

User Manual

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PHILIPS

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TV Tour

1.1

Ultra HD TV

This TV has an Ultra HD display. Its resolution is four times as much as normal HD displays. Ultra HD means 8 million pixels for the most refined and lifelike picture on TV.

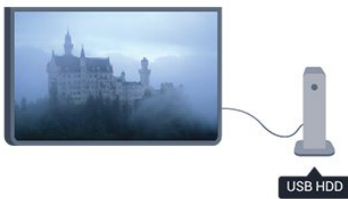
You can watch native Ultra HD videos through an HDMI connection. Ultra HD offers TV viewing that is crisp and sharp even on a big screen.



1.2

Pause TV and recordings

If you connect a USB Hard Drive, you can pause and record a broadcast from a digital TV channel.



Pause your TV and answer that urgent phone call or simply take a break during a sports match, while the TV stores the broadcast on the USB Hard Drive. You can start watching again later.

With a USB Hard Drive connected, you can also record digital broadcasts. You can record while you are watching a programme or schedule a recording of an upcoming programme.

1.3

EasyLink

With EasyLink you can operate a connected device, like a Blu-ray Disc player, with the remote control of the TV.

EasyLink uses HDMI CEC to communicate with the connected devices.

Setting up

2.1

Read safety

Read the safety instructions first before you use the TV.

In Help, go to **Safety and care > Safety**.

2.2

TV stand and wall mounting

TV stand

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

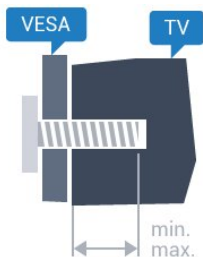
Use the product type number of the TV to look for the Quick Start Guide to download.

Wall mounting

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

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

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



- 43PUx4900 - VESA MIS-F 200x200, M6 (Minimum 10 mm, Maximum 15 mm)
- 49PUx4900 - VESA MIS-F 400x200, M6 (Minimum 10 mm, Maximum 15 mm)
- 55PUx4900 - VESA MIS-F 400x200, M6 (Minimum 10 mm, Maximum 15 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.

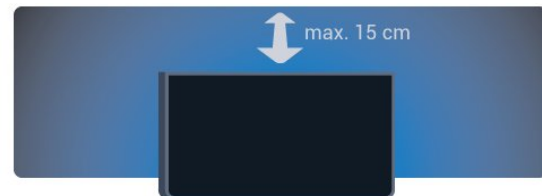
TP Vision Europe B.V. bears no responsibility for improper mounting or any mounting that results in

accident or injury.

2.3

Tips on placement

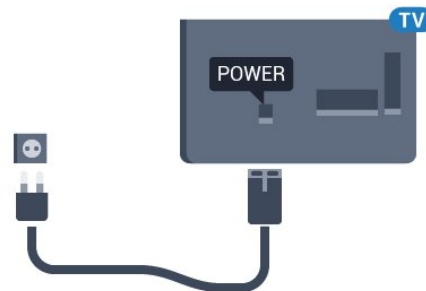
- Position the TV where light does not shine directly on the screen.
- Position the TV up to 15 cm away from the wall.
- The ideal distance to watch TV is 3 times its diagonal screen size. When seated, your eyes should be level with the centre of the screen.



2.4

Power cable

- Insert the power cable into the **POWER** connector on the back of the TV.
- Make sure the power cable is securely inserted in the connector.
- Make sure that the power plug, in the wall socket, is accessible at all times.
- When you unplug the power cable, always pull the plug, never pull the cable.



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

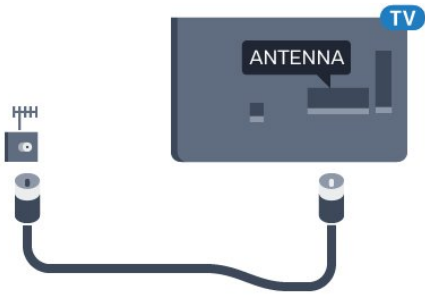
2.5

Antenna cable

Insert the antenna plug firmly into the **ANTENNA** socket at the 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.

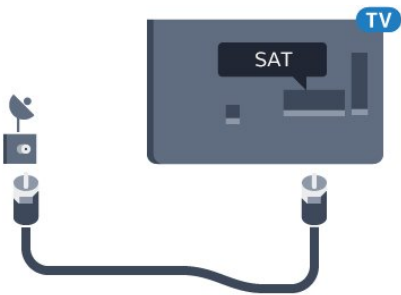


2.6

Satellite dish

- For PUK models

Attach the satellite F-type connector to the satellite connection **SAT** at the back of the TV.



Connect devices

About connections

Connectivity guide

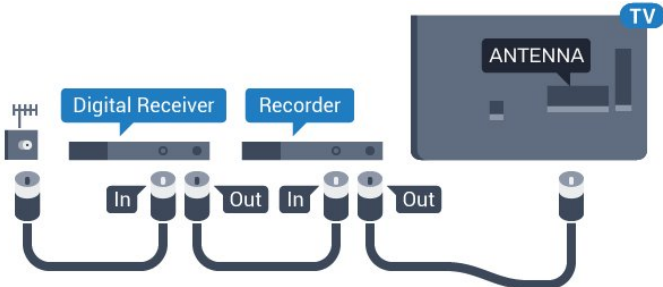
Always connect a device to the TV with the highest quality connection available. Also, use good quality cables to ensure a good transfer of picture and sound.

If you need help to connect several devices to the TV, you can visit the Philips TV connectivity guide. The guide offers information on how to connect and which cables to use.

Go to www.connectivityguide.philips.com

Antenna port

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

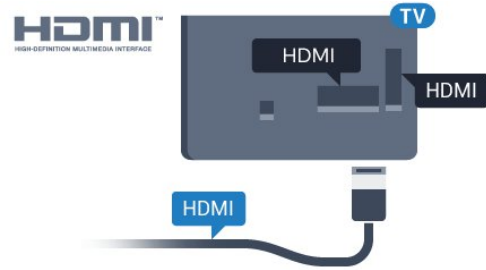


HDMI ports

HDMI quality

An HDMI connection has the best picture and sound quality. Use an HDMI cable for TV signal.

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



Copy protection

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

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

In case you prefer to switch off ARC on the HDMI connections, press **Home** and select **Setup** and press **OK**. Select **TV settings > Sound > Advanced > HDMI 1 - ARC**.

HDMI Ultra HD

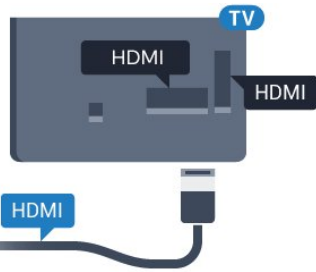
You can watch videos filmed or made in 'native' Ultra HD resolution - 3840x2160 pixels - on this TV.

Connect a Blu-ray Disc player, game console or computer that plays Ultra HD videos to one of HDMI connections. Use a High speed HDMI cable to connect. The HDMI UHD connections have ARC (Audio Return Channel).

HDMI CEC - EasyLink

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 **SOURCES**, 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 **HOME** 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 On or Off

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

To switch off EasyLink completely . . .

1. Press **HOME** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > EasyLink**.
3. Select **EasyLink**.
4. Select **Off** and press **OK**.
5. Press **BACK**, repeatedly if necessary, to close the menu.

EasyLink Remote Control

EasyLink Remote Control

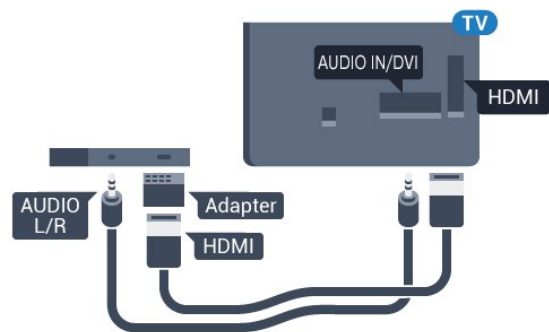
If you want devices to communicate but you don't want to operate them with the TV remote control, you can switch off EasyLink remote control separately. You can control multiple HDMI-CEC compliant devices with your TV remote control.

In the EasyLink settings menu, select **EasyLink Remote Control** and select **Off**.

DVI to HDMI

If you still own a device that only has a DVI connection, you can connect the device to any of the **HDMI** connection with a DVI to HDMI adapter.

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).

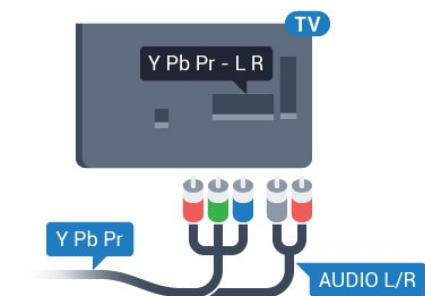
Y Pb Pr – Audio L R

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.

Match the YPbPr (green, blue, red) connector colours with the cable plugs when you connect.

Use an Audio L/R cinch cable if your device also has sound.

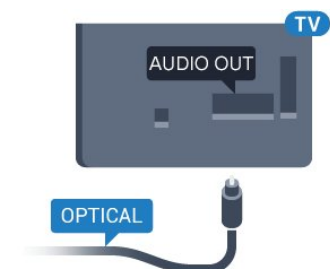


CVBS – Audio L R

CVBS – Composite Video is a high quality connection. Next to the CVBS signal adds the Audio Left and Right signals for sound.

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 synchronization.

3.2

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.

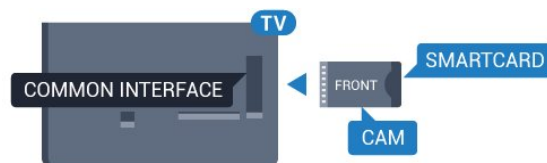
Contact a digital TV broadcaster for more information on terms and conditions.



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 to you, gently insert the CAM as far as it will go.

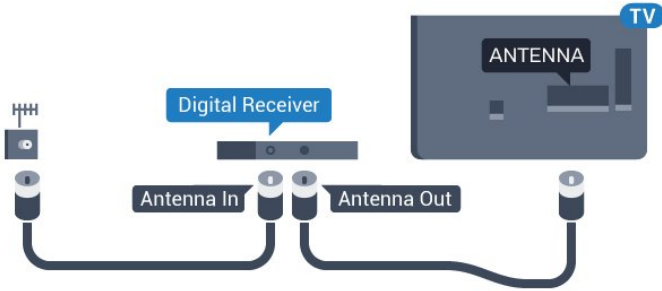
Leave the card in the slot permanently.

It may take a few minutes before the CAM is activated. Removing the CAM will deactivate the broadcast service on TV.

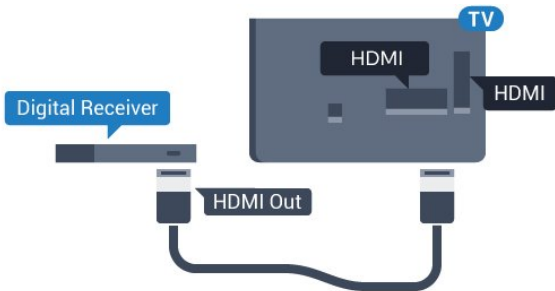
If a CAM is inserted and subscription fees are paid, (connection methods can differ), you can watch the TV broadcast. The inserted CAM is exclusively for your TV.

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.



Auto switch off

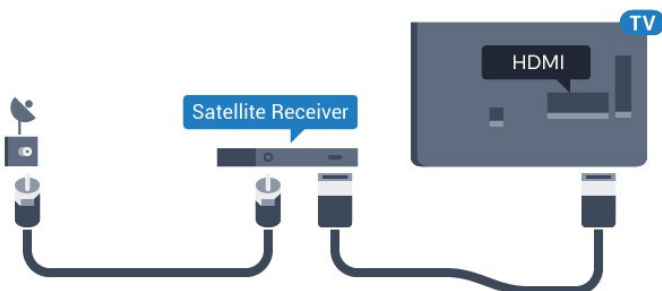
Switch off this automatic timer, if you only use the remote control of the Set-top box. Do this to prevent the TV from switching off automatically after a 4 hour period without a key press on the remote control of the TV.

To switch off the Switch off timer, press **Home** and select **Setup** and press **OK**. Select **TV settings > General settings > Switch off timer** and set the slider bar to **Off**.

Satellite receiver

Connect the dish antenna cable to the Satellite receiver.

Next to the antenna connection, add an HDMI cable to connect the device to the TV.



Auto switch off

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, press **Home** and select **Setup** and press **OK**. Select **TV settings > General settings > Switch off timer** and set the slider bar to **Off**.

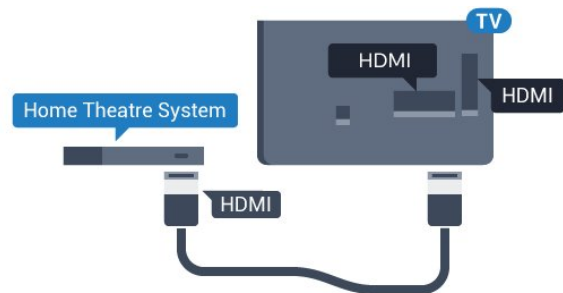
Home Theatre System - HTS

Connect with HDMI ARC

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

HDMI ARC

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



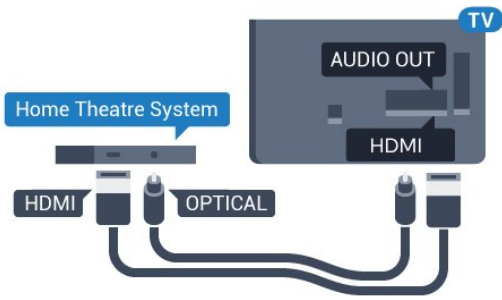
Audio to video synchronisation (sync)

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

Connect with HDMI

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

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



Audio to video synchronisation (sync)

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

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 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 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Audio out delay**.
3. Select **Off** and press **OK**.
4. Press **Back**, 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 the time necessary for the Home Theatre System to process the sound of the TV picture. You can set the value in steps of 1ms. Maximum setting is 12ms. The Audio out delay setting should be switched on.

To synchronise the sound on the TV . . .

1. Press **Home** 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 **Back**, 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Audio out format**.
3. Select **Multichannel** or **Stereo**.
4. Press **Back**, repeatedly if necessary, to close the menu.

Audio Out levelling

Use the Audio Out leveling 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Audio out leveling**.
3. If the volume difference is large, select **More**. If the volume difference is small, select **Less**. Press **Back**, repeatedly if necessary, to close the menu.

Audio Out leveling 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.

1. Press **Home** and select **Setup** and press **OK**.
2. Select **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 . . .

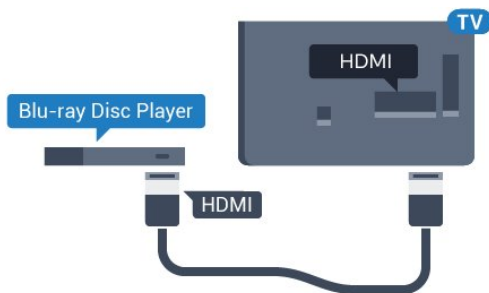
- Check if you connected the HDMI cable to a HDMI 1 connection on the Home Theatre System.
- Check if the HDMI ARC setting on the TV is switched On.

Go to **Home** > **Setup** > **TV settings** > **Sound** > **Advanced** > **HDMI 1-ARC**.

3.6

Blu-ray Disc player

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

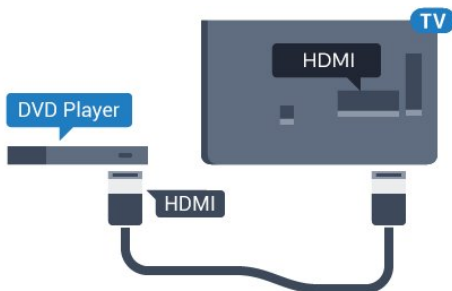


If the Blu-ray Disc player has EasyLink HDMI CEC, you can operate the player with the TV remote control.

3.7

DVD player

Use an HDMI cable to connect the DVD player to the TV.



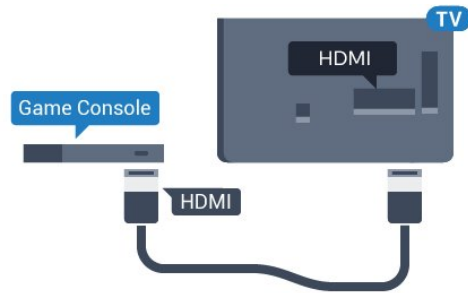
If the DVD player is connected with HDMI and has EasyLink CEC, you can operate the player with the TV remote control.

3.8

Game console

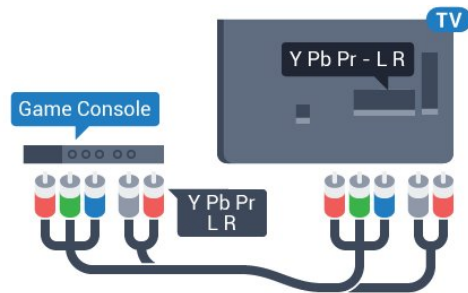
HDMI

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.



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.

Best Setting

Before you start playing a game from a connected game console, we advice you to set the TV in the ideal setting **Game**.

To set the TV to the ideal setting...

1. Press **Home** 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 **Back**, repeatedly if necessary, to close the menu.

USB Hard Drive

What you need

If you connect a USB Hard Drive, you can pause or record a TV broadcast. The TV broadcast must be a digital broadcast (DVB broadcast or similar).

To pause

To pause a broadcast, you need a USB 2.0 compatible Hard Drive with a minimum of 32GB disc space.

To record

To pause and record a broadcast, you need a minimum of 250GB disc space.

TV guide

Before you decide to buy a USB Hard Drive to record, you can check if you can record digital TV channels in your country.

Press **TV GUIDE** on the remote control. If there is a Record button on the TV guide page, you can record.

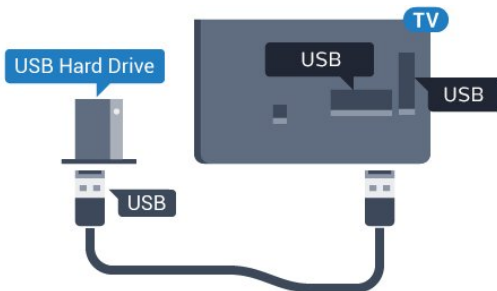
Installation

Before you can pause or record a broadcast, you must connect and format a USB Hard Drive.

1. Connect the USB Hard Drive to one of the **USB** connections on the TV. Do not connect another USB device to the other USB ports when formatting.
2. Switch on the USB Hard Drive and the TV.
3. When the TV is tuned to a digital TV channel, press **||** (Pause). Trying to pause will start the formatting.

Follow the instructions on screen.

When the USB Hard Drive is formatted, leave it connected permanently.



Warning

The USB Hard Drive is formatted exclusively for this TV, you cannot use the stored recordings on another TV or PC. Do not copy or change recording files on the USB Hard Drive with any PC application. This will

corrupt your recordings. When you format another USB Hard Drive, the content on the former will be lost. A USB Hard Drive installed on your TV will need reformatting for use with a computer.

Formatting

Before you can pause or record a broadcast, you must connect and format a USB Hard Drive. Formatting removes all files from the USB Hard Drive.

Warning

The USB Hard Drive is formatted exclusively for this TV, you cannot use the stored recordings on another TV or PC. Do not copy or change recording files on the USB Hard Drive with any PC application. This will corrupt your recordings. When you format another USB Hard Drive, the content on the former will be lost. A USB Hard Drive installed on your TV will need reformatting for use with a computer.

To format a USB Hard Drive...

1. Connect the USB Hard Drive to one of the **USB** connections on the TV. Do not connect another USB device to the other USB ports when formatting.
2. Switch on the USB Hard Drive and the TV.
3. When the TV is tuned to a digital TV channel, press **||** (Pause). Trying to pause will start the formatting. Follow the instructions on screen.

When the USB Hard Drive is formatted, leave it connected permanently.

USB flash drive

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

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



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

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

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

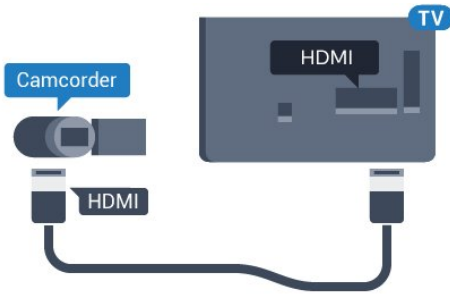
To disconnect the USB flash drive, you can pull out the flash drive anytime.

3.11

Camcorder

HDMI

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



CVBS - Audio L R

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

3.12

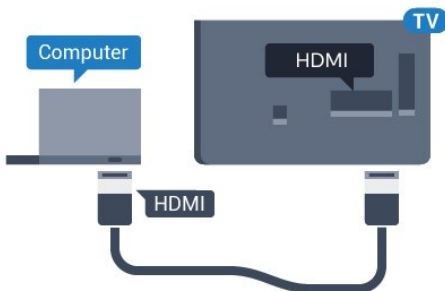
Computer

Connect

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

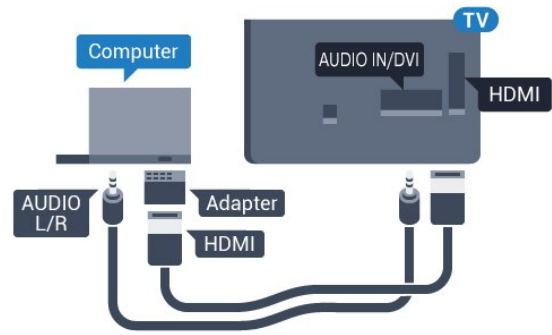
With HDMI

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.



Best Setting

Ideal monitor setting

If your computer is added as a Computer type of device in the Source menu (the list of connections), the TV is set to the ideal Computer setting automatically.

If you use your computer to watch movies or use it to play games, you might want to set the TV back to the ideal TV watching or gaming setting.


To set the TV to the ideal setting manually . . .

1. Press **Home** 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 **Back**, repeatedly if necessary, to close the menu.

Remember to set the Game or computer setting back to **Computer** when you stop playing the game.

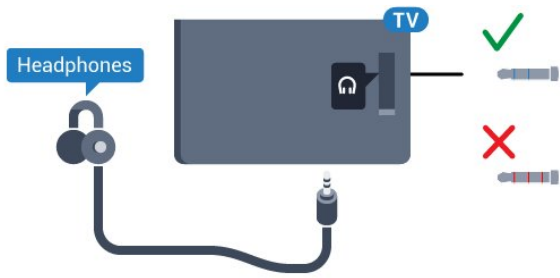
3.13

Headphones

You can connect a set of headphones to  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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Headphone volume** and press **OK**.
3. Press **Up** (up) or **Down** (down) to adjust the volume.
4. Press **Back**, repeatedly if necessary, to close the menu.



Switch on


4.1

On, Standby or Off

Before you switch on the TV, make sure you plugged in the mains power in the **POWER** connector on the back of the TV.

To put the TV in Standby when the indicator light is off, press the small joystick key on the back of the TV. The 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 key. The indicator light goes off. The TV is still connected to the mains power but consumes very little energy.




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

4.2

Keys on TV

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

To open the basic menu...

1. With the TV switched on, press the joystick key on the back of the TV to bring up the basic menu.
2. Press left or right to select  Volume,  Channel or  Sources.
3. Press up or down to adjust the volume or tune to the next or previous channel. Press up or down to go through the list of sources, including the tuner selection.
4. The menu will disappear automatically.

To switch the TV off, select  and press the joystick

key.




4.3


Sleep timer

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  and select **Setup** and press **OK**.
2. Select **TV settings** > **General settings** > **Sleep timer**.

With the slider bar you can set the time to up to 180 minutes in increments of 5 minutes. If set to 0 minutes, the sleep timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.

3. Press , repeatedly if necessary, to close the menu.





4.4

Switch Off Timer

If the TV receives a TV signal but you don't press a key on the remote control during a 4 hour period, the TV switches off automatically to save energy. Also, if the TV does not receive a TV signal nor a remote control command for 10 minutes, the TV switches off automatically.

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

To deactivate the Switch Off Timer ...

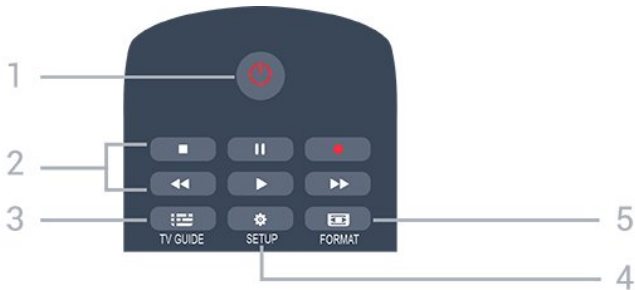
1. Press  and select **Setup** and press **OK**.
2. Select **TV settings** > **General settings** > **Switch off timer**.
3. Press  (up) or  (down) to adjust the value. The value **0** deactivates the automatic switch off.
4. Press , repeatedly if necessary, to close the menu.

Remote control

5.1

Key overview

Top



1. Standby / On

To switch the TV on or back to Standby.

2. Playback keys

- Play , to playback
- Pause , to pause playback
- Stop , to stop playback
- Rewind , to rewind
- Fast forward , to go fast forward
- Record , to record now

3. TV GUIDE

To open or close the TV Guide.

4. SETUP

To open the Settings menu.

5. FORMAT

To open or close the Picture format menu.

Middle



1. SOURCES

To open or close the Sources menu - the list of

connected devices.

2. Colour keys

The buttons function follow the on-screen instructions.

3. INFO

To open or close programme information.

4. BACK

To switch back to the previous channel you selected.
To close a menu without changing a setting.

5. HOME

To open or close the home menu.

6. TV EXIT

To switch back to watching TV.

7. OPTIONS

To open or close the Options menu.

8. OK key

To confirm a selection or setting.

9. Arrow / navigation keys

To navigate up, down, left or right.

10. LIST

To open or close the channel list.

Bottom



1. Volume

To adjust the volume level.

2. Number keys and text keypad

To select a TV channel directly or to enter text.

3. SUBTITLE

To switch subtitles on, off or Automatic.

4. Channel

To switch to the next or previous channel in the channel list. To open the next or previous page in Text/Teletext. To start the next or previous chapter on a disc.

5. Mute

To mute the sound or to restore it.

6. TEXT

To open or close Text / Teletext.

5.2

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.

5.3

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 batteries. Make sure the + and the - ends of the batteries line up correctly.
3. Reposition the battery door.
4. 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.

5.4

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.

TV channels

Channel Lists

About channel lists

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

There is a channel list with all installed channels. You can only filter this list to show TV or only Radio channels.

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

Channel icons

After an Automatic Channel Update of the channel list, newly found channels are marked with a ★ (star).

If you lock a channel, it will be marked with a 🔒 (lock).

The 3 most popular channels being watched by others at this moment are marked with a 1, 2 or 3.

Radio stations

If digital broadcasting is available, digital radio stations are installed during installation. Switch to a radio channel just like you switch to a TV channel. A Cable (DVB-C) channel installation usually places radio stations from channel number 1001 onwards.

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

Open a channel list

To open the current channel list...

1. Press **TV**, to switch to TV.
2. Press **≡ LIST** to open the current channel list.
3. Press **≡ LIST** again to close the channel list.

Filter a channel list

You can filter a list with all channels. You can set the channel list to show only TV channels or only Radio stations.

To set a filter on a list with all channels...

1. While watching a TV channel, press **≡ LIST** to open the channel list.
2. Press **≡ OPTIONS** to open Option menu.
3. Select **List**, then you can select **All**, **Favourites**, **Radio**, and **New channels**.

Watching TV channels

Watching channels

Tune to a channel

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

Switch channels

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

Previous channel

- To switch back to the previously tuned channel, press **↶**.

Channel list

While watching a TV channel, press **≡ LIST** to open the channel lists.

The channel list can have several pages with channels. To view the next or previous page, press **⏏ +** or **⏏ -**.

To close the channel lists without switching channel, press **≡ LIST** again.

Radio channels

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

Lock a channel

Lock and unlock a channel

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

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. While watching a TV channel, press **≡ LIST** to open the **Channel list**.
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 **🔒**.

To unlock a channel, select the locked channel in the channel list, press **≡ OPTIONS** , then 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. Press **🏠** and select **Setup** and press **OK**.
2. Select **Channel settings > Child lock > Parental rating** and press **OK**.
3. Enter a 4-digit Child lock code. 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.
6. 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. Press **🏠** and select **Setup** and press **OK**.
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?

To override and enter a new child lock code in case you forget it, enter **8888**.

Channel options

Open options

While watching a channel, you can set some options.

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

To open the options menu...

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

Subtitles and subtitle language

Switch On

To switch on Subtitles, press **SUBTITLE**.

You can set subtitles to **Subtitles off**, **Subtitles on**, or **Automatic**.

Automatic

If language information is part of the digital broadcast and the broadcasted programme is not in your language (the language set on TV), the TV can show subtitles automatically in one of your preferred subtitle languages. One of these subtitle languages must also be part of the broadcast.

You can select your preferred subtitle languages in **Subtitle Language**.

Preferred subtitle languages

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 **🏠** and select **Setup** and press **OK**.
2. Select **Channel settings** and select **Languages**.
3. Select **Primary subtitle language** or **Secondary subtitle language** and press **OK**.
4. Select a language and press **OK**.
5. Press **↩**, repeatedly if necessary, to close the menu.

Select a subtitle language

If none of the preferred subtitle languages are available, you can select another subtitle language if available. If no subtitle languages are available, you cannot select this option.

To select a subtitle language when none of your preferred languages are available...

1. Press **≡** **OPTIONS**.
2. Select **Subtitle language** and select one of the languages as subtitles temporarily.

Subtitles for analogue channels

For analogue channels, you need to make the subtitles available for each channel manually.

1. Switch to a channel and press **TEXT** to open Text.
2. Enter the page number for subtitles, usually **888**.
3. Press **TEXT** again, to close Text.

If you select On in the Subtitle menu when watching this analogue channel, subtitles will be shown if available.

To know if a channel is analogue or digital, switch to the channel and open **Status** in the **Options** menu.

Audio language

Preferred audio language

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

If none of the preferred audio languages is available, you can select another audio language which is available.

To set the primary and secondary audio language ...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **Channel settings** and select **Languages**.
3. Select **Primary audio language** or **Secondary audio language** and press **OK**.
4. Select a language and press **OK**.
5. Press **↩**, repeatedly if necessary, to close the menu.

Select an audio language

To select an audio language when none of your preferred audio language is available ...

1. Press **≡** **OPTIONS**.
2. Select **Audio language** and select an audio 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.

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.

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.

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.



Favourite channels

About 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 a favourites list

1. While watching a TV channel, press **≡** **LIST** to open the channel list.
2. Select **All** to view all channels.
3. Select the channel, and press **■** (yellow) 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  (yellow) again to unmark as favourite.


Reorder channels

You can only reorder channels in the Favourites list.

1. In the channel list **Favourites**, highlight the channel you want to reposition.
2. Press  (green).
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  **EXIT** to exit from the Favourite channel list.

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. Press  (red).
3. You can enter text with the the on-screen keyboard.

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.

To open T.O.P. Text pages within Text, press  **OPTIONS** and select **T.O.P. overview**.

Favourite pages

The TV makes a list of the last 10 Text pages you opened. You can easily reopen them again in the


Favourite Text pages column.

1. In Text, select the star in the top left corner of the screen to show the column of favourite pages.
2. Press  (down) or  (up) to select a page number and press **OK** to open the page.

You can clear the list with the option **Clear favourite pages**.

Search Text






You can select a word and scan Text for all occurrences of this word.

1. Open a Text page and press **OK**.
2. Select a word or number with the arrow keys.
3. Press **OK** again to jump immediately to the next occurrence of this word or number.
4. Press **OK** again to jump to the subsequent occurrence.
5. To stop searching, press  (up) until nothing is selected.

Text from a connected device

Some devices that receive TV channels can also offer Text.

To open Text from a connected device . . .

1. Press , select the device and press **OK**.
2. While watching a channel on the device, press  **OPTIONS**, select **Show device keys** and select the  key and press **OK**.
3. Press  to hide the device keys.
4. To close Text, press  again.

Digital Text (UK only)

Some digital broadcasters offer dedicated Digital Text or interactive TV on their digital TV channels. This includes normal Text using the number, colour and arrow keys to select and navigate.

To close Digital Text, press .

Text options

In Text, press  **OPTIONS** to select the following . . .

- **Freeze page / Unfreeze 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 / Normal view**

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. Press **⬆** and select **Setup** and press **OK**.
2. Select **Channel settings > Languages**.
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**.
4. Press **⬅**, repeatedly if necessary, to close the menu.

6.3

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. Press **⬆** and select **Setup** and press **OK**.
3. Select **TV settings > General settings > Copy channel list > 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

To not Installed TVs

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

To a TV that is not yet installed

1. Plug in the power plug to start the installation and select language and country. You can skip 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 > Copy channel list > 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 Installed TVs

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

To an already installed TV

1. Verify the country setting of the TV. (To verify this setting, press **⬆** and select **Setup** and press **OK**. Select **Search for channels > Reinstall 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 > Re-install 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 > Copy channel list > 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.

Channel installation

- Antenna, Cable

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. 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. Press **⬆** and select **Setup** and press **OK**.
2. Select **Channel settings** and press **OK**.
3. Select **Channel installation > Automatic channel update > Off**.

Start an update

To start an update yourself . . .

1. Press **⬆** and select **Setup** and press **OK**.
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

Reinstall All Channels

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

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

To reinstall channels...

1. Press **⬆** and select **Setup** and press **OK**.
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.

Reinstall TV

You can redo a full TV installation. The TV is completely reinstalled.

To redo a full TV installation...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Reinstall TV** and press **OK**. The installation may take a few minutes. Follow the instructions on screen.

DVB-T or DVB-C

DVB-T or DVB-C reception

DVB Settings

Access DVB settings

1. Press **⬆** and select **Setup** and press **OK**.
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.

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.

Network frequency

With **Frequency scan** set to **Quick** or **Advanced**, you can enter here the network frequency value received from your cable provider. 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.

Network ID

With **Frequency scan** set to **Quick**, you can enter here the network ID value received from your cable provider. 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

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

To check the reception quality of a digital channel...

1. Tune to the channel.
 2. Press **▲** and select **Setup** and press **OK**.
 3. Select **Channel settings** and press **OK**.
 4. Select **Channel installation > Digital: Reception Test** and press **OK**.
 5. Select **Search** and press **OK**. The digital frequency is shown for this channel.
 6. Select **Search again** and press **OK** to check the signal quality of this frequency. The test result is shown on screen. You can reposition the antenna or check the connections to possibly improve the reception.
 7. You can also change the frequency yourself. Select the frequency number one by one and use the **▲** (up) or **▼** (down) keys to change the value. Select **Search** and press **OK** to test the reception again.
-

7.4

Manual Installation

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

To install analogue channels manually . . .

1. Press **▲** and select **Setup** and press **OK**.
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**

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 found all available analogue TV channels.

Channel installation - Satellite (For PxK models)

8.1

Watching satellite channels

To watch satellite channels . . .

Press **▲** and select **Satellite** and press **OK**. The TV tunes to the satellite channel you last watched.

Change channel

To change channels, press **⏮** + or **⏭** -. The TV will tune to the next channel in the selected channel list. If you know the channel number, you can use the number keys on the remote control. To change back to the previously tuned channel, press **↶**.

You can also tune to a channel directly from the Satellite channel list.

8.2

Satellite channel list

About the channel list

When the satellite installation is completed, all satellite channels are put in the channel list. You can view the list of all channels or filter the list down to show the favourite channels only or the radio stations only. Or, after a channel update, you can find the newly added channels in the list of new channels.

From any list, you can directly tune to a channel. The list you select in the channel list, determines the channels you tune to with the **⏮** + and **⏭** - keys. You can only reorder channels in the list of favourite channels.

Select a list filter

The list you select in the channel list, determines the channels you tune to with the **⏮** + and **⏭** - keys.

To select a channel list . . .

1. Press **▲** and select **Satellite** and press **OK**.
2. Press **≡** LIST to open the channel list. The list appears with the current channel selected.
3. Navigate up to select **All** or a list filter **Favourites**, **Radio**, **TV** or **New**.

Channel list options

To view the channel list options on the current channel . . .

1. With the All channels list on screen, select a channel and press **≡** OPTIONS .
2. Select the option you want and press **OK**.

Available options for satellite channels . . .

- Satellite

Filter the channel list to only show the channels of a specific satellite or show the channels of all satellites.

- Free/Scrambled

Filter the channel list to only show the free-to-air channels, only the scrambled channels or both. Scrambled channels are marked with a key **🔑**.

- Lock

You can lock a channel. First select a channel in the list, press **≡** OPTIONS and select **Lock**. You will have to enter the 4-digit child lock code. A locked channel is marked with a lock **🔒**.

- Unlock

To unlock a locked channel. Select a locked channel in the list, press **≡** OPTIONS and and select **Unlock**. You will have to enter the 4-digit child lock code.

8.3

Favourite satellite channels

Favourite channels

You can mark channels as favourite channels. Your favourite satellite channels are collected in the **Favourites** list of the satellite channel list.

Watching favourite channels

Set up a favourite channel list to easily switch between the channels you want to watch. Only in this list, you can reorder channels according to your preference.

To only switch between your favourite channels with **⏮** + and **⏭** -, select the **Favourites** list in the channel list and close the channel list again.

There are two favourite lists, one for TV channels and one for satellite channels.

Set up your favourites list

To compose a list of your favourite channels . . .

1. While watching a channel, press **≡** LIST to open the channel list.
2. Select the **Favourites** list.
3. The TV will ask you to start adding channels

immediately. Press **OK**. To avoid a lot of reordering later, select the channels in the order you want them in the list.

4. To add a channel to the Favourites list, select the channel and press **OK**. You can then select another channel to add as a favourite.

5. To finish, press **↩**.

Add or remove favourite channels

To add or remove favourites list . . .

1. While watching a TV channel, press **≡ LIST** to open the channel list.
2. Select the channel to mark as favourite and press **≡ OPTIONS**.
3. Select **Add favourites** and press **OK**. The selected channel is marked with a **♥**.
4. To finish, press **↩**. The channels are added to the Favourites list.

To remove a channel from the favourites list, select **Remove favourites** and press **OK**.

Reorder favourite channels

You can only reorder channels in the Favourites list.

1. In the channel list **Favourites**, highlight the channel you want to reposition.
2. Press **■** (green).
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**.

8.4

Lock satellite channels

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. While watching a TV channel, press **≡ LIST** to open the **Channel list**.
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 **🔒**.

To unlock a channel, select the locked channel in the channel list and select the **Unlock channel** option.

You will need to enter the Child lock code.

Use an age 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. Press **🏠** and select **Setup** and press **OK**.
2. Select **Satellite settings > Child lock > Parental rating** and press **OK**.
3. Enter a 4-digit Child lock code. If you did not set a code yet, select **Set code** and press **OK**. 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.
6. 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.

Child lock code

You can set or change the Child lock code.

To set the lock code or to change the current code . . .

1. Press **🏠** and select **Setup** and press **OK**.
2. Select **Satellite settings > Child lock > Set code** or **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 Child lock code?

If you forgot your code, you can override the current code and enter a new code.

1. Press **🏠** and select **Setup** and press **OK**.
2. Select **Satellite settings > Child lock > Change code** and press **OK**.
3. Enter the overriding code **8888**.
4. Now enter a new Child lock code and enter it again to confirm.

Satellite installation

About installing satellites

This TV has a built-in satellite DVB-S/DVB-S2 receiver. Connect the cable from your satellite dish directly to the TV. Use a coaxial cable fit for connecting a satellite antenna dish. Make sure your satellite dish is perfectly aligned before you start the installation.

Up to 4 satellites

You can install up to 4 satellites (4 LNBs) on this TV. Select the exact number of satellites you wish to install at the start of the installation. This will speed up the installation.

Unicable

You can use a Unicable system to connect the antenna dish to the TV. Select if you are installing satellites for a Unicable system, for 1 or for 2 satellites at the start of the installation.

Start the installation

You can install your satellites during the initial TV setup. If you only watch satellite channels, you can skip the TV channel installation.

You can always start a new satellite installation from the Setup menu.

To install satellite channels . . .

1. Press **▲** and select **Setup** and press **OK**.
2. Select **Search for satellite** and press **OK**.
3. Select **Install satellites** and press **OK**.
4. The TV shows the current installation setting. If the current setting corresponds with the satellite installation you want, you can start searching for satellites. Select **Search** and press **OK**. Go to step 5. If the current setting is not the setting you want, select **Settings** and press **OK**. Go to step 4b.

4b - In the Settings menu, select the exact number of satellites you want to install. Or, if you use a Unicable setup, select **Unicable for 1 satellite** or **Unicable for 2 satellites** according the number of satellites you want to install for Unicable. Select the setting you want and press **OK**.

4c - If the exact number of satellites is set or you completed the Unicable settings, select **Search** and press **OK**.

5. The TV will search for satellites available on the alignment of your antenna dish. This may take a few minutes. If a satellite is found, its name and reception strength are shown on screen. If a channel package is available for any of the satellites found, you can

select the package you want.

6. To install the channels of the satellites found, select **Install** and press **OK**. The TV shows the number of channels and radio stations found.

7. To store the satellite settings, all satellite channels and satellite radio stations, select **Finish** and press **OK**.

Satellite installation settings

The satellite installation settings are preset according your country. These settings determine how the TV searches and installs satellites and its channels. You can always change these settings.

To change the satellite installation settings...

1. Start the satellite installation.
2. On the screen where you can start searching for satellites, select **Settings** and press **OK**.
3. Select the number of satellites you want to install or select one of the Unicable systems. When you select Unicable, you can choose the User Band Numbers and enter the User Band Frequencies for each tuner.
4. When you're done, select **Next** and press **OK**.
5. On the Settings menu, press the colour key **■ Done** to return to the screen to start searching for satellites.

Homing Transponder and LNB

In some countries, you can adjust the expert settings for homing transponder and each LNB. Only use or change these settings when a normal installation fails. If you have non-standard satellite equipment, you can use these settings to overrule the standard settings. Some providers might give you some transponder or LNB values which you can enter here.

Channel Packages

Satellite operator can offer channel packages that bundle free channels (free-to-air) and offer a sorting that suits a country. Some satellites offer subscription packages - a collection of channels you pay for.

If you choose a subscription package, the TV might ask you to select a Quick or Full installation. Select **Satellite operator channels only** to install the channels of the package only or select **All satellite channels** to install the package and all other available channels too. We recommend a Quick installation for subscription packages. If you have additional satellites that are not part of your subscription package, we recommend a Full installation. All installed channels are put in the channels list All.

If you choose a subscription package, the TV might

ask you to select a Quick or Full installation. Select **Quick** to install the channels of the package only or select **Full** to install the package and all other available channels too. We recommend a Quick installation for subscription packages. If you have additional satellites that are not part of your subscription package, we recommend a Full installation. All installed channels are put in the channels list All.

Unicable setup

The Unicable system

You can use a Unicable system to connect the antenna dish to the TV. A Unicable system uses one cable to connect the satellite dish to all satellite receivers in its system. Unicable is typically used in apartment buildings. If you use a Unicable system, the TV will ask you to assign a user band number and corresponding frequency during the installation. You can install 1 or 2 satellites with Unicable on this TV.

If you notice some missing channels after a Unicable installation, another installation might have been done at the same moment on the Unicable system. Do the installation again to install the missing channels.

User band number

In a Unicable system, each connected satellite receiver must be numbered (e.g. 0, 1, 2 or 3 etc.).

You can find the available user bands and their number on the Unicable switchbox. User band is sometimes shortened as UB. There are Unicable switchboxes that offer 4 or 8 user bands. If you select Unicable in the settings, the TV will ask you to assign the unique user band number for its built-in satellite receiver. A satellite receiver cannot have the same user band number as another satellite receiver in the Unicable system.

User band frequency

Next to the unique user band number, the built-in satellite receiver needs the frequency of the selected user band number. These frequencies are mostly shown next to the user band number on a Unicable switchbox.

Automatic channel 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. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Channel installation** > **Channel update message** > **Off**.

To switch off the Automatic channel update . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Channel installation** > **Automatic channel update** > **Off**.

Start an update

To start an update yourself . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Search for satellite** 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.

Manual channel update

You can set the TV to only update the channels of a specific satellite.

To mark satellites for updating...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Channel installation** > **Automatic update option** and press **OK**.
4. In the list of satellites, select a satellite and press **OK** to mark or unmark.

In certain countries, the automatic channel update is done while watching TV or on any moment when the TV is in Standby.

Add a satellite

You can add an additional satellite to your current satellite installation. The installed satellites and their channels stay untouched. However, some satellite operators do not allow adding a satellite.

The additional satellite should be seen as an extra, it is not your main satellite subscription or not the main satellite of which you use its channel package.

Typically, you would add a 4th satellite when you have 3 satellites already installed. If you have 4 satellites installed, you might consider removing one first to be able to add a new satellite.

Settings

If you currently have only 1 or 2 satellites installed, the current installation settings might not allow adding an extra satellite. If you need to change the installation settings, you must redo the complete satellite installation. You cannot use **Add satellite** if a change of settings is needed.

To add a satellite . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Search for satellite** and press **OK**.
3. Select **Add satellite** and press **OK**. The current satellites are shown.
4. Select **Add** and press **OK**. The TV will search for new satellites.
5. If the TV has found one or more satellites, select **Install** and press **OK**. The TV installs the channels of the found satellites.
6. To store the channels and radio stations, select **Finish** and press **OK**.

Remove a satellite

You can remove one or more satellites from your current satellite installation. You remove the satellite and its channels. However, some satellite operators do not allow removing a satellite.

To remove satellites . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Search for satellite** and press **OK**.
3. Select **Remove satellite** and press **OK**. The current satellites are shown.
4. Use the arrows keys to select the satellite you want to remove.
5. Press **OK** to mark a satellite to remove. Press **OK** again to unmark.
6. Select **Remove**, press **OK** and confirm. The satellites are removed.
7. Select **Exit** and press **OK** to close Remove satellite.

Manual Installation

Manual Installation is intended for expert users.

You can use Manual Installation to quickly add new channels from a satellite transponder. You need to know the frequency and polarization of the transponder. The TV will install all channels of that transponder. If the transponder was installed before, all its channels - the former and the new ones - are moved to the end of the channel list All.

You cannot use Manual installation if you need to change the number of satellites. If this is needed, you have to do a complete installation with **Install Satellites**.

To install a transponder...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Channel installation > Manual installation** and press **OK**.
4. If you have more than 1 satellite installed, select **LNB** for which you want to add channels.
5. Set the **Polarisation** you need. If you set the **Symbol Rate Mode** to **Manual**, you can enter the symbol rate in **Symbol Rate** manually.
6. Press the arrows **▲** (up) or **▼** (down) to adjust the frequency, and select **Done**.
7. Select **Search** and press **OK**. The signal strength is shown on screen.
8. If you want to store the channels of a new transponder, select **Store** and press **OK**.

Languages and audio

Preferred languages and subtitles

Satellite channels can hold different audio languages, subtitle languages or Text languages. You can set the TV to automatically switch to the language, subtitle language or Text language you prefer, if this language is available on the channel or Text pages.

To set the your preferred language . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Languages** and press **OK**. Select the setting you want.
4. Press **Back**, repeatedly if necessary, to close the menu.

Audio description

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 **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings > Languages > Audio description > Speakers / Headphones** and press **OK**.
3. Select **Speakers, Headphones or Speakers + headphones** and press **OK**.
4. Press **Left Arrow**, repeatedly if necessary, to close the menu.

Audio effect

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

To switch on Audio effects (if available) . . .

1. Press **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings > Languages > Audio description > Audio effects** and press **OK**.
3. Select **On or Off** and press **OK**.
4. Press **Left Arrow**, 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 **Home** and select **Setup** and press **OK**.
2. Select **Satellite settings > Languages > Audio description > Speech** and press **OK**.
3. Select **Descriptive (audio) or Subtitles** and press **OK**.
4. Press **Left Arrow**, repeatedly if necessary, to close the menu.

8.6

Problems with satellites

The TV cannot find the satellites I want or the TV installs the same satellite twice

- Make sure that the correct number of satellites is set in Settings at the start of the installation. You can set the TV to search for One, Two or 3/4 satellites.

A dual head LNB cannot find a second satellite

- If the TV finds one satellite but cannot find a second one, turn the dish a few degrees. Align the dish to get the strongest signal on the first satellite. Check the signal strength indicator of the first satellite on screen. With the first satellite set at the strongest signal, select Search again to find the second satellite. • Make sure the settings are set to Two satellites.

Changing the installation settings did not solve my problem

- All settings, satellites and channels are only stored at the end of the installation when you finish.

All satellite channels are gone

- If you use a Unicable system, make sure you assigned a unique user band number to the satellite receiver in the Unicable settings. It might be that another satellite receiver is using the same user band number.

Some satellite channels seem to have disappeared from the channel list

- If some channels seem to be gone or displaced, the broadcaster might have changed the transponder location of these channels. To restore the channel positions in the channel list, you can try an update of the channel package.

I cannot remove a satellite

- Subscription packages do not allow removing a satellite. To remove the satellite, you have to do a complete installation again and select another package.

Sometimes the reception is poor

- Check if the satellite dish is solidly mounted. Strong winds can move the dish.
- Snow and rain can degrade the reception.

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  TV GUIDE.

Press  TV 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  + to view the schedule of one of the next days. Press  - 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 a reminder for a programme. A message will alert you at the start of the programme. You can tune to this channel immediately.

In the TV Guide a programme with a reminder is marked with a  (clock).

To set a reminder...

1. Press  TV GUIDE and select an upcoming programme.
2. Press  OPTIONS.
3. Select **Set reminder** and press OK.

To clear a reminder...

1. Press  TV GUIDE and select a programme with the reminder.
2. Press  OPTIONS.
3. Select **Clear reminder** and press OK.

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.




List of reminders

You can view a list of the reminders you have set.

List of Reminders


To open the list of reminders...



1. Press  TV GUIDE.
2. Press the colour key  Recordings .

3. At the top of the screen, select  **Scheduled** and press **OK**.
4. In the list of scheduled recordings and reminders, select the tab **Reminders** and press **OK** to view the reminders only.
5. Press the colour key  **Remove** to remove the selected reminder. Press the colour key  **Record** to record the selected programme.



Set a Recording

You can set a recording in the TV Guide*.



In the TV Guide, a programme set to be recorded is marked with .

To see the recording list, press  **Recordings**, a programme set to be recorded is marked with a  (red dot) on the front of the programme name.

To record a programme...

1. Press  **TV GUIDE** and select a future or ongoing programme.
2. Press the colour key  **Record**.

To cancel a recording...

1. Press  **TV GUIDE** and select the programme set for recording.
2. Press the colour key  **Clear Recording**.

Recording and pause TV

Recording

What you need

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

To record a TV programme you need...

- a connected USB Hard Drive formatted on this TV
- digital TV channels installed on this TV
- to receive channel information for the on screen TV Guide
- a reliable TV clock setting. If you reset the TV clock manually, recordings may fail.

You cannot record when you are using Pause TV.

In terms enforcement of copyright legislation, some DVB providers can apply different restriction by means of DRM (Digital Right Management) technology. In case of broadcasting protected channels, recording, record validity or number of views may be restricted. Recording may be completely prohibited. In case of trying to record a protected broadcasting or play back an expired recording, , an error message can appear.

Record a programme

Record now

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

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

When TV Guide data is available, the programme you are watching will be recorded from the moment you pressed the recording key until the programme ends. If no TV Guide data is available, the recording will only last 30 minutes. You can adjust the end time of the recording in the list of **Recordings**.

Schedule a recording

You can schedule a recording of an upcoming programme for today or a few days from today (maximum of 8 days away). The TV will use the data from the TV Guide to start and end the recording.

To record a programme...

1. Press **≡** TV GUIDE.
2. On the TV Guide, select the channel and programme you wish to record. Press **▶** (right) or **◀** (left) to scroll through the programmes of a channel. Use the colour key **■** Day to select the day you need.
3. With the programme highlighted, press the colour key **■** Record . The programme is scheduled for recording. A warning will show automatically when overlapping recordings are scheduled. If you plan to record a programme in your absence, remember to leave the TV switched to Standby and the USB Hard Drive switched on.

List of recordings

You can view and manage your recordings in the list of recordings. Next to the list of recordings, there is a separate list for scheduled recordings and reminders.

To open the list or recordings...

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

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

When a scheduled recording was prevented by the broadcaster or when the broadcast was interrupted, a recording is marked as **Failed**.

Recording Conflicts

When two scheduled recordings are overlapping in time, there is a recording conflict. To solve a recording conflict, you can adjust the start and end time of one or both scheduled recordings.

To adjust the start or end time of a scheduled recording...

1. Press **≡** TV GUIDE.
2. Press the colour key **■** Recordings .
3. At the top of the screen, select **⌚** Scheduled and press **OK**.
4. In the list of scheduled recordings and reminders, select the tab **Recordings** and press **OK** to view the scheduled recordings only.
5. Select the scheduled recording that conflicts with another scheduled recording and press the colour

key **Adjust Time** .
6. Select the start or end time and change the time with the **▲** (up) or **▼** (down) keys.
Select **Apply** and press **OK**.

Manual Recording

You can schedule a recording that is not linked to a TV programme. You set the tuner type, channel and the start and end time yourself.

To schedule a recording manually...

1. Press **TV GUIDE**.
2. Press the colour key **Recordings** .
3. At the top of the screen, select **Scheduled** and press **OK**.
4. Press **OPTIONS**, select **Schedule** and press **OK**.
5. Select the tuner from where you want to record and press **OK**.
6. Select the channel to record from and press **OK**.
7. Select the day of the recording and press **OK**.
8. Set the start and end time of the recording. Select a button and use the **▲** (up) or **▼** (down) keys to set the hours and minutes.
9. Select **Schedule** and press **OK** to schedule the manual recording.

The recording will appear in the list of scheduled recordings and reminders.

Watch a Recording

To watch a recording...

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

10.2

Pause TV

What you need

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

To pause a TV programme you need...

- a connected USB Hard Drive formatted on this TV
- digital TV channels installed on this TV
- to receive channel information for the on screen TV Guide

With the USB Hard Drive connected and formatted, the TV continuously stores the TV broadcast you are watching. When you switch to another channel, the broadcast of the former channel is cleared. Also when you switch the TV to standby the broadcast is cleared.

You cannot use Pause TV when you are recording.

Pause a programme

To pause and resume a broadcast...

To pause a broadcast, press **||** (Pause). A progress bar at the bottom of the screen appears briefly. To call up the progress bar, press **||** (Pause) again. To resume watching, press **▶** (Play).

With the progress bar on screen, press **◀◀** (Rewind) or press **▶▶** (Forward) to select from where you want to start viewing the paused broadcast. Press these keys repeatedly to change speed.

You can pause a broadcast for a maximum time span of 90 minutes.

To switch back to the live TV broadcast, press **■** (Stop).

Replay

Since the TV stores the broadcast you are watching, you can mostly replay the broadcast for a few seconds.

To replay a current broadcast...

1. Press **||** (Pause)
2. Press **◀◀** (Rewind). You can press **◀◀** repeatedly to select from where you want to start viewing the paused broadcast. Press these keys repeatedly to change speed. At one point you will reach the start of the broadcast storage or the maximum time span.
3. Press **▶** (Play) to watch the broadcast again.
4. Press **■** (Stop) to watch the broadcast live.



Sources

11.1

Switch to a device

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  SOURCES .
To switch to a connected device, select the device with the arrows ◀ (left) or ▶ (right) and press OK.
To close the Source menu without switching to a device, press  SOURCES again.

11.2


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  SOURCES on the TV remote control.

11.3

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.

Timers and clock

12.1

Sleep timer

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 **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Sleep timer**.

With the slider bar you can set the time to up to 180 minutes in increments of 5 minutes. If set to 0 minutes, the sleep timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.

3. Press **↵**, repeatedly if necessary, to close the menu.

12.2

Clock

To know what time it is, press **≡ TV GUIDE** to find the time in the TV guide.

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. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Clock > Auto clock mode** and select **Country dependent**.
3. Select **Daylight saving** and select the appropriate setting.

12.3

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. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Switch off timer** and set the slider bar to **0 (Off)**.

3. Press **↵**, repeatedly if necessary, to close the menu.

Videos, Photos and Music

13.1

From a USB connection

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

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

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

1. Press **SOURCES**, select **USB** and press **OK**.
2. Select **USB Devices** and press **▶** (right) to select the USB device you need.

You can browse your files in the folder structure you have organised on the drive.

To stop playing videos, photos and music, press **TV EXIT**.

Warning

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

13.2

Play your videos

Play videos

How you open the list of your media files on TV depends on the type of device where the files are stored. See the chapters above.

To play a video on TV...

Select **Videos**, and select the file name and press **OK**.

- To pause the video, press **OK**. Press **OK** again to continue.
- To rewind or go fast forward, press **▶▶** or **◀◀**. Press the keys several times to speed up - 2x, 4x, 8x, 16x, 32x.
- To jump to the next video in a folder, press **OK** to pause and select **▶** on screen and press **OK**.
- To stop the video playback, press **■** (Stop).
- To go back to the folder, press **◀**.

Progress Bar

To show the progress bar when a video is playing (playhead position, duration, title, date, etc.), press **INFO**. Press again to hide the info.

Video options

During the video playback, press **≡** **OPTIONS** to...

- Subtitles

Display the subtitles if available.

- Audio language

Play the audio language if available.

- Repeat, Play once

Play videos repeatedly or once.

- Shuffle on, Shuffle off

Play videos in sequence or at random.

- Show info

Display the file name.

- Subtitle settings

Set subtitle colour and position if available.

13.3

View your photos

View photos

How you open the list of your media files on TV depends on the type of device where the files are stored. See the chapters above.

To view all photos on TV...

Select **Photos**, and select **All** and press **OK**.

To view a photo on TV...

Select **Photos**, and select the file name and press **OK**.

To start a slide show on TV...

If there are several photos in a folder, you can start a slide show.

To start a slide show...

1. Select the folder with photos.
2. Press the colour key **Slide Show**.
 - To jump to the next or previous photo, press **▶** (right - next) or **◀** (left - previous).
 - To pause the slide show, press **OK**. To start again, press **OK** again.
 - To stop the slide show, press **OK** and press **◀**.

Info

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

Slideshow with music

You can watch a slideshow of your photos and listen to your music at the same time. You must start the music before you start the photo slideshow.

To play music with the slide show...

1. Select a song or a folder with songs and press **OK**.
2. Press **i** INFO to hide file info and progress bar.
3. Press **↩**.
4. Now use the navigation arrows to select the folder with photos.
5. Select the folder with photos and press **▶** Slide Show.
6. To stop the slideshow, press **↩**.

Photo options

With a photo on screen, press **≡** OPTIONS to...

- **Start slideshow, Stop slideshow**

Start or stop slideshow.

- **Slideshow transitions**

Set the transition from one picture to the next.

- **Slideshow frequency**

Select the display time for each photo.

- **Repeat, Play once**

View the pictures repeatedly or once only.

- **Shuffle off, Shuffle on**

View the pictures in sequential order, or at random.

- **Rotate image**

Rotate photo.

- **Show info**

Display the picture name, date, size and next picture in the slide show.

- **Stop music**

Stop the music playing in the background.

13.4

Play your music

Play music

How you open the list of your media files on TV depends on the type of device where the files are stored. See the chapters above.

To play a song on TV...

Select **🎵 Music**, and select the file name and press **OK**

If there are several songs in a folder, you can listen to them one after the other.

- To pause a song, press **OK**. Press **OK** again to continue.

- To rewind or go fast forward, press **▶▶** or **◀◀**. Press the keys several times to speed up - 2x, 4x, 8x, 16x, 32x.

- To jump to the next song in a folder, press **OK** to pause and select **▶** on screen and press **OK**.

- To go back to the folder, press **↩**, the music will keep on playing.

- To stop the music playback, press **■** (Stop).

Progress Bar

To show the progress bar when a song is playing (playhead position, duration, title, date, etc.),

press **i** INFO .

Press again to hide the info.

Music options

Options for playing music...

- **Stop playback**

Stop music play.

- **Repeat, Play once**

Play songs repeatedly or once.

- **Shuffle on, Shuffle off**

Play songs in sequence or at random.

- **Show info**

Display the file name.

Settings

14.1

Picture

Picture style

Select a style

For easy picture adjustment, you can select a preset Picture Style.

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Picture style**, and select one of the styles in the list.
3. Select a style and press **OK**.

The available Picture styles are ...

- **Personal** - The picture preferences you set during the first start up.
- **Vivid** - Ideal for daylight viewing
- **Natural** - Natural picture settings
- **Standard** - Most energy conscious setting - Factory setting
- **Movie** - Ideal for watching movies
- **Photo** - Ideal for viewing photos

Customise a style

Any picture setting you adjust, like **Colour** or **Contrast**, is stored in the currently selected **Picture style**. It allows you to customise each style.

Restore a style

The selected style will store the changes you made. We recommend to adjust the picture settings for the style **Personal** only. The Picture style - **Personal** can save its settings for each individual connected device in Sources menu.

To restore the style to its original setting...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Restore style**, and select the Picture Style you want to restore.
3. Press **OK**. The style is restored.

Home or Shop

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. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Location** and press **OK**.
3. Select **Home** and press **OK**.
4. Press **↵**, repeatedly if necessary, to close the menu.

Picture settings

Colour

With **Colour**, you can adjust the colour saturation of the picture.

To adjust the colour ...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Colour**.
3. Press **▶** (right) and adjust the value with **▲** (up) or **▼** (down).
4. Press **↵**, repeatedly if necessary, to close the menu.

Contrast

With **Contrast**, you can adjust the brightness of the display backlight.

To adjust the level ...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Contrast**.
3. Press **▶** (right) and adjust the value with **▲** (up) or **▼** (down).
4. Press **↵**, repeatedly if necessary, to close the menu.

Sharpness

With **Sharpness**, you can adjust the level of sharpness in fine detail of the picture.

To adjust the sharpness ...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Sharpness**.
3. Press **▶** (right) and adjust the value with **▲** (up) or **▼** (down).
4. Press **↵**, repeatedly if necessary, to close the menu.

Advanced picture settings

Game or computer

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

If you have a game console with a built-in Blu-ray Disc player, you might have set the type name to Blu-ray Disc. With **Activity style** you can switch to the ideal settings for gaming manually. Don't forget to switch to **TV**, when you return to watch TV.

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.

Colour settings

Colour enhancement

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

To adjust the level...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Colour**.
3. Select **Colour enhancement** and press **OK**.
3. 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. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Colour**.
3. Select **Colour Temperature** and press **OK**.
3. Select **Normal, Warm** or **Cool**. Or select **Custom** if you want to customise 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 yourself. To set a custom colour temperature, first select **Custom** in the Colour temperature menu. Custom colour temperature is a setting intended for expert users.

To set a custom colour temperature...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Colour**.
3. Select **Custom Colour Temperature** and press **OK**.
3. Press the arrows **▲** (up) or **▼** (down) to adjust the value. WP is white point and BL is black level. You can also select one of the presets in this menu.
4. Press **⬅**, repeatedly if necessary, to close the menu.

Contrast Settings

Contrast modes

With **Contrast Mode**, 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. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Contrast > Contrast mode**.
3. Select **Standard, Best power, Best picture**, 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. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Contrast > Dynamic contrast**.
3. 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Contrast > Brightness**.
3. Press **Right** and adjust the value with **Up** (up) or **Down** (down).
4. Press **Back**, repeatedly if necessary, to close the menu.

Video contrast

With **Video Contrast**, you can decrease the range of the video contrast.

To adjust the level...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Contrast > Video contrast**.
3. Press **Right** and adjust the value with **Up** (up) or **Down** (down).
4. Press **Back**, repeatedly if necessary, to close the menu.

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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Contrast > Gamma**.
3. Press **Right** and adjust the value with **Up** (up) or **Down** (down).
4. Press **Back**, repeatedly if necessary, to close the menu.

Sharpness settings

Ultra resolution

With **Ultra resolution**, you switch on a superior sharpness in line edges and contours.

To switch on or off...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Sharpness > Ultra resolution**.
3. Select **On** or **Off**.
4. Press **Back**, repeatedly if necessary, to close the menu.

Noise reduction

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

To adjust the noise reduction...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Sharpness > Noise reduction**.
3. Select **Maximum**, **Medium**, **Minimum** or **Off**.
4. Press **Back**, 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Advanced > Sharpness > MPEG artefact reduction**.
3. Select **Maximum**, **Medium**, **Minimum** or **Off**.
4. Press **Back**, repeatedly if necessary, to close the menu.

Format and edges

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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Format and edges > Picture format**.
3. Select a format from the list and press **OK**.
4. Press **Back**, repeatedly if necessary, to close the menu.

To change the picture format while watching TV ...

1. While watching a TV channel, press **Picture** to open the **Picture format** menu.

2. Select a format from the list and press **OK**.

Screen edges

With **Screen edges**, you can slightly enlarge the picture to hide distorted edges.

To adjust the edges ...

1. Press **⬆️** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Format and edges > Screen edges**.
3. Adjust the value with **▲** (up) or **▼** (down).
4. Press **⬅️**, repeatedly if necessary, to close the menu.

Picture shift

With **Picture shift**, you can slightly move the position of the picture.

To move the picture ...

1. Press **⬆️** and select **Setup** and press **OK**.
2. Select **TV settings > Picture > Format and edges > Picture shift**.
3. Adjust the position with **▲** (up), **▼** (down), **▶** (right), or **◀** (left).
4. Press **⬅️**, repeatedly if necessary, to close the menu.

14.2

Sound

Sound style

Select a style

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

1. Press **⬆️** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Sound style**, and select one of the styles in the list.
3. Select a style and press **OK**.

The available Sound styles are ...

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

Restore a style

The selected style will store the changes you made. We recommend to adjust the sound settings for the style **Personal** only. The **Sound Style - Personal** can save its settings for each individual connected device in **Sources** menu.

To restore the style to its original setting...

1. Press **⬆️** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Restore style**.

Sound settings

Bass

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

To adjust the level ...

1. Press **⬆️** and select **Setup** and press **OK**.
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. Press **⬆️** and select **Setup** and press **OK**.
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. Press **⬆️** and select **Setup** and press **OK**.
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 **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Headphones volume**.
3. Press **▲** (up) or **▼** (down) to adjust the volume.
4. Press **Back**, repeatedly if necessary, to close the menu.

Advanced sound settings

Auto volume levelling

With **Auto volume leveling**, 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Auto volume leveling**.
3. Press **▶** (right) and select **On** or **Off**.
4. Press **Back**, 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > TV speakers**.
3. Press **▶** (right) and select **Off**, **On**, **EasyLink** or **EasyLink autostart**.
4. Press **Back**, 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. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Clear sound**.
3. Press **▶** (right) and select **On** or **Off**.
4. Press **Back**, repeatedly if necessary, to close the menu.

HDMI1-ARC

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

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > HDMI 1 - ARC**.
3. Press **▶** (right) and select **On** or **Off**.
4. Press **Back**, repeatedly if necessary, to close the menu.

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.

To set Audio out format...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Audio out format**.
3. Press **▶** (right) and select **Multichannel** or **Stereo**.
4. Press **Back**, repeatedly if necessary, to close the menu.

Audio out levelling

With **Audio out leveling** 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.

To level the difference in volume...

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings > Sound > Advanced > Audio out levelling**.
3. Select **More**, **Medium**, or **Less**, then press **OK**.
4. If the volume difference is large, select **More**. If

the volume difference is small, select **Less**.
5. Press **↵**, repeatedly if necessary, to close the menu.

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 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 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. 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 a delay on the TV with **Audio out offset**.

To synchronise the sound on the TV...

1. 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.

14.3

General settings

Menu language

To change the language of the TV menus and messages...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Menu language**.
3. Select on the language you need.
4. Press **↵**, repeatedly if necessary, to close the menu.

Clock

Date and Time

Automatic

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.

When you record programmes - scheduled in the TV Guide, we recommend not to change the time and date manually. In some countries, for some network operators, the **Clock** setting is hidden to avoid an incorrect clock setting.

To correct the TV clock automatically...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Clock > Auto Clock Mode**, and select **Country dependent**.
3. Select **Daylight saving** and select the appropriate setting.
4. Press **↵**, repeatedly if necessary, to close the menu.

Manual

To set the TV clock manually...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Clock > Auto Clock Mode**, and select **Manual**.
3. Select **Date** and **Time** to adjust.
4. Press **↵**, repeatedly if necessary, to close the menu.

Time zone

To set the time zone...

1. Press **⬆** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Clock > Time zone**.
3. Select one of the time zones.

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

Sleep timer

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 **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Sleep timer**.

With the slider bar you can set the time to up to 180 minutes in increments of 5 minutes. If set to 0 minutes, the sleep timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.

3. Press **↵**, repeatedly if necessary, to close the menu.

Switch off timer

If the TV receives a TV signal but you don't press a key on the remote control during a 4 hour period, the TV switches off automatically to save energy. Also, if the TV does not receive a TV signal nor a remote control command for 10 minutes, the TV switches off automatically.

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

To deactivate the Switch off timer ...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Switch off timer**.
3. Select inside the slider bar to adjust the value. The value **0 (Off)** deactivates the automatic switch off.
4. Press **↵**, repeatedly if necessary, to close the menu.

Location

To set the TV for Home use...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Location** and press **OK**.
3. Select **Home** and press **OK**.
4. Press **↵**, repeatedly if necessary, to close the menu.

TV placement

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

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > TV Placement** and press **OK**.
3. Select **On a TV stand** or **On the Wall**.
4. Press **↵**, repeatedly if necessary, to close the menu.

Factory settings

You can set the TV back to the original TV settings (the factory settings).

To switch back to the original settings...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Factory Settings** and press **OK**.
3. Press **↵**, repeatedly if necessary, to close the menu.

Reinstall TV

You can redo a full TV installation. The TV is completely reinstalled.

To redo a full TV installation...

1. Press **▲** and select **Setup** and press **OK**.
2. Select **TV settings > General settings > Reinstall TV** and press **OK**.
3. Follow the instructions on screen. The installation may take a few minutes.

Specifications

15.1

Environmental

Saving energy

The **Eco settings** bundle the settings that help the environment.

While you are watching TV channels, press **■** to open **Eco settings**.

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.

Auto switch off

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.

Power management

The advanced power management of this TV ensures the most efficient use of energy. You can check how your personal TV settings, the level of brightness in current onscreen pictures, and the surrounding light conditions determine the relative power consumption.

To check the relative power consumption . . .

1. Press **▲** and select **Setup** and press **OK**.
2. Select **Watch demos > Active control Demo** and press **OK**.
3. Select a setting to check the corresponding values.

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

Product Fiche

43PUx4900

- Energy Efficiency Class : A
- Visible Screen Size : 108 cm / 43 inch
- On Mode Power Consumption (W) : 66 W
- Annual Energy Consumption (kWh) * : 96 kWh
- Standby Power Consumption (W) ** : 0.30 W
- Off Mode Power Consumption (W) : 0.30 W
- Display Resolution (Pixels) : 3840 x 2160p

49PUx4900

- Energy Efficiency Class : A
- Visible Screen Size : 123 cm / 49 inch
- On Mode Power Consumption (W) : 73 W
- Annual Energy Consumption (kWh) * : 106 kWh
- Standby Power Consumption (W) ** : 0.30 W
- Off Mode Power Consumption (W) : 0.30 W
- Display Resolution (Pixels) : 3840 x 2160p

55PUx4900

- Energy Efficiency Class : A
- Visible Screen Size : 139 cm / 55 inch
- On Mode Power Consumption (W) : 101 W
- Annual Energy Consumption (kWh) * : 148 kWh
- Standby Power Consumption (W) ** : 0.30 W
- Off Mode Power Consumption (W) : 0.30 W
- Display Resolution (Pixels) : 3840 x 2160p

* Energy consumption kWh per year, based on the power consumption of the television operating 4 hours per day for 365 days. The actual energy consumption depends on how the television is used.

** When the TV is turned off with the remote control and no function is active.

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.

15.2

Reception for PxH / PxT models

- Aerial input : 75 ohm coaxial (IEC75)
- Tuner bands : Hyperband; S-Channel; UHF; VHF
- DVB : DVB-T (terrestrial, antenna) COFDM 2K/8K; DVB-T2 : only for TV types '... PUT'; DVB-C (cable) QAM
- Analogue video playback : NTSC; SECAM; PAL
- Digital video playback : MPEG2 SD/HD (ISO/IEC 13818-2); MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)

15.3

Reception for PxK models

- Aerial input : 75 ohm coaxial (IEC75)
- Tuner bands : Hyperband, S-Channel, UHF, VHF
- DVB : DVB-T (terrestrial, antenna) COFDM 2K/8K, DVB-C (cable) QAM
- Analogue video playback : NTSC, SECAM, PAL
- Digital video playback : MPEG2 SD/HD (ISO/IEC 13818-2), MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)
- Satellite aerial input : 75 ohm F-type
- Input frequency range : 950 to 2150MHz
- Input level range : 25 to 65 dBm
- DVB-S/S2 QPSK, symbol rate 2 to 45M symbols, SCPC and MCPC
- Supported satellites : Astra 19.2°E, Astra 23.5°E, Astra 28.2°E, Hotbird 13.0°E, Türksat 42.0°E, Eutelsat 7°W, Thor 1°W
- Astra HD+ support
- LNB : DiSEqC 1.0, 1 to 4 LNBS supported, Polarity selection 14/18V, Band selection 22kHz, Tone burst mode, LNB current 300mA max

15.4

Display

Type

Diagonal screen size :

- 43PUx4900 : 108 cm / 43 inch
- 49PUx4900 : 123 cm / 49 inch
- 55PUx4900 : 139 cm / 55 inch

Display resolution:

- 3840 x 2160p

Display resolutions

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
- 2160p - 24 Hz, 25 Hz, 30 Hz (YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0)
- 2160p - 50 Hz, 60 Hz (YCbCr 4:2:0)

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
- 3840 x 2160p – 24 Hz, 25 Hz, 30 Hz (YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0)
- 3840 x 2160p – 50 Hz, 60 Hz (YCbCr 4:2:0)

15.5

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 : 5°C to 35°C
- Standby power consumption : less than 0.3W
- Power saving features : Eco mode, Picture mute (for radio), Auto switch off , Eco settings menu.

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).

15.6

Dimensions and weights

43PUx4900

- without TV stand:
Width 968.2 mm – Height 575.9 mm – Depth 79.4 mm
– Weight ± 9.18 kg

- with TV stand:
Width 968.2 mm – Height 616.5 mm – Depth 205.7 mm
– Weight ± 9.46 kg

49PUx4900

- without TV stand:
Width 1099.2 mm – Height 632 mm – Depth 78.6 mm
– Weight ± 11.48 kg

- with TV stand:
Width 1099.2 mm – Height 683.7 mm – Depth 210.8 mm
– Weight ± 11.89 kg

55PUx4900

- without TV stand:
Width 1239.2 mm – Height 711.6 mm – Depth 79.2 mm
– Weight ± 15.3 kg

- with TV stand:

Width 1239.2 mm – Height 764.1 mm – Depth 210.8 mm – Weight ± 15.6 kg

15.7

Connectivity

For PUK4900

TV Rear

- HDMI 1 in – ARC – HDCP 2.2
- HDMI 2 in – HDCP 2.2
- SERV. U: Service port
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- YPbPr : Y Pb Pr, Audio L/R : Stereo mini-jack 3.5mm
- USB
- TV ANTENNA: 75 ohm coaxial (IEC)
- Satellite

TV Side

- CI: Common Interface
- HDMI 3 in – HDCP 2.2
- USB
- Headphones: Stereo 3.5mm mini-jack

For PUH4900/PUT4900

TV Rear

- HDMI 1 in – ARC – HDCP 2.2
- HDMI 2 in – HDCP 2.2
- SERV. U: Service port
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- YPbPr : Y Pb Pr, Audio L/R : Stereo mini-jack 3.5mm
- USB
- TV ANTENNA: 75 ohm coaxial (IEC)

TV Side

- CI: Common Interface
- HDMI 3 in – HDCP 2.2
- USB
- Headphones: Stereo 3.5mm mini-jack

15.8

Sound

- Mono / Stereo
- Sound enhancement : Incredible Surround, Clear Sound
- Output power:
16W (RMS @ 10% THD)

Multimedia

Note: Multimedia file names must not exceed 128 characters.

Supported multimedia connections

- USB (FAT / FAT 32 / NTFS): only connect USB devices that consume 500 mA of power or less.

Supported image files

- JPEG: *.jpg, *.jpeg
- PNG: *.png.jpg

Supported audio files

- MPEG1: *.mp3

Supported video files

- *.avi, *.mp4, *.mov, *.mkv, *.mpg, *.mpeg

Supported subtitle format

- SRT: multiple language support

Software

16.1

Software update

It might be necessary to update the TV software. You need a computer 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. Start the update on TV

To start the software update . . .

Press **▲**, select **Setup** and press **OK**.

Select **Update software** > **USB** and press **OK**.

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.

16.2

Software version

To view the current TV software version ...

1. Press **▲** and select **Setup** and press **OK**.

2. Select **Software settings** and press **OK**.

3. Select **Current software info** and see **Release Version**.

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

16.3

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.

Prins Bernhardplein 200

1097 JB Amsterdam

The Netherlands

16.4

Open source license

Open source license

Open source license statement

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

This is a document describing the distribution of the source code used in this product, 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 documentation supplied with this product.

TP VISION MAKES NO WARRANTIES WHATSOEVER, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THIS SOFTWARE.

TP Vision offers no support for this software. The preceding does not affect your warranties and statutory rights regarding any product(s) you purchased. It only applies to this source code made available to you.

sqlite3 (3.7.14)

SQLite is a C library that implements an SQL database engine.

Programs that link with the SQLite library can have SQL database access without running a separate RDBMS process.

Source: <http://linuxappfinder.com/package/sqlite3>

libpng

libpng is the official PNG reference library. It supports almost all PNG features.

Source: www.libpng.org

OpenSSL (1.0.0.d)

The OpenSSL Project is a collaborative effort to develop a robust, commercial-grade, full-featured, and **Open Source** toolkit implementing the **Secure Sockets Layer** (SSL v2/v3) and Transport Layer Security (TLS v1) protocols as well as a full-strength general purpose cryptography library. The project is managed by a worldwide community of volunteers that use the Internet to communicate, plan, and develop the OpenSSL toolkit and its related documentation.

Source: www.openssl.org

libboost (1.51)

Boost provides free peer-reviewed portable C++ source libraries, and emphasize libraries that work well with the C++ Standard Library.

Boost libraries are intended to be widely useful, and usable across a broad spectrum of applications.

The Boost license encourages both commercial and non-commercial use.

Source: www.boost.org

libjpeg (6b)

Libjpeg is a widely used C library for reading and writing JPEG image files.

Source: <http://libjpeg.sourceforge.net/>

zlib (1.2.7)

A massively spiffy yet delicately unobtrusive compression library

Source: www.zlib.net

libdirectfb (1.4.11)

DirectFB is a thin library that provides hardware graphics acceleration, input device handling and abstraction, integrated windowing system with support for translucent windows and multiple display

layers, not only on top of the Linux Framebuffer Device.

It is a complete hardware abstraction layer with software fallbacks for every graphics operation that is not supported by the underlying hardware. DirectFB adds graphical power to embedded systems and sets a new standard for graphics under Linux.

Source: <http://directfb.org/>

libTomMath (0.42.0)

LibTom Projects are open source libraries written in portable C under WTFPL. The libraries supports a variety of cryptographic and algebraic primitives designed to enable developers and students to pursue the field of cryptography much more efficiently.

Source: <http://libtom.org/>

MTD utility (1.5.0)

MTD subsystem (stands for Memory Technology Devices) provides an abstraction layer for raw flash devices. It makes it possible to use the same API when working with different flash types and technologies, e.g. NAND, OneNAND, NOR, AG-AND, ECC'd NOR, etc.

MTD subsystem does not deal with block devices like MMC, eMMC, SD, CompactFlash, etc. These devices are not raw flashes but they have a Flash Translation layer inside, which makes them look like block devices. These devices are the subject of the Linux block subsystem, not MTD.

Source: <http://www.linux-mtd.infradead.org/source.html>

libscew

The aim of SCEW is to provide an easy interface around the XML Expat parser, as well as a simple interface for creating new XML documents. It provides functions to load and access XML elements without the need to create Expat event handling routines every time you want to load a new XML document.

SCEW is freely available for download under the terms of the GNU Lesser General Public License v2.1 (LGPL).

Source: <http://www.nongnu.org/scew/>

libexpat

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).

Source: <http://expat.sourceforge.net/>

libdrm

libdrm provides core library routines for the X Window System to directly interface with video hardware using the Linux kernel's Direct Rendering Manager (DRM).

Source: <http://dri.freedesktop.org/libdrm/>

FFmpeg (0.6)

A complete, cross-platform solution to record, convert and stream audio and video.

Source: www.ffmpeg.org

Troubleshooting and support

17.1

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 and that the correct network is selected.

Previously installed channels are not in the channel list

Make sure that the correct channel list is selected.

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.

1. Press **Home** and select **Setup** and press **OK**.
2. Select **TV settings** > **General settings** > **Menu language** and press **OK**.
3. Select the language you want and press **OK**.
4. Press **Back**, 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 .

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 audio output is connected to the audio input on the Home Theatre System.
- Sound should be heard from the HTS speakers.
- Some devices may require you to manually enable HDMI audio output. If HDMI audio is already enabled, but you still do not hear audio, try changing the digital audio format of the device to PCM (Pulse Code Modulation). Refer to the documentation accompanying your device for instructions.

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.

17.2

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

17.3

Help

This TV offers help on screen.

Open Help

1. Press  to open the Home menu.
2. Select **Help** and press **OK**.

UMv 49001506v12-20160424

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.

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

18.1

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

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

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

Follow these precautions to prevent the TV from toppling over and causing injury:

- 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

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

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

Risk of hearing damage

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

Low temperatures

If the TV is transported in temperatures below 5 degrees Celsius or 41 degrees Fahrenheit, 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.

18.2

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

19.1

Terms of use

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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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property of the display (within common industry standards) and is not a malfunction. CE compliance This product is in compliance with the essential requirements and other relevant provisions of Directives 2006/95/EC (Low Voltage), 2004/108/EC (EMC) and 2011/65/EU (ROHS). Compliance with EMF TP Vision Europe B.V. manufactures and sells many products targeted at consumers which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals. One of Philips' leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the Electro Magnetic Field (EMF) standards applicable at the time of producing the products. Philips is committed to develop, produce and market products that cause no adverse health effects. TP Vision confirms that, as long as its products are handled properly for their intended use, they are safe to use according to scientific evidence available today. Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardisation for early integration in its products.

19.2

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Klantenservice/
Service Consommateurs
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(0.15€/min.)

Bosna i Hercegovina

Potpora potrošačima
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(Lokalni poziv)

Republika Srbija

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Kundendienst
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Τμήμα καταναλωτών
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Eesti

Klienditugi
668 30 61
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España

Atención al consumidor
913 496 582
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France

Service Consommateurs
01 57 32 40 50
(coût d'un appel local sauf
surcoût éventuel selon
opérateur réseau)

Hrvatska

Potpora potrošačima
01 777 66 01
(Lokalni poziv)

Indonesia

Consumer Care
0800 133 3000

Ireland

Consumer Care
015 24 54 45
(National Call)

Italia

Servizio Consumatori
0245 28 70 14
(Chiamata nazionale)

Қазақстан Республикасы

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810 800 2000 00 04
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бойынша қоңырау шалу тегін)

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(Vietēlais tarifs)

Lietuva

Klientų palaikymo tarnyba
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Республика Беларусь

Контакт Центр
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Consumer Care
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(5p/min BT landline)

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Consumer Care
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