

EN User manual



2010 © Koninklijke Philips Electronics N.V. All rights reserved. Specifications are subject to change without notice.Trademarks are the property of Koninklijke Philips Electronics N.V. or their respective owners.

Philips reserves the right to change products at any time without being obliged to adjust earlier supplies accordingly. The material in the user manual is believed adequate for the intended use of the system. If the product, or its individual modules or procedures, are used for purposes other than those specified herein, confirmation of their validity and suitability must be obtained. Philips warrants that the material itself does not infringe any United States patents. No further warranty is expressed or implied.

#### Warranty

No components are user-serviceable. Never open or remove covers and never insert objects in the ventilation slots or insert objects not suitable for the specific connectors. Repairs may only be done by Philips Service Centres and official repairshops. Failure to do so shall void any warranty, stated or implied. Any operation expressly prohibited in this manual, any adjustments, or assembly procedures not recommended or authorised in this manual shall void the warranty.

#### **Pixel** characteristics

This LCD 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.

#### Open source software

This television contains open source software. Philips hereby offers to deliver or make available, upon request, for a charge no more than the cost of physically performing source distribution, a complete machinereadable copy of the corresponding source code on a medium customarily used for software interchange. This offer is valid for a period of 3 years after the date of purchase of this product. To obtain the source code, write to Open Source Team, Philips Electronics High Tech Campus Bld HTC-44 5600 AE Eindhoven The Netherlands E-mail: open.source@philips.com

#### Compliance with EMF

Koninklijke Philips Electronics N.V. manufactures and sells many products targeted at consumers, which, like any electronic apparatus, in general have the ability to emit and receive electromagnetic signals. One of Philips' leading Business Principles is to take all necessary health and safety measures for our products, to comply with all applicable legal requirements and to stay well within the EMF standards applicable at the time of producing the products. Philips is committed to develop, produce and market products that cause no adverse health effects. Philips confirms that if its products are handled properly for their intended use, they are safe to use according to scientific evidence available today. Philips plays an active role in the development of international EMF and safety standards, enabling Philips to anticipate further developments in standardisation for early integration in its products.

#### ESD regulation

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

#### Mains fuse (UK only)

This TV is fitted with an approved moulded plug. Should it become necessary to replace the mains fuse, this must be replaced with a fuse of the same value as indicated on the plug (example 10A). 1. Remove fuse cover and fuse.

2. The replacement fuse must comply with BS 1362 and have the ASTA approval mark. If the fuse is lost, contact your dealer in order to verify the correct type.

3. Refit the fuse cover.

In order to maintain conformity to the EMC directive, the mains plug on this product must not be detached from the mains cord.

#### Copyrights

VESA, FDMI and the VESA Mounting Compliant logo are trademarks of the Video Electronics Standards Association. Manufactured under license from Dolby Laboratories. 'Dolby', 'Pro Logic' and the double D symbol, are trademarks of Dolby

Laboratories. Windows Media is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. DLNA®, the DLNA logo and DNLA Certified™ are trademarks, service marks, or certification marks of the Digital Living Network Alliance.

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

## Europe EC Declaration of Conformity

#### English

Hereby, Philips Innovative Applications N.V. declares that this television is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

#### Deutsch

Hiermit erklärt Philips Innovative Applications N.V. dass sich das Fernsehgerät in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.

#### Français

Par la présente Philips Innovative Applications N.V. déclare que cet appareil de télévision est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.

#### Nederlands

Hierbij verklaart Philips Innovative Applications N.V. dat deze televisie in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.

#### Español

Por medio de la presente Philips Innovative Applications N.V. declara que el televisor cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.

#### Italiano

Con la presente Philips Innovative Applications N.V. dichiara che questo televisore è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.

#### Português

Philips Innovative Applications N.V. declara que este televisor está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.

#### Ελληνικά

ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ Η **Philips Innovative Applications N.V.** ΔΗΛΩΝΕΙ ΟΤΙ Η ΤΗΛΕΌΡΑΣΗ ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.

#### **S**venska

Härmed intygar Philips Innovative Applications N.V. att denna TV står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

#### Norsk

Philips Innovative Applications N.V. erklærer herved at utstyret TV er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.

#### Dansk

Undertegnede Philips Innovative Applications N.V. erklærer herved, at dette TV overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.

#### Suomi

Philips Innovative Applications N.V. vakuuttaa täten että tämaä televisio on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.

#### Polski

Firma Philips Innovative Applications N.V. niniejszym oświadcza, że 'Telewizor' jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.

#### Magyar

Alulírott, Philips Innovative Applications N.V. nyilatkozom, hogy a televízió megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.

#### Česky

Philips Innovative Applications N.V. tímto prohlašuje, že tento televizor je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.

#### Slovensky

Philips Innovative Applications N.V. týmto vyhlasuje, že tento televízor spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.

#### Slovensko

Philips Innovative Applications N.V. izjavlja, da je ta televizor v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.

#### Eesti

Käesolevaga kinnitab Philips Innovative Applications N.V. seadme Teler vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.

#### Latviski

Ar šo Philips Innovative Applications N.V. deklarē, ka 'Televizors' atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem noteikumiem.

#### Lietuvių

Šiuo Philips Innovative Applications N.V. deklaruoja, kad šis 'Televizorius' atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.

#### Malti

Hawnhekk, Philips Innovative Applications N.V., jiddikjara li dan 'Television' jikkonforma mal-ħtiģijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.

#### Íslenska

Hér með lýsir Philips Innovative Applications N.V. yfir því að 'Television' er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.

A copy of the Declaration of Conformity is available at : http://www.philips.com/support

# €

This equipment may be operated in the following European countries  $\ldots$ 

AT	BE	BG	СН	CY	CZ
DE	DK	EE	ES	FI	FR
GB	GR	ΗU	IE	IS	IT
LI	LT	LU	LV	MT	NL
NO	PL	РТ	RO	SE	SK
SL	TR				

This equipment can be operated in other non-European countries.

#### Italiano

Sistema TV wireless Informationi sulle normative applicabili

#### Per il mercato italiano

uso privato: Decreto legislativo . 259 1/8/2003 Codice delle comunicazione elettroniche. In particulare, l'articolo 104 specifica i casi in cui occorre richiedere un autorizzazione generale, mentre l'Art. 105 indica i casi in cui l'utilizzo è libero
regolamentazione della fornitura dell' accesso RLAN del pubblico alle reti e ai servizi pubblici di comunicazione elettronica (es. sistema TV wireless). Decreto ministeriale 28/5/2003 e relative modifiche, e Art. 25 (autorizzazione generale per reti e servizi di comunicazione elettronici) del Codice delle comunicazione elettroniche
uso privato: Decreto ministriale 12/7/2007

# Contents

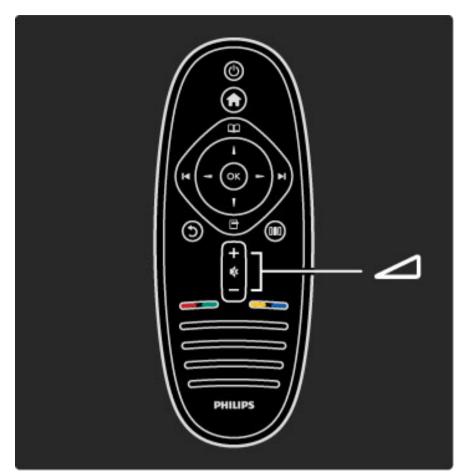
<b>1</b>	<b>To begin 5</b>
1.1	TV tour 5
1.2	Setting up 11
1.3	Keys on the TV 17
1.4	Register your TV 19
1.5	Help and support 20
<b>2</b>	Use your TV 21
2.1	Remote control 21
2.2	Menus 24
2.3	Watch TV 28
2.4	Watch a connected device 32
2.5	Ambilight 33
2.6	Net TV 35
<b>3</b>	More on 38
3.1	Text 38
3.2	Interactive TV 40
3.3	Multimedia 41
3.4	Locks and timers 43
3.5	Subtitles and languages 44
3.6	Universal access 45
<b>4</b>	<b>Setup 46</b>
4.1	Picture, Sound, Ambilight 46
4.2	Channels 48
4.3	Network 50
4.4	Devices 51
4.5	Software 53
<b>5</b>	Connections 54
5.1	First connections 54
5.2	About cables 55
5.3	Connect devices 57
5.4	Connect more devices 65
5.5	Network 69
5.6	SD card 70
5.7	Common Interface CAM 71
5.8	3D 72
<b>6</b>	<b>Troubleshooting 73</b>
6.1	Contact information 73
6.2	TV and remote control 74
6.3	TV channels 75
6.4	Picture and sound 76
6.5	Devices 77
6.6	Multimedia 78
6.7	Network 79
<b>7</b> 7.1 7.2 7.3 7.4 7.5 7.6 7.7 7.8	Specifications80Software80Environmental81Power and reception82Display and sound83Display resolutions84Multimedia85Connectivity86Dimensions and weights87

Index 88

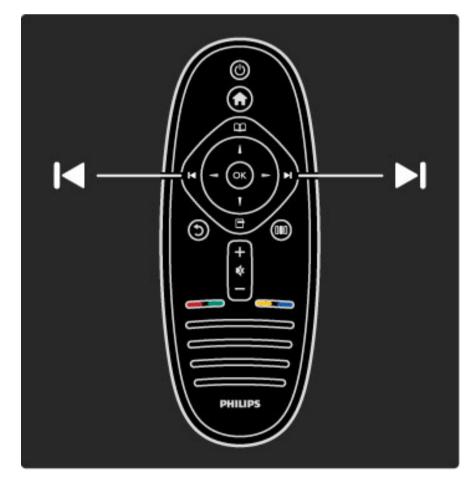
# 1 To begin

# 1.1 TV tour

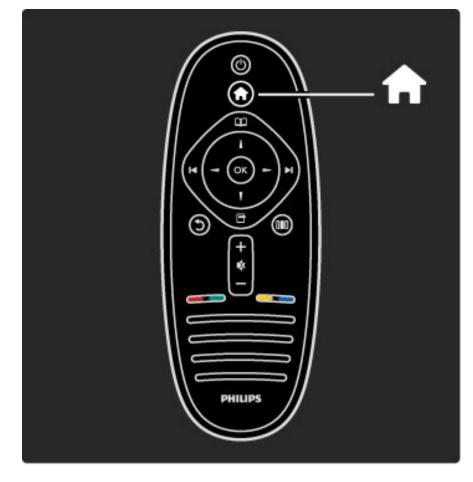
# The remote control



To adjust the volume.

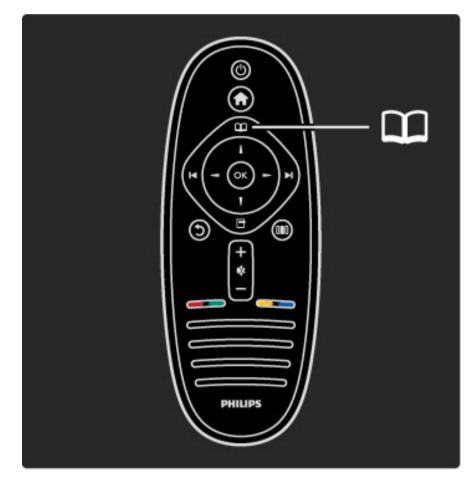


To switch TV channels.



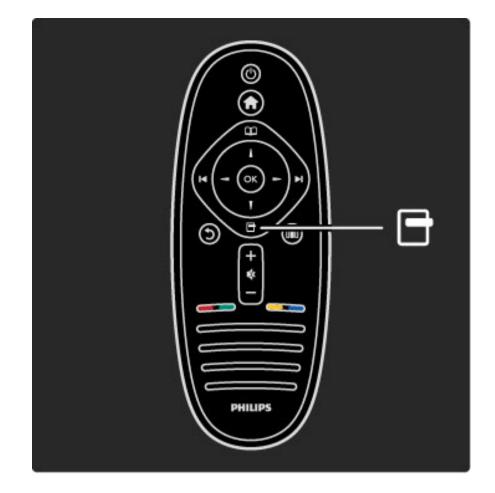
To open or close the Home menu igarharpi .

In the Home menu, you can start or stop a TV activity. Like watching TV or watching a movie from a connected DVD player.



To open or close the **Browse menu**  $\square$ .

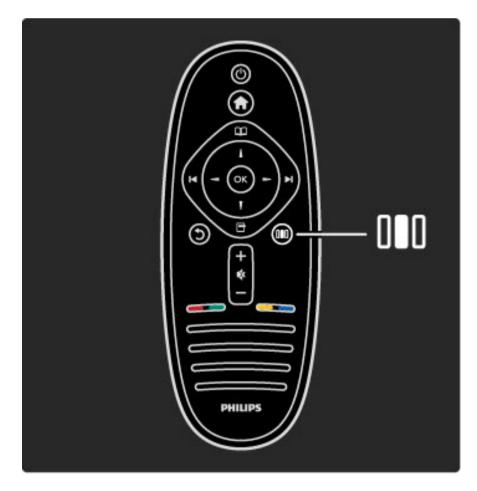
In the Browse menu, you can open Text, the Channel list or the TV programme guide.



To open or close the Options menu  $\square$ .

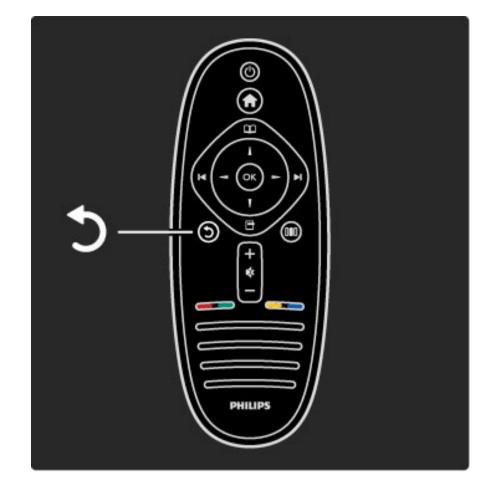
In the Options menu, you can select settings related to what is shown on screen.

While you watch a channel, mark it as a favourite or stop the slideshow of your photos shown on screen.



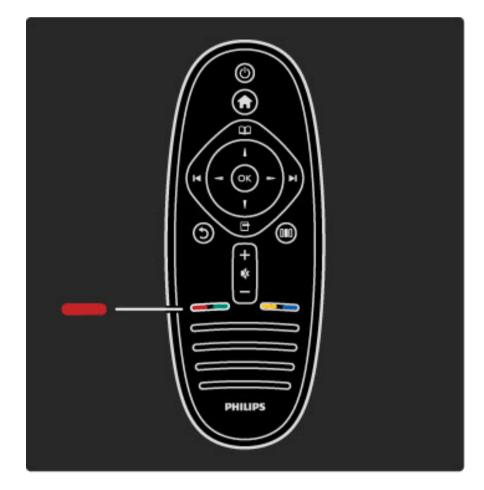
To open or close the **Adjust menu DID**.

In the Adjust menu, you can quickly adjust some picture and sound settings.



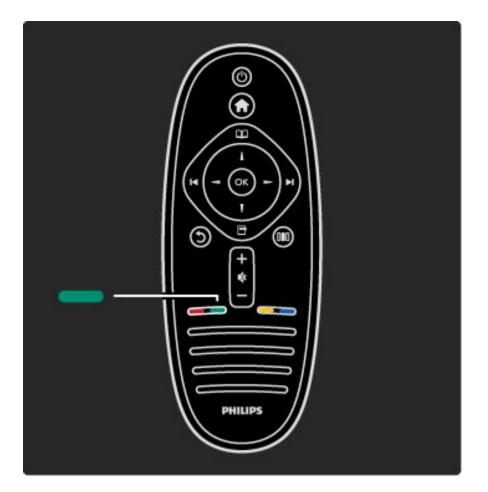


With Back you go back to the previous TV channel or go one step back in a menu.

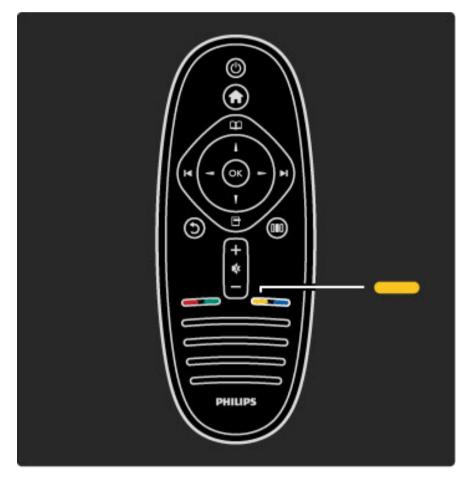


### Red

With the red key, you select the red option or open digital **Interactive TV services** or some TV demonstration clips.



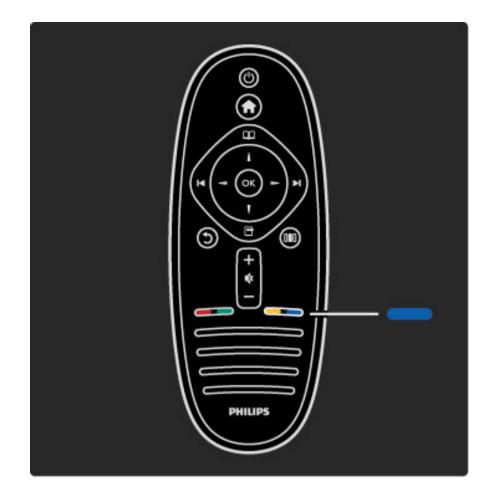
#### Green



With the green key, you select the green option or the  $\ensuremath{\mathsf{Eco\ settings}}$  .

### Yellow

With the yellow key, you select the yellow option or the **Help menu**.



#### Blue

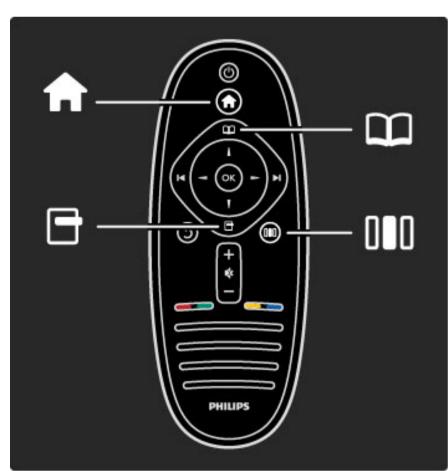
With the blue key, you select the blue option.

Read more about the remote control in Help > Use your TV > Remote control > Overview.

Or go to the  $\mathbf{Q}$  Search page to look for any topic.

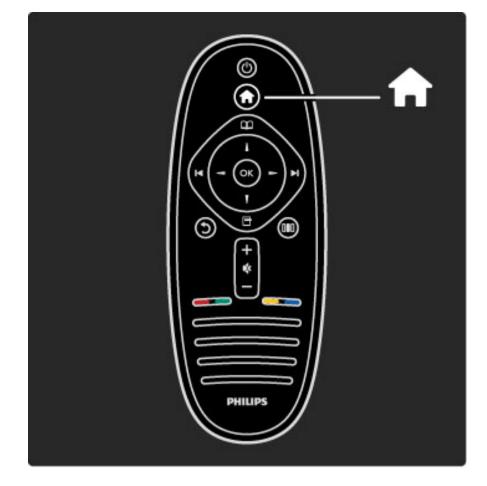
Press  $\blacktriangle$  to select the next TV tour.

## The TV menus



You can operate the TV with the 4 menus. Discover and learn their specific uses.

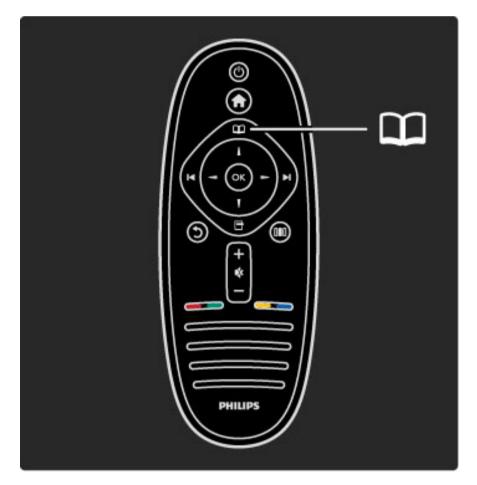
- the **Home** menu
- the **Browse** menu
- the **Options** menu
- the **Adjust** menu



To open or close the Home menu igarharpi.

Open the Home menu as a starting point to operate the TV.

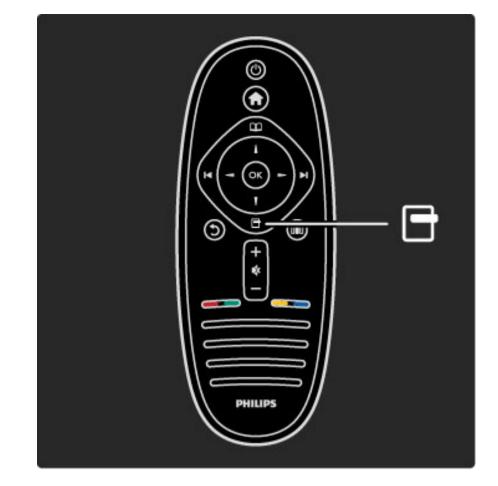
In the Home menu, you can start or stop a TV activity. Like watching TV - **Watch TV** - or watching a movie from a connected DVD player.



To open or close the **Browse menu**  $\square$ .

With an activity started in the Home menu, open the Browse menu to find the activity content.

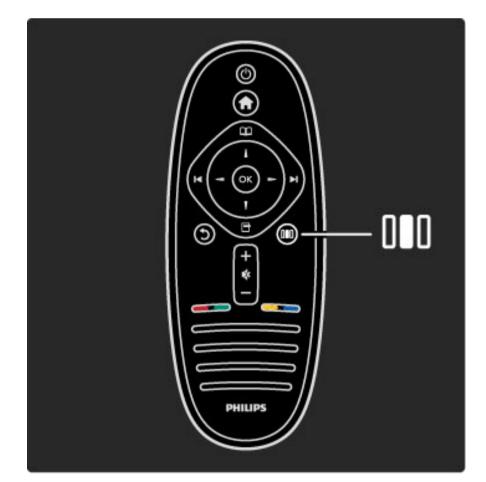
While watching TV, you can find a channel in the **Channel list** or open **Text**.



To open or close the **Options menu** 🗖

Open the Options menu to select a setting related to what is shown on screen.

While you watch a channel, mark it as a favourite but also open the DVD disc menu while watching a DVD movie.



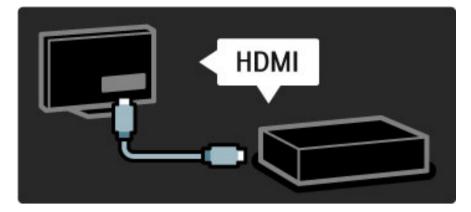
To open or close the **Adjust menu []** 

Open the Adjust menu to quickly adjust the picture and sound settings.

You can set the Smart picture setting to **Game**, which is ideal for gaming, or change the Surround setting of the TV speakers.

Go to the **Q** Search page to look for any topic in Help.

## Connecting devices



To connect a DVD, Blu-ray Disc player or game console, use the **HDMI** connection.

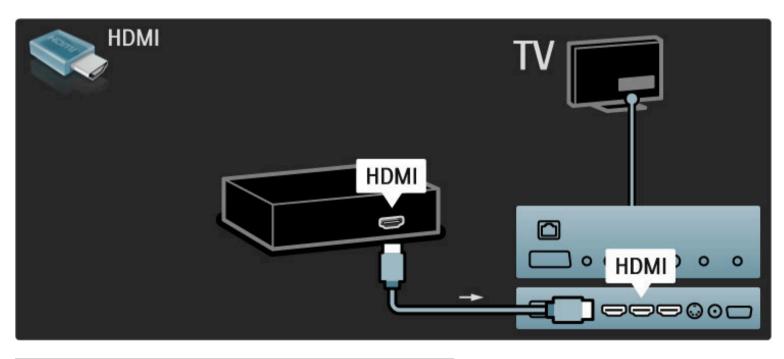
The HDMI connection offers the best picture and sound quality and, if your device has **EasyLink** (HDMI-CEC), the TV can add the device in the Home menu automatically.

When a device is added in the Home menu, you can select it to watch its programme. If the device has no EasyLink or you do not use the HDMI connection, you must add the connected device in the Home menu using **Add your devices**.

Read more about Add your devices in Help > Use your TV > Menus > Home menu.

Read more about EasyLink in Help > Setup > EasyLink HDMI-CEC.

In the chapter **Help** > **Connections**, drawings like these help you to connect most common devices.



# High Definition TV

This TV can display High Definition programmes, but to enjoy HD TV you need to get programmes in HD first. If you are not watching HD programmes, the picture quality will be that of a normal TV.

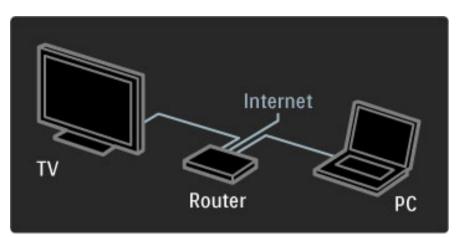
Watch HD TV programmes from . . .

- a Blu-ray Disc player
- a Digital HD receiver connected with HDMI and with a
- subscription to HD programmes
- Over-the-air HD broadcasts (DVB-T MPEG4)
- channels offering HD on a DVB-C network
- an HD game console connected with HDMI and playing an HD game

#### HD video clip

To experience the stunning sharpness and picture quality of HD TV, you can start the High Definition video clip from the Home menu. Press **Home** > **Setup** > **Watch demos** (on the second page of the Setup menu). Contact your dealer for more information. Go to www.philips.com/support to find FAQs featuring the list of HD channels or providers in your country.

# Network and Net TV



### PC network

You can connect the TV to your PC network. Enjoy your pictures, videos and music files from your PC on a big TV screen.

You Tube funspot 9	h	
You Tube funspot 🕫		
Broadcoat Yourself"		You Tube funspot 🕫
MeteoGroup томтом 🤣		MeteoGroup

### Read more about PC Network in **Help** > **Setup** > **Network**.

### Net TV

If you have an Internet connection on your home network, you can connect to Net TV. Net TV offers you online movies, pictures, music, infotainment, games and much more.

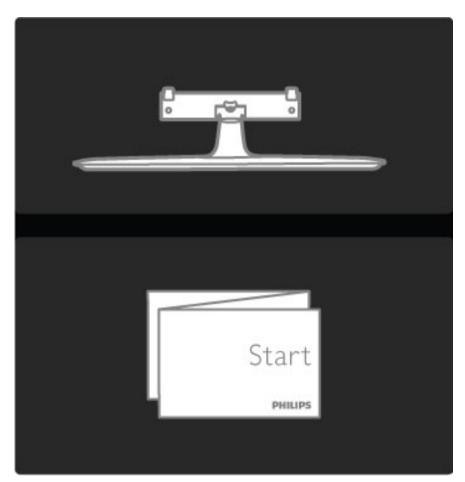
Read more about Net TV in Help > Use your TV > Net TV.

# 1.2 Setting up

# Wall or stand mounting

The 2-in-1 stand that comes with the TV, can be used as a table-top stand or as a wall mount bracket. Instructions to mount the 2-in-1 stand are also included in the printed Start guide.

### Read the instructions on the following pages.



#### 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. Read also the safety precautions before positioning the TV.

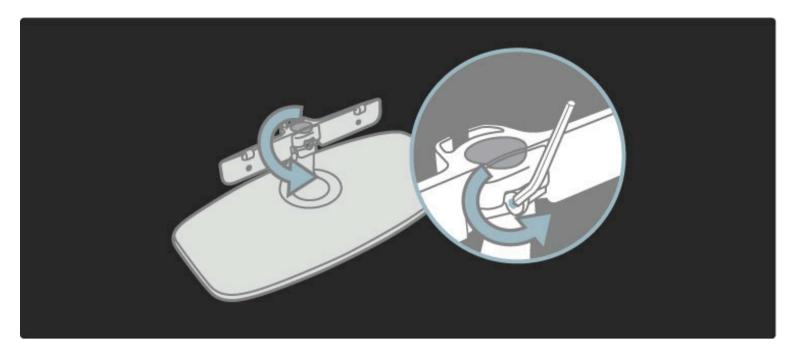
Koninklijke Philips Electronics N.V. bears no responsibility for improper mounting or any mounting that results in accident or injury.

Unmount the TV from the stand if necessary.

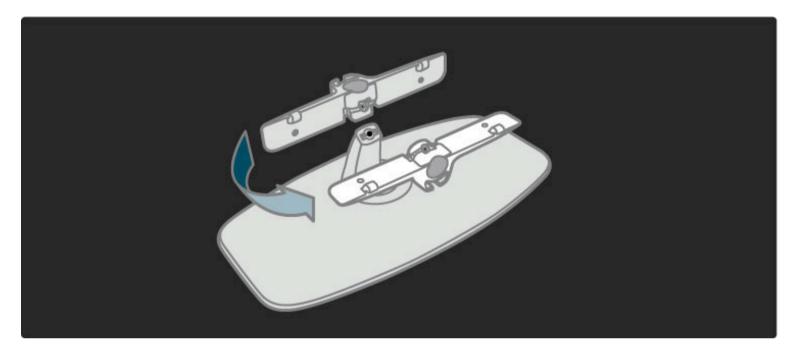
To wall mount the TV, you need the 2 screws used to fix the TV onto the TV stand and the 2 mounting discs as shown.



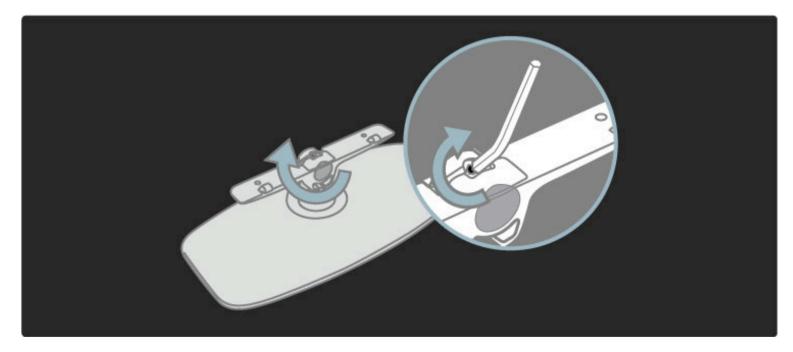
Unscrew the bolt in the middle of the bar with the supplied hex key.



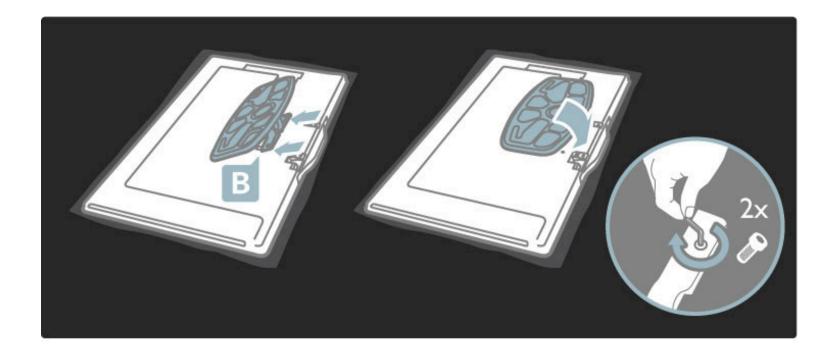
Turn the bar as shown.



Reposition the bar on the stand and fix the bolt with the hex key.



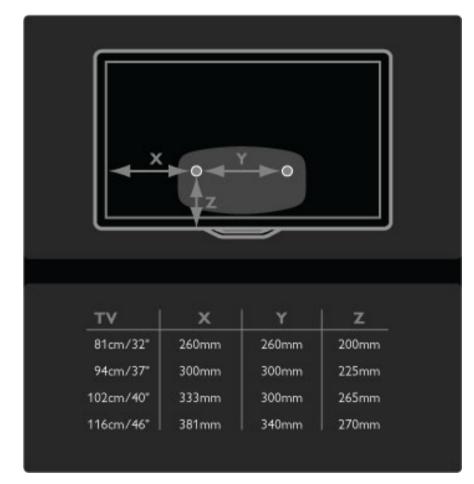
Fix the stand to the TV.



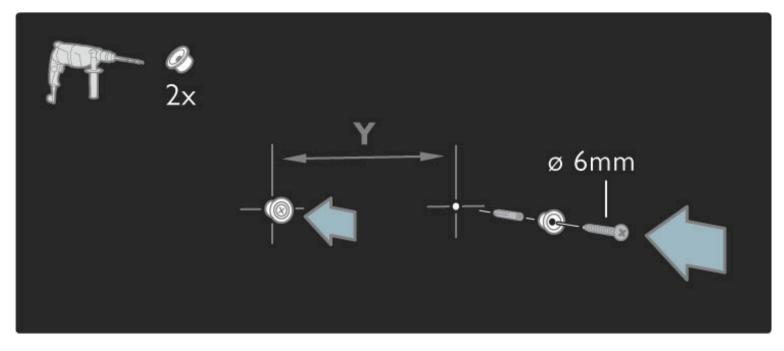
The TV is mounted at the correct height if your eyes are level with the centre of the screen when you sit down.

Distance between the 2 fixing points . . .

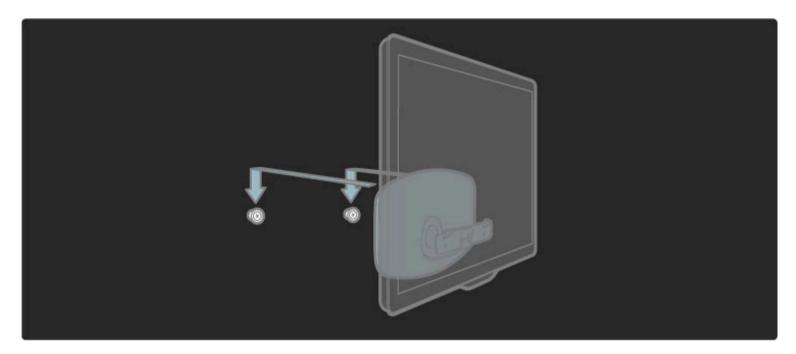
- 81cm/32" = 260mm
- 94cm/37" = 300mm
- 102cm/40" = 300mm
- 117cm/46" = 340mm



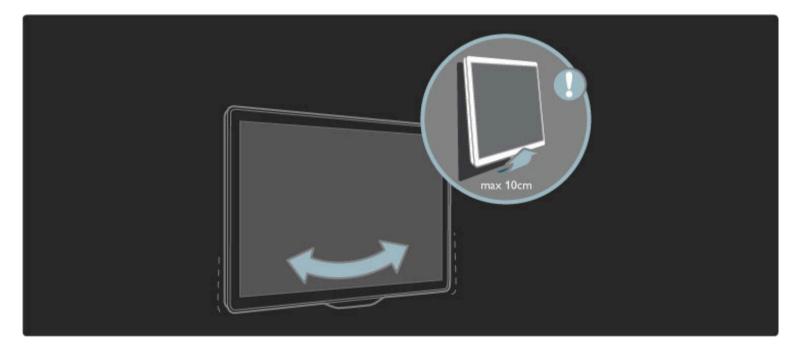
Fix the 2 mounting discs. Use screws with a diameter of max 6mm.



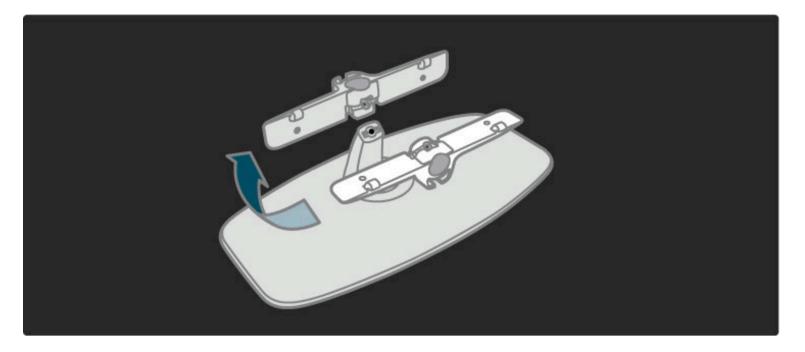
Slide the bottom plate of the stand onto the mounting discs.



To level the TV, pull the bottom of the TV towards you slightly and let it slide on the discs.



Unscrew the bolt and turn the bar in the position shown.

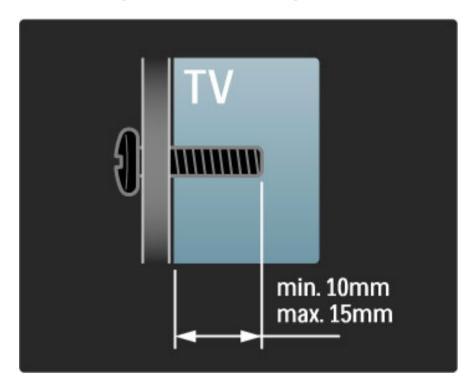


# **VESA** info

Your TV is prepared for a VESA-compliant wall mount bracket (not included).

- VESA codes to purchase the bracket:
- 81cm/32" VESA MIS-F 100,100,M6
- 94cm/37" VESA MIS-F 200, 300, M6
- 102cm/40" VESA MIS-F 200, 300, M6
- 46PFL8605 : VESA MIS-F 200, 300, M6
- 46PFL9705 : VESA MIS-F 300, 300, M6

Use a screw length as shown in the drawing.



# Positioning the TV

Carefully read the safety precautions before positioning the TV.

- Position the TV where light does not shine directly on the screen.
- Dim lighting conditions in the room for best Ambilight effect.
  Position the TV up to 25 cm away from the wall for the best Ambilight effect.



Position the TV at the ideal viewing distance. Get more from HD TV picture or any picture without straining your eyes. Find the 'sweet spot', right in front of the TV, for the best possible TV experience and relaxed viewing.

The ideal distance to watch TV from is three times its diagonal screen size. When seated, your eyes should be level with the centre of the screen.

# Safety and care

Make sure you have read and understood all instructions before using your TV. The warranty becomes invalid if any damage is caused by failure to follow instructions.

### Risk of electric shock or fire!

• Never expose the TV or remote control to rain, water or excessive heat.

• 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 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.

• Keep candles and other naked flames away from this product at all times.

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

• Ensure power plugs do not come under heavy force. Loose power plugs can cause arcing and are a fire hazard.

Never place the TV or any objects on the power cord.When disconnecting the power cord, always pull the plug, never

## Risk of injury or damage to the TV!

the cord.

• Two people are required to lift and carry a TV that weighs more than 25 kg.

• 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.

• When mounting the TV on a wall, ensure that the wall mount can safely bear the weight of the TV set. Koninklijke Philips Electronics N.V. bears no responsibility for improper wall mounting that results in accident, injury or 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 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.

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

#### Risk of overheating!

Always leave a space of at least 10 cm 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  $5^{\circ}$ C, unpack the TV and wait until the TV temperature reaches room temperature before connecting the TV to the mains.

• 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. Never use substances such as alcohol, chemicals or household cleaners on the TV.

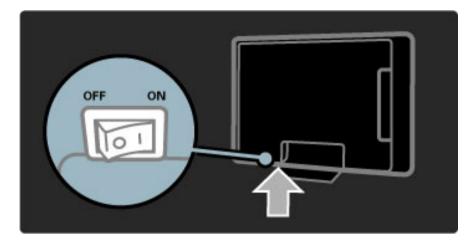
• To avoid deformations and colour fading, wipe off water drops as soon as possible.

• 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.

# 1.3 Keys on the TV

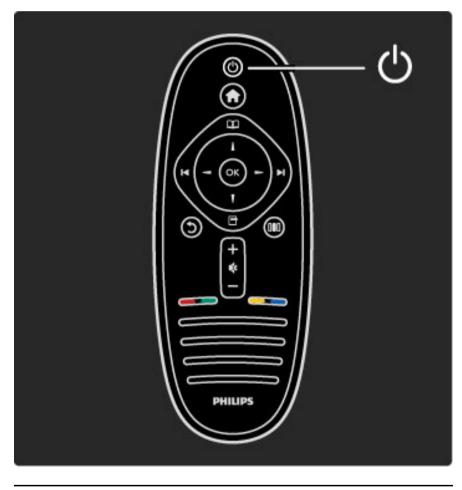
## Power switch

Switch the TV on or off with the power switch at the bottom of the TV. When switched off, the TV does not consume any energy.



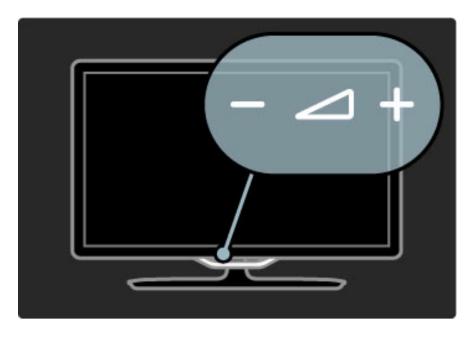
If the red indicator light is off, switch on the TV with the power switch.

If the red indicator is on (standby indication), press on the remote control to switch on the TV. Alternatively, you can switch on the TV from standby with any key on the TV. It takes a few seconds for the TV to start up.



∠ Volume

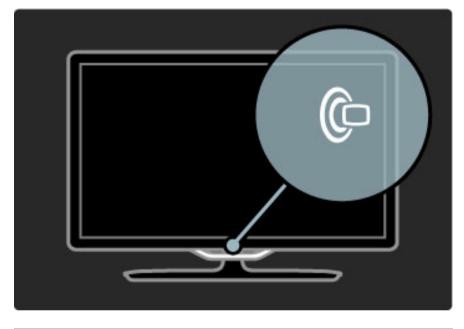
Press  $\checkmark$  (Volume) - or + to adjust the volume. Or use the + or - keys on the remote control.



# C Ambilight

Press ( (Ambilight), to switch Ambilight on or off.

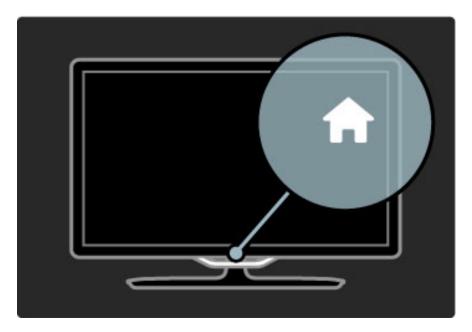
While the TV is on standby, you can switch Ambilight on and create an Ambilight LoungeLight effect in your room. Read more about LoungeLight in Help > Use your TV > Use Ambilight > LoungeLight



# **f** Home

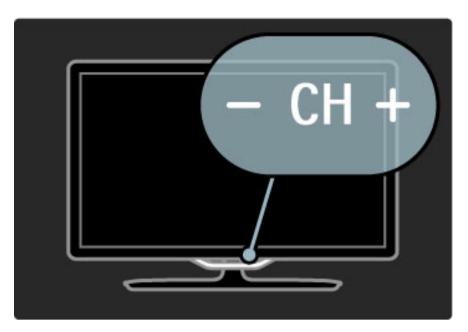
Press  $\clubsuit$  (Home) to open the Home menu on screen. You can navigate the Home menu with the Volume - or + (left or right) and the Channel - or + (down or up) keys on the TV. To confirm your choice, press  $\clubsuit$  again.

Read more about Home in Help > Use your TV > Menus > $frac{1}{Home}$ 



# CH Channel

Press CH (Channel) - or + to switch channels. Or use the  $\blacktriangleright$  or  $\blacktriangleright$  keys on the remote control.



# 1.4 Register your TV

Congratulations on your purchase and welcome to Philips.

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.

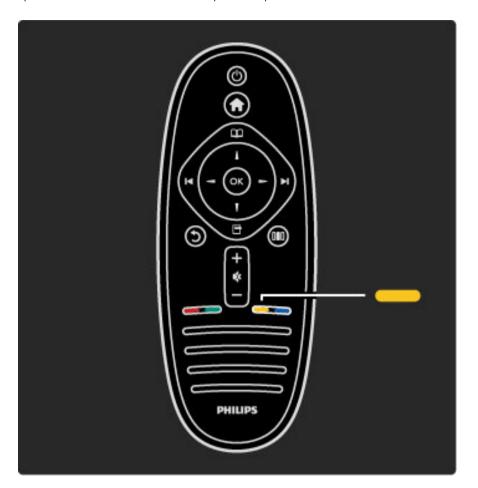
Go to www.philips.com/welcome

# 1.5 Help and support

# Using Help and Search

## Help

You can open Help from the Home menu. In most cases, you can also press the **Yellow** key on your remote control to open or close Help directly. For some activities, like Text, the colour keys have specific functions and cannot open Help.



Before you follow the Help instructions, close Help. Press the **Yellow** key or press **1** to close Help. When you press the **Yellow** key again, Help will open on the page where you closed it.

## **Q** Search

In Help, use **Q** Search to find a topic you need. Select a topic from the list with the navigation keys and press **OK**. The topic you are looking for might not be present on the first page but a few pages further on. Press  $\blacktriangleright$  to go to the next page.

# **Online** support

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).

You can download new TV software or the manual to read on your PC. You can email a specific question or, in some countries, chat online with one of our collaborators.

# **Contact Philips**

For support, you can call the Philips Consumer Care hotline in your country. Find the telephone number on the printed documentation that came with the TV.

Or consult our website **www.philips.com/support** 

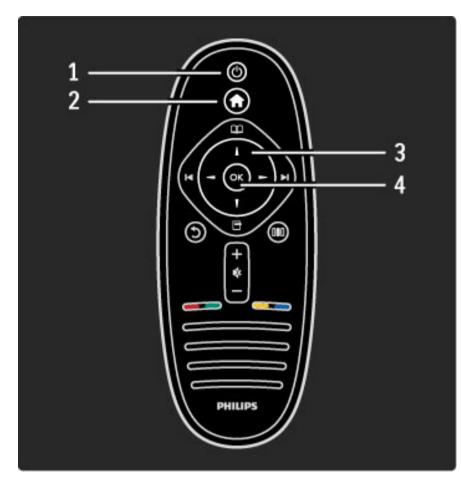
## TV model number and serial number

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.

# 2 Use your TV

# 2.1 Remote control

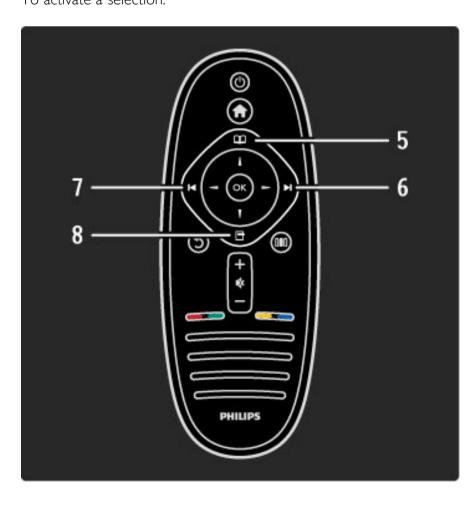
## Overview



## 1 Standby 🖒

To switch the TV on or back to standby. **2 Home** To open or close the Home menu. **3 Navigation key** To navigate up, down, left or right.

**4 OK key** To activate a selection.



## 5 Browse 🕮

To open or close the Browse menu.

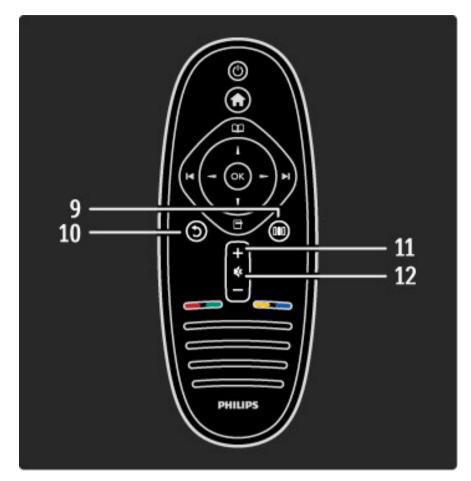
- 6 Next ►I
- To switch to the next channel, page or chapter.

7 Previous I

To switch to the previous channel, page or chapter.

8 Options 🖻

To open or close the Options menu.



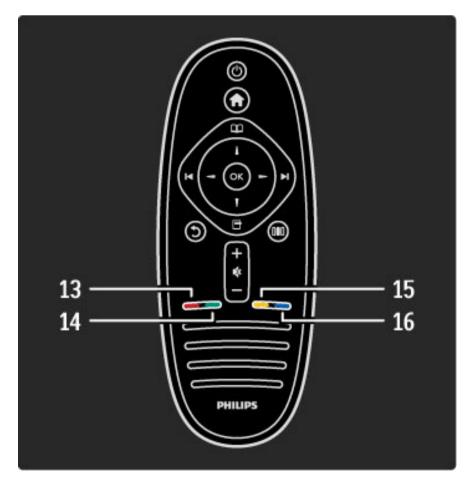
## 9 Back 🕽

To go back to the previous channel. To exit a menu without changing a setting. To go back to the previous Text or Net TV page. **10 Adjust OD** 

- To open or close the most used settings like picture, sound or Ambilight.
- 11 Volume 🛆
- To adjust the volume level.

## 12 Mute 🕸

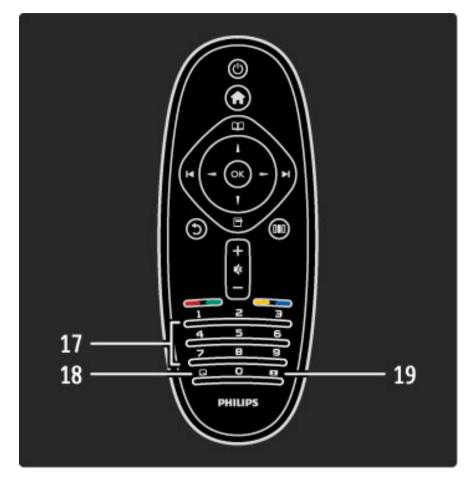
To mute the sound or to restore it.



#### 13 Red colour key

To open interactive TV or to select a Text page.

- 14 Green colour key
- To open the Eco settings or to select a Text page.
- 15 Yellow colour key
- To open and close Help or to select a Text page.
- 16 Blue colour key
- To select a Text page.



### 17 Number keys and text keypad

To select a TV channel directly or to enter text. **18 Exit** To exit MHP. **19 Teletext** 

To open or close Text.

To learn how to use the remote control, read  $Help > To \ begin > TV \ tour > Remote \ control.$ 

# EasyLink Remote Control

The remote control of the TV can also operate a connected device. The device must have EasyLink (HDMI-CEC) and have it switched on. The device must also be connected with an HDMI cable.

## Operate an EasyLink device

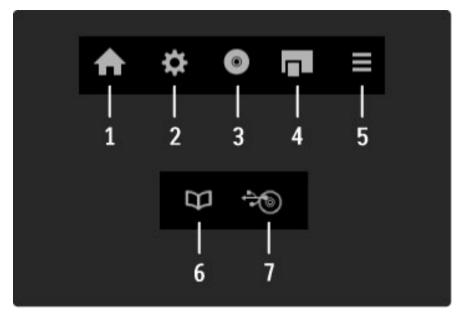
To operate such a device with the TV remote control, select the device -or its activity- in the  $\uparrow$  Home menu and press **OK**. The commands of all keys, except the  $\uparrow$  key, is forwarded to the device.

If the key you need is not on the TV remote control, you can show extra keys on screen with Show remote control.

### Show remote control keys

To show the device keys on screen, press 🗗 (Options) and select **Show remote control**. Select the key you need and press **OK**.

To hide the remote control keys of the device, press  $\$  (Back).



In general, these keys open the following device menus:

- 1 Home menu
- **2** Setup menu
- 3 Disc menu (disc content)
- **4** Pop-up menu
- 5 Options menu
- 6 Programme guide
- 7 Media selection

Read more about EasyLink in Help > Setup > Devices > EasyLink HDMI-CEC.

## IR sensor

Always make sure you point the remote control at the remote control infrared sensor on the front of the TV.



## **Batteries**

To replace the batteries of the remote control, slide open the small tray at the bottom of the remote control. Use 2 coin-shaped batteries (Type CR2032 – 3V). Make sure the + side of the batteries (top side) point upwards. The small tray has 2 + indicators.



Remove the batteries if you are not using the remote control for a long time. Dispose of batteries according to the end of use directives. Read Help > To begin > Setting up > End of use.

# 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 TV or remote control.

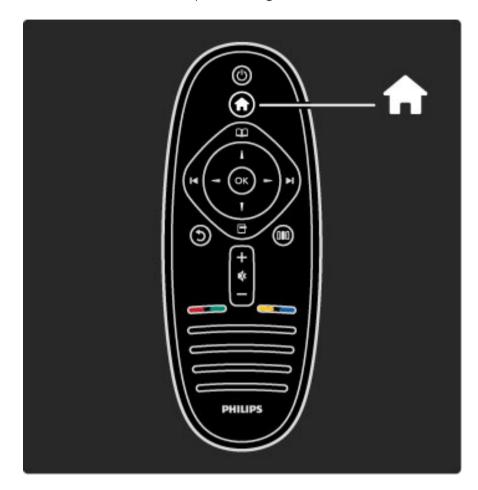
# 2.2 Menus

# A Home

With the Home menu, you can start watching TV or a movie disc or start any other activity. You can add an activity when you connect a device to the TV.

Press f to open the Home menu.

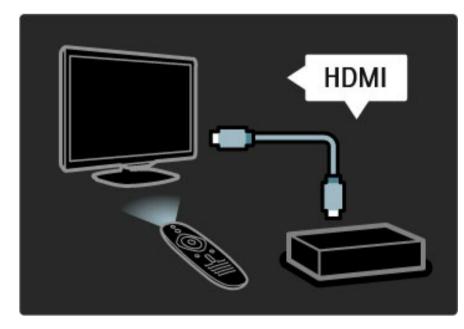
To start an activity, select it with the navigation keys and press OK. To close the Home menu, press  $\uparrow$  again.



### Operate a selected device

The TV remote control can operate a device if the device is connected with HDMI and has EasyLink (HDMI-CEC).

Read more about EasyLink Remote control in Help > Use your TV > Remote control > EasyLink Remote control.



## Add a device

Devices connected with EasyLink (HDMI-CEC) automatically show their activity in the Home menu. A single device can add several activities. The device must be connected with an HDMI cable. If your connected device does not show itself in the Home menu, EasyLink on the device may be switched off. If your connected device does not have EasyLink (HDMI-CEC) or is not connected with an HDMI cable, you need to manually add your device with **Add your devices** in the Home menu.

### Add your devices

In the Home menu, select **Add your devices** and press **OK**. Follow the instructions on screen.

The TV asks you to select the device and the connection to which the device is connected.

The device or its activities are now added to the Home menu.

### Rename a device

To rename an added device or activity, press  $\Box$  (Options) and select **Rename**. Use the keypad on the remote control as you do for SMS/text messaging to enter the new name.

### Delete a device

To delete a device or activity from the Home menu, select the item and press 🗗 (Options) and then select **Remove this device**. If a device or activity keeps appearing in the Home menu after you deleted it, switch off the EasyLink setting on the device to prevent this automatic pop-up appearing again.

Read more about EasyLink in Help > Setup > EasyLink HDMI-CEC.

### Options for a device

To view the available options for a device or activity in the Home menu, select it and press 🗗 (Options). You can Rename or Remove devices and activities, Reorder the sequence of them or Restore activities if you deleted one of several activities of a device.

### Reorder

To reorder a device or an activity in the Home menu, select it and press  $\square$  (Options).

### 1 Select Reorder.

**2** With the navigation keys, reposition the device or activity where you want it. You can only reorder the sequence of the added devices and activities.

 ${\bf 3}$  Press  ${\bf OK}$  to confirm the position. All devices and activities shift to the right.

You can highlight another device or activity and reposition it.

To stop Reorder, press 🖻 (Options) and select **Exit reorder**.

### Restore activities

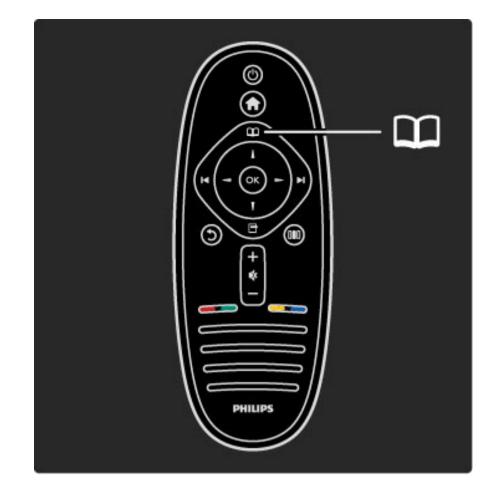
To recall a deleted activity from a device with several activities, select the device or one of its activities and press 🗗 (Options). Select **Restore activities** and press **OK**. All deleted activities of this device appear again.

## D Browse

With the Browse menu, you find the channel you want to watch from the Channel list, a future programme from the onscreen Programme guide or a Text page.

Press  $\square$  to open the Browse menu.

Select your choice with the navigation keys and press **OK**. To close the Browse menu, press **D** again.



#### Find your content

While watching TV, open the Browse menu to open the Channel list, the Programme guide or Text.

When other activities are selected in the Home menu, like Browse PC or Browse USB, use the Browse menu to find a picture, music or video stored on your computer or USB.



### Channel list

The Channel list shows the TV channels and radio stations installed on your TV.

While watching TV, press III to open the Browse menu and select **Channel list**. Navigate to a channel or station and press **OK** to watch or listen to the selected channel or station.

Press  $\mathbf{I}$  (Back) to leave the channel list without changing the channel.

#### Channel list options

With the Channel list on screen, you can press  $\square$  (Options) to select the following options :

- Select list
- Mark as favourite
- Reorder
- Rename
- Hide channel
- Show hidden channels

#### Select list

Use this option to select which channels are shown in the Channel list. The list you select here determines which channels you look through with ▶I and I◄ while watching TV.

#### Mark as favourite

When a channel is highlighted in the Channel list, you can set it as a favourite channel.

Read Use your TV > Watch TV > Favourite channels.

#### Reorder

You can reposition channels within the list.

**1** Press **(**Options) and select **Reorder** to start reordering channels.

2 Highlight a channel and press OK.

**3** Reposition the channel where you want it with the navigation keys.

Alternatively, enter the new position directly with the number keys.

 ${\bf 4}$  Press  ${\bf OK}$  to confirm the position. You can insert the channel or swap it.

You can highlight another channel and do the same.

To stop Reorder, press 🖻 (Options) and select **Exit reorder**.

#### Rename

You can rename a channel in the Channel list.

1 In the channel list, highlight the channel you want to rename.
2 Press (Options) and select Rename to start renaming. You can enter text directly with the remote control keypad or open a full keyboard on top of the text entry menu.



#### Enter text with the remote control keypad

Use the navigation keys to position the cursor in the text. Press **(**Back) to delete a character.

Use the remote control keypad as you do for SMS/text messaging to enter a character. Use the **1** key to select a special character. Select **Clear** to delete a character. Select **Done** to end Rename.

#### Enter text with the on-screen keyboard

To open the on-screen keyboard on top of the text entry menu, press **OK** when the cursor in the text blinks.

On the keyboard, use the navigation keys to position the highlight on a character and press OK to enter it. To delete a character, press  $\Im$  (Back) or highlight  $\blacktriangleleft$  and press OK.

To switch from uppercase to lowercase or to a set of special characters, press ► (Next) or ► (Previous).

To edit a character within a line of text, position the cursor on this character and use the  $\leftarrow$  and  $\rightarrow$  keys at both ends of the on-screen spacebar.

To close the on-screen keyboard, highlight **Done** and press **OK**.

#### Hide channel

You can hide a channel in the Channel list. When looking through channels, a hidden channel will be skipped.

1 In the Channel list, highlight the channel you want to hide.
2 Press ☐ (Options) and select Hide channel. The channel is hidden as soon as you close the Channel list.

#### Show hidden channels

You can recall all hidden channels and unhide them again. 1 In the Channel list, press (Options) and select **Show hidden channels**. The Channel list now shows all channels again.

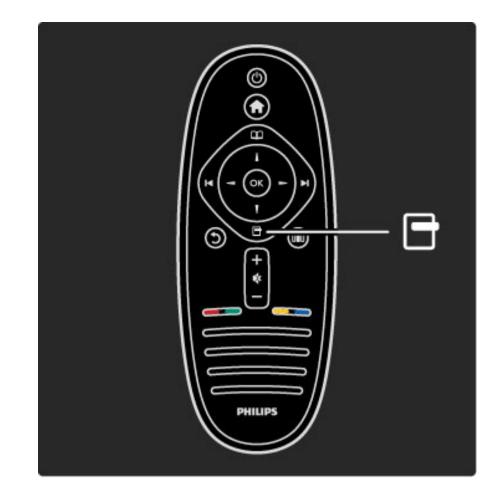
**2** Press 🖬 (Options) and select **Unhide all** to unhide the previously hidden channels.

Or, if you want to leave the previously hidden channels hidden, press 🖻 (Options) and select **Exit**.

## Options

The Options menu gives settings related to what is shown on screen. Depending on what is shown, the Options menu holds different settings.

Press 🖻 (Options) at any time to see which options are available. To close the Options menu, press 🖻 again.

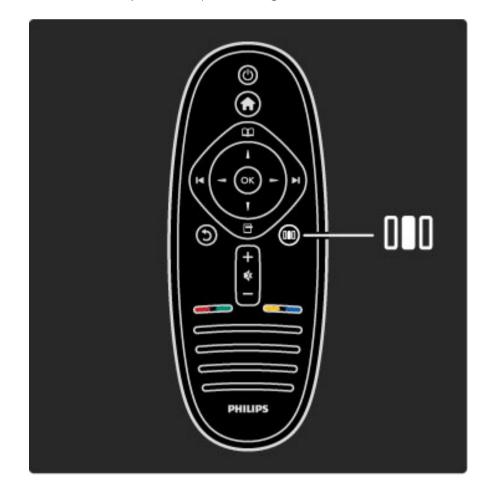


## 000 Adjust

With the Adjust menu, you can adjust picture, sound and Ambilight settings quickly.

Press **DID** to open the Adjust menu.

Select your choice with the navigation keys and press **OK**. To close the Adjust menu, press **DID** again.



#### Benefits

In the Adjust menu you can quickly lower or speed up the Ambilight dynamics, adjust the Picture format or shift the picture up a little to view the subtitles and select a preset setting for picture or for sound according to what you are watching. If a Home Theatre System, connected with EasyLink, is forwarding its sound presets, you can select these too. In the Adjust menu you can adjust the following:

- Ambilight On or Off
- Ambilight dynamics
- Picture format
- Smart picture (presets)
- Smart sound (presets)
- Speakers
- SurroundPicture shift
- Ficture shill

### Ambilight

Read more about the Ambilight settings in Help > Use your TV > Use Ambilight.

#### Picture format

Read more about the Picture format settings in Help > Use your TV > Watch TV > Picture format.

#### Smart picture, Smart sound

You can set the TV to the pre-defined setting that best suits what you're watching.

Read more about Smart settings in Help > Use your TV > Watch TV > Smart settings

#### Speakers

To hear the sound through the TV speakers, close Help, press DD (Adjust), select **Speakers** and select **TV**.

Select **Amplifier** if you want to hear the sound through a connected Home Theatre System or Amplifier.

These settings temporarily override any EasyLink settings.

#### Surround

To switch the TV automatically to the best surround sound mode (depending on the programme being broadcast), close Help, press **DID** (Adjust), select **Surround** and select **On**.

#### Picture shift

You can shift the picture on screen in a vertical or a horizontal direction depending on the TV input. For instance, you can shift the picture up vertically to view subtitles fully.

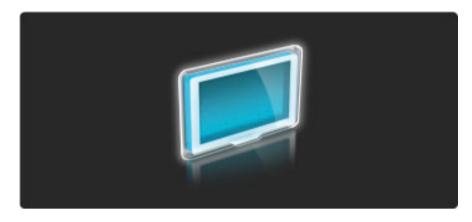
While watching TV, press **DID** (Adjust), select **Picture shift** and press **OK**. Shift the picture with the navigation keys. Press **OK** to stop Picture shift.

# 2.3 Watch TV

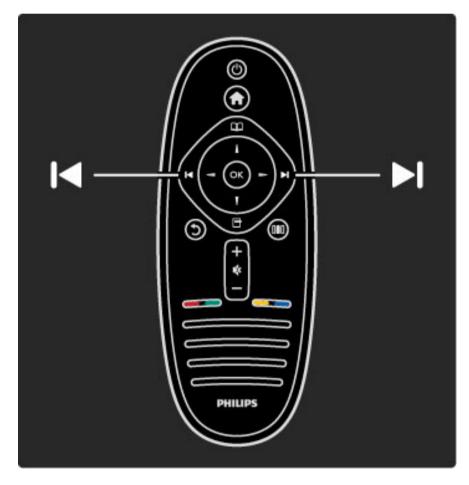
## Switch channels

To watch TV and switch TV channels, make sure the **Watch TV** activity is selected in the Home menu.

To watch TV, press **f** , select **Watch TV** and press **OK**.



To switch TV channels, press  $\blacktriangleright$  or  $\blacktriangleright$  on the remote control. You can use the number keys if you know the channel number or you can use the Channel list to select a channel.



### To switch back to the previous channel, press $\mathbf T$ (Back).

## Channel list

To open the Channel list, while watching TV, press 💭 to open the Browse menu. Select **Channel list** and press **OK**. Select a channel with the navigation keys and press **OK** to switch to the channel.

To leave the Channel list without changing the channel, press **(**Back).



#### Channel list pages

The channel list can have several pages. To view the next or previous Channel list page, press  $\blacktriangleright$  or  $\triangleleft$ .

You can Reorder and Rename channels or make a channel a favourite. Read more about Channel list in Help > Use your TV > Menus > Browse ).

#### Radio channels

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

### Options for watching TV channels

With digital TV broadcast, you can see what programme is on now or coming up next, switch Subtitles on or off or even view the channel diagnostics.

While watching TV channels, press  $\hfill \ensuremath{\square}$  (Options) to select an available option.

#### What's on

This option shows information on the current and next programme on this channel. Use the navigation keys to scroll through text or to go to the next column.

#### Status

Depending on the broadcast, the Status page will show relevant information. You can use this information to improve the channel signal or to check if certain services are available.

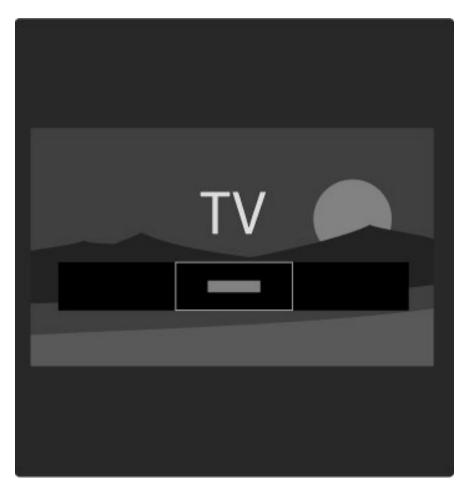
#### Video selection

Digital TV channels can offer multi video signals (multifeed broadcasts), different camera viewpoints or angles of the same event or different programmes on one TV channel. The TV shows a message to advise if any such TV channels are available. When available, press (Options) and select **Video selection** to select your choice.

## Favourite channels

In the Channel list you can mark a channel as a favourite. You can set the Channel list to only show your favourite channels.

# To open the **Channel list**, while watching TV, press $\square$ (Browse) on your remote control.



#### Set up a favourite channel

While watching TV, press  $\square$  to open the Browse menu. Select **Channel list** and press **OK**. Navigate to a channel you want to mark as favourite and press  $\square$  (Options). Select **Mark as favourite**. In the Channel list, the favourite channel is marked with a  $\bigstar$ . You can unmark a favourite channel with **Unmark favourite**.

#### Only watch your favourite channels

You can set the Channel list to show only your favourite channels. With the list on screen, press 🗗 (Options) and select **Select list**. Select **Favourites** from the list and press **OK**. With the Favourites list selected, you will only see your favourite

channels when you look through the channels.

## Programme guide

The Programme guide is an on-screen guide for scheduled TV programmes. You can set a reminder to tell you when a programme is due to start or select programmes by genre.

The Programme guide is provided by the broadcaster or Net TV.



To open the Programme guide, while watching TV, press 💭 to open the Browse menu. Select **Programme guide** and press **OK**.

To leave the Programme guide without changing a setting, press  $\mathbf{I}$  (Back).

#### First use

The first time you open the Programme guide, the TV scans all TV channels for programme guide information. This can take several minutes. This data is stored in the TV. Read also **Update Programme guide** in the Programme guide options.

#### Programme guide options

Select a programme with the navigation keys and press  $\square$  (Options) to select the following :

#### • Set reminder

To set an on-screen reminder for when a programme is due to start, select **Set reminder** and press **OK**. The programme is marked with

•. To cancel this reminder, select **Clear reminder** and press **OK**.

#### • Change day

View the previous or next day's programmes.

• More info

Shows the programme details and summary.

## • Search by genre

View all programmes selected by genre.

#### Scheduled reminders

If a reminder is set, you can view a list of all scheduled reminders.

#### • Update Programme guide

After the first scan, the TV stores the programme guide data. If you update or reinstall channels or reorder the Channel list, you will need to update this data.

To update this data, select **Update Programme guide**. Reminders are cleared and the new data is stored.

#### Specifics

Dependant of the amount of channels carrying programme guide data, the TV stores guide information for up to eight days.

### Broadcaster or Network

To select where the Programme guide information comes from, press  $rac{1}{2}$  > Setup > TV settings > Preferences > Programme guide.

#### Select From the network or From the broadcaster.

#### From the network

Until you link up with Net TV, programme guide information comes from the broadcaster. Once you are connected with Net TV, the TV switches automatically to the Internet for programme guide information.

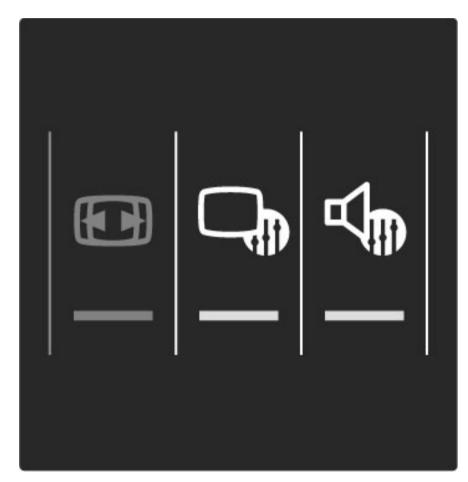
#### From the broadcaster

Guide information comes from the broadcaster/operator.

## Smart picture and sound settings

For easy picture or sound adjustment, you can select a preset setting for each.

While watching TV, press **DID** to open the Adjust menu and select **Smart picture** or **Smart sound**. Make a selection from the list and press **OK**.



#### Smart picture and Smart sound

Smart settings are a combination of preset settings suited to a specific use like gaming or daylight viewing.

You can adjust a specific setting like Brightness or Contrast, Bass or Treble, of a chosen smart setting. The smart setting will remember the adjustments you made.

#### Adjust smart settings

To adjust a specific setting of a smart setting, select the smart setting and press OK. Then press  $\clubsuit$  and select **Setup**. Select **TV settings**, navigate to the individual setting and adjust it.

To return to the original smart setting values, undoing the adjustments you made, first set the TV in the smart setting you want to reset. Then press  $rac{1}{2}$  > Setup > TV settings, select Reset, press OK and confirm.

Read more about adjusting separate settings in Help > Setup > Picture, Sound and Ambilight.

#### Smart picture list

- Personal Your choices made in Personalise picture and sound
- Vivid Ideal for daylight viewing
- Natural Natural picture settings
- Cinema Ideal for watching movies
- Game Ideal for gaming
- Energy saving Energy-conscious settings
- Standard Factory standard settings
- Photo Ideal for viewing photos
- Custom A smart picture setting free for any setting you wish

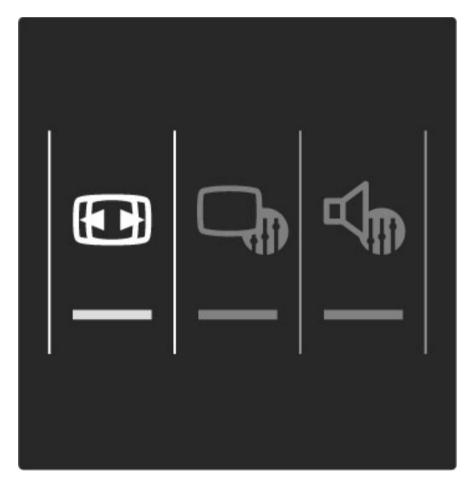
#### Smart sound list

- **Personal** Your personal choices made in Personalise picture and sound
- Standard Factory standard
- News Ideal for speech
- Movie Ideal for watching movies
- Game Ideal for gaming
- Drama Ideal for TV soaps
- Sports Ideal for sports programmes

## Picture format

If black bars appear on the screen, you can adjust the picture format to a format that fills the screen.

While watching TV, press **DID** to open the Adjust menu and select **Picture format**. Select a format from the list and press **OK**.



#### **Picture formats**

The following formats are available according to the picture on screen:

#### Auto fill

Automatically enlarges the picture to fill the screen. Minimal picture distortion, subtitles remain visible. Not fit for PC input.

### • Auto zoom

Automatically zooms the picture in to fill the screen as much as possible without distortion. Black bars may be visible. Not fit for PC

#### input. • Super zoom

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

• Movie expand

Scales the picture to a 16:9 format.

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 PC.

## Switch to standby

If the TV is on, press  ${\bf \underline{O}}$  on the remote control to switch to standby. The red standby key indicator is on.

Although the TV consumes very little power when in standby, energy does continue to be consumed.

When the TV is not in use for an extended period of time, we recommend you switch the TV off completely with the power switch.

# 2.4 Watch a connected device

## Select a device

When a connected devices is added to the Home menu, you can easily select it.

To select and watch a connected device or activity, press for to open the Home menu and select the device or its activity and press **OK**. Make sure the device is switched on.

Read more about Add your devices in Help > Use your TV > Menus > Home menu.

## Use the TV remote control

The TV remote control can operate a device if the device is connected with HDMI and has EasyLink (HDMI-CEC).

Read more about EasyLink Remote control in Help > Use your TV > Remote control > EasyLink Remote control.

# 2.5 Ambilight

## Benefits

With Ambilight, you enjoy a more relaxed viewing experience and improved perceived picture quality.

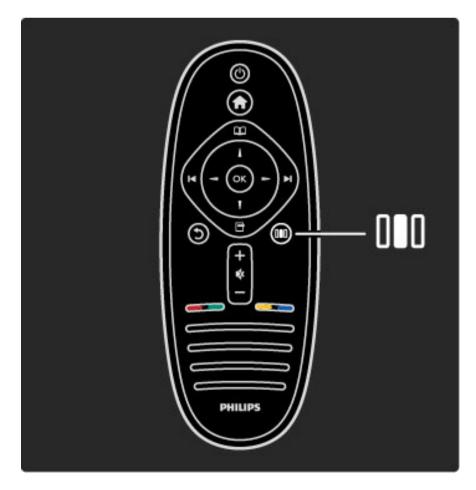
Dim the lighting conditions in the room and position the TV up to 25cm away from the wall for the best Ambilight effect. To prevent poor infrared remote control reception, position your devices out of sight of Ambilight.



# Adjust

You can use the Adjust menu to set the most used Ambilight settings.

While watching TV, press **DID** to open the **Adjust menu**. To close the Adjust menu, press **DID** again.



### Switch Ambilight on or off

In the Adjust menu, select **Ambilight** and press **OK**. Switch Ambilight **On** or **Off**.

### Ambilight dynamic

In the Adjust menu, select **Ambilight dynamic** and press **OK**. Adjust the speed at which Ambilight responds to onscreen images.

#### Ambilight brightness

In the Adjust menu, select **Ambilight brightness** and press **OK**. Adjust the light output of Ambilight.

#### Ambilight colour

In the Adjust menu, select **Ambilight colour** and press **OK**. Select **Dynamic**, if Ambilight should respond to onscreen images or select one of the fixed colours. Select **Custom** if you want to set a specific fixed colour.

Read more about Ambilight settings in Help > Use your TV > Use Ambilight > Setup.

## Setup

As well as the settings in the Adjust menu, Ambilight offers some advanced settings. You can set a fixed colour of your own or a delayed Ambilight switch off after you switched off the TV.

To open the Ambilight menu, press  $\clubsuit$  and select Setup > TV settings > Ambilight.

#### Custom colour

To set a Ambilight colour of your own, select **Custom** in the Ambilight **Colour** menu. With Custom selected, you can open the **Custom colour** menu. Select **Palette** to choose your own colour. Ambilight Custom colour is a fixed (non-dynamic) colour setting.

### Separation

To set the difference in colour level between the lights on each side of the TV, select **Separation**. Separation **Off** gives a dynamic but uniform Ambilight colour.

#### TV switch off

To set Ambilight to fade out and switch off a few seconds after you have switched off the TV, select **TV switch off**. Allow Ambilight to fade out and switch off completely before you switch the TV back on again.

#### Scenea lounge light

To always switch off Ambilight when Scenea is switched on, select **Scenea lounge light** and select **Off**.

### Wall colour

The colour of the wall behind your TV can influence the colour effect of Ambilight. To correct this influence, select **Wall colour** and select a colour that matches the wall colour. Ambilight will correct its colours to mix best with the colour of the wall behind the TV.

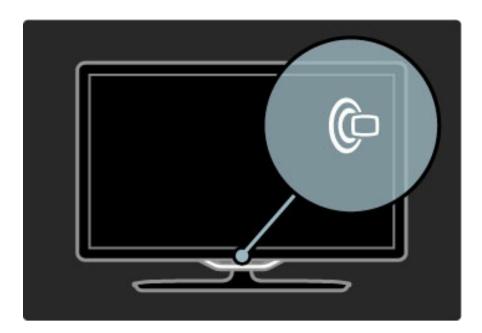
#### Lounge light mood

Read more about Lounge light mood in Help > Use your TV > UseAmbilight > Lounge light mood.

# Lounge light mood

When the TV is on standby, you can switch Ambilight on and create a Lounge light mood in your room.

To switch Ambilight on while the TV is on standby, press on the TV.



To change the Lounge light mood colour scheme, press  $\bigcirc$  on the TV again.

To switch off Lounge light mood, press and hold on the TV for 3 seconds.

You can also set up the colour scheme in the Setup menu. With the TV switched on, press f and select **Setup**. Select **TV settings** > **Ambilight** > **Lounge light mood**. Select the colour scheme with which Lounge light mood will start up.

# 2.6 Net TV

## What is Net TV ?

Net TV offers Internet services and websites tailored for your TV. You can visit popular sites, look at infotainment, rent a movie from a video store or watch a TV show you missed.

### Net TV pages

The most popular websites in your country have tailored their web pages for use on TV. Read the newspaper headlines, watch the latest video hit or check the weather forecast.

#### Net TV programme guide

Once you are connected to Net TV, the TV programme guide uses the Internet to gather its information.

#### Video stores

With Net TV you can rent your favourite movie from an online rental video store.

#### Missed a programme?

If a broadcaster offers this service, you can catch-up with a favourite programme you missed. Watch this programme when it suits you.

Read more about Net TV in the following chapters.

#### New services

New services are added regularly. Consult the Net TV pages from time to time to discover the newly-added services.

#### Specifics

• The availability of Net TV services vary per country.

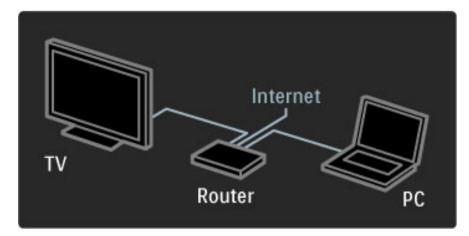
• With Net TV you can also link up to the Internet. You can view any website you like but remember that most Internet websites are not tailored to be viewed on a TV screen and certain plug-ins (e.g. to view pages or videos) are not available on your TV.

- Net TV online services can be added, changed or stopped.
- Net TV shows one page at a time and full screen.
- You cannot download and save files or install plug-ins.

## What you need

To enjoy Net TV, you need to connect the TV to a router with a high-speed connection to the Internet.

### Read Help > Setup > Network.



Once the connection is made, select **Browse Net TV** in the Home menu to start the Net TV on-screen setup.

Read Help > Use your TV > Net TV > First use.



## First use

 Agree to the Terms of Use.
 Register for Net TV.
 Switch on Parental control. Net TV is ready for use.

#### How to register

To register, you need an email address and a PC connected to the Internet. If you skip the registration at first use, you can register from the Net TV Start page later on.

To start the Net TV registration, enter your email address on screen. To open the on-screen keyboard, press **OK** with the text field highlighted. Enter the characters one by one. Select **Register** and press **OK**.

A message will appear if a registration email has been send to your email address. Open the email on your PC and click the link to the registration form. Complete the form and click the button to submit.

On the TV, select **OK** and press **OK** to open the Net TV Start page.

#### Switch on Parental control

The first time you open the Net TV Start page, you can switch on Parental control. If you switch on Parental control, you need to enter a personal lock/unlock code. Enter a 4 digit code as your Net TV lock/unlock code.

Use the number keys on the remote control. Enter the same code again to confirm.

Net TV is ready to use.

#### Registration benefits

When you have registered, your favourite or locked Net TV pages are stored as a back-up. Also, the last 16 web addresses (URLs) you visit are stored. You can share these pages with another Net TV television if you register that TV with the same email address.

When registered, you can restore these selected pages after an accidental reset of Net TV with Clear history.

#### Parental control benefits

With Parental control switched on ...

- you can lock and unlock services and/or categories of services
- some services that are not suitable for children are locked from the start but can be unlocked

#### Parental control specifics

• Only services on the Net TV pages can be locked. Advertisements and Internet websites cannot be locked.

• Services are locked per country. Categories are locked for all countries.

Browse Net TV

To open Net TV, close this Help and press **1**, select **Browse Net TV** and press **OK**. The TV links up to Net TV and opens the Start page.

## To exit Net TV, press $\clubsuit$ and select another activity.



### The ★ Start page

The ★ Start page shows your favourite services and some recommended services. You can browse Net TV from this page.

To return to the  $\bigstar$  Start page, press  $\square$  (Browse).

#### Open a Net TV service

Select a Net TV service with  $\blacktriangle$  or  $\blacktriangledown$ ,  $\blacktriangleleft$  or  $\blacktriangleright$  keys. To open a selected service, press **OK**.

A closing lock animation means that the page you have opened is a secure page.

#### Navigate a Net TV service

Navigating a Net TV service can differ from using another service. You can mainly use the navigation keys and the OK key to browse the service. Some services indicate how to browse their service. To go back one page, press  $\mathbf{\hat{D}}$  (Back).

#### All services

To view the available services for your country, select **Services** and press **OK**.

On this page, you can view all services or view them by category, e.g. **News** or **Entertainment**. To view the services by category, select a category in the column at the left and press **OK**.

#### Options

Press 🗗 (Options) to select the following:

- Lock service
- Mark favourite
- Disable parental control
- Show remote control
- Reload page
- Zoom page
- Security infoClear Net TV memory
- Clear thet i v memor

#### Lock service

To lock a Net TV service, select its icon and press  $\Box$  (Options). Select **Lock service** and press **OK**. The service icon is marked with a  $\Box$ .

To open a locked service, you must enter your 4 digit code. Once you have opened a locked service, you can delete the lock.

#### Mark favourites

To mark a service as a favourite, select the service icon and press (Options). Select Mark favourite and press OK.

You can mark up to 12 services as favourites. All of your favourite services are shown in the  $\bigstar$  Start page. In **III** Services, favourite services are marked with a star  $\bigstar$ .

Only Net TV services can be marked as favourites. Advertisements and Internet websites cannot be marked.

#### Unmark favourites

To Unmark a favourite, select the icon of a favourite service and press 🗗 (Options) and select **Unmark favourite**.

#### Disable parental control

To switch off Parental control, press 🗗 (Options) and select **Disable parental control**. Enter the 4 digit code to disable Parental control.

#### Show remote control

Keys like Play  $\blacktriangleright$ , Rewind  $\blacktriangleleft$  and Fast Forward  $\blacktriangleright$  can be called up with **Show remote control**.

Press (Options) and select **Show remote control**. With these keys on screen, you can operate audio or video players. Select a key and press **OK** to carry out its function. Press **C** (Back) to hide these on-screen keys.

#### Reload page

If something went wrong during the loading of a page, you can try and reload it. Press 🗇 (Options) and select **Reload page**.

#### Zoom page

To zoom an Internet page in or out, press 🖻 (Options) and select **Zoom page**. Use the slider bar to set the enlargement. To scroll through an Internet page, use the navigation keys to jump from highlight to highlight.

#### Security info

To view a page's security information, press  $\ensuremath{\fbox{}}$  (Options) and select Security info.

#### Clear Net TV memory

Warning - this option resets Net TV completely.

To clear the Net TV memory completely, including your Favourite, the Parental control code, passwords, cookies and history, press (options) and select **Clear Net TV memory**.

#### Net TV services for another country

Another country might have other services available. To switch to the services of another country, select **Country :** ... at the bottom right of the page and press **OK**. Select a country and press **OK**.

Koninklijke Philips Electronics N.V. bears no responsibility regarding the content and the quality of the content provided by the content service providers.

#### Internet websites

With Net TV you can also link up to the Internet. You can view any website you like but remember that most Internet websites are not meant to be viewed on a TV screen and certain plug-ins (e.g. to view pages or videos) are not available on your TV.

#### Open an Internet site

To go to an Internet page, select 🚱 Internet and press OK. Using the on-screen keyboard, you can enter the web address you need. Select a character and press OK to enter it in the address line at the top of the page. Once you entered the address, select Go and press OK to load the Internet website.

Use the  $\blacktriangle$  or  $\blacktriangledown$ ,  $\blacktriangleleft$  or  $\blacktriangleright$  keys to navigate to the available links on an open Internet page, press **OK** to go to the link.

#### Internet history

Net TV will automatically add every site you visit to the history list. Later, you can select a site icon in the list and press **OK** to open it. To scroll through the history list, use the navigation keys.

# Clear Net TV history

With a site icon selected in the history list, you can clear the whole list. Press  $\Box$  (Options) and select **Clear history**.

# Video stores

With this TV, you can rent a video from an online video store. 1 Open a video store.

- **2** Select a video.
- 3 Make the online payment.
- **4** Download the video.
- 5 Start watching.

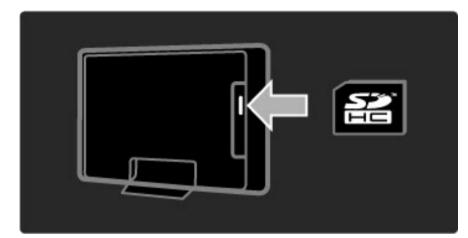
#### What you need

To rent and download a video, you need a high-speed Internet connection to the TV. Read more about connecting to the network in **Help** > **Setup** > **Network**.

You also need an SD memory card to insert in the TV SD card slot.

#### Formatting an SD card

To format an SD memory card as video memory, insert the SD card in the SD slot. The TV will automatically start formatting the SD card. The TV could reject the SD card if the write speed is insufficient for video transfer. Once formatted, leave the card permanently in the slot.



#### View a video store

To view a video store, press  $\clubsuit$ , select Net TV > Video stores and press OK. The Video stores page shows the available stores for your country. To view a store, select its icon and press OK.



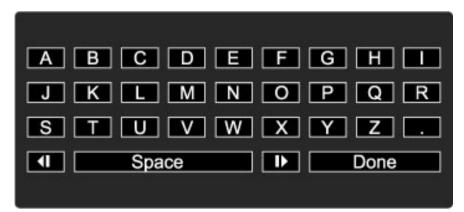
#### Rent a video

To rent a video, select its icon on the video store page and press **OK**. In most cases you can rent a video for 1 day or for a couple of days or even just 1 hour. The way you select and rent a video varies from store to store.

# Payment

The store will ask you to log in or to open a new log in account if you don't already have one. The login might consist of your email address and a personal PIN code. When you are logged in, you can select the payment method, a credit card or a value code in most cases. Consult the video store website for more information on their payment terms. To enter a number code (PIN), use the numbers on the remote control.

To enter an email address, select the text field on the page and press **OK**. Select a character on the keyboard and press **OK** to enter it.



#### Download the video

Once the payment is complete, you can download the video on the video memory. During the download, you can carry on watching the normal programme until the TV notifies you that the video is ready to play. If you cancel a download, you can still download the video until the rental period expires.

#### Start watching

To start watching a downloaded video, press  $\clubsuit$ , select Net TV > Video stores and press OK. With your log in, enter the store were you rented the video and select the video from the list of downloaded videos. Select the video and press OK to play.

# Online TV

Some digital broadcasters offer an Online TV service. With Online TV you can watch a programme you missed. Link up with the broadcasters Online TV page to see what programmes are available.

# What you need

To link up with an Online TV service, you need a high-speed Internet connection to the TV. Read more about connecting to the network in **Help** > **Setup** > **Network**.

# Open Online TV from Net TV

To open an Online TV service from Net TV, press  $\Uparrow$ , select **Browse Net TV** and press **OK**. In the Net TV services, look for the icon of the TV channel that broadcasts the programme you want. Select the service and press **OK**.

# Open Online TV on a channel

To open the Online TV service of a TV channel directly, press the **Red** key. If this service is available, the TV will open the page of the broadcaster.

The availability of Online TV services varies by country.

# 3 More on ...

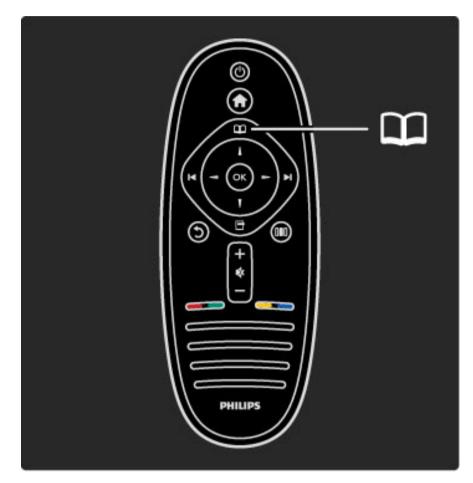
# 3.1 Text

# Text pages

# Open Text

To open Text, while watching TV, press  $\square$  (Browse) and select Text.

To close Text, press **5** (Back).

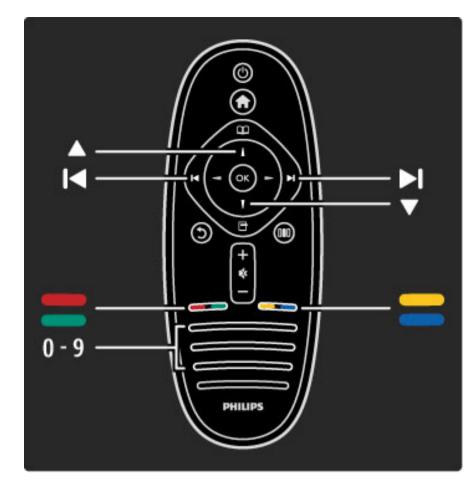


# Select a Text page

To select a page ...

- Enter the page number with the number keys.
- Press ▶I or I◀
- Press ▲ or ▼.

• 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 within Text, press 🗗 (Options) and select **T.O.P. overview**.

# Search Text

You can select a word and scan Text for all instances where this word reoccurs. This a practical way to look for a specific subject.

Open a Text page and press **OK**. Select a word or number with the navigation keys. Now press **OK** again to jump immediately to the next occurrence of this word or number. Press **OK** again to jump to the subsequent occurrence.

To stop the search, press  $\blacktriangle$  until nothing is selected.

# Text from a connected device

Some connected devices that receive TV channels can also offer Text.

To open Text from a connected device, press ♠, select the device and press OK. While watching a channel, press ➡ (Options), select Show remote control and select the ➡ key and press OK. Press > (Back) to hide the remote control keys. To close Text, press > (Back).

# Digital text (UK only)

Some digital TV broadcasters offer dedicated digital text or interactive services on their digital TV channels. These services include normal Text using the number, colour and navigation keys to select and navigate.

To close Digital text, press **5** (Back).

Digital text is blocked when subtitles are broadcast and Subtitle On is set in the Subtitle menu. Select **Subtitles Off** to allow Digital text.

# Text options

In Text, press 🗖 (Options) to select the following:

- Freeze page
- Dual screen
- T.O.P. overview
- Enlarge
- Reveal
- Cycle subpages
- Language

#### Freeze page

To stop the automatic rotation of subpages, press 🗗 (Options) and select **Freeze page**.

# Dual screen / Full screen

To show the TV channel and Text alongside each other, press (Options) and select **Dual screen**. Select **Full screen** to switch back to full screen view.

# T.O.P. overview

To open T.O.P. Text, press 🗗 (Options) and select **T.O.P.** overview.

# Enlarge

To enlarge the Text page for more comfortable reading, press  $\square$  (Options) and select **Enlarge**. To scroll down the page, press  $\checkmark$  or  $\blacktriangle$ .

#### Reveal

To unhide hidden information on a page, press 🖻 (Options) and select **Reveal**.

#### Cycle subpages

To cycle subpage when these are available, press  $\square$  (Options) and select **Cycle subpages**.

#### Language

To switch the group of characters that Text uses to display correctly, press  $\square$  (Options) and select Language.

# Text setup

# Text language

Some digital TV broadcasters have several Text languages available.

To set your primary and secondary Text language, press  $\clubsuit$  > Set up > Channel settings and select Primary or Secondary Text and select your preferred Text languages.

#### 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 it off, select  $\clubsuit$  > Setup > TV settings > Preferences > Text 2.5.

# 3.2 Interactive TV

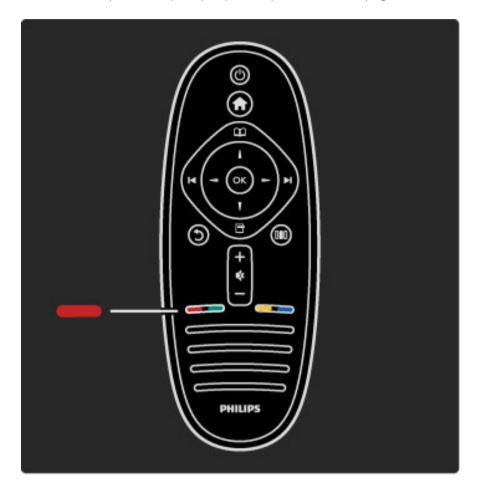
# **Benefits**

Interactive TV can offer additional infotainment or programmes on a digital TV channel. Interactive TV is dependent on the country or broadcast. Benefits range from enhanced text to online TV and much more.

For some iTV services, you need a high-speed connection to the Internet. Read **Help** > **Setup** > **Network**.

# Use iTV

To open iTV, press the **Red** key while watching a digital channel. If interactive TV is available, the Home page of the broadcaster opens. To close iTV, press **1** (Back) repeatedly until the iTV page closes.



# MHP iTV

If the TV is installed for country Italy, MHP (Multimedia Home Platform) is active. The MHP applications are provided by the broadcasters. The MHP application pages offer all kinds of interactivity. You can respond to a program or vote, do online shopping or pay for a video-on-demand program.

To fully enjoy MHP you need a high-speed connection to the Internet. Read more about connecting the TV to the Internet in **Help > Setup > Network**.

# Open MHP pages

When you tune to a TV channel that offers MHP, wait for the MHP icon to fully load the application. To open the MHP pages, press the **Red** colour key or press **Teletext**, depending on the application. To close MHP, press **Exit**.

# Navigate MHP pages

You can use the navigation and colour keys, the number keys and the  $\mathbf{J}$  (Back) key to navigate the MHP pages. You can use the keypad on the remote control as you do for SMS/text messaging to enter text.

# Auto start

The TV is set to load the MHP pages automatically. To avoid the automatic loading, you can switch off the MHP auto start.

# Select MHP applications

Some MHP pages might not launch. If so, you can try to launch the application from the MHP application list.

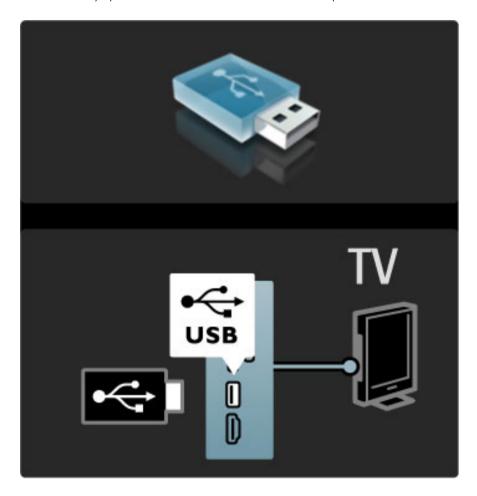
Press (Browse), select **MHP applications** and select **Disable MHP auto start**. This setting makes the individual application selectable. Select the desired application in the list (if it is available) and press **OK** to launch the application.

# 3.3 Multimedia

# Browse USB

You can view photos or play your music and videos from a USB memory device.

Insert a USB device in the USB connection on the left-hand side of the TV while the TV is switched on. The TV detects the device and opens a list showing its content. If the list does not appear automatically, press  $\widehat{\mathbf{n}}$ , select **Browse USB** and press **OK**.



To close Browse USB, press  $\clubsuit$  and select another activity or disconnect the USB device.

# View photos

To view photos, select a photo in the list and press **OK**. If there are more photos in the folder, the TV starts a slideshow of these photos. To stop, press **T** (Options) and select **Stop**.

To pause or play the slideshow again, press **OK**. To view the next photo, press ►I. To view the previous photo, press ►.

# Options for photos

Press  $\square$  (Options) to select the following:

- Show info
- Stop
- Play once / Repeat
- Rotate
- Shuffle on / off
- Slideshow speed
  Slideshow transition
- Slideshow transitionSet as Scenea

# Shuffle on

Plays the files randomly.

#### Set as Scenea

Sets the current photo as a wallpaper photo for Scenea.

# Play videos or music

To play videos or music, select the file in the list and press OK. If there are more music or video files in the folder, the TV plays the files one after the other. To stop, press  $\Box$  (Options).

#### More on ... / Multimedia

To pause or play, press **OK**.

- To play the next file in the folder, press  $\blacktriangleright$ .
- To play to the previous file, press  ${lackslash 4}$  .
- To fast forward, press  $\blacktriangleright$ .
- To rewind, press  $\blacktriangleleft$ .

# Options for music and videos

- Press 🖬 (Options) to select the following:
- Stop
- Play once / Repeat
- Shuffle on / off

# Music with photos

You can play music and show photos at the same time. You must start the music first then the photos. **1** Select a folder with music files and press **OK**.

- 2 Select a folder with photo files and press OK.
- To stop, press 🗗 (Options) and select **Stop**.

#### Mute screen

If you only listen to music, you can mute the TV screen to save energy.

To mute the screen, press the **Green** key, select **Mute screen** and press **OK**. To switch the screen back on, press any key on the remote control.

See the list of compatible playback formats in  ${\rm Help} > {\rm Specifications} > {\rm Multimedia}.$ 

# Browse PC

You can view photos or play your music and videos from a PC in your home network.

#### What you need

To browse these PC files, you need to connect the TV to your home network. You also need to set the PC media server software to share the files with the TV.

Read more about connecting to a network in **Help** > **Setup** > **Network**.

# Browse PC

To browse your PC files, press **1**, select **Browse PC** and press **OK**. If the network is not yet installed when you select Browse PC, Network installation starts automatically. Follow the instructions on screen.

To close Browse PC, press f and select another activity.

To select, view and play your files, read Help > More on ... > Multimedia > Browse USB.

See the list of compatible playback formats in  ${\rm Help} > {\rm Specifications} > {\rm Multimedia}.$ 

# Scenea

With Scenea, you can set a photo as a painting on your TV screen. Select your favourite photo from your collection.

To open Scenea, press **1**, select **Scenea** and press **OK**. If you did not yet select a photo of your own, a preset photo is shown. To close the Scenea photo, press a key on the remote control.



#### Select a photo for Scenea

**1** Select a photo from a connected USB device or from a connected PC. This photo must be in JPEG format.

**2** With the photo highlighted in the Browse USB or Browse PC list, press (Options), select **Set as Scenea** and press **OK**. By agreeing to overwrite the current photo, the new photo is set.

# Scenea lounge light

To switch off Ambilight when Scenea is on, press **DID** (Adjust). Or press **(**Ambilight) on the front of the TV.

#### Energy saving

To switch the TV to the energy conscious setting, press **DD** (Adjust), select **Smart picture** and press **OK**. Select **Energy saving**.

#### Specifics

With Scenea switched on, the TV will automatically switch to standby after 4 hours. You will be warned 1 minute before switch off. This automatic switch to standby prevents unnecessary energy use in case you forget that Scenea is on.

If the Sleep timer is set, the TV will also switch to standby after the set time has elapsed. Scenea has no sound.

# 3.4 Locks and timers

# Child locks

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

#### Parental rating

Some digital broadcasters have programmes rated. When the rating is equal or higher than the rating you have set for your child's age, the programme will be blocked.

To watch a blocked programme you must enter the Child lock code. The parental age rating is set for all channels.

#### Set an age rating

# Press **and select Setup** > Channel settings and select Child lock > Parental rating.

To select an age rating, you must first enter your 4 digit child lock code. If no child lock code is set, you can set the code now.

When the code is entered, you can select the age rating. When the rating of a programme is equal or higher than the rating you have set for your child's age, the programme will be blocked. The TV will ask for the code to unblock the programme. For some operators, the TV only blocks programmes with a higher rating.

#### Lock a channel

To lock a channel, press  $\clubsuit$  and select Setup > Channel settings and select Child lock > Channel lock. In the list of channel numbers, select a channel and press OK to lock a channel.

In the list, a locked channel is marked with an X. Now, you can select another channel to lock or unlock. The lock is activated as soon as you close the menu.

You cannot lock programmes from connected devices.

#### Change code

To change the current code, press  $\clubsuit$  and select Setup > Channel settings and select Child lock > Change code. Enter the current code and then enter the new code twice. The new code is set.

#### Forgotten your code ?

To override the code if you forget it, enter 8888.

# Sleep timer

With Sleep timer you can switch the TV to standby at a specified time.

To set the sleep timer, press  $\clubsuit$  > Setup > TV settings > Preferences > Sleep timer. With the slider bar you can set the time up to 180 minutes in increments of 5 minutes. If set to 0 minutes, Sleep timer is switched off.

You can always switch off your TV earlier or reset the time during the countdown.

# 3.5 Subtitles and languages

# **Subtitles**

Programme subtitles are available most of the time. You can set subtitles to be constantly displayed. How to set constant subtitles depends on whether a channel is analogue or digital. For digital channels, a preferred subtitle language can be set.

# For analogue channels

To show subtitles of a channel, switch to the channel and press (Browse), select **Text** and press **OK**. Enter the number of the page that shows subtitles, usually 888, and press **O** (Browse) again to close Text. Subtitles will be shown if available. Each analogue channel must be set up separately.

# For digital channels

There is no need to activate subtitles in Text for digital channels. You can set a preferred primary and secondary subtitle language. If these subtitle languages are not available for a channel, you can select another available subtitle language.

To set the primary and secondary subtitle language, press  $\clubsuit$  and select Setup > Channel settings and select Languages > Primary and Secondary subtitles.

To select a subtitle language when none of your preferred languages is shown, press 🗖 (Options), select **Subtitle language** and select a language you want temporarily.

# Subtitle menu

To open the subtitle menu, press  $\Box$ .



In the Subtitle menu, you can switch subtitles **On** or **Off**. Select **On during mute** to show subtitles only when the sound is muted with **&** .

# Audio languages

Digital TV channels can broadcast audio that transmits several languages for a program. You can set the TV to switch to your preferred language if it is available.

To set your preferred audio language, press f and select Setup > Channel settings and select Languages > Primary and Secondary audio. The TV will automatically switch to the languages you set, if the language is being broadcast.

To check if an audio language is available, press 🗖 (Options) and select **Audio language**. You can select another audio language from the list.

Some digital TV channels broadcast special audio and subtitles adapted for people who are hearing or visually impaired. Read **More on** ... > **Universal access**.

# 3.6 Universal access

# Switch on

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

#### Switch on

If you did not switch on Universal access at first use, you can still switch it on in Setup.

To switch on Universal access, press  $\clubsuit$  > Setup > TV settings > Preferences > Universal access. Select On and press OK.

With Universal access switched on in Setup, the Universal access option is added in the Options menu. With Universal menu in the Options menu, you can set specific settings for hearing and visually impaired people.

# Hearing impaired

Some digital TV channels broadcast special audio and subtitles adapted for hearing impaired people. With Hearing impaired switched on, the TV automatically switches to the adapted audio and subtitles, if available.

#### Switch on

To switch on Hearing impaired, press 🗗 (Options), select Universal access and press OK. Select Hearing impaired, select On and press OK.

To check whether a hearing impaired audio language is available, press  $\bigcirc$  (Options), select **Audio language** and look for an audio language marked with a  $\bigcirc$ .

If Universal access does not appear in the Options menu, switch on Universal access in the Setup. Read **Help** > **More on** ... > **Universal access** > **Switch on**.

# Visually impaired

In some countries, some digital TV channels broadcast special audio adapted for visually impaired people. The adapted audio has extra commentary.

#### Switch on

To switch on Visually impaired, press  $\Box$  (Options), select **Universal** access and press **OK**. Select **Visually impaired** and select **On** or, if available, select the speakers the adapted audio should be played from. If available, the TV will play the visually impaired audio.

#### Volume - Visually impaired

If available, you can set the volume of the extra commentary.

To check whether a visually impaired audio language is available, press  $\Box$  (Options), select **Audio language** and look for an audio language marked with a  $\checkmark$ .

If Universal access does not appear in the Options menu, switch on Universal access in the Setup. Read **Help** > **More on** ... > **Universal access** > **Switch on**.

# Key beep

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

#### Switch on

To switch on Key beep, press (Options), select **Universal access** and press **OK**. Select **Key beep** and select **On**.

If Universal access does not appear in the Options menu, switch on Universal access in the Setup. Read Help > More on ... > Universal access > Switch on.

# 4 Setup

# 4.1 Picture, Sound, Ambilight

# Smart settings

You can adjust each Smart setting with the settings in Picture or Sound in Setup, TV settings. Adjust the brightness for a particular Smart picture or adjust the bass for a Smart sound.

To return to the original smart setting values, undoing the adjustments you made, first set up the TV in the smart setting you want to reset. Then press  $rac{1}{2} > Setup > TV$  settings, select Reset, press OK and confirm.

Read more about Smart picture and sound settings in Help > Useyour TV > Watch TV > Smart picture and sound settings.

# Picture

In the Picture menu, you can adjust all picture settings individually.

To open the Picture settings, press  $\clubsuit$  > Setup > TV settings > Picture.

#### Contrast

Sets the contrast level of the picture.

#### Brightness

Sets the brightness level of the picture.

• Colour Sets the level of colour saturation.

#### • Hue

If NTSC is broadcast, hue compensates the colour variations.

#### Sharpness

Sets the level of sharpness of fine detail.

#### Noise reduction

Filters out and reduces the image noise in the picture.

#### • Tint

Sets the colours to **Normal**, **Warm** (reddish) or **Cool** (bluish). Select **Custom** to set up your own personal settings in the Custom menu.

#### • Custom tint

Use the slider bar to set the colour temperature of the picture.

#### • Perfect Pixel HD

Controls the advanced settings of the Perfect Pixel HD Engine. — **Perfect Natural Motion** removes motion judder and reproduces smooth movement, especially in movies.

— 200 Hz Clear LCD / 100 Hz Clear LCD gives a superior motion sharpness, better black level, high contrast with a flicker-free, quiet image and a larger viewing angle.

--- Super resolution enables superior sharpness, especially on lines and contours in the picture.

- Perfect contrast sets the level at which the TV automatically enhances the details in the dark, middle and light areas of the picture.

— **Dynamic backlight** sets the level at which power consumption can be reduced by dimming the brightness intensity of the screen. Choose for the best power consumption or for the picture with the best brightness intensity. - MPEG artefact reduction smooths the digital transitions in the picture.

--- Colour enhancement makes the colours more vivid and improves the resolution of details in bright colours.

— **Gamma** is a non-linear setting for picture luminance and contrast. Use the slider bar to set a higher or lower gamma value.

#### PC mode

Sets the TV to the ideal pre-defined computer setting if a computer has been connected.

• Light sensor

Adjusts the picture and Ambilight settings automatically to the lighting conditions of the room.

• Picture format

#### Read Help > Use your TV > Watch TV > Picture format.

# • Screen edges

Slightly enlarge the picture to hide distorted edges.

#### • Picture shift

Move the picture up / down or left / right with the cursor keys.

# Sound

In the Sound menu, you can adjust all sound settings individually.

To open Sound settings, press  $\clubsuit$  > Setup > TV settings > Sound.

#### • Bass

Sets the level of low tones in the sound.

Treble

Sets the level of high tones in the sound.

• Surround Sets the surround sound effect from internal speakers.

#### • Headphones volume

Sets the volume for the headphone connection of the TV.

• Auto volume levelling

Reduces sudden volume differences like at the beginning of adverts or when switching from one channel to another.

# • Balance

Sets the balance of the left and right speakers to best fit your listening position.

# Ambilight

Read the chapter Ambilight in Help > Use your TV > Ambilight.

# Eco settings

Eco settings bundle the TV settings that help the environment.

While watching TV, press the **Green** key to open **Eco settings**. Active settings are marked with a  $\mathcal{U}$ . Press again to close.

#### Energy saving

This Smart picture setting sets the picture, together with Ambilight, in the most ideal energy conscious setting. To switch on, select **Energy saving** in Eco settings and press **OK**.

To switch off Energy saving, select another Smart picture in the DDD Adjust menu.

# Mute screen

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

**Light sensor** The built-in light sensor automatically adjusts the picture, together with Ambilight, to the lighting conditions of the room. To switch on, select **Light sensor** and press **OK**. To switch off, press **OK** again.

# 4.2 Channels

# Reorder and rename

You can reorder and rename channels in the Channel list.

To reorder or rename a channel, read  $Help > Use your TV > Menus > \square$  Browse.

# Update channels

On first use, the TV installed all channels in the Channel list. If the TV installed digital channels, the TV can automatically update the Channel list with new channels. You can also start an update of the Channel list yourself. The update is for digital channels only.

# Automatic channel update

Once a day, at 6 AM, the TV updates the channels and stores new channels. Empty channels are removed. For new or removed channels, 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, press  $\clubsuit$  > Setup > Channel settings and press OK. Select Channel installation > Channel update message and select Off.

To switch off the automatic channel update, press  $\clubsuit$  > Setup > Channel settings and press OK. Select Channel installation > Automatic channel update and select Off.

# Start an update

# DVB-T or DVB-C

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 will have selected one or the other with the channel installation on first use.

If you want to change the DVB setting to start a new channel installation, press **A** > **Setup** > **Channel settings** and press **OK**. Select **Channel installation** > **Antenna or Cable DVB** and press **OK**. Select the DVB setting you want.

# 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, like a symbol rate or a frequency, enter these values when the TV asks for them during installation.

# DVB-T + DVB-C

You can set up your TV for DVB-T and DVB-C. Install one system followed by the other. When both installations are complete, the Channel list will show both DVB-T and DVB-C channels.

# Reinstall

On first use, the TV installed all channels in the Channel list. You can redo this full installation to reset your language, country and install all available TV channels.

# Full installation

To reinstall the TV, press **1** > **Setup** > **Search for channels** and press **OK**. Select **Reinstall channels** and press **OK**. Press **Start**. The update can take a few minutes. Follow the instructions on screen.

You can reorder and rename channels in the Channel list.

# Reception quality

If you receive digital TV broadcasting (DVB), you can check the quality and signal strength of a channel. If you use an antenna, you can reposition the antenna to try and improve the reception.

To check the reception quality of a digital channel, switch to the channel and press  $\clubsuit$  > Setup > Channel settings and press OK. Select Channel installation > Digital : reception test and press OK.

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

To enter a specific digital frequency yourself, select the frequency, position the arrows on a number with  $\blacktriangleright$  and  $\blacktriangleleft$  and change the number with  $\blacktriangle$  and  $\blacktriangledown$ . To check the frequency, select **Search** and press **OK**.

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

# Manual installation — Analogue

Analogue TV channels can be manually tuned in channel by channel.

To install analogue channels manually, press  $\clubsuit$  > Setup > Channel settings and press OK. Select Channel installation > Analogue : manual installation and press OK.

# 1 System

To set up the TV system, select **System** and press **OK**. Select your country or part of the world where you are now.

# 2 Find channel

To find a channel, select **Find 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**.

# 3 Fine tune

To fine tune a channel, select **Fine tune** and press **OK**. You can fine tune the channel with  $\blacktriangle$  or  $\blacktriangledown$ . If you want to store the found channel, select **Done** and press **OK**.

# 4 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 find all available analogue TV channels.

# **Clock settings**

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, press  $\clubsuit$  > Setup > TV settings > Preferences > Clock and select Country dependent. Select Daylight saving and select the appropriate setting. To set the time and date manually, select Manual. Then select Time or Date.

# 4.3 Network

# **Benefits**

# Browse PC

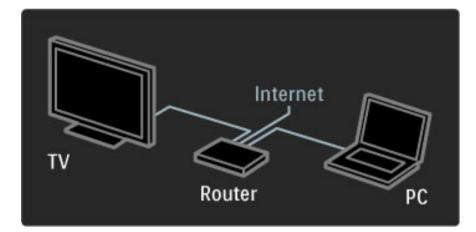
If you connect the TV to a home network, you can play photos, music and videos from your computer or storage device. Once the network is installed on the TV, you can find and play the files from your PC on the TV screen.

# Net TV

If you connect the TV to a home network, you can link up the TV to Net TV. Net TV offers Internet services and websites tailored to your TV. Play music and videos, consult infotainment, rent movies and much more. Once the network is installed, you can enjoy the best of the Internet for your TV.

# What you need

To connect the TV to a home network and Internet, you need a router in your home network. The router must be set to DHCP server on. Use a router with a high-speed connection to the Internet.



If you use a wired connection to the router you need a network (Ethernet) cable.

The TV uses a DLNA-certified protocol. You can use a computer with Microsoft Windows XP or Vista, Intel Mac OSX or Linux as the operating system.

# Find your PC files

To select your PC files on screen, you need recent media server software on your computer, like Windows Media Player 11 or similar. To find your files on the TV, some media server software must be set up to share the PC files with the TV.

See the list of supported media server software, read Help > Specifications > Multimedia.

# Wired installation

Connect the router to the TV and switch on your router before you start the network installation.

To start the network installation, press  $\clubsuit$ , select Setup > Connect to network and press OK. Follow the instructions on screen.

The TV constantly searches for a network connection. The router must be set to DHCP server on.

If asked for, agree to the End User licence Agreement.

Read more about how to connect in Help > Connections > Network > Wired.

# Network settings

To open the Network settings, press  $\clubsuit$  > Setup > Network settings and press OK.

You can view the network type, IP and MAC address, the signal strength, speed and encryption method etc. You can set DHCP and Auto IP, the IP configuration settings, DMR and the TV network name.

# 4.4 Devices

# EasyLink HDMI-CEC

With the TV remote control you can operate devices that have EasyLink (HDMI-CEC) and are connected with an HDMI cable. Devices with EasyLink automatically show their activity in the Home menu. The TV comes with EasyLink switched on.

With an EasyLink device connected, EasyLink offers the following:

# • One touch play

Insert a disc and press Play on the device. The TV switches on from standby and starts playing the disc.

# • System standby

Press  $\bigcirc$  on the remote control to switch all EasyLink devices to standby.

Make sure that all HDMI-CEC settings are properly set up on the device. EasyLink and EasyLink Remote control 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 of name are: Anynet, Aquos Link, Bravia Theatre Sync, Kuro Link, Simplink and Viera Link. Not all brands are fully compatible with EasyLink.

# EasyLink Remote control

With EasyLink Remote Control, the TV remote control can operate the device you are watching on TV. The device must have EasyLink (HDMI-CEC) and have it switched on. The device must also be connected with an HDMI cable.

With an EasyLink device connected, select the device (the activity) and the TV remote control will now operate some or all of the functions of the device.

To switch back to TV, select **Watch TV** in the Home  $\Uparrow$  menu and press **OK**.

# Switch off EasyLink Remote Control

To switch off EasyLink Remote Control, press Home  $rac{l} > Setup >$ TV settings and select EasyLink > EasyLink Remote Control and select Off.

Read more about EasyLink in Help > Setup > Devices > EasyLink HDMI-CEC.

# Add a new device

Devices connected with EasyLink (HDMI-CEC) automatically show their activity in the Home menu. A single device can add several activities. The device must be connected with an HDMI cable. If your connected device does not appear in the Home menu, on the device EasyLink may be switched off.

If your connected device does not have EasyLink (HDMI-CEC) or is not connected with an HDMI cable, you need to manually add your device with **Add your devices** in the Home menu.

# Add your devices

In the Home menu, select **Add your devices** and press **OK**. Follow the instructions on screen.

The TV asks you to select the device and the connection to which the device is connected.

The device or its activities are now added to the Home menu.

# Rename a device

To rename an added device or activity, press  $\Box$  (Options) and select **Rename**. Use the keypad on the remote control as you do for SMS/text messaging to enter the new name.

#### Delete a device

To delete a device or activity from the Home menu, select the item and press 🖻 (Options) and then select **Remove this device**.

If the device or activity, keeps appearing in the Home menu after you deleted it, switch off the EasyLink setting on the device to prevent this automatic pop-up appearing again.

# Sound

With an audio system connected, EasyLink also offers the following:

#### • System audio control

If you connect an audio system, you can listen to the audio from the TV through the audio system. The TV speakers are muted automatically.

#### • Surround mode

With a recent Philips device selected in the Home menu, you can change the surround sound setting of the device on the TV. To change this setting, press **DID** (Adjust), select **Surround mode** and press **OK**. On **Next mode**, press **OK** to toggle through the available modes on the device.

#### • Smart sound

With a recent Philips device selected in the Home menu, you can change the Smart sound setting of the device on the TV. To change this setting, press **DID** (Adjust), select **Smart sound** and press **OK**. Select a sound mode from the list.

#### • Screen off

If a recent Philips device that is selected in the Home menu is only sending audio to the TV, the device may suggest switching off the TV screen. To switch off the screen when this message appears, select **Screen off** and press **OK**. To switch the screen back on, press **A**.

#### • TV speakers

The TV speakers mute automatically when an EasyLink audio device is selected in the Home menu. You can also set the TV speakers to always or never play sound or set the TV to always start up the audio device and play sound from the device.

To set the TV speakers, press  $\clubsuit$  > Setup > TV settings > EasyLink > TV speakers. Select EasyLink Autostart only if you always want to play sound from the audio device.

# Audio to Video sync

With a Home Theatre System (HTS) connected to the TV, the picture on TV and the sound from the HTS should be synchronized. A mismatch is visible in scenes with people talking. When they finish sentences before their lips stop moving.

# HDMI-ARC

Latest Home Theatre Systems with built-in disc players adjust the audio to video sync automatically when they are connected to the HDMI-ARC connections (HDMI - Audio Return Channel).

#### Audio sync delay

Other Home Theatre Systems might need an audio sync delay to synchronize. 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 if the HTS has this delay set up for all its output connections. To switch off Audio Out delay, press and select Setup > TV settings > Preferences > Audio Out delay. Select Off and press OK.

If you cannot set up a delay on the HTS or its maximum setting is insufficient, you can switch off the Perfect Natural Motion picture processing of the TV. To switch off Perfect Natural Motion, press and select TV settings > Picture > Perfect Natural Motion. Select Off and press OK.

# Auto subtitle shift

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

To switch off Auto subtitle shift, press  $rac{l}{l}$  > Setup > TV settings > EasyLink > Auto subtitle shift. Select Off.

# Pixel Plus link

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

To switch off Pixel Plus link, press  $\clubsuit$  > Setup > TV settings > EasyLink > Pixel Plus link. Select Off.

# 4.5 Software

# Current version

To view the current TV software version, press  $\clubsuit$  > Setup > Software settings and press OK. Select Current software info and read Version: . . ..

# Update from Internet

If the TV is connected to the Internet, you may receive a message from Philips to update the TV software. You need a high-speed Internet connection.

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

You can also look for new updates yourself. To look for an update, press  $\clubsuit$  > Setup > Update software and press OK. Follow the instructions on screen.

When the update is complete, the TV switches itself off and back on again automatically. Wait for the TV to switch itself back on. Do not use the Power switch 0 on the TV.

# Update with USB

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

1 Start

- **2** Identify
- **3** Download
- **4** Update TV

# 1 Start the update on TV

To start the software update, press  $\uparrow$  > Setup > Update now.

# 2 Identify the TV

Insert the USB memory on the side of the TV, select **Start** and press **OK**. An identification file is written on the USB memory.

# 3 Download the TV software

Insert the USB memory in your PC. On the USB memory, 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. Do not place this file in a folder.

#### 4 Update the TV software

Insert the USB memory in 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 from the TV

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

At the end of the update, the message **Operation succesful** appears on screen. Remove the USB memory and press on the remote control.

Do not . . .

• press 🕁 twice

• use the 🖒 switch on the TV

The TV switches itself off (for 10 seconds) and then back on again. Please wait.

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

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

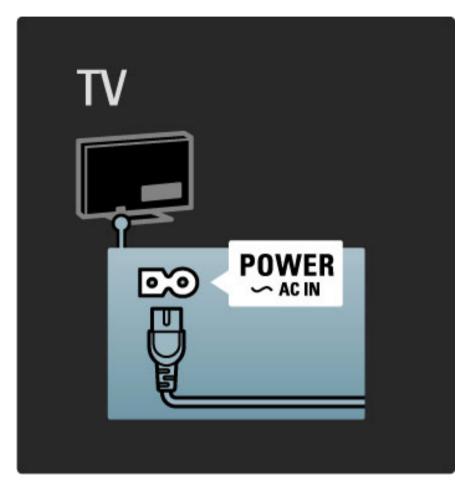
# 5 Connections

# 5.1 First connections

# Power cable

Insert the power cable in the power socket of the TV.

When disconnecting the power cable, always pull the plug, never the cable.



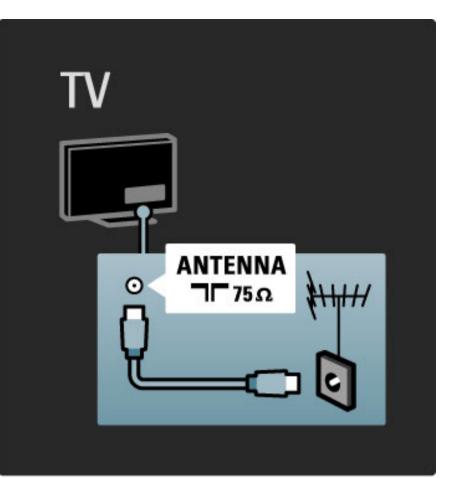
Although this TV has a very low standby power consumption, switch off the TV with the power switch to save energy if you do not use the TV for a long period of time.

Read more about the power switch in Help > To begin > Keys on the TV > Power switch.

Make sure the power cable is securely inserted in the TV. Make sure that the power plug in the wall socket is accessible at all times.

# Antenna cable

Locate the antenna connection at the back of the TV. Insert the antenna cable securely in the Antenna  $\neg \Box$  socket.



# 5.2 About cables

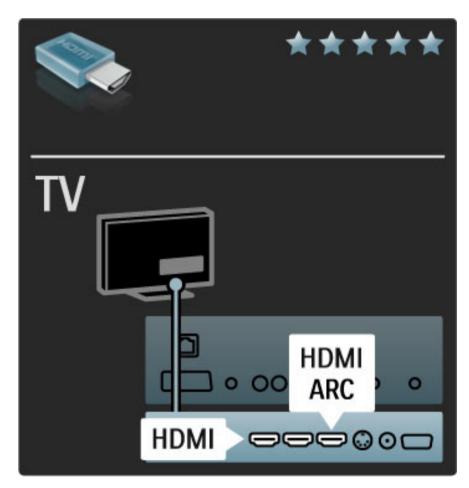
# Cable quality

Before you connect devices to the TV, check which connectors are available on the device. Connect the device to the TV with the highest quality connection available. Good quality cables ensure a good transfer of picture and sound. Read the other chapters of **About cables**.

The connections diagrams shown in Help > Connections > Connect devices are recommendations. Other solutions are possible.

# HDMI

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) TV signals. An HDMI cable transfers picture and sound signals in only one direction. Do not use an HDMI cable longer than 5m.



# EasyLink HDMI-CEC

If your devices are connected with HDMI and have EasyLink, you can operate them with the TV remote control. Read more about EasyLink in Help > Setup > Devices > EasyLink HDMI-CEC.

# HDMI-ARC

If you have a Home Theatre System with an HDMI-ARC (Audio Return Channel) connection, you can connect this device with the TV with only a HDMI cable. Use the HDMI1 ARC connection.

You can skip the audio cable that is added normally (the cable that connects the TV Digital audio Out to the device Digital audio In). The return audio connection in this HDMI-ARC connector is built-in. You do not need a special HDMI cable.

You can leave the ARC channel switched on if you use the additional digital audio cable. Still you can switch off HDMI-ARC. To switch off the ARC in the HDMI 1 connection, press r > Setup > TV settings > EasyLink > HDMI 1 ARC, select Off and press OK.

# 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 to **Audio In VGA/HDMI** for sound, on the back of the TV.

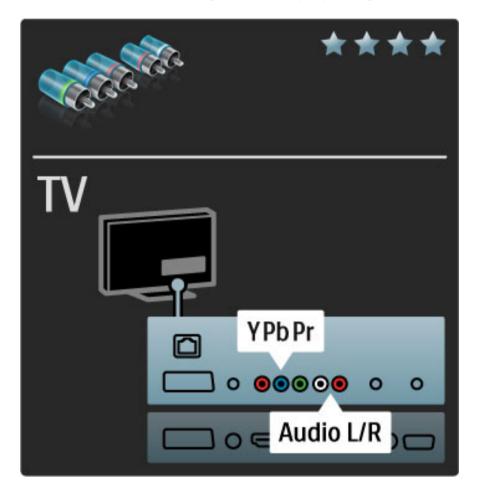
# Copy protection

A DVI and HDMI cable support HDCP (High-bandwidth Digital Contents 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 Managament).

# Y Pb Pr

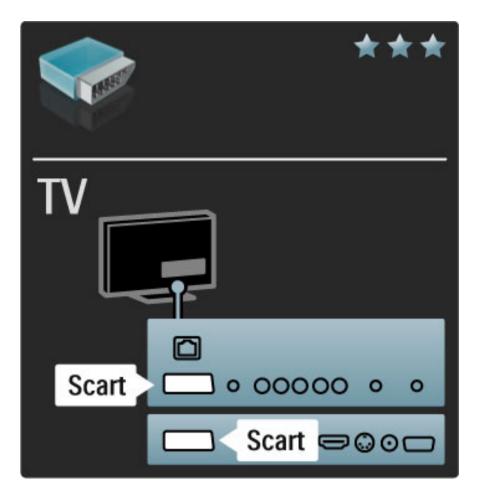
Use the Component Video YPbPr connection together with an Audio Left and Right connection for sound.

Match the YPbPr connector colours with the cable plugs when you connect. YPbPr can handle High Definition (HD) TV signals.



# Scart

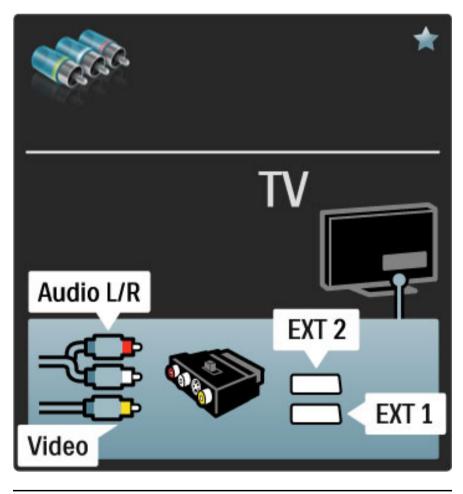
A scart cable combines video and audio signals. Scart connectors can handle RGB video signals but cannot handle High Definition (HD) TV signals.



# 

# Video

If you have a device with only a Video (CVBS) connection, you need to use a **Video to Scart adapter** (not supplied). You can add the Audio L/R connections. Connect the adapter to a Scart connection of the TV.



# VGA

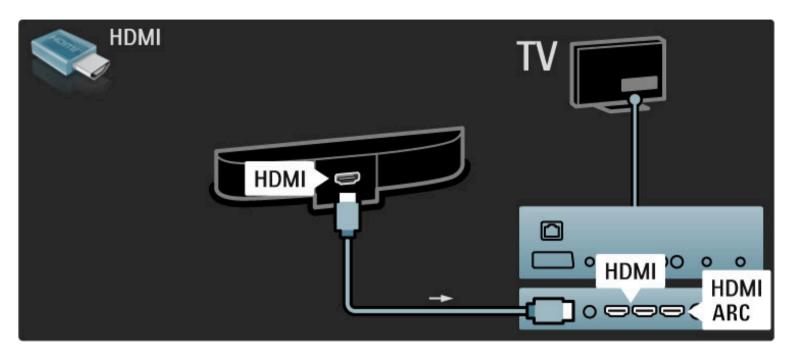
Use a VGA cable (DE15 connector) to connect a computer to the TV. With this connection you can use the TV as a computer monitor. You can add an Audio L/R cable for sound.

To connect a computer with the VGA connection, read **Help** > **Connections** > **Connect more devices** > **TV as PC monitor**.

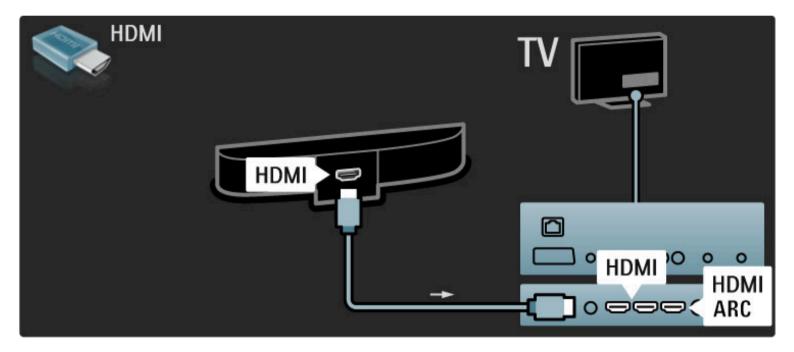
# 5.3 Connect devices

# SoundBar

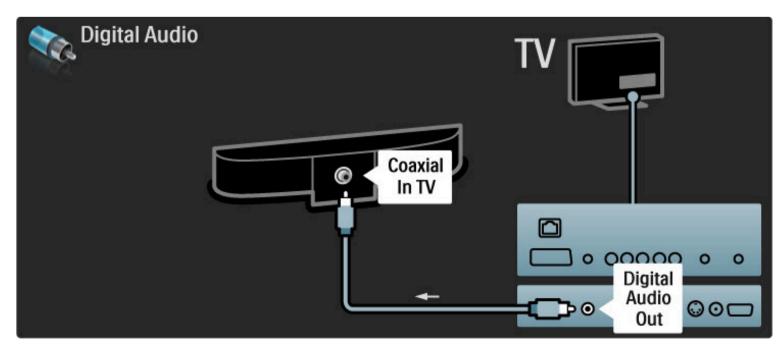
Use an HDMI cable to connect the device to the TV.



If you use the HDMI-ARC connections on both TV and device, no other cable is needed. If not, read on.

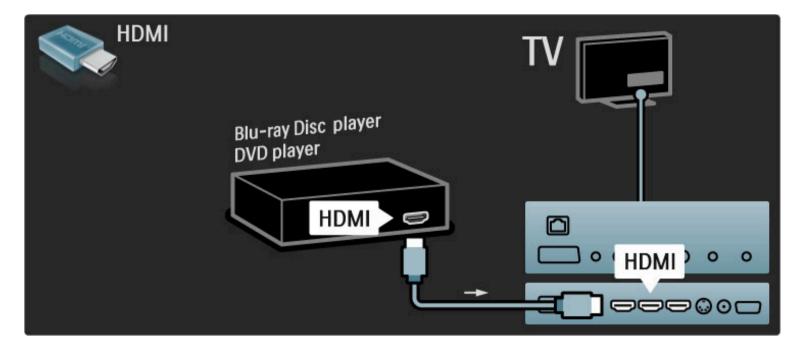


If you do not use the HDMI-ARC connection, add a digital audio cable (cinch coaxial).



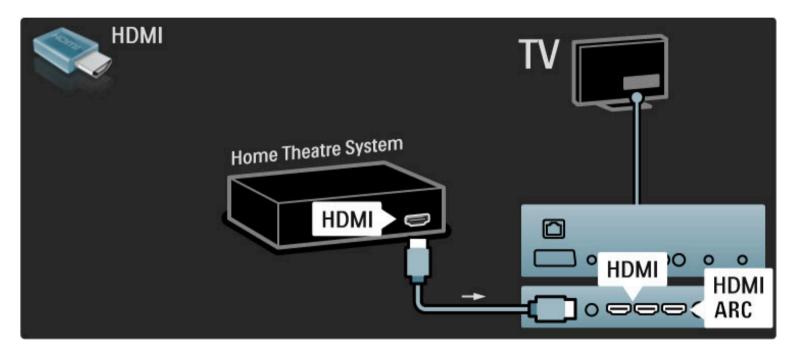
# Blu-ray Disc / DVD player

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

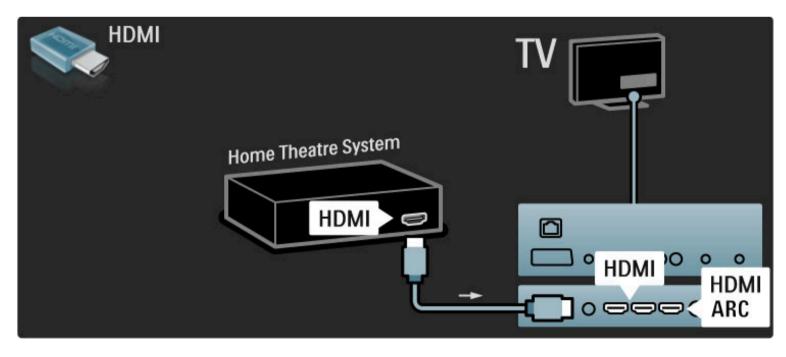


# Home Theatre System with disc player

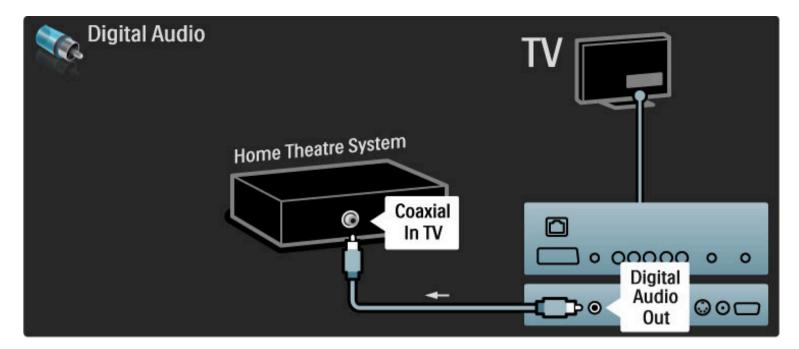
Use an HDMI cable to connect the device to the TV.



If you use the HDMI-ARC connections on both TV and device, no other cable is needed. If not, read on.



If you do not use the HDMI-ARC connection, add a digital audio cable (cinch coaxial).



# Audio to Video synchronisation (sync)

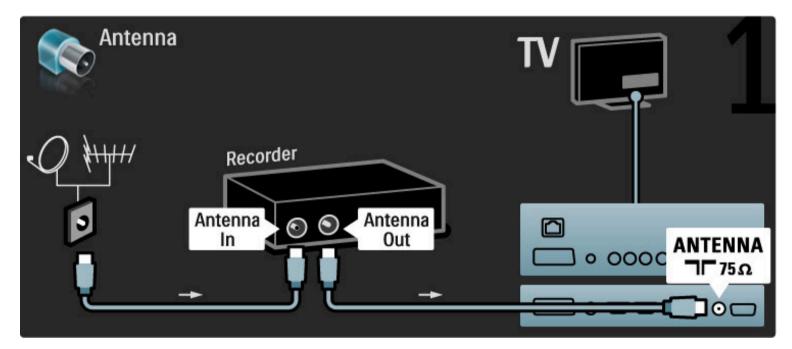
If the sound does not match with the video on screen, you can set a delay on most DVD Home Theatre Systems to match the sound and video.

Read more about Audio to Video sync in Help > Setup > Devices > Audio to Video sync.

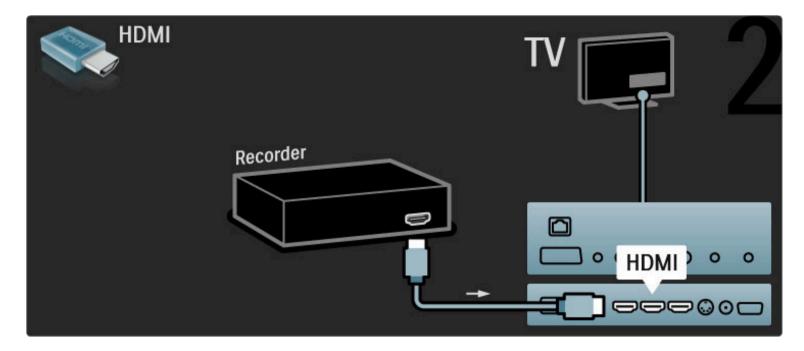
Do not connect the audio signal from a DVD player or other device directly to the Home Theatre System. Always route the sound through the TV first.

# Recorder

Use 2 antenna cables to connect the antenna to the device and the TV.

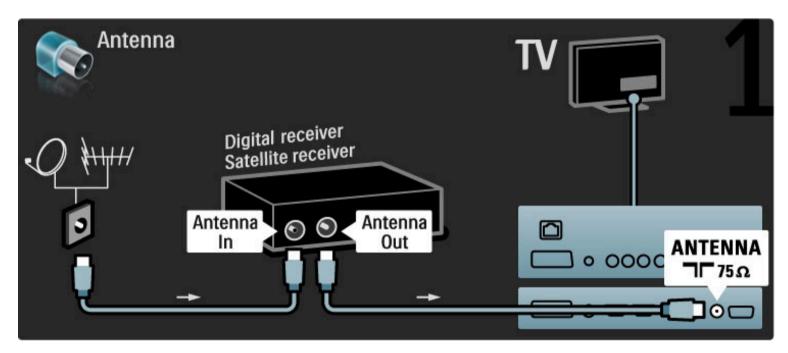


Add an HDMI cable to connect the device to the TV.

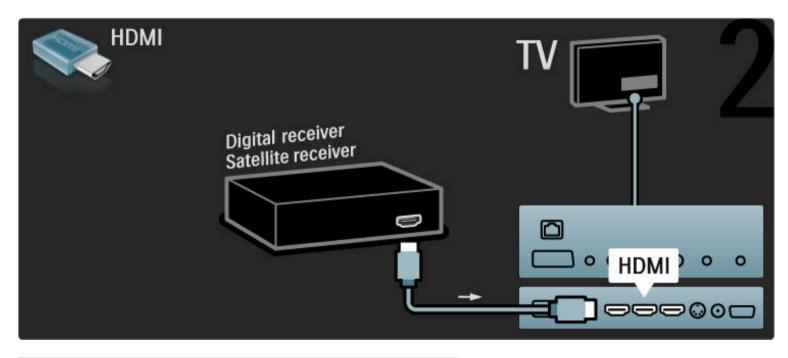


# Digital receiver / Sat.

Use 2 antenna cables to connect the antenna to the device and the TV.

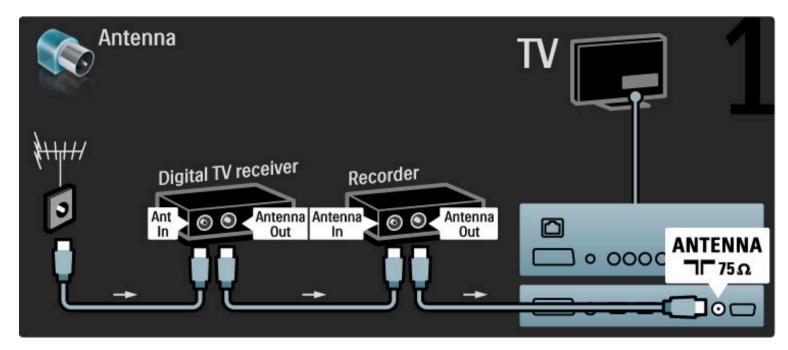


Add an HDMI cable to connect the device to the TV.



# Dig. receiver + Disc Recorder

First, use 3 antenna cables to connect the devices to the TV.



Then use an HDMI cable to connect the digital receiver to the TV.

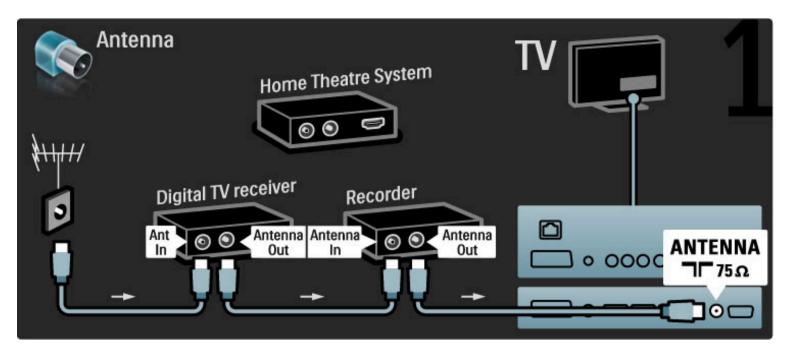
HDMI		TV <b>P</b>
Digital TV receiver	Recorder	HDMI ) • •

Finally, use an HDMI cable to connect the Disc Recorder to the TV.

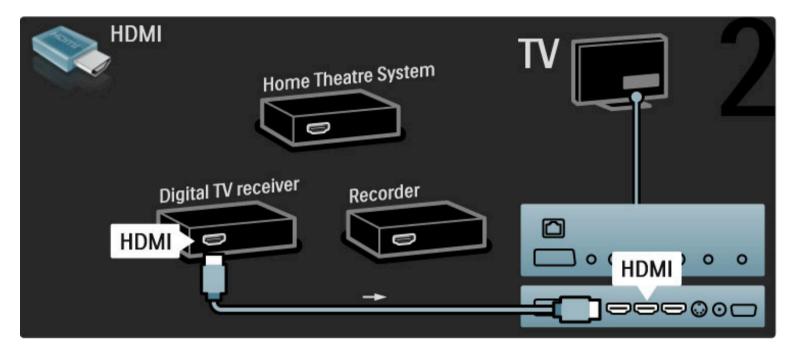
HDMI	TV IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
Digital TV receiver	

Dig. receiver + Disc-R + Home Theatre

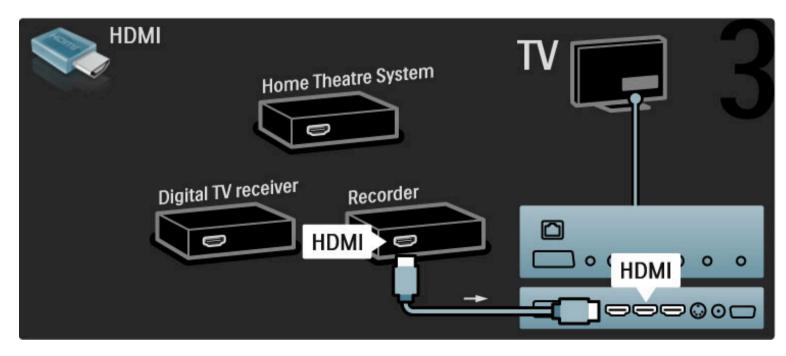
First, use 3 antenna cables to connect the devices to the TV.



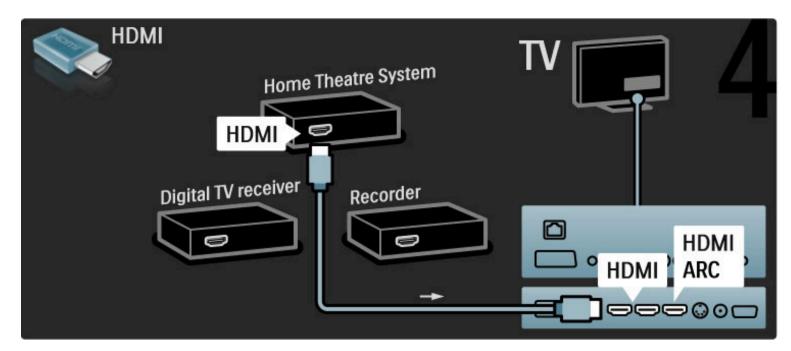
Then use an HDMI cable to connect the digital receiver to the TV.



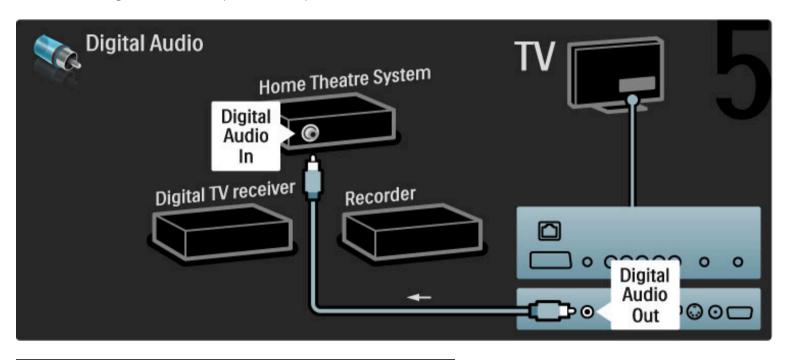
Then use an HDMI cable to connect the Disc Recorder to the TV.



Then use an HDMI cable to connect the Home Theatre System to the TV.

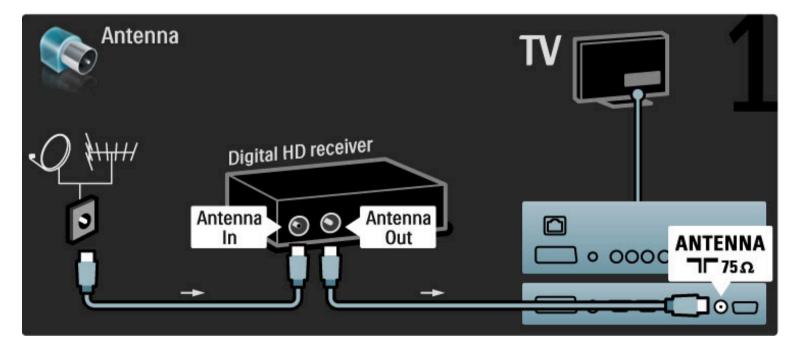


If you do not use the HDMI-ARC connection on the TV and the device, add a digital audio cable (cinch coaxial).

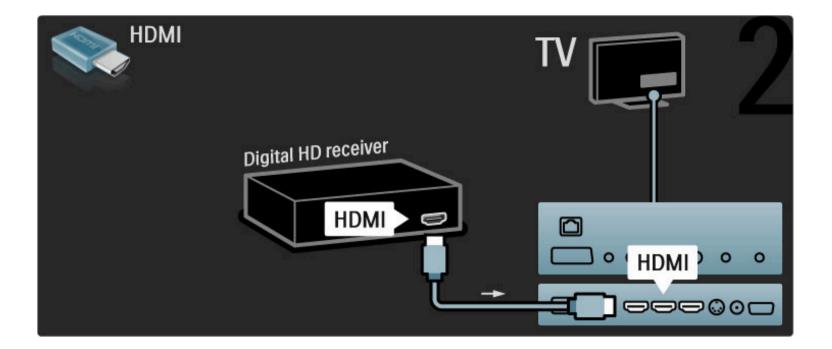


# Digital HD receiver

First, use 2 antenna cables to connect the device to the TV.



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



# 5.4 Connect more devices

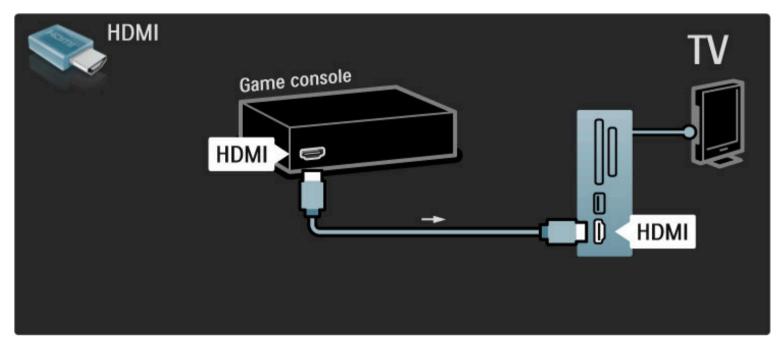
# Game

Connect a game console to the side or back of the TV. You can use an HDMI, YPbPr or Scart connection. If your game console only has Video (CVBS) and Audio L/R output, use a **Video Audio L/R to Scart** adapter to connect to the Scart connection.

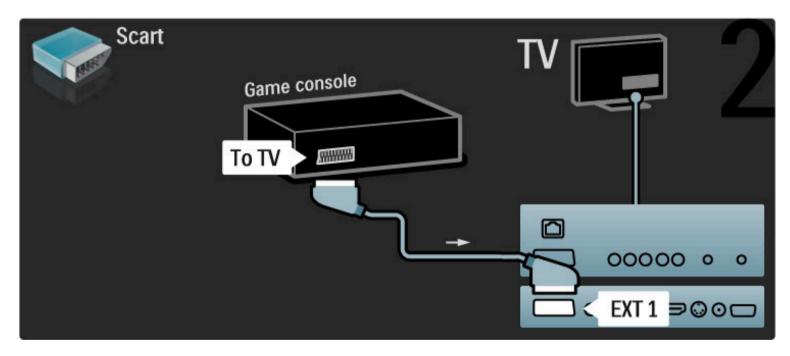
# Picture delay

To prevent picture delay while gaming, close Help and press **DID** (Adjust) and select **Smart picture** > **Game** and press **OK**. After gaming, do not forget to select the Smart picture you normally use for watching TV.

Use an HDMI cable to connect the device to the side of the TV.



Or use a Scart adapter to connect the device to the TV.



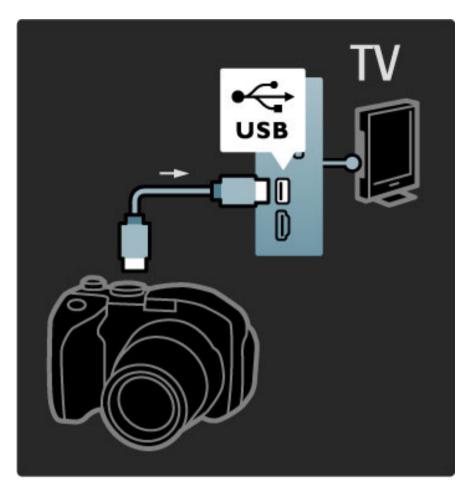
# HD Game

Use an HDMI cable or YPbPr and Audio L/R cables to connect a High Definition game console to the TV.

To connect a HD Game console, read Help > Connections > Connect more devices > Game.

# Photo camera

To view pictures stored on your digital photo camera, you can connect the camera directly to the TV. Use the USB connection on the side of the TV to connect. Switch on the camera after you made the connection.



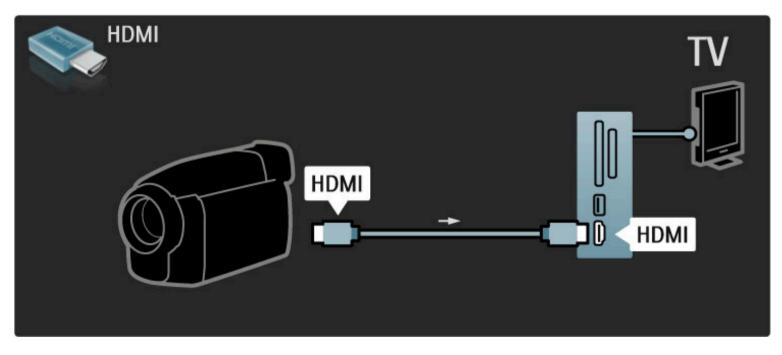
If the list with the content of the camera does not appear automatically, your camera might need to be set to transfer its content with PTP (Picture Transfer Protocol). Read the user manual of the digital photo camera.

# Camcorder

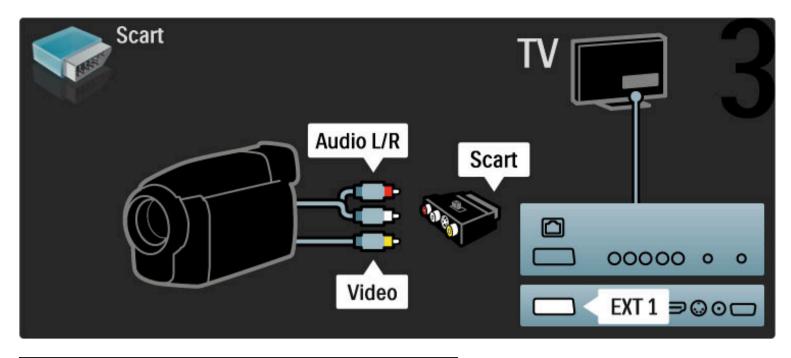
Connect a camcorder to the side or back of the TV. You can use an HDMI, YPbPr or Scart connection. If your camcorder only has Video (CVBS) and Audio L/R output, use a **Video Audio L/R to Scart** adapter to connect to the Scart connection.

See the following pages to connect your camcorder.

Use an HDMI cable to connect the camcorder to the side of the TV.



Or use a Scart adapter to connect the device to the TV.

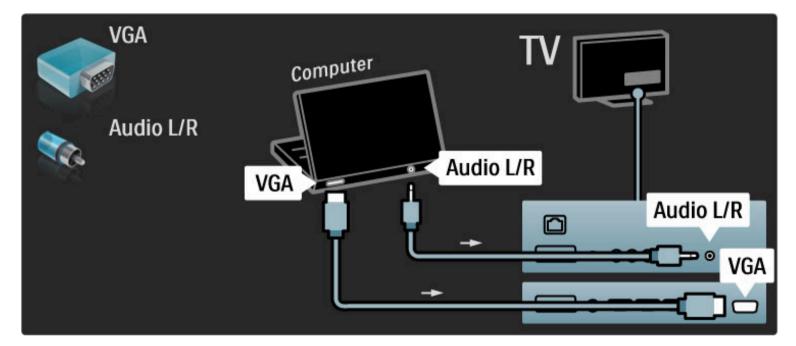


# TV as PC monitor

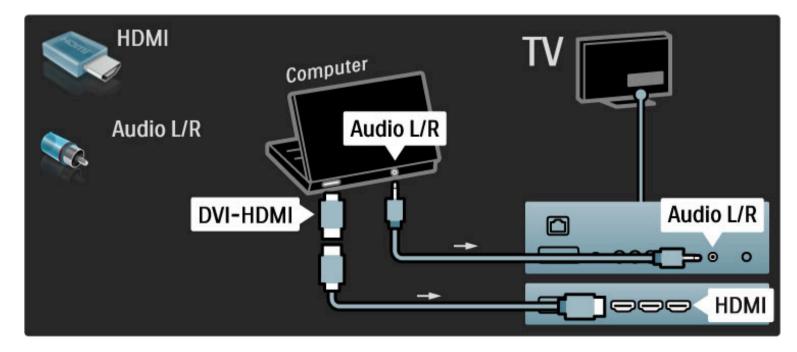
You can connect the TV to your computer as a PC monitor. Before connecting the PC, set the PC monitor refresh rate to 60 Hz.

See the following pages for how to connect your computer.

Use a VGA cable to connect the PC to the VGA connector and an audio L/R cable to connect the VGA Audio L/R to the back of the TV.



Use a DVI to HDMI adapter to connect the PC to HDMI and an audio L/R cable to connect the Audio L/R to the back of the TV.



# Ideal TV setting

Set the TV Picture format to Unscaled for the sharpest picture quality. While watching TV, press 📑, select **Picture format** and select **Unscaled**.

For a list of supported resolutions see  $\mbox{Help} > \mbox{Specifications} > \mbox{Display resolutions}.$ 

# Decoder

Use a scart cable to connect a decoder that decodes analogue antenna channels. Use the **EXT1** or **EXT2** connectors on the back of the TV.

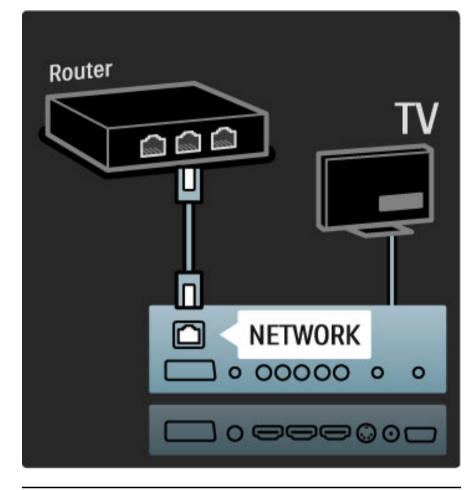
You have to assign the TV channel as a channel to be decoded. Then assign the connection where the decoder is connected. To assign this TV channel, press  $rac{1}{2}$  > Setup > Channel settings > Decoder. Select Channel to set up the channel that you want to decode. Select Status to set the connection you use for the decoder.

# 5.5 Network

# Wired

To set up the wired network connection, read Help > Setup > Network

Connect the router to the TV with a network cable. To fullfill EMC regulations, use a shielded FTP Cat. 5E ethernet cable.



# Wi-Fi Ready

This TV is Wi-Fi Ready. With the Wireless USB adapter PTA01 accessory (not supplied) you can connect the TV to your network wirelessly. Next to the wireless connection, the free Wi-Fi MediaConnect software can bring up -project- your PC screen on the TV. You can project video, music, presentations, etc. playing on your laptop or desktop PC.

# What you need

To use Wi-Fi MediaConnect, you need to connect the TV to your home network. You need a wireless router. Read more about connecting to a network in **Help** > **Setup** > **Network**.

# Install Wi-Fi MediaConnect

**1** Insert the Wi-Fi MediaConnect CD-ROM in your PC. The CD-ROM disc that came with the PTA01.

**2** Your PC starts your Internet browser and opens the Wi-Fi MediaConnect download page - www.philips.com/wifimediaconnect. On the website, you can check the necessary PC system requirements.

3 Enter the code printed on the CD-ROM envelope.

**4** Click the 'Download now' button to download the free Wi-Fi MediaConnect software.

**5** Once downloaded, start the file 'Wi-Fi MediaConnect\_setup.exe'. Follow the instructions on screen.

# TV network name

If you have more then one TV in your home network, you can rename this TV. To rename this TV in the network, press  $\uparrow$  > Setup > Network settings and select TV network name.

To enter the name, press  $\ensuremath{\mathsf{OK}}$  to open the on-screen keyboard or use the remote control keypad.

# Wi-Fi MediaConnect Help

To read the Wi-Fi MediaConnect Help, right click the program icon in the notification tray of the PC and select **Help**.

# Specifics

You can project high definition (HD) or standard definition (SD) video, depending on the processing power of your PC.

The content protection on most DVD or Blu-ray Disc movies might restrict watching the movie on TV when the disc is playing on a PC. The TV shows PC media files with a small delay. Wi-Fi MediaConnect is only available for PC.

# PC requirements

Windows XP, Vista, Windows 7 (PC only)

Minimum PC requirements

- Intel Pentium Core 2 Duo 1.8GHz
- 512MB RAM
- 200MB free hard disk space
- Wi-Fi 802.11g
- Internet connection

Recommended PC requirements

- Intel Pentium Core 2 Duo 2.1GHz
- 1GB RAM
- 200MB free hard disk space
- Wi-Fi 802.11n
- Internet connection

# 5.6 SD card

# Memory size

To download rented videos from Net TV, you need to insert an SD memory card in the TV SD card slot. Once formatted, leave the card permanently in the slot.

# SD memory size

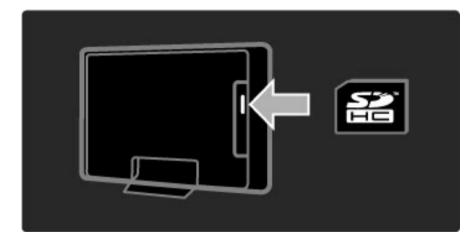
We recommend an SDHC (High Capacity) Class 2 card with a minimum of 4GB memory. For HD movies, a minumum of 8GB memory.

Read more about renting videos in Help > Use your TV > Net TV > Video stores.

# Insert the card

Make sure to unlock the SD memory card before you insert it.

To format the SD card, switch on the TV and insert the SD card in the SD card slot. The TV will automatically start formatting. Leave the SD card permanently in the slot.



# 5.7 Common Interface CAM

# CAM

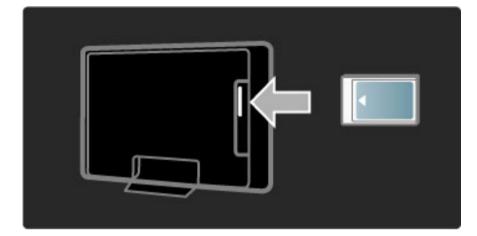
Scrambled digital TV channels can be decoded with a Conditional Access Module (CAM). Digital TV service operators provide the CAM when you subscribe to their services. Contact a digital TV service operator for more information and to see terms & conditions.

#### Insert a CAM

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 the TV.

Look for the common interface slot on the back of the TV. Gently insert the CAM as far as it will go and leave it in the slot permanently.

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



#### Watching a CAM service

If a CAM is inserted and subscription fees have been paid, the TV shows the programme from the digital TV service provider. The applications, their function, the content and the onscreen messages all come from the CAM service.

# CAM settings

To set passwords or PIN codes for the CAM service, press  $\clubsuit$  > Setup > Channel settings > Common Interface. Select the CAM provider and press OK.

# CI+

This TV can handle the CI+ conditional access. CI+ allows service providers to offer premium HD digital programmes like movies and sports with a high level of copy protection.

To insert a CI+ CAM, read the chapter **CAM - Conditional Access Module.** 

# 5.8 3D

# 3D

This TV is prepared for future 3D TV accessories. (Only for 40PFL8605 and 46PFL8605.)

# 6 Troubleshooting

# 6.1 Contact information

If the advice and suggestions in Troubleshooting do not help resolve the problem, try switching the TV off and back on again.

#### Warning

If your TV breaks down, **NEVER** try to repair the TV yourself.

#### Consumer Care

If the TV problem is not solved you can call the Philips Consumer Care hotline in your country. Look up the TV model and serial number before you call. Find the telephone number on the documentation that came with the TV. Or consult our website **www.philips.com/support** 

#### TV 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.

# 6.2 TV and remote control

#### The TV does not switch on

 $\bullet$  Switch the TV off and on again with the switch on the bottom of the TV.

- Check the power cable connection.
- Try using the keys on the TV to switch on.

#### The TV does not switch on from standby

• Check that the batteries of the remote control are not empty or

weak. Check their + / - orientation.

 $\bullet$  Try using the keys on the TV to switch on.

#### The TV does not respond to the remote control

• Check that the batteries of the remote control are not empty or

weak. Check their + / - orientation.

• Clean the remote control and TV sensor lens.

• During start-up, which can take up to two minutes with connected devices, the TV and some external devices do not immediately respond to commands from the remote control. The device is functioning normally and is not broken.

#### The TV switches off and the red light blinks

• Switch the TV off and on again with the switch at the bottom of the TV. Check if there is enough space for ventilation. Wait until the TV has cooled down.

If the TV does not restart from standby and the blinking occurs again, call Consumer Care.

#### You forgot your code to unlock Child lock?

Read Help > More on ... > Locks and timers > Child lock.

# 6.3 TV channels

#### Some TV channels are gone

• Check if the correct list is selected in the Channel list. With the Channel list on screen, press  $\Box$  (Options) and select the list you need with **Select list**.

• A channel could be hidden in the Channel list. Read more about Channel list in **Help** > **Use your TV** > **Menus** > **Browse**.

#### No digital channel found during installation

• Check if the TV supports DVB-T or DVB-C in your country. Check the 'Digital TV Country Compatibility' sticker on the back of the TV.

# 6.4 Picture and sound

#### No picture

- Check if the antenna is connected properly.
- Check if the correct device is selected and connected properly.
- Check the contrast or brightness setting in **†** > Setup > TV settings > Contrast or Brightness.

#### The picture is poor

- Bad weather can influence the picture quality.
- Check if the antenna is connected properly.

• Non-earthed audio devices, neon lights, high buildings or mountains can influence the picture quality. Try to improve the picture by changing the position of the antenna or placing devices away from the TV.

• Check that the correct TV system is chosen in the Manual installation menu.

• If only a certain channel is poor, try to fine tune this channel with the Fine tune menu. Read Help > Setup > Channels > Manual installation - Analogue.

The picture has poor colour

• Check the colour settings in  $\clubsuit$  > Setup > TV settings. Or press III (Adjust) to select a Smart picture setting.

#### Picture delay when a game console is connected

• To prevent picture delay, press **DID** (Adjust), select **Smart picture** > **Game**.

The TV does not remember my settings when I switch it back on • Check whether the TV is set to the Home location. Press DD > Setup > TV settings > Preferences > Location.

#### The picture does not fit the screen

• Press **DID** (Adjust), **Picture format** and select **Auto fill**.

#### The picture position on screen is not correct

• To correct a shifted picture, press **DID** (Adjust) and select **Picture shift**. Use the navigation keys to adjust the picture position. Press **OK** to stop Picture shift.

• If distorted screen edges are visible, press  $\uparrow$  > Setup > TV settings > Picture > Screen edges and use the slider bar to enlarge the picture slightly.

#### There is a picture but no sound

- Check the volume is not set to 0.
- Check the sound has not been muted with  $\mathbf{R}$ .
- Check that all cables are connected properly.

• If no sound signal is detected, the TV automatically switches off sound. This is proper operation and is not a malfunction.

#### The sound is poor

- Try any Smart sound setting, press **DID** (Adjust), **Smart sound**.
- Check that the sound is set to Stereo.

#### The sound comes from one speaker only

• Check the Balance setting. Press  $\clubsuit$  > Setup > TV settings > Sound > Balance. Use the slider bar to set the balance.

#### Sound delay

• If there is an audio to video sync mismatch when sound comes from a Home Theatre System, an audio sync delay needs to be set up. Read more about Audio to Video sync in **Help** > **Setup** > **Devices** > **Audio to Video sync**.

# 6.5 Devices

#### HDMI connections

• The HDMI-HDCP procedure might take a few seconds before the picture from a device appears.

• If the TV does not recognise the device and there is no picture, try switching from one device to another and back again to restart the HDCP procedure. Or switch the device off and back on again.

• If sound interruptions occur persistently, see the user manual of the device to check the output settings. If that does not help, connect an additional audio cable.

• If a DVI to HDMI adaptor is used, check that an additional audio connection is in place to complete the DVI connection.

#### EasyLink HDMI-CEC

• Check if the connected device supports the HDMI-CEC standard and is properly set up. Read the user manual that comes with the device.

• Check if the HDMI cable is properly connected.

• Check if EasyLink on the TV and device is switched on.

• Make sure that the System audio control in your HDMI-CEC audio devices is properly set up. Read the user manual that comes with your audio device.

#### PC display

• The refresh rate of a PC connected to the TV with VGA or DVI to HDMI adapter should set to 60Hz.

• Check that the correct resolution mode is selected on your PC. See the list in **Help** > **Specifications** > **Display resolutions**.

# 6.6 Multimedia

#### The files on my USB device are not shown

Set your device (camera) to 'Mass Storage Class' compliant.
The USB device may need specific driver software. Unfortunately, this software cannot be downloaded to your TV.

• Not all audio and picture files are supported. See the list in Help > Specifications > Multimedia.

#### Files from a USB device do not play back smoothly

• The transfer performance of the USB device limits the transfer rate.

#### The files on my PC are not shown

• To look for files on your home network with Browse PC, your PC media server software should be set up to share the files with the TV. See the list of compatible Media server software in Help > Specifications > Multimedia.

# 6.7 Network

#### Net TV does not work

 $\bullet$  If the connection to the router is OK, check the router connection to the Internet.

• You need a high-speed Internet connection for your router.

# 7 Specifications

# 7.1 Software

### Software version

To view the current TV software version, press  $\clubsuit$  > Setup > Software settings and press OK. Select Current software info and read Version:.

# Open source software

This television contains open source software. Philips hereby offers to deliver or make available, upon request, for a charge no more than the cost of physically performing source distribution, a complete machine readable copy of the corresponding source code on a medium customarily used for software interchange.

This offer is valid for a period of 3 years after the date of purchase of this product. To obtain the source code, write to . . .

Open Source Team, Philips Electronics High Tech Campus Bld HTC-44 5600 AE Eindhoven The Netherlands E-mail: open.source@philips.com

Read the Open Source Licences in Help > To begin > Open Source Licences.

# 7.2 Environmental

### Eco-label

Philips continuously focuses on lowering the environmental impact of its innovative consumer products. We aim our efforts towards environmental improvements during manufacturing, reduction of harmful substances, energy-efficient use, end-of-life instructions and product recycling.



Thanks to our environmental effort, this TV has been awarded the European Ecolabel —the flower- (www.ecolabel.eu).

You can find detailed information on standby energy consumption, warranty policy, spare parts and recycling of this TV on the Philips website for your country at **www.philips.com** 

# Energy saving

#### Light sensor

To save energy, the built-in ambient light sensor lowers the brightness of the TV screen when the surrounding light darkens. **Energy saving** 

The Energy saving Smart picture setting, combines several TV settings that result in saving energy.

#### Low standby power

The class-leading and highly advanced power circuitry brings down the power consumption of the TV to an extremely low level, without losing out on the constant Standby functionality.

#### Power management

The advanced power management of this TV ensures the most efficient use of its 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, press  $\clubsuit$  > Setup and press  $\blacktriangleright$ . Select Watch demos > Active control and press OK. Select a Smart setting to check the corresponding values.

## 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 inform yourself about the local rules on separate collection of batteries because correct disposal helps to prevent negative consequences for the environmental and human health.

# 7.3 Power and reception

## 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 consumtion : < 0.15W

• Power saving features : Light sensor, Eco mode, Picture mute (for radio), Auto switch-off timer, Eco settings menu.

# Reception

- Aerial input : 75 ohm coaxial (IEC75)
- TV system : DVB COFDM 2K/8K
- Video playback : NTSC, SECAM, PAL
- DVB : DVB Terrestrial\*, DVB-T MPEG4\*, DVB-C MPEG4\*, DVB-S
- MPEG4 HD, MHEG (\* see selected countries on the TV typeplate)
- Tuner bands : Hyperband, S-Channel, UHF, VHF

# 7.4 Display and sound

#### Display / Picture

- Diagonal size :
- 32PFL8605 : 81cm / 32"
- 37PFL8605 : 94cm / 37"
- 40PFL8605 : 102cm / 40"
- 46PFL8605 : 116cm / 46"
- 52PFL8605 : 132cm / 52"
- Picture enhancement :
- Perfect Pixel HD Engine
- 32PFL8605 : 100Hz Clear LCD
- 37, 40, 46, 52PFL8605 : 200Hz Clear LCD
- Display type : LCD Full HD, edge LED backlight
- Panel resolution : 1920 × 1080p
- Color processing : 2250 trillion colors 17bit RGB
- Brightness : 500 cd/m2
- Dynamic contrast : 500.000:1
- Response time (typical) : 1 (BEW equiv.) ms

#### Sound

- Output power (RMS) : 2 × 10W
- Dolby Digital Plus, Dolby Pulse Dolby and the double-D symbol
- are registered trademarks of Dolby Laboratories.
- Speaker types : 2 woofers

#### 7.5 Display resolutions

#### Video formats

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

#### Computer formats

Resolution — Refresh rate

- 640 × 480p 60 Hz (VGA/HDMI)
- 600 × 800p 60 Hz (VGA/HDMI)
- 1024 × 768p 60 Hz (VGA/HDMI) 1280 × 768p 60 Hz (VGA/HDMI)
- 1360 x 765p 60 Hz (VGA/HDMÍ)
- 1360 × 768p 60 Hz (VGA/HDMI) 1280 × 1024p 60 Hz (HDMI)
- 1920 × 1080i 60 Hz (HDMI)
- 1920 × 1080p 60 Hz (HDMI)

# 7.6 Multimedia

#### Connections

- USB
- Ethernet LAN RJ-45

#### Supported USB / memory device formats

• FAT 16, FAT 32, NTFS

### Playback formats

#### • MP3, AAC

- WMA v2 up to v9.2
- Still pictures : JPEG
- MPEG 1, MPEG 2, MPEG 4
- H.264 (MPEG-4 AVC)
- WMV9
- MPEG program and transport stream
- AVI, MP4, MKV, ASF

#### Supported media server software

• Windows Media Player 11 (for Microsoft Windows XP, Vista or Windows 7)

- Google (for Windows XP)
- Twonky Media PacketVideo 4.4.9 (for PC and Intel MacOX)(5.0.68 MacOX)
- Sony Vaio Media Server (for Microsoft Windows XP or Vista)
- Sony PS3 media server (for Windows XP)
- Nero 8 Nero MediaHome (for Microsoft Windows XP)
- DiXiM (for Windows XP)
- Macrovision Network Media Server(for Microsoft Windows XP)
- Fuppes (for Linux)
- uShare (for Linux)
- Philips NAS SPD8020 (v. 1.2.9.47)
- TVersity 1.7 pro (for Windows XP)
- Nokia N82, N96, N95
- Nokia N78, N80, N81, 8GB, N800, N810, N92, N93, N93i,N96
- Samsung SGH-i780

#### ESD regulations

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

# 7.7 Connectivity

#### TV Rear

- EXT1 Scart : Audio L/R, CVBS in, RGB
- EXT2 Scart : Audio L/R, CVBS in, RGB
- EXT3 : Y Pb Pr, Audio L/R
- VGA (D-sub 15), Audio In (stereo mini-jack 3.5mm)
- HDMI 1 ARC in (HDMI v1.4)
- HDMI 2 in (HDMI v1.3)
- HDMI 3 in (HDMI v1.3)
- Audio In (DVI to HDMI)(stereo mini-jack 3.5mm)
- Audio Out L/R display synchronised (coaxial-cinch-S/PDIF)
- Headphones (stereo mini-jack 3.5mm)
- Network (RJ45)
- 3D Out (only for 40PFL8605 and 46PFL8605)

#### TV Side

- HDMI Side in (HDMI v1.3)
- USB
- Common interface slot (CAM)
- SD card slot (SD High Capacity)(as Video stores memory)

# 7.8 Dimensions and weights

#### 32PFL8605

Width 779 mm Height 496 mm Depth 44 mm Weight ±13 kg . . . with TV stand Height 532 mm Depth 228 mm Weight ±16 kg

#### 37PFL8605

Width 900 mm Height 565 mm Depth 44 mm Weight ±16 kg . . . with TV stand Height 601 mm Depth 248 mm Weight ±19 kg

#### 40PFL8605

Width 965 mm Height 600 mm Depth 50 mm Weight ±18 kg . . . with TV stand Height 636 mm Depth 248 mm Weight ±20 kg

#### 46PFL8605

Width 1102 mm Height 675 mm Depth 51 mm Weight ±25 kg . . . with TV stand Height 711 mm Depth 268 mm Weight ±28 kg

#### 52PFL8605

Width 1245 mm Height 758 mm Depth 51 mm Weight ±30 kg ... with TV stand Height 802 mm Depth 268 mm Weight ±33 kg

UMv 3104 327 0034.3 - 100906

# Index

#### 2

2-in-1 stand 11

#### Α

Add your devices 24 Adjust menu 26 Ambilight 33 Ambilight colour 33 Audio Out delay 52 Auto subtitle shift 52

### В

Balance 46 Black bars 30 Browse menu 24

### С

CAM 71 Channel list 25 Channel list options 25 Channels 28 CI+ 71 Clear Net TV history 37 Clear Net TV memory 36 Clock 49 Common interface slot 71 Component Video YPbPr 55 Connections 55 Consumer Care 73 Current TV software 53

### D

Delete a device 24 Digital audio cable 55 Digital text 38 Dual screen 39 DVB 48 DVI to HDMI adapter 55

### Е

Eco settings 46 ESD 85

#### F

Favourite channels 29

#### Н

HD TV 9 HD video clip 9 HDMI connection 55 HDMI-ARC (Audio Return Channel) 55 HDMI-CEC 51 Headphone volume 46 Hidden channels 26 Home menu 24 Home network 50

#### I

Infrared sensor 22 Interactive TV 40 Internet websites 36

L

Lock code 43

### Μ

Media server software 50, 85

MHP 40 Music with photos 41

## N

Net TV 35 Net TV lock 35

## 0

On during mute 44 On-screen keyboard 26 Online video store 37 Open source software 80 Options menu 26

### Ρ

Parental rating 43 Perfect Pixel HD Engine 46 Picture delay 65 Picture settings 46 Picture shift 27 Pixel Plus link 52 Play videos 41 Power consumption 81

### R

Radio channels 28 Reception quality 48 Rename a channel 25 Rename a device 24 Reorder a channel 25 Router 50

### S

Screen edges 46 SD card slot 70 SD memory card 37 Search 20 Select list 25 Smart sound 30 Sound settings 46 Subtitle language 44 Surround sound 27

### Т

T.O.P. Text 39 TV tour 7

## U

Universal access 45 Update channels 48

## ۷

Video (CVBS) connection 56 Video selection 28 View photos 41

### W

Wall colour 33 Watch TV 28 Wired network 50 Wired network connection 69



CE2010

# Philips Consumer Lifestyle

Philips Consumer Lifestyle BV. Tussendiep 4 9206 AD Drachten Netherlands.

AGB32-JLA-15.1005

(Report No. / Numéro du Rapport)

(Year in which the CE mark is affixed) (Année au cours de laquelle le marquage CE a été apposé)

# **EC DECLARATION OF CONFORMITY**

(DECLARATION DE CONFORMITE CE)

We / Nous, PHILIPS CONSUMER LIFESTYLE BV.

(Name / Nom de l'entreprise)

TUSSENDIEP 4, 9206 AD DRACHTEN, NETHERLANDS

(address / adresse)

declare under our responsibility that the electrical product: (Déclarons sous notre propre responsabilité que le produit électrique:)

Philips

32/40/46PFL9705H/12 H/60 K/02 M/08, 58PFL9955H/12

(brand name, nom de la marque)

(Type version or model, référence ou modèle)

LCD Television Receiver with integrated Wi-Fi module WUS-N11 (product description, description du produit)

to which this declaration relates is in conformity with the following standards: (Auquel cette déclaration se rapporte, est conforme aux normes harmonisées suivantes)

EN60065:2002+A1:2006, A11:2008 EN55013:2001+A1:2003, A2:2006 EN55020:2007 EN55022:2006 EN61000-3-2:2006, -3-3:1995+A1:2001 EN61000-4-2:1995+A1:1998, A2:2001 EN61000-4-3:2006, -4-4:2004 EN300328: V1.7.1 EN301489-17: V1.8.1+V1.3.2:2008 EN62311:2008 EN62087:2003 EN55024:1998+A1:2001, A2:2003

(title, number and date of issue of the standard / titre, numéro et date de parution de la norme)

following the provisions of LVD, EMC, EuP and R&TTE Directives (Conformément aux exigences essentielles de)

and is produced by a manufacturing organisation on ISO9001 level. (*Et sont fabriqués conformément à une qualité au moins conforme à la norme ISO 9001*)

Brugge, 2010-05-06 (place, date / lieu, date) Jan Laurent, Approbation Mgr. (signature, name and function / signature, nom et fonction)



# Contact information

Argentina	0800 8888 7532 (gratuito)
België / Belgique	0800 80 190 (gratis / gratuit)
Brazil	0800 701 0203
	Sao Paulo (11) 2121 0203
Бълария	+3592 489 99 96
	(Местен разговор)
Česká republika	800 142840 (Bezplatný hovor)
China / 中国	4008 800 008
Danmark	3525 8759 (lokalt opkald)
Deutchland	0800 000 7520 (kostenlos)
Ελλάδα	0 0800 3122 1280
	Κλήση χωρίς χρέωση
España	900 800 655 (gratuito)
Estonia	6008600 (local)
France	0805 025 510 (gratuit)
Hrvatska	01 6403 776 (Lokalni poziv)
Italia	800 088 774 (gratuito)
Ireland	0160 11 161 (free)
Northern Ireland	0800 055 6882
Казакстан	007 727 250 66 17 (lokal)
Latvia	527 37691 (local)
Lithuania	67228896 (local)
Luxembourg / Luxemburg	
	0800 26 550 (kostenios / gratuit

Nederland         0800 023 0076 (gratis)           Norge         2270 8111 (lokalsamtale)           Österreich         0800 180 016 (kostenlos)           Polska         022 3491504 (połączenie lokalne)
Österreich 0800 180 016 (kostenlos)
Polska 022 3491504 (połączenie lokalne)
<b>Portugal</b> 800 780 903 (grátis)
<b>Romānä</b> 0800 894910 (gratis)
Россия
- Москва (495) 961-1111 - Местный звонок
- 8-800-200-0880 - Местный звонок
Suisse / Schweiz / Svizzera
0800 002 050 (kostenlos / gratuit / gratuito)
<b>Србија</b> +381 114 440 841 (Lokalni poziv)
Slovakia 0800 004537 (Bezplatný hovor)
<b>Slovenija</b> 00386 1 280 95 00 (Lokalni klic)
Suomi 09 23113415 (paikallispuhelu)
<b>Sverige</b> 08 5792 9100 (lokalsamtal)
<b>Thailand / ประเทศไทย</b> 66 2 652 8652
Türkiye0800 261 3302 (Şehiriçi arama)

United Kingdom 0800 331 6015 (toll free)

0800 26 550 (kostenlos / gratuit)



Non-contractual images / Images non contractuelles / Außervertragliche Bilder All registered and unregistered trademarks are property of their respective owners.

Specifications are subject to change without notice Trademarks are the property of Koninklijke Philips Electronics N.V. or their respective owners 2010 © Koninklijke Philips Electronics N.V. All rights reserved

www.philips.com