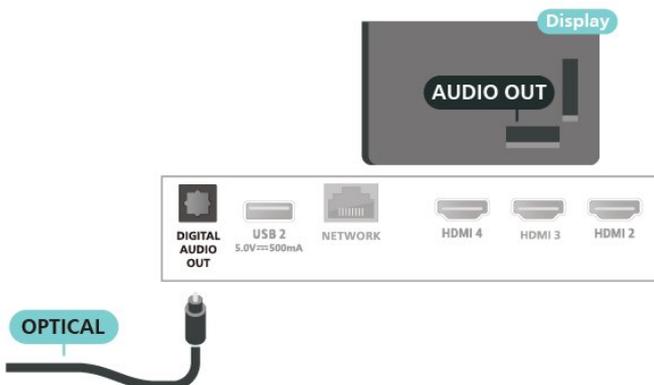
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## 5.4. Audio Device

### 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 display to the HTS.

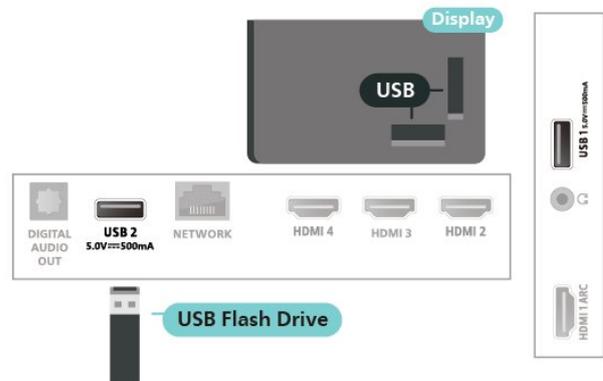


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## 5.5. USB Flash Drive

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 display while the display 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 display will downscale the resolution if the resolution of the photo is higher.

# 6. Bluetooth®

---

## 6.1. What You Need

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

To enable the display audio on a wireless speaker, you must pair the wireless speaker with the display. The display 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.

---

## 6.2. Pairing a Device

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

Once a wireless speaker is paired, you can select it to play the display 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 display:

- 1 - Switch on the Bluetooth® device and place it within range of the display.
- 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 display and the display 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.

---

## 6.3. 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.
- 

## 6.4. 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.
- 

## 6.5. 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.

# 7. Connect your Google Display

## 7.1. Network and Internet

### Home Network

To enjoy the full capabilities of your Google Display, your display must be connected to the Internet.

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

### Connect to Network

#### Wireless Connection

##### What You Need

To connect the display 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 display'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.

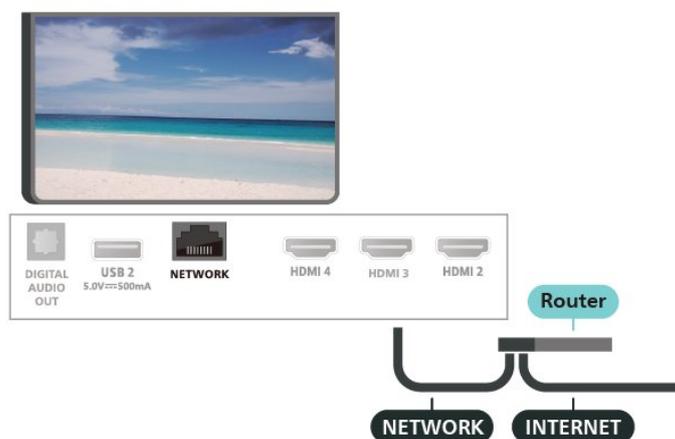
#### DHCP

- 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 display 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 display with a network cable (Ethernet cable\*\*).

2 - Make sure that the router is switched on.

3 - The display 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.

---

## 7.2. Google Account

### Sign In Google Account

To enjoy the full capabilities of your Google Display, 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 display. You will also get customised video and music recommendations on your display 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 display installation, your display is working with Basic Mode. You can sign in with Google account to switch your display to Full Mode in anytime. Use your existing Google account to sign in to your display. 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 display installation:

- 1 - Select **Settings** > **Set up Google Display** and press **OK**.
- 2 - Alternately, press **Home** to go back to Home screen, select the Google Display 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.

# 8. Apps

---

## 8.1. 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 display offer specific functions for an enriched display 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 display.

To install apps from the Google Play™ Store, the display 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.

---

## 8.2. Google Play

### Movies and Display

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

#### What You Need

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

#### To rent or buy a movie or display show:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google TV**.
- 2 - Select a movie or display 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 display show:

- 1 - Go to **Settings > Apps > See all apps > Show system apps** and select **Google TV**.
- 2 - Select the movie or display 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](http://www.support.google.com/googletv)

### Music

With **YouTube Music**, you can play your favourite music on display.

You can buy new music on your computer or mobile device. Or, on your display, 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 display must be connected with the Internet
- you must sign in with your Google Account on display
- 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](http://www.support.google.com/googletv)  
or [support.google.com/youtubemusic](http://support.google.com/youtubemusic)

### Games

With Google Play Games, you can play games on display. 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 display must be connected with the Internet
- you must sign in with your Google Account on display
- 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 display. 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](http://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 display must be connected with the Internet
- you must sign in with your Google Account on display
- 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](http://www.support.google.com/googletv)

## Payments

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

### To add a credit card:

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

---

## 8.3. 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.

---

## 8.4. 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 display. 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 display. Also, it is best to uninstall apps that you are not using anymore.

# 9. Sources

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## 9.1. 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 display 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 display will show the programme or content of the device.

### One Touch Play

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

# 10. Settings

---

## 10.1. Display 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.

### Advanced options

Adjust advanced settings.

### Settings

View settings menu.

---

## 10.2. 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 - Factory setting
- Vivid - Ideal for daylight viewing
- Sport - Ideal for sport

- Movie - Ideal for watching movies with original studio effect
- Game\* - Ideal for playing games
- Energy saving - Ideal for saving energy

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

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

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

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

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

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

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

When display 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.

- **Motion styles** (Only available for 70" models)  
Motion styles provides optimised motion setting modes for different video contents. Select one of the motion styles (**Off, Low, Medium, High**) to have different viewing experience on motion video.

- **Dolby Vision Notification**

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

- **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, display 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 display to Game mode to have fast response time.

- **HDMI Auto Game mode**

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

- **PC Mode**

Switch display 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 Correction

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.

---

## 10.3. 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 display.

#### Speakers

Switch **On** or **Off** the display 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.

---

## 10.4. System

### Accessibility Settings

Settings > System > Accessibility.

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

#### Captions

Settings > System > Accessibility > Captions.

Turn on/off or 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.

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## About

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### System Update

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#### Update Software

#### Update from Internet

If the display is connected to the Internet, you may receive a message to update the display 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 display 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 status information

**Settings > System > About > Status**.

To display the display 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 > Display 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 display system

**Settings > System > About > Model / Android Display OS version / Android security patch level / Kernel version / Android Display 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 display menu and messages**

**Settings > System > Language**.

Select the language to display display menu and messages.

## Keyboard

### Settings for the connected keyboard

**Settings > System > Keyboard**.

Connect the USB keyboard to one of the USB connections on this display. When the display 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 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 display to stay on **Home screen** or on **Last input** when power on the display.

### Set Energy saver

**Settings > System > Power & Energy > Energy saver.**

Set the time to turn off display 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.**

Display 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 display screen is switched off, to switch the display screen back on, press any key on the remote control.

### Set display switch off timer

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

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

### Set auto sleep timer

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

Display switches to standby mode automatically after a preset time if the display 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 display 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 display 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 display.

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.

Retail Mode

## Restart

Settings > System > Restart

**Note:**

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

This will remove unnecessary data and information in the memory.

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

---

## 10.5. Advanced Options

### Blue Mute

MENU > Display options > Advanced Options > Blue Mute.

Switch the blue mute on or off.

### No Signal Auto Power Off

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

## Open Source Licenses

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

To view the open source licenses information.

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# 11. Videos, Photos, Music & Text

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## 11.1. From a USB Connection

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

With the display 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.

---

## 11.2. 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.

---

## 11.3. 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.

---

## 11.4. 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.

---

## 11.5. 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.

# 12. Smartphones and Tablets

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## 12.1. Chromecast built-in

### What You Need

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

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

### 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](http://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](http://www.support.google.com/chromecastbuiltin) .

### Cast From Apps to Display

To cast an app to the display screen:

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

# 13. Netflix

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If you have a Netflix membership subscription, you can enjoy Netflix on this display. Your display 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 display in standby.

[www.netflix.com](http://www.netflix.com)

# 14. Amazon Prime Video

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With an Amazon prime membership, you gain access to thousands of popular movies and display 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 display must be connected to the Internet to use the app. For more information about Amazon Prime Video, please visit [www.primevideo.com](http://www.primevideo.com).

# 15. Specifications

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## 15.1. Environmental

### Product Fiche

43PUH7428/96

- On mode power consumption (W): 125 W
- Standby power consumption (W)\*:  $\leq 0.5$  W
- Display resolution (pixels): 3840x2160p

\* When the display is turned off using the remote control and no functions are active. The power consumption in full standby mode is  $< 0.5$  W. It takes several minutes for the display to enter full standby mode.

### End of Use

#### Disposal of your old product and batteries

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



Please recycle used batteries



Drained or discharged batteries must be recycled or discarded according to relevant laws and regulations. For more detailed information, please contact the unit responsible for solid waste disposal in your country. (Display disposal method)

According to Environmental Protection Administration regulations, displays must be properly disposed of to avoid any negative impact on the environment. When disposing of a display, please use one of the following methods:

1. When purchasing a new display, you can entrust your old display to the seller for recycling.
2. You can contact the service hotline for the Resource Recycling Management Fund Committee on Electronic and Electrical Appliances Waste at : 0800-085-717.

Please take time to learn more about the different recycling processes for electrical and electronic products in your local area.

Please ensure to follow local regulations, do not dispose of your old products together with general household waste. Disposing of your old electronic products correctly will minimise any negative impact on the environment and the health of others.

Please take time to research the relevant regulations for battery recycling in your local area. Disposing of your batteries correctly will minimise any negative impact on the environment and the health of others.

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## 15.2. Power

Product specifications are subject to change without notice. For more specification details of this product, see [www.philips.com/TVsupport](http://www.philips.com/TVsupport).

### Power supply

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

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## 15.3. Operating System

Android OS:

Android 11

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## 15.4. Reception

- Digital video playback: MPEG2 SD/HD (ISO/IEC 13818-2), MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)

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## 15.5. Display Type

### Diagonal screen size

- 108 cm / 43 inch

### Display resolution

- 3840 x 2160

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## 15.6. 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

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## 15.7. Connectivity

### Display Side

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

### Display Bottom

- Digital Audio out: Optical
- USB 2: USB 2.0
- Network LAN: RJ45
- HDMI 2 in: Ultra HD - HDR
- HDMI 3 in: Ultra HD - HDR
- HDMI 4 in: Ultra HD - HDR

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## 15.8. 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)

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## 15.9. 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

# 16. Help and Support

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## 16.1. Register your Display

Go to [www.philips.com/TVsupport](http://www.philips.com/TVsupport) to register your display 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.

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## 16.2. Troubleshooting

### Switch On and Remote Control

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

#### Display does not respond to the remote control

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

If the display 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 display 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 display.

### Picture

#### No picture / distorted picture

- 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 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 display 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 display 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 display to display content from an HDMI device.
- If the display 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 display 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 display 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 display.
- Make sure that the audio and picture file formats are supported by the display.

### Choppy playback of USB files

- The transfer performance of the USB storage device may limit the data transfer rate to the display 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 display'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 display as possible.
- Trying to pair several devices with the display at the same time, may not work.

### Bluetooth® lost connection

- Always position the wireless speaker within a range of 5 meters from the display.

### 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.

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## 16.3. Online Help

Go to [www.philips.com/TVsupport](http://www.philips.com/TVsupport) to solve any Philips display 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 display software or the manual to read on your computer.

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## 16.4. 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 display. Or consult our website [www.philips.com/TVsupport](http://www.philips.com/TVsupport) and select your country if needed.

### **Display model number and serial number**

You might be asked to provide the display 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 display.

### **Warning**

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

# 17. Safety and Care

## 17.1. Safety

### Important and RoHS regulations

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

#### RoHS regulatory requirements

Device name: Philips LED Smart Display

Model (type): 43PUH7428/96

單元	限用物質及其化學符號					
	鉛 (Pb)	汞 (Hg)	鎘 (Cd)	六價鉻 (Cr <sup>6+</sup> )	多溴聯苯 (PBB)	多溴二苯醚 (PBDE)
塑料外框	○	○	○	○	○	○
後殼	○	○	○	○	○	○
液晶面板	—	○	○	○	○	○
電路板組件	—	○	○	○	○	○
底座	○	○	○	○	○	○
電源線	—	○	○	○	○	○
其他線材	—	○	○	○	○	○
遙控器	—	○	○	○	○	○

備考1. "○" 係指該項限用物質之百分比含量未超出百分比含量基準值。  
備考2. "—" 係指該項限用物質為排除項目。

#### Safety precautions

**Warning:** Excessive use may cause damage to eyesight.

#### Precautions:

- You should take a 10-minute break for every 30 minutes of use
- Children under the age of 2 should not look at the screen and those over the age of 2 should not look at the screen for more than 1 hour per day.

#### Technical specifications for low-power radio frequency equipment

Without approval, businesses, shops or users are not permitted to change the frequency, increase the power or change the original design characteristics and functions of the low-power RF equipment certified by inspection. The use of low-power radio frequency equipment must not affect flight safety or interfere with lawful communications. If any interference is discovered, it should be stopped immediately and improved to ensure no interference before continuing use. The aforementioned lawful communication refers to radio communication operated in accordance with the provisions of the Telecommunications Management Act. Low-power radio frequency equipment must withstand

interference from lawful communications or electrical equipment used for radio wave radiation in industrial, scientific and medical applications.

Wireless information transmission equipment operating in the 5.25–5.35 GHz frequency band is limited to indoor use only.

Avoid interfering with the operation of nearby radar systems.

High-gain directional aerials can only be used in fixed point-to-point systems.

### Risk of Electric Shock or Fire

- Never expose the display to rain or water. Never place liquid containers, such as vases, near the display. If liquids are spilt on or into the display, disconnect the display from the power outlet immediately. Contact display Consumer Care to have the display checked before use.
- Never expose the display, 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 display.
- 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 display screen.
- To disconnect the display from the mains power, the power plug of the display 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 Display

- Two people are required to lift and carry a display that weighs more than 25 kg or 55 lbs.
- If you mount the display on a stand, only use the supplied stand. Secure the stand to the display tightly. Place the display on a flat, level surface that can support the weight of the display and the stand.
- When wall mounted, ensure that the wall mount can safely bear the weight of the display 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 display !

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

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

## Risk of Hearing Damage

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

## Low Temperatures

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

## Humidity

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

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

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## 17.2. Screen Care

- Never touch, push, rub or strike the screen with any object.
- Unplug the display before cleaning.
- Clean the display and frame with a soft damp cloth and wipe gently. Never use substances such as alcohol,

chemicals or household cleaners on the display.

- 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.

# 18. 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 display with which this booklet was packaged. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V.

Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V or their respective owners. TP Vision reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly.

The written material packaged with the display and the manual stored in the memory of the display or downloaded from the Philips website [www.philips.com/TVsupport](http://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 display or void of warranty!

Never attempt to repair the display yourself. Use the display and accessories only as intended by the manufacturer. The caution sign printed on the back of the display indicates risk of electric shock. Never remove the display cover. Always contact Philips display Customer Care for service or repairs. Find the telephone number in the printed documentation that came with the display. Or consult our website [www.philips.com/TVsupport](http://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 display 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 display have gone through stringent tests and checks before shipping to you. You can be rest assured that we place the quality of our displays the utmost importance so that you do not suffer any viewing displeasure while watching your display. 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 display specifications. Such occurrences do not represent a deterioration nor shall be regarded as a defect of the display. 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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# 19. Copyrights

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## 19.1. Google TV

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



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## 19.2. HDMI

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



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## 19.3. HEVC Advance

Covered by one or more claims of the HEVC patents listed at [patentlist.accessadvance.com](http://patentlist.accessadvance.com). Future proof with advanced HEVC decoding.



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## 19.4. Dolby Vision and Dolby Atmos

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## 19.5. Wi-Fi Alliance

The Wi-Fi CERTIFIED® Logo is a registered trademark of Wi-Fi Alliance®.



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## 19.6. Kensington

(If applicable)

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## 19.7. Other Trademarks

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# 20. Disclaimer

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Disclaimer regarding services and/or software offered by third parties

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[www.philips.com/welcome](http://www.philips.com/welcome)