AOC

LCD TV with LED backlight
User Manual

LE32S5970
LE43S5970
LE49S5970

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

www.aoc.com

Contents

Using help

Open Help

Press the ▬ key (blue) to open Help immediately. Help will open to the chapter that is most relevant to what you are doing or what is selected on TV. To look up topics alphabetically, press the color key ▬ **Keywords**.

To read the Help as a book, select **Book**.

Before you execute the Help instructions, close Help. To close Help, press the color key ▬ **Close**.

TV Help on your tablet, smartphone or computer

To carry out extended sequences of instructions more easily, you can download the TV Help in PDF format to read on your smartphone, tablet or computer. Alternatively, you can print the relevant Help page from your computer.

2

Troubleshooting

2.1

Channels

No digital channels found during the installation

Make sure that all cables are properly connected and that the correct network is selected.

Previously installed channels are not in the channel list

Make sure that the correct channel list is selected.

2.2

General

The TV does not switch on
• Disconnect the power cable from the power outlet. Wait for one minute then reconnect it.
• Make sure that the power cable is securely connected.

Creaking sound at startup or power off

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

TV does not respond to the remote control

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

The TV goes back to standby after showing the startup screen

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

The standby light keeps on blinking

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

2.3

Picture

No picture / distorted picture
• Make sure that the antenna is properly connected to the TV.
• Make sure that the correct device is selected as the display source.
• Make sure that the external device or source is properly connected.

Sound but no picture
• Make sure that the picture settings are set correctly.

Poor antenna reception
• Make sure that the antenna is properly connected to the TV.
• Loud speakers, unearthed audio devices, neon lights, high buildings and other large objects can influence reception quality. If possible, try to improve the reception quality by changing the antenna direction or moving devices away from the TV.

Poor picture from a device
• Make sure that the device is connected properly.
• Make sure that the picture settings are set correctly.

Picture settings change after a while

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

A commercial banner appears

Make sure that **Location** is set to **Home**.

Picture does not fit the screen

Change to a different picture format. Press **PICTURE FORMAT** key on remote control.

Picture format keeps changing with different channels

Select a non "Auto" picture format.

Picture position is incorrect

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

Computer picture is not stable

Make sure that your PC uses the supported resolution and refresh rate.

2.4

Sound

No sound or poor sound quality

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

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

2.5

HDMI and USB

HDMI
• Note that HDCP (High-bandwidth Digital Content Protection) support can delay the time taken for a TV to display content from an HDMI device.
• If the TV does not recognize the HDMI device and no picture is displayed, switch the source from one device to another and back again.
• If there are intermittent sound disruptions, make sure that output settings from the HDMI device are correct.

HDMI E-Link does not work
• Make sure that your HDMI devices are HDMI-CEC compatible. E-Link features only work with devices that are HDMI-CEC compatible.

No volume icon shown
• When an HDMI-CEC audio device is connected this behavior is normal.

Photos, movies, and music from a USB device do not play
• Make sure that the USB storage device is set to Mass Storage Class compliant, as described in the storage device's documentation.
• Make sure that the USB storage device is compatible with the TV.
• Make sure that the audio and picture file formats are supported by the TV.

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

2.6

Wi-Fi and Internet

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

Internet does not work
• If the connection to the router is OK, check the router connection to the Internet.

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

DHCP
• If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be switched on.

2.7

Wrong menu language

Change the language back to your language.

To change the language of the TV menus and messages…

1 - Press the **Settings** key.
2 - Select **General settings > Language > Menu Language** and press **OK.**
3 - Select the language you need.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

3

TV tour

3.1

Smart TV

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

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

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

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

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

3.2

App gallery

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

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

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

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

3.3

Rental videos

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

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

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

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

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

3.4

Social Networks

No need to get up to check your friend's messages on your computer.

On this TV, you get the messages from your **social networks** on your TV screen. You can send a return message from your couch.

For more information, in **Help**, press the color key ━ **Keywords** and look up **Apps**.

3.5

Pause TV and recordings

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

Pause your TV and answer that urgent phone call, or simply take a break during a sports match while the TV stores the broadcast on the USB Hard Drive. You can watch it again later. With a USB Hard Drive connected, you can also record digital broadcasts, record while you are watching a program, or schedule a recording of an upcoming program.

For more information, in **Help**, press the color key ━ **Keywords** and look up **Pause TV** or **Recording**.

Setting up

4.1

Read safety

Read the safety instructions first before you use the TV.

To read the instructions, in **Help**, press the color key ━ **Keywords** and look up **Safety instructions**.
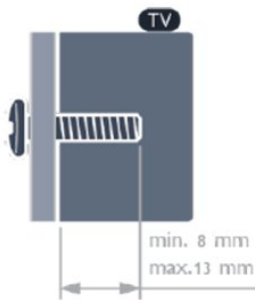
4.2

TV stand and wall mounting

You can find the instructions for mounting the TV stand in the Quick Start Guide that came with the TV.

Your TV is also prepared for a VESA-compliant wall mount bracket (sold separately).
Use the following VESA code when purchasing the wall mount .
. .

• For 32-inch TV: **VESA MIS-F 100x100, M4**
• For 43-inch TV: **VESA MIS-F 200x200, M6**
• For 49-inch TV: **VESA MIS-F 400x200, M6**

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 TVs weight. Also read the safety precautions before positioning the TV.

4.3

Tips on placement

• Position the TV where light does not shine directly on the screen.
• Position the TV up to 6 inches away from the wall.
• The ideal distance to watch TV is 3 times its diagonal screen size. When seated, your eyes should be level with the center of the screen.
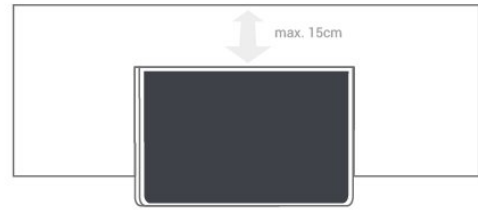
4.4

Power cable

• Insert the power cable into the **POWER** connector on the back of the TV.
• Make sure the power cable is securely inserted in the connector.
• Make sure that the power plug, in the wall socket, is accessible at all times.
• When you unplug the power cable, always pull the plug, never pull the cable.
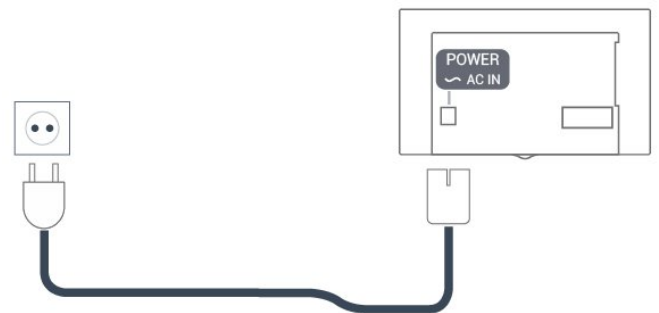
Although this TV has a very low standby power consumption, unplug the power cable to save energy if you do not use the TV for a long period of time.

For more information, in **Help**, press the color key ━ **Keywords** and look up **Switching on** for more information.

4.5

Antenna cable

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

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

ANTENNA

5
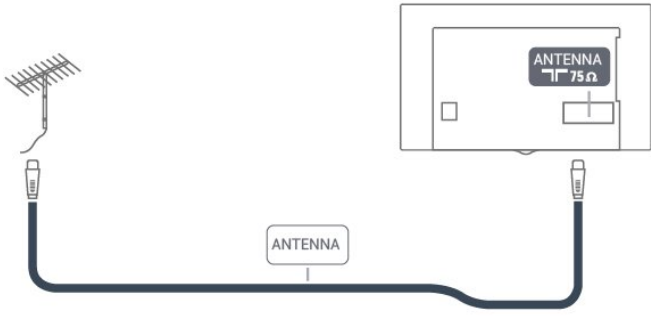
Connect devices

5.1

About connections

Antenna port

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

HDMI ports

HDMI quality

An HDMI connection has the best picture and sound quality. One HDMI cable combines video and audio signals. Use an HDMI cable for TV signal.

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

Copy protection

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

HDMI CEC

E-Link

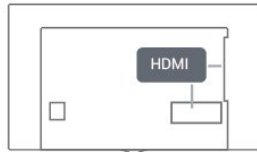#### E-Link HDMI CEC

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

Operate devices

To operate a device connected to HDMI and set up with E-Link, select the device or its activity in the list of TV connections. Press **SOURCES**, select a device connected to an HDMI

connection, and press **OK**.

E-Link settings

To switch off E-Link completely…

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **E-Link**, press **>** (right) and select **E-Link** one step further.
3 - Select **Off**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

E-Link remote control

To switch E-Link Remote Control on or off…

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **E-Link** > **E-Link Remote Control** and press **OK**.
3 - Select **On** or **Off** and press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Pixel Plus Link

Some devices, such as a DVD or Blu-ray Disc player, might have their own picture quality processing. To avoid bad picture quality caused by interference with the TV's processing, picture processing should be disabled on these devices.

To switch **Pixel Plus Link** on or off…

1 - Press the **Settings** key, select **General settings**, and press **>** (right) to enter the menu.
2 - Select **E-Link** > **Pixel Plus Link** and press **OK**.
3 - Select **On** or **Off** and press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Auto turn off devices

You can set the TV to turn off the connecting HDMI-CEC compliant devices if they are not the active source. The TV turns the connected device to standby after 5 minutes of inactivity.

HDMI ARC

Only **HDMI 3** on the TV has **HDMI ARC** (Audio Return Channel).

If the device, typically a Home Theater System (HTS), also has the HDMI ARC connection, connect it to the **HDMI 3** connection on this TV. With the HDMI ARC connection, you do not need to connect the extra audio cable that sends the TV sound to the HTS. The HDMI ARC connection combines both signals.

In case you prefer to disable ARC on the HDMI connections, press **Settings** key.
Select Sound and press **>** (right) to enter the menu. Select **Advanced** > **HDMI 3 - ARC** and press **OK**.

HDMI MHL

With **HDMI MHL**, you can send what you see on your Android smartphone or tablet to a TV screen.

The **HDMI 1** connection on this TV incorporates **MHL 2.0** (Mobile High-Definition Link).

This wired connection offers great stability and bandwidth, low latency, no wireless interference and good quality sound reproduction. On top of that, the MHL connection will charge the battery of your smartphone or tablet. Although connected, your mobile device will not be charging when the TV is on standby.

Inform yourself regarding which passive MHL cable is suited for your mobile device. In particular, with the HDMI connector for the TV on one side, the type of connector you need to connect to your smartphone or tablet.

MHL, Mobile High-Definition Link and the MHL Logo are trademarks or registered trademarks of the MHL, LLC.

DVI to HDMI

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

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

Copy protection

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

Y Pb Pr - Component

Y Pb Pr - Component Video is a high quality connection.

The YPbPr connection can be used for High Definition (HD) TV signals. Next to the Y, Pb and Pr signals, add the Audio Left and Right signals for sound.

Match the YPbPr (green, blue, red) connector colors with the cable plugs when you make the connections.
Use an Audio L/R cinch cable if your device also has sound.
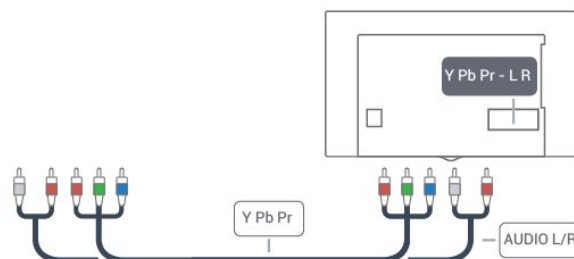
CVBS - Audio L R

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

• Y shares the same jack with CVBS.
• Component and Composite share audio jacks.
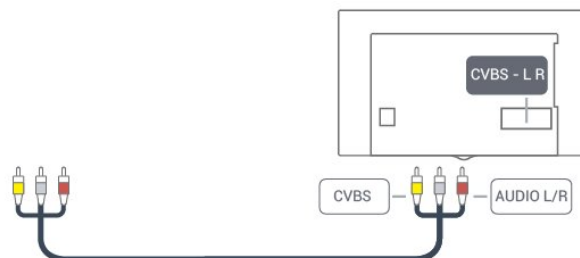
SPDIF

SPDIF is a high quality sound connection.

This optical connection can carry 5.1 audio channels. If your device, typically a Home Theater System (HTS), has no HDMI ARC connection, you can use this connection with the SPDIF connection on the HTS. The SPDIF connection sends the sound from the TV to the HTS.

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

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

For more information, in **Help**, press the color key ━ **Keywords** and look up **Audio to video sync**.
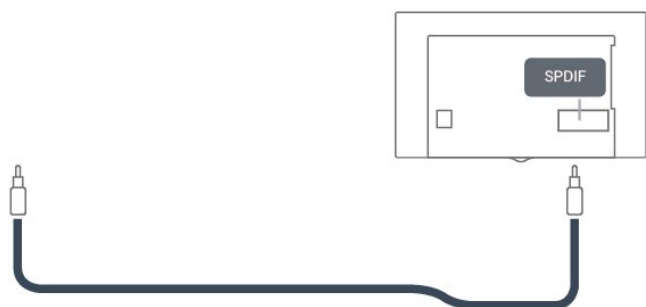
Receiver - Set-Top Box

Cable box

Use 2 antenna cables to connect the antenna to the Set-top box (a digital receiver) and the TV.
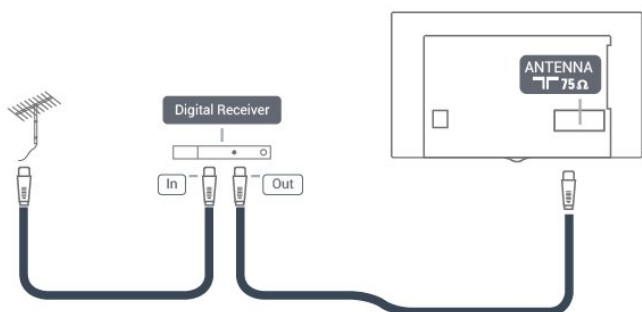
Next to the antenna connections, add an HDMI cable to connect the Set-top box to the TV.
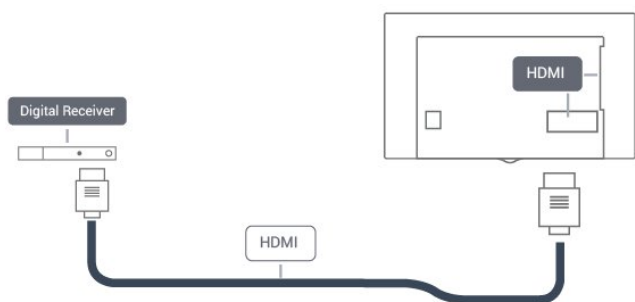
Switch Off Timer

Switch off this automatic timer if you only use the remote control for the Set-top box. Switching this timer off prevents the TV from switching off automatically after a 4-hour period without a key press on the TV's remote control.

For more information, in **Help**, press the color key ━ **Keywords** and look up **Switch off timer** for more

information.

5.3

Home Theater System - HTS

Connect with HDMI ARC

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

HDMI ARC

If your Home Theater System has an HDMI ARC connection, you can use **HDMI 3** on the TV to connect. With HDMI ARC, you do not need to connect the extra audio cable. The HDMI ARC connection combines both signals.

HDMI 3 on the TV can offer the Audio Return Channel (ARC) signal, but once you have connected the Home Theater System, the TV can only send the ARC signal to this HDMI connection.
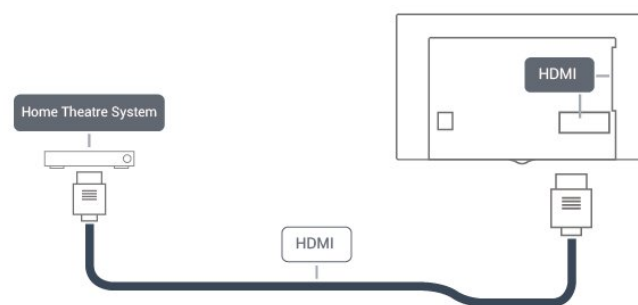
Audio to video synchronization (sync)

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

For more information, in **Help**, press the color key ━ **Keywords** and look up **Audio to video sync**.

Connect with HDMI

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

If the Home Theater System has no HDMI ARC connection, add an SPDIF cable to send the TV sound to the Home Theater System.

Audio to video synchronization (sync)

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

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Audio to video sync**.

Audio out settings

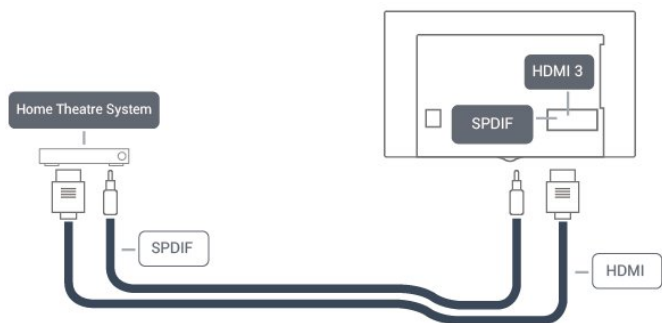### Audio out delay

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

Automatic audio to video sync

With recent Home Theater Systems, the audio to video sync is done automatically and is always correct.

Audio sync delay

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

To switch off Audio Out Delay…

1 - Press the **Settings** key, select **Sound** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Audio out delay** and press **OK**.
3 - Select **Off**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Audio out offset

If you cannot set a delay on the Home Theater System, you can set the TV to sync the sound. You can set an offset that compensates for the time necessary for the Home Theater System to process the sound of the TV picture. You can set the value in steps of 5ms. Maximum setting is -60ms.

The **Audio out delay** setting should be switched on.

To synchronize the sound on the TV…

1 - Press the **Settings** key, select **Sound** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Audio out offset** and press **OK**.
3 - Use the slider bar to set the sound offset and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Audio out format

If you have a Home Theater System (HTS) with multichannel sound processing capabilities such as Dolby Digital or similar, set the Audio Out Format to Multichannel. With Multichannel, the TV can send the compressed multichannel sound signal from a TV channel or connected player to the Home Theater System. If you have a Home Theater System without multichannel sound processing, select Stereo.

To set **Audio out format**…

1 - Press the **Settings** key, select **Sound** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Audio out format** and press **OK**.
3 - Select **Multichannel**, **Stereo** or **Multichannel (bypass)**, then press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Audio out leveling

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

To level the difference in volume…

1 - Press the **Settings** key, select **Sound** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Audio out leveling** and press **OK**.
3 - Select **More**, **Medium**, or **Less**, then press **OK**.

4 - If the volume difference is large, select **More**. If the volume difference is small, select **Less**.
5 - Press ❮ (left) repeatedly if necessary, to close the menu.

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

Problems with HTS sound

Sound with loud noise

If you watch a video from a plugged-in USB flash drive or connected computer, the sound from your Home Theater System might be distorted. You can fix this by setting the **Audio out format** of the TV to **Stereo**.

Press the **Settings** key.
Select **Sound** > **Advanced** > **Audio out format**.

No sound

If you cannot hear the sound from the TV on your Home Theater System, check if you connected the HDMI cable to an **HDMI3 ARC** connection on the Home Theater System.

5.4

Smartphones and tablets

To connect a smartphone or tablet to the TV, you can use a wired connection.

Wired

For a wired connection, use the HDMI 1 MHL connection on the back of the TV. In **Help**, press the color key ▬ **Keywords** and look up **HDMI MHL** for more information.

5.5

Blu-ray disc player

Use a **High speed HDMI** cable to connect the Blu-ray Disc player to the TV.
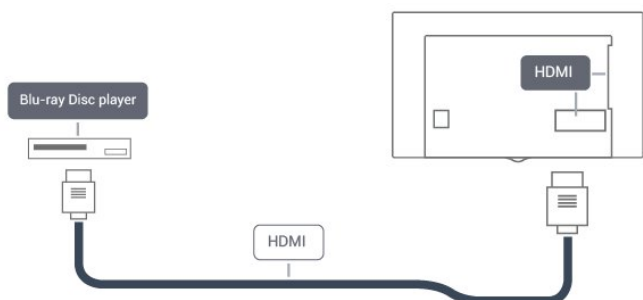
5.6

DVD player

Use an HDMI cable to connect the DVD player to the TV.
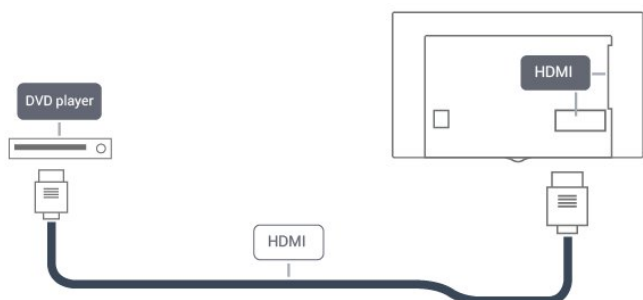
5.7

Headphones

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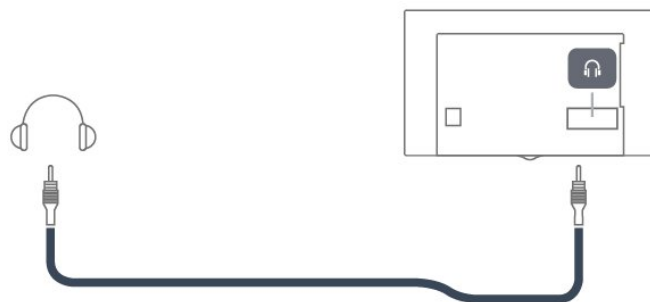
To adjust the volume…

1 - Press the **Settings** key, select **Sound** > **Headphone volume** and press **OK**.
2 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

5.8

Game console

HDMI

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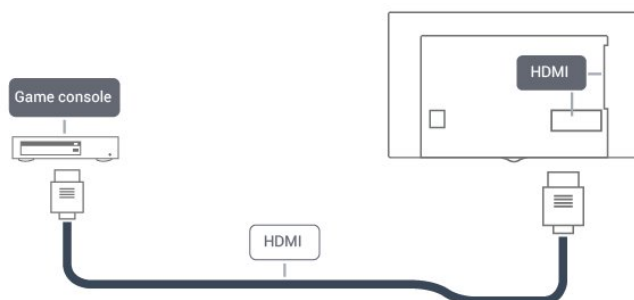
Y Pb Pr - Component

Connect the game console with a component video cable (Y Pb Pr) and an audio L/R cable to the TV.
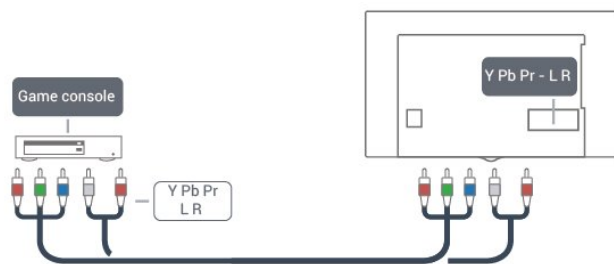
CVBS - Audio L R

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

• Y shares the same jack with CVBS.
• Component and Composite share audio jacks.

Best settings

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

When you finish playing a game and start watching TV again, remember to switch the **Game or Computer** setting back to **Off**.

To set the TV to the ideal setting…

1 - Press the **Settings** key, select **Picture** and press **>** (right) to enter the menu.
2 - Select **Advanced** > **Game or Computer**, and select the device type you want to use. To switch back to TV, select **Off**.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

5.9

USB hard drive

What you need

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

To Pause

To pause a broadcast, you need a USB-compatible Hard Drive with a minimum of 4GB of disk space.

To Record

To pause and record a broadcast, you need a minimum of 250GB disk space. If you want to record a broadcast with TV guide data from the Internet, you need to have the Internet connection installed on your TV before you install the USB Hard Drive.

For more information on how to install a USB Hard Drive, in **Help**, press the color key ▬ **Keywords** and look up **USB hard drive, installation**.

Installation

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

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

Follow the instructions on screen.

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

Warning

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

Formatting

Before you can pause or record a broadcast, you must connect and format a USB Hard Drive. Formatting removes all files from the USB Hard Drive. If you want to record broadcasts with TV Guide data from the Internet, you must first set up the Internet connection before you install the USB Hard Drive.

Warning

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

To format a USB Hard Drive…

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

screen instructions.
4 - The TV will ask if you want to use the USB Hard Drive to store apps. Select Agree if you do.
5 - When the USB Hard Drive is formatted, leave it connected permanently.

5.10

USB keyboard

Connect

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

Use one of the **USB** connections to connect.

Configure

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

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

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **USB keyboard settings**, and press **OK** to start the keyboard setup.

Special keys

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

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

5.11

USB mouse

Connect USB mouse

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

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

Connect the mouse

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

Mouse clicks
• Left click = **OK**

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

Mouse speed

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

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

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **Mouse settings**, and press **OK** to start the keyboard setup.

5.12

USB flash drive

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

Insert a USB flash drive in one of the **USB** connections on the TV while the TV is switched on.
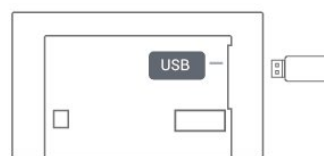
The TV detects the flash drive and opens a list showing its content.
If the contents list does not appear automatically, press **SOURCES** and select **USB**.

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

For more information on watching or playing content from a USB flash drive, in **Help**, press the color key ➡ **Keywords** and look up **Photos, movies and music**.

5.13
Photo camera

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

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

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

For more information on viewing photos, in **Help**, press the color key ➡ **Keywords** and look up **Photos movies and music**.

5.14
Camcorder

For best quality, use an HDMI cable to connect the camcorder to the TV.
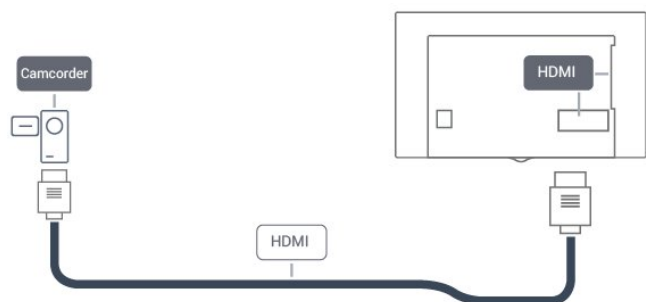
You can use a YPbPr connection to connect the camcorder to the TV.
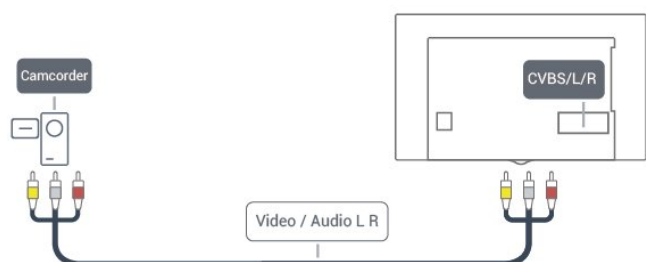
5.15
Computer

Connect

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

With HDMI

Use an HDMI cable to connect the computer to the TV.
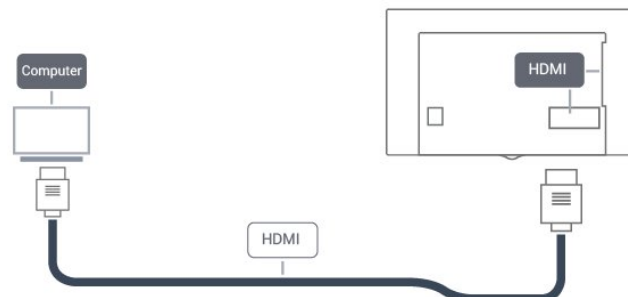
Ideal setting

If you connect a computer, we advise you to give the connection, to which the computer is connected, the correct device type name in the Source menu. If you then switch to **Computer** in the Source menu, the TV is automatically set to the ideal settings for a computer.

You can manually switch the ideal setting to **Off** for watching TV or **Game** for playing a game from a connected game console (remember to switch back to Off when you stop playing a game).

If you switch to a source and change the **Game or Computer** setting, it will be stored for this selected source.

To set the TV to the ideal setting…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Game or computer**, and press **OK**.
3 - Select **Game** (for gaming) or select **Computer** (for watching a movie).
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

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

Home menu

About the Home menu

Channels

This row contains all channels.

Sources

This row contains available sources on this TV.

Utilities

This row contains TV functions available to the user.

Quick settings

This row contains settings available to the user.

Open the Home menu

To open the Home menu and open an item…

1 - Press **↑ Home**.
2 - Select an item and press **OK** to open or start it.
3 - Press **← BACK** to close the Home menu without starting anything.

Network

7.1
Network and Internet

Home network

To enjoy the full capabilities of your TV, your TV must be connected to the Internet.

Connect the TV to a home network with a high-speed Internet connection. You can connect your TV wirelessly or wired to your network router.

Connect to network

Wireless connection

What you need

To connect the TV to the Internet wirelessly, you need a Wi-Fi router with a connection to the Internet.

Use a high-speed (broadband) Internet connection.

Make the connection

To make a wireless connection…

Step 1 - Make sure that your wireless network router is switched on.
Step 2 - Press the **Settings** key, select **Network** and press ❯ (right) to enter the menu.
Step 3 - Select **Connect to network** > **Start now** and press **OK**.
Step 4 - Select **Connect** and press **OK**.
Step 5 - Select **Wireless** and press **OK**.
Step 6 - Select **Scan** to scan for your wireless network. If you have a router with WPS (Wi-Fi Protected Setup), you can select **WPS**. Select your choice and press **OK**.

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

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

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

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

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

Problems

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

Internet does not work
• If the connection to the router is OK, check the router connection to the Internet.

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

DHCP

• If the connection fails, you can check the DHCP (Dynamic Host Configuration Protocol) setting of the router. DHCP should be switched on.

Wired connection

What you need

To connect the TV to the Internet, you need a network router with an internet connection.

Use a high-speed (broadband) Internet connection.

Make the connection

To make a wired connection…

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

If the connection fails, you can check the DHCP setting of the router. DHCP should be switched on.

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

Network settings

View network settings

 You can view all current network settings here. The IP and MAC address, signal strength, speed, encryption method, etc.

 To view the current network settings…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **View network settings** and press **OK.**
3 - Select **Next** to view the current network settings, or select **Close** to close the menu.

Network configuration

If you are an advanced user and want to install your network with Static IP addressing, set the TV to **Static IP**.

To set the TV to Static IP…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **Network configuration** and press **OK.**

3 - Select **Static IP** and press **OK** to enable **Static IP configuration**.
4 - Select **Static IP configuration** and configure the connection.
5 - You can set the number for **IP address**, **Netmask**, **Gateway**, **DNS 1**, or **DNS 2**.
6 - Press **<** (left) repeatedly if necessary, to close the menu.

Switch On with Wi-Fi (WoWLAN)

You can switch this TV on from your smartphone or tablet if the TV is on Standby. The setting **Switch On with Wi-Fi (WoWLAN)** must be switched on.

To switch on WoWLAN…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **Switch on with Wi-Fi (WoWLAN)** and press **OK.**
3 - Select **On** and press **OK.**
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Digital Media Renderer - DMR

If your media files do not play on your TV, make sure that the Digital Media Renderer is turned on. As a factory setting, DMR is turned on.

To switch on DMR…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **Digital Media Renderer - DMR** and press **OK.**
3 - Select **On** and press **OK.**
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Switch on Wi-Fi connection

You can switch the Wi-Fi connection on your TV on or off.

To switch on Wi-Fi…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **Wi-Fi On/Off** and press **OK.**
3 - Select **On** and press **OK.**
4 - Press **<** (left) repeatedly if necessary, to close the menu.

TV network name

If you have more than one TV in your home network, you can give the TV a unique name.

To change the TV name…

1 - Press the **Settings** key, select **Network** and press **>** (right) to enter the menu.
2 - Select **TV network name** and press **OK.**
3 - Enter the name with the on-screen keyboard.

4 - Select **Done** to confirm the change.
5 - Press ‹ (left) repeatedly if necessary, to close the menu.

Netflix settings

With **Netflix settings**, you can view the ESN number or deactivate a Netflix device.

To enter **Netflix settings**…

1 - Press the **Settings** key, select **Network** and press › (right) to enter the menu.
2 - Select **Netflix settings** and press **OK**.
3 - Press ‹ (left) repeatedly if necessary, to close the menu.

Clear Internet memory

With **Clear Internet Memory**, you can clear all Internet files and logins stored on your TV, such as passwords, cookies, and history.

To clear the Internet memory…

1 - Press the **Settings** key, select **Network** and press › (right) to enter the menu.
2 - Select **Clear Internet memory** and press **OK**.
3 - Select **OK** to confirm.
4 - Press ‹ (left) repeatedly if necessary, to close the menu.

File sharing

The TV can connect to other devices in your wireless network, like your computer or smartphone. You can use a computer with Microsoft Windows or Apple OS X.
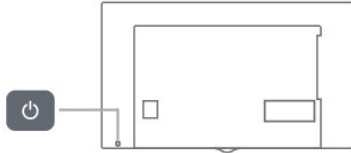
On this TV, you can open photos, movies and music stored on your computer.

Switching On and Off

8.1

On or standby

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

With the TV in Standby, press ⏻ on the remote control to switch the TV on. You can also press the small joystick key on the back of the TV to switch the TV on in case you can't find the remote control or its batteries are empty.

Switch to standby

To switch the TV to standby, press ⏻ on the remote control. You can also press the small joystick key on the back of the TV.

In standby mode, the TV is still connected to the wall power but consumes very little energy.

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

8.2

Keys on TV

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

To open the basic menu…

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

To switch the TV on standby, select ⏻ and press the joystick key.

8.3

Sleep timer

With the **Sleep Timer**, you can set the TV to switch to Standby automatically after a preset time.

To set the Sleep Timer…

1 - Press the **Settings** key, select **General settings** > **Sleep timer** and press **OK**.
2 - With the slider bar you can set the time up to 180 minutes in 5-minute increments. If set to 0 minutes, the Sleep Timer is switched off. You can always switch off your TV earlier or reset the time during the countdown.
3 - Press ⬑ **BACK** to close the menu.

8.4

Switch off timer

If the TV receives a TV signal, but you don't press a key on the remote control during a 4 hour period, the TV switches off automatically to save energy. Also, if the TV does not receive a TV signal or a remote control command for 10 minutes, the TV switches off automatically.

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

To deactivate the Switch Off Timer …

1 - Press the **Settings** key, select **Eco settings** and press ❯ (right) to enter the menu.
2 - Select **Switch off timer** and press **OK**.
3 - Press the arrows ⌃ (up) or ⌄ (down) to adjust the value. The value **0** deactivates the automatic switch off.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

For more information on environmentally friendly TV settings, in **Help**, press the color key ▬ **Keywords** and look up **Eco settings**.

9

Remote control

9.1

Key overview

Top

1 - ⏻ Standby / On

To switch the TV On or back to Standby.

2 - TV GUIDE

To open or close the TV guide.

3 - Number keys

To select a TV channel directly.

4 - CC

To switch subtitles on, off, or on during mute.

5 - ≡ LIST

To open or close the channel list.

6 - INFO

To open or close program info.

7 - SOURCES

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

8 - (Dot)

To enter digital sub-channels.

Middle
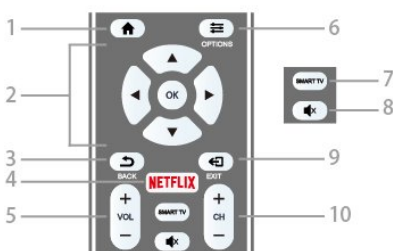
1 - ⌂ HOME

To open or close the home menu.

2 - Arrow / navigation / OK keys

To navigate up, down, left or right. To confirm a selection or setting.

3 - ⤺ BACK

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

4 - NETFLIX

To open NETFLIX.

5 - Volume

To adjust the volume level.

6 - ⇶ OPTIONS

To open or close the Options menu.

7 - SMART TV

To open the Smart TV start page.

8 - Mute

To mute the sound or to restore it.

9 - EXIT

To switch back to watching TV.

10 - Channel

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

Bottom
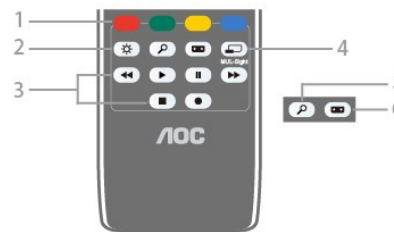
1 - Color keys

Follow the on-screen instructions.

2 - Settings key

To open the Settings menu.

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

4 - ⧉ MULTI-Sight

To open an extra small screen.

5 - ⚲ SEARCH

To open the Popular searches page.

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

9.2

IR sensor

The TV can receive commands from a remote control that uses infrared (IR) to send commands. If you use this kind of remote control, always point it at the infrared sensor on the front of the TV.

⚠ **Warning**

Do not put any objects in front of IR sensor of the TV as it may block the IR signal.

9.3

Batteries

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

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

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

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

For more information, in **Help**, press the color key ➖ **Keywords** and look up **End of use**.

9.4

Cleaning

Your remote control is treated with a scratch-resistant coating.

To clean the remote control, use a soft damp cloth. Never use substances such as alcohol, chemicals or household cleaners on the remote control.

Channels

10.1

Install Channels

For more information, in **Help**, press the color key ━ **Keywords** and look up **Channel, Antenna installation** or **Channel, Cable installation**.

10.2

Switch channels

• To watch TV channels, press ≡ **LIST**. The TV tunes to the TV channel you last watched.
• Alternatively, press ♠ **Home** to open the Home menu and select **Channels** and press **OK**.
• To switch channels, press **CH ＋** or **CH －**. If you know the channel number, enter it using the number keys. Press **OK** after entering the number to switch channels.
• To switch back to the previous channel, press ⬑ **BACK**.

To switch to a channel from a channel list

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

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

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

10.3

Channel lists

About channel lists

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

With a channel list selected, you can only tune to the channels in that list by pressing the **CH ＋** or **CH －** keys.

Open a channel list

To open the current channel list...

1 - Press ≡ **LIST** to open the current channel list and select **All**, then press **OK**.
2 - Press ⇄ **OPTIONS** and select **Digital + Analog** and press ❯ (right) to enter the menu.
3 - Select a channel in any of the lists and press **OK**. The TV will

tune to the selected channel.
4 - Press ❮ (left) to go back one step or press ⬑ **BACK** to close the menu.

Filter a channel list

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

1 - Press ≡ **LIST** to open the current channel list and select **All**, then press **OK**.
2 - Press ⇄ **OPTIONS** and select **Digital + Analog** and press ❯ (right) to enter the menu.
3 - Select the filter you want and press **OK** to activate it. The name of the filter appears as part of the channel list name on top of the channel list.
4 - Press ❮ (left) to go back one step or press ⬑ **BACK** to close the menu.

Search for a channel

You can search for a channel to find it in a long list of channels.

To search for a channel…

1 - Press ≡ **LIST** to open the current channel list and select **All**.
2 - Press ⇄ **OPTIONS**.
3 - Select **Digital + Analog** and press **OK**.
4 - Select the list you want to filter and press **OK**.
5 - Press the color key ━ (green) to open **Find Channel** and press **OK** to open a text field.
6 - Enter a number, a name, or part of a name, select **Done** and press **OK**. The TV will search for matching channel names in the list you selected.

Search results are listed as a channel list - see the list name at the top. The search results disappear once you select another channel list or close the list with search results.

10.4

Watching channels

Tune to a channel

To start watching TV channels, press ≡ **LIST**. The TV tunes to the channel you last watched.

Switch Channels

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

Previous channel

To switch back to the previously tuned channel, press ⬑ **BACK**.

Lock a channel

Lock and unlock a channel

Channels may be locked to prevent children from watching a specific channel. To watch a locked channel, you must enter the 4-digit **Child lock** PIN code first. You cannot lock programs from connected devices.

To lock a channel…

1 - Press ≡ **LIST** to open the current channel list and select **All**.
2 - Change the channel list, if necessary.
3 - Select the channel you want to lock.
4 - Press ⇄ **OPTIONS** and select **Channel lock** and press **OK**.
5 - Enter your 4-digit PIN code if the TV asks for it. A locked channel is marked with a 🔒 (lock).
6 - Press ❮ (left) to go back one step or press ⤺ **BACK** to close the menu.

To unlock a channel…

1 - Press ≡ **LIST** to open the current channel list and select **All**.
2 - Press **OK** to open the channel list. If necessary, change the channel list.
3 - Select the channel you want to unlock.
4 - Press ⇄ **OPTIONS** and select **Unlock channel** and press **OK**.
5 - Enter your 4-digit PIN code if the TV asks for it.
6 - Press ❮ (left) to go back one step or press ⤺ **BACK** to close the menu.

If you lock or unlock channels in a channel list, you only have to enter the PIN code just once until you close the channel list.

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Child lock** for more information.

Age Ratings

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

Digital channels may have age-rated programs. When the age rating of a program is equal to or higher than the age rating you set for your child, the program will be locked. To watch a locked program, you must enter the **Age ratings lock** code first.

To set an age rating…

1 - Press the **Settings** key, select **Child lock** > **Age ratings lock** and press **OK**.
2 - Enter a 4-digit Child lock code. If you have not yet set a code, select **Change code** in **Child lock**. Enter a 4-digit Child lock code and confirm. You can now set an age rating.
3 - Back in **Age ratings lock**, select the age and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

To switch off the parental age rating, select **Free**. However, in some countries you must set an age rating.

For some broadcasters/operators, the TV only locks programs with a higher rating. The parental age rating is set for all channels.

Channel options

Open options

While watching a channel, you can set some options.

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

To open the options menu…

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

Closed captions

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

Caption service

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

Audio language

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

Status

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

To view the technical information for a channel…

1 - Tune to the channel.
2 - Press ⇄ **OPTIONS**, select **Status** and press **OK**.
3 - To close this screen, press **OK**.

Share

Enables the user to communicate their activity on their social networks (such as Twitter or email).

Mono / Stereo

You can switch the sound of an analog channel to Mono or Stereo.

To switch to Mono or Stereo…

1 - Tune to an analog channel.
2 - Press ⇄ OPTIONS, select Mono/Stereo and press ❯ (right).
3 - Select Mono or Stereo and press OK.
4 - Press ❮ (left) to go back one step or press ⬑ BACK to close the menu.

10.5

Favorite Channels

About favorite Channels

In a favorite channel list, you can collect the channels you like.

With a Favorites List selected, you can only tune to the channels in that list by pressing the CH + or CH − keys.

Create a Favorites List

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

Create your favorite channel list
1 - Press ☰ LIST to open the current channel list and select All.
2 - Select the channel and press — Mark as favorite.
3 - The selected channel is marked with a ★.
4 - To finish, press ⬑ BACK. The channels are added to the Favorites list.

To remove a channel from the favorites list, select the channel with ★, then press — again to unmark as favorite.

Rename a Favorites List

You can only rename a Favorites List.

To rename a Favorites List…

1 - Press ☰ LIST to open the current channel list and select Favorites.
2 - Open the Favorite List you want to rename and press — Rename.
3 - Delete the current name and enter a new name.
4 - When done, select Done and press OK.
5 - Press ⬑ BACK to close the channel list.

Remove a Favorites List

You can only remove a Favorites List.

To remove a Favorites List…

1 - Press ☰ LIST to open the current channel list and select Favorites.
2 - Open the Favorites List you want to remove.
3 - Press — Remove to remove the list.
4 - Press ⬑ BACK to close the channel list.

10.6

Closed captioning (CC) and language

Closed captions

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

To open Closed captions, press CC.

Note:

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

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

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

Audio Language

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

1 - While you watch TV, press ⇄ OPTIONS.
2 - For digital channels, select Audio Language. For analog channels, select Alternate Audio. Press OK to confirm your selection.
3 - Select from the available languages, then press OK.

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

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

Menu language

To change the language of the TV menus and messages…

1 - Press the **Settings** key, select **General
settings** > **Language** > **Menu language** and press **OK**.
2 - Select your desired language and press **OK**.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

TV guide

11.1

What you need

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

The TV can collect TV Guide information for the channels that are installed on the TV. The TV cannot collect the TV Guide information for channels viewed from a digital receiver or decoder.

11.2

TV guide data

TV Guide information may not be available in some regions and for some channels. The TV can collect TV Guide information for the channels that are installed on the TV. The TV cannot collect the TV Guide information from channels viewed from a digital receiver or decoder.

The TV comes with the information set to **From the broadcaster**.

11.3

Using the TV guide

Open the TV guide

To open the TV Guide, press **TV GUIDE**. The TV Guide shows the channels of the selected tuner.

Press **TV GUIDE** again to close.

The first time you open the TV Guide, the TV scans all TV channels for program information. This may take several minutes. TV Guide data is stored on the TV.

Tune to a program

From the TV Guide, you can tune to a current program.

To switch to the program (channel), select the program and press **OK**.

View program details

To call up the details of the selected program…

1 - Press **INFO**.
2 - Press ⬑ **BACK** to close.

Change day

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

If the TV guide information comes from the broadcaster, you can press **CH ➕** to view the schedule for one of the next days. Press **CH ➖** to go back to the previous day.
Alternatively, you can press ⇶ **OPTIONS** and select **Change day**.
Select **Previous day**, **Today**, or **Next day** and press **OK** to select the day of the schedule.

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

If the TV guide information comes from the broadcaster, you can press **CH ➕** to view the schedule for one of the next days. Press **CH ➖** to go back to the previous day.

To change the day…

1 - Press **TV GUIDE**.
2 - Press ⇶ **OPTIONS**.
3 - Select **Change day**, select **Previous day**, **Today** or **Next day** and press **OK**.
4 - Press ⬑ **BACK** to close the menu.

Set a reminder

You can set reminders that alert you of the start of a program with a message on screen.

• To set a reminder, select the program in the schedule and press ➖ for **Set reminder**. The program is marked with a clock.
• To cancel the reminder, press the ➖ for **Clear reminder**.
• To view a list of all reminders you have set, press ⇶ **OPTIONS**, and select **All reminders**.

Search by genre

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

To search for programs by genre…

1 - Press **TV GUIDE**.
2 - Press ⇶ **OPTIONS**.
3 - Select **Search by genre** and press **OK**.
4 - Select the genre you want and press **OK**. A list with the found programs appears.
5 - You can set reminders or schedule a recording on a selected program.
6 - Press ⬑ **BACK** to close the menu.

Set a recording

You can set a recording in the TV Guide*.

To see the recording list, press ▬ **Recordings**, a program set to be recorded is marked with a ● (red dot) before the program's name.

To record a program…

1 - Press **TV GUIDE** and select a future or ongoing program.
2 - Press the color key ▬ **Record**.
3 - Press ↰ **BACK** to close the menu.

To cancel a recording…

1 - Press **TV GUIDE** and select the program set for recording.
2 - Press the color key ▬ **Clear Recording**.
3 - Press ↰ **BACK** to close the menu.

12
Recording and Pause TV

12.1
Recording

What you need

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

To record a TV program you need…

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

You cannot record when you are using Pause TV.

Some digital TV operators do not allow the recording of channels.

For more information on installing a USB Hard Drive, in **Help**, press the color key ▬ **Keywords** and look up **USB hard drive, installation**.

Record a program

Record now

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

If you receive TV guide information from the Internet, you can adjust the end time of the recording in the pop-up window before you confirm the recording.

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

Schedule a recording

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

1 - To schedule a recording, press **TV GUIDE**.
On the TV guide page, select the channel and program you wish to record.
You can enter the channel number to jump to the channel in the list.
Press ❯ (Right) or ❮ (Left) to scroll through a channel's programs.

To change the date of the list, press ⇄ **OPTIONS** and select **Change day**. In the list, select the desired day and press **OK**. If the TV guide comes from the Internet, you can select the date at the top of the page and press **OK**.
2 - With the program highlighted, press ▬ **Record**. The TV adds some time buffer at the end of the program. You can add some extra buffer if needed.
3 - Select **Schedule** and press **OK**. The program is scheduled for recording. A warning will appear automatically when overlapping recordings are scheduled.
If you plan to record a program in your absence, remember to leave the TV switched to standby and the USB Hard Drive turned on.

List of recordings

To view the list of recordings and scheduled recordings, press ⌂ **Home**, select **Utilities** > **Recordings** and press **OK**.

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

Remove a scheduled recording

Select the scheduled recording, press ▬ **Remove** and press **OK**.

Specifics

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

Watch a recording

To watch a recording . . .

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

Expired recording

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

Failed recording

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

Delete a recording

To delete an existing recording, select the recording in the list, press — **Remove** and press **OK**.

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

12.2

Pause TV

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

Pause or resume a broadcast

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

Back to the actual TV broadcast

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

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

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

Instant replay

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

Progress bar

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

Utilities

Smart TV

Open Smart TV page.

TV guide

For more information, in **Help**, press the color key ➖ **Keywords** and look up **TV guide**.

Recordings

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Recording**.

Channels

View channel list.

Update software

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Update software**.

Netflix

If you have a Netflix subscription, you can enjoy Netflix on this TV. Your TV must be connected to the Internet.

To open Netflix, press **NETFLIX** to open the Netflix App. You can open Netflix immediately from a TV in standby.

www.netflix.com

15

Sources

15.1

Switch to a device

From the list of Sources, you can switch to any of the connected devices. You can switch to a tuner to watch TV, open the content of a connected USB Flash Drive or see the recordings you made on a connected USB Hard Drive. You can switch to your connected devices to watch their programs, or to a digital receiver, or Blu-ray Disc player.

To switch to a connected device…

1 - Press **SOURCES** to open the Sources menu.
2 - Select one of the items in the source list and press **OK**. The TV will show the program or content of the device.
3 - Press **SOURCES** again to close the menu.

One Touch Play

With the TV on standby, you can switch on a disc player with your TV remote control.
To switch on both the disc player and TV from standby and start playing the disc immediately, press ▶ (Play) on the TV remote control. The device must be connected with an HDMI cable and both the TV and the device must have HDMI CEC switched on.

15.2

Options for TV Input

Some TV input devices offer specific settings.

To set the options for a specific TV input…

1 - Press **SOURCES**.
2 - Select the TV input from the list and press **OK**.
3 - Press ⇌ **OPTIONS**. You can set the options for the selected TV input here.
4 - Press ⇌ **OPTIONS** again to close the Options menu.

Possible options…

Controls

With this option you can operate the connected device with the TV remote control. The device must be connected with an HDMI cable and both the TV and the device must have HDMI CEC switched on.

15.3

Scan connections

To rescan connections and update the Sources menu, press ▬ **Scan connections**. (if ▬ key is available on the bottom of the screen.)

15.4

Game or computer

The device type determines picture and sound styles, resolution values and other specifics. You don't have to worry about the ideal settings.

For some devices the device type is unclear. A game console can have a built-in Blu-ray Disc player, so the type is set to Player because it is used as a disc player most of the time. For this kind of device, you can temporarily switch to the ideal settings for gaming. Or alternatively, switch to the ideal settings for a connected computer.

You can only use the setting **Game or Computer** when you switch to a connected device in the Sources menu. The Game or Computer setting is stored for the selected device.

To switch to the ideal settings for gaming or computer manually…

1 - Press the **Settings** key, select **Picture** > **Advanced** and press **OK**.
2 - Select **Game or Computer** and press **OK**.
3 - Select **Game**, **Computer** or **Off**.
4 - Press ❮ (left) to go back one step or press ↰ **BACK** to close the menu.

Remember to set this setting back to **Off** when you stop playing the game.

Internet

16.1

Start Internet

You can browse the Internet on your TV. You can view any Internet website but most of them are not prepared for a TV screen.

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

To start the Internet browser…

1 - Press **SMART TV** > **Apps**, and press **OK**.
2 - Select **Open Internet go to** and press **OK**.
3 - Enter an Internet address and press **OK**.
4 - To close Internet, press ♠ **Home** or **EXIT**.

16.2

Internet Options

Some extras are available for the Internet.

To open the extras…

1 - With the website open, press ⇶ **OPTIONS**.
2 - Select one of the items and press **OK**.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.
• Add to Speed Dial
• Add to Bookmarks
• Page Security
• New Private Tab
• Settings
• Help
• Exit Internet Browser

Your music, movies and photos

17.1

From a USB connection

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

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

If the list of files does not appear automatically…

1 - Press **SOURCES**, select **USB** and press **OK**.
2 - Select **USB Devices** and press ❯ (right) to select the desired USB device.
3 - You can browse your files in the folder structure you have organized on the drive.
4 - To stop playing videos, photos and music, press **EXIT**.

Warning

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

17.2

Menu bar and sorting

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

The menu bar

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

Sorting

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

17.3

Play your music

Play music

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

Info

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

Music options

Options for playing music…

• **Repeat** – Play all songs in this folder once or continuously.

17.4

Play your movie

Play movie

• To play a video, select **Movie** in the menu bar, select a video and press **OK**.
• If there are more videos in the same folder, press ━ **Play all** to play all videos in this folder.
• To jump to the next or previous video, press **CH ＋** or **CH −**.
• To pause the video, press **OK**. Press **OK** again to continue.
• To make a 10-second jump forwards or backwards in a video, press ❯ or ❮.
• To rewind or fast forward, press ▶▶ or ◀◀. Press the keys several times to speed up to 2x, 4x, 8x, 16x, 32x.
• To stop the video playback, press ■ (Stop).

Info

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

Movie options

During the video playback, press ⇌ **OPTIONS** to…

• **Subtitles**
• **Subtitle language**
• **Audio language**
• **Character set**
• **Status**
• **Repeat**
• **Subtitle settings**

17.5

View your photos

View photos

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

Info

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

Slideshow with music

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

To play music with the slide show…

1 - Select a song or a folder with songs and press **OK**.
2 - Press **INFO** to hide the browser list.
3 - Press ⬑ **BACK**.
4 - Now use the navigation arrows to select the folder with photos.
5 - Select the folder with photos and press ▬ **Play All**.
6 - To stop the slideshow, press ⬑ **BACK**.

Photo options

With a photo on screen, press ⇌ **OPTIONS** to…

• **Shuffle** – Play your files in a random order.
• **Repeat** – Play the slide show once or continuously.
• **Slide show speed** – Set the speed of the slide show.
• **Slide show transition** – Set the style of the photo transitions.

Smartphones and tablets

18.1
MHL

This TV is MHL™ compliant.

If your mobile device is also MHL compliant, you can connect your mobile device with a MHL cable to the TV. With the MHL cable connected you can share what's on your mobile device on the TV screen. Your mobile device charges its battery at the same time. The MHL connection is ideal for watching movies or playing games from your mobile device on TV for a longer time.

Charging

With the MHL cable connected, your device will charge while the TV is switched on (not in standby).

MHL Cable

You need a passive MHL cable (HDMI to Micro USB) to connect your mobile device to the TV. You might need an extra adapter to connect to your mobile device. To connect the MHL cable to the TV use the **HDMI 1 MHL** connection.

MHL, Mobile High-Definition Link and the MHL Logo are trademarks or registered trademarks of the MHL, LLC.

In **Help**, press ━ **Keywords** and look up HDMI MHL for more information.

18.2
Smart TV

About Smart TV

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

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

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

What you need

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

For more information, press ━ **Keywords** and look up **Network**.

Tip

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

Setup Smart TV

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

Parental control

To lock Adult 18+ rated apps . . .

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

Smart TV Apps

Open Smart TV

The Smart TV start page is your link to the Internet. You can rent movies online, read newspapers, watch videos, listen to music, shop online, or watch TV programs whenever you want with Online TV.

To do this, you use Apps, which are Internet sites tailored for TV. With your TV connected to the Internet, you can open Smart TV.

Open Smart TV

To open the Smart TV start page, press **Smart TV**. Alternatively, you can press ⌂ **Home** > **Utilities**, select ◆ **Smart TV** and press **OK**.

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

Close Smart TV

To close the Smart TV start page, press ♠ **Home** and select another activity.

Smart TV start page

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

Your Apps

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

App gallery

In the App gallery you find all available Apps.

Internet

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

Recommended Apps

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

Search

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

Open an App

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

Open an App

To open an App . . .
1 - Press ♠ **Home** > **Utilities** > ⊞ **Smart TV**.
2 - On the start page, select an App icon and press **OK**.
In an App, press ↩ **BACK** to go back one step or page.

Close an App

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

Reload an App page

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

Zoom

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

View security info

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

Feedback on an App

Select the App and press ▬ **Feedback** to select a 'like' or 'dislike' button and send a suggestion or comment to us. You can also report an App malfunction.

Manage your Apps

From the list of Apps on the Smart TV start page you can . . .
• **Remove an App**
To remove an App from the list, select the App icon and press ▬ **Remove**. The App is still available in the App gallery.
• **Move an App**
To reposition an App in the list, select the App icon, press ▬ **Move** and use the arrow keys to reposition the App. Press **OK** to confirm the position.
• **Manage an App**
To manage an App from the list, select the App icon and press ▬ **Manage**.

App gallery

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

Find the App for YouTube videos, a national newspaper, an online photo album, etc. There are Apps to rent a video from an

online video store and Apps for watching programs you missed. If the App gallery does not have what you are looking for, try the World Wide Web and surf the Internet on your TV.

Rental video Apps

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

Rent a movie

1 - Open a Video store App in your list of Apps, or select a recommended video on the Smart TV start page.
2 - Select a movie.
3 - Make the online payment.
4 - Start watching. You can use the ▶ (Play) and ‖ (Pause) keys.

Most Video stores ask you to create a login account.

Streaming video

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

Internet traffic

Streaming or downloading many videos may exceed your monthly Internet traffic limit.

Online TV

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

Open Online TV

To open the Online TV App . . .

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

List per broadcaster

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

* If available in your region.

MULTI-Sight

You can watch the current TV channel while in a Smart TV App or on the Internet. **MULTI-Sight** opens a small screen for the TV channel next to the Smart TV screen.

To open MULTI-Sight…

1 - Press **SMART TV** to open Smart TV.
2 - Press ▭ **MULTI-Sight** to open the small screen.
3 - Press **CH +** or **CH −** to change the TV channel in the small screen.

Reset Smart TV

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

To clear the Internet memory…

1 - Press the **Settings** key, select **Network** and press ❯ (right) to enter the menu.
2 - Select **Clear Internet memory** and press **OK**.
3 - Select **OK** to confirm.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

19
Settings

Quick settings

Eco settings

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Eco settings**.

Picture style

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Picture style**.

Picture format

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Picture format**.

Sound style

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Sound style**.

Headphones volume

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Headphones volume**.

Speakers

For more information, in **Help**, press the color key ➖ **Keywords** and look up **TV speakers**.

Clock

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Clock**.

Sleep timer

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Sleep timer**.

19.2
Picture

Picture style

Select a style

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

1 - While watching a TV channel, press **Settings** key.
2 - Select **Picture** > **Picture style**, and select one of the styles in the list.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

The available styles are…

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

Customize a style

Any picture setting you adjust, such as Color or Contrast, is stored in the currently selected **Picture style**. This allows you to customize each style.
Only the **Personal** style can save settings for each connected device in the Sources menu.

Restore a style

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

To restore the style to its original setting…

1 - While watching a TV channel, press **Settings** key.
2 - Select **Picture** > **Picture style**, and select the style you want to restore.
3 - Press the color key ➖ **Restore style**, and press **OK**. The style is restored.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Home or Store

If the **Picture style** is switched back to **Vivid** every time you switch on the TV, the TV location is set to **Shop**, a setting meant for in-store promotion.

To set the TV for Home use…

1 - Press the **Settings** key, select **General settings** and press > (right) to enter the menu.
2 - Select **Location** > **Home** and press **OK**.
3 - Press < (left) repeatedly if necessary, to close the menu.

Picture settings

Color

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

To adjust the color…

1 - Press the **Settings** key, select **Picture** and press > (right) to enter the menu.
2 - Select **Color** and press > (right).
3 - Press the ∧ (up) or ∨ (down) arrows to adjust the value.
4 - Press < (left) repeatedly if necessary, to close the menu.

Contrast

With **Contrast**, you can adjust the contrast of the picture.

To adjust the contrast…

1 - Press the **Settings** key, select **Picture** and press > (right) to enter the menu.
2 - Select **Contrast** and press > (right).
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press < (left) repeatedly if necessary, to close the menu.

Sharpness

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

To adjust the sharpness…

1 - Press the **Settings** key, select **Picture** and press > (right) to enter the menu.
2 - Select **Sharpness** and press > (right).
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press < (left) repeatedly if necessary, to close the menu.

Advanced picture settings

Game or computer

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

If you have a game console with a built-in Blu-ray Disc player, the type name may have been set to Blu-ray Disc. With **Game or computer** you can switch to the ideal settings for gaming manually. Don't forget to switch the Game or Computer setting off when you go back to watching TV.

To switch to the ideal settings for gaming or computer manually…

1 - Press the **Settings** key, select **Picture** > **Advanced** and press **OK.**
2 - Select **Game or computer** and press **OK**.
3 - Select **Game**, **Computer** or **TV**.
4 - Press < (left) to go back one step or press ⬅ **BACK** to close the menu.

Color settings

Color enhancement

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

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press > (right) to enter the menu.
2 - Select **Advanced** > **Color** > **Color enhancement** and press **OK**.
3 - Select **Maximum**, **Medium**, **Minimum** or **Off**.
4 - Press < (left) repeatedly if necessary, to close the menu.

Color temperature

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

To select a preset…

1 - Press the **Settings** key, select **Picture** and press > (right) to enter the menu.
2 - Select **Advanced** > **Color** > **Color temperature** and press **OK**.
3 - Select **Normal**, **Warm** or **Cool**. Or select **Custom** if you want to customize a color temperature yourself.
4 - Press < (left) repeatedly if necessary, to close the menu.

Custom color temperature

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

To set a custom color temperature…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Color** > **Custom color temperature** and press **OK**.
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Contrast settings

Contrast modes

With **Contrast Mode**, you can set the level at which power consumption can be reduced by dimming the intensity of the screen. Choose for the best power consumption or for the picture with the best intensity.

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Contrast** > **Contrast mode** and press **OK**.
3 - Select **Standard**, **Best power**, **Best picture**, or **Off**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Dynamic contrast

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

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Contrast** > **Dynamic contrast** and press **OK**.
3 - Select **Maximum**, **Medium**, **Minimum** or **Off**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Brightness

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

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to

enter the menu.
2 - Select **Advanced** > **Contrast** > **Brightness**, and press **OK**.
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Video contrast

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

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Contrast** > **Video contrast**, and press **OK**.
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Gamma

With **Gamma**, you can set a non-linear setting for picture luminance and contrast. Gamma is a setting intended for expert users.

To adjust the level…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Contrast** > **Gamma**, and press **OK**.
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Sharpness settings

Super resolution

With **Super Resolution**, you can switch on a superior sharpness in line edges and contours.

To switch on or off…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Sharpness** > **Super Resolution**, and press **OK**.
3 - Select **On** or **Off**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Noise reduction

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

To adjust the noise reduction…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.

2 - Select **Advanced** > **Sharpness** > **Noise reduction**, and press **OK**.
3 - Select **Maximum**, **Medium**, **Minimum** or **Off**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

MPEG artifact reduction

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

To reduce the MPEG artifacts…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Advanced** > **Sharpness** > **MPEG artifact reduction**, and press ❯ (right) to enter the menu.
3 - Select On and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Picture format

Fill the screen settings

If the picture is not filling the whole screen, if black bars are showing on the top or bottom or at both sides, you can adjust the picture to fill the screen completely.

To select one of the basic settings to fill the screen…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Picture format** and press ❯ (right).
3 - Select **Fill screen, Fit to screen** or **Wide screen**, and press **OK**.
4 - Press ⬅ **BACK** to close the menu.

• **Fill screen** – automatically enlarges the picture to fill the screen. Picture distortion is minimal, subtitles remain visible. Not suitable for PC input. Some extreme picture formats may still show black bars.
• **Fit to screen** – automatically zooms in the picture to fill the screen without distortion. Black bars may be visible. Not suitable for PC input.

Advanced

If the two basic settings are inadequate to format the picture you want, you can use the advanced settings. With the advanced settings you manually format the picture on your screen.

You can zoom, stretch and shift the picture until it shows what you need – e.g. missing subtitles or scrolling text banners . If you format the picture for a specific Source – like a connected game console – you can return to this setting the next time you use the game console. The TV stores your last settings for each connection.

To format the picture manually…

1 - Press the **Settings** key, select **Picture** and press ❯ (right) to enter the menu.
2 - Select **Picture format** and press ❯ (right).
3 - Press ▬ **Advanced** and press **OK**.
4 - Use **Shift**, **Zoom**, **Stretch** or **Original** to adjust the picture. Select **Undo** to return to the setting the picture had when you opened **Picture Format**.
• **Last setting** – Select to return to the last setting.
• **Shift** – Select on the arrows to shift the picture. You can only shift the picture when it is zoomed in.
• **Zoom** – Select on the arrows to zoom in.
• **Stretch** – Select on the arrows to stretch the picture vertically or horizontally.
• **Original** – Shows the original format of the incoming picture. This is a 1:1 pixel on pixel format. Expert mode for HD and PC input.
• **Undo** – Select to return to the picture format you started with.

Sound

Sound style

Select a style

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

1 - While watching a TV channel, press **Settings** key.
2 - Select **Sound** and press ❯ (right) to enter the menu.
3 - Select **Sound style**, and select one of the styles in the list.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

The available styles are…

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

Restore a style

With a Sound Style selected, you can adjust any sound setting in **Setup** > **Sound**…

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

To restore the style to its original setting…

1 - While watching a TV channel, press **Settings** key.

2 - Select **Sound** and press **>** (right) to enter the menu.
3 - Select **Sound style**, and select the Sound Style you want to restore.
4 - Press the color key ▬ **Restore style**. The style is restored.
5 - Press **<** (left) repeatedly if necessary, to close the menu.

Sound settings

Bass

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

To adjust the level…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Bass** and press **>** (right).
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Treble

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

To adjust the level…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Treble** and press **>** (right).
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Surround mode

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

To set the surround mode…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Surround mode** and press **>** (right) to enter the menu.
3 - Select **Stereo** or **Incredible surround**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Advanced sound settings

Auto volume leveling

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

To switch on or off…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.

2 - Select **Advanced** and press **>** (right) to enter the menu.
3 - Select **Auto volume leveling** and press **>** (right) to enter the menu.
4 - Select **On** or **Off**.
5 - Press **<** (left) repeatedly if necessary, to close the menu.

Delta volume

With **Delta volume**, you can set the TV to automatically level out sudden volume differences.

To adjust the value…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** and press **>** (right) to enter the menu.
3 - Select **Delta volume** and press **>** (right) to enter the menu.
4 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
5 - Press **<** (left) repeatedly if necessary, to close the menu.

TV speakers

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

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

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

To set the TV speakers…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** and press **>** (right) to enter the menu.
3 - Select **TV speakers** and press **>** (right) to enter the menu.
4 - Select **On**, **Off**, **E-Link**, or **E-Link autostart**.
5 - Press **<** (left) repeatedly if necessary, to close the menu.

To switch to speakers directly…

1 - While watching TV, press the **Settings** key.
2 - Select **Quick settings** > **Speakers** and
select **TV** or **Amplifier** (audio system).
3 - Press **<** (left) repeatedly if necessary, to close the menu.

Clear sound

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

To switch on or off…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** > **Clear sound** and press **OK**.
3 - Select **On** or **Off**, then press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Audio out format

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Audio out format**.

Audio out leveling

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Audio out leveling**.

HDMI 3 - ARC

To switch on or off…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** > **HDMI 3 - ARC** and press **OK**.
3 - Select **On** or **Off**, then press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Audio out delay

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

To switch off Audio Out Delay…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** > **Audio out delay** and press **OK**.
3 - Select **Off**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Audio out delay**.

Audio out offset

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

To synchronize the sound on the TV…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Advanced** > **Audio out offset** and press **OK**.
3 - Use the slider bar to set the sound offset and press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Audio out offset**.

Headphone volume

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

To adjust the volume…

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **Headphones volume** and press **OK**.
3 - Press the arrows ∧ (up) or ∨ (down) to adjust the value.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

TV placement

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

1 - Press the **Settings** key, select **Sound** and press **>** (right) to enter the menu.
2 - Select **TV placement** and press **OK**.
3 - Select **On a TV stand** or On the wall.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

19.4

Eco settings

Energy saving

Eco settings adjusts the settings to help the environment.

Energy Saving

If you select Energy Saving, the TV switches to Picture Style - Standard automatically, the most ideal energy conscious setting for the picture.

To set the TV in Energy Saving…

1 - Press the **Settings** key, select **Eco settings** and press **>** (right) to enter the menu.
2 - Select **Energy saving**, the **Picture style** is set to **Standard** automatically.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

Screen off

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

To only switch off the TV screen…

1 - Press the **Settings** key, select **Eco settings** and press **>** (right) to enter the menu.
2 - Select **Screen off**.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

To switch the screen back on, press any key on the remote control.

Switch off timer

If the TV receives a TV signal, but you don't press a key on the remote control during a 4 hour period, the TV switches off automatically to save energy. Also, if the TV does not receive a TV signal or a remote control command for 10 minutes, the TV switches off automatically.

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

To deactivate the Switch Off Timer …

1 - Press the **Settings** key, select **Eco settings** and press **>** (right) to enter the menu.
2 - Select **Switch off timer** and press **OK**.
3 - Press the arrows **∧** (up) or **∨** (down) to adjust the value. The value **0** deactivates the automatic switch off.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

For more information on environmentally friendly TV settings, in **Help**, press the color key ▬ **Keywords** and look up **Eco settings**.

19.5
General settings

Languages

For more information, in **Help**, press ▬ **Keywords** and look up **Language settings**.

Clock

For more information, in **Help**, press ▬ **Keywords** and look up **Clock settings**.

Sleep timer

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Sleep timer**.

Switch off timer

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Switch off timer**.

E-Link

For more information, in **Help**, press the color key ▬ **Keywords** and look up **E-Link**.

USB keyboard settings

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

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

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **USB keyboard settings**, and press **OK** to start the keyboard setup.

Mouse settings

To adjust the motion speed of the USB mouse.…

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **Mouse settings**, and press **OK** to start the mouse speed setup.

Home or Store

If the TV is installed in a shop, you can set the TV to display an in store promotion banner. **Picture style** is set to **Vivid** automatically. **Switch off timer** is switched off.

To set the TV to Store location…

1 - Press the **Settings** key, select **General settings** and press **>** (right) to enter the menu.
2 - Select **Location** > **Store**, and press **OK**.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

If you use the TV at home, set the TV in Home location.

Shop setup

If the TV is set to **Store**, you can set the availability of a specific demo for in store use.

1 - Press the **Settings** key, select **General settings** and press ❯ (right) to enter the menu.
2 - Select **Shop setup** and press ❯ (right) to enter the menu.
3 - Select **banner**, and select **Commercial banner** or **Promotional banner** as in store demo.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Channel logos

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

To switch off the logos…

1 - Press the **Settings** key, select **General settings** and press ❯ (right) to enter the menu.
2 - Select **Channel logos** and press ❯ (right) to enter the menu.
3 - Select **Off** and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Factory settings

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

To switch back to the original settings…

1 - Press the **Settings** key, select **General settings** and press ❯ (right) to enter the menu.
2 - Select **Factory settings** and press **OK.**
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

Reinstall TV

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

To redo the full TV installation…

1 - Press the **Settings** key, select **General settings** and press ❯ (right) to enter the menu.
2 - Select **Reinstall TV** and press **OK**.
3 - Follow the instructions on screen. The installation may take a few minutes.

Channel list copy

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Channel List Copy, copy**.

Universal Access

For more information, in **Help**, press the color key ➖ **Keywords** and look up **Universal access**.

Child lock

Age ratings lock

To set a minimum age to watch rated programs…

1 - Press the **Settings** key, select **Child lock** and press ❯ (right) to enter the menu.
2 - Select **Age ratings lock**, and select one of the ages in the list.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

Set code / Change code

The Child lock PIN code is used to lock or unlock channels or programs.

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

1 - Press the **Settings** key, select **Child lock** and press ❯ (right) to enter the menu.
2 - Select **Set code** or **Change code** and press **OK**.
3 - Enter a 4-digit code of your choice. If a code is set already, enter the current Child lock code and then enter the new code twice.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

The new code is set.

Forgot your Child lock PIN code?

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

1 - Press the **Settings** key, select **Child lock** and press ❯ (right) to enter the menu.
2 - Select **Change code** and press **OK**.
3 - Enter the overriding code **8888**.
4 - Now enter a new Child lock PIN code and enter it again to confirm.
5 - Press ❮ (left) repeatedly if necessary, to close the menu.

The new code is set.

19.6

Clock

Date and time

Automatic

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

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

To correct the TV clock automatically...

1 - Press the **Settings** key, select **General settings** > **Clock** > **Auto clock mode**, and select **Country dependent**.
2 - Select **Daylight savings** and select the appropriate setting.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

Manual

To set the TV clock manually…

1 - Press the **Settings** key, select **General settings** > **Clock** > **Auto clock mode**, and select **Manual**.
2 - Select **Date** and **Time** to adjust.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

Time zone

To set the time zone…

1 - Press the **Settings** key, select **General settings** > **Clock** > **Time zone**, and press **OK**.
2 - Select one of the time zones.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

19.7

Universal Access

Switch on

With **Universal access** switched on, the TV is prepared for use for the deaf, hard of hearing, blind, or visually impaired people.

Switch on

If you did not switch on **Universal access** during the installation, you can still enable it in **Universal access** menu.
To switch on Accessibility…

1 - Press the **Settings** key, select **Universal access** and press ❯ (right) to enter the menu.
2 - Select **Universal access** one step further.
3 - Select **On** and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

With **Universal access** switched on, the option **Universal access** is added in the Options menu.

Audio description

Switch on

Digital TV channels can broadcast special audio commentary describing what is happening on screen.
To be able to set audio and effects for the visually impaired, you must first enable **Audio description**.
Also, before you can switch on **Audio description**, you have to enable **Universal access** in setup menu.

With **Audio description**, a narrator's commentary is added to the normal audio.
To switch on the commentary (if available)…

To switch on **Audio description**…

1 - Press the **Settings** key, select **Universal access** and press ❯ (right) to enter the menu.
2 - Select **On** and press **OK**.
3 - Select **Audio description** and press ❯ (right) to enter the menu.
4 - Select **Audio description** one step further
2 - Select **On** and press **OK**.
6 - Press ❮ (left) repeatedly if necessary, to close the menu.

You can check if an audio commentary is available.
In the Options menu, select **Audio language** and look for an audio language marked with a **AD**.

Speakers/headphones

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

To set Speakers/Headphones…

1 - Press the **Settings** key, select **Universal access** and press ❯ (right) to enter the menu.
2 - Select **Audio Description** > **Speakers/headphones** and press **OK**.
3 - Select **Speakers**, **Headphones** or **Speakers + Headphones** and press **OK**.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Mixed volume

You can mix the volume of the normal audio with the audio commentary.

To mix the volume…

1 - Press the **Settings** key, select **Universal access** and
press **>** (right) to enter the menu.
2 - Select **Audio Description** > **Mixed volume** and press **OK**.
3 - Press the arrows **∧** (up) or **∨** (down) to adjust the value.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Audio effect

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

To switch on **Audio effects** (if available)…

1 - Press the **Settings** key, select **Universal access** and
press **>** (right) to enter the menu.
2 - Select **Audio description** > **Audio effects** > **On** and
press **OK**.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

Speech

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

To switch on these subtitles (if available) . . .

1 - Press the **Settings** key, select **Universal access** and
press **>** (right) to enter the menu.
2 - Select **Audio description** > **Speech** and press **OK**.
3 - Select **Descriptive** or **Subtitles** and press **OK**.
4 - Press **<** (left) repeatedly if necessary, to close the menu.

Channel installation

20.1

Antenna/cable installation

Search for channels

Update channels

You can always start a channel update yourself.

To start a channel update manually…

1 - Press the **Settings** key, select **Antenna/cable installation** and press **OK**.
2 - Enter your PIN code if necessary.
3 - Select **Search for channels** and press **OK**.
4 - Select **Start now** and press **OK**.
5 - Select **Update channels** and press **OK**.
6 - Press ⬅ **BACK** to close the menu.

Reinstall channels

Reinstall all channels

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

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

To reinstall channels…

1 - Press the **Settings** key, select **Antenna/cable installation** and press **OK**.
2 - Enter your PIN code if necessary.
3 - Select **Search for channels** and press **OK**.
4 - Select **Start now** and press **OK.**
5 - Select **Reinstall channels** and press **OK**.
6 - Select your country and press **OK**.
7 - Select **Start** and press **OK** to update channels. This can take a few minutes.
8 - Press ⬅ **BACK** to close the menu.

Reinstall TV

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

To redo the full TV installation…

1 - Press the **Settings** key, select **General settings** > **Reinstall TV** and press **OK**.
2 - Enter your PIN code if necessary.
3 - Select **Yes** and press **OK** to confirm.
4 - The TV will perform a complete reinstallation. All settings will

be reset and installed channels will be replaced. The installation can take a few minutes.
5 - Press ⬅ **BACK** to close the menu.

Service navigation

Switch the availability to navigate through primary channels only or all channels, on or off.

20.2

Channel list copy

Introduction

Channel List Copy is intended for dealers and expert users.

With Channel List Copy, you can copy the channels installed on one TV onto another AOC TV of the same range, thereby avoiding time-consuming channel searches by uploading a predefined channel list to a TV. Use a USB flash drive with a storage capacity of at least 1 GB.

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

Current software version

To check the current version of the TV software…

1 - Press the **Settings** key, select **Update Software** and press ❯ (right) to enter the menu.
2 - Select **Current Software Info** and press **OK**.
3 - The version, release notes, and creation date are shown. Also, the Netflix ESN Number is shown, if available.
4 - Press ❮ (left) repeatedly if necessary, to close the menu.

Copy a channel list

To copy a channel list…

1 - Switch on the TV. This TV should have channels installed.
2 - Plug in a USB flash drive.
3 - Press the **Settings** key, select **General settings** > **Channel List Copy** and press **OK**.
4 - Select **Copy to USB** and press **OK**. You might be asked to enter the Child Lock PIN code to copy the channel list.
5 - When copying is done, unplug the USB flash drive.
6 - Press ❮ (left) repeatedly if necessary, to close the menu.

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

Channel list version

Check the current version of the channel list…

1 - Press the **Settings** key, select **General settings** > **Channel List Copy** and press **OK**.
2 - Select **Current version**, then press **OK**.
3 - Press **<** (left) repeatedly if necessary, to close the menu.

Upload a channel list

To TVs that are not installed

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

To a TV that is not yet installed
1 - Plug in the power plug to start the installation and select language and country. You can skip the channel search. Finish the installation.
2 - Plug in the USB flash drive that holds the channel list of the other TV.
3 - To start the channel list upload, press the **Settings** key, select **General settings** and press **OK**.
4 - Select **Channel List Copy** > **Copy to TV** and press **OK**. Enter your PIN code if necessary.
5 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB flash drive.

To installed TVs

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

To an already installed TV
1 - Verify the country setting of the TV. (To verify this setting, see chapter Reinstall All Channels. Start this procedure until you reach the country setting. Press ⬅ **BACK** to cancel the installation.)
If the country is correct continue with step 2.
If the country is not correct, you will need to start a reinstallation. See chapter Reinstall All Channels and start the installation. Select the correct country and skip the channels search. Finish the installation. When done, continue with step 2.
2 - Plug in the USB flash drive that holds the channel list of the other TV.
3 - To start the channel list upload, press the **Settings** key, select **General settings** and press **OK**.
4 - Select **Channel List Copy** > **Copy to TV** and press **OK**. Enter your PIN code if necessary.
5 - The TV notifies you if the channel list is copied to the TV successfully. Unplug the USB flash drive.

Install digital channels

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

1 - Press the **Settings** key, select **Antenna/cable installation** and press **OK**.
2 - Enter your PIN code if necessary.
3 - Select **Digital: Reception test** > **Search** and press **OK**.
4 - Press the numbered buttons to enter the channel frequency.
5 - Select **Search** and press **OK**.
6 - When the channel is found, select **Store** and press **OK**.

Software

21.1

Update software

Update from Internet

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

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

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

1 - Press the **Settings** key, select **Update software** > **Search for updates**, then press **OK**.
2 - Select **Internet**, then press **OK**. Follow the instructions on screen.

When the update is complete, the TV turns off and back on again automatically.
Wait for the TV to turn itself back on.

For more information, in **Help**, press the color key ▬ **Keywords** and look up **Network**, for more information on connecting the TV to a network.

21.2

Software version

To view the current TV software version…

1 - Press the **Settings** key, select **Update Software** > **Current Software Info** and press **OK**.
2 - The version, **Release Version** is shown. Also, the Netflix ESN Number is shown, if available.
3 - Press ❮ (left) repeatedly if necessary, to close the menu.

21.3

Open source license

About open source license

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

This is a document describing the distribution of the source code used on the TV, which fall either under the GNU General Public License (the GPL), or the GNU Lesser General Public License (the LGPL), or any other open source license.

Instructions to obtain source code for this software can be found in the user manual.

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

Specifications

22.1
Environmental

Energy Label

The **Energy Label** informs you about the energy efficiency class of this product. The greener the energy efficiency class of this product is, the lower the amount of energy it consumes.
On the label, you can find the energy efficiency class, the average power consumption of this product in use, and the average energy consumption for one year.

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 trash container symbol is attached to a product, it means that the product is covered by the European Directive 2012/19/EC.

Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. Correct disposal of your old product helps to prevent potential negative consequences for the environment and human health.

Your product contains batteries covered by the European Directive 2006/66/EC, which cannot be disposed with normal household waste.

Please find out for yourself about the local rules on separate collection of batteries because correct disposal will help to prevent negative consequences for the environment and human health.

22.2
Power

Product specifications are subject to change without notice.

Power
• Line power: AC 110-240V +/-10%
• Ambient temperature: 5°C to 35°C
• Power saving features: Eco mode, Picture mute (for radio), Auto turn-off timer, Eco settings menu.

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

22.3
Reception

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

Note: See selected countries on the TV type plate

22.4
Display type

Diagonal screen size
• LE32S5970: 32 in / 80 cm

Display resolution
• 1366 x 768p

Diagonal screen size
• LE43S5970: 43 in / 108 cm
• LE49S5970: 49 in / 123 cm

Display resolution
• 1920 x 1080p

22.5
Display input resolution

Video formats

Resolution — Refresh rate

• 480i - 60 Hz
• 480p - 60 Hz
• 576i - 50 Hz
• 576p - 50 Hz
• 720p - 50 Hz, 60 Hz
• 1080i - 50 Hz, 60 Hz
• 1080p - 24 Hz, 25 Hz, 30 Hz

Computer formats

Resolutions (among others)

- 640 × 480p - 60 Hz
- 800 × 600p - 60 Hz
- 1024 × 768p - 60 Hz
- 1280 × 768p - 60 Hz
- 1360 × 765p - 60 Hz
- 1360 × 768p - 60 Hz
- 1280 × 1024p - 60 Hz
- 1920 × 1080p - 60 Hz

22.6

Dimensions and Weights

LE32S5970

- without TV stand:
Width 28.6 in (726.49 mm) - Height 17.3 in (438.8 mm) -
Depth 3.1 in (79.24 mm) - Weight ± 10.6 lb (4.81 kg)
- with TV stand:
Width 28.6 in (726.49 mm) - Height 19.3 in (491.02 mm) -
Depth 7.3 in (185.62 mm) - Weight ± 11.4 lb (5.16 kg)

LE43S5970

- without TV stand:
Width 38.1 in (968.2 mm) - Height 22.7 in (575.9 mm) - Depth
3.1 in (79.5 mm) - Weight ± 19.6 lb (8.89 kg)
- with TV stand:
Width 38.1 in (968.2 mm) - Height 24.7 in (627.4 mm) - Depth
9.5 in (241 mm) - Weight ± 24.3 lb (11.02 kg)

LE49S5970

- without TV stand:
Width 43.3 in (1099.2 mm) - Height 25.4 in (645.4 mm) -
Depth 3.2 in (81.2 mm) - Weight ± 24.5 lb (11.12 kg)
- with TV stand:
Width 43.3 in (1099.2 mm) - Height 27.4 in (695.9 mm) -
Depth 10.2 in (258.9 mm) - Weight ± 30.2 lb (13.7 kg)

22.7

Connectivity

TV Side

- HDMI 1 in - MHL
- HDMI 2 in
- USB 1
- USB 2
- 1x Serv.U
- Antenna (75 ohm)

TV Rear

- CVBS/Y Pb Pr: CVBS/Y Pb Pr, Audio L/R
- HDMI 3 in - ARC
- SPDIF: Digital Audio Out-Optical
- Network LAN: RJ45
- Headphones - Stereo mini-jack 3.5mm

22.8

Sound

HD Stereo wOOx

- Output power (RMS): 16W

22.9

Multimedia

Connections

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

Supported USB file systems

- FAT 16, FAT 32, NTFS

Playback formats

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

Supported media server software (DMS)

- PC - Microsoft Windows XP, Vista or Windows 7
– Microsoft - Windows Media Player
- Mobile devices
– Interoperability and performance may vary, depending on the
capabilities of the mobile device and the software used.

Safety and care

23.1

Safety

Important

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

Secure the TV from falling over

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

You can find the mounting instructions in the Quick Start Guide that came with the TV.

Risk of electric shock or fire

• Never expose the TV to rain or water. Never place liquid containers, such as vases, near the TV.
If liquids are spilled on or into the TV, disconnect the TV from the power outlet immediately.
• Never expose the TV, remote control or batteries to excessive heat. Never place them near burning candles, naked flames or other heat sources, including direct sunlight.
• Never insert objects into the ventilation slots or other openings on the TV.
• Never place heavy objects on the power cord.
• Avoid force coming onto power plugs. Loose power plugs can cause arcing or fire. Ensure that no strain is exerted on the power cord when you swivel the TV screen.
• To disconnect the TV from the main power, the power plug of the TV must be disconnected. When disconnecting the power, always pull the power plug, never the cord. Ensure that you have full access to the power plug, power cord and outlet socket at all times.

Risk of injury or damage to the TV

• Two people are required to lift and carry a TV that weighs more than 25 kg or 55 lbs.
• If you mount the TV on a stand, only use the supplied stand. Secure the stand to the TV tightly.
Place the TV on a flat, level surface that can support the weight of the TV and the stand.
• When wall mounted, ensure that the wall mount can safely bear the weight of the TV set. We bear no responsibility for improper wall mounting that results in accident, injury or damage.
• Parts of this product are made of glass. Handle with care to avoid injury or damage.

Risk of damage to the TV!

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

Risk of injury to children

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

• Never place the TV on a surface covered by a cloth or other material that can be pulled away.
• Ensure that no part of the TV hangs over the edge of the mounting surface.
• Never place the TV on tall furniture, such as a bookcase, without anchoring both the furniture and TV to the wall or a suitable support.
• Teach children about the dangers of climbing on furniture to reach the TV.

Risk of swallowing batteries!

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

Risk of overheating

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

Lightning storms

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

Risk of hearing damage

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

Low temperatures

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

Humidity

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

23.2

Screen care

• Never touch, push, rub or strike the screen with any object.
• Unplug the TV before cleaning.
• Clean the TV and frame with a soft damp cloth and wipe
gently. Never use substances such as alcohol, chemicals, or
household cleaners on the TV.
• To avoid deformations and color fading, wipe off water drops
as quickly as possible.
• Avoid stationary images as much as possible. Stationary images
are images that remain on screen for extended periods of time.
Stationary images include on screen menus, black bars, time
displays, etc. If you must use stationary images, reduce screen
contrast and brightness to avoid screen damage.

Copyrights

24.1
MHL

MHL, Mobile High-Definition Link and the MHL Logo are trademarks or registered trademarks of the MHL, LLC.

24.2
HDMI

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

24.3
Dolby

Manufactured under license from Dolby Laboratories. Dolby, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories.

24.4
DTVi

The DTVi brand and logo are registered marks of Pontifical Catholic University of Rio de Janeiro (PUC-Rio) and the Federal University of Paraíba (UFPB).

24.5
Java

Java and all Java based trademarks are registered trademarks of Oracle and/or its affiliates, in the United States and other countries.

24.6
ANATEL

Este produto está homologado pela ANATEL de acordo com os procedimentos regulamentados pela Resolução 242/2000, e atende aos requisitos técnicos aplicados.
Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

24.7
Microsoft

Windows Media

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

Microsoft PlayReady

Content owners use Microsoft PlayReady™ content access technology to protect their intellectual property, including copyrighted content.
This device uses PlayReady technology to access PlayReady-protected content and/or WMDRM-protected content. If the device fails to properly enforce restrictions on content usage, content owners may require Microsoft to revoke the device's ability to consume PlayReady-protected content. Revocation should not affect unprotected content or content protected by other content access technologies. Content owners may require you to upgrade PlayReady to access their content. If you decline

an upgrade, you will not be able to access content that requires the upgrade.

24.8

Wi-Fi Alliance

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

24.9

Kensington

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

24.10

Other trademarks

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

Index