User Manual

PHILIPS

Contents

1

Your new TV
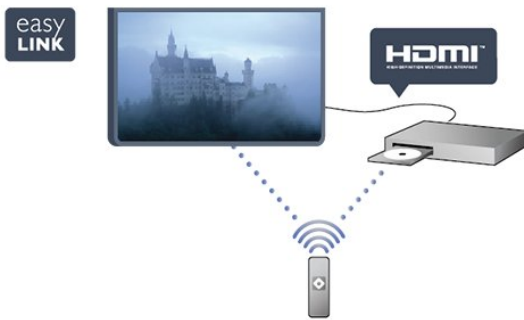
1.1

EasyLink

With **EasyLink** you can operate a connected device, like a Bluray Disc player, with the remote control of the TV.

EasyLink uses HDMI CEC to communicate with the connected devices.

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 .
. .

- 20Pxx4109 - VESA MIS-F 75x75, M4
- 22Pxx4109 - VESA MIS-F 75x75, M4
- 23Pxx4009 - VESA MIS-F 75x75, M4
- 24Pxx4109 - VESA MIS-F 75x75, M4
- 28Pxx4109 - VESA MIS-F 100x100, M4

- 32Pxx41x9 - VESA MIS-F 400x200, M6
- 39Pxx41x9 - VESA MIS-F 400x200, M6
- 40Pxx41x9 - VESA MIS-F 400x200, M6
- 42Pxx41x9 - VESA MIS-F 400x200, M6
- 47Pxx41x9 - VESA MIS-F 400x200, M6

- 50Pxx41x9 - VESA MIS-F 400x400, M6

- 22Pxx4209 - VESA MIS-F 75x75, M4

- 24Pxx5219 - VESA MIS-F 75x75, M4

- 32Pxx43x9 - VESA MIS-F 100x100, M4
- 40Pxx43x9 - VESA MIS-F 200x200, M4
- 50Pxx43x9 - VESA MIS-F 400x200, M6

- 32Pxx5109 - VESA MIS-F 400x200, M6
- 40Pxx5109 - VESA MIS-F 400x200, M6
- 48Pxx5109 - VESA MIS-F 400x200, M6
- 55Pxx5109 - VESA MIS-F 400x400, M6

- 42Pxx5209 - VESA MIS-F 200x200, M6

- 47Pxx5209 - VESA MIS-F 400x400, M6
- 55Pxx5209 - VESA MIS-F 400x400, M6

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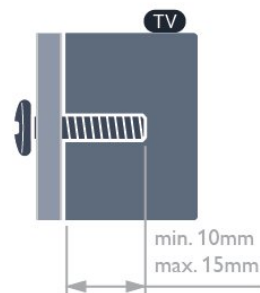
Caution

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 centre of the screen.

2.4

Power cable

- Insert the power cable into the **POWER** connector on the back of the TV.
- Make sure the power cable is securely inserted in the connector.
- Make sure that the power plug, in the wall socket, is accessible at all times.

- When you unplug the power cable, always pull the plug, never pull the cable.
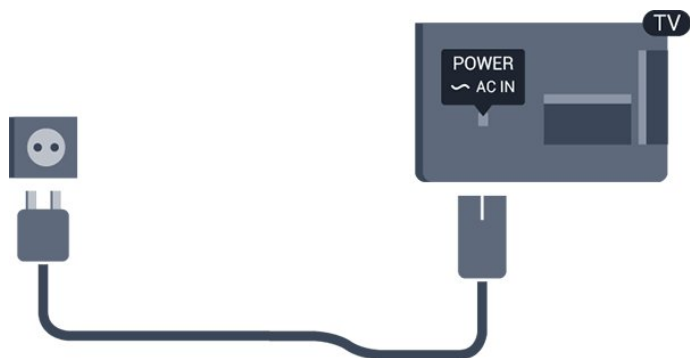
For 22PFx4209
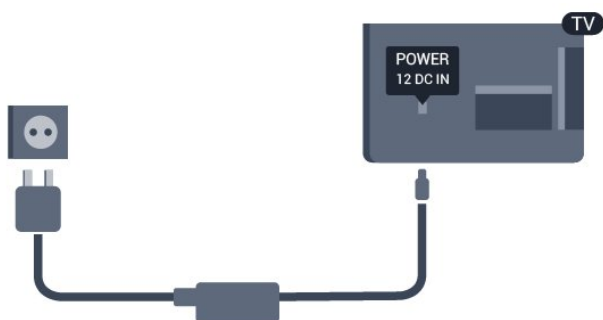
Although this TV has a very low standby power consumption, unplug the power cable to save energy if you do not use the TV for a long period of time.

2.5

Antenna cable

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

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

Use this antenna connection for DVB-T and DVB-C input signals.
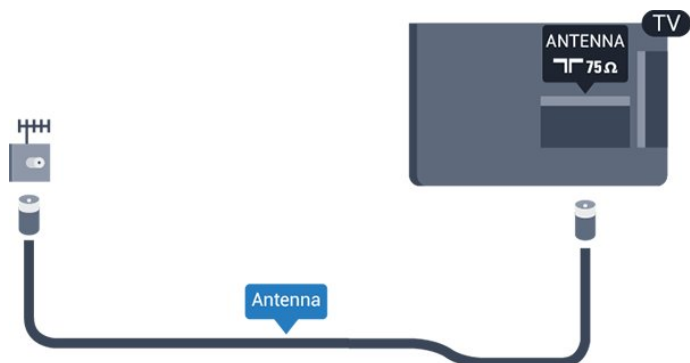
2.6

Satellite dish

Attach the satellite F-type connector to the satellite connection **SAT** at the back of the TV.
- Only for TVs with a built-in satellite tuner.

Connections

3.1

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.
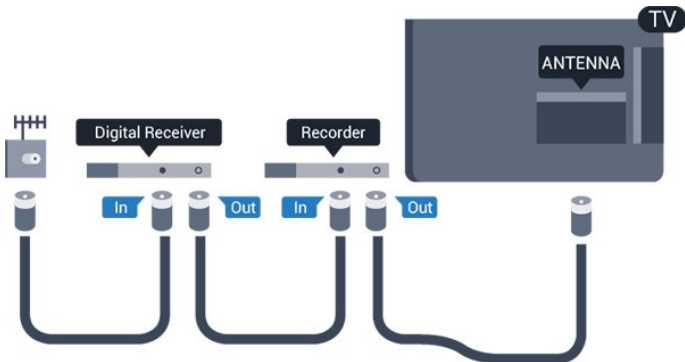
HDMI

HDMI CEC

An HDMI connection has the best picture and sound quality. One HDMI cable combines video and audio signals. Use an HDMI cable for High Definition (HD) or Full HD (FHD) TV signals. For best signal quality transfer, use a High speed HDMI cable and do not use an HDMI cable longer than 5 m.

EasyLink HDMI CEC

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

DVI to HDMI

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

Copy protection

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

HDMI ARC

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

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

Scart

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

Use the SCART adapter cable to connect your device.

Audio Out - Optical

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

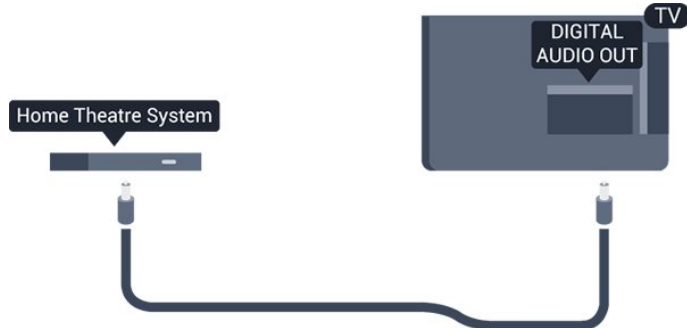You can set the type of the audio out signal to fit the audio capabilities of your Home Theatre System.

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

3.2

EasyLink HDMI CEC

EasyLink

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

EasyLink setup

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

HDMI CEC on other brands

The HDMI CEC functionality has different names on different brands. Some examples are: Anynet, Aquos Link, Bravia Theatre Sync, Kuro Link, Simplink and Viera Link. Not all brands are fully compatible with EasyLink.

Example HDMI CEC branding names are property of their respective owners.

Operate devices

To operate a device connected to HDMI and set up with EasyLink, select the device - or its activity - in the list of TV connections. Press ▣ 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 switched on. You can switch off any EasyLink setting independently.

EasyLink

To switch off EasyLink completely . . .

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

EasyLink Remote Control

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

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

One-touch play

When you play an HDMI-CEC compliant device, the TV switches on from standby and switches to the correct source.

One-touch standby

When you press Φ on the TV remote control, the TV and all HDMI-CEC compliant devices switch to standby mode.

System audio control
If you connect an HDMI-CEC compliant device that includes speakers through the HDMI ARC connector, you can choose to hear the TV audio from those speakers instead of the TV speakers.

3.3
Common interface - CAM

CI+

This TV is ready for the CI+ Conditional Access.

With CI+ you can watch premium HD programmes, like movies and sports, offered by digital TV broadcasters in your region. These programmes are scrambled by the TV broadcaster and descrambled with a prepaid CI+ module.
Digital TV broadcasters provide this CI+ module (Conditional Access Module - CAM) when you subscribe to their premium programmes. These programmes have a high level of copy protection.

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

CI+

CAM

Insert a CAM module

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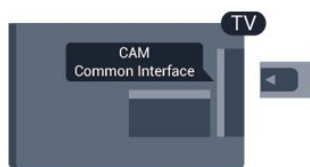
Use the Common Interface slot on the TV to insert the CAM card.
With the front of the card facing to you, gently insert the CAM as far as it will go.
Leave the card in the slot permanently.

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

3.4
Set-top box - STB

Use 2 antenna cables to connect the antenna to the Set-top box (a digital receiver) and the TV.
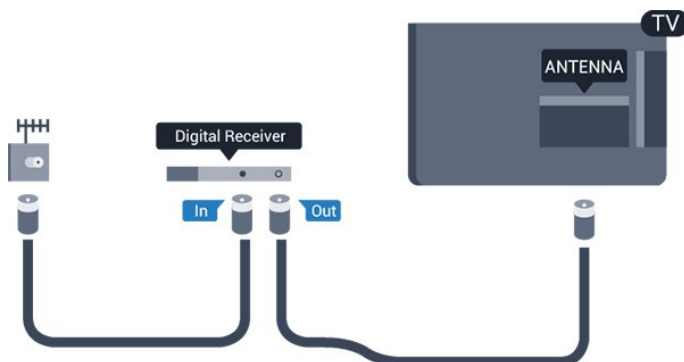
Next to the antenna connections, add an HDMI cable to connect the Set-top box to the TV.
Alternatively, you can use a SCART cable if the Set-top box has no HDMI connection.

Auto switch off

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

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

3.5
Satellite receiver

- Only for TVs with a built-in satellite tuner.

Connect the dish antenna cable to the Satellite receiver.
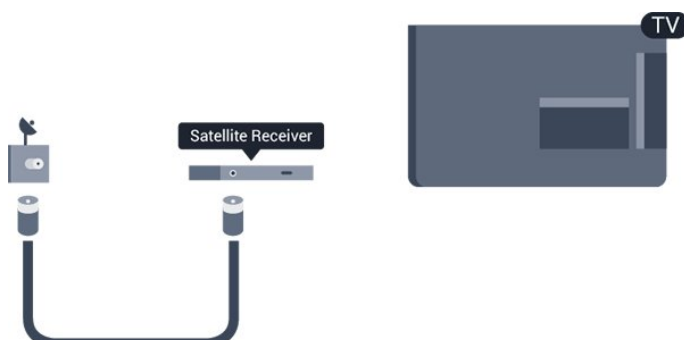
Next to the antenna connection, add an HDMI cable to connect the device to the TV.
Alternatively, you can use a SCART cable if the device has no HDMI connection.
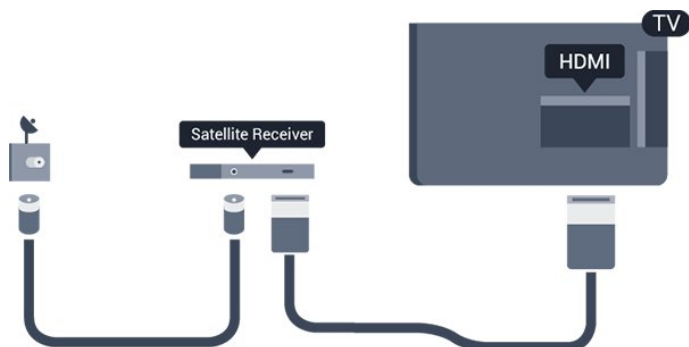
Auto switch off

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

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

3.6

Home Theatre System - HTS

Connect HTS

Use an HDMI cable to connect a Home Theatre System (HTS) to the TV. You can connect a Philips Soundbar or an HTS with a built-in disc player.
Alternatively, you can use a SCART cable if the device has no HDMI connection.

HDMI ARC

If your Home Theatre 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 connected the Home Theatre System, the TV can only send the ARC signal to this HDMI connection.
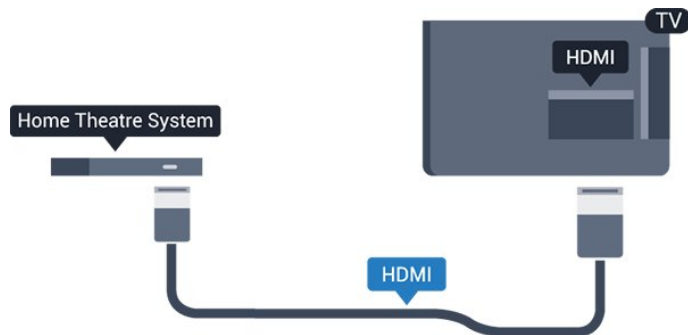
If the Home Theatre System has no HDMI ARC connection, add an optical audio cable (Toslink) to send the sound of the TV picture to the Home Theatre System.
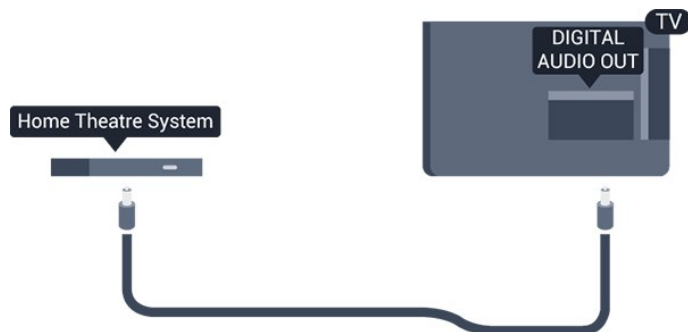
Audio to video synchronisation (sync)

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

Audio Out settings

Audio Out delay

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

Automatic audio to video sync

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

Audio sync delay

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

To switch off the Audio Out delay . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **TV settings** > **Sound** > **Advanced** > **Audio out delay**.
3. Select **Off** and press **OK**.
4. Press ⬅, repeatedly if necessary, to close the menu.

Audio Out offset

If you cannot set a delay on the Home Theatre System, you can set the TV to sync the sound. You can set an offset that compensates the time necessary for the Home Theatre System to process the sound of the TV picture. You can set the value in steps of 1ms. Maximum setting is 12ms. The Audio out delay setting should be switched on.

To synchronise the sound on the TV . . .

1. Press ⌂ and select **Setup** and press **OK**.
2. Select **TV settings** > **Sound** > **Advanced** > **Audio out offset**.
3. Use the slider bar to set the sound offset and press **OK**.
4. Press ⬅, repeatedly if necessary, to close the menu.

Audio Out format

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

To set the Audio Out format . . .

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

Audio Out levelling

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

To level the difference in volume . . .

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

Audio Out leveling affects both the Audio Out - Optical and HDMI ARC sound signals.

Problems with HTS sound

Sound with loud noise

If you watch a video from a plugged in USB flash drive or connected computer, the sound from your Home Theatre System might be distorted.

1. Press ⌂ and select **Setup** and press **OK**.
2. Select **TV settings** > **Sound** > **Advanced** > **Audio out format**.

No sound

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

- Check if you connected the HDMI cable to a **HDMI ARC** connection on the Home Theatre System. All HDMI connections on the TV are HDMI ARC connections.

- Check if the **HDMI ARC** setting on the TV is switched **On**. Go to ⌂ > **Setup** > **TV settings** > **Sound** > **Advanced** > **HDMI 1 -ARC**.

3.7

Blu-ray Disc player

Use a **High speed HDMI** cable to connect the Blu-ray Disc player to the TV.
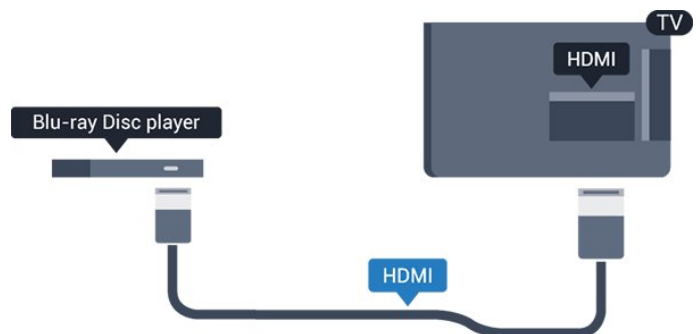
If the Blu-ray Disc player has EasyLink HDMI CEC, you can operate the player with the TV remote control.

3.8

DVD player

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

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

3.9

Game console

HDMI

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

3.10

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 switched on.

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

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

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

3.11

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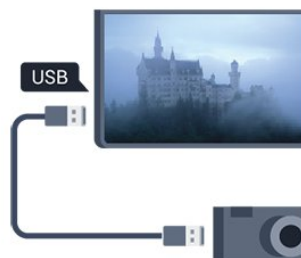
If the contents list does not appear automatically, press ⤵ **SOURCE**, select **USB** and press **OK**.
Your camera might need to be set to transfer its content with PTP (Picture Transfer Protocol). Read the user manual of the digital photo camera.

3.12

Camcorder

HDMI

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

3.13
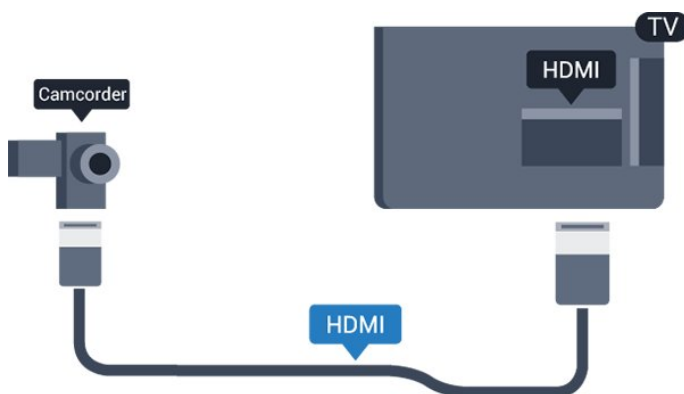
Computer

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 3.5mm) to AUDIO IN L/R on the back of the TV.
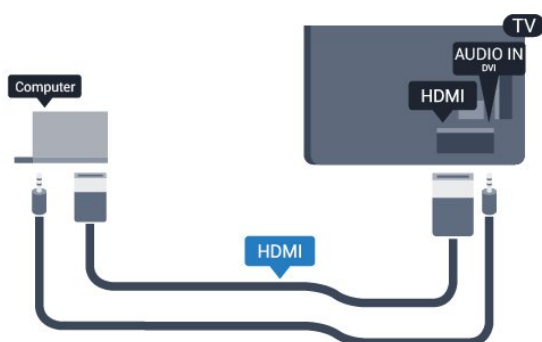
Settings

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** > **Game or compter** 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.

3.14

Headphones

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

To adjust the volume . . .

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

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

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

4. Press ⬅, repeatedly if necessay, to close the menu.

Switch on

4.1

On or Standby

Make sure you plugged in the mains power on the back of the
TV before you switch on the TV.
If the red indicator light is off, press the power button on the
side of the TV to put the TV in standby - the red indicator will
light up.
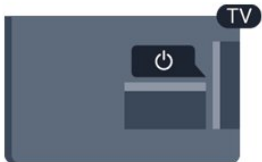
With the TV in standby, press ⏻ on the remote control to
switch the TV On.

Switch to standby

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

Switch Off

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

5

Remote control

5.1

Key overview

Top

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

5. ♠ HOME
To open or close the home menu.

6. 📺 EXIT
To switch back to watching TV.

7. ⇄ OPTIONS
To open or close the Options menu.

8. OK key
To confirm a selection or setting.

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

10. ☰ LIST
To open or close the channel list.

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

2. Playback keys
- Play ▶, to playback.
- Pause ‖, to pause playback
- Stop ■, to stop playback
- Rewind ◀◀, to rewind
- Fast forward ▶▶, to go fast forward

3. ⦂⦂ TV GUIDE
To open or close the TV guide.

4. ⚙ SETUP
To open the Settings menu.

5. ⬛ FORMAT
To open or close the Picture format menu.

Middle

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

2. Colour keys
The buttons function follow the on-screen instructions.

3. ⓘ INFO
To open or close programme info.

4. ⬅ BACK

Bottom

1. ◢ Volume
To adjust the volume level.

2. Number keys and **text keypad**
To select a TV channel directly or to enter text.

3. SUBTITLE
To switch subtitles on, off or Automatic.

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

5. ◀ᵖ Mute
To mute the sound or to restore it.

6. TEXT
To open or close Text / Teletext.

5.2

Batteries

1. Slide the battery door in the direction shown by the arrow.

2. Replace the old batteries with 2
type **AAA-LR03-1.5V** batteries. Make sure the + and the - ends
of the batteries line up correctly.

3. Reposition the battery door.

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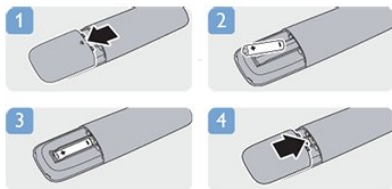
Remove the batteries if you are not using the remote control for
a long time.
Safely dispose of your old batteries according to the end of use
directions.

5.3

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.

6

TV channels

6.1

Watching TV channels

Switch channels

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

Alternatively, press ⌂ to open the Home menu and select **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 channel.

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

To switch to a channel from a channel list

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

The channel list can have several pages with channels. To view the next or previous page, press ⠿ **+** or ⠿ **—**.
To close the channel lists without switching channel, press ≡ **LIST** again.

Radio channels

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

Channel list

View all channel list

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

Favourite channels

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

Create your favourite channel list

1. While watching a TV channel, press ≡ **LIST** to open the channel list.
2. Select the channel to mark as favourite and press ⇄ **OPTIONS**.
3. Select **Add favourites** and press **OK**. The selected channel is marked with a ★.
4. To finish, press ⬏. The channels are added to the Favourites list.
5. To remove a channel from the favourites list, select the channel with a ★, then press ⇄ **OPTIONS**, select **Remove favourites** and press **OK**.

Reorder

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

1. In the channel list **Favourites**, highlight the channel you want to reposition.
2. Press ⇄ **OPTIONS**.
3. Select **Reorder** and press **OK**.
4. Select the channel to reorder and press **OK**.
5. Press the **Navigation buttons** to move the highlighted channel to another location and press **OK**.
6. Once complete, press ⇄ **OPTIONS**.
7. Select **Exit reorder** and press **OK**.

You can highlight another channel and do the same.

Add or remove favourites in other channel lists

You can mark channels and radio stations as favourites from the **All**, **Radio** and **New** channel list.
In these lists, highlight a channel you want to add to the favourite list and press ⇄ **OPTIONS**. Select **Add favourites** and press **OK**.
The selected channel is marked with a ★.
To remove a channel from the favourites list, select **Remove favourites** and press **OK**.

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 ⇄ OPTIONS.
3. Select **Rename** and press **OK**.

Lock a channel

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

Lock a channel

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

To lock a channel . . .

1. While watching a TV channel, press ☰ LIST to open the **Channel list**.
2. In any list, select the channel you want to lock.
3. Press ⇄ OPTIONS and select **Lock channel**. In a channel list, a locked channel is marked with a lock 🔒.

To unlock a channel, select the locked channel in the channel list, press ⇄ OPTIONS , then select **Unlock channel**. You will need to enter the Child lock code.

Parental rating

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

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

To set an age rating . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Channel settings** > **Child lock** > **Parental rating** and press **OK.**
3. Enter a 4-digit Child lock code. Enter a 4-digit Child lock code and confirm. Now you can set an age rating.
4. Set the age and press **OK**.
5. Press ⬑, repeatedly if necessary, to close the menu.
6. To switch off the parental age rating, select **None** as age setting.

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

Set or change the lock code

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

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Channel settings** > **Child lock** > **Change code** and press **OK**.
3. If a code is set already, enter the current Child lock code and then enter the new code twice.

The new code is set.

Forgotten your code?

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

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

- Auto
Adjust the picture format according to the input source.

- Super zoom
Removes the black bars on the side of 4:3 broadcasts. The picture is adjusted to fit the screen.

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

- Wide screen
Stretches the picture to a 16:9 format.

- Unscaled
Expert mode for HD or PC input. Pixel for pixel display. Black bars may appear with pictures from a computer.

- 4:3
Display the classic 4:3 format.

Text / Teletext

Text pages

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

Select a Text page

To select a page . . .

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

Text sub-pages

A Text page number can hold several subpages. The subpage numbers are shown on a bar next to the main page number.
To select a subpage, press ◀ or ▶.

T.O.P. Text pages

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

Favourite pages

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

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

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

Search Text

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

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

Text from a connected device

Some devices that receive TV channels can also offer Text.
To open Text from a connected device . . .

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

Digital Text (UK only)

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

To close Digital Text, press ⬅.

Text options

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

- Freeze page / Unfreeze page
To stop the automatic rotation of subpages.

- Dual screen / Full screen
To show the TV channel and Text alongside each other.

- T.O.P. overview
To open T.O.P. Text.

- Enlarge / Normal view
To enlarge the Text page for comfortable reading.

- Reveal
To unhide hidden information on a page.

- Cycle subpages
To cycle subpages when these are available.

- Language
To switch the group of characters that Text uses to display correctly.

- Text 2.5
To activate the Text 2.5 for more colours and better graphics.

Text setup

Text language

Some digital TV broadcasters have several Text languages available.
To set your primary and secondary Text language . . .

1. Press ♠ and select **Setup** and press **OK**.
2. Select **Channel settings** > **Languages**.
3. Select **Primary Teletext** or **Secondary Teletext**.
4. Select your preferred Text languages.
5. Press ⬅, repeatedly if necessary, to close the menu.

Text 2.5

If available, Text 2.5 offers more colours and better graphics.
Text 2.5 is activated as a standard factory setting.
To switch off Text 2.5 . . .

1. Press **TEXT**.
2. While watching the teletext, press ⇌ **OPTIONS**.
3. Select **Text 2.5** > **Off**.
4.Press ⬅, repeatedly if necessary, to close the menu.

Subtitles and languages

Subtitles

Switch subtitles on

To open the Subtitle menu, press **SUBTITLE**.
You can set subtitles to **Subtitles off**, **Subtitles on**, or **Automatic**.

To show subtitles when the broadcasted programme is not in your language — the language you set for the TV, select **Automatic**. Also, this setting will show subtitles when you mute the sound with ◀ᵖ.

For analogue channels, subtitles must be made available in **Text**.

Subtitles for digital channels

There is no need to set subtitles in Text for digital channels. Digital channels can offer several subtitle languages for a programme. You can set a preferred primary and secondary subtitle language. If subtitles in one of these languages are available, the TV will show them.

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

To set the primary and secondary subtitle language . . .

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

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

1. Press ⇌ **OPTIONS**.
2. Select **Subtitle language** and select a language you want temporarily and press **OK**.

Subtitles for analogue channels

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

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

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

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

Audio languages

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

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

To set the primary and secondary audio language . . .

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

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

1. Press ⇌ **OPTIONS**.
2. Select **Audio language** and select an audio language you want temporarily and press **OK**.

Audio languages for the hearing and visually impaired

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

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.

6.2

Channel installation

Update channels

Automatic update

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

Automatic channel update

Once a day, at 6 AM, the TV updates the channels and stores new channels. New channels are stored in the All channels list but also in the New channels list. Empty channels are removed. If new channels are found or if channels are updated or removed, a message is shown at TV start up. The TV must be in standby to automatically update channels.

To switch off the message at start up . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Channel settings** and press **OK**.
3. Select **Channel installation** > **Channel update message** > **Off**.

To switch off the Automatic channel update . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Channel settings** and press **OK**.

3. Select **Channel installation** > **Automatic channel update** > **Off**.

Start an update

To start an update yourself . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Search for channels** and press **OK**.
3. Select **Update channels** and follow the instructions on screen. The update may take a few minutes.

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

New channels

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

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

Reinstall channels

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** > **Re-install Channels** and press **OK**.
3. Select the country where you install the TV.
4. Select **Antenna (DVB-T)** or **Cable (DVB-C)**. The channel search may take a few minutes. Follow the instructions on screen.

Full installation

To redo a full TV installation . . .

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

Factory settings

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

1. 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. In some countries, Channel list copy is only availble for copying satellite channels.

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

Conditions

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

Current version

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

Copy channel list

To copy a channel list . . .

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

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

Upload channel list

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** > **Copy channel list** > **Copy to TV** and press **OK**. You might be asked to enter the Child lock code of this TV.
5. The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB memory device.

To an already installed TV

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

DVB-T or DVB-C

DVB-T or DVB-C reception

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

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

1. Press ♠ and select **Setup** and press **OK**.
2. Select **Channel settings** and press **OK**.
3. Select **Channel installation** > **Antenna connection** > **Antenna (DVB-T)** or **Cable (DVB-C)** and press **OK**.
4. Select the DVB setting you want.
5. Press ⬅, repeatedly if necessary, to close the menu.

DVB-C channel installation

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

Manual.

Channel number conflicts

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

DVB-T + DVB-C

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

DVB settings

Access DVB settings

1. Press ♠ and select **Setup** and press **OK**.
2. Select **Search for channels** and press **OK**.
3. Select **Re-install Channels**.
4. Select the country where you install this TV.
5. Select **Cable (DVB-C)**.
6. Select **Start to search channels**, or select **Settings for DVB-C settings**.
7. Press ⬅, repeatedly if necessary, to close the menu.

Symbol rate mode

If your cable provider did not give you a specific **symbol rate** value to install the TV channels, leave the **Symbol rate mode** setting on **Automatic**.

If you received a specific symbol rate value, select **Manual**. However, the value you received could be in the predefined list of symbol rates already. Select **Predefined symbol rates** to check if your value is available automatically.

Symbol rate

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

Network frequency

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

Frequency scan

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

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

Network ID

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

Digital channels

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

Analogue channels

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

Free / Scrambled

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

Manual installation

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

To install analogue channels manually . . .
1. Press ⌂ and select **Setup** and press **OK**.
2. Select **Channel settings** > **Channel installation** > **Analogue : manual installation** and press **OK**.

- **System**
To set up the TV system, select **System** and press **OK**.
Select your country or the part of the world where you are now.
- **Search channel**
To find a channel, select **Search channel** and press **OK**. Select **Search** and press **OK**. You can also enter a frequency yourself. If the reception is poor, press **Search** again. If you want to store the channel, select **Done** and press **OK**.
- **Fine tune**

To fine tune a channel, select **Fine tune** and press **OK**. You can fine tune the channel with ▲ or ▼.
If you want to store the channel found, select **Done** and press **OK**.
- **Store**
You can store the channel on the current channel number or as a new channel number.
Select **Store current channel** or **Store as new channel**.

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

7

Satellite channels

7.1

Watching satellite channels

- Only for TVs with a built-in satellite tuner.

To watch satellite channels . . .
Press ⌂ and select **Satellite** and press **OK**. The TV tunes to the satellite channel you last watched.

Change channel

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

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

7.2

Satellite channel list

About the channel list

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

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

Select a list filter

The list you select in the channel list, determines the channels you tune to with the ▦ **+** and ▦ **—** keys.

To select a channel list . . .

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

Channel list options

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

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

Available options for satellite channels . . .

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

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

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

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

Copy channel list

Copy channel list 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. Channel list copy will copy both terrestrial and satellite channels.

7.3

Favourite satellite channels

Favourite channels

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

Watching favourite channels

Set up a favourite channel list to easily switch between the channels you want to watch. Only in this list, you can reorder channels according to your preference.
To only switch between your favourite channels with ▦ **+** and ▦ **-**, select the Favourites list in the channel list and close the channel list again.

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

Set up your favourites list

To compose a list of your favourite channels . . .

1. While watching a channel, press ≡ **LIST** to open the channel list.
2. Select the **Favourites** list.
3. The TV will ask you to start adding channels immediately. Press **OK**. To avoid a lot of reordering later, select the channels in the order you want them in the list.
4. To add a channel to the Favourites list, select the channel and press **OK**. You can then select another channel to add as a favourite.
5. To finish, press ⬅.

Add or remove favourite channels

To add or remove favourites list . . .

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

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

Reorder favourite channels

You can only reorder channels in the Favourites list.

1. In the Favourites list **All**, highlight the channel you want to reposition.
2. Press ⇌ **OPTIONS**.
3. Select **Reorder** and press **OK**.
4. Select the channel to reorder and press **OK**.
5. Press the **Navigation buttons** to move the highlighted channel to another location and press **OK**.
6. Once complete, press ⇌ **OPTIONS**.
7. Select **Exit reorder** and press **OK**.

7.4

Lock satellite channels

Lock a channel

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

To lock a channel . . .

1. While watching a TV channel, press ≡ **LIST** to open the **Channel list**.
2. In any list, select the channel you want to lock.
3. Press ⇌ **OPTIONS** and select **Lock channel**. In a channel list, a locked channel is marked with a lock 🔒.

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

Use an age rating

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

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

To set an age rating . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Satellite settings** > **Child lock** > **Parental rating** and press **OK**
3. Enter a 4-digit Child lock code. If you did not set a code yet, select **Set code** and press **OK**. Enter a 4-digit Child lock code and confirm. Now you can set an age rating.
4. Set the age and press **OK**.
5. Press ⬅, repeatedly if necessary, to close the menu.
6. To switch off the parental age rating, select **None** as age setting.

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

Child lock code

You can set or change the Child lock code.

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

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **Satellite settings** > **Child lock** > **Set code** or **Change code** and press **OK**.
3. If a code is set already, enter the current Child lock code and then enter the new code twice.

The new code is set.

Forgotten your Child lock code?

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

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

7.5

Satellite installation

Installing satellites

About installing satellites

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

Up to 4 satellites

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

Unicable

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

Installing

You can install your satellites during the initial TV setup. The satellite installation follows the TV channel installation. If you only watch satellite channels, you can skip the TV channel installation. You can always start a new satellite installation from the Setup menu.

To install satellite channels . . .

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

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

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

5. The TV will search for satellites available on the alignment of your antenna dish. This may take a few minutes. If a satellite is found, its name and reception strength are shown on screen. If a channel package is available for any of the satellites found, you can select the package you want.
6. To install the channels of the satellites found, select **Install** and press **OK**. The TV shows the number of channels and radio stations found.
7. To store the satellite settings, all satellite channels and satellite radio stations, select **Finish** and press **OK**.

Channel packages

About channel packages

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

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

Unicable setup

The Unicable system

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

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

User band number

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

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

User band frequency

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

Add a satellite

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

The additional satellite should be seen as an extra, it is not your main satellite subscription or not the main satellite of which you use its channel package. Typically, you would add a 4th satellite when you have 3 satellites already installed. If you have 4 satellites installed, you might consider removing one first to be able to add a new satellite.

Settings

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

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

Remove a satellite

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

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

Update satellite channels

Once a day, at 6 AM, the TV automatically updates the satellite channels. A channel update looks for new channels and adds them to the channel list. No longer available channels are removed and if a provider reorders its channel package, the channel list of the TV will be updated. The TV must be on standby to automatically update the satellite channels. Alternatively, you can do a channel update yourself at any moment.

New channels, found with the channel update, are marked with the letter N and collected in the channel list New. New channels are also added in the All channel list. New channels stay in the channel list New as long as you do not tune to them or mark them as a favourite.

Switch off the automatic channel update

You can completely switch off the TV at night to avoid a channel update. Alternatively, you can switch off the automatic update in the setup menu.

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

Switch off the update for a specific satellite

1. Press **⌂** and select **Setup** and press **OK**.
2. Select **Satellite settings** > **Channel installation** > **Automatic update option**.
3. With the arrow keys, select the satellite you do not wish to update. Press **OK** to unmark the satellite.
4. Select **Done** and press **OK** to close the menu.

The TV will not update the channels from satellite you marked.

Start an update yourself

1. Press ⌂ and select **Setup** and press **OK**.
2. Select **Search for satellite** and press **OK**.
3. Select **Update channels** and press **OK**.
4. If you want to check which satellites are set for updating, select **Settings** and press **OK**.
5. With the arrow keys, mark or unmark the satellites for updating. Select **Done** and press **OK**.
6. Select **Update** and press **OK**. The update may take a few minutes.
7. Select **Finish** and press **OK**.

Languages and audio

Preferred languages and subtitles

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

To set the your preferred language . . .
1. Press ⌂ and select **Setup** and press **OK**.
2. Select **Satellite settings** and press **OK**.
3. Select **Languages** and press **OK**. Select the setting you want.
4. Press ⬅, repeatedly if necessary, to close the menu.

Audio description

Speakers / Headphones

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

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

Audio effect

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

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

Speech

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

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

Manual installation

Manual installation is intended for expert users.
You can use Manual installation to quickly add new channels from a satellite transponder. You need to know the frequency and polarization of the transponder. The TV will install all channels of that transponder. If the transponder was installed before, all its channels - the former and the new ones - are moved to the end of the channel list All.
You cannot use Manual installation if you need to change the number of satellites. If this is needed, you have to do a complete installation with Install satellites.

To install a transponder . . .
1. Press ⌂ and select **Setup** and press **OK**.
2. Select **Satellite settings** > **Channel installation** > **Manual installation** and press **OK**.
3. If you have more than 1 satellite installed, select the satellite/LNB for which you want to add channels.
4. Set the **Polarization** you need. If you set the **Symbol rate mode** to **Manual**, you can enter the symbol rate in **Symbol rate** manually. Enter the **Frequency** and start searching for the transponder.
5. If a transponder is found, select **Store** and press **OK** to store the new transponder on the selected LNB.
6. Select **Exit** to leave the manual installation.

7.6

Problems with satellites

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

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

A dual head LNB cannot find a second satellite

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

Changing the installation settings did not solve my problem

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

All satellite channels are gone

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

Some satellite channels seem to have disappeared from the channel list

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

I cannot remove a satellite

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

Sometimes the reception is poor

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

8

TV guide

8.1

Using the TV guide

What you need

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

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

Open the TV guide

To open the TV guide, press ≔ **TV GUIDE**.

Press ≔ **TV GUIDE** again to close.

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

Tune to a programme

Switch to a programme

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

View programme details

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

Change day

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

If the TV guide information comes from the broadcaster, you can press ≣ **+** to view the schedule of one of the next days. Press ≣ **−** to go back to the previous day.
Alternatively, you can press ≢ **OPTIONS** and select **Change**

day.
Select **Previous day**, **Today** or **Next day** and press **OK**, to select the day of the schedule.

Search by genre

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

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

9

Sources

9.1
Sources list

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

Sources menu

To open the Sources menu, press ⤴ **SOURCES**.
To switch to a connected device, select the device with the arrows ◄ (left) or ► (right) and press **OK**.
To close the Source menu without switching to a device, press ⤴ **SOURCES** again.

9.2
From standby

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

Play

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

Home Theatre System

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

9.3
EasyLink

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

Timers and clock

10.1

Sleep timer

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

To set the sleep timer . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **TV settings** > **General settings** > **Sleep timer**.
With the slider bar you can set the time to up to 180 minutes in increments of 5 minutes. If set to 0 minutes, the sleep timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.
3. Press ⬑, repeatedly if necessary, to close the menu.

10.2

Clock

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

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

To correct the TV clock . . .

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

10.3

Auto switch off

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

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

To deactivate the **Auto switch off** . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **TV settings** > **General settings** > Auto switch off and set the slider bar to **0 (Off)**.

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

Your photos, videos and music

11.1

From a USB connection

What you need

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

From a USB device

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

Menu bar

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 **Picture**, **Music** or **Movie**. Alternatively, you can open the **Folders** view and browse your folders to look for a file.

View photos

In the USB browser, select **Picture** and press **OK**.

Options

Press ⇄ **OPTIONS**.

- Start slideshow, Stop slideshow
Start or stop slideshow.

- Slideshow transitions
Set the transition from one picture to the next.

- Slideshow frequency
Select the display time for each photo.

- Repeat, Play once
View the pictures repeatedly or once only.

- Shuffle off, Shuffle on
View the pictures in sequential order, or at random.

- Rotate image
Rotate photo.

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

To close **Browse USB**, press ♠ and select another activity.

Play music

In the USB browser, select **Music** and press **OK**.

Options

Press ⇄ **OPTIONS**.

- Stop playback
Stop music play.

- Repeat, Play once
Play songs repeatedly or once.

- Shuffle on, Shuffle off
Play songs in sequence or at random.

- Show info
Display the file name.

To close **Browse USB**, press ♠ and select another activity.

Play videos

In the USB browser, select **Movie** and press **OK**.

Options

Press ⇄ **OPTIONS**.

- Subtitles
Display the subtitles if available.

- Audio language
Play the audio language if available.

- Repeat, Play once

Play videos repeatedly or once.

- Shuffle on, Shuffle off

Play videos in sequence or at random.

- Show info

Display the file name.

To close **Browse USB**, press ♠ and select another activity.

Settings

12.1
Tint

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

To select a preset . . .
1. Press ⌂ and select **Setup** and press **OK**.
2. Select **TV settings** > **Picture** > **Advanced** > **Tint**.
3. Press ▶ (right) and select **Normal**, **Warm** or **Cool**.
Select **Custom** if you want to set a colour temperature yourself.
4. Press ⥈, repeatedly if necessary, to close the menu.

12.2
Custom tint

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

To set a custom colour temperature . . .
1. Press ⌂ and select **Setup** and press **OK**.
2. Select **TV settings** > **Picture** > **Advanced** > **Custom tint**.
3. Press ▶ (right).
4. Select a setting with the arrow keys. (WP is white point and BL is black level.)
5. Press **OK** to confirm a setting. You can also select one of the presets in this menu.
6. Press ⥈, repeatedly if necessary, to close the menu.

12.3
Brightness

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

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

12.4
Game or computer

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

To switch the setting manually . . .

1. Press ⌂ and select **Setup** and press **OK**.
2. Select **TV settings** > **Picture** > **Advanced** > **Game or computer**.
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.

12.5
Format and edges

Screen edges

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

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

12.6
Location

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

12.7

Sound

Sound style

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

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

The different Sound styles are . . .
- **Personal** - Your personal choices made in Personalise picture and sound
- **Original** - Factory standard
- **Movie** - Ideal for watching movies
- **News** - Ideal for speech
- **Music** - Ideal for listening to music
- **Game** - Ideal for gaming

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.
4. 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** > **Restore style.**

Sound settings

Bass

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

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

Treble

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

To adjust the level . . .
1. Press ♠ and select **Setup** and press **OK**.

2. Select **TV settings** > **Sound** > **Treble**.
3. Press ▶ (right) and adjust the value with ▲ (up) or ▼ (down).
4. Press ⬑, repeatedly if necessary, to close the menu.

Surround mode

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

To set the surround mode . . .
1. Press ♠ and select **Setup** and press **OK**.
2. Select **TV settings** > **Sound** > **Surround mode**.
3. Press ▶ (right) and select **Stereo, Incredible surround** .
4. Press ⬑, repeatedly if necessary, to close the menu.

Headphones volume

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

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

Advanced sound settings

Auto volume levelling

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

To switch on or off . . .
1. Press ♠ 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.

TV speakers

You can send the TV sound to a connected audio device - a Home Theatre System or audio system. With **TV speakers**, you select where you want to hear the TV sound and how you want to control it.
- If you select **Off**, you permanently switch off the TV speakers.
- If you select **On**, the TV speakers are always on.

With an audio device connected with HDMI CEC, you can use one of the EasyLink settings.
- If you select **EasyLink**, the TV sends the TV sound to the audio device. The TV will switch off the TV speakers when the device is playing the sound.

- If you select **EasyLink autostart**, the TV will switch on the audio device, send the TV sound to the device and switch off the TV speakers.
With **EasyLink** or **EasyLink autostart** selected, you can still switch to TV speakers or device speakers in the Picture and sound menu.

To set the TV speakers . . .

1. Press 🏠 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 ⚏ **OPTIONS** and select **Picture and sound**.
2. Select **Speakers** and select **TV** or **Amplifier** (audio device).
3. Press ⮐, repeatedly if necessary, to close the menu.

Clear sound

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

To switch on or off . . .
1. 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.

HDMI1-ARC

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

Audio Out format

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

Audio Out levelling

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

Audio Out delay

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

Audio Out offset

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

Speakers

Home Theatre System

You can send the TV sound to a connected audio device - a Home Theatre System or audio system.

You can select where you want to hear the TV sound and how you want to control it.
- If you select **Off**, you permanently switch off the TV speakers.
- If you select **TV speakers**, the TV speakers are always on.

With an audio device connected with HDMI CEC, you can use one of the EasyLink settings.
- If you select **EasyLink**, the TV sends the TV sound to the audio device. The TV will switch off the TV speakers when the device is playing the sound.
- If you select **EasyLink autostart**, the TV will switch on the audio device, send the TV sound to the device and switch off the TV speakers.
With EasyLink or EasyLink autostart selected, you can still switch to TV speakers if necessary.

To set the TV speakers . . .

1. Press 🏠 and select **Setup** and press **OK**.
2. Select **TV settings** > **Sound** > **Sound output**.
3. Press ▶ (right) and select **Off**, **TV speakers**, **EasyLink** or **EasyLink autostart**.
4. Press ⮐, repeatedly if necessary, to close the menu.

To switch to speakers directly . . .

1. While watching TV, press ⚙ .
2. Select **Speakers** and select **TV** or **Amplifier** (audio system).
3. Press ⮐, repeatedly if necessary, to close the menu.

TV placement

As part of the first installation, this setting is set to either **On a TV stand** or **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.

13

Specifications

Environmental

Saving energy

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

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

Screen off

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

Auto switch off

If you do not press a key on the remote control during a 4 hour period, or if the TV receives no signal for 10 minutes, the TV switches off automatically to save energy.
If you use the TV as a monitor or use a digital receiver to watch TV (a Set-top box - STB) and you do not use the remote control of the TV, deactivate the automatic switch off.

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

Inactive devices off

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

Power management

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

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

European energy label

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

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.

13.2

Reception for PxHxxx9/PxTxxx9

- Aerial input : 75 ohm coaxial (IEC75)
- Tuner bands : Hyperband; S-Channel; UHF; VHF
- DVB : DVB-T (terrestrial, antenna) COFDM 2K/8K; DVB-T2 : only for TV types '. . . T/12'; DVB-C (cable) QAM

- Analogue video playback : NTSC; SECAM; PAL
- Digital video playback : MPEG2 SD/HD (ISO/IEC 13818-2);
MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)

13.3

Reception for PxKxxx9

- Aerial input : 75 ohm coaxial (IEC75)
- Tuner bands : Hyperband, S-Channel, UHF, VHF
- DVB : DVB-T (terrestrial, antenna) COFDM 2K/8K, DVB-T2 :
only for TV types '. . . T/12', DVB-C (cable) QAM
- Analogue video playback : NTSC, SECAM, PAL
- Digital video playback : MPEG2 SD/HD (ISO/IEC 13818-2),
MPEG4 SD/HD (ISO/IEC 14496-10)
- Digital audio playback (ISO/IEC 13818-3)
- Satellite aerial input : 75 ohm F-type
- Input frequency range : 950 to 2150MHz
- Input level range : 25 to 65 dBm
- DVB-S/S2 QPSK, symbol rate 2 to 45M symbols, SCPC and
MCPC
- Supported satellites : Astra 19.2°E, Astra 23.5°E, Astra 28.2°E,
Hotbird 13.0°E, TürkSat 42.0°E, Eutelsat 7°W, Thor 1°W
- Astra HD+ support
- LNB : DiSEqC 1.0, 1 to 4 LNBs supported, Polarity selection
14/18V, Band selection 22kHz, Tone burst mode, LNB current
300mA max

13.4

Display

Type

Diagonal screen size :
- 20Pxx4109 : 51 cm / 20 inch
- 22Pxx4109 : 56 cm / 22 inch
- 23Pxx4009 : 58 cm / 23 inch
- 24Pxx4109 : 61 cm / 24 inch
- 28Pxx4109 : 71 cm / 28 inch

- 32Pxx41x9 : 81 cm / 32 inch
- 39Pxx41x9 : 96 cm / 39 inch
- 40Pxx41x9 : 102 cm / 40 inch
- 42Pxx41x9 : 107 cm / 42 inch
- 47Pxx41x9 : 120 cm / 47 inch
- 50Pxx41x9 : 127 cm / 50 inch

- 22Pxx4209 : 56 cm / 22 inch

- 24Pxx5219 : 61 cm / 24 inch

- 32Pxx43x9 : 81 cm / 32 inch
- 40Pxx43x9 : 102 cm / 40 inch
- 50Pxx43x9 : 127 cm / 50 inch

- 32Pxx5109 : 81 cm / 32 inch
- 40Pxx5109 : 102 cm / 40 inch

- 48Pxx5109 : 122 cm / 48 inch
- 55Pxx5109 : 140 cm / 55 inch

- 42Pxx5209 : 107 cm / 42 inch
- 47Pxx5209 : 119 cm / 47 inch
- 55Pxx5209 : 140 cm / 55 inch

Display resolution :
- PFxxxx9 : 1920x1080p
- PFxxxx9 : 1366x768p

Display resolutions

Computer formats - HDMI (Resolution - refresh rate)
640 x 480 - 60 Hz
800 x 600 - 60 Hz
1024 x 768 - 60 Hz
1280 X 720 - 60 Hz
1280 X 768 - 60 Hz
1280 x 1024 - 60 Hz
1360 x 768 - 60 Hz
1600 x 900 - 60 Hz*
1680 x 1050 - 60 Hz*
1920 x 1080 - 60 Hz*

Computer formats - VGA (Resolution - refresh rate)
640 x 480 - 60 Hz
800 x 600 - 60 Hz
1024 x 768 - 60 Hz
1280 x 1024 - 60 Hz
1360 x 768 - 60 Hz
1600 x 900 - 60 Hz*
1600 x 1200 - 60 Hz*
1920 x 1080 - 60 Hz*

Video formats (Resolution - refresh rate)
480i - 60 Hz
480p - 60 Hz
576i - 50 Hz
576p - 50 Hz
720p - 50Hz, 60 Hz
1080i - 50Hz, 60 Hz
1080p - 24Hz, 25Hz, 30Hz, 50Hz, 60 Hz

* For certain sets only.

13.5

Power

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

Power

- Mains power : AC 220-240V +/-10%
- Ambient temperature : 5°C to 35°C
- Standby power consumption : less than 0.3W
- Power saving features : Eco mode, Picture mute (for radio), Auto switch off , Eco settings menu.

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

13.6

Dimensions and weights_4009/41x9/4209

20Pxx4109

- without TV stand:
Width 460.9 mm - Height 299 mm - Depth 53.3 mm - Weight ±2.62 kg

- with TV stand:
Width 460.9 mm - Height 343.5 mm - Depth 145 mm - Weight ±2.83 kg

22Pxx4109/22Pxx4209

- without TV stand:
Width 509.7 mm - Height 322.7 mm - Depth 55.5 mm - Weight ±3.03 kg

- with TV stand:
Width 509.7 mm - Height 367.2 mm - Depth 145 mm - Weight ±3.24 kg

23Pxx4009

- without TV stand:
Width 545.1 mm - Height 344 mm - Depth 55.5 mm - Weight ±3.05 kg

- with TV stand:
Width 545.1 mm - Height 385.6 mm - Depth 145 mm - Weight ±3.26 kg

24Pxx4109

- without TV stand:
Width 550.4 mm - Height 345.7 mm - Depth 55.5 mm - Weight ±3.3 kg

- with TV stand:
Width 550.4 mm - Height 386.8 mm - Depth 145 mm - Weight ±3.51 kg

28Pxx4109

- without TV stand:
Width 635.1 mm - Height 396.7 mm - Depth 80.8 mm - Weight ±4.33 kg

- with TV stand:

Width 635.1 mm - Height 438 mm - Depth 190 mm - Weight ±4.89 kg

32Pxx41x9

- without TV stand:
Width 725.7 mm - Height 432.1 mm - Depth 94 mm - Weight ±5.06 kg

- with TV stand:
Width 725.7 mm - Height 487.8 mm - Depth 190 mm - Weight ±5.66 kg

39Pxx4109

- without TV stand:
Width 878.3 mm - Height 517.4 mm - Depth 94 mm - Weight ±6.88 kg

- with TV stand:
Width 878.3 mm - Height 571.4 mm - Depth 250 mm - Weight ±8.9 kg

40Pxx41x9

- without TV stand:
Width 919 mm - Height 538.5 mm - Depth 94 mm - Weight ±7.68 kg

- with TV stand:
Width 919 mm - Height 594.1 mm - Depth 250 mm - Weight ±9.14 kg

42Pxx41x9

- without TV stand:
Width 958 mm - Height 563 mm - Depth 94 mm - Weight ±7.8 kg

- with TV stand:
Width 958 mm - Height 617 mm - Depth 250 mm - Weight ±9.9 kg

47Pxx41x9

- without TV stand:
Width 1099 mm - Height 626 mm - Depth 94 mm - Weight ±9.4 kg

- with TV stand:
Width 1099 mm - Height 681 mm - Depth 270 mm - Weight ±11.8 kg

50Pxx41x9

- without TV stand:
Width 1125 mm - Height 656 mm - Depth 94 mm - Weight ±10.7 kg

- with TV stand:
Width 1125 mm - Height 709 mm - Depth 270 mm - Weight ±13.1 kg

13.7

Dimensions and weights_5219

24Pxx5219

- without TV stand:
Width 552.3 mm - Height 331.5 mm - Depth 54.8 mm - Weight ±3.4 kg

- with TV stand:
Width 552.3 mm - Height 338.8 mm - Depth 121.5 mm - Weight ±3.66 kg

13.8

Dimensions and weights_5109

32Pxx5109

- without TV stand:
Width 725.7 mm - Height 429.2 mm - Depth 55.4 mm - Weight ±4.97 kg

- with TV stand:
Width 725.7 mm - Height 479.7 mm - Depth 190 mm - Weight ±5.57 kg

40Pxx5109

- without TV stand:
Width 918.2 mm - Height 536.5 mm - Depth 56.3 mm - Weight ±7.82 kg

- with TV stand:
Width 918.2 mm - Height 592.1 mm - Depth 249.8 mm - Weight ±9.9 kg

48Pxx5109

- without TV stand:
Width 1082 mm - Height 625 mm - Depth 57 mm - Weight ±10.8 kg

- with TV stand:
Width 1082 mm - Height 680 mm - Depth 250 mm - Weight ±13.3 kg

55Pxx5109

- without TV stand:
Width 1243.2 mm - Height 720.6 mm - Depth 78 mm - Weight ±16.8 kg

- with TV stand:
Width 1243.2 mm - Height 770.5 mm - Depth 270 mm - Weight ±19.4 kg

13.9

Connectivity_20"-28"_4009/4109/4209/5219

For PxKxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack
- VGA: PC input

TV Side

- CI: Common Interface
- USB
- Satellite

For PxHxxx9/PxTxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack
- VGA: PC input

TV Side

- CI: Common Interface
- USB

13.10

Connectivity_32"-39"_41x9

For PxKxxx9

TV Rear

- HDMI 2
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor

TV Side

- DIGITAL AUDIO OUT: SPDIF
- HDMI 1: HDMI Audio Return Channel
- CI: Common Interface
- USB
- Satellite

For PxHxxx9/PxTxxx9

TV Rear

- HDMI 2
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor

TV Side

- DIGITAL AUDIO OUT: SPDIF
- HDMI 1: HDMI Audio Return Channel
- CI: Common Interface
- USB

13.11

Connectivity_40"-50"_41x9

For PxKxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- HDMI 2
- HDMI 3
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack
- USB 2

TV Side

- CI: Common Interface
- USB 1
- Satellite

For PxHxxx9/PxTxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- HDMI 2
- HDMI 3 (Only for PFT41x9 models)
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack

- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack
- USB 2 (Only for PFT41x9 models)

TV Side

- CI: Common Interface
- USB 1

13.12

Connectivity_32"-55"_4309/5109/5209

For PxKxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- HDMI 2
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack

TV Side

- CI: Common Interface
- USB
- Satellite

For PxHxxx9/PxTxxx9

TV Rear

- HDMI 1 ARC: HDMI Audio Return Channel
- HDMI 2
- SERV. U: Service port
- TV ANTENNA: 75 ohm coaxial (IEC)
- SCART (RGB/CVBS): SCART adaptor
- AUDIO IN (DVI): Stereo 3.5mm mini-jack
- DIGITAL AUDIO OUT: SPDIF
- Headphones: Stereo 3.5mm mini-jack

TV Side

- CI: Common Interface
- USB
- Satellite

13.13

Sound

- Output power (RMS @ 10% THD): 4W
- Mono / Stereo
- Sound enhancement : Incredible Surround, Clear Sound

13.14

Multimedia

Note: Multimedia file names must not exceed 128 characters.

Supported multimedia connections

- USB 2.0 (FAT / FAT 32 / NTFS): only connect USB devices that consume 500 mA of power or less.

Supported image files
- JPEG: *.jpg, *.jpeg
- PNG: *.png.jpg

Supported audio files
- MPEG1: *.mp3

Supported video files
- *.avi, *.mp4, *.mov, *.mkv, *.mpg, *.mpeg

Supported subtitle format

- SRT: multiple language support

Supported audio/video formats

File Extensions	Container	Video Decoder	Resolution	Audio Decoder
*.avi	AVI	x264 - H264/AVC encoder (X264), 1920x1080, 30 fps MPEG Layer-3, 192 kBit/s, 48,000 Hz, Stereo	1920 x 1080	MP3, MP2, AC3
		XviD	1920 x 1080	MP3, MP2
		MPEG1	768 x 576	MP3, MP2, AC3
		MPEG2	1920 x 1080	MP3, MP2, AC3
		H.264	1920 x 1080	MP3, MP2, AC3
		MPEG-4	1920 x 1080	MP3, MP2, AC3
*.mp4 *.mov		H.264	1920 x 1080	MP3
		MPEG-4	1920 x 1080	MP3
*.mkv	MKV	H.264	1920 x 1080	MP3, AC3
		MPEG-4	1920 x 1080	MP3, MP2, AC3
*.mpg *.mpeg	PS (Program Stream)	MPEG1	768 x 576	MP2, AC3
		MPEG2	1920 x 1080	MP2, AC3

File Extensions	Container	Video Decoder	Resolution	Audio Decoder
Others	TS (Transport Stream)	MPEG2	1920 x 1080	MP2, AC3
		H.264	1920 x 1080	MP2, AC3

Software

Software update

Update from USB

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

1. Start the update on TV
To start the software update . . .
Press ♠, select **Setup** and press **OK**.
Select **Update software** > **USB** and press **OK**.

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

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

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

Do not . . .

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

If a power cut occurs during the update, never remove the USB memory device from the TV. When the power returns, the update will continue.

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.

Open source software

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

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

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

Troubleshooting and support

15.1

Troubleshooting

Channels

No digital channels found during the installation

See the technical specifications to make sure that your TV supports DVB-T or DVB-C in your country.
Make sure that all cables are properly connected and that the correct network is selected.

Previously installed channels are not in the channel list

Make sure that the correct channel list is selected.

General

The TV does not switch on

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

Creaking sound at startup or switch off

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

TV does not respond to the remote control

The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behaviour.
If the TV continues to be unresponsive to the remote control, you can check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.
If you do not notice the flickering, the remote control might be broken or its batteries are low.
This method of checking the remote control is not possible with remote controls which are wirelessly paired with the TV.

The TV goes back to standby after showing the Philips startup screen

When the TV is in standby, a Philips startup screen is displayed,

then the TV returns to standby mode. This is normal behaviour. When the TV is disconnected and reconnected to the power supply, the startup screen is displayed at the next startup. To switch on the TV from standby, press on the remote control or the TV.

The standby light keeps on blinking

Disconnect the power cable from the power outlet. Wait 5 minutes before you reconnect the power cable. If the blinking reoccurs, contact Philips TV Consumer Care.

Wrong menu language

Change the language back to your language.

1. Press ⌂ 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 switches the audio output off — this does not indicate malfunction.

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

Connections

HDMI

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

EasyLink does not work

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

No volume icon shown

- When a HDMI-CEC audio device is connected this behaviour is normal.

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

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

Choppy playback of USB files

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

15.2

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**

15.3

Help

This TV offers help on screen.

Open Help

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

15.4

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 colaborators 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.

15.5

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 attemp to repair the TV yourself. This may cause severe injury, irreparable damage to your TV or void your warranty.

Safety and care

16.1

Safety

Important

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

Secure the TV from falling over

Always use the supplied wall bracket to secure the TV from falling over. Mount the bracket and secure the TV onto the bracket, even if you put the TV on the floor.

You can find the mounting instructions in the Quick Start Guide that came with the TV. In case you lost this guide, you can download the guide from www.philips.com
Use the product type number of the TV to look for the Quick Start Guide to download.

Risk of electric shock or fire

- Never expose the TV to rain or water. Never place liquid containers, such as vases, near the TV.
If liquids are spilt on or into the TV, disconnect the TV from the power outlet immediately.
Contact Philips TV Consumer Care to have the TV checked before use.

- Never expose the TV, remote control or batteries to excessive heat. Never place them near burning candles, naked flames or other heat sources, including direct sunlight.

- Never insert objects into the ventilation slots or other openings on the TV.

- Never place heavy objects on the power cord.

- Avoid force coming onto power plugs. Loose power plugs can cause arcing or fire. Ensure that no strain is exerted on the power cord when you swivel the TV screen.

- To disconnect the TV from the mains power, the power plug of the TV must be disconnected. When disconnecting the power, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

Risk of injury or damage to the TV

- Two people are required to lift and carry a TV that weighs more than 25 kg or 55 lbs.

- If you mount the TV on a stand, only use the supplied stand. Secure the stand to the TV tightly.
Place the TV on a flat, level surface that can support the weight of the TV and the stand.

- When wall mounted, ensure that the wall mount can safely bear the weight of the TV set. TP Vision bears no responsibility for improper wall mounting that results in accident, injury or damage.

- Parts of this product are made of glass. Handle with care to avoid injury or damage.

Risk of damage to the TV !

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

Risk of injury to children

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

- Never place the TV on a surface covered by a cloth or other material that can be pulled away.

- Ensure that no part of the TV hangs over the edge of the mounting surface.

- Never place the TV on tall furniture, such as a bookcase, without anchoring both the furniture and TV to the wall or a suitable support.

- Teach children about the dangers of climbing on furniture to reach the TV.

Risk of swallowing batteries !

The remote control may contain coin-type batteries which can easily be swallowed by small children. Keep these batteries out of reach of children at all times.

Risk of overheating

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

Lightning storms

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.

16.2

Screen care

- Never touch, push, rub or strike the screen with any object.

- Unplug the TV before cleaning.

- Clean the TV and frame with a soft damp cloth and wipe gently. Never use substances such as alcohol, chemicals or household cleaners on the TV.

- To avoid deformations and colour fading, wipe off water drops as quickly as possible.

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

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