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6100 series

User Manual

40PFG6110

PHILIPS

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1

My new TV

1.1

Smart TV

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

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

With your TV connected to the Internet, you can watch a rental video from an online video store, read the online TV guide or record your favorite TV show on a USB Hard Drive.

The Smart TV Apps add to the fun with all sorts of entertainment and convenient services.

In **Help**, press **Keywords** and look up **Smart TV** for more information.

1.2

App gallery

Open the **App gallery** in Smart TV to browse the Apps, the collection of tailored websites for TV.

Find the App for YouTube videos, a national newspaper, an online photo album, Twitter, etc.

There are Apps for renting videos from an online video store and Apps for watching programs you missed.

If the App gallery does not have what you are looking for, try the World Wide Web and surf the Internet on TV.

In **Help**, press **Keywords** and look up **App gallery** for more information.

1.3

Rental videos

To watch a **rental video**, you don't need to leave your home.
Simply rent the latest movie from your regional online video store.

Start Smart TV and add the video store App to the Smart TV start page.

Open the video store App, create your personal account, select the movie and press play.
No fuss with downloading, you can watch the movie immediately.*

In **Help**, press **Keywords** and look up **Rental videos** for more information.

* Depending on the video streaming service of the selected video store.

1.4

Social networks

No need to get up to check your friend's messages on your computer.
Open Smart TV, select your **social network** page and send a message back from your couch.

Smart TV supports the popular social networks Twitter.

In **Help**, press **Keywords** and look up **App gallery** for more information.

1.5

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 game, 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 program or schedule a recording of an upcoming program.

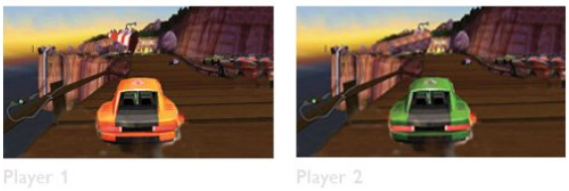
In **Help**, press **Keywords** and look up **Pause TV** or **Recording** for more information.

1.6

Gaming

If you select your game console in the Home menu, the TV automatically switches to the settings ideal for gaming.

If you play a multi-player game with split screens, you can set the TV to show each screen as a full screen simultaneously.
Each player can focus on his own game to play.



The TV uses 3D technology to show both screens. To play a two-player game with two different full-screen pictures, you'll need a pair of 3D glasses for each player.

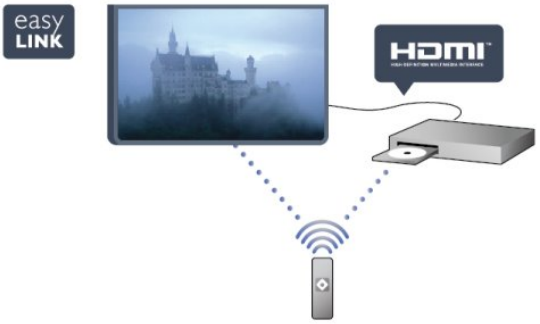
In **Help**, press **Keywords** and look up **Game console** or **Two player games** for more information.

1.7

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.



In **Help**, press **Keywords** and look up **EasyLink** for more information.

2

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.

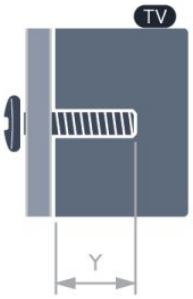
Use the product type number of the TV to look for the Quick Start Guide to download.

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 . . .

• For 40-inch TV: VESA MIS-F 200x200, M4, 12-16 mm

To attach the bracket securely, use screws of the length indicated in the drawing.



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

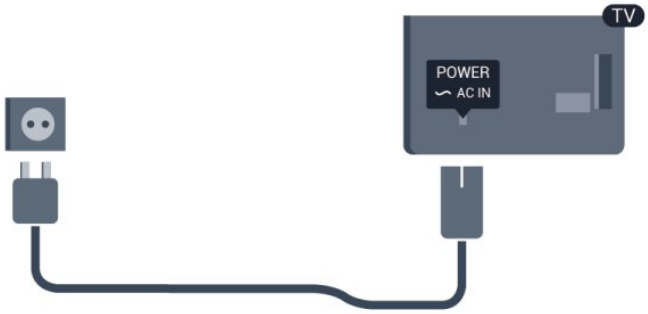
Tips on placement

• 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 center 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.

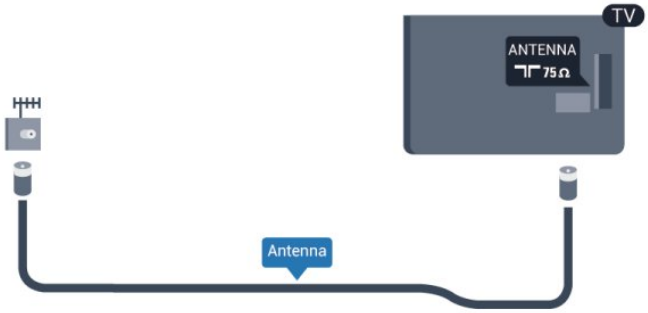
In **Help**, press **Keywords** and look up Turning on for more information about turning the TV on or off.

2.5

Antenna cable

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

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


TV
ANTENNA
75 Ω
Antenna

3

Network

3.1

Wireless network

What you need

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

Network devices

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

File sharing

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

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

Make the connection

Follow steps 1 to 9.

Step 1 - Make sure that the router of your wireless network is turned on.
Step 2 - Press ⌂ and select Setup and press OK.
Step 3 - Select Connect to network and press OK.
Step 4 - Select Connect and press OK.
Step 5 - Select Wireless and press OK.
Step 6 - Select Scan to scan for your wireless network. If you have a router with WPS (Wi-Fi Protected Setup), you can select WPS. Select your choice and press OK.

· Scan
Select Scan to scan for your wireless network (your wireless router). The TV might find several wireless networks in your proximity.
· WPS
If your router has WPS, you can directly connect to the router without scanning. Go to the router, press the WPS button and return to the TV within 2 minutes. Then press Connect to make the connection.
If you have devices in your wireless network that use the WEP security encryption system, you cannot use WPS.
If you must use the WPS PIN code to connect, select Scan instead of WPS.

Step 7 - From the list of networks found, select your wireless network and press OK.
If your network is not in the list because the network name is hidden (you turned off the SSID broadcast of the router), select Manual entry to enter the network name yourself.

Step 8 - Depending on the type of router, you can now enter your encryption key (WEP, WPA or WPA2). If you have entered the encryption key for this network before, you can select Next to make the connection immediately.
If your router supports WPS or WPS PIN, you select WPS, WPS PIN or Standard. Select your choice and press OK.

· Standard
Select Standard to enter the encryption key (password, passphrase, or security key) manually. You can use the keyboard on the remote control to enter the encryption key. Once you have entered the key, press Connect.
· WPS PIN
To make a secured WPS connection with a PIN code, select WPS PIN and press OK. Write down the 8-digit PIN code shown and enter it in the router software on your PC. Return to the TV and press Connect. Consult the router manual on where to enter the PIN code in the router software.

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

Network configuration

If the connection fails, you can check the DHCP setting of the router. DHCP should be set to On. Alternatively, if you are an advanced user and want to install your network with Static IP addressing, set the TV to Static IP.
To set the TV to Static IP, press ⌂ and select Setup and press OK. Select Network settings > Network settings > Network configuration > Static IP. With Static IP selected in the menu, you can set the IP address and other necessary settings in Static IP configuration in the same menu.

Network problems

Wireless network not found or distorted

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

Internet does not work

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

The PC and Internet connection are slow

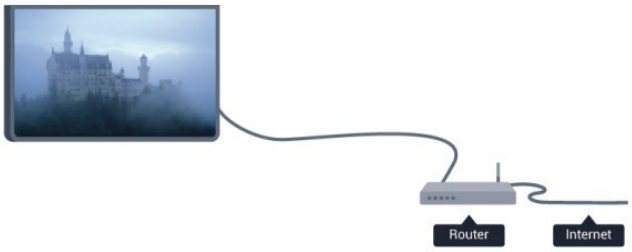
• Look in your wireless router's user manual for information on indoor range, transfer rate and other factors of signal quality.
• Use a high-speed (broadband) Internet connection for your router.

3.2

Wired network

What you need

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



File sharing

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

In **Help**, press **Keywords** and look up **Media server software, supported** for an overview of supported media server software.

Connect the router

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

1 - Connect the router to the TV with a network cable (Ethernet cable**).
2 - Make sure that the router is turned on.
3 - Press ⌂ and select **Setup** and press **OK**.
4 - Select **Connect to network** and press **OK**.
5 - Select **Wired** and press **OK**.
The TV constantly searches for the network connection. A message will be shown when the connection is successful.

Network configuration

If the connection fails, you can check the DHCP setting of the router. DHCP should be set to **On**. Alternatively, if you are an advanced user and want to install your network with Static IP addressing, set the TV to Static IP.
To set the TV to Static IP, press ⌂ and select **Setup** and press **OK**.
Select **Network settings** > **Network settings** > **Network configuration** > **Static IP**. With Static IP selected in the menu, you can set the IP address and other necessary settings in **Static IP configuration** in the same menu.

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

3.3

Network settings

To open the Network settings . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **Network settings** and press **OK**.

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

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

• Wi-Fi media playback
To receive multimedia files from smartphones or tablets, set the DMR to On.

· Static IP configuration
If Static IP is selected, you can set all necessary static IP settings here.

· Wi-Fi Miracast
For more information on Wi-Fi Miracast, press Keywords and look up Wi-Fi Miracast™.

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

· TV network name
If you have more than one TV in your network, you can rename the TVs here.

· Netflix settings
Adjust Netflix settings.

· Clear Internet memory
With Clear Internet Memory, you clear all Internet files stored on your TV. You clear your Philips Smart TV registration and parental control settings, video store app logins, Smart TV app favorites, and Internet bookmarks and history. Interactive MHEG applications save cookies to your TV. These files are also cleared.

4

Connections

4.1

Tips on connections

Connectivity guide

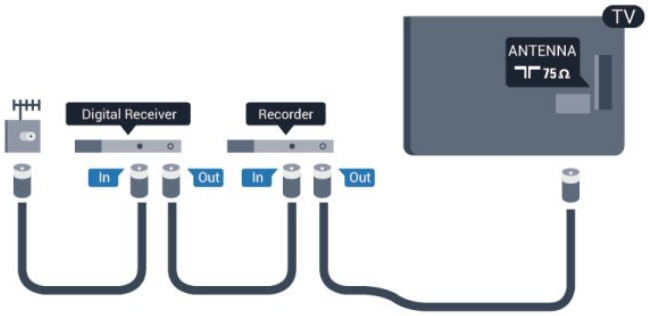
Always connect a device to the TV with the highest quality connection available. Also, use good quality cables to ensure a good transfer of picture and sound.

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

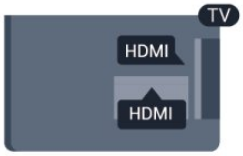
If you have a Set-top box (a digital receiver) or Recorder, connect the antenna cables to run the antenna signal through the Set-top box and/or Recorder first before it enters the TV. In this way, the antenna and the Set-top box can send possible additional channels to the Recorder to record.



HDMI

HDMI CEC

HDMI connections provide the best picture and sound quality. HDMI cables combine video and audio signals. Use an HDMI cable for high-definition (HD) and TV signals. For best signal quality, use a high-speed HDMI cable, and do not use HDMI cables longer than 5 m.



EasyLink HDMI CEC

If your devices are connected with HDMI and have EasyLink, you can operate them with the TV remote control. EasyLink HDMI CEC must be turned On on the TV and the connected device.
For more information on using EasyLink, press Keywords and look up **EasyLink CEC**.

DVI to HDMI

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

Copy protection

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

HDMI ARC

All of the HDMI connections on the TV have HDMI ARC (Audio Return Channel).
If the device, typically a Home Theater System (HTS), also has the HDMI ARC connection, connect it to any of the HDMI connections on this TV. With the HDMI ARC connection, you do not need to connect the extra audio cable that sends the sound of the TV picture to the HTS. The HDMI ARC connection combines both signals.
You can use any HDMI connection on this TV to connect the HTS but ARC is only available for 1 device/connection at a time.

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

Video-Audio LR

CVBS - Composite Video is a high quality connection. Next to the CVBS signal, add 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 Theater System (HTS), has no HDMI ARC connection, you can use this connection with the Audio In - Optical connection on the HTS. The Audio Out - Optical connection sends the sound from the TV to the HTS.

You can set the type of the audio out signal to fit the audio capabilities of your Home Theater System.
For more information, press Keywords and look up **Audio Out settings**.

If the sound does not match the video on screen, you can adjust the audio to video synchronization.
For more information, press Keywords and look up **Audio to video sync**.

4.2

EasyLink HDMI CEC

EasyLink

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

EasyLink setup

The TV comes with EasyLink turned 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 and OPTIONS keys and some other TV keys are not forwarded to the device.
If the key you need is not on the TV remote control, you can select the key in the Options menu.
Press OPTIONS and select **Controls** in the menu bar. On the screen, select the device key you need and press **OK**.
Some very specific device keys might not be available in the Controls menu.

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

EasyLink settings

The TV comes with all EasyLink settings turned on. You can turn off any EasyLink setting independently.

EasyLink

To turn off EasyLink completely . . .

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

EasyLink Remote Control

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

Pixel Plus link

Some devices, a DVD or Blu-ray Disc player, might have their own picture quality processing. To avoid bad picture quality caused by interference with the TV processing, the picture processing of these devices should be disabled. The TV comes with Pixel Plus link turned on and disables the picture quality processing of recent Philips devices connected to the TV.
To turn off Pixel Plus link, in the EasyLink settings menu, select **Pixel Plus link** and select **Off**.

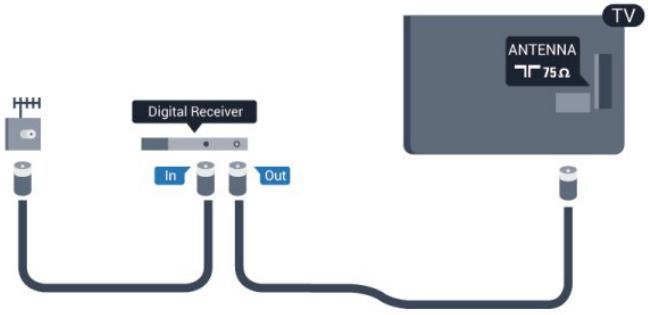
Auto turn off devices

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

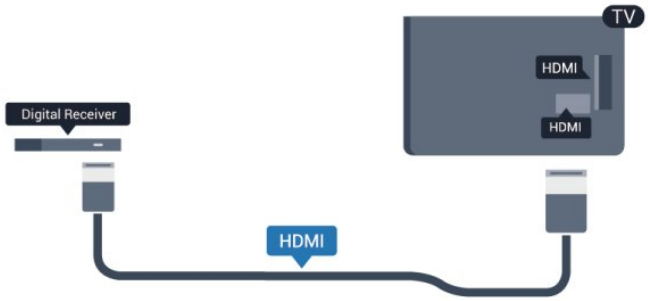
4.3

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.



Switch off timer

Switch off this automatic timer if you only use the remote control of the set-top box. This prevents the TV from turning off automatically after 4 hours without a key press on the TV remote control.

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

4.4

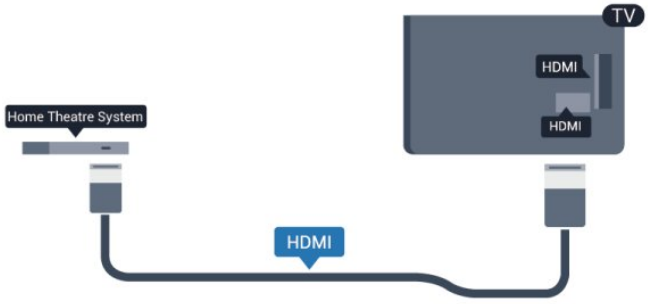
Home Theater System - HTS

Connect HTS

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

HDMI ARC

If your Home Theater System has an HDMI ARC connection, you can use any HDMI connection on the TV to connect. With HDMI ARC, you do not need to connect the extra audio cable. The HDMI ARC connection combines both signals.
All HDMI connections on the TV can offer the Audio Return Channel (ARC) signal, but once you have connected the Home Theater System, the TV can only send the ARC signal to this HDMI connection.



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

Audio to video synchronization (sync)

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

For more information, press ▬ **Keywords** and look up **Audio to video sync**.

Audio Out settings

Audio Out delay

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

Automatic audio to video sync

With recent Philips Home Theater Systems, the audio to video sync is done automatically.

Audio sync delay

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

To turn 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 Theater System, you can set the TV to sync the sound. You can set an offset that compensates for the time necessary for the Home Theater System to process the sound of the TV picture. You can set the value in steps of 5ms. Maximum setting is -60ms. The Audio Out delay setting should be turned on.

To synchronize 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.

Audio Out format

If you have a Home Theater 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 Theater System. If you have a Home Theater System without multichannel sound processing, select Stereo.

To set the Audio Out format . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > Sound > Advanced > Audio Out format.
3 - Select Multichannel or Stereo.
4 - Press ↩, repeatedly if necessary, to close the menu.

Audio Out leveling

Use the Audio Out leveling setting to level the volume (loudness) of the TV and the Home Theater 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 ⌂ 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.
4 - Press ↩, 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 Theater System might be distorted. This noise is heard when the audio or video file has DTS sound but the Home Theater System has no DTS sound processing. You can fix this by setting the Audio Out format of the TV to Stereo.
Press ⌂ and select Setup > TV settings > Sound > Advanced > Audio out format.

No sound

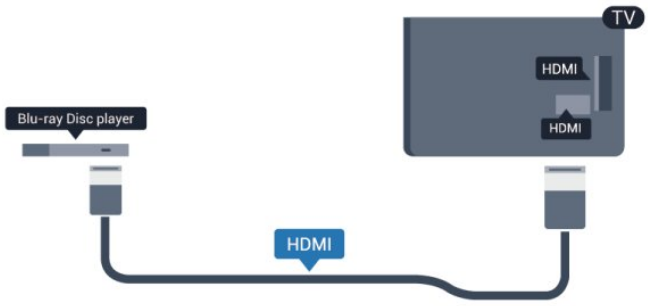
If you cannot hear the sound from the TV on your Home Theater System, check the following . . .

• Check if you connected the HDMI cable to an HDMI ARC connection on the Home Theater System. All HDMI connections on the TV are HDMI ARC connections.
• Check if the HDMI ARC setting on the TV is turned On.
Press ⌂ and select Setup > TV settings > Sound > Advanced > HDMI ARC.

4.5

Blu-ray Disc player

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



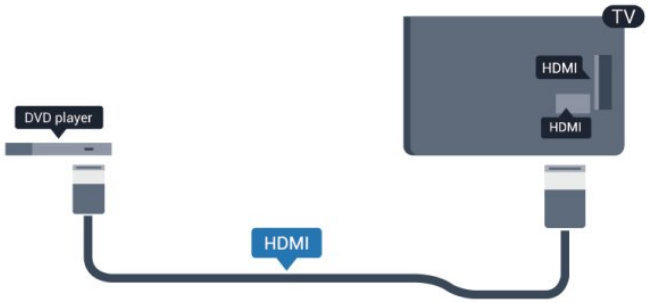
If the Blu-ray Disc player has EasyLink HDMI CEC, you can operate the player with the TV remote control.

For more information on EasyLink, press **Keywords** and look up **EasyLink HDMI CEC**.

4.6

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.

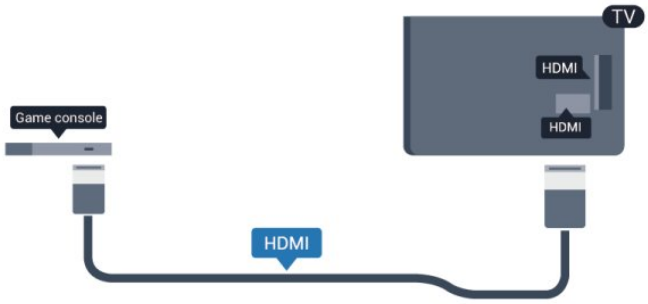
For more information on EasyLink, press **Keywords** and look up **EasyLink HDMI CEC**.

4.7

Game console

HDMI

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



Video-Audio LR

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

4.8

USB Hard Drive

What you need

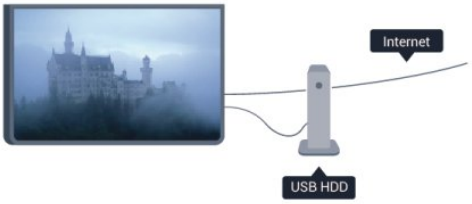
If you connect a USB Hard Drive, you can pause or record a TV broadcast. The TV broadcast must be a digital broadcast (DVB broadcast or similar).

To pause

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

To record

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



TV guide

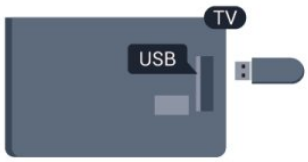
Before you decide to buy a USB Hard Drive to record, you should check if it is possible to record digital TV channels in your country.
Press TV GUIDE on the remote control. If there is a Record button on the TV guide page, you can record.

For more information on how to install a USB Hard Drive, press Keywords and look up **USB Hard Drive, installation**.

Installation

Before you can pause or record a broadcast, you must connect and format a USB Hard Drive. If you want to record a broadcast with TV guide data from the Internet, you need to have the Internet connection installed on your TV before you install the USB Hard Drive. Formatting removes all files from the 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 - Turn on the USB Hard Drive and the TV.
3 - When the TV is tuned to a digital TV channel, press II (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.

For more information, press Keywords and look up **Pause TV** or **Recording**.

4.9

USB keyboard or mouse

USB keyboard

Connect a USB keyboard (USB-HID type) to enter text on your TV.

You can connect a keyboard and a mouse to the TV. Use one of the **USB** connections to connect.

Install the keyboard

To install the USB keyboard, turn on the TV and connect the USB keyboard to one of the **USB** connections on the TV. When the TV detects the keyboard for the first time, you can select your keyboard layout and test your selection. If you select a Cyrillic or Greek keyboard layout first, you can select a secondary Latin keyboard layout.

To change the keyboard layout setting when a layout was selected...

1 - Press and select **Setup** and press **OK**.
2 - Select **TV settings** > **General settings** > **USB keyboard settings** and press **OK**.

Keys for channel renaming

- Enter key = OK
- Backspace = delete character before cursor
- Arrow keys = navigate within a text field
- To switch between keyboard layouts, if a secondary layout is set, press the **Ctrl** + **Shift** keys simultaneously.

Keys for Smart TV Apps and Internet pages

- Shift+Tab = Next and Previous
- Home = scroll to the top of the page
- End = scroll to the bottom of the page
- Page Up = jump one page up
- Page Down = jump one page down
- + = zoom in one step
- - = zoom out one step
- * = fit the web page to the screen width

USB mouse

Connect USB mouse

You can connect a USB mouse (USB-HID type) to navigate pages on the Internet.

On an Internet page, you can select and click on links more easily.

Connect the mouse

Turn the TV on and connect the USB mouse to one of the **USB** connections on the TV. You can also connect the USB mouse to a connected USB keyboard.

Mouse clicks
• Left click = **OK**

You can use the scroll wheel to scroll pages up and down.

For more information on how to connect a keyboard, press **Keywords** and look up **USB keyboard**.

Mouse speed

You can adjust the speed of the mouse moving on screen.

To adjust the speed . . .

1 - Press and select **Setup** and press **OK**.
2 - Select **TV settings** and press **OK**.
3 - Select **General settings** > **Mouse settings** and press **OK**.
4 - Press the arrows ▲ (up) or ▼ (down) to increase or decrease the speed.
5 - Press **OK** to store and close the setting.
6 - Press , repeatedly if necessary, to close the menu.

4.10

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 turned on.

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

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

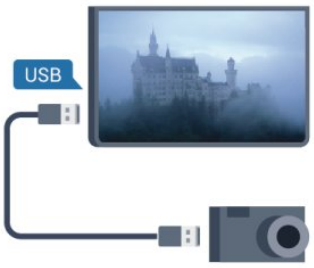
For more information on watching or playing content from a USB flash drive, press **Keywords** and look up **Your photos, videos and music**.

4.11

Photo camera

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

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



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

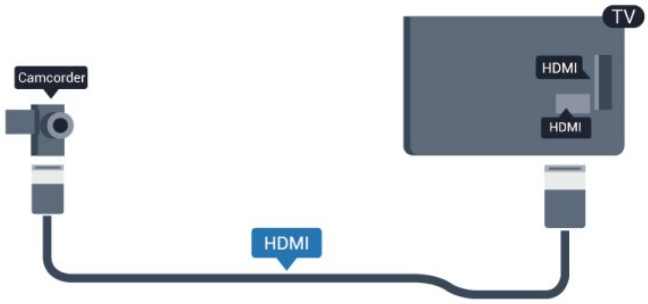
For more information on viewing photos, press **Keywords** and look up **Your photos, videos and music**.

4.12

Camcorder

HDMI

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



Video-Audio LR

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

4.13

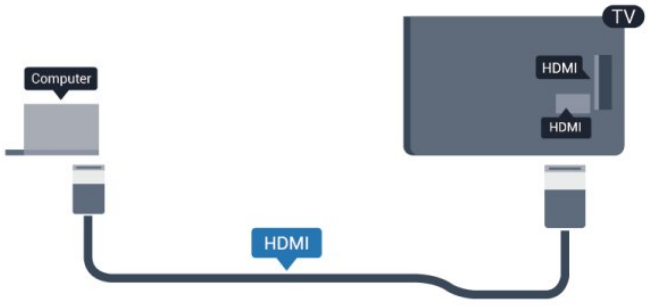
Computer

Connect

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

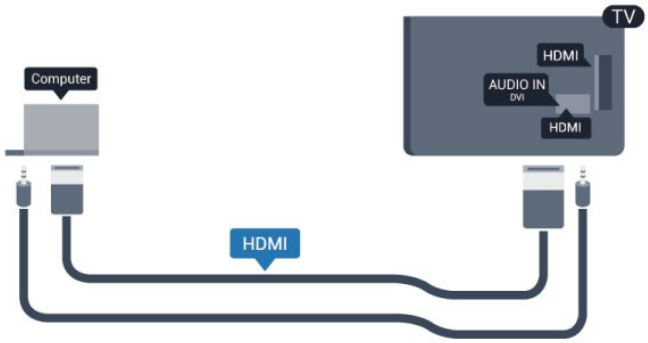
With HDMI

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 3.5 mm) to AUDIO IN DVI on the back of the TV.



Settings

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 ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Activity style** and press **OK**.
3 - Select **Game** (for gaming) or select **Computer** (for watching a movie) and press **OK**.
4 - Press ⮌, repeatedly if necessary, to close the menu.

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

4.14

Headphones

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

To adjust the volume . . .

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

TV

5

Turn on

5.1

On or Standby

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

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

Switch to standby

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

Turn Off

To turn the TV Off, press the Joystick on the right of the TV on the back. The red indicator light is off. The TV is still connected to the main power but consumes a minimum of energy.
To turn off the TV completely, disconnect the power plug.
When disconnecting the power plug, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

5.2

Keys on TV

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

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

5.3

Word mark brightness

You can turn off or adjust the word mark lighting.

To adjust or turn off...

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > General settings > Word mark brightness and press OK.
3 - Select Maximum, Medium, Minimum or select Off to turn off the lighting of the word mark.
4 - Press ⮌, repeatedly if necessary, to close the menu.

6

Remote control

6.1

Key overview

Top

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

2 - Playback and record keys
- Play ▶, to playback.
- Pause ⏸, to pause playback
- Stop ■, to stop playback
- Rewind ◀◀, to rewind
- Fast forward ▶▶, to fast forward
- Record ●, to record now

3 - Ambilight
No function.

4 - TV GUIDE
To open or close the TV guide.

5 - Settings
To open the Settings menu.

6 - Picture format
To open or close the Picture format menu.

7 - SOURCES
To open or close the Sources menu - the list of connected devices.

8 - SEARCH
To open the Popular searches page.

Middle

1 - SMART TV
To open the Smart TV start page.

2 - Color keys
Follow the on-screen instructions.

3 - INFO
To open or close program info.

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

5 - HOME
To open or close the home menu.

6 - EXIT
To switch back to watching TV.

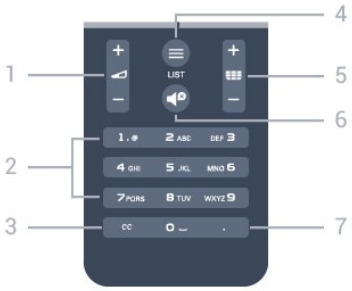
7 - OPTIONS
To open or close the Options menu.

8 - OK key
To confirm a selection or setting.

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

10 - MULTIVIEW
To open an extra small screen.

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 - CC
To turn subtitles on, off, or on during mute.

4 - LIST
To open or close the channel list.

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

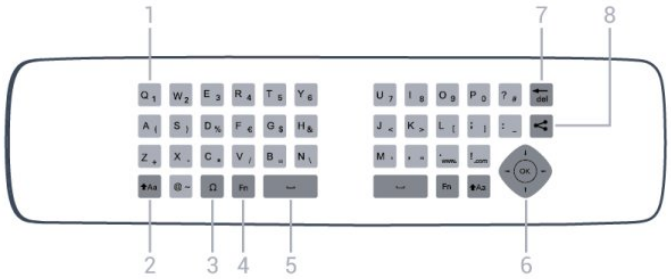
6 - Mute
To mute the sound or to restore it.

7 - (Dot)
To enter digital sub-channels.

6.2
Keyboard

Overview

Overview of a keyboard.



1 - Character
Character position.

2 - ⬆Aa Shift
To type uppercase characters.

3 - ⌧ Special characters
To open the onscreen keyboard to select accented characters or symbols.

4 - Fn key
To type a number or punctuation character.

5 - ␣ Spacebar
Enter a space.

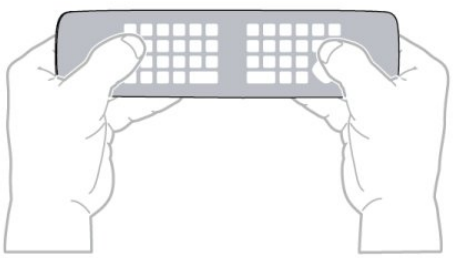
6 - Navigation and OK
Navigate through the menus, and confirm a selection.

7 - ⬅ del
Delete the character in front of the text cursor.

8 - Share this
To share online what you are now watching.

Writing text

With the keyboard on the back of the remote control, you can write text in any text field on screen. Turn the keyboard facing upwards to activate the keyboard keys. Hold the remote control with two hands and type with both thumbs.



Enter text
• To enter text into a text field, select the text field and start typing. Press OK to confirm the text.

Uppercase and lowercase

• To type an uppercase character, press the ⬆Aa (Shift) key just before you type the character.
• To type several uppercase characters consecutively, press and hold the ⬆Aa key while typing.
• To type uppercase constantly, press the ⬆Aa key for 2 seconds to switch the keyboard in uppercase mode.
• To switch out of uppercase mode, press the ⬆Aa key again. If no keys are pressed for 20 seconds, uppercase mode turns off automatically. Also, if you press another modifier key, like Fn or ⌧, you switch out of uppercase mode.

Numbers and punctuation characters

• To type a number or punctuation character, press the Fn key just before you type the number or punctuation character you need. You can turn the Fn mode on or off as you would for the uppercase mode.

Internet
• You can use the Fn key to enter www. or .com.

Accented letters and symbols

Accented characters and symbols are not directly available on the remote control keyboard.
To type such a character, you can open the onscreen keyboard.

To open the onscreen keyboard, press ⌧. In the onscreen keyboard, you can navigate to the character you need. Switch the keyboard layout with the color keys. Press OK to enter a character. The onscreen keyboard disappears when you press a character on the remote control keyboard.

Alternatively, you can enter special characters with the remote control SMS/text keypad on the front of the remote control.

6.3
IR sensor

The remote control of the TV uses RF (radio frequency) to send its commands to the TV. With RF, you do not need to point the remote control at the TV.

However, the TV can also 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.

6.4

Pairing with TV

This remote control uses radio frequency (RF) to send its commands to the TV. Unlike remote controls using infrared signals, with this remote control you can send commands without pointing at the TV.

The TV will notify you when the battery power of the remote control is low.

Pairing the remote control

For the remote control to communicate with the TV, both TV and remote control should be paired with each other. Once paired, you cannot use the remote control to control another TV.
When you started the initial TV installation, the TV asked you to press the **OK** key, and by doing so, the pairing was done. When you turn off the TV, the pairing is stored. You can pair up to 5 remote controls with this TV.

Pairing again

You can pair another remote control with this TV.
The method to pair a remote control is different for a remote control already paired with another TV compared with a remote control that is not paired yet.

· The remote control is paired with another TV
To pair, hold the remote control close to the TV and press the **Red** and **Blue** key at the same time for 5 seconds. A message will appear if pairing is successful.
· The remote control is not paired yet
To pair, hold the remote control close to the TV and press **OK** for a few seconds. A message will appear if pairing is successful.

For retail

To pair a new, not yet paired TV with a remote control that is already paired with another TV, hold the remote control close to the TV and press the **Red** and **Blue** key at the same time for 5 seconds. A message will appear if pairing is successful.

Note:
If the remote control still fails to pair with the TV, press **Home** > **Setup** > **TV settings** > **General settings** > **Reinstall TV**, then repeat the pairing step.

6.5

Batteries

If the TV does not react on a key press on the remote control, the batteries might be empty.

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

1 - Slide the battery door in the direction shown by the arrow.
2 - Replace the old batteries with 2 type **AAA-LR03-1.5V** alkaline batteries. Make sure the + and the - ends of the batteries line up correctly.
3 - Reposition the battery door and slide it back until it clicks.

Remove the batteries if you are not using the remote control for a long time.
Safely dispose of your old batteries according to the end of use directions.

For more information, press **Keywords** and look up **End of use**.

6.6

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.

7

TV channels

7.1

Watching TV channels

Switch channels

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

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

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 channels.

To switch back to the previously tuned channel, press Back.

To switch to a channel from a channel list

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

In a channel list, navigate to a TV channel or radio station. With its icon highlighted, press OK to change the TV channel or listen to the radio station.
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 channels, press LIST again.

Radio channels

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

Channel list

Favorite channels

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

Create your favorite channel list

1 - While watching a TV channel, press LIST to open the channel list.
2 - Select the channel and press Mark as favorites. The selected channel is marked with a ★.
3 - To finish, press Back. The channels are added to the Favorites list

To remove a channel from the Favorites list, select the channel and press Remove.

Channel list views

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

Channel list options

According to the channel list on screen, press OPTIONS to select one of the options.

Channel logos

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

1 - Press Home and select Setup and press OK.
2 - Select TV settings > General settings > Channel logos and press OK.
3 - Select Off and press OK.
4 - Press Back, repeatedly if necessary, to close the menu.

Rename channels

You can rename channels in the channel list.

1 - Select the channel you want to rename in one of the channel lists.

2 - Press Rename.
3 - You can enter text with the remote control keyboard or open the on-screen keyboard.

With the on-screen keyboard

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

Lock a channel

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

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 programs 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 and select Unlock channel. You will need to enter the Child lock code.

Age ratings lock

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

Some digital broadcasters have age rated their programs. When the age rating of a program is equal to or higher than the age you have set as age rating for your child, the program will be locked.
To watch a locked program you must enter the child lock code. 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 > Age ratings lock 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.

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

Content rating

You can block programs with objectionable content.

1 - Press and select Setup and press OK.
2 - Select Channel settings > Child lock > Content ratings lock.
3 - If no child lock code is set, you must enter one now. Enter a 4-digit code.
4 - Set the content and press OK. The selected content is blocked.
5 - Press , repeatedly if necessary, to close the menu.

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 > 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 code?

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

Options for channels

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

Open the options menu

While watching a channel, press OPTIONS .

Universal Access - Key beep

When you press a button on the remote control or TV, you can set the TV to play a beep.
For more information, press Keywords and look

up Universal Access - Key beep.

Closed captions

Turn Closed captions on or Closed captions off with this options. Select On during mute to show closed captions only when the sound is muted with .

Caption service

Select the correct type of closed-caption services.
For more information, press Keywords and look up Closed captions.

Alternate audio

For analog channels, select Main or SAP for audio language.

Audio languages

For digital broadcast, you can select an available audio language temporarily if none of your preferred languages are available.
For more information, press Keywords and look up Audio languages.

Dual I-II

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

DTVi Applications

Display the list of Digital TV interactive applications.
For more information, press Keywords and look up DTVi.

Status

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

Share

Enables the user to communicate his activity with his social networks (such as Twitter, or email).
iTV not shown

Picture format

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

To change the picture format . . .

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

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

· Basic
- Fill screen
- Fit to screen

· Advanced
- Last setting
- Move
- Zoom
- Stretch
- Native
- Undo

Closed captioning (CC) and language

Closed captions

You can display closed captions at all times or only when the TV is muted.

To open Closed captions, press CC.

Note:

· Digital TV interactive applications are not accessible when closed caption text is turned on.
· Not all TV programs, commercials and features include closed captioning information. See your local TV program
listings for channels with closed captions. Captioned programs are typically listed with service marks, such as 'CC,' in the TV listings.

Turn on closed captions
1 - While you watch TV, press OPTIONS.
2 - Select Closed captions > On and press OK.

Select type of closed captions
1 - While you watch TV, press OPTIONS.
2 - Select Caption service.
3 - Select the correct type of closed captions and press OK.

Audio language

If the TV channel broadcasts multiple or dual audio languages, you can select your preferred audio language.

1 - While you watch TV, press OPTIONS.
2 - For digital channels, select Audio language. For analog channels, select Alternate audio.
Press OK to confirm your selection.

3 - Select from the available languages, then press OK.

Note:
If you have selected Alternate audio for analog channels, select between:

- Main: Primary audio language or
- SAP: Secondary audio language

Menu language

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

1 - Press ⌂ 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 ↩, repeatedly if necessary, to close the menu.

Interactive TV

About interactive TV

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

Note:

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

Visit the broadcaster's Internet website for more information.

What you need

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

Use interactive TV

Open iTV pages

Most channels that offer HbbTV or iTV invite you to press the ▬ key or OK key to open their interactive program.

Navigate iTV pages

You can use the arrow and color keys, the number keys and the ↩ key to navigate the iTV pages.

You can use the ▶ (Play), ⏸ (Pause), and ■ (Stop) keys to watch videos within iTV pages.

Close iTV pages

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

7.2
Channel installation

Update channels

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.

Reinstall channels

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

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

Reinstall channels

To reinstall the channels only . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select Search for channels > Reinstall channels and press OK.
3 - Follow the instructions on screen.

Full installation

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 on-screen instructions.

Factory settings

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

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > General settings > Factory settings and press OK.
3 - Press OK to confirm.
4 - Press ↩, repeatedly if necessary, to close the menu.

Channel list copy

Introduction

Channel list copy is intended for dealers and expert users.

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.

1 - Press ⌂, select Setup and press OK.
2 - Select Software settings > Current software info and press OK.

Copy channel list

To copy a channel list . . .

1 - Turn on the TV that has its channels installed. Plug in a USB memory device.
2 - Press ⌂ and select Setup and press OK.
3 - Select TV settings > General settings > Channel list copy > Copy to USB and press OK. To copy the channel list from this TV, you might be asked to enter the Child lock code you entered during the installation.
4 - When copying is done, unplug the USB memory device.

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

Upload channel list

Upload a copied channel list

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

To a TV that is not yet installed

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

To an already installed TV

1 - Verify the country setting of the TV. (To verify this setting, press ⌂ and select Setup and press OK. Select Search for channels > 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 > Reinstall TV > OK. Select the correct country and skip the Search for channels. Finish the installation. When done, continue with step 2.
2 - Plug in the USB memory device that holds the channel list of the other TV.
3 - To start the channel list upload, press ⌂ and select Setup and press OK.
4 - Select TV settings > General settings > Channel list copy > Copy to TV and press OK. You might be asked to enter the Child lock code of this TV.
5 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB memory device.

Install digital channels

If you know the channel frequency of the channels you want to install, you can search and store digital channels one by one. For best results, contact the service provider.

1 - Press ⌂.
2 - Select Setup > Channel settings > Channel installation.
3 - Select Digital: Reception test > Search and press OK.
4 - Press the numbered buttons to enter the channel frequency.
5 - Select Search and press OK.
6 - When the channel is found, select Store and press OK.

8

Home menu

From the Home menu, you can start using all TV functions.

Open the Home menu to start watching TV or start watching a disc on your Home Theater System. Also in the Home menu, you can open Smart TV to surf the Internet or open Help if you need information on using the TV.

Open the Home menu

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

· Help
Select Help and press OK to open on-screen Help. Look up topics in the alphabetical list.
· Setup
Select Setup to install channels or adjust TV settings.
· TV
Select TV and press OK to watch TV channels.
· Smart TV
Select Smart TV and press OK to open the Smart TV start page.
· Source
Select Source and a connected device in the list underneath the icon. Press OK to switch to the selected device.
· TV guide
Select TV guide and press OK to open a list of current and scheduled TV programs on your channels.
· Recordings
Select Recordings and press OK to open the list of your recordings.

9

TV guide

9.1

What you need

With the TV guide you can view a list of the current and scheduled TV programs of your channels. Depending on where the TV guide information (data) is coming from, analog and digital channels or only digital channels are shown. Not all channels offer TV guide information.

The TV can collect TV guide information for the channels that are installed on the TV (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 program information. This may take several minutes. TV guide data is stored in the TV.

Tune to a program

Switch to a program

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

View program details

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

Change day

The TV guide can show scheduled programs 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 reminders that alert you of the start of a program with a message on screen.

· To set a reminder, select the program in the schedule and press the color key for Set reminder. The program is marked with a clock.
· To cancel the reminder, press the color key for Clear reminder.
· To view a list of all reminders you have set, press OPTIONS > All reminders for Scheduled reminders.

Search by genre

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

To search for programs by genre, press OPTIONS and select Search by genre.
Select a genre and press OK. A list of programs appears.

9.3

Recordings

From the TV guide, you can instantly record or schedule a recording of a TV program. To store the recordings, connect a USB Hard Drive to the TV.

For more information on Recording, press Keywords and look up Recording.

10

Sources

10.1

Sources list

In the list of connections (Sources menu), you can find the devices connected to the TV. From the Sources 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.
For some devices (HDMI-CEC devices), you can select an activity directly in the list underneath the device icon.
Select the device and an activity, then press OK.
To close the Source menu without switching to a device, press SOURCES again.

Automatic detection

When you connect a new device to the TV, the device is detected automatically and put in the Sources menu. The device is shown as an icon (the device type) and has a name. If the device type does not correspond with the device, e.g. the TV says it is a player but it is not, you can change the type.
To change the type of the device, press Change type and select a type that fits the device and press OK.
If the name does not fit the device or you want to give the device a name of your own, press Rename .
Use the remote control keypad to enter a new name.

An appropriate device type helps you in using the device. The device type determines picture and sound styles, resolution values, specific settings or the position within the Sources menu.

When you connect a new device to the TV, the icon of the device jumps to the front of the Sources menu.

If the TV does not detect the device automatically, select the connection you used to connected the device and adjust the Device type and name.

Original name and icon

To restore the device icon to its original name and type icon, press OPTIONS. Select the Original name and icon and press OK.

Scan connections

To rescan all TV connections and update the Sources menu, press OPTIONS. select Scan connections and press OK.

10.2

From standby

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

Play

To turn on both the disc player and TV from standby and start playing the disc or program 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 turned on.

Home Theater System

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

10.3

EasyLink

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

For more information, press Keywords and look up EasyLink.

11

Timers and clock

11.1

Sleeptimer

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

To set the sleep timer . . .

1 - Press ⌂ 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 5 minute increments. If set to 0 min, the sleep timer is turned off. You can always turn off your TV earlier or reset the time during the countdown.
3 - Press ↩, repeatedly if necessary, to close the menu.

11.2

Clock

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

Change the clock mode

You can change clock mode to automatic or manual. By default, it is set to automatic mode, which automatically synchronizes it to Coordinated Universal Time (UTC). If your TV cannot receive UTC transmissions, change the clock mode to Manual.

1 - While you watch TV, press ⌂.
2 - Select Setup > TV settings > General settings.
3 - Select Clock > Auto clock mode.
4 - Select Automatic or Manual, then press OK.

Change the time zone

In countries with clock transmission data, you can change the time zone if Auto clock mode > Automatic is selected.

1 - In the Clock menu, select Time zone.
2 - Select your time zone, then press OK.

Set the clock manually

You can set the date and time manually. Before you start, set the clock mode to Manual.

1 - In the Clock menu, select Date or Time, then press OK.
2 - Set the time or date with the Navigation buttons.
3 - Select Done, then press OK.

When you record programs with Smart TV, Recording, we recommend not to change the time and date manually.

11.3

Switch off timer

If you do not press a key on the remote control after a preset time, or if the TV receives no input signal or remote control commands for 10 minutes, the TV turns 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 Off.
3 - Press ↩, repeatedly if necessary, to close the menu.

For more information on environmentally friendly TV settings, press ▬ Keywords and look up Eco settings.

12

3D

12.1

What you need

This is an Active 3D TV. On this TV, you can watch 3D programs and movies in full High Definition resolution with Active 3D.

To watch 3D you need to :

• Tune to a TV channel that broadcasts programs in 3D
• Rent a movie in 3D from an online video store with Smart TV
• Watch a movie in 3D from a 3D Blu-ray Disc, a USB device, or computer

To also watch in 3D on this TV, you will need one of these types of Philips Active 3D glasses. . .

• PTA507
• PTA508
• PTA509
• PTA517
• PTA518
• PTA519

All types are sold separately. Other active 3D glasses might not be supported.

12.2

The 3D glasses

Overview

1 - On or off switch
2 - Player 1 or player 2 selection
3 - Receiver lens
4 - Battery compartment

When you unpack the 3D glasses, also remove the small plastic foil from the battery compartment that prevents the battery from running empty.

Turn on and off

Turn on

When a 3D program is shown on screen, press ⏻ on the 3D glasses and put them on. The glasses need some seconds to adjust to the 3D signal from the 3D transmitter on the TV. At first use, this may take up to 15 seconds.

Battery level

You can check the battery level when you turn on the 3D glasses.

• If the LED light blinks green, you can use the glasses for 4 hours or more.
• If the LED light blinks orange, you can use the glasses for at least 2 hours but less than 4.
• If the LED light blinks red, the battery is almost empty and less than 2 hours of 3D watching remain.

Turn off

To turn off the 3D glasses, press ⏻. The LED light blinks red 4 times. When the 3D glasses do not receive 3D signals for 2 minutes, the glasses turn off automatically.

3D transmitter

Make sure the receiver lens in the center of the glasses can receive the 3D signals. Also, clear objects away from the 3D transmitter on the TV.

1 - 3D transmitter on the TV
2 - 3D receiver on the 3D glasses

Two-player gaming

You can use these glasses to play two-player games. Two players can watch the same TV but see two different screens to play a game.
To switch the glasses to watch the Player 1 or Player 2 screen, turn on the glasses and then press the **Player 1/2** key.

• If the LED light is orange and is lit up continuously for 2 seconds, the glasses are set for player 1.
• If the LED light is orange and blinks, the glasses are set for player 2.

For more information, press **Keywords** and look up **Two-player gaming**.

Replacing the batteries

To replace the battery of the 3D glasses PTA508, unscrew the small battery lid and replace the battery: type CR2032 (3V). Make sure the + side of the battery is visible. Replace the lid and fix it with the screw.

To replace the battery in the PTA509 or PTA519 3D glasses, press the small knob on the battery lid and slide the lid up to open. Replace the battery with a type CR2032 (3 V) replacement. Make sure the + side of the battery is visible. Replace the lid and slide it down until it clicks.

⚠ Warning

Danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.

Danger
• Do not ingest the battery. Chemical burn hazard.
• This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
• Keep new and used batteries away from children.
• If the battery compartment does not close securely, stop using the product and keep it away from children.
• If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

12.3
The 3D glasses

When a 3D program is shown on screen, simply put on the 3D glasses to watch the program in 3D.

Recommended viewing height

For best picture quality, when watching passive 3D, your eyes should be level with the center of the screen.

12.4
Care of the 3D glasses

• Do not use cleaning chemicals containing alcohol, solvent, surfactant, or wax, benzene, thinner, mosquito repellent or lubricant. Using these chemicals can cause discoloration or cracks.
• Do not expose the 3D glasses to direct sunlight, heat, fire or water. This may result in a product malfunction or fire.
• Do not drop, bend or apply force to the lenses of the 3D glasses.
• Use a clean soft cloth (microfiber or cotton flannel) to clean the lenses to avoid scratching them.
• Never spray cleaner directly onto the 3D glasses. This may damage the electronics.

12.5
Watch 3D

To experience the best 3D effect while you watch 3D programs:

• Sit at a distance that is at least three times the height of the TV screen.
• Do not sit more than 20 feet away.

3D switching

The first time a 3D signal is detected, you can set your preference on how to start 3D in the future.

• To switch to 3D automatically, select Automatic.
• To show a notification first, select Notification only.
• To never switch to 3D, select Never.

You can still change this preference in the Setup menu > TV settings > 3D > Switch to 3D.

Start 3D

When the TV switches to 3D or when a notification is shown that 3D is available, put on your 3D glasses.

If the TV cannot detect the 3D signal (the 3D signal tag is missing), the 3D program is shown as a double image on the screen. To switch to 3D, adjust the 3D settings and select 3D - Side by side or 3D - Top / bottom according to the double image positions.

1 - Press ⚙.
2 - Select 3D settings > 3D - Side by side or 3D - Top / bottom, then press OK.

Stop 3D

To stop watching 3D, press ⚙, select 3D settings and select 2D.
3D is switched to 2D when you switch to another channel or connected device.

2D to 3D conversion

You can convert any 2D program to watch it in 3D.

1 - Press ⚙.
2 - Select 3D settings > 2D to 3D conversion.

Adjust the 3D depth
1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > 3D > 3D effect.
3 - Select Off or On.
4 - Press ⮌, repeatedly if necessary, to close the menu

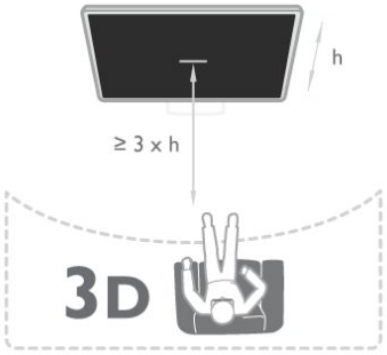
To turn off 2D to 3D conversion...

1 - Press ⚙.
2 - Select 3D settings > 2D, then press OK.

12.6
Optimal 3D viewing

For an optimal 3D viewing experience, we recommend that you:

• sit at least 3 times the height of the TV screen away from the TV, but no further than 20 feet away.
• avoid fluorescent lighting (such as TL lighting or certain energy saving light bulbs which operate on a low frequency) and direct sunlight as they may interfere with the 3D experience.



12.7

Health warning

• Watching 3D is not recommended for children under the age of six.
• If you or your family have a history of epilepsy or photosensitive seizures, consult a medical professional before exposing yourself to flashing light sources, rapid image sequences or 3D viewing.
• If you experience any discomfort, stop watching 3D and do not immediately engage in any potentially hazardous activity (for example driving a car) until your symptoms have disappeared. If symptoms persist, do not resume watching 3D without consulting a medical professional first.
• To avoid discomfort such as dizziness, headache or disorientation, we recommend not watching 3D for extended periods of time.
• Do not use the 3D glasses for any purpose other than watching 3D TV.
• If you normally wear corrective glasses or use contact lenses, wear the 3D glasses together with these glasses or lenses.
• Keep the glasses away from small children to avoid the swallowing of small parts or batteries.
• Parents should monitor their children during 3D viewing and ensure they do not experience any discomfort as mentioned above. Watching 3D is not recommended for children under six years of age as their visual system is not fully developed yet.
• Avoid the use of the 3D glasses in case of eye infection or other diseases transmitted by contact (e.g. conjunctivitis, head lice, etc.). Only start using the 3D glasses again when the infection has disappeared completely.

13

Games

13.1

Play a game

With a game console connected to the TV, you can play games on TV.

For more information on connecting a game console, press Keywords and look up **Game console, connect**.

Start a game

1 - Turn on the game console.
2 - Press SOURCES, select the game console and press **OK**.
3 - Start the game.

Ideal game setting

For some games, where speed and precision is needed, set the TV to the ideal **Game** setting before you start playing.
If your game console is added as a **Game** type of device in the Sources menu (list of connections), the TV is set to the ideal Game setting automatically.
If the type of your game console is set as **Player** and used as a disc player most of the time, leave the device type set to **Player**.

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

1 - Press and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Activity style** and press **OK**.
3 - Select **Game** and press **OK**.
4 - Press , repeatedly if necessary, to close the menu. Remember to set the Game or computer setting back to Off when you stop playing the game.

13.2

Two-player games

About two-player gaming

If you play a multi-player game with split screens, you can set the TV to show each screen as a full screen. Each player sees only his part of the game, full screen. The TV uses 3D technology to show both screens.

What you need

To play a two-player game with this TV, you need 2 active 3D glasses - Philips PTA507, PTA508, PTA509, PTA517, PTA518 or PTA519.
Also, the game console must be connected with HDMI.

Play a two-player game

To start a two-player game . . .

1 - Press SOURCES , select the game console and press **OK**.
2 - On the game console, start the game and select the multi or two-player mode. Select the mode for split screen viewing.
3 - On the TV, press > **Two-player gaming** and press **OK**.
4 - Select the format in which the split screen game is shown on screen, **Side by side** or **Top / bottom** and press **OK**. The TV shows the 2 screens as full screens.
To watch the 2 different screens, put on the 3D glasses.
To switch the glasses to watch the Player 1 screen or Player 2 screen, press the **Player 1/2** selection key on the glasses.

In and out of split screen view

In two-player split screen view, you can switch back and forth from split screen to combined view, to be able to read the game menu or game scores.
To switch views back and forth, press **OK** on the remote control of the TV.

Stop a Two-player game

To stop the two-player split screen view, press and select another activity.

14

Your photos, videos and music

14.1

From a USB connection or network computer

What you need

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

From a USB device

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

Warning

If you try to pause or record a program 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.

From a computer

If the TV and the computer are in the same network, the TV can browse and play files stored on your computer.
On your computer, you need to install media server software like Twonky™ to share your files with the TV.
The TV shows your files and folders as they are organized on your computer.
To browse the files on your computer, press SOURCES , select Browse network and press OK.

Menu bar and sorting

With a USB device connected, the TV sorts the files by type. Navigate to the menu bar and select the type of file you are looking for.
If you browse files from a computer, you can only browse the files and folders as they are organized on the computer.

The menu bar

Navigate to the menu bar and select the type of file you want to watch or play.
Select Photos , Music or Videos .
Alternatively, you can open the Folders view and browse your folders to look for a file.

Sorting

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

View photos

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

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

Info

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

Options

Press OPTIONS .

- Shuffle
Shows your photos in a random order.
- Repeat
Plays the slide show continuously.
- Slide show time
Sets the duration of the slide show.
- Slide show transition
Sets the style of the photo transitions.

To close Browse USB or Browse network, press and select another activity.

Play music

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

If you press LIST or , the music keeps on playing.

Info

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

Options

Press OPTIONS .

· Shuffle
Plays your music in a random order.
· Repeat
Plays the song once or continuously.

To close Browse USB or Browse network, press and select another activity.

Play videos

To play a video, select Videos in the menu bar, select a video and press OK.
If there are more videos in the same folder, press Play all to play all videos in this folder.
To jump to the next or previous video, press + or –.
To pause the video, press OK. Press OK again to continue.
To make a 10-second jump forwards or backwards in a video, press ▶ or ◀.
To rewind or fast forward, press ▶▶ or ◀◀. Press the keys several times to speed up: 1/4, 1/2, 2x, 4x, 8x, 16x, 32x.
To stop the video playback, press ■.

Info

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

Options

Press OPTIONS .

· Subtitles
If available, you can switch between Subtitles Off , Subtitles On , or Automatic.
· Shuffle
Plays your videos in a random order.
· Repeat
Plays a video once or continuously.

To close Browse USB or Browse network, press and select another activity.

14.2
Wi-Fi Miracast

About Wi-Fi Miracast

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

For more information on Wi-Fi Certified Miracast™ go to www.wi-fi.org

Wi-Fi®, the Wi-Fi CERTIFIED logo, the Wi-Fi logo are registered trademarks of the Wi-Fi Alliance. Wi-Fi CERTIFIED Miracast™, Miracast™ are trademarks of the Wi-Fi Alliance.

Turn on Miracast

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

Turn off Miracast

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

1 - Press ⌂ and select Setup and press OK.
2 - Select Network settings > Wi-Fi Miracast > Off and press OK.
3 - Press ⮌, repeatedly if necessary, to close the menu.

Share a screen on TV

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

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

* Miracast is supported by Wi-Fi 3.5 onwards.

Stop sharing

You can stop sharing a screen from the TV or the mobile device.

From the device

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

From the TV

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

- press TV to watch a TV broadcast
- press ⌂ to start another activity on TV
- press SOURCES to open the Sources menu and select a connected device.

Block a device

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

Unblock all devices

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

To unblock all blocked devices . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select Network settings > Reset Miracast group.
3 - Press OK to clear the list.
4 - Press ⮌, repeatedly if necessary, to close the menu.

Blocking a previously connected device

If you want to block a device that you previously connected, you need to clear the Wi-Fi Miracast connections list first. If you clear this list, you will have to confirm or block the connection for every device again.

Screen delay

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

Specifics

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

15

Pause TV

You can pause a TV broadcast and resume watching it later. Only digital TV channels can be paused. You must connect a USB Hard Drive to buffer the broadcast. You can pause a broadcast for a maximum time span of 90 minutes.
For more information, press Keywords and look up USB Hard Drive.

Pause or resume a broadcast

To pause a broadcast, press ⏸ (Pause). A progress bar appears briefly on screen.
To call up the progress bar, press ⏸ (Pause) again.
To resume watching, press ▶ (Play). The icon on screen indicates you are watching a paused broadcast.

Back to the actual TV broadcast

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

The moment you switch to a digital channel, the USB Hard Drive starts buffering the broadcast. When you switch to another digital channel, the broadcast of the new channel is buffered and the broadcast of the previous channel is cleared. When you switch to a connected device (a Blu-ray Disc player or digital receiver) the USB Hard Drive stops buffering and the broadcast is cleared. Also when you switch the TV to standby the broadcast is cleared.

While recording a program on the USB Hard Drive, you cannot pause a broadcast.

Instant replay

While watching a broadcast from a digital TV channel, you can easily instant replay the broadcast.
To replay the last 10 seconds of a broadcast, press ⏸ (Pause) and press ◀ (Left).
You can press ◀ repeatedly until you reach the start of the broadcast buffer or the maximum time span.

Progress bar

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.

16

Recording

16.1

What you need

To record a TV program you need . . .

• a connected USB Hard Drive formatted on this TV
• digital TV channels installed on this TV (the channels you watch with Watch TV)
• to receive channel information for the built-in TV guide (from the broadcaster or from the Internet)

For more information, press ▬ Keywords and look up USB Hard Drive, installation.

16.2

Record a program

Record now

To record the program you are watching, press ● (Record) on the remote control.

If you receive TV guide information from the Internet, you can adjust the end time of the recording in the pop-up window before you confirm the recording.
If you receive TV guide information from the broadcaster, the recording starts immediately. You can adjust the end time of the recording in the list of recordings.
To stop recording, press ■ (Stop).

Schedule a recording

You can schedule a recording of an upcoming program for today or a few days from today (maximum of 8 days away).

1 - To schedule a recording, press TV Guide . On the TV guide page, select the channel and program you wish to record.
You can enter the channel number to jump to the channel in the list.
Press ▶ (Right) or ◀ (Left) to scroll through the programs of a channel.
To change the date of the list, press OPTIONS and select Change day. In the list, select the day you want and press OK. If the TV guide comes from the Internet, you can select the date at the top of the page and press OK.

2 - With the program highlighted, press ▬ Record . The TV adds some time buffer at the end of the program. You can add extra buffer if needed.

3 - Select Schedule and press OK. The program is scheduled for recording. A warning will appear automatically when overlapping recordings are scheduled.
If you plan to record a program in your absence, remember to leave the TV switched to standby and the USB Hard Drive turned on.

List of recordings

To view the list of recordings and scheduled recordings, press ⌂, select Recordings and press OK.

In this list, you can select a recording to watch, remove recorded programs, adjust the end time of an ongoing recording or check the free disk space. Also in this list, if the TV guide comes from the Internet, you can schedule a recording for which you set the beginning and end time yourself, as a timed recording not linked to a program. To set a timed recording, select Schedule recording at the top of the page and press OK. Set the channel, date and time span. To confirm the recording, select Schedule and press OK.

Remove a scheduled recording

To remove a scheduled recording, select the upcoming recording in the list and press OK. Alternatively, you can select the scheduled recording and press OPTIONS and select Cancel recording.

Specifics

• While recording a program, you can watch a previously recorded program.
• While recording, you cannot switch TV channels.
• While recording, you cannot pause the TV broadcast.
• To Record, broadcasters need a reliable clock setting. If you reset the TV clock manually, recordings may fail.

16.3

Watch a recording

To watch a recording . . .

1 - Press ⌂, select Recordings and press OK.
2 - In the list, select the recording and press ▶ (Play) to start the playback. You can use the ▶▶ (Forward), ◀◀ (Rewind), ⏸ (Pause), or ■ (Stop) keys on the remote control.

Expired recording

Broadcasters can limit the number of days a recording can be viewed. A recording in the list can show the number of days before it expires.

Failed recording

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

Delete a recording

To delete a made recording, select the recording in the list, press OPTIONS and select Delete recording.

For more information, press Keywords and look up Record a program.

17

Smart TV

17.1

About Smart TV

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

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

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

17.2

What you need

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

For more information, press Keywords and look up Network.

Tip

To enter text or to navigate an Internet page more easily, you can consider connecting a USB keyboard and a USB mouse to the TV.
For more information, press Keywords and look up USB keyboard or USB mouse.

17.3

Setup Smart TV

The first time you open Smart TV, you need to configure your connection. Read and agree to the terms and conditions to continue. If you do not want to set up Smart TV, press ⮌.

Register

To register with Club Philips . . .

1 - Select Register and press OK.
2 - Enter your email address, select Continue and press OK.
3 - Confirm the email address.

Parental control

To lock Adult 18+ rated apps . . .

1 - Turn on Smart TV parental control by selecting Enable and then pressing OK.
2 - Enter an unlock PIN code of your choice.
3 - Confirm your PIN code.
Adult 18+ rated apps are now locked. To open a locked app, select the app and press OK. The TV will ask you to enter your 4-digit code.

17.4

Smart TV Apps

Open Smart TV

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

Open Smart TV

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

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

Close Smart TV

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

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

Smart TV start page

1 - Now on your TV
2 - Your Apps
3 - App gallery
4 - Internet
5 - Recommended Apps
6 - Search
7 - Color keys for control

Your Apps

You start Apps from the Smart TV start page. If the start page does not hold any Apps yet, you can add Apps from the App gallery.

App gallery

In the App gallery you find all available Apps.

Internet

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

Recommended Apps

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

Search

With Search, you can search the App gallery for relevant Apps.
Enter a keyword in the text field, select and press OK to start searching. You can enter names, titles, genres, and description keywords to search. Alternatively, you can leave the text field empty and search for the most popular searches/keywords for a range of categories. In the list of found keywords, select a keyword and press OK to search for items with that keyword.

Open an App

To open an App, you must add it to your list of Apps in the Smart TV start page first. You can add Apps to your list from the App gallery.
The list of your Apps on the Smart TV start page can be several pages long. Use the arrow keys to go to the next or previous page. Alternatively, press + (Next page) or – (Previous page).

Open an App

To open an App . . .
1 - Press and select Smart TV.
2 - On the start page, select an App icon and press OK.
In an App, press to go back 1 step or page.

Close an App

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

Reload an App page

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

Zoom

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

View security info

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

Feedback on an App

Select the App and press Feedback to select a 'like' or 'don't like' button and send a suggestion or remark to us. You can also report an App malfunction.

Manage your Apps

From the list of Apps on the Smart TV start page you can . . .
- Remove an App

To remove an App from the list, select the App icon and press Remove . The App is still available in the App gallery.
- Move an App

To reposition an App in the list, select the App icon, press Move and use the arrow keys to reposition the App. Press OK to confirm the position.
- Lock an App

To lock an App, select the App icon and press Lock .
When you lock an App, you must enter the 4 digit PIN code you set for Parental control when you configured Smart TV. In the list, a locked App is marked with a lock .
To unlock an App, select the App icon and press Unlock . You must enter the 4 digit PIN code to unlock.

App gallery

Open the App gallery in Smart TV to browse the Apps, the collection of tailored websites for TV.

Find the App for YouTube videos, a national newspaper, an online photo album, Twitter, etc. There are Apps to rent a video from an online video store and Apps for watching programs you missed. If the App gallery does not have what you are looking for, try the World Wide Web and surf the Internet on TV.

Rental video Apps

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

Rent a movie

1 - Open a Video store App in your list of Apps, or select a recommended video on the Smart TV start

page.
2 - Select a movie.
3 - Make the online payment.
4 - Start watching. You can use the ▶ (Play) and ⏸ (Pause) keys.

Most Video stores ask you to create a login account.

Streaming video

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

Internet traffic

Streaming or downloading multiple videos may cause you to exceed your monthly Internet traffic limit.

Online TV

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

Open Online TV

To open the Online TV App . . .

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

List per broadcaster

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

* If available in your region.

World Wide Web

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

On your TV, you can view any Internet website but most of them are not tailored for a TV screen.

• Some plug-ins (e.g., to view pages or videos) are not available on your TV.
• Internet pages are shown one page at a time and full screen.

17.5

Multi view

While you are on a Smart TV App or the Internet, you can watch the current TV channel. Multi view opens a small screen for the TV channel next to the Smart TV screen.

To open Multi view...

1 - Press SMART TV to open Smart TV.
2 - Press MULTI VIEW to open the small screen.
3 - Press + or – to change the TV channel in the small screen.

The Multi view screen cannot display video in 3D or in UHD. With Multi view open, you cannot use the Remote Control Pointer or use a connected USB mouse in the Smart TV screen.

17.6

Reset Smart TV

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

To clear the Internet memory . . .
1 - Press and select Setup and press OK.
2 - Select Network settings > Clear Internet memory and press OK.

18

Settings

18.1

Setup menu

Quick picture and sound settings

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

To return to your preferred picture setting, while watching a TV channel, press ⚙ Select **Picture style** and select **Personal**.

To set a Quick picture setting . . .

1 - Press ⌂, select **Setup** and press **OK**.
2 - Select **Quick picture and sound settings** and press **OK**. Go through the steps and finish.

For more information, press ▬ **Keywords** and look up **Picture style**.

TV settings

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

For more information, press ▬ **Keywords** and look up the topic you need

Search for channels

With **Search for channels**, you can update your current channel list and reinstall all channels. Channel update or channel reinstall may take some time.

Press ▬ **Keywords** and look up **Channel, update** or **Channels, reinstall**.

Channel settings

In the **Channel settings** menu, you can set your language preferences. Set an age rating to prevent children from watching a rated program, and set or change your Child lock code.

Languages

Press ▬ **Keywords** and look up **Audio language** or **Closed captions**.

Channel installation

Press ▬ **Keywords** and look up **Channel installation**.

Child lock

Press ▬ **Keywords** and look up **Child lock**.

Connect to network

Press ▬ **Keywords** and look up **Network, wireless** or **Network, wired**.

Network settings

Press ▬ **Keywords** and look up **Network, settings**.

Update software

Press ▬ **Keywords** and look up **Software, Internet update** or **Software, USB update**.

Software settings

Press ▬ **Keywords** and look up **Software, current version**.

Watch demo

With **Watch demos** in the **Setup** menu, you can watch demonstration videos of some of the picture quality features of
your TV.

Pixel Plus HD

The demo shows how Pixel Plus technology enhances the image quality. It demonstrates image performance before and after enhancement to clearly demonstrate the effects of the Pixel Plus HD feature.

Active control

The TV monitors incoming picture quality, the amount of motion in the picture, brighter or darker scenes, and the light conditions in your room. With these values, the TV adjusts the picture for best performance.

18.2

Picture

Picture style

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

1 - While watching a TV channel, press ⚙ to open the menu.
2 - Select **Picture style** and press **OK**.

The available Picture styles are . . .

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

Adjust a Picture style

1 - Select the style and press **OK**.
2 - Press ⌂ and select **Setup** and press **OK**.
3 - Select **TV settings** > **Picture**, navigate to the individual setting and adjust it.
4 - Press ↩, repeatedly if necessary, to close the menu.

Restore a Picture style

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Picture style** and select the style you want to reset.
3 - Press ▬ **Restore style** . The style is reset.

For more information on adjusting individual picture settings, press ▬ **Keywords** and look up **Picture**.

Vivid

If the Picture style is switched back to **Vivid** every time you turn 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

Color

With **Color**, you can adjust the color saturation of the picture.

To adjust the color . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Color**.
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 contrast of the picture. If you are watching 3D pictures, this setting is switched to **3D contrast**.

To adjust the contrast . . .

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

Color settings

Color enhancement

With **Color enhancement**, you can enhance the color intensity and the details in bright colors.

To adjust the level . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Color** > **Color enhancement**.
3 - Press ▶ (right) and select **Maximum**, **Medium**, **Minimum** or **Off**.
4 - Press ↩, repeatedly if necessary, to close the menu.

Color temperature

With **Color temperature**, you can set the picture to a preset color temperature or select **Custom** to set a temperature setting yourself with **Custom color temperature**. **Color temperature** and **Custom color 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** > **Color** > **Color temperature**.
3 - Press ▶ (right) and select **Normal**, **Warm** or **Cool**. Select **Custom** if you want to set a color temperature yourself.
4 - Press ⮌, repeatedly if necessary, to close the menu.

Custom color temperature

With **Custom color temperature**, you can set the color temperature yourself. To set a **Custom color temperature**, first select **Custom** in the **Color temperature** setting to enable the **Custom color temperature** menu. **Custom color temperature** is a setting intended for expert users.

To set a custom color temperature . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Color** > **Custom color temperature**.
3 - Press ▶ (right).
4 - Select a setting with the arrow keys.
5 - Press **OK** to confirm a setting. You can also select one of the presets in this menu.
6 - Press ⮌, repeatedly if necessary, to close the menu.

Contrast settings

Contrast modes

With **Contrast modes**, you can set the level at which power consumption is reduced when dimming the intensity of the screen. Choose the mode for the best power consumption or best picture intensity.

To adjust the level . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Contrast** > **Contrast modes**.
3 - Press ▶ (right) and select **Best picture**, **Best power**, **Standard** or **Off**.
4 - Press ⮌, repeatedly if necessary, to close the menu.

Dynamic contrast

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

To adjust the level . . .

1 - Press ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** > **Contrast** > **Dynamic contrast**.
3 - Press ▶ (right) and select **Maximum**, **Medium**, **Minimum** or **Off**.
4 - Press ⮌, repeatedly if necessary, to close the menu.

Brightness

With **Brightness**, set the level of brightness of the picture. The Brightness setting is intended for expert users. We recommend that other users adjust brightness with the **Contrast** setting.

To adjust the level . . .

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

Video contrast

With **Video contrast**, you can decrease the range of the video contrast. If you are watching 3D pictures, this setting is switched to **3D video contrast**. Video contrast and 3D video contrast are settings intended for expert users.

To adjust the level . . .

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

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 ⌂ and select **Setup** and press **OK**.
2 - Select **TV settings** > **Picture** > **Advanced** >

Contrast > Gamma.
3 - Press ▶ (right) and adjust the value with ▲ (up) or ▼ (down).
4 - Press ↩, repeatedly if necessary, to close the menu.

Sharpness settings

Super resolution

Super resolution provides superior sharpness in line edges and contours.

To turn on or off . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > Picture > Advanced > Sharpness > Super resolution.
3 - Press ▶ (right) and select On or Off.
4 - Press ↩, 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 ⌂ and select Setup and press OK.
2 - Select TV settings > Picture > Advanced > Sharpness > Noise reduction.
3 - Press ▶ (right) and select Maximum, Medium, Minimum or Off.
4 - Press ↩, repeatedly if necessary, to close the menu.

MPEG artifact reduction

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

To reduce the MPEG artifacts . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > Picture > Advanced > Sharpness > MPEG artifact reduction.
3 - Press ▶ (right) and select On or Off.
4 - Press ↩, repeatedly if necessary, to close the menu.

Game or computer

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

To switch the setting manually . . .

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

Location

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

To set the TV to Shop location . . .

1 - Press ⌂ and select Setup and press OK.
2 - Select TV settings > General settings > Location and press OK.
3 - Select Shop and press OK.
4 - Press ↩, repeatedly if necessary, to close the menu.

18.3

Sound

Sound style

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

1 - While watching a TV channel, press ⚙ to open the menu.
2 - Select Sound style and press OK.

The different Sound styles are . . .

- Personal - Your personal choices made in Personalize picture and sound
- Original - Factory standard
- Movie - Ideal for watching movies
- Music - Ideal for listening to music
- Game - Ideal for gaming
- News - Ideal for speech

Adjust a Sound style

You can adjust a Sound style . . .

1 - Select the style and press OK.
2 - Press and select Setup and press OK.
3 - Select TV settings, navigate to the individual setting and adjust it.
Press to close the menu to store your setting.

To return to the original Sound style values . . .
1 - Press and select Setup and press OK.
2 - Select TV settings > Sound > Sound style and select the style you want to reset.
3 - Press Restore style . The style is reset.

Press Keywords and look up Sound for adjusting individual sound settings.

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. By selecting Incredible surround for 2D viewing, the TV switches to Incredible surround 3D automatically when you watch 3D. If you do not want the TV to switch automatically, select Off in Auto surround 3D.

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, Incredible surround or Incredible surround 3D.
4 - Press , repeatedly if necessary, to close the menu.

Auto surround 3D

With Auto surround 3D, you can prevent the TV from automatically switching.

To turn on or off . . .

1 - Press and select Setup and press OK.
2 - Select TV settings > Sound > Auto surround 3D.
3 - Press (right) and select On or Off.
4 - Press , repeatedly if necessary, to close the menu.

Headphones volume

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

To adjust the volume . . .

1 - Press and select Headphones volume and press OK.
2 - Press (up) or (down) to adjust the volume.
3 - Press , repeatedly if necessary, to close the menu.

Advanced sound settings

Auto volume leveling

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 turn on or off . . .

1 - Press 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 , repeatedly if necessary, to close the menu.

Delta volume

For analog TV and HDMI source only.

Delta volume is a fine volume adjustment for individual channels. With Delta volume, you can increase the volume for channels with a weaker audio signal or decrease the volume for channels with a stronger audio signal. The setting will be stored for specific channels. The TV speakers must to be set to "On".

TV speakers

You can send the TV sound to a connected audio device - a Home Theater 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 turn 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 turn off the TV speakers when the device is playing the sound.
- If you select **EasyLink autostart**, the TV will turn on the audio device, send the TV sound to the device and turn 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 ⌂ 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 ⮌, repeatedly if necessary, to close the menu.

To switch speakers directly . . .

1 - While watching TV, press ⚙.
2 - Select **Speakers** then **TV** or **Amplifier** (audio device).
3 - Press ⮌, repeatedly if necessary, to close the menu.

Clear sound

With **Clear sound**, you improve the sound for speech. Ideal for news programs. You can turn the speech improvement on or off.

To turn on or off . . .

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

HDMI ARC

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

For more information, press ▬ **Keywords** and look up **HDMI ARC**.

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 Theater System.

For more information, press ▬ **Keywords** and look up **Audio Out format**.

Audio Out leveling

With **Audio Out Leveling** you can level the sound volume of the Home Theater System with the volume of the TV when you switch from one to the other.

For more information, press ▬ **Keywords** and look up **Audio Out Leveling**.

Audio Out delay

If you set an Audio sync delay on your Home Theater System, to synchronize the sound with the picture, you must turn off **Audio Out delay** on the TV.

For more information, press ▬ **Keywords** and look up **Audio Out Delay**.

Audio Out offset

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

For more information, press ▬ **Keywords** and look up **Audio Out Offset**.

TV placement

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

1 - 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 **Wall mounted** and press **OK**.
4 - Press ⮌, repeatedly if necessary, to close the menu.

18.4

Universal Access - Key beep

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

To turn on Key beep . . .

1 - While you watch TV, press OPTIONS .
2 - Select **Universal Access** - **Key beep** > **On**, then press **OK**.

For more information, press **Keywords** and look up **Universal Access - Key beep**.

19

Specifications

19.1

Environmental

Saving energy

Energy saving

This Picture style sets the picture in the most ideal energy conscious setting.
For more information, press Keywords and look up Picture style.

Screen off

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

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 turns 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 turn off.

In addition to the Eco settings, your TV also has environmentally friendly technology with regard to power consumption.

Inactive devices off

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

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.

19.2

Reception

- Antenna input: 75 ohm coaxial (F-type)
- TV system: PAL-M, PAL-N, NTSC-M, SATVD-T, SBTVD-T
- Video playback: NTSC; PAL

Note: See selected countries on the TV type plate

19.3

Display

Type

- Diagonal screen size
- 40PFG6110 : 102 cm / 40 inch

- Display resolution : 1920x1080p

Input resolution

Video formats

Resolution — Refresh rate

- 480i - 60 Hz
- 480p - 60 Hz
- 576i - 50 Hz
- 576p - 50 Hz
- 720p - 50 Hz, 60 Hz
- 1080i - 50 Hz, 60 Hz

• 1080p - 24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

Computer formats

Resolutions (among 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

19.4

Power

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

Power

• Main power : AC 110-240 V, 50-60 Hz
• Ambient temperature : 5°C to 40°C
• Standby power consumption : < 0.5W
• Power saving features : Energy saving, Screen off, Switch off timer, Inactive devices off.

19.5

Dimensions and weights

40PFG6110

• without TV stand:
Width 918 mm - Height 593.96 mm - Depth 76.8 mm - Weight ± 8.6 kg
• with TV stand:
Width 918 mm - Height 593.96 mm - Depth 213.2 mm - Weight ± 9.92 kg

19.6

Connectivity

TV Rear

• 2x HDMI in with ARC
• 2x CVBS: Audio L/R, CVBS in, RGB
• SPDIF: Digital Audio Out-Optical
• Network LAN: RJ45

TV Side

• 1x HDMI in with ARC
• 2x USB 2.0
• Headphones: Stereo mini-jack 3.5mm

19.7

Multimedia

Connections

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

Supported USB file systems

• FAT 16, FAT 32, NTFS

Playback formats

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

Wi-Fi Certified Miracast™

This TV supports WiDi 4.x devices.

Supported media server software (DMS)

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

ESD regulations

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

20

Software

20.1

Software update

Update from USB

It might be necessary to update the TV software. You need a computer with an high-speed Internet connection and a USB memory device to upload the software on the TV. Use a USB memory device with at least 256MB of 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 device 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 device 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 device into the TV again. The update starts automatically.
The TV turns itself off for 10 seconds and then back on again. Please wait.

Do not . . .

- use the remote control
- remove the USB memory device from the TV

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

Do not . . .

- press twice
- press the power switch on the TV

The TV turns itself off for 10 seconds and then back on again. Please wait.

The TV software has been updated. You can use the TV again.
To prevent an accidental update of the TV software, delete the autorun.upg file from the USB memory device.

Update from Internet

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

If you receive this message, we recommend you carry out the update.
Select Update. Follow the instructions on screen.

You can also look for new updates yourself.
To look for an update . . .

1 - Press and select Setup and press OK.
2 - Select Update software and press OK. Follow the instructions on screen.

When the update is complete, the TV turns off and back on again automatically.
Wait for the TV to turn itself back on.
Do not press the Power switch on the TV.

20.2

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.

20.3

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 licenses.

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

Intellectual Property Dept.
TP Vision Europe B.V.
Prins Bernhardplein 200
1097 JB Amsterdam
The Netherlands

20.4

Open-source license

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

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

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

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

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

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

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

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

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

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

u-Boot loader (1.3.4)
Used by boot loader and only linked with boot loader, GPL license.
This piece of software is made available under the terms and conditions of the u-Boot loader license, which can be found below.
Source: http://sourceforge.net/projects/u-boot/files/u-boot/U-Boot-1.1.4/u-boot-1.1.4.tar.bz2/download

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

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

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

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

Expat (2.01)
xml paser; Expat is an XML parser library written in C. It is a stream-oriented parser in which an application registers handlers for things the parser might find in the XML document (like start tags). An introductory article on using.
This piece of software is made available under the terms and conditions of the Expat license, which can be found below.
Source: http://expat.sourceforge.net/

DirectFB include SAWMAN (1.4.0)
It is a software library for GNU/Linux/UNIX based operating system with a small memory footprint that provides graphics acceleration, input device handling and abstraction layer, and integrated windowing system with support for translucent windows and multiple display layers on top of the Linux framebuffer without requiring any kernel modifications.
This piece of software is made available under the terms and conditions of the DirectFB license, which can be found below.
Source: http://sourceforge.net/projects/jointspace/files/remote_applications_SDK/remote_spplications_SDK_v1.3.1/DirectFB141_source_1.3.1.7z/download

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

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

SQLite (3.7.2)
SQLite is a in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.
This piece of software is made available under the terms and conditions of the SQLite license, which can be found below.
Source: http://www.sqlite.org/download.html

SquashFS (3.4)
SquashFS is a compressed read-only file system for Linux. SquashFS compresses files, inodes and directories, and supports block sizes up to 1 MB for greater compression. SquashFS is also the name of free/open software, licensed under the GPL, for accessing SquashFS filesystems.
This piece of software is made available under the terms and conditions of the SquashFS license, which can be found below.
Source: http://squashfs.sourceforge.net/

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

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

libusb (1.0.6)
This is the home of libusb, a library that gives user level applications uniform access to USB devices across many different operating systems. libusb is an open source project licensed under the GNU Lesser General Public License version 2.1.Many participants in the libusb community have helped and continue to help with ideas, implementation, support and improvements for libusb.
This piece of software is made available under the terms and conditions of the libusb license, which can be found below.
Source:
http://libusb.wiki.sourceforge.net
http://www.libusb.org/

libusb-compat (0.1.3)
Library to enable user space application programs to communicate with USB devices.
This piece of software is made available under the terms and conditions of the libusb-compat license,

which can be found below.
Source:
http://libusb.wiki.sourceforge.net/LibusbCompat0.1

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

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

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

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

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

electric-fence (2.1.13)
Used for memory corruption detection.
This piece of software is made available under the terms and conditions of the electric-fence license, which can be found below.
Source: http://perens.com/FreeSoftware/ElectricFence/electric-fence_2.1.13-0.1.tar.gz

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

QT (4.7.0)
Netflix skpe besttv pandora picasa? will use QT.
This piece of software is made available under the terms and conditions of the QT license, which can be found below.
Source: http://qt.nokia.com/

e2fsprogs (1.41.14)
e2fsprogs provides the filesystem utilities for use with the ext2 filesystem, it also supports the ext3 and ext4 filesystems.
This piece of software is made available under the terms and conditions of the e2fsprogs license, which can be found below.
Source: http://e2fsprogs.sourceforge.net/

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

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

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

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

rlog (1.4)
A library that provides a flexible message logging facility for C programs and libraries is used for encfs.
Source: http://www.arg0.net/rlog

iptables (1.4.15)
For Cross connection.

Source: http://www.netfilter.org/projects/iptables/

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

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

findutils (4.2.31)
The GNU Find Utilities are the basic directory searching utilities of the GNU operating system.
These programs are typically used in conjunction with other programs to provide modular and powerful directory search and file locating capabilities to other commands.
Source: http://www.gnu.org/software/findutils/

gawk (3.1.5)
If you are like many computer users, you would frequently like to make changes in various text files wherever certain patterns appear, or extract data from parts of certain lines while discarding the rest.
To write a program to do this in a language such as C or Pascal is a time-consuming inconvenience that may take many lines of code.
The job is easy with awk, especially the GNU implementation: gawk.
Source: http://www.gnu.org/software/gawk/

grep (2.5.1a)
The grep command searches one or more input files for lines containing a match to a specified pattern. By default, grep prints the matching lines.
Source: http://www.gnu.org/software/grep/

gzip (1.3.12)
GNU Gzip is a popular data compression program originally written by Jean-loup Gailly for the GNU project. Mark Adler wrote the decompression part.
Source: http://www.gnu.org/software/gzip/

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

iputils (s20101006)
The iputils package is set of small useful utilities for Linux networking. It was originally maintained by Alexey Kuznetsov.
Source: http://www.skbuff.net/iputils/

module-init-tools (3.12)
Provides developer documentation for the utilities used by Linux systems to load and manage kernel modules (commonly referred to as "drivers").
Source: https://modules.wiki.kernel.org/index.php/Main_Page

ncurses (5.7)
The Ncurses (new curses) library is a free software emulation of curses in System V Release 4.0, and more.
It uses Terminfo format, supports pads and color and multiple highlights and forms characters and function-key mapping, and has all the other SYSV-curses enhancements over BSD Curses.
Source: http://www.gnu.org/software/ncurses/

net-tools (1.6)
The Net-tools?package is a collection of programs for controlling the network subsystem of the Linux kernel.
Source: http://www.linuxfromscratch.org/blfs/view/6.3/basicnet/net-tools.html

procps (ps, top) (3.2.8)
procps is the package that has a bunch of small useful utilities that give information about processes using the /proc filesystem.
The package includes the programs ps, top, vmstat, w, kill, free, slabtop, and skill.
Source: http://procps.sourceforge.net/index.html

psmisc (22.13)
This PSmisc package is a set of some small useful utilities that use the proc filesystem. We're not about changing the world, but providing the system administrator with some help in common tasks.
Source: http://psmisc.sourceforge.net/

sed (4.1.5)
sed (stream editor) isn't an interactive text editor. Instead, it is used to filter text, i.e., it takes text input, performs some operation (or set of operations) on it, and outputs the modified text.
sed is typically used for extracting part of a file using pattern matching or substituting multiple occurrences of a string within a file.
Source: http://www.gnu.org/software/sed/

tar (1.17)
GNU Tar provides the ability to create tar archives, as well as various other kinds of manipulation.
For example, you can use Tar on previously created archives to extract files, to store additional files, or to

update or list files which were already stored.
Source: http://www.gnu.org/software/tar/

util-linux-ng (2.18)
Various system utilities.
Source: http://userweb.kernel.org/~kzak/util-linux-ng/

udhcpc (0.9.8cvs20050303-3)
Udhcpc is a very small?DHCP?client geared towards?embedded systems.
Source: http://udhcp.sourcearchive.com/downloads/0.9.8cvs20050303-3/

Libxml2 (2.7.8)
The "libxml2" library is used in AstroTV as a support for the execution of NCL application. This library was developed for the GNOME software suite and is available under a "MIT" license.
Source: http://www.xmlsoft.org

uriparser (0.7.7)
For MPEG-DASH
Source: http://uriparser.sourceforge.net/

xerces-c++ (3.1.1)
For MPEG-DASH
Source: http://xerces.apache.org/

webp (0.2.1)
For Netflix
Source: https://code.google.com/p/webp/

wget (1.10.2)
GNU Wget is a free software package for retrieving files using HTTP, HTTPS and FTP, the most widely-used Internet protocols.
It is a non-interactive commandline tool, so it may easily be called from scripts,?cron?jobs, terminals without X-Windows support, etc.
Source:
http://ftp.gnu.org/gnu/wget/wget-1.10.2.tar.gz

wireless_tools (0.29)
The Wireless Tools (WT)?is a set of tools allowing to manipulate the Wireless Extensions.
They use a textual interface and are rather crude, but aim to support the full Wireless Extension.
Source: http://www.hpl.hp.com/personal/Jean_Tourrilhes/Linux/Tools.html

ezxml (0.8.6)
ezXML is a C library for parsing XML documents. Used inside Philips libraries.
Source: http://sourceforge.net/projects/ezxml/

SQLite (3.7.7.1)
SQLite is a in-process library that implements a self-contained, serverless, zero-configuration, transactional SQL database engine.
Source: http://www.sqlite.org/download.html

AES (aes-src-29-04-09.zip)
Advanced Encryption Standard (AES) is a specification for the encryption of electronic data.
Used inside Philips libraries.
Source: http://gladman.plushost.co.uk/oldsite/AES/

microhttpd (libmicrohttpd-0.9.9.tar.gz)
GNU libmicrohttpd is a small C library that is supposed to make it easy to run an HTTP server as part of another application.
The original download site for this software is :
http://www.gnu.org/software/libmicrohttpd/This piece of software is made available under the terms and conditions of the LGPL v2.1 license
Source: http://ftp.gnu.org/gnu/libmicrohttpd/libmicrohttpd-0.9.9.tar.gz

yajl (lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz)
YAJL is a small event-driven (SAX-style) JSON parser written in ANSI C, and a small validating JSON generator. YAJL is released under the ISC license.
The original download site for this software is :
http://lloyd.github.com/yajl/This piece of software is made available under the terms and conditions of the ISC license
Source: http://pkgs.fedoraproject.org/repo/pkgs/yajl/lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz/df6a751e7797b9c2182efd91b5d64017/lloyd-yajl-2.0.1-0-gf4b2b1a.tar.gz

HMAC-SHA1 (0.1)
keyed-hash message authentication code (HMAC) is a specific construction for calculating a message authentication code (MAC) involving a cryptographic hash function in combination with a secret cryptographic key.
As with any MAC, it may be used to simultaneously verify both the data integrity and the authentication of a message.
Any cryptographic hash function, such as MD5 or SHA-1, may be used in the calculation of an HMAC; the resulting MAC algorithm is termed HMAC-MD5 or HMAC-SHA1 accordingly.
Source:
http://www.deadhat.com/wlancrypto/hmac_sha1.c

gSoap (2.7.15)
The gSOAP toolkit is an open source C and C++ software development toolkit for SOAP/XML Web services and generic (non-SOAP) C/C++ XML data bindings.
Part of the software embedded in this product is gSOAP software. Portions created by gSOAP are Copyright 2000-2011 Robert A. van Engelen, Genivia inc. All Rights Reserved.
Source: http://sourceforge.net/projects/gsoap2/

jquery (1.10.2)

jQuery is a fast and concise JavaScript Library that simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development.
Source: http://jquery.com/

Libupnp (1.2.1)
The Linux* SDK for UPnP* Devices (libupnp) provides developers with an API and open source code for building control points, devices, and bridges that are compliant with Version 1.0 of the UPnP Device Architecture Specification.
Source: http://upnp.sourceforge.net/

mDNSResponder (mDNSResponder-320.10.80)
The mDNSResponder project is a component of Bonjour,
Apple's ease-of-use IP networking initiative:<http://developer.apple.com/bonjour/>
In our project, Bonjour is used for the automatic discovery of devices and services
Source: http://developer.apple.com/bonjour/

21

Troubleshooting and support

21.1

Troubleshooting

Channels

No digital channels found during the installation

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 turn 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 power 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 behavior.
If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any 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 behavior. When the TV is disconnected and reconnected to the power supply, the startup screen is displayed at the next startup. To turn 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 ⌂ 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 ↩, 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 turns the audio output off — this does not indicate malfunction.

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

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 recognize 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 an HDMI-CEC audio device is connected this behavior is normal.

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

- Make sure that the USB storage device is set to Mass Storage Class compliant, as described in the storage device's documentation.
- 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.

21.2

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

21.3

Help

This TV offers help on screen.

Open Help

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

To search for topics alphabetically, select **Keywords** .
To read the Help as a book, select **Book**.

Before you execute the Help instructions, close Help.
To close Help, press ⌂.

Direct help

Press the ▬ key (blue) to open Help immediately. Help will open on the chapter that is most relevant to what you are doing or what is selected on TV.

For some activities, like Text (Teletext), the color keys have specific functions and cannot open Help.

TV Help on your tablet, smartphone or computer

To carry out extended sequences of instructions more easily, you can download the TV Help in PDF format to read on your smartphone, tablet or computer. Alternatively, you can print the relevant Help page from your computer.
To download the Help (user manual), visit www.philips.com/support

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21.4

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.

21.5

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.

22

Safety and care

22.1

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 misplaced 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 spilled on or into the TV, disconnect the TV from the power outlet immediately.
Contact Philips TV Consumer Care to have the TV checked before use.
• Never expose the TV, remote control or batteries to excessive heat. Never place them near burning candles, naked flames or other heat sources, including direct sunlight.
• Never insert objects into the ventilation slots or other openings on the TV.
• Never place heavy objects on the power cord.
• Avoid force coming onto power plugs. Loose power plugs can cause arcing or fire. Ensure that no strain is exerted on the power cord when you swivel the TV screen.
• To disconnect the TV from the main 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 falling 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 in around the TV for ventilation. Ensure curtains or other objects never cover the ventilation slots on the TV.

Lightning storms

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

Risk of hearing damage

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

Low temperatures

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

Humidity

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

22.2

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 color fading, wipe off water drops as quickly as possible.
• Avoid stationary images as much as possible. Stationary images are images that remain onscreen for extended periods of time. Stationary images include onscreen menus, black bars, time displays, etc. If you must use stationary images, reduce screen contrast and brightness to avoid screen damage.

23

Terms of use, copyrights and licenses

23.1

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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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23.2

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DTS 2.0 + Digital Out ™

DTS 2.0 + Digital Out™

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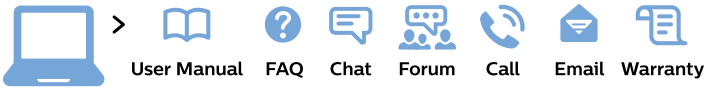

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