Setting up

1.1 Read safety

Read the safety instructions that are supplied with the TV first before you use the TV.

1.2 TV stand and wall mounting

**TV stand**

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

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

**Wall mounting**

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

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

To fix the bracket securely, use screws with a length indicated in the drawing.

- 28HFL5010T - VESA MIS-F 100x100, M4 (Minimum 7.5 mm, Maximum 8.5 mm)
- 32HFL5010T - VESA MIS-F 100x100, M4 (Minimum 8 mm, Maximum 14 mm)
- 40HFL5010T - VESA MIS-F 200x200, M4 (Minimum 12 mm, Maximum 16 mm)
- 48HFL5010T - VESA MIS-F 200x200, M6 (Minimum 12 mm, Maximum 16 mm)
- 55HFL5010T - VESA MIS-F 400x200, M6 (Minimum 12 mm, Maximum 16 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 TV's weight. Also read the safety precautions before positioning the TV. TP Vision Europe B.V. bears no responsibility for improper mounting or any mounting that results in accident or injury.

**Note**

Before mounting the TV on the wall, remove the existing VESA screws on the back panel.

**Warning**

Follow all instructions provided with the TV mount. TP Vision Europe B.V. bears no responsibility for improper TV mounting that results in accident, injury or damage.

To prevent damage to cables and connectors, leave a gap of at least 5.5 cm / 2.2 inches from the back of the TV.

Before you mount the TV on the wall, find the correct length of the screw. To find the length of the screw, add the thickness of your wall mount to the screw length.

1.3 Tips on placement

- Position the TV where light does not shine directly on the screen.
- Dim lighting conditions in the room for best Ambilight effect.*
- Position the TV up to 15 cm away from the wall.
- The ideal distance to watch TV is 3 times its diagonal screen size. When seated, your eyes should be level with the centre of the screen.

* Ambilight function is only for TVs with Ambilight.

1.4 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.

### 1.5 Antenna cable

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

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

Use this antenna connection for DVB-T and DVB-C input signals.
Connections

2.1 Tips on connections

Antenna

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

HDMI CEC

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) or Ultra HD (UHD) TV signals. For best signal quality transfer, use a High speed HDMI cable and do not use an HDMI cable longer than 5 m.

EasyLink HDMI CEC

If your devices are connected with HDMI and have EasyLink, you can operate them with the TV remote control. EasyLink HDMI CEC must be switched On on the TV and the connected device.

DVI to HDMI

Use a DVI to HDMI adapter if your device only has a DVI connection. Use one of the HDMI connections and add an Audio L/R cable (mini-jack 3.5mm) to AUDIO IN for sound, on the back of the TV.

Copy protection

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

HDMI ARC

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

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

In case you prefer to switch off ARC on the HDMI connections, enter the Professional Home Menu. Select TV settings > Sound > Advanced > HDMI ARC.

Y Pb Pr - Audio L R

Y Pb Pr - Component Video is a high quality connection. The YPbPr connection can be used for High Definition (HD) TV signals. Next to the Y, Pb and Pr signals add the Audio Left and Right signals for sound.

- Y shares the same jack with CVBS.
- Component and Composite share audio jacks.
CVBS - Audio L R

CVBS - Composite Video is a high quality connection. The CVBS connection can be used for High Definition (HD) TV signals. Next to the CVBS signal adds the Audio Left and Right signals for sound.
- Y shares the same jack with CVBS.
- Component and Composite share audio jacks.

• Only for TVs with component/composite connectors.

Scart

SCART is a good quality connection. The SCART connection can be used for CVBS and RGB video signals but cannot be used for High Definition (HD) TV signals. The SCART connection combines video and audio signals.

Use the SCART adapter cable to connect your device.

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.

You can set the type of the audio out signal to fit the audio capabilities of your Home Theatre System.

If the sound does not match the video on screen, you can adjust the audio to video synchronisation.

2.2

EasyLink HDMI CEC

EasyLink

With EasyLink you can operate a connected device with the TV remote control. EasyLink uses HDMI CEC (Consumer Electronics Control) to communicate with the connected devices. Devices must support HDMI CEC and must be connected with an HDMI connection.

EasyLink setup

The TV comes with EasyLink switched on. Make sure that all HDMI CEC settings are properly set up on the connected EasyLink devices. EasyLink might not work with devices from other brands.

HDMI CEC on 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.
Operate devices

To operate a device connected to HDMI and set up with EasyLink, select the device - or its activity - in the list of TV connections. Press SOURCE, select a device connected to an HDMI connection and press OK.

Once the device is selected, the TV remote control can control the device. However and OPTIONS keys and some other TV keys are not forwarded to the device.

If the key you need is not on the TV remote control, you can select the key in the Options menu. Press OPTIONS and select Controls in the menu bar. On the screen, select the device key you need and press OK.

Some very specific device keys might not be available in the Controls menu.

Note: Only devices that support EasyLink remote control function will respond to the TV remote control.

EasyLink settings

The TV comes with all EasyLink settings switched on. You can switch off any EasyLink setting independently.

EasyLink

To switch off EasyLink completely...

1 - Professional Mode: Off – Press and select Setup and press OK.
2 - Professional Mode: On – Enter the Professional Home Menu.

2 - Select TV settings > General settings > EasyLink, and press OK.
3 - Select Off and press OK.
4 - Press , repeatedly if necessary, to close the menu.

EasyLink Remote Control

If you want devices to communicate but you don’t want to operate them with the TV remote control, you can switch off EasyLink remote control separately. In the EasyLink settings menu, select EasyLink remote control and select Off.

Pixel Plus Link

Some devices, a DVD or Blu-ray Disc player, might have their own picture quality processing. To avoid bad picture quality caused by interference with the TV processing, the picture processing of these devices should be disabled. The TV comes with Pixel Plus Link switched on and disables the picture quality processing of recent Philips devices connected to the TV.

To switch off Pixel Plus Link, in the EasyLink settings menu, select Pixel Plus Link and select Off.

Auto subtitle shift

If you play a DVD or Blu-ray Disc on a Philips disc player that supports subtitles, the TV can move the subtitles upwards. Subtitles will be visible whatever Picture format you select. The TV comes with Auto subtitle shift switched on.

To switch off Auto subtitle shift, in the EasyLink settings menu, select Auto subtitle shift and select Off.

Auto switch off devices

You can set the TV to switch off the connecting HDMI-CEC compliant devices if they are not the active source. The TV switches the connected device to standby after 10 minutes of inactivity.

2.3 Common interface - CAM

CI+

This TV is ready for the CI+ Conditional Access. With CI+ you can watch premium HD programmes, like movies and sports, offered by digital TV broadcasters in your region. These programmes are scrambled by the TV broadcaster and descrambled with a prepaid CI+ module.

Digital TV broadcasters provide this CI+ module (Conditional Access Module - CAM) when you subscribe to their premium programmes. These programmes have a high level of copy protection.

Contact a digital TV broadcaster for more information on terms & conditions.

CAM

Insert a CAM module

Switch off the TV before inserting a CAM. Look on the CAM for the correct method of insertion. Incorrect insertion can damage the CAM and TV.
Use the Common Interface slot on the TV to insert the CAM card.
With the front of the card facing towards you, gently insert the CAM as far as it will go.
Leave the card in the slot permanently.

It may take a few minutes before the CAM is activated. Removing the CAM will deactivate the broadcast service on TV.
If a CAM is inserted and subscription fees are paid, (connection methods can differ), you can watch the TV broadcast. The inserted CAM is exclusively for your TV.

CAM settings
To set passwords or PIN codes for the CAM TV broadcast, press \ and select \ Setup and press \ OK.
Select Channel settings > Common Interface.
Select the CAM TV broadcaster and press \ OK.

2.4 Set-top box - STB

Use 2 antenna cables to connect the antenna to the Set-top box (a digital receiver) and the TV.

Next to the antenna connections, add an HDMI cable to connect the Set-top box to the TV.
Alternatively, you can use a SCART cable if the Set-top box has no HDMI connection.

Switch off timer
Switch off this automatic timer, if you only use the remote control of the Set-top box. Do this to prevent the TV from switching off automatically after a 4 hour period without a key press on the remote control of the TV.
To switch off the Switch off timer:
Professional Mode: Off \ Press \ and select \ Setup and press \ OK.
Professional Mode: On \ Enter the Professional Home Menu.
Select TV settings > General settings > Switch off timer and set the slider bar to Off.

2.5 Home Theatre System - HTS

Connect HTS
Use 2 antenna cables to connect the antenna to the Set-top box (a digital receiver) and the TV.

Next to the antenna connections, add an HDMI cable to connect the Set-top box to the TV.
Alternatively, you can use a SCART cable if the Set-top box has no HDMI connection.

Switch off timer
Switch off this automatic timer, if you only use the remote control of the Set-top box. Do this to prevent the TV from switching off automatically after a 4 hour period without a key press on the remote control of the TV.
To switch off the Switch off timer:
Professional Mode: Off \ Press \ and select \ Setup and press \ OK.
Select TV settings > General settings > Switch off timer and set the slider bar to Off.

Audio Out settings

Audio Out delay

With a Home Theatre System (HTS) connected to the TV, the picture on TV and the sound from the HTS should be synchronised.

Automatic audio to video sync

With recent Philips Home Theatre Systems, the audio to video sync is done automatically synchronised and always correct.

Audio sync delay

For some Home Theatre Systems you might need to adjust the audio sync delay to synchronise the audio to the video. On the HTS, increase the delay value until there is a match between picture and sound. A delay value of 180ms may be required. Read the user manual of the HTS. With a delay value set up on the HTS, you need to switch off Audio out delay on the TV.

To switch off the Audio Out delay . . .

1 - Professional Mode: Off – Press 🖼️ and select Setup and press OK.
2 - Select TV settings > Sound > Advanced > Audio out delay.
3 - Select Off and press OK.
4 - Press 🗞️, repeatedly if necessary, to close the menu.

Audio Out offset

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

To synchronise the sound on the TV . . .

1 - Professional Mode: Off – Press 🖼️ and select Setup and press OK.
2 - Select TV settings > Sound > Advanced > Audio out offset.
3 - Use the slider bar to set the sound offset and press OK.
4 - Press 🗞️, repeatedly if necessary, to close the menu.

Audio Out format

If you have a Home Theatre System (HTS) with multichannel sound processing capabilities like Dolby Digital, DTS® or similar, set the Audio out format to Multichannel. With Multichannel, the TV can send the compressed multichannel sound signal from a TV channel or connected player to the Home Theatre System. If you have a Home Theatre System without multichannel sound processing, select Stereo.

To set the Audio out format . . .

1 - Professional Mode: Off – Press 🖼️ and select Setup and press OK.
2 - Select TV settings > Sound > Advanced > Audio out format.
3 - Select Multichannel or Stereo.
4 - Press 🗞️, repeatedly if necessary, to close the menu.

Audio Out levelling

Use the Audio Out levelling setting to level the volume (loudness) of the TV and the Home Theatre System when you switch over from one to another. Volume differences can be caused by differences in sound processing.

To level the difference in volume . . .

1 - Professional Mode: Off – Press 🖼️ and select Setup and press OK.
2 - Select TV settings > Sound > Advanced > Audio out levelling.
3 - If the volume difference is large, select More. If the volume difference is small, select Less.
4 - Press 🗞️, repeatedly if necessary, to close the menu.

Audio Out levelling affects both the Audio Out - Optical and HDMI ARC sound signals.
Problems with HTS sound

Sound with loud noise

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

1. **Professional Mode:** Off → Press ‒ and select **Setup** and press ‒ OK.
   Professional Mode: On → Enter the Professional Home Menu.

2. Select **Setup** > **TV settings** > **Sound** > Advanced > **Audio out format**.

No sound

If you cannot hear the sound from the TV on your Home Theatre System, check the following . . .

- Check if you connected the HDMI cable to an **HDMI ARC** connection on the Home Theatre System. All HDMI connections on the TV are HDMI ARC connections.
- Check if the **HDMI ARC** setting on the TV is switched On.

2.6 Blu-ray Disc player

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

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

2.7 DVD player

Use an HDMI cable to connect the DVD player to the TV. Alternatively, you can use a SCART cable, if the device has no HDMI connection.

If the DVD player is connected with HDMI and has EasyLink CEC, you can operate the player with the TV remote control.

2.8 Game console

**HDMI**

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

**Y Pb Pr - Audio L R**

Connect the game console with a component video cable (Y Pb Pr) and an audio L/R cable to the TV.
• Y shares the same jack with CVBS.
• Component and Composite share audio jacks.

CVBS - Audio L R / Scart

Connect the game console to the TV with a composite cable (CVBS) and an audio L/R cable to the TV.

If your game console only has Video (CVBS) and Audio L/R output, use a Video Audio L/R to SCART adapter to connect to the SCART connection.

Note: the CVBS to SCART Adapter is not provided in the TV set.

CVBS - Audio L R

Connect the game console to the TV with a composite cable (CVBS) and an audio L/R cable to the TV.

• Y shares the same jack with CVBS.
• Component and Composite share audio jacks.

USB flash drive

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

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

The TV detects the flash drive and opens a list showing its content.
If the contents list does not appear automatically, press SOURCE, select USB and press OK.

To stop watching the USB flash drive content, press TV or select another activity.
To disconnect the USB flash drive, you can pull out the flash drive anytime.

2.10

Photo camera

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

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

If the contents list does not appear automatically, press SOURCE, select USB and press OK.
Your camera might need to be set to transfer its content with PTP (Picture Transfer Protocol). Read the user manual of the digital photo camera.

Ultra HD on USB

You can view photos in Ultra HD resolution from a connected USB device or flash drive. The TV will downscale the resolution to Ultra HD if the resolution of the photo is higher. You cannot play a native Ultra HD video on any of the USB connections.
2.11 Camcorder

HDMI

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

CVBS - Audio L R / Scart

You can use an HDMI, YPbPr or SCART connection to connect your camcorder. If your camcorder only has Video (CVBS) and Audio L/R output, use a Video Audio L/R to SCART adapter to connect to the SCART connection.

Note: the CVBS to Scart Adaptor is not provided in the TV set.

CVBS - Audio L R

Use a Video Audio L/R cable to connect the camcorder to the TV.

2.12 Computer

Connect

You can connect your computer to the TV and use the TV as a PC monitor.

With HDMI

Use an HDMI cable to connect the computer to the TV.

With DVI to HDMI

Alternatively, you can use a DVI to HDMI adapter to connect the PC to HDMI and an audio L/R cable (mini-jack 3.5mm) to AUDIO IN L/R on the back of the TV.

2.13 Headphones

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

To adjust the volume . . .

1 - Professional Mode: Off → Press \(\uparrow\) and select Setup and press OK. Professional Mode: On → Enter the Professional Home Menu.

2 - Select TV settings > Sound > Headphones
volume and press **OK**.

3 - Press ▲ (up) or ▼ (down) to adjust the volume.

4 - Press(Result deleted by the user) , repeatedly if necessary, to close the menu.
Remote control

3.1 Key overview

Top

1 - Standby / On
To switch the TV On or back to Standby.

2 - MYCHOICE
To switch on mychoice.

3 - CHANNEL GRID
To open or close the channel grid.

4 - SOURCE
To open or close the Sources menu - the list of connected devices.

5 - CLOCK
To display the clock.

6 - SMART TV
To open the Smart TV start page.
(Only for Smart TV’s)

7 - ALARM
To set the alarm.

8 - SMART INFO
To open the smart information page.

9 - OPTIONS
To open or close the Options menu.

10 - TV
To switch back to watching TV.

Middle

1 - HOME
To open or close the home menu.

2 - GUIDE
To open or close the TV guide.

3 - ADJUST
To open the Adjust menu.

4 - BACK
To switch back to the previous channel you selected.
To close a menu without changing a setting.
To go back to the previous Smart TV page.

5 - Play/Pause
• Play ▶ to playback.
• Pause ▷ to pause playback.

6 - INFO
To open or close programme info.

7 - OK key
To confirm a selection or setting.

8 - Arrow / navigation keys
To navigate up, down, left or right.

9 - OPTIONS
To open or close the Options menu.

Bottom

1 - Channel
To switch to the next or previous channel in the channel list.
To open the next or previous page in Text or start the next or previous chapter on a disc.

2 - Colour keys
Follow on screen instructions. Blue key  ▶ , opens Help.

3 - Number keys and text keypad
To select a TV channel directly or to enter text.

4 - SUBTITLE
To switch subtitles on, off or Automatic.

5 - Volume
To adjust the volume level.

6 - Mute
To mute the sound or to restore it.
3.2

**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.

3.3

**Batteries**

1. Slide the battery door in the direction shown by the arrow.
2. Replace the old batteries with 2 type AAA-LR03-1.5V alkaline 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.

3.4

**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.
Switch on

4.1

On or Standby

Make sure you plugged in the mains power on the back of the TV before you switch on the TV. If the red indicator light is off, press the Joystick on the right side or on the back of the TV to put the TV in standby - the red indicator will light up.

With the TV in standby, press  on the remote control to switch the TV on.

Switch to standby

To switch the TV to standby, press  on the remote control.

Switch Off

To switch the TV Off, press the Joystick on the right or on the back. The red indicator light is off. The TV is still connected to the mains power but consumes a minimum of energy. To switch off the TV completely, disconnect the power plug.

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

4.2

Keys on TV*

While the on-screen display is on, press the Joystick to display the menu.

- Use the arrow/navigation keys to navigate up, down, left or right.
- Press the Joystick to confirm a selection or setting.

4.3

Word mark brightness*

You can switch off or adjust the word mark lighting.

To adjust or switch off...

1 - Professional Mode: Off  ➤ Press  and select Setup and press OK.
Professional Mode: On  ➤ Enter the Professional Home Menu.
2 – Select TV settings > General settings > Word mark brightness and press OK.
3 – Select Maximum, Medium, Minimum or select Off to switch off the lighting of the word mark.
4 – Press ➤ , repeatedly if necessary, to close the menu.

*Only available for certain TV models
Professional mode

5.1 What you can do

In professional mode, you can configure the TV for hotel use. Features include:

• Changing professional setup items, such as power and speaker settings.
• USB cloning
• Downloading software via RF, including SSB firmware, Smart TV and hotel information.
• Change TV settings, Install channels, Change Network settings.

5.2 Enter Professional Home Menu

To enter the Professional Home Menu
1 - Press 3, 1, 9, 7, 5, 3 and x.
The professional setup menu appears.
The Professional Home Menu has items for:
• Quick picture & sound settings and TV settings
• Search for channels and Channel settings
• Connect to network and Network settings (if applicable)
• Update software and Software settings
• Professional settings menu

5.3 Enable Professional Home Menu

Enable professional mode

The Professional Mode will be already set to On if it was selected during the Virgin installation procedure.
To change the setting:
1 - In the professional mode menu, select Professional Settings menu and press OK.
2 - Select Professional settings > Professional mode > On, and press OK:
- On: Switch on professional mode. Hospitality features are enabled.
- Off: Switch off professional mode. The TV operates as a normal consumer TV.

5.4 Professional settings menu

Professional settings

Dashboard
This provides the selection of Default or Custom dashboard (i.e. Home Menu)

Professional Settings Overview
To view the Professional settings.

Room ID
Set a room ID for the TV. Restricted to numeric characters only, with a maximum of four characters.

Channel setup
Here you can enter the channel setup menu to rename, reorder, mark as favourites, hide/unhide channels

Reset Professional Settings
To reset Professional mode settings to factory default values.

Switch on settings
Customise the way the TV behaves when it is switched on.

Switch on channel
Switches to a predefined channel.

Switch on vol
Switches to a predefined volume.

Max volume
Limits the maximum volume of the TV.

Switch On Feature
Starts up in Smart TV or MyChoice modes.

Switch on picture format
Switches to a predefined picture format.

Power Settings

Customise the way the TV behaves when it is switched on.

Power On
Determine whether the TV goes to standby when it is switched on.

Low Power Standby
Determine whether standby mode is [Fast] (regular) or [Green] (low energy).

**Smart power**
Enable or disable energy saving mode.

**Wake on LAN**
Switch on the TV via internet if the TV is in standby.

---

**Welcome message**
Create and display a welcome message for your guests.

**Display message**
Switch the welcome message [On] or [Off].

- **Line 1**
  Enter the first line of welcome text.

- **Line 2**
  Enter the second line of welcome text.

**Clear**
Clear the welcome message.

**Message Time-out**
Set how long to display the welcome message.

---

**Welcome logo**
Display logo
Enable or disable the welcome logo that appears when the TV starts.

**USB to TV**
Load the welcome message from USB to TV.

---

**SmartInfo Settings**

**SmartInfo**
This sets the way the SmartInfo is shown.

**USB to TV**
Load the information for **SmartInfo** from USB to TV.

---

**Control settings**

**Local KB lock**
Select **On** to lock all TV buttons except . Select **[Off]** or **[All]** to unlock or lock all buttons respectively.

**RC lock**
Select **On** to disable all buttons on the remote control. Note that you can still enter the professional setup menu by pressing 3, 1, 9, 7, 5, 3, 7.

**OSD display**
Enable or disable on-screen information.

**High security**
Select **On** to restrict access to the professional setup menu.

**Auto scart**
Enable or disable the auto SCART feature – this feature allows a connected SCART device to turn the TV on or off.

**USB break-in**
Enable or disable access to various USB features.

**Enable USB**
Enable or disable access to a connected USB storage device.

**SXP BaudRate**
Select a baud rate value (38400 or 19200).

**Enable teletext**
Enable or disable access to Teletext.

**Enable MHEG**
Enable or disable access to MHEG channels. Applicable to UK only.

**Enable EPG**
Enable or disable access to the Electronic Programme Guide.

**Enable subtitle**
Enable or disable subtitles.

**Subtitle On Startup**
Enable or disable subtitles when the TV starts.

**Blue mute**
Turn the TV screen to blue and mute the sound if there is no signal detected.

**Enable CI slot**
Enable or disable the CI slot.

**Wi-Fi Direct Cross Connection**
Enable or disable Wi-Fi Direct Cross Connection.

**Wi-Fi Miracast**
Enable or disable the Miracast.

**DirectShare**
Enable or disable the DirectShare feature.

**Scrambled Program OSD**
When disabled, scrambled programmes will not be visible to guests.

**Wi-Fi Lost OSD**
When disabled, no message will be shown when the WiFi connection of the TV is lost.

**Joint Space**
Enable or disable the Joint Space feature.

**EasyLink Break-in/ Easylink control**
Enable or disable access to various EasyLink features.

**Enable Skype**
Enable or disable Skype feature.

**Digit Time Out**
Sets the time out for the Digit OSD.

**Selectable AV**
The different AV connections can be selected to show up in the Source list.

**Watch TV**
To select which source to select when using the Watch TV icon / button.

---

**Clock setup**

**External Clock**
Enable or disable the external clock.

**Clock brightness at Dim Light**
This sets the level of brightness of the LCD clock when the environmental light conditions are dim.

**Clock brightness at Intense Light**
This sets the level of brightness of the LCD clock when the environmental light conditions are bright.

**Clock Light Sensor Sensitivity**
This sets the sensitivity level of the light sensor to sense environmental light conditions.

---

**Time Download**
To select from which source the time will be retrieved. Manual, RF channel or IP channel.

**Time Setting**
Manually enter the time. This is only enabled when Time download is set to Manual.

**Time Download Program**
Define which channel to extract the time from. Only visible when Time Download is set to RF.

**NTP Server URL**
Define which URL to extract the time from. Only visible when Time Download is set to IP.

**Country Selection**
Set the country in which the TV is being installed.

**Time Zone**
Set the time zone in which the TV is being installed.

**Daylight Saving**
Enable or disable daylight saving.

**Time offset**
Add to or subtract from the extracted time value.

**Reference Date**
Define whether the date is referenced from the TV.

**Reference Time**
Define whether the time is referenced from the TV.

---

**Speaker settings**
Set the audio output of the TV. If independent external speakers are attached, they will match the audio of the TV speakers.

**TV speaker enable**
Enable or disable TV speakers.

**Independent main speaker mute**
Enable or disable external speakers.

**Default main speaker volume**
Define the default volume to be applied when speakers are unmuted.
Installation

Blank Channel
Provides a list of the installed channels that can be selected to blank.

Free/scrambled
Select to install only Free To Air channels or also Scrambled channels.

Multi remote control
Pair up to four RCs to a TV. Each RC is associated with one of four colour keys.

MyChoice
Enable or disable access to premium channels (MyChoice).

SystemUI Settings

Source
Smart UI allows hotels to display a HTML portal when users select Browse Portal from the Home menu. Select Off to disable this feature and hide Browse Portal from the Home menu. Selecting Server links to a URL and Local displays locally-stored HTML pages. The HTML files and supporting content (images, video etc.) stored in the TV should not exceed a total of 4 MB.

Fallback
If SmartUI is on, enabling the backup automatically launches locally-stored HTML content if the link to an external server or URL does not work.

Icon Label
Change the label of the Browse Portal icon.

Server URL
Enter the URL to access from Browse Portal.

Web Services

TVDisclosure Service
Enable auto discovery by selecting On. Disable it by selecting Off.

SI Service
If SI Services is enabled by selecting On, users view the server defined in Smart TV Settings when they select Browse Portal in the home menu. If SI Services is disabled, the locally-stored HTML files (defined in Smart TV Settings) will launch when Browse Portal is selected.

IP Upgrade Service
Enable or disable IP upgrade.

Vsecure
Vsecure prevents unauthorised viewing and copying of video – use this setting to change modes, load and erase keys.

Vsecure over RF enable
To enable Vsecure feature for RF channels.

Load Key to USB
To load the Vsecure key to USB flash drive.

Load Key to TV
To load the Vsecure key from USB flash drive to TV.

Vsecure Self Test
To initiate self test for Vsecure.

Erase Key Option
To select which Key to be erased.

Erase Key
To effectively erase the selected Key.

Clone/Upgrade

Clone to TV
Initiate cloning from USB flash drive to the TV.

Select Clone to TV
To select which clone file on the USB to clone to the TV.

Clone to USB
To initiate download of clone items from TV to USB flash drive.

Upgrade Mode
This sets the firmware upgrade mode to RF or IP.

Start Upgrade
To manually trigger instant firmware upgrade.

Auto Upgrade
Enable or disable automatic firmware upgrade.
5.5

MyChoice setup

Ask For PIN
To request for the pin code to enable MyChoice package.

Free Package
To select the list of channels to group in this package.

Package 1
To select the list of channels to group in this package.

Package 2
To select the list of channels to group in this package.

5.6

Combine channel list
This enables or disables a combined list of channels and AV sources.

5.7

Smart TV Settings

Smart TV can be disabled, or set to show default content or to show content via App Control.

App Control ID
To provide the ID number for App Control.

Profile Name
To provide the name of the profile to be used for this TV.

Manage Profiles
This will bring you to the page for changing SmartTV settings
TV channels

6.1 Watching TV channels

Switch channels

To watch TV channels, press TV. The TV tunes to the TV channel you last watched.

Alternatively, press 🆕 to open the Home menu and select Watch TV and press OK.

To switch channels, press CH + or CH −. 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 back to the previously tuned channel, press ⬅.

To switch to a channel from a channel list

While watching a TV channel, press CHANNEL GRID to open the channel grid.

The channel grid can have several pages with channels. To view the next or previous page, press CH + or CH −.

To close the channel lists without switching channels, press CHANNEL GRID again.

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.

Channel list

Favourite channels

You can create a favourite channel list that only holds the channels you want to watch. With the Favourite channel list selected, you will only see your favourite channels when you switch through channels.

Create your favourite channel list

1 - Professional Mode: Off — While watching a TV channel, press CHANNEL GRID to open the channel list.

Professional Mode: On — In the Professional Home Menu, select Professional Settings menu and press OK.

Select Professional settings > Channel setup and press OK.

2 - Select All to view all channels.

3 - Select the channel, and press ⬅ to mark as favourite.

4 - The selected channel is marked with a ★.

5 - To finish, press ⬅️. The channels are added to the Favourites list.

To remove a channel from the favourites list, select the channel with ★, then press ⬅️ again to unmark as favourite.

Reorder

You can reorder — reposition — channels in the Favourite channel list.

1 - In the channel list Favourites, highlight the channel you want to reposition.

2 - Press ⬅️.

3 - Select the channel to reorder and press OK.

4 - Press the Navigation buttons to move the highlighted channel to another location and press OK.

5 - Once complete, press ⬅️ to exit from the Favourite channel list.

You can highlight another channel and do the same.

Channel list views

In the channel lists, you can find all installed TV and radio channels.

Next to the channel list All, which holds all installed channels, you can set up a list of Favourites, view the installed Radio stations separately or discover the newly added channels in New.

Channel logos

In some countries, the TV can show the channel logos. If you do not want these logos to appear, you can switch them off.

To switch off Channel logos . . .

1 - Professional Mode: Off — Press 🆕 and
select Setup and press OK.

Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings ➔ General settings ➔ Channel logos and press OK.
3 - Select Off and press OK.
4 - Press ➔, repeatedly if necessary, to close the menu.

Rename channels

You can rename channels in the channel list.
1 - Select the channel you want to rename in one of the channel lists.
2 - Select the channel to rename.
3 - Press ➔.

You can enter text with the remote control keyboard or open the on-screen keyboard.

With the on-screen keyboard
• To open the on-screen keyboard, place the cursor in the name text field and press OK.
• To delete the character in front of the cursor, press Backspace.
• To enter a character, select the character with the arrow keys and press OK.
• To select uppercase characters, press ➔.
• To select numbers or special characters, press ➔.
• When you are ready, press ➔ to close the on-screen keyboard.
• To finish renaming, select Done and press OK.

Lock a channel

To prevent children from watching a channel or a programme, you can lock channels or lock age rated programmes.

Lock a channel

You can lock a channel to prevent children from watching it. To watch a locked channel you need to enter the Child lock code. You cannot lock programmes from connected devices.

To lock a channel . . .
1 - Professional Mode: Off  ➔ While watching a TV channel, press CHANNEL GRID to open the channel list.
Professional Mode: On  ➔ In the Professional Home Menu, select Professional Settings menu and press OK.
Select Professional settings > Channel setup and press OK.
2 - In any list, select the channel you want to lock.
3 - Press OPTIONS and select Lock channel. In a channel list, a locked channel is marked with a lock icon.

To unlock a channel, select the locked channel in the channel list. Press OPTIONS and select Unlock channel. You will need to enter the Child lock code.

Parental rating

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

Some digital broadcasters have age rated their programmes. When the age rating of a programme is equal to or higher than the age you have set as age rating for your child, the programme will be locked. To watch a locked programme you must enter the child lock code. The parental age rating is set for all channels.

To set an age rating . . .
1 - Professional Mode: Off  ➔ Press ➔ and select Setup and press OK.
Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select Channel settings ➔ Child lock ➔ Parental rating and press OK.
3 - Enter a 4-digit Child lock code and confirm. Now you can set an age rating.
4 - Set the age and press OK.
5 - Press ➔, repeatedly if necessary, to close the menu.

To switch off the parental age rating, select None as age setting.

The TV will ask for the code to unlock the programme. For some broadcasters / operators, the TV only locks programmes with a higher rating.

Set or change the lock code

To set the lock code or to change the current code . . .
1 - Professional Mode: Off  ➔ Press ➔ and select Setup and press OK.
Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select Channel settings ➔ Child lock ➔ Change code and press OK.
3 - If a code is set already, enter the current Child lock code and then enter the new code twice.

The new code is set.

Forgotten your code?

If you have forgotten your code to unlock, call Consumer Care in your country. Find the telephone number on the documentation that came with the TV or go to www.philips.com/support
Options for channels

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

Open the options menu
While watching a channel, press OPTIONS.

Universal access
With Universal access switched on, you can set some options for hearing impaired and visually impaired people.

Video selection
Digital TV channels can offer multi video signals (multi-feed broadcast), different camera viewpoints or angles of the same event or different programmes on one TV channel. The TV shows a message if any such TV channels are available.

Subtitles
Switch Subtitles on or Subtitles off with this options. Select Automatic to show subtitles only when the sound is muted with音量.

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

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

Dual I-II
If an audio signal contains two audio languages but one language — or both — has no language indication, this option is available.

Common interface
If prepaid premium content is available from a CAM, you can set the provider settings with this option.

HbbTV on this channel
You can block the HbbTV pages from a channel that offers HbbTV.

MHP applications
Enable or disable the MHP applications.

Status
Select Status to view technical information on the channel (if it is analogue or digital) or a connected device you are watching.

Share
Enables the user to communicate his activity with his social networks (such as Twitter or email).

*For Smart TVs only.

Picture format

If black bars appear on top and bottom or on both sides of the picture, you can adjust the picture format to a format that fills the screen.

To change the picture format . . .
1 - While watching a TV channel, press FORMAT to open the Picture format menu.
2 - Select a format from the list and press OK.

The following format can be available according the picture on screen . . .

• Auto fill
• Auto zoom
• Super zoom
• Movie expand 16:9
• Wide screen
• Unscaled
• 4:3

Text / Teletext

Text pages
To open Text (Teletext) while you are watching TV channels, press TEXT.
To close Text, press TEXT again.

Select a Text page
To select a page . . .
1 - Enter the page number with the number keys.
2 - Use the arrow keys to navigate.
3 - Press a colour key to select a colour-coded subject at the bottom of the screen.

Text sub-pages
A Text page number can hold several subpages. The
subpage numbers are shown on a bar next to the main page number.
To select a subpage, press ▼ or ▲.

T.O.P. Text pages
Some broadcasters offer T.O.P. Text.

Text options
In Text, press OPTIONS to select the following . . .
- Freeze page
  To stop the automatic rotation of subpages.
- Dual screen / Full screen
  To show the TV channel and Text alongside each other.
- T.O.P. overview
  To open T.O.P. Text.
- Enlarge
  To enlarge the Text page for comfortable reading.
- Reveal
  To unhide hidden information on a page.
- Cycle subpages
  To cycle subpages when these are available.
- Language
  To switch the group of characters that Text uses to display correctly.
- Text 2.5
  To activate the Text 2.5 for more colours and better graphics.

Text setup
Text language
Some digital TV broadcasters have several Text languages available.
To set your primary and secondary Text language . . .
1 - Professional Mode: Off  ➔ Press ▲ and select Setup and press OK.
  Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select Channel settings > Language.
3 - Select Primary Teletext or Secondary Teletext.
4 - Select your preferred Text languages.
5 - Press ◄, repeatedly if necessary, to close the menu.

Text 2.5
If available, Text 2.5 offers more colours and better graphics. Text 2.5 is activated as a standard factory setting.
To switch off Text 2.5 . . .
1 - Press TEXT.
2 - While watching the teletext, press OPTIONS.
3 - Select Text 2.5 > Off.

Menu language
To change the language or the TV menus and messages . . .
1 - Professional Mode: Off  ➔ Press ▲ and select Setup and press OK.
  Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > General settings > Menu language and press OK.
3 - Select the language you want and press OK.
4 - Press ◄, repeatedly if necessary, to close the menu.

Audio languages
If the TV channel broadcasts multiple or dual audio languages, you can select your preferred audio language.
1 - While you watch TV, press OPTIONS.
2 - For digital channels, select Audio language. For analogue channels, select Alternate audio.
  Press OK to confirm your selection.
3 - Select from the available languages, then press OK.

Note:
If you have selected Alternate audio for analogue channels, select between:
- Main: Primary audio language or
- SAP: Secondary audio language

Subtitles and languages
Subtitles
Switch subtitles on
To open the Subtitle menu, press SUBTITLE.
You can set subtitles to On, Off or Automatic.
To show subtitles when the broadcasted programme is not in your language — the language you set for the TV, select Automatic. Also, this setting will show subtitles when you mute the sound with ◄.
For analogue channels, subtitles must be made available in Text.
Subtitles for digital channels

There is no need to set subtitles in Text for digital channels.
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 them.
If none of the preferred subtitle languages are available, you can select another subtitle language which is available.

To set the primary and secondary subtitle language . . .
1 - Press OPTIONS.
2 - Select Subtitle language and select a language you want temporarily and press OK.

Audio languages for the hearing and visually impaired

Some digital TV channels broadcast special audio and subtitles adapted for people who are hearing or visually impaired.

Menu language

To change the language or the TV menus and messages . . .
1 - Press OPTIONS.
2 - Select Audio language and select an audio language you want temporarily and press OK.

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, MHEG, . . .

Broadcasters use various interactive TV systems: HbbTV (Hybrid Broadcast Broadband TV) or iTV (Interactive TV - MHEG). 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
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.

1 - Professional Mode: Off ➔ Press 🔄 and select Setup and press OK.

2 - Select TV settings and select General settings > HbbTV and press OK.

3 - Select On and press OK.

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

If you want to avoid access to HbbTV pages on a specific channel, you can block the HbbTV pages for this channel only.

1 - Tune to the channel of which you want to block the HbbTV pages.

2 - Press OPTIONS and select HBB TV on this channel and press OK.

3 - Select Off and press OK.

Use iTV

Open iTV pages

Most channels that offer HbbTV or iTV invite you to press the ➔ 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 ➔ key to navigate the iTV pages. You can use the ➔ (Play) and ➕ (Pause) keys to watch videos within iTV pages.

Digital Text (UK only)

To open Digital Text, press TEXT. To close, press 🟥

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 switch back.

About interactive TV

With interactive TV, some digital broadcasters combine their normal TV programme with information or entertainment pages.

Note:

• You cannot download files to your TV with this feature.
• Not all TV programmes, commercials and features include closed captioning information.
• You cannot respond to the digital content.

Visit the broadcaster's Internet website for more information.

6.2 Channel installation

Update channels

Automatic update

If you receive digital channels, you can set the TV to automatically update the list with new channels. Alternatively, you can start a channel update yourself.

Automatic channel update

Once a day, at 6 AM, the TV updates the channels and stores new channels. New channels are stored in the All channels list but also in the New channels list. Empty channels are removed.

If new channels are found or if channels are updated or removed, a message is shown at TV start up. The TV must be in standby to automatically update channels.

To switch off the message at start up . . .

1 - Professional Mode: Off ➔ Press 🔄 and select Setup and press OK.

2 - Select Channel settings and press OK.

3 - Select Channel installation > Channel update message > Off.

To switch off the Automatic channel update . . .

1 - Professional Mode: Off ➔ Press 🔄 and select Setup and press OK.

2 - Select Channel settings and press OK.

3 - Select Channel installation > Automatic channel update > Off and press OK.

Start an update
To start an update yourself . . .

1 - Professional Mode: Off – Press ⬅ and select Setup and press OK.

Professional Mode: On – Enter the Professional Home Menu.

2 - Select Search for channels and press OK.

3 - Select Update channels and follow the instructions on screen. The update may take a few minutes.

In certain countries, the Automatic channel update is done while watching TV or any moment when the TV is in standby.

New channels

New channels added with the automatic channel update are easy to find in the channel list New. The same new channels are also stored in the All or Radio channel list.

New channels are kept in the channel list New as long as you don’t mark them as a favourite or tune to them.

Reinstall channels

You can search for and reinstall channels and leave all other TV settings untouched. Alternatively, you can do a full new TV installation.

If a child lock code is set, you will need to enter this code before you can reinstall channels.

Reinstall channels

To reinstall the channels only . . .

1 - Professional Mode: Off – Press ⬅ and select Setup and press OK.

Professional Mode: On – Enter the Professional Home Menu.

2 - Select Search for channels > Re-install channels and press OK.

3 - Select the country where you install the TV.

4 - Select Antenna (DVB-T) or Cable (DVB-C). The channel search may take a few minutes. Follow the instructions on screen.

Full installation

To redo a full TV installation . . .

1 - Professional Mode: Off – Press ⬅ and select Setup and press OK.

Professional Mode: On – Enter the Professional Home Menu.

2 - Select TV settings > General settings > Reinstall TV and press OK. The installation may take a few minutes. Follow the instructions on screen.

Factory settings

Factory settings sets the TV back to the original TV settings for picture and sound. To switch back to the original Factory settings . . .

1 - Professional Mode: Off – Press ⬅ and select Setup and press OK.

Professional Mode: On – Enter the Professional Home Menu.

2 - Select TV settings > General settings > Factory settings and press OK.

3 - Press OK to confirm.

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

Channel list copy

Introduction

Channel list copy is intended for dealers and expert users. In some countries, Channel list copy is only available for copying satellite channels.

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

Conditions

• Both TVs are from the same year range.
• Both TVs have the same hardware type. Check the hardware type on the TV type plate on the back of the TV. Typically noted as Q . . . LA
• Both TVs have compatible software versions.

Current version

You can check the current version of the TV software with Current software info in ⬅ > Setup > Software settings.

Copy channel list

To copy a channel list . . .

1 - Switch on the TV which has its channels installed. Plug in a USB memory device.

2 - Professional Mode: Off – Press ⬅ and select Setup and press OK.

Professional Mode: On – Enter the Professional Home Menu.

3 - Select TV settings > General settings > Channel list copy > Copy to USB and press OK. To copy the channel list from this TV, you might be asked to enter the Child lock code you entered during the installation.

4 - When copying is done, unplug the USB memory device.

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

Upload channel list

Upload a copied channel list

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

To a TV that is not yet installed

1 - Plug in the power plug to start the installation and select language and country. You can skip Search for channels. Finish the installation.
2 - Plug in the USB memory device that holds the channel list of the other TV.
3 - To start the channel list upload, press \ and select Setup and press OK.
4 - Select TV settings > General settings > Channel list copy > Copy to TV and press OK. You might be asked to enter the Child lock code of this TV.
5 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB memory device.

To an already installed TV

1 - Verify the country setting of the TV. (To verify this setting, press \ and select Setup and press OK. Select Search for channels > Re-install channels and press OK. Press \ and later Cancel to leave the Search for channels.) If the country is correct continue with step 2. If the country is not correct, you need to start a reinstallation. To start the reinstallation, press \ and select Setup and press OK. Select TV settings > General settings > Reinstall TV > OK. Select the correct country and skip the Search for channels. Finish the installation. When done, continue with step 2.
2 - Plug in the USB memory device that holds the channel list of the other TV.
3 - To start the channel list upload, press \ and select Setup and press OK.
4 - Select TV settings > General settings > Channel list copy > Copy to TV and press OK. You might be asked to enter the Child lock code of this TV.
5 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB memory device.

DVB-T or DVB-C

DVB-T or DVB-C reception

If both DVB-T and DVB-C reception is available in your country and if this TV is ready to receive DVB-T and DVB-C for your country, you have selected one or the other during the channel installation.

If you want to change the DVB setting to start a new channel installation . . .

1 - Professional Mode: Off \ Press \ and select Setup and press OK.
Professional Mode: On \ Enter the Professional Home Menu.
2 - Select Channel settings and press OK.
3 - Select Channel installation > Antenna connection > Antenna (DVB-T) or Cable (DVB-C) and press OK.
4 - Select the DVB setting you want.
5 - Press \, repeatedly if necessary, to close the menu.

DVB-C channel installation

For ease of use, all DVB-C settings are set to automatic. If your DVB-C provider gave you specific DVB-C values, the network ID or network frequency, enter these values when the TV asks for them during installation. It might be necessary to adjust the scanning (full or quick scan) or enter a specific symbol rate in the Settings menu while installing. To set a Symbol rate, first set the Symbol rate to Manual.

Channel number conflicts

In some countries, different TV channels (broadcasters) might have the same channel number. While installing, the TV shows the list with channel number conflicts. You need to select which TV channel you want to install on a channel number with multiple TV channels.

DVB-T + DVB-C

If you can use a DVB-T antenna input but also a DVB-C input, you can set up your TV for both DVB-T and DVB-C. Install one system followed by the other with the necessary settings. Once each system is installed, you need to switch the antenna input signal on the Antenna connection on the back of the TV and set the TV in the appropriate system to view the installed channels on TV. To select the DVB-T or DVB-C setting, see above.

DVB settings

Access DVB settings

1 - Professional Mode: Off \ Press \ and select Setup and press OK.
Professional Mode: On \ Enter the Professional Home Menu.
2 - Select Search for channels and press OK.
3 - Select Re-install Channels.
4 - Select the country where you install this TV.
5 - Select Cable (DVB-C).
6 - Select Start to search channels, or select Settings for DVB-C settings .
7 - Press \, repeatedly if necessary, to close the menu.
Symbol rate mode
If your cable provider did not give you a specific symbol rate value to install the TV channels, leave the Symbol rate mode setting on Automatic. If you received a specific symbol rate value, select Manual. However, the value you received could be in the predefined list of symbol rates already. Select Predefined symbol rates to check if your value is available automatically.

Predefined symbol rates
With the Symbol rate mode set to Automatic, the TV will use 1 of the predefined symbol rates as used by most cable providers in your country.

Symbol rate
With the Symbol rate mode set to Manual, you can enter the symbol rate value you received from your cable provider. To enter the value, use the number keys.

Symbol rate 2
With the Symbol rate mode set to Manual, you can enter a second symbol rate value you received from your cable provider. To enter the value, use the number keys.

Network frequency mode
If you intend to use the fast Quick scan method in Frequency scan to search for channels, select Automatic. The TV will use 1 of the predefined network frequencies (or HC - homing channel) as used by most cable providers in your country. If you received a specific network frequency value to search for channels, select Manual.

Network frequency
With the Network frequency mode set to Manual, you can enter the network frequency value received from your cable provider here. To enter the value, use the number keys.

Frequency scan
Select the method of searching for channels. You can select the faster Quick scan method and use the predefined settings used by most cable providers in your country.

If this results in having no channels installed or if some channels are missing, you can select the extended Full scan method. This method will take more time to search for and install channels.

Frequency step size
The TV searches for channels in steps of 8MHz. If this results in having no channels installed or if some channels are missing, you can search in smaller steps of 1MHz. Using the 1MHz steps will take more time to search for and install channels.

Network frequency
With the Network frequency mode set to Manual, you can enter the network frequency value received from your cable provider here. To enter the value, use the number keys.

Digital channels
If you know your cable provider is not offering digital channels, you can skip searching for digital channels. Select Off.

Analogue channels
If you know your cable provider is not offering analogue channels, you can skip searching for analogue channels. Select Off.

Free / Scrambled
If you have a subscription and a CAM - Conditional Access Module for pay TV services, select Free + scrambled. If you did not subscribe to pay TV channels or services, you can select Free channels only.

Reception quality
If you receive digital channels, you can check the quality and signal strength of a 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 - Tune to the channel.
2 - Press   and select Setup and press OK.
3 - Select Channel settings > Channel installation > Digital : reception test and press OK.

The digital frequency is shown for this channel. If the reception is poor, you can reposition your antenna. To check the signal quality of this frequency again, select Search and press OK.

To enter a specific digital frequency yourself, use the remote control digit keys. Alternatively, select the frequency, position the arrows on a number with   and   and change the number with   and  . To
check the frequency, select Search and press OK.

If you use DVB-C to receive channels, the option Symbol rate mode is available. For Symbol rate mode, select Automatic, unless your cable provider gave you a specific symbol rate value. To enter the symbol rate value, use the number keys.

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**Manual installation**

Analogue TV channels can be manually installed, channel by channel.

To install analogue channels manually . . .

1 - Professional Mode: Off → Press and select Setup and press OK.
   Professional Mode: On → Enter the Professional Home Menu.
2 - Select Channel settings > Channel installation > Analogue : Manual installation and press OK.
   • System
   To set up the TV system, select System and press OK. Select your country or the part of the world where you are now.
   • Search channel
   To find a channel, select Search channel and press OK. Select Search and press OK. You can also enter a frequency yourself. If the reception is poor, press Search again. If you want to store the channel, select Done and press OK.
   • Fine tune
   To fine tune a channel, select Fine tune and press OK. You can fine tune the channel with ▲ or ▼. If you want to store the channel found, select Done and press OK.
   • Store current channel / Store as new channel
   You can store the channel on the current channel number or as a new channel number. Select Store current channel or Store as new channel.

You can redo these steps until you have found all available analogue TV channels.
Home menu

From the Home menu, you can start any activity you can do with the TV.

Open the Home menu to start watching TV or start watching a disc on your Home Theatre System. Also in the Home menu, you can open Smart TV to surf the Internet, start Skype.

Open the Home menu
1 - To open the Home menu, press 🌈.
2 - Select an activity using the arrow keys and press OK to start the activity.
3 - To close the Home menu without changing the current activity, press 🔄.

· Guest Menu
Select Guest Menu to install channels or adjust all TV settings.
Guest Menu — Select Guest Menu to adjust TV settings.
· TV
Select TV and press OK to watch TV channels.
· Smart TV
Select Smart TV and press OK to open the Smart TV start page.
· Source
Select Source and select a connected device in the list underneath the icon. Press OK to switch to the selected device.
· TV guide
Select TV guide and press OK to open a list of the current and scheduled TV programmes of your channels.
· Smart Info
Select Smart Info to show information provided by the Hotel.
· Skype
Select Skype to make video calls for free.
· MyChoice
Select MyChoice to be able to select premium services made available through MyChoice service.
· DirectShare
Select DirectShare to view Movies, pictures or play music from mobile device to the TV.
· Miracast
Select Miracast to mirror the content of your mobile device display on to the TV.
Settings

8.1 Setup menu

Quick picture settings

With Quick picture settings you can set your basic picture preferences in a few easy steps. The settings you made are stored under the Picture style – Personal. You can return to your picture preference if some settings were changed. You can set a preferred picture setting for every TV activity or connected device individually.

To return to your preferred picture setting, while watching a TV channel, press OPTIONS, select Picture and sound in the menu bar, select Picture style and select Personal.

To set a Quick picture setting...

1 - Press etermins the device type of your particular setup.
2 - Professional Mode: Off → Press 🎨 and select Setup and press OK. Professional Mode: On → Enter the Professional Home Menu.
3 - Select Quick picture settings and press OK. Go through the steps and finish. The activity or connection has your personal preferences.

TV settings

In the TV settings menu you can set all Picture and Sound settings. The item General settings in the menu holds a collection of settings like Menu language, Sleep timer, Switch off timer, Universal access and more.

Search for channels

With Search for channels, you can update your current channel list and possible newly found channels are added to the channel list. You can also do a reinstallation of all channels. A channel update or a channel reinstall may take some time.

Channel settings

In the Channel settings menu, you can set your language preferences or switch on the Universal access for people who are hearing and visually impaired. You can set an age rating to prevent children from watching a rated programme and set or change your Child lock code. You can switch on the Automatic channel update, do a digital reception test or install analogue channels manually.

Languages

This bundles some language settings for digital channels.

Universal access

Bundles settings related to Universal access.

Channel installation

This bundles some settings for automatic and manual channel installation.

Child lock

Set a PIN code to lock or unlock channels and set an age for watching rated programs.

Connect to network

Select to make connection to your wired or wireless network.

Network settings

Here you can change settings related to your Network.

Update software

This item is related to updating TV software.

Software settings

Here you can see the current software version.

8.2 Picture
### Picture style

For easy picture adjustment, you can select a preset setting with **Picture style**.

1. While watching a TV channel, press **OPTIONS** to open the **Options** menu.
2. Select **Picture and sound** in the menu bar and select **Picture style**.
3. Select a style and press **OK**.

The available Picture styles are . . .

- **Personal** – Your preferences made in Quick picture settings
- **Vivid** – Ideal for daylight viewing
- **Natural** – Natural picture settings
- **Movie** – Ideal for watching movies
- **Standard** – Factory standard settings
- **Photo** – Ideal for viewing photos

### Adjust a Picture style

You can adjust a Picture style . . .

1. Select the style and press **OK**.
2. **Professional Mode**: Off
   - Press ▲ and select **Setup and press OK**.
   - Professional Mode: On
     - Enter the Professional Home Menu.
3. Select **TV settings**, navigate to the individual setting and adjust it.
4. Press ◼, repeatedly if necessary, to close the menu.

To return to the original Picture style values . . .

1. **Professional Mode**: Off
   - Press ▲ and select **Setup and press OK**.
   - Professional Mode: On
     - Enter the Professional Home Menu.
2. Select **TV settings > Picture > Picture style** and select the style you want to reset.
3. Press ◼ **Reset**. The style is reset.

### Vivid

If the Picture style is switched back to **Vivid** every time you switch on the TV, the TV location is set to **Shop**. A setting meant for in-store promotion.

To set the TV for Home use . . .

1. **Professional Mode**: Off
   - Press ▲ and select **Setup and press OK**.
   - Professional Mode: On
     - Enter the Professional Home Menu.
2. Select **TV settings > Picture > Picture style and select the style you want to reset.**
3. Press ◼ **Reset**. The style is reset.

### Advanced picture settings

#### Colour settings

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<td>Press ▲ (right) and adjust the value with ▲ (up) or ▼ (down).</td>
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<td>4.</td>
<td>Press ◼ repeatedly if necessary, to close the menu.</td>
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#### Contrast

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#### Sharpness

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<td>Professional Mode: On ➡️ Enter the Professional Home Menu.</td>
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<tr>
<td>3.</td>
<td>Press ▲ (right) and adjust the value with ▲ (up) or ▼ (down).</td>
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<td>4.</td>
<td>Press ◼ repeatedly if necessary, to close the menu.</td>
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Colour enhancement

With Colour enhancement, you can enhance the colour intensity and the details in bright colours.

To adjust the level . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Colour > Colour enhancement.
3 - Press ➧ (right) and select Maximum, Medium, Minimum or Off.
4 - Press ➤, repeatedly if necessary, to close the menu.

Colour temperature

With Colour temperature, you can set the picture to a preset colour temperature or select Custom to set a temperature setting yourself with Custom colour temperature. Colour temperature and Custom colour temperature are settings intended for expert users.

To select a preset . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Colour > Colour temperature.
3 - Press ➧ (right) and select Normal, Warm or Cool. Select Custom if you want to set a colour temperature yourself.
4 - Press ➤, repeatedly if necessary, to close the menu.

Custom colour temperature

With Custom colour temperature, you can set a colour temperature setting yourself. To set a Custom colour temperature, first select Custom in the Colour temperature setting to make the Custom colour temperature menu available. Custom colour temperature is a setting intended for expert users.

To set a custom colour temperature . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Colour > Custom colour temperature.
3 - Press ➧ (right).
4 - Select a setting with the arrow keys. (WP is white point and BL is black level.)
5 - Press OK to confirm a setting. You can also select one of the presets in this menu.
6 - Press ➤, repeatedly if necessary, to close the menu.

Contrast settings

Contrast modes

With Contrast modes, you can set the level at which power consumption can be reduced by dimming the intensity of the screen. Choose for the best power consumption or for the picture with the best intensity.

To adjust the level . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Contrast > Contrast modes.
3 - Press ➧ (right) and select Best picture, Best power, Standard or Off.
4 - Press ➤, repeatedly if necessary, to close the menu.

Dynamic contrast

With Dynamic contrast, you can set the level at which the TV automatically enhances the details in the dark, middle and light areas of the picture.

To adjust the level . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Contrast > Dynamic contrast.
3 - Press ➧ (right) and select Maximum, Medium, Minimum or Off.
4 - Press ➤, repeatedly if necessary, to close the menu.

Brightness

With Brightness, you can set the level of brightness of the picture signal. Brightness is a setting intended for expert users. We recommend non-expert users to adjust the brightness of the picture with the Contrast setting.

To adjust the level . . .

1 - Professional Mode: Off  ➔ Press  ➧ and select Setup and press OK.
   Professional Mode: On  ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced >
Contrast > Brightness.
3 - Press ▶ (right) and adjust the value with ▲ (up) or ▼ (down).
4 - Press ☐, repeatedly if necessary, to close the menu.

Video contrast

With Video contrast, you can decrease the range of the video contrast. Video contrast is the setting intended for expert users.

To adjust the level . . .
1 - Professional Mode: Off ➔ Press ▲ and select Setup and press OK.
Professional Mode: On ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Contrast > Video contrast.
3 - Press ▶ (right) and adjust the value with ▲ (up) or ▼ (down).
4 - Press ☐, repeatedly if necessary, to close the menu.

Light sensor

The Light sensor adjusts the picture automatically to the lighting conditions of the room. You can switch Light sensor on or off.

To switch on or off . . .
1 - Professional Mode: Off ➔ Press ▲ and select Setup and press OK.
Professional Mode: On ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Contrast > Light sensor.
3 - Press ▶ (right) and select On or Off.
4 - Press ☐, repeatedly if necessary, to close the menu.
• Only for TVs with light sensor function.

Gamma

With Gamma, you can set a non-linear setting for picture luminance and contrast. Gamma is a setting intended for expert users.

To adjust the level . . .
1 - Professional Mode: Off ➔ Press ▲ and select Setup and press OK.
Professional Mode: On ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Contrast > Gamma.
3 - Press ▶ (right) and adjust the value with ▲ (up) or ▼ (down).

Noise reduction

With Noise reduction, you can filter out and reduce the level of image noise.

To adjust the noise reduction . . .
1 - Professional Mode: Off ➔ Press ▲ and select Setup and press OK.
Professional Mode: On ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Sharpness > Noise reduction.
3 - Press ▶ (right) and select Maximum, Medium, Minimum or Off.
4 - Press ☐, repeatedly if necessary, to close the menu.

MPEG artefact reduction

With MPEG artefact reduction, you can smoothen the digital transitions in the picture. MPEG artefacts are mostly visible as small blocks or jagged edges in images.

To reduce the MPEG artefacts . . .
1 - Professional Mode: Off ➔ Press ▲ and select Setup and press OK.
Professional Mode: On ➔ Enter the Professional Home Menu.
2 - Select TV settings > Picture > Advanced > Sharpness > MPEG artefact reduction.
3 - Press ▶ (right) and select Maximum, Medium, Minimum or Off.
4 - Press ☐, repeatedly if necessary, to close the menu.
Game or computer

You can switch the TV to the ideal picture setting for gaming or for using the TV as a computer monitor. There is a different setting for Game or Computer. If a device has a correct type set in the Source menu - Game console or Computer - the TV switches automatically to the ideal setting when you switch to the device. If you switch the setting manually, do not forget to switch it off when you switch to watching TV or another connected device.

To switch the setting manually . . .
1 - Press ‡ and select Setup and press OK.
2 - Select TV settings > Picture > Advanced > Activity style.
3 - Select Game, Computer or TV. The setting TV returns to the picture settings for watching TV.
4 - Press ◄, repeatedly if necessary, to close the menu.

Location

If the TV is located in a shop, you can set the TV to display an in store promotion banner. The Picture style is set to Vivid automatically. The automatic Switch off timer is switched off.

To set the TV to Shop location . . .
1 - Professional Mode: Off ➧ Press ‡ and select Setup and press OK.
Professional Mode: On ➧ Enter the Professional Home Menu.
2 - Select TV settings > General settings > Location and press OK.
3 - Select Shop and press OK.
4 - Press ◄, repeatedly if necessary, to close the menu.

8.3 Sound

Sound style

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

1 - While watching a TV channel, press OPTIONS to open the Options menu.
2 - Select Picture and sound in the menu bar and select Sound style.
3 - Select a Sound style and press OK.

The different Sound styles are . . .
• Personal - Your personal choices made in Personalise picture and sound
• Original - Factory standard

• News - Ideal for speech
• Movie - Ideal for watching movies
• Game - Ideal for gaming
• Music - Ideal for listening to music

Adjust a Sound style

You can adjust a Sound style . . .
1 - Select the style and press OK.
2 - Professional Mode: Off ➧ Press ‡ and select Setup and press OK.
Professional Mode: On ➧ Enter the Professional Home Menu.
3 - Select TV settings, navigate to the individual setting and adjust it. Press ◄ to close the menu to store your setting.

To return to the original Sound style values . . .
1 - Professional Mode: Off ➧ Press ‡ and select Setup and press OK.
Professional Mode: On ➧ Enter the Professional Home Menu.
2 - Select TV settings > Sound > Sound style and select the style you want to reset.
3 - Press ◄ Reset. The style is reset.

Sound settings

Bass

With Bass, you can adjust the level of low tones in the sound.

To adjust the level . . .
1 - Professional Mode: Off ➧ Press ‡ and select Setup and press OK.
Professional Mode: On ➧ Enter the Professional Home Menu.
2 - Select TV settings > Sound > Bass.
3 - Press ▲ (right) and adjust the value with ▲ (up) or ▼ (down).
4 - Press ◄, repeatedly if necessary, to close the menu.

Treble

With Treble, you can adjust the level of high tones in the sound.

To adjust the level . . .
1 - Professional Mode: Off ➧ Press ‡ and select Setup and press OK.
Professional Mode: On ➧ Enter the Professional Home Menu.
2 - Select TV settings > Sound > Treble.
3 - Press ▲ (right) and adjust the value with ▲ (up) or ▼ (down).
4 - Press ◄, repeatedly if necessary, to close the menu.
Surround mode

With Surround mode, you can set the sound effect of the TV speakers.

To set the surround mode . . .
1 - Professional Mode: Off — Press  and select Setup and press OK.
   Professional Mode: On — Enter the Professional Home Menu.
2 - Select TV settings > Sound > Surround mode.
3 - Press  (right) and select Stereo or Incredible surround.
4 - Press  repeatedly if necessary, to close the menu.

Headphones volume

With Headphones volume, you can set the volume of a connected headphones separately.

To adjust the volume . . .
1 - Press OPTIONS and select Picture and sound in the menu bar.
2 - Press  (down) and select Headphones volume and press OK.
3 - Press  (up) or  (down) to adjust the volume.
4 - Press  repeatedly if necessary, to close the menu.

Advanced sound settings

Auto volume levelling

With Auto volume levelling, you can set the TV to automatically level out sudden volume differences. Typically at the beginning of adverts or when you are switching channels.

To switch on or off . . .
1 - Professional Mode: Off — Press  and select Setup and press OK.
   Professional Mode: On — Enter the Professional Home Menu.
2 - Select TV settings > Sound > Advanced > Auto volume leveling.
3 - Press  (right) and select Off or On.
4 - Press  repeatedly if necessary, to close the menu.

TV speakers

You can send the TV sound to a connected audio device - a Home Theatre System or audio system. With TV speakers, you select where you want to hear the TV sound and how you want to control it.

• If you select Off, you permanently switch off the TV speakers.
• If you select On, the TV speakers are always on.

With an audio device connected with HDMI CEC, you can use one of the EasyLink settings.

• If you select EasyLink, the TV sends the TV sound to the audio device. The TV will switch off the TV speakers when the device is playing the sound.
• If you select EasyLink autostart, the TV will switch on the audio device, send the TV sound to the device and switch off the TV speakers.

With EasyLink or EasyLink autostart selected, you can still switch to TV speakers or device speakers in the Picture and sound menu.

To set the TV speakers . . .
1 - Professional Mode: Off — Press  and select Setup and press OK.
   Professional Mode: On — Enter the Professional Home Menu.
2 - Select TV settings > Sound > Advanced > TV speakers.
3 - Press  (right) and select Off, TV speakers, EasyLink or EasyLink autostart.
4 - Press  repeatedly if necessary, to close the menu.

To switch speakers directly . . .
1 - While watching TV, press OPTIONS and select Picture and sound.
2 - Select Speakers and select TV or Amplifier (audio device).
3 - Press  repeatedly if necessary, to close the menu.

Clear sound

With Clear sound, you improve the sound for speech. Ideal for news programmes. You can switch the speech improvement on or off.

To switch on or off . . .
1 - Professional Mode: Off — Press  and select Setup and press OK.
   Professional Mode: On — Enter the Professional Home Menu.
2 - Select TV settings > Sound > Advanced > Clear sound.
3 - Press  (right) and select On or Off.
4 - Press  repeatedly if necessary, to close the menu.

HDMI ARC

If you do not need an Audio Return Channel (ARC) on any of the HDMI connections, you can switch the ARC signal off.
Audio Out format

With Audio Out format, you can set the audio out signal of the TV to fit the sound processing capabilities of your Home Theatre System.

Audio Out levelling

With Audio Out levelling, you can level the sound volume of the Home Theatre System with the volume of the TV when you switch over from one to another.

Audio Out delay

If you set an Audio sync delay on your Home Theatre System, to synchronise the sound with the picture, you must switch off Audio Out delay on the TV.

Audio Out offset

If you cannot set a delay on the Home Theatre System, you can set a delay on the TV with Audio Out offset.

TV placement

As part of the first installation, this setting is set to either On a TV stand or Wall mounted. If you have changed the placement of the TV since then, adjust this setting accordingly for best sound reproduction.

1 - Professional Mode: Off → Press ⬆️ and select Setup and press OK.
   Professional Mode: On → Enter the Professional Home Menu.
2 - Select TV settings > General settings > TV placement and press OK.
3 - Select On a TV stand or Wall mounted and press OK.
4 - Press ↵️, repeatedly if necessary, to close the menu.

8.4 Universal access

Switch on

With Universal access switched on, the TV is set for use for hearing and visually impaired people.

Switch on

If you did not switch on Universal access during the installation, you can still switch it on in Setup.

To switch on Universal access . . .

1 - Professional Mode: Off → Press ⬆️ and select Setup and press OK.
   Professional Mode: On → Enter the Professional Home Menu.
2 - Select TV settings > General settings > Universal access and press OK.
3 - Select On and press OK.
4 - Press ↵️, repeatedly if necessary, to close the menu.

With Universal access switched on in Setup, the Universal access option is added in the Options menu.

Hearing impaired

Switch on

Digital TV channels can broadcast special audio commentary describing what is happening on screen. To be able to set the visually impaired audio and effects, you have to switch on Audio description first. Also, before you can switch on Audio description, you have to switch on Universal access.

Audio description

With Audio description, a narrator’s commentary is added to the normal audio. To switch on the commentary (if available) . . .

1 - With Universal access switched on, press OPTIONS and select the Options tab in the menu bar.
2 - Select Audio description and press OK.
3 - Select On and press OK.
4 - Press ↵️, repeatedly if necessary, to close the menu.

You can check if an audio commentary is available. In the Options menu, select Audio language and look for an audio language marked with a 🎤.

Speakers / Headphones

With Speakers / Headphones, you can select where you want to hear the audio commentary. On the TV speakers only, on the headphones only or on both.

To set Speakers / Headphones . . .

1 - Press ⬆️ and select Setup and press OK.
2 - Select Channel settings > Languages > Audio description > Speakers / Headphones and press OK.
3 - Select Speakers, Headphones or Speakers + headphones and press OK.
4 - Press ↵️, repeatedly if necessary, to close the menu.
Visually impaired

Mixed volume

You can mix the volume of the normal audio with the audio commentary.

To mix the volume . . .
1 - Press OPTIONS and select Universal access in the menu bar.
2 - Select Mixed volume and press OK.
3 - Use the arrows up and down to set the slider bar.
4 - Press OK to confirm.

Audio effect

Some audio commentary can hold extra audio effects, like stereo or fading sound.

To switch on Audio effects (if available) . . .
1 - Press and select Setup and press OK.
2 - Select Channel settings > Languages > Audio description > Audio effects and press OK.
3 - Select On or Off and press OK.
4 - Press , repeatedly if necessary, to close the menu.

Speech

The audio commentary can also hold subtitles for the words which are spoken.

To switch on these subtitles (if available) . . .
1 - Press and select Setup and press OK.
2 - Select Channel settings > Languages > Audio description > Speech and press OK.
3 - Select Descriptive (audio) or Subtitles and press OK.
4 - Press , repeatedly if necessary, to close the menu.

Key beep

Key beep gives an audio feedback each time you press a key on the remote control. The volume of the beep is fixed.

To switch on Key beep . . .
1 - Press OPTIONS, select Universal access and press OK.
2 - Select Key beep and select On.

If Universal access does not appear in the Options menu, switch on Universal access in Setup.
9

TV guide

9.1

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 (e.g the channels you watch with Watch TV). The TV cannot collect the TV guide information for channels viewed from a digital receiver.

9.2

Using the TV guide

Open the TV guide

To open the TV guide, press GUIDE. Press GUIDE again to close.

The first time you open the TV guide, the TV scans all TV channels for programme information. This may take several minutes. TV guide data is stored in the TV.

Tune to a programme

Switch to a programme

From the TV guide, you can switch to a current programme. To select a programme, use the arrow keys to highlight the programme name. Navigate to the right to view programmes scheduled later that day. To switch to the programme (channel), select the programme and press OK.

View programme details

To call up the details of the selected programme, press INFO.

Change day

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

If the TV guide information comes from the broadcaster, you can press CH↑ to view the schedule of one of the next days. Press CH↓ to go back to the previous day. Alternatively, you can press OPTIONS and select Change day. Select Previous day, Today or Next day and press OK, to select the day of the schedule.

Set a reminder

You can set reminders that alert you of the start of a programme with a message on screen.

- To set a reminder, select the programme in the schedule and press for Set reminder. The programme is marked with a clock.
- To cancel the reminder, press the for Clear reminder.
- To view a list of all reminders you have set, press OPTIONS, and select All reminders.

Search by genre

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

To search for programmes by genre, press OPTIONS and select Search by genre. Select a genre and press OK. A list with the found programmes appears.
10 Sources

10.1 Sources list

In the list of connections – the Source menu – you can find the devices connected to the TV. From this Source menu, you can switch to a device.

Sources menu

To open the Sources menu, press SOURCE. To switch to a connected device, select the device with the arrows лечь or  → (right) and press OK. For some devices (HDMI-CEC devices), you can select an activity directly in the list underneath the device icon. Select the device and select an activity and press OK. To close the Source menu without switching to a device, press SOURCE again.

10.2 From standby

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

Play

To switch on both disc player and TV from standby and start playing the disc or programme immediately, press ➤ (play) on the TV remote control. The device should be connected with an HDMI cable and both TV and device must have HDMI CEC switched on.

Home Theatre System

You can switch on your Home Theatre System to listen to an audio disc or a radio channel and leave the TV in standby. To only switch on the HTS, with the TV in standby, press SOURCE on the TV remote control.

10.3 EasyLink

With EasyLink you can operate a connected device with the TV remote control. EasyLink uses HDMI CEC to communicate with the connected devices. Devices must support HDMI CEC and must be connected with an HDMI connection.
11

Timers and clock

11.1

Sleeptimer

With the sleep timer, you can set the TV to switch to standby automatically after a preset time.

To set the sleep timer . . .

1 - Press \( \mathbf{\langle} \) and select \( \text{Setup}^* \) and press \( \text{OK} \).
*Professional Mode: Off \( \Rightarrow \) Setup Menu
2 - Select \( \text{TV settings}^* > \text{General settings}^* > \text{Sleep timer} \).
*Professional Mode: Off \( \Rightarrow \) TV settings > General settings
With the slider bar you can set the time to up to 240 minutes in increments of 30 minutes. If set to \( \text{Off} \), the sleep timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.
3 - Press \( \Rightarrow \), repeatedly if necessary, to close the menu.

11.2

Clock

To know what time it is, press \( \text{CLOCK} \) on the remote control.

In some countries, digital broadcasts do not send UTC - Coordinated Universal Time information. The daylight saving change might be ignored and the TV might show an incorrect time.

To correct the TV clock . . .

1 - Professional Mode: Off \( \Rightarrow \) Press \( \mathbf{\langle} \) and select \( \text{Setup} \) and press \( \text{OK} \).
Professional Mode: On \( \Rightarrow \) Enter the Professional Home Menu.
2 - Select \( \text{TV settings} > \text{General settings} > \text{Clock} > \text{Auto clock mode} \) and select \( \text{Country dependent} \).
3 - Select \( \text{Daylight saving} \) and select the appropriate setting.
4 - Press \( \Rightarrow \), repeatedly if necessary, to close the menu.

To set the TV clock manually . . .

1 - Professional Mode: Off \( \Rightarrow \) Press \( \mathbf{\langle} \) and select \( \text{Setup} \) and press \( \text{OK} \).
Professional Mode: On \( \Rightarrow \) Enter the Professional Home Menu.
2 - Select \( \text{TV settings} > \text{General settings} > \text{Clock} > \text{Auto clock mode} \) and select \( \text{Manual} \).
3 - Select \( \text{Day} \) and \( \text{Time} \) to adjust.

4 - Press \( \Rightarrow \), repeatedly if necessary, to close the menu.

11.3

Switch off timer

If you do not press a key on the remote control during a 4 hour period, or if the TV receives no input signal nor remote control commands for 10 minutes, the TV switches off automatically to save energy.

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 the automatic switch off.

To deactivate the Switch off timer . . .

1 - Professional Mode: Off \( \Rightarrow \) Press \( \mathbf{\langle} \) and select \( \text{Setup} \) and press \( \text{OK} \).
Professional Mode: On \( \Rightarrow \) Enter the Professional Home Menu.
2 - Select \( \text{TV settings} > \text{General settings} > \text{Switch off timer} \) and set the slider bar to \( \text{Off} \).
3 - Press \( \Rightarrow \), repeatedly if necessary, to close the menu.

11.4

Alarm

Only available if Professional Mode: On.

An alarm can be set on the TV. The TV can wakeup on a defined alarm time.

To set the alarm follow following steps:

1 - Press \( \mathbf{\langle} \) and select \( \text{Guest menu} \) and press \( \text{OK} \).
2 - Select \( \text{Alarm} \). To set the alarm select \( \text{On} \).
3 - Select \( \text{Alarm time} \) and press \( \text{OK} \). The time can be changed by \( \mathbf{\langle} \) or \( \mathbf{\rangle} \). Select \( \text{On} \) to program the alarm time that has been set.
4 - A \( \text{Wakeup volume} \) can be set. Adjust the slider bar to set the desired volume level.
5 - A \( \text{Wakeup tune} \) can be selected. There are 4 predefined tunes available to select.
6 - Alternatively a \( \text{Wakeup channel} \) can be selected from the list.

Alternatively, alarm time can be set by pressing the \( \text{ALARM} \) button on the remote control.
Network

What you need

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

Network devices

The TV can connect to other devices in your wireless network, like your computer or smartphone. You can use a computer with Microsoft Windows or Apple OS X.

File sharing

On this TV, you can open photos, music and videos stored on your computer. Use a recent version of media server software like Philips MediaManager*, Windows Media Player 11, Twonky™ or similar.

Install the media server software on your computer and set it up to share your media files with the TV. Read the manual of the media server software for more information. This software must be running on your computer to view or play your files on TV.

* You can download the Philips MediaManager software from the Philips support site www.philips.com/support

Make the connection

Follow steps 1 to 5.

Step 1 - Make sure that the router of your wireless network is switched on.

Step 2 - Professional Mode: Off – Press and select Setup and press OK.

Step 3 – Select Connect to network and press OK.

Step 4 – Select Connect and press OK.

Step 5 – Select Wireless and press OK.

Step 6 – Select Scan to scan for your wireless network.

If you have a router with WPS (Wi-Fi Protected Setup), you can select WPS. Select your choice and press OK.

· Scan

Select Scan to scan for your wireless network (your wireless router). The TV might find several wireless networks in your proximity.

· WPS

If your router has WPS, you can directly connect to the router without scanning. Go to the router, press the WPS button and return to the TV within 2 minutes. Then press Connect to make the connection.

If you have devices in your wireless network that use the WEP security encryption system, you cannot use WPS.

If you must use the WPS PIN code to connect, select Scan instead of WPS.

Step 7 – In the list of networks found, select your wireless network and press OK.

If your network is not in the list because the network name is hidden (you switched off the SSID broadcast of the router), select Manual entry to enter the network name yourself.

Step 8 – Depending on the type of router, you can now enter your encryption key (WEP, WPA or WPA2). If you entered the encryption key for this network before, you can select Next to make the connection immediately.

If your router supports WPS or WPS PIN, you select WPS, WPS PIN or Standard. Select your choice and press OK.

· Standard

Select Standard to enter the encryption key (password, passphrase or security key) manually. You can use the keyboard on the RC to enter the encryption key. Once you have entered the key, press Connect.

· WPS PIN

To make a secured WPS connection with a PIN code, select WPS PIN and press OK. Write down the 8-digit PIN code shown and enter it in the router software on your PC. Return to the TV and press Connect. Consult the router manual on where to enter the PIN code in the router software.

Step 9 – A message will be shown when the connection is successful.

Network configuration

If the connection fails, you can check the DHCP
setting of the router. DHCP should be set to On. Alternatively, if you are an advanced user and want to install your network with Static IP addressing, set the TV to Static IP.

To set the TV to Static IP:

Professional Mode: Off  ➜ Press ✪ and select Setup and press OK.
Professional Mode: On ➜ Enter the Professional Home Menu.

Select Network settings > Network settings > Network configuration > Static IP. With Static IP selected in the menu, you can set the IP address and other necessary settings in Static IP configuration in the same menu.

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**Network 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.

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**Wired network**

**What you need**

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

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**Connect the router**

To connect and setup the router follow steps 1 to 5.

1 - Connect the router to the TV with a network cable (Ethernet cable**).
2 - Make sure that the router is switched on.
3 - Professional Mode: Off ➜ Press ✪ and select Setup and press OK.
Professional Mode: On ➜ Enter the Professional Home Menu.
4 - Select Connect to network and press OK.
5 - Select Wired and press OK. The TV constantly searches for the network connection. A message will be shown when the connection is successful.

**Network configuration**

If the connection fails, you can check the DHCP setting of the router. DHCP should be set to On. Alternatively, if you are an advanced user and want to install your network with static IP addressing, set the TV to Static IP.

To set the TV to Static IP:

Professional Mode: Off ➜ Press ✪ and select Setup and press OK.
Professional Mode: On ➜ Enter the Professional Home Menu

Select Network settings > Network settings > Network configuration > Static IP. With Static IP selected in the menu, you can set the IP address and other necessary settings in Static IP configuration in the same menu.

**File sharing**

On this TV, you can open photos, music and videos stored on your computer. Use a recent version of media server software like Philips MediaManager*, Windows Media Player 11, Twonky™ or similar. Install the media server software on your computer and set it up to share your media files with the TV. Read the manual of the media server software for more information. This software must be running on your computer to view or play your files on TV.

* You can download the Philips MediaManager software from the Philips support site www.philips.com/support

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

To open the Network settings . . .

1 - Professional Mode: Off  ➤ Press ⬆ and select Setup and press OK.
   Professional Mode: On  ➤ Enter the Professional Home Menu.
2 - Select Network settings and press OK.

- View network settings
   All current network settings are shown here. The IP and MAC address, signal strength, speed, encryption method, etc.

- Network settings
  - Network type
    Sets the network to Wired or Wireless.
  - Network configuration
    Sets the network configuration to DHCP or Static IP.

- Static IP configuration
  If Static IP is selected in Network Settings menu, you can set all necessary static IP settings here.

- Reset Wi-Fi Miracast group
  Clear the list of connected and blocked devices that are used with Miracast.

- Clear Internet memory
  With Clear Internet memory, you can clear all Internet files stored on your TV. You clear your Philips Smart TV registration and parental rating settings, your video store app logins, all Smart TV app favourites, Internet bookmarks and history. Interactive MHEG applications can also save so-called ‘cookies’, on your TV. These files will also be cleared.
Your photos, videos and music

13.1 From a USB connection or computer

What you need

You can view your photos or play your music and videos from a connected USB flash drive or USB Hard Drive. If you have a computer in your home network, you can view and play your files from your computer on the TV.

From a USB device

With the TV switched on, plug in a USB flash drive or USB Hard Drive to one of the USB connections. The TV detects the device and lists your files. If the list does not appear automatically, press SOURCE, select Browse USB and press OK.

Warning

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

Menu bar and sorting

With a USB device connected, the TV sorts the files by type. Navigate to the menu bar and select the type of file you are looking for.

If you browse files from a computer, you can only browse the files and folders as they are organized on the computer.

The menu bar

Navigate to the menu bar and select the type of file you want to watch or play.

Select Photos, Music or Videos. Alternatively, you can open the Folders view and browse your folders to look for a file.

Sorting

To browse your photos by date, month, year or alphabetically by name, press Sort.
To browse your music by album, artist, genre or alphabetically by name, press Sort.
Videos are sorted alphabetically.

View photos

To view photos, select Photos in the menu bar, select a photo thumbnail and press OK.
If there are several photos in the same folder, select a photo and press Slide show to start a slide show of all photos in this folder.
To jump to the next or previous photo, press CH or CH.
To stop the slide show or close the photo, press .

You can play music with a slide show.
Start the slide show after you started the music.
1 - Select a song or a folder with songs and press OK.
2 - Press CHANNEL GRID and select Photos.
3 - Select a photo or a folder with photos and press Slide show.

Info

To view info on a photo (size, creation date, file path, etc.), select a photo and press INFO. Press again to hide the info.

Options

Press OPTIONS.

• Shuffle
Shows your photos in a random order.

• Repeat
Plays the slide show continuously.

• Slide show speed
Sets the speed of the slide show.

• Slide show transition
Sets the style of the photo transitions.

To close Browse USB, press  and select another activity.

Play music

To play music, select Music in the menu bar, select a song and press OK.
If there are more songs in the same folder, press Play all to play all songs in this folder.
To jump to the next or previous song, press CH or CH.
To pause the music, press OK. Press OK again to continue.
To make a 10-second jump in a song or 10-second jump back, press or .
To rewind or fast forward, press or . Press the
keys several times to speed up - 2x, 4x, 8x, 16x, 32x.
To stop the music playback, press ■ (Stop).
If you press ◀, the music keeps on playing.

Info
To view song info (title, artist, duration, etc.), select the song and press INFO.
Press again to hide the info.

Options
Press OPTIONS.
• Shuffle
Plays your music randomly.
• Repeat
Plays the song once or continuously.
• Screen off
If you only listen to music, you can switch off the TV screen to save energy.
To switch off the screen, press OPTIONS, select Eco settings in the menu bar, select Screen off and press OK.
To switch the screen back on, press any key on the remote control.
To close Browse USB, press ▲ and select another activity.

Wi-Fi Miracast

About Wi-Fi Miracast
Your TV is a Wi-Fi Certified Miracast™ device. With Miracast™, you can watch and share the screen of your smartphone, tablet or computer on your TV screen wirelessly. You can stream videos (audio and video), share photos or anything else that's on screen of the device. No need to connect the device to your home network. Both the TV and the device must be Wi-Fi Certified Miracast™ devices and have Miracast switched on.

For more information on Wi-Fi Certified Miracast™ go to www.wi-fi.org
Wi-Fi®, the Wi-Fi CERTIFIED logo, the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance. Wi-Fi CERTIFIED Miracast™, Miracast™ are trademarks of the Wi-Fi Alliance.

Switch on Miracast
The TV comes with Miracast switched On and is ready to show the screen of a device with Miracast.

Switch off Miracast
If you do not want the TV to receive requests for screen sharing from other devices, you can switch off Miracast on the TV.

1 - Professional Mode: Off — Press ▲ and select Setup and press OK.
Professional Mode: On — Enter the Professional Home Menu.
2 - Select Network settings > Wi-Fi Miracast > Off and press OK.
3 - Press ▼, repeatedly if necessary, to close the menu.
4 - When Professional Mode: On — a Miracast Icon will be added in the Home Menu.

Play videos
To play a video, select Videos in the menu bar, select a video and press OK.
If there are more videos in the same folder, press Play all to play all videos in this folder.
To jump to the next or previous video, press CH ‹ or CH ›.
To pause the video, press OK. Press OK again to continue.
To make a 10-second jump forward or backward in a video, press ▶ or ◀.
To rewind or go fast forward, press ◀ or ▶. Press the keys several times to speed up - 2x, 4x, 8x, 16x, 32x.
To stop the video playback, press ■.

Info
To view info on a video (playhead position, duration, title, date, etc.), select the video and press INFO.
Press again to hide the info.

Options
Press OPTIONS.
• Subtitles
If available, you can switch subtitles On, Off or On during mute.
• Shuffle
Plays your videos in a random order.
• Repeat
Plays a video once or continuously.

To close Browse USB, press ▲ and select another activity.
Share a screen on TV

To share the screen of your smartphone, tablet or computer on the TV . . .

1 - Switch on the TV.
3 - On the device, open an application such as Wi-Fi Miracast, Wi-Fi Direct™, Intel®Wireless Display* or similar and start scanning for other Miracast devices.
4 - In the list of found devices, select the TV and connect.
5 - On the TV, agree to the request to connect to the TV. You might be asked to enter a PIN code from the device on the TV – enter the numbers with the digit keys on the remote control. Alternatively, you might be asked by the TV to enter a PIN code on the device. If you connect, the TV will show the screen of the device.
6 - On the device, select the videos, photos or files you want to watch on TV.

* Miracast is supported by WiDi 3.5 onwards.

Stop sharing

From the device

With the application you use to start Miracast, you can disconnect and stop watching the screen of the device on TV. The TV will switch back to the last selected programme.

From the TV

To stop watching the screen of the device on TV, you can . . .

• press TV to watch a TV broadcast
• press ‹ to start another activity on TV
• press SOURCE to open the Sources menu and select a connected device.

Block a device

The first time you receive a request to connect from a device, you can block the device. This request, and all requests in the future, from this device, will be ignored.

To block a device, select Block . . . in the request window and press OK.

Unblock all devices

All previously connected and blocked devices are stored in the Wi-Fi Miracast list of connections. If you clear this list, all blocked devices will be unblocked.

To unblock all blocked devices . . .

Screen delay

The normal delay when sharing a screen with Miracast is about 1 second. The delay might be longer if you are using older devices/computers with less processing power.

Specifics

• Miracast on this TV is subject to the HDCP protocol and cannot display copy-protected premium content sent by a device.
• The maximum video resolution supported is 720p.
14

Skype

14.1

About Skype

With Skype™ you can make video calls on your TV for free. You can call and see your friends from anywhere in the world. Talk to your friends while watching them on the big screen of your TV.

14.2

What you need

To make a video call on Skype, you need the separately sold Philips PTA317 TV camera with a built-in microphone and a good connection to the Internet. Before you can start Skype, the TV must have a good quality connection to the Internet. You can connect your TV either wireless or wired.

Skype account

To use Skype, you need to create a Skype account for yourself or for your family. You can create a new account for Skype on your TV or on your computer.

Skype Credit or Skype Subscriptions

With Skype, for a little cost, you can also call phones or mobile phones. Using your computer you can buy Skype Credit or take a Skype subscription at www.skype.com

No emergency calls

Skype is not a replacement for your telephone and cannot be used for emergency calling.

14.3

Start with Skype

Install the camera

Connect the TV camera cable to one of the USB connections on the TV.

Bend the small clamp as shown in the illustration below and position the camera on the top of the TV.

Point the camera to the position you usually sit at. When you are making a Skype call, you can pan, tilt or zoom in or out the camera image.

You can position the camera anywhere you want but it is recommended to put it away from the speakers of the TV.

If the TV camera is not connected, Skype will not start.

Sign in

Sign in to Skype with your Skype Name and password. If you don’t have a Skype Name yet, you have to create a new Skype account.

To sign in to Skype...

1 - Press ♀ to open the Home menu.
2 - Select Skype and press OK to start Skype and open the Sign in page.
3 - Select the Skype Name text field and enter your Skype Name. To open the on screen keyboard, select the text field and press OK. If you have signed in before, press GUIDE and select your Skype Name. The TV remembers the 5 last Skype Names that signed in.
4 - Select the Password text field and enter your password.
5 - When done, select Sign in and press OK.

You are signed in if the Skype menu opens on screen.

Need help?

If you have forgotten your Skype Name or password, or are having problems signing in, please visit www.skype.com/support

New Skype account

If you don’t have a Skype Name and Password yet, you can create a new Skype account on your computer. Once you have successfully created the new account, you can use your Skype Name and password to sign in on TV. To create a Skype account on your computer, go to www.skype.com

If you have a remote control with an integrated keyboard or have a USB keyboard connected to the TV, you can create a new Skype account on your TV.

To create a new account on your TV...

1 - On the Skype Sign in page, select Create a new account and press OK.
2 - On the next menu, select Open browser and press OK.
3 - The TV opens the web page of www.skype.com directly. You can create your new account on this web page.
4 - When Skype confirms that your new account is successfully created, leave the web browser and go back to the Sign in page of Skype on TV.
5 - Enter your Skype name and Password to sign in.

Skype Name

A Skype Name must begin with a letter, upper or lowercase. It must have 6 to 32 characters and can contain numbers. A Skype Name cannot contain a space.

Password

Your password must have 6 to 20 characters and
must at least contain one letter or one number. It
cannot contain special characters like a trademark,
bullet or euro sign. A Skype password cannot contain
a space.

If you don't have a Skype Name and Password yet,
you can create a new account on the sign in page on
TV.
1 - On the sign-in page, select New account and press
OK.
2 - Create your new account.
   • Full name
      Enter your full name.
   • Skype name
      Enter a name as your Skype name. Your Skype Name
      will be shown in the list of contacts of other Skype
      users. A Skype Name must begin with a letter, upper
      or lowercase. It must have 6 to 32 characters and can
      contain numbers. A Skype Name cannot contain a
      space.
   • Password
      Enter your password. Your password must have 6 to
      20 characters and must at least contain one letter or
      one number. It cannot contain special characters like
      a trademark, bullet or euro sign. A Skype password
      cannot contain a space.
   • Email
      Enter your email address.
3 - Read and accept the Skype Terms of Use.
4 - If your new account was accepted, you are signed
in.

You can edit or complete your Skype profile on your
computer. Start Skype on your computer, sign in with
your Skype Name and Password and open your
Skype profile. You can change your profile picture,
add a mood message or set the privacy settings.

Microsoft account

If you have a Microsoft account, you can use this
account to sign in to Skype on TV.
To sign in with a Microsoft account...
1 - On the Skype Sign in page, select Sign in with
Microsoft account and press OK.
2 - Select Next and press OK. The TV will open the
Microsoft account sign in web page.
3 - Enter your Microsoft account email and
password.
4 - Select the Submit button and press OK.

No emergency calls

No emergency calls with Skype

Skype is not a replacement for your telephone and
cannot be used for emergency calling.

14.4

Skype menu

When you have signed in successfully, Skype opens
the Skype menu.
The Skype menu items are...
• My profile - your Skype name
   To view or modify your Skype profile. Select your
   Skype Name and press OK.

• People
   In People, you can start making a Skype call and
   manage your contacts.

• Call phones
   In Call phones, you can call a landline or a mobile
   phone number by dialing the number on a dial pad.
   You must have Skype Credit or a Skype subscription
to call a phone number. You can't select Call phones
if a camera and microphone are not connected.

• History
   In History, you can view your missed and former calls
   or view Contact requests.

• Settings
   In Settings, you can change your password, set your
   privacy and voicemail settings or view your blocked
   contacts and much more.

• Sign out
   To sign out of Skype on TV.
14.5

**My profile**

In **My profile**, you can edit your personal profile for Skype.

- **Public**
  View or change your profile information that can be viewed by your contacts.

- **Phone**
  You can enter or change your home, office or mobile phone number here.

- **Private**
  View or change your email address, check the amount of credit you have or view the subscription information, or write a message that reflects your mood.

- **Profile picture**
  If you did not upload a profile picture with your computer yet, you can select one of the available avatars as Profile picture here.

- **Online status**
  You can change your online status. Select the status you want your contacts to see when you are online.

14.6

**People**

**Your contacts**

In **People**, you can find the list of your Skype contacts.

Your contacts are shown with their Skype Name. Contacts are online and available for a Skype call when a green dot is shown next their name.

You can use the text box in the top left corner of the contact page to search for a contact within your contact list. Or, simply scroll down the list to find the contact you want.

---

**Add a contact**

**Add a Skype contact**

In **People**, the list of your contacts, you can add a new Skype contact.

**Add a Skype contact**

If you know the Skype Name or email of a friend, Skype can easily find your contact. If you do not know their Skype Name or email, you can also try to look for them by name.

To add a Skype contact...

1 - On the Contacts page, press OPTIONS.
2 - Select Add Skype Contact and press OK.
3 - Enter a Skype Name or email address of your new contact. You can also try to enter a name. To open the on screen keyboard, press OK. When you’re done, press OK.
4 - Skype will search for the contact you are looking for and will show the search results.
5 - Select the contact you want and press OK to send a contact request.
6 - Write the request and press OK. Skype will send the request message to your new contact. If the contact accepts the request, the Skype Name of the new contact will appear in the your list and you can call your contact on Skype.

---

**Add a phone number**

In **People**, the list of your contacts, you can add a phone number as a contact. You can call a phone with a Skype voice call. You need Skype Credits to make a phone call.

To add a phone number...

1 - On the Contacts page, press OPTIONS.
2 - Select Add a Phone Number and press OK.
3 - Enter the name of your contact. To open the on screen keyboard, press OK. When you’re done, press OK.
4 - Enter the phone number of your contact. Always start with a country code (e.g. +31 for The Netherlands). Do not use the double zero. When you’re done, press OK. The name of your phone number contact will appear in your list.

---

**Accept a contact request**

When you receive a Contact request, a small icon will show next to History in the Skype menu.

To accept a contact request...

1 - In the Skype menu, select History and press OK.
2 - Select Contact requests and press OK. Select the
request and press OK. Skype will ask you to accept this contact. If you accept, the contact will appear in your contact list.

Block a contact

You can Block a Skype contact. A blocked contact will be unable to contact you on Skype. A blocked contact will not be notified, you will appear as being offline in the contact list of the blocked contact. You can always unblock contacts you have blocked.

To block a contact...
1 - On the Contacts page, select the contact you want to block.
2 - Press OPTIONS and select Block and press OK. The contact is blocked.

To unblock a contact...
1 - Select a contact that is blocked.
2 - Press OPTIONS and select Unblock and press OK. The contact is unblocked.

To view a list of blocked contacts...
1 - In the Skype menu, select Settings and press OK. The list will show all contacts you have blocked.

Remove or rename

You can Remove or Rename contacts.

To remove a contact...
1 - On the Contacts page, select the contact you want to remove.
2 - Press OPTIONS and select Remove and press OK. The contact is removed from the list.

To rename a contact...
1 - On the Contacts page, select the contact you want to rename.
2 - Press OPTIONS and select Rename and press OK.
3 - Enter the new name for this contact in the text field. To open the on screen keyboard, press OK. When you’re done, press OK.

Video or voice call

Make a Video call

Make a Video call to call and see your friends on your TV screen.

To make a Video call...
1 - On the Contacts page, select the contact you want to call.
2 - Select Video call and press OK. If your contact is on Skype, has a Skype camera connected and answers the call, you can see this person on TV.
3 - To end the call, select End call and press OK.

When your Skype camera is switched on, a blue indicator LED lights up. You can check what your contact can see in the small screen on the bottom right of the TV screen.

To switch the Skype camera off, select Video Off and press OK. To switch it back on, select Video On and press OK.

To mute your microphone, select Mic Off and press OK. To switch it back on, select Mic On and press OK.

While you are making a video call, you can change the viewpoint of the camera.

Make a Voice call

Make a Voice call to call without video, with the camera switched off.

To make a Voice call...
1 - On the Contacts page, select the contact you want to call.
2 - Select Call and press OK. If your contact is on Skype and answers the call, you can talk to your contact.
3 - To end the call, select End call and press OK.

A contact can add you to a voice call with more than one participant. You cannot add an extra participant yourself.

Calling phones

With Skype you can also call landline phones and mobile phones. To call phones you need to buy Skype Credit or a Skype subscription.

To call a phone...
1 - On the Contacts page, select a phone number contact.
2 - Select Call and press OK. You must have Skype Credits available or have a Skype subscription to make a call with a phone number. If your contact
answers the phone, you can talk to your contact.

3 - To end the call, select End call and press OK.

With Skype, you can also call a phone number directly. You can enter the phone number with the dial pad.

To open the dial pad...

1 - In the Skype menu, select Call phones and press OK.
2 - If the dial pad is not on screen, select Show Dial Pad and press OK.
3 - Dial the phone number. You can navigate to the numbers and press OK or use the number keys on the remote control.

No emergency calls

Skype is not a replacement for your telephone and cannot be used for emergency calling.

---

### Receiving a call

When you are signed in to Skype and watching TV, a ringtone and a message on screen will alert you of an incoming call. The message will show who is calling and you can answer or decline the call.

To answer the call, select Answer with video and press OK.

To answer the call with the camera switched off, select Answer with audio and press OK.

To decline the call, select Decline call and press OK.

---

### History

In the History page of the Skype menu, you will find a list of all calls you made, including the calls you missed. You can also see new contact requests and listen to voicemails.

To view a list, select All calls, Missed calls, Incoming calls or Outgoing calls and press OK.

To view new contact requests, select Contact requests and press OK.

To view and listen to your voicemails, select Voicemails and press OK.

For how long your Skype events are kept in this history list depends on the amount of contacts you have and how intensively you use Skype.

---

### Voicemail

#### About Voicemail

If someone calls you on Skype and you do not take the call, he or she can leave a spoken message on your Skype voicemail. If you call a contact and they can’t take the call, you can send a Skype voicemail to your contact.

To send a voicemail or to receive a voicemail, you – or your contact – must set up Skype voicemail first. You can set up Voicemail on your computer. Go to www.skype.com

When you made voicemail available for you on a computer, set your voicemail preferences in the Skype menu > Settings > Voicemails.

#### Record a Voicemail

When you call a contact and they can’t take the call, you can leave a voicemail.

To record a voicemail...

1 - Call a contact. If your call was not answered, Skype will propose to send a Voicemail.
2 - Select Yes and speak your message.
3 - To stop recording, select End call and press OK.

#### Play a Voicemail

A contact can send a voicemail message to you. If a voicemail was sent to you, a small icon will show on the Skype menu. You can play a voicemail from the History page.

To play a voicemail...

1 - In the Skype menu, select History and press OK.
2 - Select Voicemails and press OK.
3 - Select the voicemail you want to play and press OK. You can listen to a voicemail as many times you want. To manage your voicemails, press OPTIONS.

---

### Skype credit

On Skype, you can buy Skype Credit or take a Skype subscription. With Skype Credit or a Skype subscription available, you can call landline phones and mobile phones with your TV.

#### Buy Skype Credit

To buy Skype Credit or take a Skype subscription, sign in to Skype on your computer.

The Skype Credit you buy will be available when you sign in to Skype on your TV.
The amount of credit or the subscription information is shown on each page where you can make a phone call.

Skype Credit low
You will be notified if your credit is too low to make a phone call.

14.9
Skype settings

Signing in
You can set Skype to automatically sign in when you select Skype from the Home menu. You do not need to enter your Skype Name or password.

To sign in when Skype starts...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Signing in.
4 - Press ► (right) to select the check box and press OK to mark Sign me in when Skype starts.

Change password
You can change your current Skype password and enter a new password for your Skype account.

To change your password...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Change password.
4 - Press ► (right) to select Current password and enter your current password. Press OK first if you want to use the on screen keyboard.
5 - Press ▼ (down) to select New password and enter your new password.
6 - Press ▼ (down) again to select Repeat new password and re-enter the new password.
7 - Press ▼ (down) again to select Apply to send the new password for confirmation.

Video
You can set Skype to restrict the use of video in Skype calls.

With Automatically receive video from, you can set Skype to automatically receive and show video from Anyone, People in my contact list only or from No one.

With Show that I have video to, you can set Skype to send out your video to People in my contact list only or to No one.

To set the Video settings...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Video.
4 - Press ► (right) to select the radio buttons and press OK to mark or unmark.

Privacy
You can set Skype to restrict incoming Skype calls.
You can allow calls from Anyone or from From people in my contact list only.

To set the Privacy settings...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Privacy.
4 - Press ► (right) to select the radio buttons and press OK to mark or unmark.

Blocked contacts
You can view a list of all your Blocked contacts.

To view the list...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Blocked contacts and press OK. To manage your blocked contacts, press OPTIONS.

Voicemail
You can set some preferences for sending voicemails.
If you allow a contact to send you a voicemail when you can't take the call, check the box of Send unanswered calls to voicemail. Leave the box unchecked, if you do not want to receive voicemails.

If you allow a contact to send you a voicemail when you can't answer the call within 15 seconds and you are in another call, check the box of I am already in a call.

If you allow a voicemail, when you declined a call, check the box of I decline an incoming call.

To set your preferences for voicemail...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Select Voicemail and press OK.
4 - Press ▼ (down) or ▲ (up) to select a check box. Press OK to check or uncheck.
Call forwarding

Never miss a Skype call with Call Forwarding.

If you are not online or can’t take the call, you can forward a Skype call to any phone or mobile phone. You can also forward a Skype call to another Skype account. You can set up to three phone numbers or Skype Names in order of preference to forward calls to. You need Skype Credit or a Skype subscription to forward calls to phones. Forwarding Skype calls to other Skype accounts is free of charge. For more information on call forwarding, go to www.skype.com/support.

To set up call forwarding...
1 - Sign in to Skype with your account.
2 - In the Skype menu, select Settings and press OK.
3 - Press OK to check the check box for Forward calls when I am not on Skype.
4 - In the entry fields below, enter the phone numbers or Skype Names from your contact list in order of preference to forward your calls to. Always add the country code for phone numbers.
5 - Change, if necessary, the amount of seconds before Skype forwards your call.
6 - Select Save to store your Call Forwarding setup.

Camera zoom, pan and tilt

You can set the viewpoint of your camera. You can zoom in or out, pan or tilt the camera frame. While you are in a Video call, you can set the camera viewpoint.

To set the camera viewpoint...
1 - Start a Video call and wait until the call is ongoing.
2 - Press ► (right) to select the icon above the small screen and press OK. A bar with colour key functions appears.
3 - To shift (pan) the camera frame, press ◀ (left) or ► (right). To tilt the camera frame, press ▲ (up) or ▼ (down). To zoom in, press − Zoom in. To zoom out, press + Zoom out.
4 - Press ◐ Done to store the camera viewpoint and to go back to your Skype call.

Sign out

When you sign out of Skype, you are signing out your Skype account. Your Online status will change to Offline. Your contacts will not be able to call you.

To sign out...
1 - Press ◊ Back from anywhere within Skype to return to the Skype menu.
2 - Select Sign out in the Skype menu and press OK.
The TV will ask you to quit Skype or to use Skype with another Skype account.

Quit Skype

When you sign out of Skype, the Skype application on TV is still active. Another Skype account can sign in or you can create a new account. To stop the Skype application on TV, you must quit Skype.

Terms of use & Privacy Policy

Read the Terms of Use of Skype at www.skype.com/go/tou.
Also read the Privacy Policy at www.skype.com/go/privacy.
Smart TV

15.1 About Smart TV

Connect this Philips Smart LED TV to the Internet and discover a new world of television. You can make a wired connection to your router or you can link up wirelessly with Wi-Fi.

With the TV connected to your home network, a smartphone can show a photo on TV, you can play videos stored on your computer or control the TV with your tablet.

With your TV connected to the Internet, you can watch a rental video from an online video store, read the online TV guide. The Smart TV Apps add to the fun with all sorts of entertainment and convenient services.

15.2 What you need

To enjoy Smart TV Apps you must connect the TV to a router with a high-speed (broadband) connection to the Internet. You can use a home network connected to the Internet. You do not need a computer.

Tip

To enter text or to navigate an Internet page more easily, you can consider to connect a USB keyboard and a USB mouse to the TV.

15.3 Smart TV Apps

Open Smart TV

The Smart TV start page is your link to the Internet. You can rent movies online, read newspapers, watch videos and listen to music, also shop online, open your social network page (Twitter . . .) or watch TV programmes when it suits you with Online TV. To do this, you open Apps – Internet sites which are tailored for TV. With your TV connected to the Internet, you can open Smart TV.

Open Smart TV

To open the Smart TV start page, press SMART TV. Alternatively, you can press ▲, select Smart TV and press OK.

The TV connects to the Internet and opens the Smart TV start page. This may take a few seconds.

Close Smart TV

To close the Smart TV start page, press ▲ and select another activity.

TP Vision Europe B.V. bears no responsibility regarding the content and the quality of the content provided by the content service providers.

Smart TV start page

1 - Now on your TV
2 - Country Flags
3 - Recommended Apps

Country Flags

Apps are organized by Country. Select the desired country flag to see the overview of available apps for that profile.

Recommended Apps

In this window, Philips presents a range of recommended Apps for your country, Apps for Online TV or a selection of rental movies from Video stores. You can select and open them from the Recommended Apps window.

Open an App

The list of your Apps on the Smart TV start page can be several pages long. Use the arrow keys to go to the next or previous page. Alternatively, press CH ▶ (Next page) or CH ◀ (Previous page).

Open an App

To open an App . . .
1 - Press ▲ and select Smart TV.
2 - On the start page, select the desired Country Flag and Press OK.
3 - Select an App icon and press OK.
4 - In an App, press ▼ to go back 1 step or page.

Close an App

To close an App and return to the Smart TV start page, press SMART TV.

Reload an App page

If an App page did not load properly, press OPTIONS and select Reload to reload the page.

Zoom

To zoom in on an App page . . .
1 - Press OPTIONS and select Zoom page.
2 - Use the slider bar to set the zoom level.
3 - Return to normal view by resetting the slider bar.

View security info
You can check the security level of an App page. On an App page, press OPTIONS and select Security info. If a lock is shown next to the loading animation on the bottom of the screen while loading a page, the transfer is secured.

Rental video Apps

With the video store Apps in Smart TV, you can rent your favourite movie from an online rental video store. You can pay securely with your credit card.

Rent a movie
1 - Open a Video store App in your list of Apps or select a recommended video on the Smart TV start page.
2 - Select a movie.
3 - Make the online payment.
4 - Start watching. You can use the (Play) and (Pause) keys.
Most Video stores ask you to create a login account.

Streaming video

With this TV, you can watch rental movies sent as a streaming video format. You can almost instantly watch the movie. You might need a USB Hard Drive to store some video buffer. If you have a USB Hard Drive connected, you can also download rental movies from video stores that offer movie downloading only. You can pause or restart a downloaded rental movie. Consult the video store regarding the rental duration of rental movies.

Internet traffic

Streaming or downloading many videos may exceed your monthly Internet traffic limit.

Online TV

With the Online TV App on the Smart TV start page*, you can watch TV programmes you missed or watch programmes whenever it suits you best.

Open Online TV

To open the Online TV App . . .

1 - Press SMART TV.
2 - On the start page, select the Online TV icon and press OK.
3 - Select a programme on the page and press OK to start watching. You can use the (Play) and (Pause) keys.

List per broadcaster

To view the Online TV programmes ordered by broadcaster, press All broadcasters. Select a broadcaster and press OK.

World Wide Web

The Internet App opens the World Wide Web on your TV.

On your TV, you can view any Internet website but most of them are not tailored for a TV screen.
- Some plug-ins (e.g. to view pages or videos) are not available on your TV.
- Internet pages are shown one page at a time and full screen.

Reset Smart TV

To reset your connection with Smart TV, clear the Internet memory on the TV. You will clear your Philips Smart TV registration and parental rating setting, your video store app logins, all Smart TV app favourites, Internet bookmarks and history.

To clear the Internet memory . . .

1 - Professional Mode: Off - Press  and select Setup and press OK. Professional Mode: On - Enter the Professional Home Menu.
2 - Select Network settings > Clear Internet memory and press OK.

* If available in your region.
Specifications

16.1 Environmental

Saving energy

The Eco settings bundle the settings that help the environment.
While you are watching TV channels, press adjust and select Eco settings to open Eco settings.
Active settings are marked with a 🔇. You can mark or unmark each setting with the OK key.
Press ▼ again to close Eco settings.

Energy saving

This Picture style sets the picture in the most ideal energy conscious setting.

Screen off

If you only listen to music, you can switch off the TV screen to save energy.
Select Screen off and press OK. To switch the screen back on, press any key on the remote control.

Light sensor

To save energy, the built-in ambient light sensor lowers the brightness of the TV screen when the surrounding light darkens. The built-in light sensor automatically adjusts the picture, to the lighting conditions of the room.

Switch off timer

If you do not press a key on the remote control during a 4 hour period, or if the TV receives no signal for 10 minutes, the TV switches off automatically to save energy.
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, deactivate the automatic switch off.
In addition to the Eco settings, your TV also has environmentally friendly technology with regard to power consumption.

Inactive devices off

Switch off connected EasyLink HDMI-CEC (Consumer Electronic Control) compliant devices that are inactive.

European energy label

The European Energy Label informs you on the energy efficiency class of this product. The greener the energy efficiency class of this product is, the lower the energy it consumes.
On the label, you can find the energy efficiency class, the average power consumption of this product in use and the average energy consumption for 1 year. You can also find the power consumption values for this product on the Philips website for your country at www.philips.com/TV

End of use

Disposal of your old product and batteries

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

When this crossed-out wheeled bin symbol is attached to a product it means that the product is covered by the European Directive 2002/96/EC.

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

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

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

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

- Aerial input: 75 ohm coaxial (IEC 75)
- Tuner bands: Hyperband; S-Channel; UHF; VHF
- DVB:
  - For models xxHFL5010: DVB-T2, DVB-T, DVB-C
- Analogue video playback: NTSC, SECAM, PAL
- Digital audio playback (ISO/IEC 13818-3)

Note: See selected countries on the TV type plate.

16.3 Display

Type

- Diagonal screen size:
  - 70 cm / 28 inch
  - 80 cm / 32 inch
  - 100 cm / 40 inch
  - 121 cm / 48 inch
  - 139 cm / 55 inch

Display resolution: 1920x1080p
32HFL5010, 40HFL5010, 48HFL5010, 55HFL5010

Display resolution: 1365x768p
28HFL5010

Input resolution for HD/FHD TVs

Video formats

Resolution — Refresh rate
- 480i — 60 Hz
- 480p — 60 Hz
- 576i — 50 Hz
- 576p — 50 Hz
- 720p — 50 Hz, 60 Hz
- 1080i — 50 Hz, 60 Hz
- 1080p — 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

Computer formats

Resolutions (amongst others)
- 640 x 480p — 60 Hz
- 800 x 600p — 60 Hz
- 1024 x 768p — 60 Hz
- 1280 x 768p — 60 Hz
- 1360 x 765p — 60 Hz
- 1360 x 768p — 60 Hz

- 1280 x 1024p — 60 Hz
- 1920 x 1080p — 60 Hz

16.4 Power

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

Power

- Mains power: AC 220–240V ±/−10%
- Ambient temperature: 0°C to 40°C
- Standby power consumption: < 0.3W

The power rating stated on the product typeplate is the power consumption for this product during normal household use (IEC 62087 Ed.2). The maximum power rating, stated between brackets, is used for electrical safety (IEC 60065 Ed. 7.2).

16.5 Dimensions and weights

28HFL5010
- without TV stand:
  Width 635.1 mm - Height 392.7 mm - Depth 73.7 mm - Weight ±4.5 kg
- with TV stand:
  Width 635.1 mm - Height 441.1 mm - Depth 190 mm - Weight ±5.07 kg

32HFL5010
- without TV stand:
  Width 726.5 mm - Height 425.4 mm - Depth 76.8 mm - Weight ±4.96 kg
- with TV stand:
  Width 726.5 mm - Height 488.6 mm - Depth 179.2 mm - Weight ±6.24 kg

40HFL5010
- without TV stand:
  Width 903.5 mm - Height 511.8 mm - Depth 76.8 mm - Weight ±7.7 kg
- with TV stand:
  Width 903.5 mm - Height 573.8 mm - Depth 213.1 mm - Weight ±9.1 kg

48HFL5010
- without TV stand:
  Width 1081.8 mm - Height 623.4 mm - Depth 77.8 mm - Weight ±12.4 kg
- with TV stand:
  Width 1081.8 mm - Height 685.7 mm - Depth 249.4 mm - Weight ±13.9 kg

55HFL5010
- without TV stand:
  Width 1239.2 mm - Height 711.6 mm - Depth 79.2 mm
- Weight ±15.1 kg
  • with TV stand:
    Width 1239.2 mm - Height 778.2 mm - Depth 265.8 mm - Weight ±17.5 kg

16.6
Wall mounting

• 28HFL5xx0 - VESA MIS-F 100x100, M4
• 32HFL5xx0 - VESA MIS-F 100x100, M4
• 40HFL5xx0 - VESA MIS-F 200x200, M4
• 48HFL5xx0 - VESA MIS-F 200x200, M6
• 55HFL5xx0 - VESA MIS-F 400x200, M6

Note:
Before mounting the TV on the wall, remove the existing VESA screws on the back panel.

Warning:
Follow all instructions provided with the TV mount. TP Vision Europe B.V. bears no responsibility for improper TV mounting that results in accident, injury or damage.

To prevent damage to cables and connectors, leave a gap of at least 5.5 cm / 2.2 inches from the back of the TV.

Before you mount the TV on the wall, find the correct length of the screw. To find the length of the screw, add the thickness of your wall mount to the screw length (y), as shown in the graphic.

16.7
Connectivity

For 28HFL5010/32HFL5010/40HFL5010/
48HFL5010/55HFL5010

TV Rear
• Audio In (DVI/VGA): Stereo mini-jack 3.5mm
• SCART: Audio L/R, CVBS in, RGB
• YPbPr : Y Pb Pr, Audio L/R : Stereo mini-jack 3.5mm
• Digital Audio out: Optical, Toslink
• VGA
• 1x HDMI
• Bathroom speaker audio out
• DC out: 12V
• SXP

TV Side
• 1x HDMI
• 1x USB 2.0
• Common interface slot: CI+/CAM
• Headphones: Stereo mini-jack 3.5mm

16.8
Multimedia

Connections
• USB 2.0
• Ethernet LAN RJ-45*
• Wi-Fi 802.11b/g/n (built-in)*

Supported USB file systems
• FAT 16, FAT 32, NTFS

Playback formats
• Containers : 3GP, AVCHD, AVI, MPEG-PS, MPEG-TS, MPEG-4, Matroska (MKV), Quicktime (MOV, M4V, M4A), Windows Media (ASF/WMV/WMA)
• Video Codecs : MPEG-1, MPEG-2, MPEG-4 Part 2, MPEG-4 Part 10 AVC (H264), VC-1, WMV9
• Audio Codecs : AAC, HE-AAC (v1/v2), AMR-NB, Dolby Digital, Dolby Digital Plus, DTS 2.0 + Digital Out™, MPEG-1/2/2.5 Layer I/II/III (includes MP3), WMA (v2 to v9.2), WMA Pro (v9/v10)
• Subtitles :
  – Formats : SAMI, SubRip (SRT), SubViewer (SUB), MicroDVD (TXT), mplayer2 (TXT), TMPlayer (TXT)
  – Character encodings : UTF-8, Central Europe and Eastern Europe (Windows-1250), Cyrillic (Windows-1251), Greek (Windows-1253), Turkish (Windows-1254), Western Europe (Windows-1252)
• Image Codecs : JPEG
• Limitations :
  – Maximum supported total bit rate for a media file is 30Mbps.
  – Maximum supported video bit rate for a media file is 20Mbps.
  – MPEG-4 AVC (H.264) is supported up to High Profile @ L4.1.
  – VC-1 is supported up to Advanced Profile @ L3.

Wi-Fi Certified Miracast™*

This TV supports WiDi 4.x devices.

Supported media server software (DMS)*
• PC – Microsoft Windows XP, Vista or Windows 7
  – You can use any DLNA certified® media server software.
  – Microsoft - Windows Media Player
  – Mac OS X
  – You can use any DLNA certified® media server software.
• Mobile devices
  – Philips MyRemote - iOS, Android
  – Interoperability and performance may vary, depending on the capabilities of the mobile device and the software used.

ESD regulations

This apparatus meets performance criteria B for ESD. In case the apparatus does not recover in file sharing mode due to electrostatic discharge, user interference is required.

* Only for Smart TVs.
Software

17.1 Software update

Update from USB

It might be necessary to update the TV software. You need a computer with an high-speed Internet connection and a USB memory device to upload the software on the TV. Use a USB memory device with 256MB free space. Make sure that write protection is switched off.

1 - To Start the update on TV
Professional Mode: Off – Press \( \uparrow \) and select Setup and press OK.
Professional Mode: On – Enter the Professional Home Menu.

2 - Identify the TV
Insert the USB memory into one of the USB connections of the TV. Select Start and press OK. An identification file is written on the USB memory device.

3 - Download the TV software
Insert the USB memory into your computer. On the USB memory device, locate the file update.htm and double click it. Click on Send ID.
If new software is available, download the .zip file. After the download, unzip the file and copy the file autorun.upg onto the USB memory device.
Do not place this file in a folder.

4 - Update the TV software
Insert the USB memory into the TV again. The update starts automatically.
The TV switches itself off for 10 seconds and then back on again. Please wait.

Do not . . .
- use the remote control
- remove the USB memory device from the TV

If a power cut occurs during the update, never remove the USB memory device from the TV. When the power returns, the update will continue.
At the end of the update, the message Operation successful appears on screen. Remove the USB memory device and press \( \circ \) on the remote control.

Do not . . .
- press \( \circ \) twice
- press the power switch on the TV
The TV switches itself off (for 10 seconds) and then back on again. Please wait.

The TV software has been updated. You can use the TV again.

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

Update from Internet

If the TV is connected to the Internet, you may receive a message from TP Vision to update the TV software. You need a high-speed (broadband) Internet connection.

If you receive this message, we recommend you carry out the update.
Select Update. Follow the instructions on screen.
You can also look for new updates yourself.
To look for an update . . .

1 - Press \( \uparrow \) and select Setup and press OK.
2 - Select Update software > TV with Internet, then press OK. Follow the instructions on screen.

When the update is complete, the TV switches off and back on again automatically.
Wait for the TV to switch itself back on.
Do not press the Power switch \( \circ \) on the TV.

17.2 Software version

To view the current TV software version . . .

1 - Professional Mode: Off – Press \( \uparrow \) and select Setup and press OK.
Professional Mode: On – Enter the Professional Home Menu.

2 - Select Software settings and press OK.

3 - Select Current software info and see Release Version.

4 - Press \( \circ \) repeatedly if necessary, to close the menu.

17.3 Open source software

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

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

Intellectual Property Dept.
TP Vision Europe B.V.
Open source license

Acknowledgements and License Texts for any open source software used in this Philips TV.

This is a document describing the distribution of the source code used on the Philips TV, which fall either under the GNU General Public License (the GPL), or the GNU Lesser General Public License (the LGPL), or any other open source license. Instructions to obtain source code for this software can be found in the user manual.

PHILIPS MAKES NO WARRANTIES WHATSOEVER, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THIS SOFTWARE. Philips offers no support for this software. The preceding does not affect your warranties and statutory rights regarding any Philips product(s) you purchased. It only applies to this source code made available to you.

Freetype (2.4.3)
FreeType is a software font engine that is designed to be small, efficient, highly customizable, and portable while capable of producing high-quality output (glyph images).
This piece of software is made available under the terms and conditions of the FreeType Project license, which can be found below.
Source: http://freetype.sourceforge.net

zlib (1.2.3)
The 'zlib' compression library provides in-memory compression and decompression functions, including integrity checks of the uncompressed data.
This piece of software is made available under the terms and conditions of the zlib license, which can be found below.
Source: http://www.zlib.net/

Fraunhofer AAC Ecnoder (3.3.3)
AAC Ecnoder.
Source: Android JB source code

unicode (3.2)
This library is used to perform UNICODE string manipulation.
This piece of software is made available under the terms and conditions of the ICU license, which can be found below.
Source: http://www.icu-project.org/

Libpng (1.2.43)
PNG decoder.
This piece of software is made available under the terms and conditions of the libpng license, which can be found below.
Source: http://www.libpng.org/pub/png/libpng.html

Libjpg (6b)
This library is used to perform JPEG decoding tasks.
This piece of software is made available under the terms and conditions of the libjgp license, which can be found below.
Source: http://www.ijg.org/

Libmng (1.0.10)
libmng - THE reference library for reading, displaying, writing and examining Multiple-Image Network Graphics. MNG is the animation extension to the popular PNG image-format.
This piece of software is made available under the terms and conditions of the libmng license, which can be found below.
Source: http://sourceforge.net/projects/libmng/files/

u-Boot loader (1.3.4)
Used by boot loader and only linked with boot loader, GPL license.
This piece of software is made available under the terms and conditions of the u-Boot loader license, which can be found below.
Source: http://sourceforge.net/projects/u-boot/files/

Libcurl (7.21.7)
HTTP client.libcurl is a free and easy-to-use client-side URL transfer library, supporting FTP, FTPS, HTTP, HTTPS, SCP, SFTP, TFTP, TELNET, DICT, LDAP, LDAPS, FILE, IMAP, SMTP, POP3 and RTSP. libcurl supports SSL certificates, HTTP POST, HTTP PUT, FTP uploading, HTTP form based upload, proxies, cookies, user+password authentication (Basic, Digest, NTLM, Negotiate, Kerberos4), file transfer resume, http proxy tunneling and more!
This piece of software is made available under the terms and conditions of the Libcurl license, which can be found below.
Source: http://curl.haxx.se/

C-ares (1.7.4)
c-ares is a C library that performs DNS requests and name resolves asynchronously.
This piece of software is made available under the terms and conditions of the c-ares license, which can be found below.
Source: http://c-ares.haxx.se/c-ares-1.7.1.tar.gz

openssl (1.0.0d)
OpenSSL is an open source implementation of the SSL and TLS protocols. The core library (written in the
C programming language) implements the basic cryptographic functions and provides various utility functions. Wrappers allowing the use of the OpenSSL library in a variety of computer languages are available.

This piece of software is made available under the terms and conditions of the 1.7.4 license, which can be found below.
Source: http://www.openssl.org/source/openssl-1.0.0.tar.gz

Expat (2.0.1)
xml parser: Expat is an XML parser library written in C. It is a stream-oriented parser in which an application registers handlers for things the parser might find in the XML document (like start tags). An introductory article on using.

This piece of software is made available under the terms and conditions of the Expat license, which can be found below.
Source: http://expat.sourceforge.net/

DirectFB include SAWMAN (1.4.0)
It is a software library for GNU/Linux/UNIX based operating system with a small memory footprint that provides graphics acceleration, input device handling and abstraction layer, and integrated windowing system with support for translucent windows and multiple display layers on top of the Linux framebuffer without requiring any kernel modifications.

This piece of software is made available under the terms and conditions of the DirectFB license, which can be found below.
Source: http://sourceforge.net/projects/jointspace/files/remote_applications_SDK/remote_applications_SDK_v1.3.1/ DirectFB141_source_1.3.1.7z/download

SAWMAN
SquashFS is a compressed read-only file system for Linux. SquashFS compresses files, inodes and directories, and supports block sizes up to 1 MB for greater compression. SquashFS is also the name of free/open software, licensed under the GPL, for accessing SquashFS filesystems.

This piece of software is made available under the terms and conditions of the SquashFS license, which can be found below.
Source: http://squashfs.sourceforge.net/

Linux Kernel (3.0)
The Linux kernel is an operating system kernel used by the Linux family of Unix-like operating systems. This piece of software is made available under the terms and conditions of the Linux Kernel license, which can be found below.
Source: http://www.kernel.org

SQLite (3.7.2)
SQLite is a in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.

This piece of software is made available under the terms and conditions of the SQLite license, which can be found below.
Source: http://www.sqlite.org/download.html

SquashFS (3.4)
SquashFS is a compressed read-only file system for Linux. SquashFS compresses files, inodes and directories, and supports block sizes up to 1 MB for greater compression. SquashFS is also the name of free/open software, licensed under the GPL, for accessing SquashFS filesystems.

This piece of software is made available under the terms and conditions of the SquashFS license, which can be found below.
Source: http://squashfs.sourceforge.net/

glibc (2.6.1)
Any Unix-like operating system needs a C library: the library which defines the "system calls" and other basic facilities such as open, malloc, printf, exit...The GNU C library is used as the C library in the GNU system and most systems with the Linux kernel. This piece of software is made available under the terms and conditions of the glibc license, which can be found below.
Source: http://www.gnu.org/software/libc/

mtd-utils (1)
The aim of the system is to make it simple to provide a driver for new hardware, by providing a generic interface between the hardware drivers and the upper layers of the system. Hardware drivers need to know nothing about the storage formats used, such as FTL, FFS2, etc., but will only need to provide simple routines for read, write and erase. Presentation of the device's contents to the user in an appropriate form will be handled by the upper layers of the system. This piece of software is made available under the terms and conditions of the mtd-utils license, which can be found below.
Source: http://www.linux-mtd.infradead.org/index.html

libusb (1.0.6)
This is the home of libusb, a library that gives user level applications uniform access to USB devices across many different operating systems. libusb is an open source project licensed under the GNU Lesser General Public License version 2.1. Many participants in the libusb community have helped and continue to help with ideas, implementation, support and improvements for libusb.

This piece of software is made available under the terms and conditions of the libusb license, which can be found below.

libusb-compat (0.1.3)
Library to enable user space application programs to communicate with USB devices.
This piece of software is made available under the terms and conditions of the libusb-compat license, which can be found below.
Source: http://libusb.wiki.sourceforge.net/LibusbCompat0.1

NTFS-3G Read/Write Driver (2010.5.22)
NTFS-3G is an open source cross-platform implementation of the Microsoft Windows NTFS file system with read-write support. NTFS-3G often uses the FUSE file system interface, so it can run unmodified on many different operating systems. It is runnable on Linux, FreeBSD, NetBSD, OpenSolaris, BeOS, QNX, WinCE, Nucleus, VxWorks, Haiku, MorphOS, and Mac OS X It is licensed under either the GNU General Public License or a proprietary license. It is a partial fork of ntfsprogs and is under active maintenance and development.
This piece of software is made available under the terms and conditions of the NTFS-3G Read/Write Driver license, which can be found below.
Source: http://www.tuxera.com

WPA Supplicant (0.5.10 & 0.6.7)
These packages are used to provide WiFi access. The supplier for these tools is Atheros. These pieces of software are made available under the terms and conditions of the GPL v2 license, which can be found below.
This piece of software is made available under the terms and conditions of the WPA Supplicant license, which can be found below.
Source: http://hostap.epitest.fi/wpa_supplicant/

ntfsprogs (2.0.0)
Some useful tool for ntfs file system.
This piece of software is made available under the terms and conditions of the ntfsprogs license, which can be found below.
Source: http://sourceforge.net/projects/linux-ntfs

fuse (2.8.4)
Fuse is a simple interface for userspace programs to export a virtual filesystem to the linux kernel.
This piece of software is made available under the terms and conditions of the fuse license, which can be found below.
Source: http://Fuse.sourceforge.net/

libiconv (1.11.1)
This library provides an iconv() implementation, for use on systems which don’t have one, or whose implementation cannot convert from/to Unicode.
This piece of software is made available under the terms and conditions of the libiconv license, which can be found below.

electric-fence (2.11.3)
Used for memory corruption detection.
This piece of software is made available under the terms and conditions of the electric-fence license, which can be found below.
Source: http://perens.com/FreeSoftware/ElectricFence/electric-fence_2.11.3-0.1.tar.gz

liveMedia
When Wifi Display or streaming RtspPlayer are enabled.
This piece of software is made available under the terms and conditions of the electric-fence license, which can be found below.
Source: www.live555.com

QT (4.7.0)
Netflix skpe besttv pandora picasa? will use QT.
This piece of software is made available under the terms and conditions of the QT license, which can be found below.
Source: http://qt.nokia.com/
e2fsprogs (1.41.14)
e2fsprogs provides the filesystem utilities for use with the ext2 filesystem, it also supports the ext3 and ext4 filesystems.
This piece of software is made available under the terms and conditions of the e2fsprogs license, which can be found below.
Source: http://e2fsprogs.sourceforge.net/

alsa (1.0.24.1)
Advanced Linux Sound Architecture (ALSA).
This piece of software is made available under the terms and conditions of the alsa license, which can be found below.
Source: http://www.alsa-project.org

lvm2 (2.02.89)
DM_VERITY.
This piece of software is made available under the terms and conditions of the lvm2 license, which can be found below.
Source: ftp://sources.redhat.com/pub/lvm2/releases/

encfs (1.3.2)
A library provides an encrypted filesystem in user-space.
Source: http://www.arg0.net/encfs

boost (1.15.0)
A library provides free peer-reviewed portable C++ source libraries is used for encfs.
Source: http://www.boost.org

rlog (1.4)
A library that provides a flexible message logging facility for C programs and libraries is used for encfs.
iptables (1.4.15)
For Cross connection.
Source: http://www.netfilter.org/projects/iptables/

bash (3.2.48)
Bash is the shell, or command language interpreter, that will appear in the GNU operating system.
Bash is an sh-compatible shell that incorporates useful features from the Korn shell (ksh) and C shell (csh).
It is intended to conform to the IEEE POSIX P1003.2/ISO 9945.2 Shell and Tools standard.
It offers functional improvements over sh for both programming and interactive use.
In addition, most sh scripts can be run by Bash without modification.
Source: http://www.gnu.org/software/bash/

coreutils (6.9)
The GNU Core Utilities are the basic file, shell and text manipulation utilities of the GNU operating system.
These are the core utilities which are expected to exist on every operating system.
Source: http://www.gnu.org/software/coreutils/

findutils (4.2.31)
The GNU Find Utilities are the basic directory searching utilities of the GNU operating system.
These programs are typically used in conjunction with other programs to provide modular and powerful directory search and file locating capabilities to other commands.
Source: http://www.gnu.org/software/findutils/
gawk (3.1.5)
If you are like many computer users, you would frequently like to make changes in various text files wherever certain patterns appear, or extract data from parts of certain lines while discarding the rest.
To write a program to do this in a language such as C or Pascal is a time-consuming inconvenience that may take many lines of code.
The job is easy with awk, especially the GNU implementation: gawk.
Source: http://www.gnu.org/software/gawk/
grep (2.5.1a)
The grep command searches one or more input files for lines containing a match to a specified pattern. By default, grep prints the matching lines.
Source: http://www.gnu.org/software/grep/
gzip (1.3.12)
GNU Gzip is a popular data compression program originally written by Jean-loup Gailly for the GNU project. Mark Adler wrote the decompression part.
Source: http://www.gnu.org/software/gzip/

inetutils (1.4.2)
Inetutils is a collection of common network programs.
Source: http://www.gnu.org/software/inetutils/

iputils (s20101006)
The iputils package is set of small useful utilities for Linux networking. It was originally maintained by Alexey Kuznetsov.
Source: http://www.skbuff.net/iputils/

module-init-tools (3.12)
Provides developer documentation for the utilities used by Linux systems to load and manage kernel modules (commonly referred to as “drivers”).
Source: https://modules.wiki.kernel.org/index.php/Main_Page

curses (5.7)
The Ncurses (new curses) library is a free software emulation of curses in System V Release 4.0, and more.
It uses Terminfo format, supports pads and color and multiple highlights and forms characters and function-key mapping, and has all the other SYSV-curses enhancements over BSD Curses.
Source: http://www.gnu.org/software/ncurses/

net-tools (1.6)
The Net-tools?package is a collection of programs for controlling the network subsystem of the Linux kernel.

procps (ps, top) (3.2.8)
procps is the package that has a bunch of small useful utilities that give information about processes using the /proc filesystem.
The package includes the programs ps, top, vmstat, w, kill, free, slabtop, and skill.
Source: http://procps.sourceforge.net/index.html

psmisc (22.13)
This PSmisc package is a set of some small useful utilities that use the proc filesystem. We’re not about changing the world, but providing the system administrator with some help in common tasks.
Source: http://psmisc.sourceforge.net/
sed (4.1.5)
sed (stream editor) isn’t an interactive text editor. Instead, it is used to filter text, i.e., it takes text input, performs some operation (or set of operations) on it, and outputs the modified text.
sed is typically used for extracting part of a file using pattern matching or substituting multiple occurrences of a string within a file.
Source: http://www.gnu.org/software/sed/
GNU Tar provides the ability to create tar archives, as well as various other kinds of manipulation. For example, you can use Tar on previously created archives to extract files, to store additional files, or to update or list files which were already stored. Source: http://www.gnu.org/software/tar/

util-linux-ng (2.18)
Various system utilities.
Source: http://userweb.kernel.org/~kzak/util-linux-ng/

udhcpc (0.9.8cvs20050303-3)
Udhcpc is a very small DHCP client geared towards embedded systems.
Source: http://udhcp.sourceforge.com/downloads/0.9.8cvs20050303-3/

Libxml2 (2.7.8)
The "libxml2" library is used in AstroTV as a support for the execution of NCL application. This library was developed for the GNOME software suite and is available under a "MIT" license.
Source: http://www.xmlsoft.org

uriparser (0.7.7)
For MPEG-DASH
Source: http://uriparser.sourceforge.net/

xerces-c++ (3.1.1)
For MPEG-DASH
Source: http://xerces.apache.org/

webp (0.2.1)
For Netflix
Source: https://code.google.com/p/webp/

wget (1.10.2)
GNU Wget is a free software package for retrieving files using HTTP, HTTPS and FTP, the most widely-used Internet protocols. It is a non-interactive command line tool, so it may easily be called from scripts, cron jobs, terminals without X-Windows support, etc.
Source: http://ftp.gnu.org/gnu/wget/wget-1.10.2.tar.gz

wireless_tools (0.29)
The Wireless Tools (WT) is a set of tools allowing to manipulate the Wireless Extensions. They use a textual interface and are rather crude, but aim to support the full Wireless Extension.
Source: http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html

ezxml (0.8.6)
ezXML is a C library for parsing XML documents. Used inside Philips libraries.
Source: http://sourceforge.net/projects/ezxml/

SQLite (3.7.7.1)
SQLite is an in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.
Source: http://www.sqlite.org/download.html

AES (aes-src-29-04-09.zip)
Advanced Encryption Standard (AES) is a specification for the encryption of electronic data. Used inside Philips libraries.
Source: http://gladman.plushost.co.uk/oldsite/AES/

microhttpd (libmicrohttpd-0.9.9.tar.gz)
GNU libmicrohttpd is a small C library that is supposed to make it easy to run an HTTP server as part of another application. The original download site for this software is: http://www.gnu.org/software/libmicrohttpd/This piece of software is made available under the terms and conditions of the LGPL v2.1 license
Source: http://ftp.gnu.org-gnu/libmicrohttpd/libmicrohttpd-0.9.9.tar.gz

yajl (lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz)
YAJL is a small event-driven (SAX-style) JSON parser written in ANSI C, and a small validating JSON generator. YAJL is released under the ISC license. The original download site for this software is: http://lloyd.github.com/yajl/This piece of software is made available under the terms and conditions of the ISC license
Source: http://pkgs.fedoraproject.org/repo/pkgs/yajl/lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz/df6a751e7797b9c2182efd91b5d64017/lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz

HMAC-SHA1 (0.1)
keyed-hash message authentication code (HMAC) is a specific construction for calculating a message authentication code (MAC) involving a cryptographic hash function in combination with a secret cryptographic key. As with any MAC, it may be used to simultaneously verify both the data integrity and the authentication of a message. Any cryptographic hash function, such as MD5 or SHA-1, may be used in the calculation of an HMAC; the resulting MAC algorithm is termed HMAC-MD5 or HMAC-SHA1 accordingly.
Source: http://www.deadhat.com/wlan/crypto/hmac_sha1.c

gSoap (2.7.15)
The gSOAP toolkit is an open source C and C++ software development toolkit for SOAP/XML Web services and generic (non-SOAP) C/C++ XML data bindings. Part of the software embedded in this product is gSOAP software. Portions created by gSOAP are Copyright 2000–2011 Robert A. van Engelen, Genivia
jQuery (1.10.2)
jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development.
Source: http://jquery.com/

Libupnp (1.2.1)
The Linux* SDK for UPnP* Devices (libupnp) provides developers with an API and open source code for building control points, devices, and bridges that are compliant with Version 1.0 of the UPnP Device Architecture Specification.
Source: http://upnp.sourceforge.net/

mDNSResponder (mDNSResponder-320.10.80)
The mDNSResponder project is a component of Bonjour,
In our project, Bonjour is used for the automatic discovery of devices and services
Source: http://developer.apple.com/bonjour/
Troubleshooting and support

18.1 Troubleshooting

Channels

No digital channels found during the installation
See the technical specifications to make sure that your TV supports DVB-T or DVB-C in your country. Make sure that all cables are properly connected.
Previously installed channels are not in the channel list
Make sure that the correct channel list is selected.

General

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

TV does not respond to the remote control
The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behaviour. If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.
If you do not notice the flickering, the remote control might be broken or its batteries are low. This method of checking the remote control is not possible with remote controls which are wirelessly paired with the TV.
The TV goes back to standby after showing the Philips startup screen
When the TV is in standby, a Philips startup screen is displayed, then the TV returns to standby mode. This is normal behaviour. When the TV is disconnected and reconnected to the power supply, the startup screen is displayed at the next startup. To switch on the TV from standby, press on the remote control or the TV.
The standby light keeps on blinking
Disconnect the power cable from the power outlet. Wait 5 minutes before you reconnect the power cable. If the blinking reoccurs, contact Philips TV Consumer Care.

Wrong menu language
Change the language back to your language.
2 - Select TV settings > General settings > Menu language and press OK.
3 - Select the language you want and press OK.
4 - Press repeatedly if necessary, to close the menu.

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
• Make sure that the picture settings are set correctly.

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.

Poor picture from a device
• Make sure that the device is connected properly.
• Make sure that the picture settings are set correctly.

Picture settings change after a while
Make sure that [Location] is set to [Home]. You can change and save settings in this mode.

A commercial banner appears
Make sure that [Location] is set to [Home].

Picture does not fit the screen
Change to a different picture format. Press FORMAT.

Picture format keeps changing with different channels
Select a non 'Auto' picture format.

Picture position is incorrect
Picture signals from some devices may not fit the screen correctly. Check the signal output of the connected device.

Computer picture is not stable
Make sure that your PC uses the supported resolution and refresh rate.

Sound

No sound or poor sound quality
If no audio signal is detected, the TV automatically switches the audio output off — this does not indicate malfunction.
  • Make sure that the sound settings are correctly set.
  • Make sure that all cables are properly connected.
  • Make sure that the volume is not muted or set to zero.
  • Make sure that the TV 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.

Connections

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 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.

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 a HDMI-CEC audio device is connected 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.

18.2 Register

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

Go to www.philips.com/welcome.

18.3 Online help

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

Go to www.philips.com/support.

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.

18.4 Consumer Care / Repair

For support and repair, call the Consumer Care hotline in your country. Find the telephone number in the printed documentation that came with the TV.

Or consult our website www.philips.com/support.

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

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

19.1 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.

Secure the TV from falling over

Always use the supplied wall bracket to secure the TV from falling over. Mount the bracket and secure the TV onto the bracket, even if you put the TV on the floor.

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

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.

Risk of injury to children

Follow these precautions to prevent the TV from toppling over and causing injury to children:

- Never place the TV on a surface covered by a cloth or other material that can be pulled away.
- Ensure that no part of the TV hangs over the edge of the mounting surface.
- Never place the TV on tall furniture, such as a bookcase, without anchoring both the furniture and TV to the wall or a suitable support.
- Teach children about the dangers of climbing on furniture to reach the TV.

Risk of swallowing batteries

The remote control may contain coin-type batteries which can easily be swallowed by small children. Keep these batteries out of reach of children at all times.

Risk of overheating

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

19.2 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. 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.
Terms of use, copyrights and licenses

20.1 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 are believed to be adequate for the intended use of the system.

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