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PFL3108H

EN User Manual

PHILIPS

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1 Important

Safety

Precautions

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

Risk of electric shock or fire!

- Never expose the TV to rain or water. Never place liquid containers, such as vases, near the TV. If liquids are spilled on or into the TV, disconnect the TV from the power outlet immediately. Contact Philips TV Consumer Care to have the TV checked before use.
- Never place the TV, remote control or batteries near naked flames or other heat sources, including direct sunlight. To prevent the spread of fire, keep candles or other flames away from the TV, remote control and batteries at all times.



- Never insert objects into the ventilation slots or other openings on the TV.
- Never expose the remote control or batteries to rain, water or excessive heat.
- Avoid force coming onto power plugs. Ensure that the power plug is fully inserted into the power socket. Loose power plugs can cause arcing or fire.
- When the TV is swivelled, ensure that no strain is exerted on the power cord. Strain on the power cord can loosen connections and cause arcing.

- 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 damage to the TV!

- Two people are required to lift and carry a TV that weighs more than 25kg or 55lbs.
- When stand mounting the TV, use only the supplied stand. Secure the stand to the TV tightly. Place the TV on a flat, level surface that can support the combined weight of the TV and the stand.
- When wall mounting the TV, use only a wall mount that can support the weight of the TV. Secure the wall mount to a wall that can support the combined weight of the TV and wall mount. TP Vision bears no responsibility for improper wall mounting that results in accident, injury or damage.
- If you need to store the TV, disassemble the stand from the TV. Never lay the TV on its back with the stand installed.
- 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.
- Parts of this product may be made of glass. Handle with care to avoid injury and damage.

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

Risk of swallowing batteries!

- The product or remote control may contain a coin-type battery, which can be swallowed. Keep the battery 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 4 inches or 10 cm around the TV for ventilation. Ensure that curtains or other objects never cover the ventilation slots on the TV.

Risk of injury, fire or power cord damage!

- Never place the TV or any objects on the power cord.
- Disconnect the TV from the socket and aerial before lightning storms. During lightning storms, never touch any part of the TV, power cord or aerial 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 matches room temperature before connecting the TV to the power outlet.

Care

Screen

- Risk of damage to the TV screen! 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 soon 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.

Placement tips

- Position the TV where light does not shine directly on the screen.
- The ideal viewing distance of this TV is three times its diagonal screen size. For example, if the diagonal screen size of the TV is 81 cm / 32", the ideal viewing distance is ~2,5 m / ~92" from the front of the screen.
- While seated, your eyes should be level with the centre of the screen.

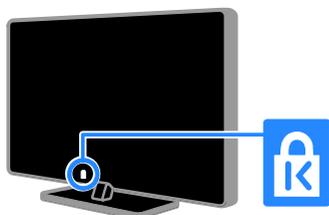
TV placement

You can apply the best sound settings for your TV by selecting the TV placement (wall mount or stand mount).

1. Press .
2. Select **[Setup]**, then press **OK**.
3. Select **[TV settings]** > **[General settings]** or **[TV placement]**.
4. Select **[On a TV stand]** or **[Wall mounted]**, then press **OK**.

Lock the TV

Your TV is equipped with a Kensington security slot at the base of the TV. To secure the TV, purchase a Kensington anti-theft lock (sold separately).



Legal

Notice

2013 © TP Vision Netherlands B.V. All rights reserved.

This product was brought to the market by TP Vision Netherlands B.V. or one of its affiliates, hereinafter referred to as TP Vision, which is the manufacturer of the product. TP Vision is the warrantor in relation to the TV with which this booklet was packaged. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V.

Specifications are subject to change without notice. TP Vision reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly.

The written material packaged with the TV and the manual stored in the memory of the TV or downloaded from the Philips website are believed to be adequate for the intended use of the system. If the product is used for purposes other than those specified herein, TP Vision cannot guarantee the proper functioning and the safety of the product.

TP Vision cannot be held responsible for any errors in the content of this document nor for any problems as a result of the content of this document. Errors reported to TP Vision will be amended and published on the Philips support website as soon as possible.

Terms of warranty

- The terms of warranty can be downloaded from the Philips support website. Never attempt to repair the TV yourself due to risk of injury, damage to the TV or voiding of warranty!
- Use the TV and accessories only as intended by the manufacturer.
- The caution sign printed on the back of the TV indicates risk of electric shock. Never remove the TV cover. Always contact Philips TV Consumer Care for service or repairs.
- Any operation expressly prohibited in this manual, or any adjustments and assembly procedures not recommended or authorised in this manual, shall void the warranty.

Pixel characteristics

This LCD/LED product has a high number of colour pixels. Although it has effective pixels of 99.999% or more, black dots or bright points of light (red, green or blue) may appear constantly on the screen. This is a structural property of the display (within common industry standards) and is not a malfunction.

CE compliance

This product is in compliance with the essential requirements and other relevant provisions of Directives 2006/95/EC (Low Voltage), 2004/108/EC (EMC) and 2011/65/EU (ROHS).



Compliance with EMF

TP Vision manufactures and sells many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals.

One of TP Vision's leading Business Principles is to take all necessary health and safety measures for the products, to comply with all applicable legal requirements and to stay well within the Electro Magnetic Field (EMF) standards applicable at the time of producing the products.

TP Vision is committed to developing, producing and marketing products that cause no adverse health effects. TP Vision confirms that, as long as its products are handled properly for their intended use, they are safe to use according to scientific evidence available today.

Philips and TP Vision play an active role in the development of international EMF and safety standards, enabling the anticipation of further developments in standardisation for early integration in the products.

Open source software

TP Vision Netherlands 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 Department, TP Vision Netherlands B.V., P.O. Box 80077, 5600 KA Eindhoven, The Netherlands".

Trademarks and copyrights

Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries.



Manufactured under licence from Dolby Laboratories. Dolby and the double D symbol are trademarks of Dolby Laboratories.



The terms HDMI and HDMI High-Definition Multimedia Interface and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.



Kensington and Micro Saver are registered US trademarks of ACCO World Corporation with issued registrations and pending applications in other countries throughout the world.

All other registered and unregistered trademarks are the property of their respective owners.

Sustainability

Energy efficiency

This TV is designed with energy-efficient features. To access these features, press the **Green button** on the remote control.

- **Energy saving picture settings:** You can apply a combination of energy saving picture settings. While you watch TV, press the **Green button** and select **[Energy saving]**. Then select the **[Energy saving]** picture setting.
- **Screen off:** If you only want to listen to audio from the TV, you can switch off the TV display. Other functions continue to operate normally. While you watch TV, press the **Green button** and select **[Screen off]**.
- **Auto switch off:** To conserve energy, set the TV to switch off automatically after a period of inactivity. While you watch TV, press the **Green button** and select **[Auto switch off]**. Then select the period after which the TV switches off.
- **Switch off inactive devices:** Switch off connected EasyLink HDMI-CEC (Consumer Electronic Control) compliant devices that are inactive. While you watch TV, press the **Green button** and select **[Inactive device off]**.

Recycling

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 of with normal household waste. Please inform yourself about the local rules on separate collection of batteries because correct disposal helps to prevent negative consequences for the environment and human health.



Energy label

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

Contact Philips

You can contact Philips TV Consumer Care in your country for support. The number is available in the leaflet accompanying this product or online at www.philips.com/support.

Before you contact Philips, write down the model and serial number of your TV. You can find this information on the back of your TV or on the TV packaging.

Help and support

Visit the Philips website

For more information, visit the Philips support website at www.philips.com/support.

On the Philips support website, you can also:

- Find answers to Frequently Asked Questions (FAQ)
- Download a printable PDF version of this user manual
- Email us a specific question
- Chat online with Philips TV Consumer Care (available in certain countries only)

Use the Philips connectivity guide

An easy-to-use connectivity guide gives you guidance on how to connect your TV to other devices. Visit <http://www.connectivityguide.philips.com>.

Search the TV forum

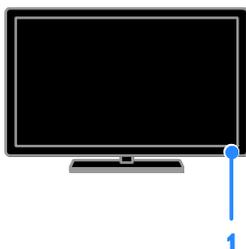
Your question may have already been answered by the Philips TV community of users. Visit www.supportforum.philips.com.

2 Use your TV

TV controls

Sensors and indicators

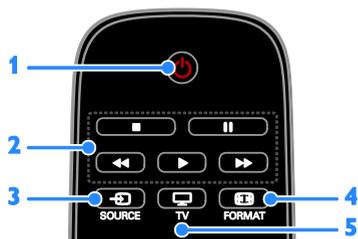
TV



1. Standby indicator LED and remote control sensor

The standby LED indicates when your TV is in standby. Point the remote control at the sensor. Make sure that the line of sight between the remote control and the TV is not blocked.

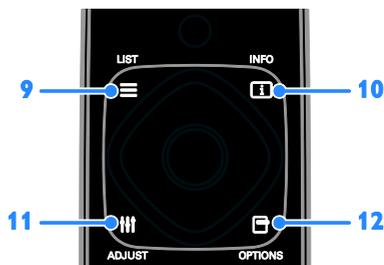
Remote control



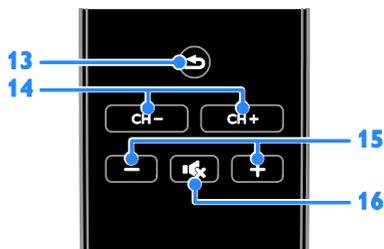
1. **⏻ (Standby):** Switch the TV on or to standby.
2. **Play buttons:** Control playback of media files.
3. **📺 SOURCE:** Access a connected device.
4. **📺 FORMAT:** Change picture format.
5. **📺 TV:** Switch source to watch TV.



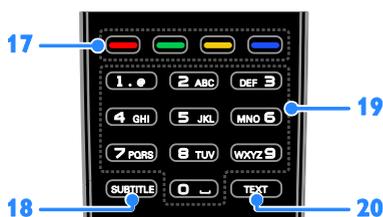
6. **🏠(Home):** Access the Home menu.
7. **OK:** Confirm an entry or selection.
8. **▲▼◀▶ (Navigation buttons):** Navigate through menus and select items.



9. **☰ LIST:** Access the TV channel list.
10. **📄 INFO:** Display information about current activity.
11. **|||| ADJUST:** Adjust TV settings.
12. **⚙️ OPTIONS:** Access currently available options.



13. (Back): Return to the previous menu page or exit from a TV function.
14. CH - / CH +: Switch channels.
15. +/- (Volume): Adjust volume.
16. (Mute): Mute or restore audio.



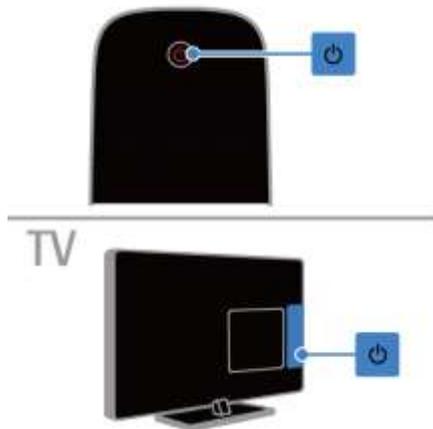
17. **Colour buttons:** Select tasks or options. The buttons function according to the services offered by the service provider.
18. **SUBTITLE:** Switch subtitles on or off.
19. **0-9 (Numeric buttons):** Select TV channels or enter text.
20. **TEXT:** Enable or disable text.

EasyLink controls

If you connect your TV to HDMI-CEC enabled devices, such as a Blu-ray player or home theatre, you can control them at the same time with one remote control. Simply switch on EasyLink after connection.

Watch TV

Switch TV on or off



Switch the TV on

- Connect the TV to the mains outlet and switch on the main power.
- If the standby LED is lit, press on the remote control.

Note: There is a short delay before the TV responds.

Tip: If you cannot find your remote control and want to switch on the TV from standby, press on the TV.

Switch TV to standby

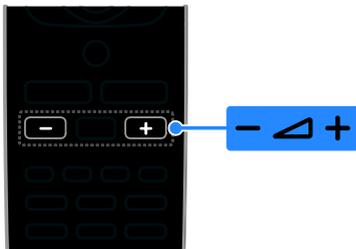
Press on the remote control. The standby LED on the TV switches to red.

Switch off the TV

Press on the TV. The standby LED switches to off.

Note: Though your TV consumes very little energy when it is in standby or switched off, it does use some energy. If you are not going to use the TV for an extended period of time, disconnect the TV from the mains plug.

Adjust TV volume



Increase or decrease the TV volume

- Press +/- on the remote control.

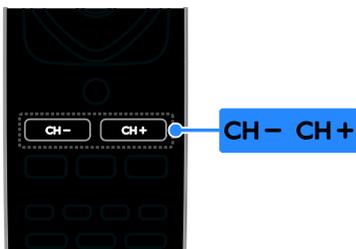
Mute or restore the TV volume

- Press  on the remote control to mute the volume.
- Press  again to restore the volume.

Adjust headphone volume

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Sound]** > **[Headphone volume]**, then press **OK**.
3. Select a level.

Switch TV channels



- Press **CH +/-** on the remote control.
- Press the **Numeric buttons** to enter a channel number.

Manage favourite channels

You can view all channels or only a list of your favourite channels.

Create a list of your favourite channels

1. Press **≡ LIST**.
The channel list is displayed.
2. Select the channel to mark as favourite, then press **OPTIONS**.

3. Select **[Add/remove favourites]**, then press **OK**.

The selected channel is marked with an asterisk.

To remove a channel from the favourites list, select **[Add/remove favourites]**, then press **OK**.

Display your list of favourite channels

1. Press **≡ LIST**, then press **OPTIONS**.
2. Select **[List]** > **[Favourites]** to display channels in the favourite list.
3. Press **OK** to confirm.

Reorder your list of favorite channels

1. While your list of favorite channels is displayed, press **OPTIONS**.
2. Select **[Reorder]**, then press **OK**.
3. Select the channel to reorder, then press **OK**.
4. Press the Navigation buttons to move the highlighted channel to another location, then press **OK**.
5. Once complete, press **OPTIONS**.
6. Select **[Exit reorder]**, then press **OK**.

Manage channel lists

After the channels are installed, you can:

- Filter channels.
- Switch between antenna and cable channels.
- Rename channels.
- Lock a channel.
- Listen to digital radio.

Filter channels

1. While you watch TV, press **≡ LIST**.
 2. Press **OPTIONS**, then select **[Filter]**.
 3. Select an option, then press **OK**.
- **[Digital + Analogue]**: Display all channels in the channels list.
 - **[Digital TV channels]**: Display only digital channels.
 - **[Analogue Channels]**: Display only analogue channels.
 - **[Free + scrambled]**: Display all channels in the channels list.
 - **[Free channels]**: Display only free channels.

- **[Scrambled channels]:** Display only scrambled channels.

Note: The filtering options may vary according to your broadcaster.

Switch between antenna and cable channels

You can switch between antenna and cable channels while you are watching TV.

1. While you watch TV, press .
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]** > **[Antenna connection]**.
3. Select **[Antenna (DVB-T)]** to watch antenna channels or **[Cable (DVB-C)]** to watch cable channels, then press **OK**.

Rename channels

When you select a channel, its name appears. You can change this channel name.

1. While you watch TV, press **LIST**.
The channel list is displayed.
2. Select the channel to rename, then press **OPTIONS**.
3. Select **[Rename]**, then press **OK**.
The onscreen keyboard is displayed.
4. Press the **Navigation buttons** to select each character, then press **OK**.
5. Once complete, select **[Done]**, then press **OK** to confirm.

Lock a channel

You can prevent unauthorised access to channels by locking them.

1. While you watch TV, press **LIST**.
The channel list is displayed.
2. Select the channel to lock, then press **OPTIONS**.
3. Select **[Lock channel]**, then press **OK**.
4. If prompted, enter the PIN code.
The channel is marked with a lock icon in the channels list.

Tip: To watch a locked channel, enter the PIN code when prompted.

Listen to digital radio

If digital radio channels are available, you can listen to them. They are installed automatically when you install the TV channels.

1. While you watch TV, press **LIST**.
The channel list is displayed.
2. Press **OPTIONS**.
3. Select **[Filter]** > **[Radio]**, then press **OK**.
4. Select a radio channel, then press **OK**.

Watch connected devices

Before you can watch a device, connect the device to the TV.

Select a device with SOURCE

1. Press **SOURCE**.
2. Select a device, then press **OK**.

Select a device from the Home menu

1. Press .
2. Select **[Source]**, then press **OK**.
3. Select the device, then press **OK**.

Use picture and sound presets

Your TV comes with predefined picture and sound settings. You can apply these settings or customise them.

Select your preferred picture settings

1. While you watch TV, press **OPTIONS**.
2. Select **[Picture and sound]** > **[Picture style]**, then press **OK**.
3. Select an option, then press **OK**:
 - **[Personal]:** Apply your personalised picture settings.
 - **[Vivid]:** Rich and dynamic settings, ideal for daytime viewing.
 - **[Natural]:** Natural picture settings.
 - **[Standard]:** Default settings that suit most environments and types of video.
 - **[Movie]:** Ideal settings for movies.
 - **[Photo]:** Ideal settings for photos.
 - **[Energy saving]:** Settings that conserve the most energy.

Select your preferred sound settings

1. While you watch TV, press **OPTIONS**.
2. Select **[Picture and sound]** > **[Sound style]**, then press **OK**.
3. Select an option, then press **OK**:
 - **[Personal]**: Apply your personalised sound settings.
 - **[Original]**: Settings that suit most environments and types of audio.
 - **[Movie]**: Ideal settings for movies.
 - **[Music]**: Ideal settings for listening to music.
 - **[Game]**: Ideal settings for games.
 - **[News]**: Ideal settings for spoken audio, such as the news.

Change picture format

You can change the picture format to suit the video source.

1. Press **[FORMAT]**.
2. Select a picture format, then press **OK**.

The available picture formats depend on the video source.

- **[Auto]**: Adjust the picture format according to the input source.
- **[Super zoom]**: Remove the black bars on the sides of 4:3 broadcasts. Not recommended for HD or PC.
- **[Movie expand 16:9]**: Scale 4:3 format to 16:9. Not recommended for HD or PC.
- **[Wide screen]**: Shows widescreen format content unstretched. Not recommended for HD or PC.
- **[Unscaled]**: Provide maximum detail for PC. Only available when PC mode is selected in the Picture menu.
- **[4:3]**: Display the classic 4:3 format.

View programme guide

What you can do

You can view channel schedules and programme synopses for digital TV channels using programme guides provided by the broadcasters. The availability of programme guides is dependent on your broadcaster.

You cannot view a channel's programme guide information if:

- the age rating of the channel is equal or higher than the age rating set on your TV.
- the channel is locked.

From the broadcaster

Access broadcaster programme guide

1. Press **[HOME]**.
2. Select **[TV guide]**, then press **OK**.

3. If you are viewing the programme guide for the first time, follow the onscreen instructions to update the guide.

Customise broadcaster programme guide

You can customise the displayed information to:

- Remind you when programmes start.
- Display only preferred channels.
- Change day of display.

Note: Options may vary according to the programme information available from the broadcaster.

1. In the programme guide, press **OPTIONS**.
2. Select an option, then press **OK**:
 - **[Update TV guide]**: Update programme guide information.
 - **[Change day]**: Select the day to display programme guide.
 - **[Search by genre]**: Search programmes by genre.
 - **[All reminders]**: Display a list of all programme reminders.

Play multimedia files

What you can do

You can play videos, photos, music and text files on your TV from a USB device connected to the TV.

Play files from USB device

If you have photos, videos or music files on a USB storage device, you can play the files on TV.

Caution:

- TP Vision is not responsible if the USB hard drive is not supported, nor is it responsible for damage to or loss of data in the device.
- Do not overload the USB port. If you connect a USB storage device that consumes more than 500mA power, make sure that it is connected to its own external power supply.

Browse USB device

1. Connect the USB device to the USB connector on the TV.
2. Press **SOURCE**, select **[USB]**, then press **OK**.
3. Select a file from the content browser, then press **OK** to start play.
4. Press the **Play buttons** to control play.

Tip:

- Select any of the options on the left of the content browser to filter your files by type.

To select a different USB device:

1. Press **SOURCE**, then select **[USB]**.
2. Select the USB device to browse and press **OK**.

Play options

Watch video

Press the **Navigation buttons** to select a video file, then press **OK** to control play.

- Press **ESC** to exit the content browser.
- To search forward or backwards, press **▶▶** or **◀◀**. Press the button repeatedly to toggle between different speeds.
- To stop the video, press **■**.

Video options

While you play video, press **OPTIONS**, then press **OK** to select an option:

- **[Subtitles]**: Select the available subtitle settings.
- **[Subtitle language]**: Select the language for subtitles if available.
- **[Audio language]**: Select an audio language.
- **[Repeat]**: Select **[Repeat]** to play the video file repeatedly or **[Play once]** to play the video file once.
- **[Shuffle on]** / **[Shuffle off]**: Enable or disable random play of video files.
- **[Show info]**: View information about a video.

Note:

To view information about a video (for example, played position, duration, title or date), select the video, then press **INFO**. To hide the information, press **INFO** again.

Listen to music

Press the **Navigation buttons** to select a video file, then press **OK** to control play.

- Press **ESC** to exit content browser.
- To search forward or backwards, press **▶▶** or **◀◀**. Press repeatedly to toggle between different speeds.
- To stop the music, press **■**.

Music options

While you play music, press **OPTIONS**, then press **OK** to select an option:

- **[Repeat]**: Select **[Repeat]** to play a track or an album repeatedly, or select **[Play once]** to play a track once.
- **[Shuffle on] / [Shuffle off]**: Enable or disable random play of tracks.
- **[Show info]**: View information about a song.

Note:

To view information about a song (for example, title, artist or duration), select the song, then press **INFO**.

To hide the information, press **INFO** again.

View pictures

Press the **Navigation buttons** to select a picture, then press **OK** to start the slideshow.

- Press **Navigation buttons** to search for a picture.
- Press **EXIT** to exit content browser.

Slideshow options

While you play a slideshow, press **OPTIONS**, then press **OK** to select an option:

- **[Slideshow frequency]**: Select the display time for each picture in the slideshow.
- **[Slideshow transitions]**: Select the transition from one picture to the next.
- **[Repeat]**: Select **[Repeat]** to watch a slideshow repeatedly or **[Play once]** to watch once.
- **[Shuffle on] / [Shuffle off]**: Enable or disable random display of pictures in the slideshow.
- **[Rotate image]**: Rotate the picture.
- **[Show info]**: View information about a picture.

Note:

To view information about a picture (for example, title, album, date, file size or name of the next picture), select the picture, then press **INFO**.

To hide the information, press **INFO** again.

3 Use more of your TV

View Text

Select a page

While you watch channels that broadcast text, you can view the text.

1. Select a channel that broadcasts text, then press **TEXT**.
2. Select a page in one of the following ways:
 - Enter the page number with the **Numeric buttons**.
 - Press **CH + / CH -** to view the next or previous page.
 - Press the **Colour buttons** to select a colour coded item.

Text options

1. While you view text, press **OPTIONS**.
2. Select an option:
 - **[Freeze page] / [Unfreeze page]**: Freeze or unfreeze the current page.
 - **[Dual screen] / [Full screen]**: Enable or disable dual screen text. Dual screen displays both the current channel and the text broadcast on two halves of the TV screen.
 - **[T.O.P. overview]**: Table Of Pages (T.O.P.) text broadcasts allow you to jump from one subject to another without entering page numbers.
 - **[Enlarge] / [Normal view]**: Zoom in on the page. Press the **Navigation buttons** to move around the enlarged view.
 - **[Reveal]**: Hide or reveal hidden information on a page, such as solutions to riddles or puzzles.
 - **[Cycle subpages]**: If subpages are available, each is shown automatically.
 - **[Language]**: Switch to a different language group to correctly display different character sets.

- **[Text 2.5]**: View text with more colours and better graphics than normal text. If Text 2.5 is broadcast by a channel, it is switched on by default.

Text language

For digital TV channels where the broadcasters provide different text languages, you can select your preferred primary and secondary languages.

1. Press **▲**.
2. Select **[Setup] > [Channel settings]**.
3. Select **[Languages] > [Primary Text] or [Secondary Text]**.
4. Select a language, then press **OK**.

Subpages

If the text page contains several subpages, you can view each subpage in succession. These subpages are shown on a bar next to the main page number.

Press **◀** or **▶** to select them.

Set locks and timers

Clock

You can display a clock on the TV. The clock displays the time that is broadcast by your TV service operator.

Display the TV clock

1. While you watch TV, press **OPTIONS**.
 2. Select **[Clock]**, then press **OK**.
- The clock is displayed on the top right-hand corner of the TV screen.

Change the clock mode

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

1. While you watch TV, press **⏏**.
2. Select **[Setup] > [TV settings] > [General settings]**.
3. Select **[Clock] > [Auto clock mode]**.
4. Select **[Automatic]**, **[Manual]** or **[Country dependent]**, then press **OK**.

Change the time zone*

In countries with clock transmission data, you can change the time zone if **[Auto clock mode] > [Automatic]** or **[Country dependent]** is selected.

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

Set daylight saving time*

In countries with clock transmission data, you can enable or disable daylight saving time if **[Auto clock mode] > [Automatic]** or **[Country dependent]** is selected.

1. In the **[Clock]** menu, select **[Daylight saving]**.
2. Select **[Standard time]** or **[Daylight saving time]**, then press **OK**.

Set the clock manually

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

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

*Only available in certain countries.

Sleep timer

You can switch the TV to standby after a specified time. During the countdown to the specified time, you can switch off your TV earlier or reset the sleep timer.

1. Press **⏏**.
2. Select **[Setup] > [TV settings] > [General settings] > [Sleep timer]**.

3. Select the sleep timer duration.

The sleep timer can be set up for to 180 minutes. To switch off the sleep timer, set it to zero minutes.

4. Press **OK** to activate the sleeptimer. After the specified time, the TV switches to standby.

Child lock

To protect children from unsuitable TV programmes, you can lock the TV or block age rated programmes.

Set or change the child lock code

1. Press **⏏**.
2. Select **[Setup] > [Channel settings] > [Child lock]**.
3. Select **[Set code]** or **[Change code]**.
4. Enter the code with the **Numeric buttons**.

Tip: If you access the channels from the channel list, you are prompted to enter your lock code. If you forget your code, enter '8888' to override any existing codes.

Lock or unlock channels

1. In the child lock menu, select **[Channel lock]**.
2. Enter the child lock code with the **Numeric buttons**.
3. Select the channels to lock or unlock. Restart the TV to activate the lock.

Note:

If you access the channels from the channel list, you are prompted to enter your lock code.

Parental rating

You can set your TV to display only programmes with age ratings lower than your child's age. This restriction only applies to digital channels from broadcasters that rate their programmes according to age.

1. Press **⏏**.
2. Select **[Setup] > [Channel settings]**.
3. Select **[Child lock] > [Parental rating]**. You are prompted to enter the child lock code.

4. Enter the child lock code with the **Numeric buttons**.

5. Select an age rating, then press **OK**.

All programmes above the selected age rating are blocked.

For information on child lock codes, see **Use more of your TV > Set locks and timers > Child lock** (Page 17).

4 Change your TV settings

Picture and sound

Picture settings

You can change the settings in the Picture menu.

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Picture]**, then press **OK**.
3. Select a setting to change, then press **OK**.

- **[Picture style]**: Select a predefined picture setting.
- **[Restore style]**: Restore the last-selected predefined picture setting.
- **[Backlight contrast]**: Adjust the brightness of the display backlight.
- **[Colour]**: Adjust the colour saturation of the picture.
- **[Sharpness]**: Adjust the sharpness of the picture.
- **[Noise reduction]**: Select the amount of noise reduction for the picture.
- **[MPEG artifact reduction]**: Smoothen transitions and haziness in the digital picture.
- **[Digital Crystal Clear]**: Fine-tune each pixel to match the surrounding pixels and produce a brilliant, high-definition image.
 - **[Advanced sharpness]**: Enable superior sharpness, especially on lines and contours in the picture
 - **[Dynamic contrast]**: Dynamically enhance the details in the dark, medium and light areas of the picture.
 - **[Dynamic backlight]**: Select a backlight level to optimise dynamic power consumption and picture contrast.
 - **[Colour enhancement]**: Dynamically enhance the vividness and details of colours.

- **[Advanced]**: Access advanced settings such as gamma, tint settings and video contrast settings.
 - **[Gamma]**: Adjust the non-linear setting for picture luminance and contrast.
 - **[Tint]**: Change the colour balance.
 - **[Custom tint]**: Customise colour balance setting. Only available if **[Tint]** > **[Custom]** is selected.
 - **[Video contrast]**: Adjust video contrast.
 - **[Brightness]**: Adjust screen brightness.
- **[Game or computer]**: When viewing content from a connected game console, select **[Game]** to apply game settings. When a computer is connected through HDMI, select **[Computer]**.
- **[Format and edges]**: Access advanced settings to control the display format of the picture.
 - **[Picture format]**: Change the picture format.
 - **[Screen edges]**: Change the picture size.
 - **[Picture shift]**: If available, move the position of the picture.

Sound settings

You can change the settings in the Sound menu.

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Sound]**, then press **OK**.
3. Select a setting to change, then press **OK**.

- **[Sound style]**: Access predefined sound settings.
- **[Restore style]**: Restore the last selected predefined sound setting.
- **[Bass]**: Adjust the bass level of the speaker and headphones.
- **[Treble]**: Adjust the treble level of the speaker and headphones.
- **[Surround mode]**: Select a surround sound mode to enhance your audio experience.
- **[Headphone volume]**: Adjust headphone volume.

- **[Advanced]:** Access advanced settings to enhance your audio experience.
 - **[Auto volume levelling]:** Enable the reduction of sudden volume changes, for example, when switching channels.
 - **[TV speakers]:** Select the preferred speakers to stream audio from the TV. See **Connect your TV > Set up EasyLink devices > Select speaker output** (Page 35).
 - **[Clear Sound]:** Enhance sound quality.
 - **[Audio Out format]:** Select the type of audio output through the digital audio output connector. Choose between **[Multichannel]** and **[Stereo]**.
 - **[HDMI 1 - ARC]:** Enable audio output from the ARC-compliant device connected to the HDMI 1 connector.
 - **[Audio out delay]:** Automatically sync the image on the TV to the audio from a connected home theatre. You do not need to use this setting when connecting the TV to a Philips home theatre.
 - **[Audio out offset]:** Adjust the setting for audio output delay. Available if **[Audio out delay]** is switched on.

Audio format

If an analogue TV channel broadcaster streams stereo audio in multiple formats, you can select an audio format.

1. Press **⏏**.
2. Select **[Setup] > [Channel settings] > [Mono/Stereo]**.
3. Select a setting, then press **OK**.

Reset picture and sound

You can restore the default picture and sound settings, while the channel installation settings remain the same.

1. While you watch TV, press **⏏**.
2. Select **[Setup] > [TV settings] > [General settings] > [Factory settings]**, then press **OK**.
3. Select **[Reset]**, then press **OK**.

All TV settings (except for channel settings) are reset to the default factory settings.

Channels

Automatic installation

When the TV was switched on for the first time, a full installation of channels was performed.

To change your language, country and reinstall all available TV channels, you can run this full installation again.

Start installation

Note: If you are prompted to enter a code, enter '8888'.

1. Press **⏏**.
2. Select **[Setup] > [Search for channels] > [Reinstall channels]**, then press **OK**.
3. Select your country, then press **OK**.
4. Select your network, then press **OK**:

- **[Antenna (DVB-T)]:** Access free-to-air antenna transmissions.
- **[Cable (DVB-C)]:** Access cable transmissions.

5. Follow the onscreen instructions to select other options, if any.

The start menu for channel search is displayed.

6. Select **[Start]**, then press **OK**.

7. Once the channel search is complete, select **[Finish]**, then press **OK**.

Tip: Press **≡ LIST** to see the channel list.

Note: When digital TV channels are found, the list of installed channels may display empty channel numbers. You can rename these channels.

Install analogue channels

You can search and store analogue TV channels one by one.

Step 1: Select your system

Note: Skip this step if your system settings are correct.

1. While you watch TV, press .
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Analogue: Manual installation]** > **[System]**, then press **OK**.
4. Select the system for your country or region, then press **OK**.

Step 2: Search and store new TV channels

1. While you watch TV, press .
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Analogue: Manual installation]** > **[Search channel]**, then press **OK**.
4. Find the channel:
 - If you know the channel frequency, enter it with the **Navigation buttons** or **Numeric buttons**.
 - If you do not know the channel frequency, search for the next frequency that has a strong signal. Select **[Search]**, then press **OK**.
5. After you have found the correct channel, select **[Done]**, then press **OK**.
6. Select **[Store as new channel]**, then press **OK** to store the new TV channel.

Note: If the reception is poor, reposition your antenna and repeat the procedure.

Install digital channels

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

1. Press .
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Digital: Reception test]** > **[Search channel]**, then press **OK**.
4. Press the **Numeric buttons** to enter the channel frequency.
5. Select **[Search]**, then press **OK**.
6. When the channel is found, select **[Store]**, then press **OK**.

Fine-tune analogue channels

If the reception of an analogue TV channel is poor, you can fine-tune the TV channel.

1. Press .
2. Select **[Setup]** > **[Channel settings]** > **[Channel installation]**.
3. Select **[Analogue: Manual installation]** > **[Fine tune]**, then press **OK**.
4. Press  or  to fine-tune the channel.
5. When you have selected the correct channel frequency, select **[Done]**, then press **OK**.
6. Select an option, then press **OK**.
 - **[Store current channel]**: Store the channel under the current channel number.
 - **[Store as new channel]**: Store the channel under a new channel number.

Update channel list

When the TV was switched on for the first time, a full installation of channels was performed. By default, when there are changes to these channel lists, the TV updates them automatically. You can also switch off the automatic update or manually update the channels.

Note: If you are prompted to enter a code, enter '8888'.

Automatic update

To add or remove digital channels automatically, leave the TV in standby mode. The TV updates channels and stores new channels everyday. Empty channels are removed from the channel list.

Switch off the channel update message

If a channel update is performed, a message is displayed at startup. You can switch off this message.

1. Press .
2. Select **[Setup]** > **[Channel settings]**.
3. Select **[Channel installation]** > **[Channel update message]**.
4. Select **[Off]**, then press **OK**.

Switch off automatic updates

In the **[Channel installation]** menu, select **[Automatic channel update]** > **[Off]**.

Update channels manually

1. Press .
2. Select **[Setup]** > **[Search for channels]** > **[Update channels]**, then press **OK**.
3. Follow the onscreen instructions to update the channels.

Copy channels

ATTENTION: This feature is intended for dealers and service personnel.

You can copy channel lists from one Philips TV to another through a USB storage device. You do not need to search for channels or install them again on the second TV. The channel list file is small enough to fit on any USB storage device.

What you need

Two Philips TVs that have these properties:

- The same country setting
- The same year range
- The same DVB type, as indicated by the suffix (H, K, T, D/00) in the model name
- The same hardware type, as indicated by the sticker on the back of the TV. For example: TPM10.1E LA.
- Compatible software versions

Note: If you are prompted to enter a code, enter '8888'.

Step 1: Check the country setting

1. Switch on the first TV (with the channels that you want to copy to the second TV).
2. Press .
3. Select **[Setup]** > **[Search for channels]** > **[Reinstall channels]**, then press **OK**.
The country menu is displayed.
4. Make a note of the current setting.
5. Press .
6. Press **[Cancel]** to exit.

Step 2: Copy channel list to USB

1. Connect a USB storage device to the first TV (with the channels installed on it).
2. Press .
3. Select **[Setup]** > **[Channel settings]**.
4. Select **[Channel installation]** > **[Copy channel list]** > **[Copy to USB]**, then press **OK**.

The channel list is copied to the USB storage device.

5. Disconnect the USB storage device.

Step 3: Copy channels to a TV with no channels installed

1. Switch on the second TV, on which you want to copy the channel list.
Initial installation starts.
2. Follow the onscreen instructions and select the same country as the TV whose channel list you want to copy.
3. Skip the search for channels.
4. Connect the USB storage device.
5. Press .
6. Select **[Setup]** > **[Channel settings]**.
7. Select **[Channel installation]** > **[Copy channel list]** > **[Copy to TV]**, then press **OK**.

The channel list is copied to the TV storage device.

8. Disconnect the USB storage device.

Step 3: Copy channels to a TV with pre-installed channels

1. Switch on the second TV, on which you want to copy the channel list.
2. Press **⬆**.
3. Select **[Setup] > [Search for channels] > [Reinstall channels]**, then press **OK**.
The country menu is displayed.
4. Make sure that the country setting is the same as for the first TV.
5. Press **⬆**.
6. Press **[Cancel]** to exit.
7. If the country setting is different, reinstall the second TV to match the country setting of the first TV. See **Change your TV settings > Reset all** (Page 25).
8. Connect the USB storage device to the second TV.
9. Press **⬆**.
10. Select **[Setup] > [Channel settings]**.
11. Select **[Channel installation] > [Copy channel list] > [Copy to TV]**, then press **OK**.
The channel list is copied to the second TV.
12. Disconnect the USB storage device.

Language settings

Menu language

1. While you watch TV, press **⬆**.
2. Select **[Setup] > [TV settings] > [General settings] > [Menu language]**.
3. Select a menu language from the list, then press **OK**.

Audio language

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

1. While you watch TV, press **OPTIONS**.
2. For digital channels, select **[Audio language]**. For analogue channels, select **[Dual I-II]**. Press **OK** to confirm your selection.
3. Select from the available languages, then press **OK**.

You can set your preferred primary and secondary audio languages to hear when available.

1. While you watch TV, press **⬆**.
2. Select **[Setup] > [Channel settings] > [Languages]**.
3. Select **[Primary audio language]** or **[Secondary audio language]** and select from the available languages.
4. Press **OK** to confirm.

Subtitles on analogue channels

1. While you watch an analogue TV channel, press **TEXT**.
2. Enter the three-digit page number of the subtitles page, which is usually '888'.
If available, subtitles are switched on.

Subtitles on digital channels

1. While you watch a digital TV channel, press **OPTIONS**.
2. Select **[Subtitles]**, then press **OK**.
3. Select **[Subtitles off]**, **[Subtitles on]** or **[Automatic]**, then press **OK**.

Subtitle language

When available, you can change the subtitle language for digital channels.

1. While you watch TV, press **OPTIONS**.
2. Select **[Subtitle language]**, then select from the available languages and press **OK**.
The subtitle language is changed for the specific channel.

You can set your preferred primary and secondary subtitle languages to display when available.

1. While you watch TV, press **⬆**.
2. Select **[Setup] > [Channel settings] > [Languages]**.
3. Select **[Primary subtitle language]** or **[Secondary subtitle language]** and select from the available languages.
4. Press **OK** to confirm.

Other settings

TV demo

You can watch a demo to find out more about the features on this TV.

1. While you watch TV, press .
2. Select **[Setup]** > **[Watch demo]**, then press **OK**.
3. Select a demo, then press **OK**.

Home mode

Some TV settings may not be available in **Shop** mode. To make sure that the correct TV settings are applied, set the TV to **Home** mode.

1. While you watch TV, press .
2. Select **[Setup]**, then press **OK**.
3. Select **[TV settings]** > **[General settings]** > **[Location]**.
4. Select **[Home]** or **[Shop]**, then press **OK**.
5. Restart the TV.

Update software

Check version

1. Press .
2. Select **[Setup]** > **[Software settings]** > **[Current software inf]**, then press **OK**.

The current software version is displayed.

Caution: Do not install a lower version of software than the current version installed on your product. TP Vision cannot be held liable or be made responsible for problems caused by a software downgrade.

Update the software through one of these methods:

- update with USB storage device
- update from digital broadcast

Update with USB

What you need

- A USB storage device that has at least 256 megabytes of storage space, is FAT or DOS formatted and has its write protection disabled.
- Access to a computer with a USB connector and Internet access.
- A file archiver program that supports the ZIP file format: for example, WinZip® for Microsoft® Windows® or Stuffit® for Macintosh®.

Note: Do not use a USB hard drive.

Download the latest software

1. Connect the USB flash drive to your computer.
2. On your computer, launch a browser such as Internet Explorer® or Safari®, and see www.philips.com/support.
3. Find your TV and locate the software and drivers available for your TV set. The software upgrade is available as a compressed file (*.zip).
4. If the software version is higher than the version on your TV, click the software upgrade link.

5. Accept the licence agreement and download the ZIP file to the USB flash drive.

Note: Some Internet browsers, such as Mozilla® Firefox® or Google® Chrome®, may download the ZIP file directly to your computer. If this happens, copy the file to your USB flash drive.

6. **For Internet Explorer:** Using a file archiver, extract autorun.upg from the downloaded ZIP file. Do not copy or place the extracted file into a folder.
6. **For Safari:** When the download is complete, autorun.upg is automatically extracted from the ZIP file to your computer. Copy the file to the USB flash drive. Do not copy or place the file into a folder.
7. Eject and disconnect the USB flash drive from the computer.

Upgrade the TV software

Caution:

- Do not switch off the TV or remove the USB flash drive during the software upgrade.
- If a power failure occurs during the upgrade, do not remove the USB flash drive from the TV. The TV continues the upgrade as soon as power is restored.
- If an error occurs during the upgrade, retry the upgrade from the beginning. If the error reoccurs, contact Philips TV Consumer Care.

1. Remove all USB devices such as a Wi-Fi adapter from the TV, then switch on the TV.
2. Connect the USB flash drive to the TV. The software upgrade starts automatically. The upgrade is complete when a notification message appears on screen.
3. Before you restart the TV, disconnect the USB flash drive from the TV.
4. Press  on the remote control – do not press  more than once. The TV switches off, then back on again. The upgrade is complete.
5. To prevent accidental updates to the TV software, reconnect the USB flash drive to your computer and delete autorun.upg.

Update from digital broadcast

When available, the TV can receive software updates through digital broadcasts. When a software update is received, you are prompted to update the software. We strongly recommend that you update the software when prompted.

Follow the onscreen instructions.

If you do not update the TV software when the update is received, you are prompted to save the update file. To update the software later:

1. Press .
2. Select **[Setup] > [Software settings] > [Local updates]**.
3. Select the file that you downloaded and follow the onscreen instructions to complete the update.

Reset all

You can reset all picture and sound settings and reinstall all TV channels on your TV.

1. Press .
2. Select **[Setup] > [TV settings] > [General settings] > [Reinstall TV]**, then press **OK**.
3. Follow the onscreen instructions.

5 Connect your TV

About cables

Cable quality

Before you connect devices to the TV, check the available connectors on the device. Connect the device to the TV with the highest quality connection available. Good quality connectors transfer picture and sound better.

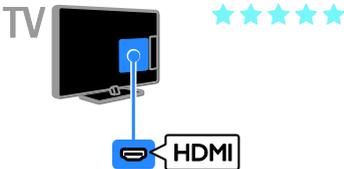
The connections shown in this user manual are recommendations only. Other solutions are possible. For more examples, visit <http://www.connectivityguide.philips.com>.

Tip: If your device has only composite or RCA connectors, use a composite (CVBS) cable to connect the device to the CVBS/Y connector on the TV.

HDMI

An HDMI connection has the best picture and sound quality.

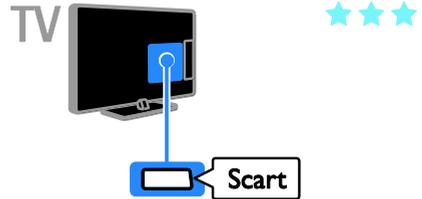
- An HDMI cable combines video and audio signals. Connect HDMI for high-definition (HD) TV signals and to switch on EasyLink.
- An HDMI Audio Return Channel (ARC) connector allows output of TV audio to an HDMI ARC compliant device.
- Connect HDMI cables shorter than 5 meters/16.4 feet.



SCART

A SCART connection combines video and audio signals.

SCART connectors can handle RGB video signals but cannot handle high-definition (HD) TV signals.

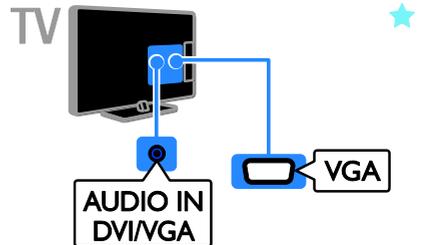


VGA

For certain sets only.

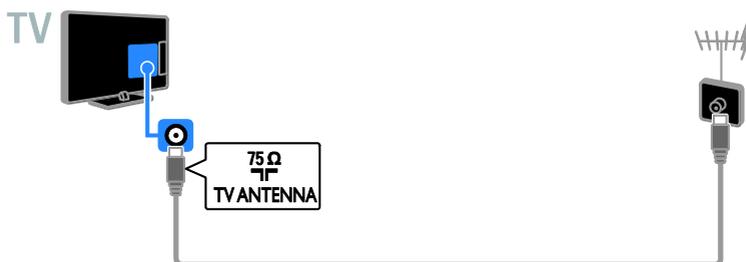
You can connect VGA to display PC content on the TV.

VGA only transmits video. For sound, also connect to AUDIO IN.



Connect antenna

Connect the antenna to the TV.



Connect devices

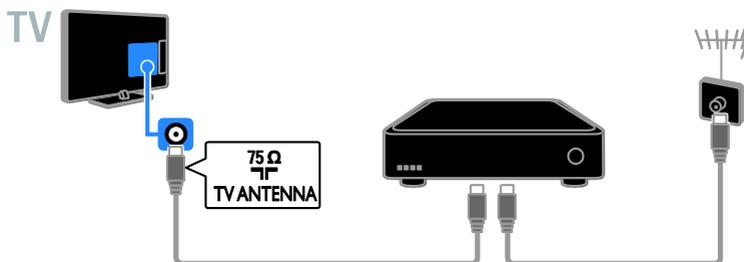
Blu-ray or DVD disc player

Connect the disc player to the TV with an HDMI cable.



TV receiver

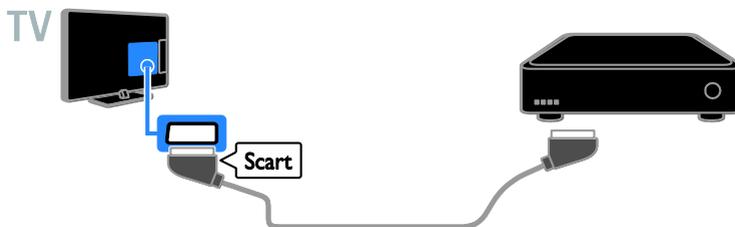
Connect the digital TV receiver with an antenna cable to the TV.



Connect the digital TV receiver to the TV with an HDMI cable.

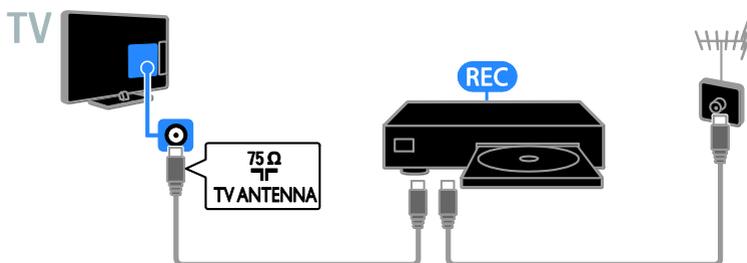


Connect the digital TV receiver to the TV with a SCART cable.



Video recorder

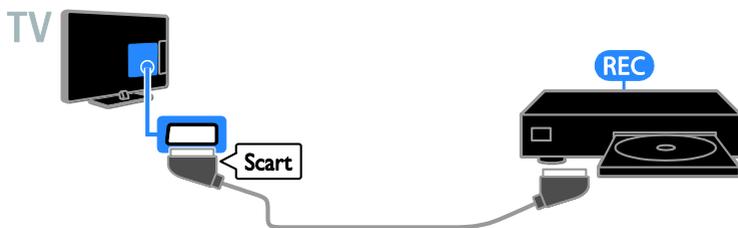
Connect the recorder to the TV with an antenna cable.



Connect the recorder to the TV with an HDMI cable.



Connect the recorder to the TV with a SCART cable.



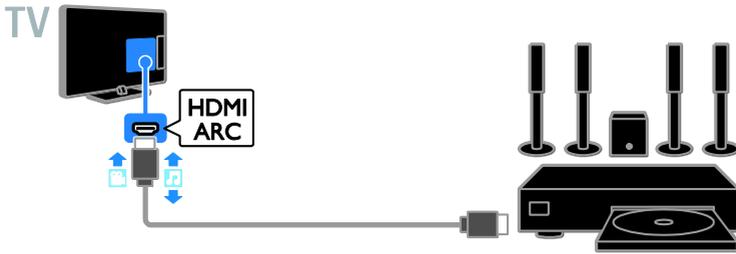
Game console

Connect the game console to the TV with an HDMI cable.

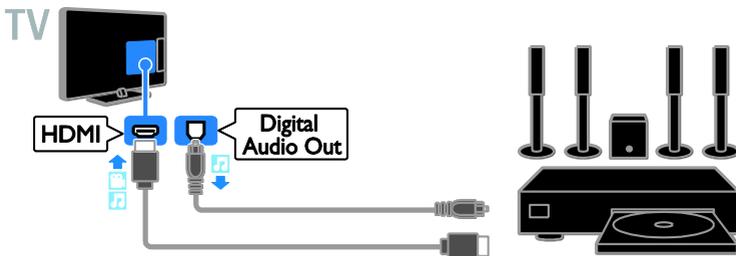


Home theatre

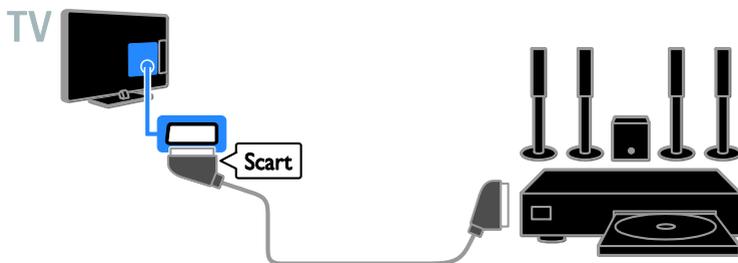
Connect an HDMI-ARC compliant home theatre to the TV with an HDMI cable.



Connect the home theatre with an HDMI cable and an optical audio cable to the TV.



Connect the home theatre to the TV with a SCART cable.



Digital camera

Connect the digital camera to the TV with a USB cable.



Digital camcorder

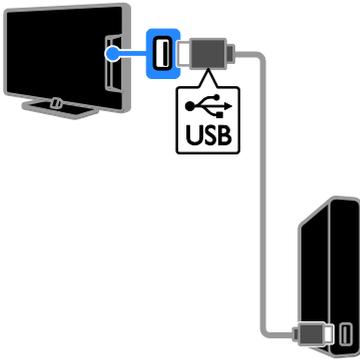
Connect the digital camcorder to the TV with an HDMI cable.



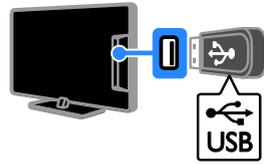
Connect more devices

USB storage device

TV



TV



Connect the USB flash drive with a USB cable to the TV.

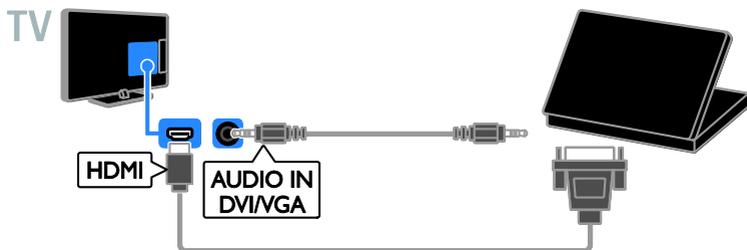
Connect the USB hard drive to the TV with a USB cable.

Computer

Connect the computer to the TV with an HDMI cable.



(For certain sets only.) Connect the computer with a DVI-HDMI cable and an audio cable to the TV.



Watch connected devices

Select a device

Before you can watch a device, connect the device to the TV. See **Connect your TV > Connect devices** (Page 27).

Select a device with SOURCE

1. Press  **SOURCE**.
2. Select a device, then press **OK**.

Select a device from Home menu

1. Press .
2. Select [**Source**], then press **OK**.
3. Select a device, then press **OK**.

Set up EasyLink devices

What you can do

You can get the most out of your HDMI-CEC-compliant devices with Philips EasyLink enhanced control features. Connect your HDMI-CEC compliant devices through HDMI to your TV and control them at the same time with your TV remote control.

Note: Other brands describe HDMI-CEC functionality differently. Some examples are AnyNet (Samsung), Aquos Link (Sharp) or BRAVIA Sync (Sony). Not all brands are fully compatible with Philips EasyLink.

After you have switched on Philips EasyLink, the following features are available:

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

EasyLink remote control

You can control multiple HDMI-CEC compliant devices with your TV remote control.

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.

What you need

- Connect an HDMI-CEC compliant device to the TV. You can connect more than one HDMI-CEC device. See **Connect your TV > Connect devices** (Page 27).
- Configure each HDMI-CEC compliant device properly.
- Switch on EasyLink.

Switch on EasyLink

1. Press .
2. Select [**Setup**] > [**TV settings**] > [**General settings**] > [**EasyLink**].
3. Select [**EasyLink**] > [**On**], then press **OK**.

Control devices

If you connect multiple HDMI-CEC devices that support this setting, you can control all such devices through the TV remote control.

Note: This is an advanced setting. Devices that do not support this setting cannot respond to the TV remote control.

1. Press .
2. Select [**Setup**] > [**TV settings**] > [**General settings**] > [**EasyLink**] > [**EasyLink remote control**].
3. Select [**On**] or [**Off**], then press **OK**.

Tips:

- To switch back to TV control, press , then select [**TV**].
- To control another device, press , then select the device from the Home menu.

EasyLink buttons

You can control HDMI-CEC compliant devices with the following buttons on the TV remote control:

-  Switch the TV and the connected device on or to standby.
- **Play buttons:** Control video or music play.
- **Numeric buttons:** Select a title, chapter or track.
- **OK:** Start, pause or resume play on the connected device, activate a selection, or access the device menu.
-  Display the TV Home menu.

Select speaker output

If a connected device is HDMI Audio Return Channel (HDMI ARC) compliant, you can output TV audio through an HDMI cable. Additional audio cables are not required. Make sure you connect the device to the HDMI ARC connector on the TV. See **Connect your TV > About cables > HDMI** (Page 26).

Switch on HDMI ARC

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Sound]** > **[Advanced]** > **[HDMI 1 - ARC]**.
3. Select one of the following, then press **OK**.
 - **[On]:** Hear the TV audio through the connected HDMI-ARC compliant device.
 - **[Off]:** Hear the TV audio through the TV speakers, or through a device connected through the digital audio out connector.

Note: Make sure that all HDMI-CEC settings are properly set up on the connected device.

Set up TV speakers

1. Press .
2. Select **[Setup]** > **[TV settings]** > **[Sound]** > **[Advanced]** > **[TV speakers]**.
3. Select an option, then press **OK**:
 - **[Off]:** Switch off TV speakers.
 - **[On]:** Switch on TV speakers.

- **[EasyLink]:** Switch off TV speakers and stream TV audio to a connected HDMI-CEC audio device.
- **[EasyLink autostart]:** When a HDMI-CEC audio device is connected, automatically switch off TV speakers and stream TV audio to the device.

Change TV audio streaming

You can switch audio between TV speakers and a connected amplifier at any time.

1. Press **OPTIONS**.
2. Select **[Picture and sound]** > **[Speakers]**.
3. Select one of the following, then press **OK**.
 - **[TV]:** On by default. Stream TV audio through TV and the connected HDMI-CEC audio device until the connected device switches to system audio control. TV audio is then streamed through the connected device.
 - **[Amplifier]:** Stream audio through the connected HDMI-CEC device. If system audio mode is not enabled on the device, audio continues to stream from the TV speakers. If **[EasyLink autostart]** was selected, the TV prompts the connected device to switch to system audio mode.

Connect a CAM (Conditional Access Module)

What you can do

You can watch scrambled digital TV channels with a Conditional Access Module (CAM). Once you have inserted the CAM and paid the subscription fees, you can watch the programmes.

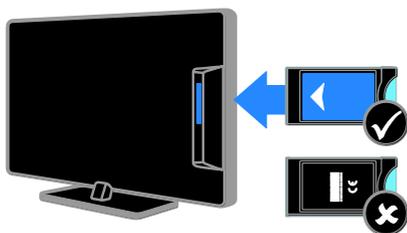
This TV supports CI (Common Interface) as well as CI+. CI+ supports premium HD digital programmes with a high level of copy protection.

Note: The applications, functions, content and onscreen messages depend on the CAM service provider.

What you need

Caution: To protect the CAM from damage, insert the CAM as instructed.

Note: Refer to the documentation from your service operator on how to insert a smart card into the Conditional Access Module.



1. Switch off the TV.
2. Follow the directions printed on the CAM to insert the CAM into the Common Interface slot at the side of the TV. Push the CAM in as far as it will go.
3. Switch on the TV, then wait for the CAM to be activated. This takes a few minutes. To maintain access to encrypted digital TV channels, leave the CAM in the slot.

Access CAM services

1. After you insert and activate the CAM, press **OPTIONS**.
2. Select [**Common interface**], then press **OK**.
3. Select the CAM provider, then press **OK**.

6 Troubleshooting

General issues

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.

When you are turning the TV on, off or to standby, you hear a creaking sound from the TV chassis:

No action is required. 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.

The TV does not respond to remote control or TV controls when switched on:

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, view the remote control sensor through a digital camera – if you press any button on the remote control and notice red flickering at the sensor, the remote control is working but the TV may need to be checked by Philips TV Consumer Care. This troubleshooting procedure is not applicable to remote controls that are paired wirelessly with the TV.

When the TV is in standby, a start-up splash 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 on the TV blinks red:

Disconnect the power cable from the power outlet. Wait until the TV cools down before you reconnect the power cable. If the blinking reoccurs, contact Philips Tv Consumer Care.

The TV audio is in the wrong language:

If you select audio language via **OPTIONS**, the TV resets to the default language when you change channels or switch off the TV. To retain the selected language, change your audio language by pressing , then selecting **[Setup] > [Channel settings] > [Languages] > [Primary audio language]** or **[Secondary audio language]**.

The TV or Smart TV menu is in the wrong language:

Change the menu to your preferred language.

For more information, see **Change your TV settings > Language settings > Menu language** (Page 23).

You forgot the 4-digit code to unlock the channel blocking feature (child lock):

Enter '8888'.

You want to upgrade your TV software:

Visit www.philips.com/support and download the latest software package for your TV. Software installation instructions and release notes indicating what's been updated are also available at the site. Full instructions on how to upgrade your TV software are also available at **Change your TV settings > Update software** (Page 24).

Channel issues

You want to install TV channels:

See **Change your TV settings > Automatic installation** (Page 20) for instructions on installing analogue or digital channels.

No digital channels were 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 do not appear in the channel list:

Make sure that the correct channel list is selected.

You want to rearrange or reorder the channel list:

After channels have been installed, they appear in the channel list. For information about managing channel lists, including rearranging channels, see **Watch TV > Manage channel lists** (Page 11).

Picture issues

The TV is on, but there is no picture or the picture is distorted:

- 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.

There is sound but no picture:

Make sure that the picture settings are set correctly.

There is poor TV reception from an antenna connection:

- 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.

There is poor picture quality from connected devices:

- Make sure that the devices are connected properly.
- Make sure that the picture settings are set correctly.

The TV did not save your picture settings:

Make sure that the TV location is set to **Home**. You can change and save settings in this mode.

The picture does not fit the screen; it is too big or too small:

Change to a different picture format.

The picture format keeps changing with different channels:

Instead of the picture format **[Auto]**, select a different picture format.

The picture position is incorrect:

Picture signals from some devices may not fit the screen correctly. Check the signal output of the device.

The picture from broadcasts is scrambled:

You may need a Conditional Access Module to access content. Check with your service operator.

An "e-sticker" banner displaying information appears on the TV display:

The TV is in **[Shop]** mode. To remove the e-sticker, set the TV to **[Home]** mode, then restart the TV. See **Change your TV settings > Other settings > Home mode** (Page 24).

The computer display on the TV is not stable:

- Make sure that your PC uses the supported resolution and refresh rate. See **Specifications > Display resolutions** (Page 41).
- Change the TV picture format to **[Unscaled]**.

Sound issues

There is a picture but sound quality is poor:

If no audio signal is detected, the TV automatically switches the audio output off — this does not indicate malfunction.

- 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 speaker setting is selected. Press **OPTIONS**, select **[Picture and sound] > [Speakers]**, then select **[TV]**.
- Make sure that the TV audio output is connected to the audio input on the HDMI-CEC enabled or EasyLink compliant home theatre device. Sound should be heard from the home theatre 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.

There is a picture but the sound quality is poor:

Make sure that the sound settings are correctly set.

Connection issues

There are problems with HDMI devices:

- 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.

You cannot use EasyLink features:

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

If an HDMI-CEC compliant audio device is connected to the TV and the TV does not display any mute or volume icon when the volume is muted, increased or decreased:

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

USB device content is not displayed:

- 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.

Audio and picture files on your USB storage device do not play or display smoothly:

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

Contact Philips

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

If you are not able to resolve your problem, refer to the frequently asked questions (FAQs) for this TV at www.philips.com/support. You can also consult and contribute to the Philips TV community at www.supportforum.philips.com.

If you wish to speak to or email a Philips representative, contact the Philips Consumer Care in your country. You can find the contact details in the leaflet accompanying this TV or at www.philips.com/support.

Note your TV model and serial number before you contact Philips. These numbers are printed on the back of the TV and on the packaging.

7 Specifications

Power and reception

Product specifications are subject to change without notice.

Power

- Mains power: AC 220-240 V (50-60 Hz)
- Standby power consumption: < 0.3 W
- Ambient temperature: 5 to 40 degree Celsius
- For power consumption, see the product specifications at www.philips.com/support.

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).

Reception

- Antenna input: 75 ohm coaxial (IEC75)
- TV system: DVB COFDM 2K/8 K
- Video playback: NTSC, PAL, SECAM
- Digital TV: MPEG-4, DVB-T (Terrestrial), DVB-C (Cable)
- Tuner bands: VHF, UHF, S-Channel, Hyperband

Display and sound

Picture / Display

- Display type: LED backlight HD/Full HD
- Diagonal size:
 - 51 cm / 20 inches
 - 56 cm / 22 inches
 - 61 cm / 24 inches
- Aspect ratio: 4:3 / 16:9 (widescreen)
- Panel resolution:
 - 20 inches: 1600x900
 - 22 inches: 1920x1080
 - 24 inches: 1366x768
- Picture enhancement: Digital Crystal Clear

Sound

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

Display resolutions

Computer formats - HDMI (Resolution - refresh rate)

640 × 480 - 60 Hz
 800 × 600 - 60 Hz
 1024 × 768 - 60 Hz
 1280 × 720 - 60 Hz
 1280 × 768 - 60 Hz
 1280 × 1024 - 60 Hz
 1360 × 768 - 60 Hz
 1600 × 900 - 60 Hz*
 1680 × 1050 - 60 Hz*
 1920 × 1080 - 60 Hz*

Computer formats - VGA (Resolution - refresh rate)

640 × 480 - 60 Hz
 800 × 600 - 60 Hz
 1024 × 768 - 60 Hz
 1280 × 1024 - 60 Hz
 1360 × 768 - 60 Hz
 1600 × 900 - 60 Hz*
 1600 × 1200 - 60 Hz*
 1920 × 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.

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

Supported audio files

- MPEG1: *.mp3
- Bit rate: 32 kbps, 64 kbps, 96 kbps, 128 kbps, 196 kbps, 256 kbps, 320 kbps
- Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz

Supported video files

- MPEG1/2: *.avi, *.mpg, *.mpeg, *.ts
- MPEG4: *.avi, *.mp4, *.mov, *.mkv
- H.264: *.avi, *.mp4, *.mov, *.mkv, *.ts

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 (H264), 1920x1080, 30 fps MPEG Layer-3, 192 kbps, 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 *.mpag	PS (Program Stream)	MPEG1	768 x 576	MP2, AC3
		MPEG2	1920 x 1080	MP2, AC3

Supported audio/video formats

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

Connectivity

Rear connectors

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: 3.5 mm mini jack

VGA: PC input

Side connectors

CI: Common Interface

USB

Help version

UMv X41G22MV81304_05_20130923

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