

TOSHIBA



43/49/50/55/58/65 UA3A Series

43/49/50/55/58/65 UA20 Series

43/49/50/55/58/65 UA2B Series

43/49/50/55/58/65 UA4B Series

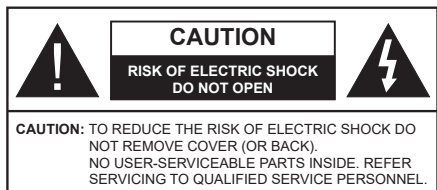
43/49/50/55/58/65 UA6B Series

OPERATING INSTRUCTIONS

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Safety Information



In extreme weather (storms, lightning) and long inactivity periods (going on holiday) disconnect the TV set from the mains.


The mains plug is used to disconnect TV set from the mains and therefore it must remain readily operable. If the TV set is not disconnected electrically from the mains, the device will still draw power for all situations even if the TV is in standby mode or switched off.

Note: Follow the on screen instructions for operating the related features.

IMPORTANT - Please read these instructions fully before installing or operating

WARNING: This device is intended to be used by persons (including children) who are capable / experienced of operating such a device unsupervised, unless they have been given supervision or instruction concerning the use of the device by a person responsible for their safety.




- Use this TV set at an altitude of less than 2000 meters above the sea level, in dry locations and in regions with moderate or tropical climates.
- The TV set is intended for household and similar general use but may also be used in public places.
- For ventilation purposes, leave at least 5cm of free space around the TV.
- The ventilation should not be impeded by covering or blocking the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- The power cord plug should be easily accessible. Do not place the TV, furniture, etc. on the power cord. A damaged power cord/plug can cause fire or give you an electric shock. Handle the power cord by the plug, do not unplug the TV by pulling the power cord. Never touch the power cord/plug with wet hands as this could cause a short circuit or electric shock. Never make a knot in the power cord or tie it with other cords. When damaged it must be replaced, this should only be done by qualified personnel.
- Do not expose the TV to dripping or splashing of liquids and do not place objects filled with liquids, such as vases, cups, etc. on or over the TV (e.g., on shelves above the unit).

- Do not expose the TV to direct sunlight or do not place open flames such as lit candles on the top of or near the TV. 
- Do not place any heat sources such as electric heaters, radiators, etc. near the TV set.
- Do not place the TV on the floor and inclined surfaces.
- To avoid danger of suffocation, keep plastic bags out of the reach of the babies, children and domestic animals.
- Carefully attach the stand to the TV. If the stand is provided with screws, tighten the screws firmly to prevent the TV from tilting. Do not over-tighten the screws and mount the stand rubbers properly.
- Do not dispose of the batteries in fire or with hazardous or flammable materials.

WARNING


- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Excessive sound pressure from earphones or headphones can cause hearing loss.


ABOVE ALL - NEVER let anyone, especially children, push or hit the screen, push anything into holes, slots or any other openings in the case.


 Caution	Serious injury or death risk
 Risk of electric shock	Dangerous voltage risk
 Maintenance	Important maintenance component

Markings on the Product

The following symbols are used on the product as a marker for restrictions and precautions and safety instructions. Each explanation shall be considered where the product bears related marking only. Note such information for security reasons.

 **Class II Equipment:** This appliance is designed in such a way that it does not require a safety connection to electrical earth.

 **Hazardous Live Terminal:** The marked terminal(s) is/are hazardous live under normal operating conditions.

 **Caution, See Operating Instructions:** The marked area(s) contain(s) user replaceable coin or button cell batteries.



Class 1 Laser Product: This product contains Class 1 laser source that is safe under reasonably foreseeable conditions of operation.

WARNING

Do not ingest the battery, Chemical Burn Hazard

This product or the accessories supplied with the product may contain a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the product and keep it away from children.

If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

A television may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.
- The equipment is only suitable for mounting at heights ≤ 2 m.

If the existing television set is going to be retained and relocated, the same considerations as above should be applied.

Apparatus connected to the protective earthing of the building installation through the MAINS connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system has therefore to be provided through a device providing

electrical isolation below a certain frequency range (galvanic isolator)

WALL MOUNTING WARNINGS

- Read the instructions before mounting your TV on the wall.
- The wall mount kit is optional. You can obtain from your local dealer, if not supplied with your TV.
- Do not install the TV on a ceiling or on an inclined wall.
- Use the specified wall mounting screws and other accessories.
- Tighten the wall mounting screws firmly to prevent the TV from fall. Do not over-tighten the screws.

Using the special functions to change the size of the displayed image (i.e. changing the height/width ratio) for the purposes of public display or commercial gain may infringe on copyright laws.

The LCD display panels are manufactured using an extremely high level of precision technology; however, sometimes some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

The set should be operated only from a 220-240 V AC 50 Hz outlet. Ensure that the television is not standing on the mains lead. Do not cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance. It should only be replaced by a correctly rated and approved type. **IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.**

Figures and illustrations in this user manual are provided for reference only and may differ from the actual product appearance. Product design and specifications may be changed without notice.

Introduction

Thank you for choosing our product. You'll soon be enjoying your new TV. Please read these instructions carefully. They contain important information which will help you get the best from your TV and ensure safe and correct installation and operation.

Features

- Remote controlled colour TV
- Android™ operating system
- Google Cast
- Voice Search
- Fully integrated digital terrestrial/cable/satellite TV (DVB-T-T2/C/S-S2)
- HDMI inputs to connect other devices with HDMI sockets
- USB input
- Composite inputs for external devices (such as DVD Players, PVR, video games, etc.)
- Stereo sound system
- Teletext
- Headphone connection
- Automatic programming system
- Manual tuning
- Sleep timer
- On/Off timer
- Switch off timer
- Picture off function
- No signal auto power off function
- VGA input
- Ethernet (LAN) for Internet connectivity and service
- 802.11 a/b/g/n/ac built in WLAN Support
- HbbTV

Ultra HD (UHD)

TV supports Ultra HD (Ultra High Definition - also known as 4K) which provides resolution of 3840 x 2160 (4K:2K). It equals 4 times the resolution of Full HD TV by doubling the pixel count of the Full HD TV both horizontally and vertically. Ultra HD contents are supported from HDMI, some of the Over-the-Top (OTT) services, USB inputs and over DVB-T2 and DVB-S2 broadcasts.

High Dynamic Range (HDR) / Hybrid Log-Gamma (HLG)

Using this feature the TV can reproduce greater dynamic range of luminosity by capturing and then

combining several different exposures. HDR/HLG promises better picture quality thanks to brighter, more realistic highlights, more realistic colour and other improvements. It delivers the look that filmmakers intended to achieve, showing the hidden areas of dark shadows and sunlight with full clarity, colour and detail. HDR/HLG contents are supported via native and market applications, HDMI, USB inputs and over DVB-S broadcasts. When the input source is set to the related HDMI input press the **Menu** button and set the **HDMI EDID Version** option in the **TV Options>Settings>Device Preferences>Inputs** menu as **EDID 2.0** or **Auto EDID** in order to watch HDR/HLG content, if the HDR/HLG content is received through an HDMI input. The source device should also be at least HDMI 2.0a compatible in this case.

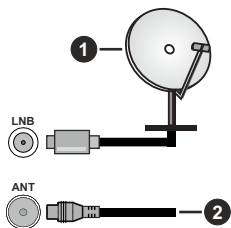
Dolby Vision

Dolby Vision™ delivers a dramatic visual experience, astonishing brightness, exceptional contrast, and vivid colour, that brings entertainment to life. It achieves this stunning image quality by combining HDR and wide colour gamut imaging technologies. By increasing the brightness of the original signal and using a higher dynamic colour and contrast range, Dolby Vision presents amazing true-to-life images with stunning detail that other post-processing technologies in the TV aren't able to produce. Dolby Vision is supported via native and market applications, HDMI and USB inputs. When the input source is set to the related HDMI input press the **Menu** button and set the **HDMI EDID Version** option in the **TV Options>Settings>Device Preferences>Inputs** menu as **EDID 2.0** or **Auto EDID** in order to watch HDR/HLG content, if the HDR/HLG content is received through an HDMI input. The source device should also be at least HDMI 2.0a compatible in this case. In the **Picture Mode** menu two predefined picture modes will be available if Dolby Vision content is detected: **Dolby Vision Bright** and **Dolby Vision Dark**. Both allow the user to experience the content in the way the creator originally intended with different ambient lighting conditions. To change the **Picture Mode** setting press the **Menu** button while watching the Dolby Vision content and go to **Picture** menu. While watching Dolby Vision Content via an application, except YouTube, Netflix and Multi Media Player, you will not be able to access the **Picture** menu and set the **Picture Mode**.

Antenna Connection

Connect the aerial or cable TV plug to the AERIAL INPUT (ANT) socket or satellite plug to the SATELLITE INPUT (LNB) socket located on the rear side of the TV.

Rear side of the TV




























1. Satellite
2. Aerial or cable



If you want to connect a device to the TV, make sure that both the TV and the device are turned off before making any connection. After the connection is done, you can turn on the units and use them.

Other Connections

 If you want to connect a device to the TV, make sure that both the TV and the device are turned off before making any connection. After the connection is done, you can turn on the units and use them.

Connector	Type	Cables	Device
COMPONENT 	Component Video Connection (back)	 VGA to Component Connection Cable	
	HDMI Connection (back&side)		
	VGA Connection (back)		
AUDIO IN 	VGA/ Component Audio Connection (back)	 Component/VGA Audio Cable	
	SPDIF 		
COMPOSITE 	Composite (Audio/Video) Connection (back)	 Audio Video Cable	
	HEADPHONE 		
	USB Connection (side)		
	CI Connection (side)		
LAN 	Ethernet Connection (back)	 LAN / Ethernet Cable	

To enable VGA/Component audio, you will need to use the back audio inputs with a VGA/Component audio cable for audio connection. When using the wall mounting kit (contact your dealer to purchase one, if not supplied), we recommend that you plug all your cables into the back of the TV before mounting on the wall. Insert or remove the CI module only when the TV is SWITCHED OFF. You should refer to the module instruction manual for details of the settings. The USB inputs on the TV support devices up to 500mA. Connecting devices that have current value above 500mA may damage your TV. When connecting equipment using a HDMI cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation and trouble-free transmission of high definition signals, such as 4K content, you have to use a high speed shielded (high grade) HDMI cable with ferrites.

Turning On/Off the TV (optional)

Connect power

IMPORTANT: The TV set is designed to operate on 220-240V AC, 50 Hz socket.

After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Plug the power cable to the mains socket outlet. The TV will switch on automatically.

To switch on the TV from standby

If the TV is in standby mode the standby LED lights up. To switch on the TV from standby mode either:

- Press the **Standby** button on the remote control.
- Press the centre of the joystick on the TV in.

To switch the TV into standby

The TV cannot be switched into standby mode via joystick. Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode.

To switch off the TV

To power down the TV completely, unplug the power cord from the mains socket.

Quick standby mode

In order to switch the TV into quick standby mode either;

- Press the **Standby** button on the remote.
Press again to go back to operating mode.
- Press and hold the center of the joystick on the TV.
Press again to go back to operating mode.

Your TV continues to operate in the quick standby mode state, as it regularly checks for updates. This is not a malfunction, it meets the requirements for energy consumption. In order to minimize energy consumption switch your TV into standby mode as explained above.

Turning On/Off the TV (optional)

Connect power

IMPORTANT: The TV set is designed to operate on 220-240V AC, 50 Hz socket.

After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

Plug the power cable to the mains socket outlet. The TV will switch on automatically.

To switch on the TV from standby

If the TV is in standby mode the standby LED lights up. To switch on the TV from standby mode either:

- Press the **Standby** button on the remote control.
- Press the centre of the control switch on the TV in.

The TV will then switch on.

To switch the TV into standby

The TV cannot be switched into standby mode via control switch. Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode.

To switch off the TV

To power down the TV completely, unplug the power cord from the mains socket.

Quick Standby Mode

In order to switch the TV into quick standby mode either;

- Press the **Standby** button on the remote.
Press again to go back to operating mode.
- Press the centre of the control switch on the TV in and hold it down for a few seconds.
Press again to go back to operating mode.

Your TV continues to operate in the quick standby mode state, as it regularly checks for updates. This is not a malfunction, it meets the requirements for energy consumption. In order to minimize energy consumption switch your TV into standby mode as explained above.

Turning On/Off the TV (optional)

Connect power

IMPORTANT: The TV set is designed to operate on 220-240V AC, 50 Hz socket.

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Plug the power cable to the mains socket outlet. The TV will switch on automatically.

To switch on the TV from standby

If the TV is in standby mode the standby LED lights up. To switch on the TV from standby mode either:

- Press the **Standby** button on the remote control.
- Press the control button on the TV.

The TV will then switch on.

To switch the TV into standby

The TV cannot be switched into standby mode via control button. Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode.

To switch off the TV

To power down the TV completely, unplug the power cord from the mains socket.

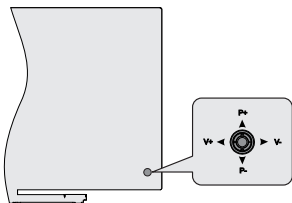
Quick Standby Mode

In order to switch the TV into quick standby mode either;

- Press the **Standby** button on the remote.
Press again to go back to operating mode.
- Press the control button on the TV.
Press the control button again to go back to operating mode.

Your TV continues to operate in the quick standby mode state, as it regularly checks for updates. This is not a malfunction, it meets the requirements for energy consumption. In order to minimize energy consumption switch your TV into standby mode as explained above.

TV Control & Operation(optional)



The joystick allows you to control the Volume / Programme / Source and Quick Standby-On functions of the TV.

Note: The position of the joystick may differ depending on the model.

To change volume: With the back of the TV facing you, push the joystick left to increase the volume and push it right to decrease the volume.

To change channel in Live TV mode: Scroll through the stored channels by pushing the joystick up or down.

To change source in Live TV mode: Press the centre of the joystick in, the **TV options** menu will be displayed. Highlight **Source** option and press the centre of the joystick in again, the **Inputs** list will appear on the screen. Select the desired source by pushing the joystick up or down and press the centre of the joystick in.

To turn the TV off (Quick Standby): Press the centre of the joystick in and hold it down for a few seconds, the TV will turn into quick standby mode.

To turn the TV off (Standby): The TV cannot be switched into standby mode via joystick.

To turn on the TV: Press the centre of the joystick in, the TV will turn on.

Operation with the Remote Control

Press the **Menu** button on your remote control to display Live TV settings menu when in Live TV mode. Press **Home** button to display or return to the Home Screen of the Android TV. Use the directional buttons to move the focus, proceed, adjust some settings and press **OK** to make selections in order to make changes, set your preferences, enter a sub-menu, launch an application etc. Press **Return/Back** to return to the previous menu screen.

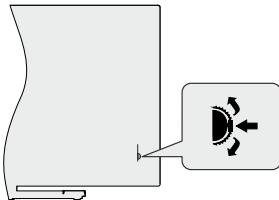
Input Selection

Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively or use the directional buttons and then press the **OK** button to switch to different sources when in Live TV mode. Or enter the **Inputs** menu on the Home Screen, select the desired source from the list and press **OK**.

Changing Channels and Volume

You can adjust the volume by using the **Volume +/-** buttons and change the channel in Live TV mode by using the **Programme +/-** buttons on the remote.

TV Control & Operation (optional)



The control switch allows you to control the Programme and Quick Standby-On functions of the TV.

Note: The position of the control switch may differ depending on the model.

To change channel in Live TV mode: Press the centre of the control switch in, the information banner will appear on the screen. Scroll through the stored channels by pushing the control switch up or down.

To turn the TV off (Quick Standby): Press the centre of the control switch in and hold it down for a few seconds, the TV will turn into quick standby mode.

To turn the TV off (Standby): The TV cannot be switched into standby mode via control switch.

To turn on the TV: Press the centre of the control switch in, the TV will turn on.

Note: Live TV settings menu OSD in Live TV mode cannot be displayed via control switch.

Operation with the Remote Control

Press the **Menu** button on your remote control to display Live TV settings menu when in Live TV mode. Press **Home** button to display or return to the Home Screen of the Android TV. Use the directional buttons to move the focus, proceed, adjust some settings and press **OK** to make selections in order to make changes, set your preferences, enter a sub-menu, launch an application etc. Press **Return/Back** to return to the previous menu screen.

Input Selection

Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively or use the directional buttons and then press the **OK** button to switch to different sources when in Live TV mode. Or enter the **Inputs** menu on the Home Screen, select the desired source from the list and press **OK**.

Changing Channels and Volume

You can adjust the volume by using the **Volume +/-** buttons and change the channel in Live TV mode by using the **Programme +/-** buttons on the remote.

set your preferences, enter a sub-menu, launch an application etc. Press **Return/Back** to return to the previous menu screen.

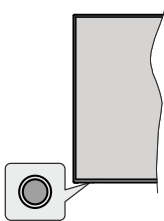
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Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively or use the directional buttons and then press the **OK** button to switch to different sources when in Live TV mode. Or enter the **Inputs** menu on the Home Screen, select the desired source from the list and press **OK**.

Changing Channels and Volume

You can adjust the volume by using the **Volume +/-** buttons and change the channel in Live TV mode by using the **Programme +/-** buttons on the remote.

TV Control & Operation (optional)



The control button allows you to control the Quick Standby-On functions of the TV.

Note: The position of the control button may differ depending on the model.

To turn the TV off (Quick Standby): Press the control button to turn the TV into quick standby mode.

To turn the TV off (Standby): The TV cannot be switched into standby mode via control button.

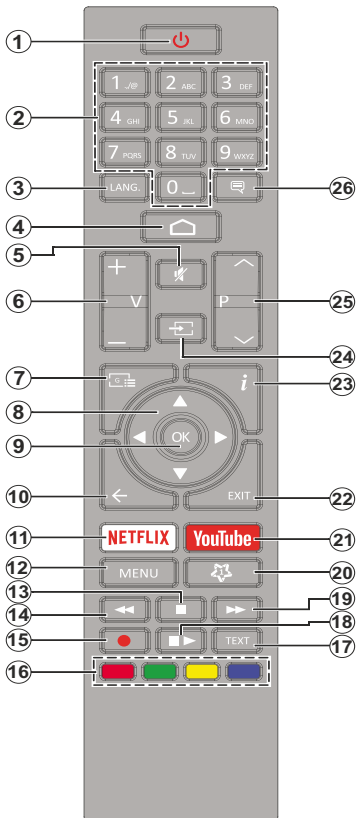
To turn on the TV: Press the control button, the TV will turn on.

Note: Live TV settings menu OSD in Live TV mode cannot be displayed via the control button.

Operation with the Remote Control

Press the **Menu** button on your remote control to display Live TV settings menu when in Live TV mode. Press **Home** button to display or return to the Home Screen of the Android TV. Use the directional buttons to move the focus, proceed, adjust some settings and press **OK** to make selections in order to make changes,

Remote Control (optional)



Inserting the Batteries into the Remote

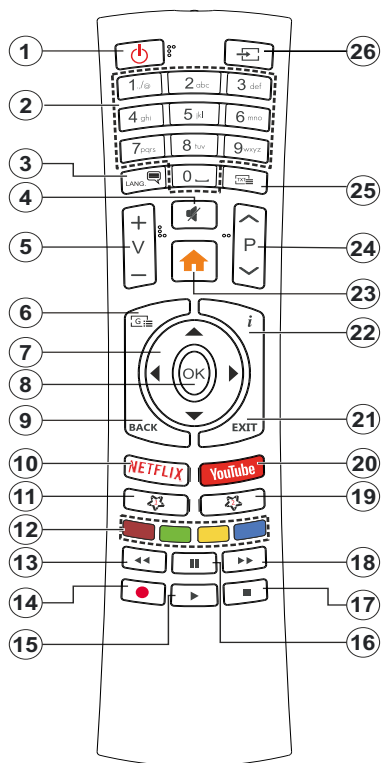
Remove the screw that secures the battery compartment cover on the back side of the remote control first. Lift the cover gently. Insert two 1.5V - size **AAA** batteries. Make sure the (+) and (-) signs match (observe correct polarity). Do not mix old and new batteries. Replace only with same or equivalent type. Place the cover back on. Then screw the cover back on again.

Standby Button

Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode. Press briefly and release to switch the TV into quick standby mode or to switch on the TV when in quick standby or standby mode.

- Standby:** Quick Standby / Standby / On
- Numeric buttons:** Switches the channel in Live TV mode, enters a number or a letter in the text box on the screen
- Language:** Switches among sound modes (analogue TV), displays and changes audio language (digital TV, where available)
- Home:** Opens the Home Screen
- Mute:** Completely turns off the volume of the TV
- Volume +/-**
- Guide:** Displays the electronic programme guide in Live TV mode
- Directional buttons:** Navigates menus, setting options, moves the focus or cursor etc., sets record time and displays the subpages in Live TV-Teletext mode when pressed Right or Left. Follow the on-screen instructions.
- OK:** Confirms selections, enters sub-menus, views channel list (in Live TV mode)
- Back/Return:** Returns to previous menu screen, goes one step back, closes open windows, closes teletext (in Live TV-Teletext mode)
- Netflix:** Launches the Netflix application
- Menu:** Displays Live TV Settings menu in Live TV mode, displays available setting options such as sound and picture
- Stop:** Stops the media being played
- Rewind:** Moves frames backwards in media such as movies
- Record:** Records programmes in Live TV mode
- Coloured Buttons:** Follow the on-screen instructions for coloured button functions
- Text:** Opens and closes teletext (where available in Live TV mode)
- Pause:** Pauses the media being played, starts timeshift recording in Live TV mode
- Play:** Starts to play selected media
- Fast forward:** Moves frames forward in media such as movies
- MyButton1:** Opens the picture mode setting menu on available sources
- YouTube:** Launches the YouTube application
- Exit:** Closes and exits from displayed Live TV Settings menus, closes running applications and/or the Home Screen and switches to last set source
- Info:** Displays information about on-screen content
- Source:** Shows all available broadcast and content sources, closes the Home Screen and switches to last set source
- Programme +/-:** Increases/Decreases channel number in Live TV mode
- Subtitles:** Turns subtitles on and off (where available)

Remote Control (optional)



- Standby:** Quick Standby / Standby / On
- Numeric buttons:** Switches the channel in Live TV mode, enters a number or a letter in the text box on the screen
- Language:** Switches among sound modes (analogue TV), displays and changes audio language (digital TV, where available)
- Mute:** Completely turns off the volume of the TV
- Volume +/-:**
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- Netflix:** Launches the Netflix application
- MyButton1:** Turns subtitles on and off (where available)
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- Text:** Opens and closes teletext (where available in Live TV mode)
- Source:** Shows all available broadcast and content sources, closes the Home Screen and switches to last set source

Inserting the Batteries into the Remote

Remove the back cover to reveal the battery compartment. You need to do the followings in order to do that:

- Place the tip of a pen or some other pointed object in the hole above the cover and press it down.
- Then press firmly on the cover and slide in the direction of the arrow.

Insert two 1.5V - size **AAA** batteries. Make sure the (+) and (-) signs match (observe correct polarity). Do not mix old and new batteries. Replace only with same or equivalent type. Place the cover back on.

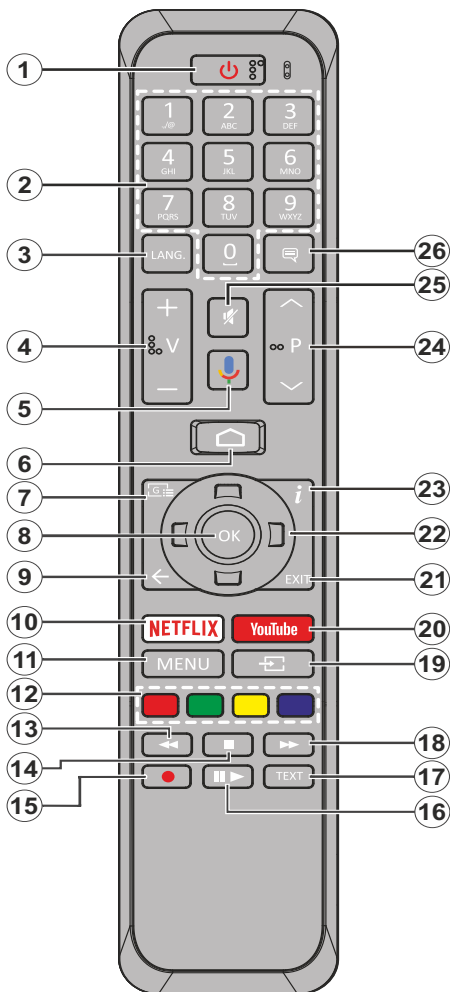
Standby Button

Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode. Press briefly and release to switch the TV into quick standby mode or to switch on the TV when in quick standby or standby mode.

(*) **Play** - Starts to play selected media

Pause - Pauses the media being played, starts timeshift recording in Live TV mode

Remote Control (optional)



1. **Standby:** Quick Standby / Stanby / On
2. **Numeric buttons:** Switches the channel in Live TV mode, enters a number or a letter in the text box on the screen
3. **Language:** Switches among sound modes (analogue TV), displays and changes audio language (digital TV, where available)
4. **Volume +/-**
5. **Microphone:** Activates the microphone on the remote
6. **Home:** Opens the Home Screen
7. **Guide:** Displays the electronic programme guide in Live TV mode
8. **OK:** Confirms selections, enters to sub-menus, views channel list (in Live TV mode)
9. **Back/Return:** Returns to previous menu screen, goes one step back, closes open windows, closes teletext (in Live TV-Teletext mode)
10. **Netflix:** Launches the Netflix application
11. **Menu:** Displays Live TV Settings menu in Live TV mode
12. **Coloured Buttons:** Follow the on-screen instructions for coloured button functions
13. **Rewind:** Moves frames backwards in media such as movies
14. **Stop:** Stops the media being played
15. **Record:** Records programmes in Live TV mode
16. **Pause:** Pauses the media being played, starts timeshift recording in Live TV mode
Play: Starts to play selected media
17. **Text:** Opens and closes teletext (where available in Live TV mode)
18. **Fast forward:** Moves frames forward in media such as movies
19. **Source:** Shows all available broadcast and content sources in Live TV mode
20. **YouTube:** Launches the YouTube application
21. **Exit:** Closes and exits from displayed Live TV Settings menus, closes the Home Screen
22. **Directional buttons:** Navigates menus, setting options, moves the focus or cursor etc., sets record time and displays the subpages in Live TV-Teletext mode when pressed Right or Left. Follow the on-screen instructions.
23. **Info:** Displays information about on-screen content
24. **Programme +/-:** Increases/Decreases channel number in Live TV mode
25. **Mute:** Completely turns off the volume of the TV
26. **Subtitles:** Turns subtitles on and off (where available)

Standby Button

Press and hold the **Standby** button on the remote control. **Power off** dialogue will appear on the screen. Highlight **OK** and press the **OK** button. The TV will switch into standby mode. Press briefly and release to switch the TV into quick standby mode or to switch on the TV when in quick standby or standby mode.

Inserting the Batteries into the Remote

Remove the screw that secure the battery compartment cover on the back side of the remote control first. Lift the cover gently. Insert two 1.5V - size **AAA** batteries. Make sure the (+) and (-) signs match (observe correct polarity). Do not mix old and new batteries. Replace only with same or equivalent type. Place the cover back on. Then screw the cover back on again.

To pair remote with the TV

When TV is turned on for the first time, a search for accessories will be performed before the initial setup starts. You will need to pair your remote control with your TV at this point.

Press and hold the **Source** button on the remote for about 5 seconds, the LED on the remote will light up. Then release the **Source** button, the LED will start to blink. That means the remote is in pairing mode.

Now you will wait the TV to find your remote. Select the name of your remote and press **OK** when it appears on the TV screen.

When the pairing process was successful, the LED on the remote will go off. If the pairing process fails the remote will enter to sleep mode after 30 seconds.

Initial Setup Wizard

*Note: Follow the on-screen instructions to complete the initial setup process. Use the directional buttons and the **OK** button on the remote to select, set, confirm and proceed.*

When turned on for the first time, a search for accessories will be performed before the initial setup starts. Follow the on-screen instructions to pair your remote control (depends on the model of the remote control) and other wireless accessories with your TV. Press **Back/Return** button to end adding accessories and start the setup.

1. Welcome Message and Language Selection

"**Welcome**" message will be displayed along with the language selection options listed on the screen. Select the desired language from the list and press **OK** to continue.

2. Quick Setup

If you didn't priorly connect your TV to the internet via Ethernet a screen will be displayed where you can transfer your Android phone's WLAN network and Google Account to your TV. Highlight **Continue** and press **OK** to proceed. Follow the on-screen instructions on your TV and your phone to complete the process.

You can also skip this step by selecting **Skip** option. Some steps may be skipped depending on the settings made in this step.

If you did priorly connect your TV to the internet via Ethernet a message will be displayed stating that you are connected. You can choose to continue with wired connection or change the network. Highlight **Change network** and press **OK** if you want to use wireless connection instead of wired connection.

3. Network Connection

You will be directed to the next step automatically, if you connect your TV to internet via Ethernet at this point. If not, available wireless networks will be searched and listed on the next screen. Select your WLAN network from the list and press **OK** to connect. Enter the password using the virtual keyboard if the network is password protected. Select the **Other network** option from the list, if the network that you want to connect has hidden SSID.

If you prefer not to connect to the internet at this point you can skip this step by selecting **Skip** option. You can connect to internet later using the **Network & Internet** menu options in the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

This step will be skipped if internet connection has been established in the previous step.

4. Sign in to your Google account

If connection succeeds, you can sign in to your Google account on the next screen. You need to be signed in to a Google account in order to use Google services. This step will be skipped if no internet connection has been established in the previous step or if you already signed in to your Google account in Quick Setup step.

By signing in, you will be able to discover new apps for videos, music and games on Google Play; get personalised recommendations from apps like YouTube; buy or rent the newest movies and shows on Google Play Movies & TV; access your entertainment and control your media. Highlight **Sign In** and press **OK** to proceed. Sign-in options are as following:

- **Use your phone or computer:** You can use a browser on your phone or computer to sign in. Highlight this option and press **OK** button. A code will be displayed on the TV screen. Make sure your phone or computer is on the same network as your TV. Open the given website (androidtv.com/setup, follow on-screen instructions for the up-to-date website url) in your phone's or computer's browser and enter the code you see on your TV screen into the related entry field. Then follow the instructions on your device and complete the process.
- **Use your remote:** Using this option you can sign in to your Google account by entering your e-mail address or phone number and your password.

If you prefer not to sign in to your Google account at this point you can skip this step by selecting **Skip** option.

5. Terms of Service

Terms of Service screen will be displayed next. By continuing, you will agree to the Google Terms of Service, the Google Privacy Policy and the Google Play Terms of Service. Highlight **Accept** and press **OK** on the remote to confirm and proceed. You can also view **Terms of Service, Privacy Policy and Play Terms of Service** on this screen. To display the content an internet connection is needed. A message will be displayed mentioning the web site address on which this information can also be viewed, in case internet access is not available.

6. Location

On the next screen, you can allow or disallow Google and third party apps to use your TV's location information. Select **Yes** to confirm and press **OK**. To skip this step without confirmation, select **No** and proceed by pressing the **OK** button. You can change this setting later using the **Settings>Device Preferences>Location** menu on the Home Screen.

7. Help improve Android

Automatically send diagnostic information to Google, like crash reports and usage data from your device and apps. This information won't be used to identify you. Select **Yes** to confirm and press **OK**. To skip this step without confirmation, select **No** and proceed by pressing the **OK** button. You can change this setting later using the **Settings>Device Preferences>Usage & Diagnostics** menu on the Home Screen.

Information on Google services and some features of your TV will be displayed next. You can turn on personal results for Assistant by choosing the related option when prompted. Press **OK** consecutively to proceed.

8. Country

In the next step select your **Country** from the list and press **OK** to continue.

9. Password

Depending on the country selection you made in the previous step you may be asked to define a password (PIN) at this point. Press **OK** to proceed. The selected PIN cannot be 0000. This PIN will be required in order to access some menus, contents or to release locked channels, sources etc. You will have to enter it if you are asked to enter a PIN for any menu operation later.

10. Select TV Mode

In the following step of the initial setup, you can set the TV's operation mode either as **Home** or as **Store**. **Store** option will configure your TV's settings for store environment. This option is intended only for store use. It is recommended to select **Home** for home use.

11. Chromecast built-in always available

Select your chromecast availability preference. If set as **On** your TV will be detected as a Google Cast device and allow Google Assistant and other services to wake your TV up to respond to Cast commands, even when on standby mode and the screen is off.

12. Tuner Mode

***Note:** If you don't want to perform a tuner scan, select one of the available options anyway. You can skip the scan at some later stage of the installation wizard. If you skip this step you can perform a channel search later using the related **Channels** menu options.*

The next step is the selection of the tuner mode. Select your tuner preference to install channels for Live TV function. **Antenna, Cable** and **Satellite** options are available. Highlight the option that corresponds to your environment and press **OK** or **Right** directional button to proceed.

Antenna

If **Antenna** option is selected, the TV will search for digital terrestrial and analogue broadcasts. On the next screen highlight **Scan** option and press **OK** to start the search or select **Skip Scan** to continue without performing a search.

Cable

If **Cable** option is selected, the TV will search for digital cable and analogue broadcasts. If any, available operator options will be listed on the **Select Operator** screen. Otherwise this step will be skipped. You can select only one operator from the list. Highlight the desired operator and press **OK** or the **Right** directional button to proceed. On the next screen select **Scan** option to start a search or select **Skip Scan** to continue without performing a search. If **Scan** is selected a configuration screen will be displayed next. **Scan Mode, Frequency(KHz), Modulation, Symbol Rate(Ksym/s), Network ID** options may need to be set. To perform a full scan set the **Scan Mode** as **Full/Advance** if available. Depending on the selected operator and/or **Scan Mode** some options may not be available to be set.

Once you are done with setting available options, press the **Right** directional button to proceed. The TV will start to search available broadcasts.

Satellite

If **Satellite** option is selected, **Satellite Type** screen will be displayed next. **Preferred Satellite** and **General Satellite** options will be available. Select one and press **OK** to proceed.

***Note:** Preferred Satellite and General Satellite options may not be available depending on the selected country. In this case the **DVBS Configuration Setting** screen will be displayed after selecting the tuner mode as **Satellite**.*

If **Preferred Satellite** option is selected, next screen will be **Select Operator** screen. You can select only

one operator from the list. Highlight the desired operator and press **OK** or the **Right** directional button to proceed. Some of the following options may be preset depending on the selected operator in this step. Check the parameters before proceeding and adjust if necessary.

DVBS Configuration Setting screen will be displayed next. First **Antenna type(*)** should be set. **Universal, Single Cable** and **Jess Singlecable** options are available. Set the **Antenna Type** as **Universal** for Direct and DiSEqC satellite systems. If you set the antenna type as **Universal**, press the **Right** directional button to proceed to the next step. If the antenna type is set as **Single Cable** or **Jess Singlecable**, there will be three more additional options on the **DVBS Configuration Setting** screen: **Tuner, Band frequency** and **User Defined**. **User Defined** option will be available if the **Band frequency** is set as **User Defined**. Set these options if available and press the **Right** directional button to proceed.

() This option may be named as **Satellite type** depending on the country selection.*

After the parameters on the **DVBS Configuration Setting** screen are configured according to your environment the next step may be **Select Satellite** screen. You may be able to set up different satellites depending on the selected antenna type and operator in the previous steps. Highlight the desired satellite option and press **OK** to set the parameters(*). The **Satellite Status** of the first satellite option will be set as **On**. In order to configure other settings of the satellite and to enable scan this option should be set as **On** first. Press **Back** button and select next satellite you want to set. After you completed the configuration changes, press the **Right** directional button to proceed.

() If you have a **Direct satellite system, DiSEqC Set** option should be set as **DiSEqCA**.*

Channel Scan screen will be displayed next. Select **Scan** and press **OK** or the **Right** directional button to proceed with the scanning configurations. Select **Skip Scan** to proceed without performing a scan and complete the initial setup.

DVBS Scan Configure screen will be displayed next if **Scan** option is selected. Following options will be available: **Scan Mode** and **Channels**. You can choose to perform a full scan or a network scan. Set the **Scan Mode** accordingly. If you are going to perform a network scan, make sure that you have adjusted the **Frequency, Symbol Rate (Ksym/s)** and **Polarization** parameters under the **Transponder** option accurately on the **Select Satellite** screen. You may not be able to change the **Scan mode** setting depending on the previous selections. If the **Channels** option is set as **Free** encrypted channels will not be installed. Additional options may also be available depending on the selected operator, configure these settings according to your preferences. Once you are done

with setting the available options, press the **Right** directional button to start scan while **Scan Mode** or **Channels** is highlighted. While the search continues you can press the **Back** button to cancel the search. The channels that have already been found will be stored in the channel list.

When the initial setup is completed "**Complete**" message will be displayed. Press **OK** to finish the setup.

A disclaimer of liability will be displayed on the screen. You can use Up and Down directional buttons to scroll through and read the entire text. Highlight **Accept** and press **OK** to proceed.

Home Screen will be displayed. You can highlight **Live TV** app and press **OK** to switch to Live TV mode and watch TV channels.

Home Screen

To enjoy the benefits of your Android 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 modem/router. Refer to the **Network & Internet** and **Connecting to the Internet** sections for further information on how to connect your TV to the internet.

The Home menu is the centre of your TV. Press the **Home** button to display Home Screen. From the Home menu you can start any application, switch to a TV channel, watch a movie or switch to a connected device. Depending on your TV setup and your country selection in the initial setup the Home menu may contain different items.

The available options of the Home Screen are positioned in rows. To navigate through the Home Screen options use the directional buttons on the remote. Apps, YouTube, Google Play Movies & TV, Google Play Music and Google Play related rows and rows of the applications you have installed might be available. Select a row then move the focus to the desired item in the row. Press **OK** button to make a selection or to enter a sub-menu.

On the upper left of the screen, search tools will be located. You can choose either to type a word to start a search via the virtual keyboard or try voice search option if your remote has a built-in microphone. Move the focus to the desired option and press **OK** to proceed.

On the upper right of the screen, **Notifications, Inputs, Network & Internet** (will be named as **Connected** or **Not Connected** according to the current connection status), **Settings** and the current time will be displayed. You can configure your date and time preferences using the **Date & time** menu options from the **Settings>Device Preferences** menu.

First row will be the **Apps** row. **Live TV** and **Multi Media Player** apps will be available alongside with other apps. Highlight **Live TV** and press **OK** to switch to Live TV mode. If the source was set to an option other than **TV** previously, press the **Source** button and set as **TV** in order to watch live TV channels. Highlight **Multi Media Player** and press **OK** to browse the connected USB devices or media servers and play/display the installed media content on the TV. The audio files can be played through the speakers of the TV or through the speaker systems connected to the TV. You can configure your sound output preference from the **Speakers** option in the **Settings>Device Preferences>Sound** menu.

Live TV Mode Menu Content

Switch the TV to Live TV mode first and then press the **Menu** button on the remote to see Live TV menu options. To switch to Live TV mode you can either press the **Exit** button or highlight the **Live TV** app from the **Apps** row and press **OK** on the Home Screen.

Channels

Add to My Favorites: Add the channel that is currently being watched to the previously selected favourite list.

Program Guide: Open the electronic programme guide. Refer to the **Programme Guide** section for detailed information.

New Channels Available: Start a search for new channels. Select the channel source application or tuner. Then make the settings according to your environment and preferences if necessary. You can use the **Channel** menu options to search for broadcast channels. Refer to the **Channel** section for more information. When complete highlight **Done** and press **OK**.

TV Options

Source: Display the list of input sources. Select the desired one and press **OK** to switch to that source.

Picture Mode: Set the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: **User**, **Standard**, **Vivid**, **Sport**, **Movie** and **Game**. You can use **User** mode to create customised settings. Go to **Settings>Device Preferences>Picture** for detailed setting options.

Display Mode: Set the aspect ratio of the screen. Select one of the predefined options according to your preference.

Speakers: To hear the TV audio from the connected compatible audio device set as **External Audio System**. Set as **TV Speakers** to use the speakers of your TV for sound output.

Power

Sleep Timer: Define an idle time after which you want your TV to enter sleep mode automatically.

Picture off: Select this option and press **OK** to turn the screen off. Press a button on the remote or on the TV to turn the screen on again. Note that you can not turn the screen on via the **Volume +/-**, **Mute** and **Standby** buttons. These buttons will function normally.

Switch off timer: Define a time after which you want your TV to switch off automatically. Set as **Off** to disable.

No Signal Auto Power Off: Set the behaviour of the TV, when no signal is detected from the currently set input source. Define a time after which you want your TV to turn itself off or set as **Off** to disable.

CI Card: Display available menu options of the CI card in use. This item may not be available depending on the input source setting.

Advanced Options

Audio Language: Set your language preference for audio. This item may not be available depending on the input source setting.

Blue Mute: Turn this function on/off according to your preference. When turned on, blue background will be displayed on the screen when no signal is available.

Default Channel: Set your default startup channel preference. When the **Select Mode** is set as **User Select**, **Show Channels** option will become available. Highlight and press **OK** to see channel list. Highlight a channel and press **OK** to make a selection. Selected channel will be displayed, every time the TV is turned back on from quick standby mode. If the **Select Mode** is set as **Last Status**, the last watched channel will be displayed.

Interaction Channel: Turn the Interaction Channel function on or off.

MHEG PIN Protection: Turn the MHEG PIN protection function on or off. This setting enables or disables access some of the MHEG applications. Disabled applications can be released by entering the right PIN.

HBBTV Settings

HBBTV Support: Turn the HBBTV function on or off.

Do Not Track: Set your preference regarding the tracking behaviour for HBBTV services.

Cookie Settings: Set your cookie setting preference for HBBTV services.

Persistent Storage: Turn the Persistent Storage function on or off. If set as **On** cookies will be

stored with an expiry date in the persistent memory of the TV.

Block Tracking Sites: Turn the Block Tracking Sites function on or off.

Device ID: Turn the Device ID function on or off.

Reset Device ID: Reset the device ID for HBBTV services. Confirmation dialogue will be displayed. Press **OK** to proceed, **Back** to cancel.

Subtitle

Subtitle Tracks: Set your subtitle track preference, if any available.

Analog Subtitle: Set this option as **Off**, **On** or **Mute**. If **Mute** option is selected, the analogue subtitle will be displayed on the screen but the speakers will be muted simultaneously.

Digital Subtitle Language: Set one of the listed language options as first digital subtitle language preference.

2nd Digital Subtitle Language: Set one of the listed language options as second digital subtitle language preference. If the selected language in the **Digital Subtitle Language** option is not available, the subtitles will be displayed in this language.

Subtitle Type: Set this option as **Normal** or **Hearing Impaired**. If **Hearing Impaired** option is selected, it provides subtitle services to deaf and hard of hearing viewers with additional descriptions.

Teletext

Digital Teletext Language: Set the teletext language for digital broadcasts.

Decoding Page Language: Set the decoding page language for teletext display.

BISS Key: “Click To Add Biss Key” message will be displayed. Press **OK** button to add a biss key. **Frequency**, **Symbol Rate (KSym/s)**, **Polarization**, **Program ID** and **CW Key** parameters will be available to be set. Once you are done with the settings highlight **Save Key** and press **OK** to save and add the biss key. This option will not be available if the **Channel Installation Mode** under the **Settings>Channel** menu is not set as **Preferred Satellite**, **General Satellite** or **Satellite**. Available options will differ depending on the selected country during the initial setup process.

Auto Sleep: Define an idle time after which you want your TV to enter sleep mode automatically. **4 Hours**, **6 Hours** and **8 Hours** options are available. Set as **Never** to disable.

System Information: Display detailed system information on the current channel such as **Signal Level**, **Signal Quality**, **Frequency** etc.

Version Info: Display system information such as **Model Name**, **Version** and **Serial Number**.

Settings: Refer to **Settings** section for detailed information.

Record

Record List: The recordings will be displayed if any available. Highlight a recording of your choice and press the **Yellow** button to delete it or press the **Blue** button to view detailed information. You can use Red and Green buttons to scroll the page up and down.

Device Info: Connected USB storage devices will be displayed. Highlight the device of your choice and press **OK** to see available options.

Set TimeShift: Tag the selected USB storage device or a partition on it for time shift recording.

Set PVR: Tag the selected USB storage device or a partition on it for PVR.

Format: Format the selected USB storage device. Refer to **USB Recording** section for more information

Speed Test: Start a speed test for the selected USB storage device. The test result will be displayed when completed.

Schedule List: Add reminders or record timers using the **Schedule List** menu.

Time Shift Mode: Enable or disable timeshift recording feature. Refer to **USB Recording** section for more information.

Settings

You can access the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

Network & Internet

You can configure your TV's network settings using the options of this menu. You can also highlight the **Connected/Not Connected** icon on the Home screen and press **OK** to access this menu.

Wi-Fi: Turn the wireless LAN (WLAN) function on and off.

Available networks

When the WLAN function is turned on, available wireless networks will be listed. Highlight **See all** and press **OK** to see all networks. Select one and press **OK** to connect. You may be asked to enter a password to connect to the selected network, in case the network is password protected. Additionally you can add new networks by using the related options.

Other options

Add new network: Add networks with hidden SSID's.

Scanning always available: You can let the location service and other apps scan for networks, even when WLAN function is turned off. Press **OK** to turn it on and off.

Wow: Turn the Wake On WLAN function on and off. This function allows you to turn on or awaken your TV via network.

Wol: Turn the Wake On LAN function on and off. This function allows you to turn on or awaken your TV via wireless network.

Ethernet

Connected/Not connected: Displays the status of the internet connection via Ethernet, IP and MAC addresses.

Proxy settings: Set a HTTP proxy for browser manually. This proxy may not be used by other apps.

IP settings: Configure your TV's IP settings.

Channel

Channels

Options of this menu may change or become inactive depending on the **Channel Installation Mode** selection.

Channel Installation Mode - Antenna

Channel Scan: Start a scan for analogue and digital channels. You can press the **Back** button to cancel the scan. The channels that have already been found will be stored in the channel list.

Update Scan: Search for updates. Previously added channels will not be deleted, but any newly found channels will be stored in the channel list.

Analog Manual Scan: Start a manual scan for analogue channels. Enter the **Start Frequency** and then select **Scan Up** or **Scan Down**. When a channel is found the scan will be completed and the found channel will be stored in the channel list.

Single RF Scan: Select the **RF Channel** by using the Right/Left directional buttons. **Signal Level** and **Signal Quality** of the selected channel will be shown. Press **OK** to start scan on the selected RF channel. The found channels will be stored in the channel list.

Manual Service Update: Start a service update manually.

LCN: Set your preference for LCN. LCN is the Logical Channel Number system that organizes available broadcasts in accordance with a recognizable channel number sequence (if available).

Channel Scan Type: Set your scan type preference.

Channel Store Type: Set your store type preference.

Favorite Network Select: Select your favourite network. This menu option will be active, if more than only one network is available.

Channel Skip: Set channels to be skipped when switching the channels via **Programme +/-** buttons on the remote. Highlight the desired channel/s on the list and press **OK** to select/unselect.

Channel Sort: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, the first selected channel will be moved to the position of that channel.

Channel Edit: Edit channels in the channel list. Edit the name and channel number of the selected channel and display **Network Name**, **Frequency**, **Color System** and **Sound System** informations related to that channel if available. Depending on the channel other options may also be editable. You can press the **Blue** button to delete the highlighted channel.

Analog Channel Fine-tune: Fine-tune an analogue channel. A list of available analogue channels will be displayed. Select the desired one from the list and press **OK** button. Then change the frequency of the channel by pressing Left/Right directional buttons. Press **OK** to store the new frequency for that channel. Press **Back** to cancel. This item may not be visible, depending on whether or not the last watched channel was analogue.

Clear Channel List: Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** button to proceed. Highlight **Cancel** and press **OK** to cancel.

Channel Installation Mode - Cable

Channel Scan: Start a scan for analogue and digital cable channels. If available, operator options will be listed. Select the desired one and press **OK**. **Scan Mode**, **Channel Scan Type**, **Frequency** and **Network ID** options may be available. The options may vary depending on the operator and the **Scan Mode** selections. Set the **Scan Mode** as **Full** if you don't know how to set up other options. Highlight **Scan** and press **OK** to start the scan. You can press the **Back** button to cancel the scan. The channels that have already been found will be stored in the channel list.

Single RF Scan: Enter the **Frequency** value. **Signal Level** and **Signal Quality** of the selected **Frequency** will be shown. Highlight the **Scan** option and press **OK** to start scan. The found channels will be stored in the channel list.

LCN: Set your preference for LCN. LCN is the Logical Channel Number system that organizes available broadcasts in accordance with a recognizable channel number sequence (if available).

Channel Scan Type: Set your scan type preference.

Channel Store Type: Set your store type preference.

Favorite Network Select: Select your favourite network. This menu option will be active, if more than only one network is available.

Channel Skip: Set channels to be skipped when switching the channels via **Programme +/-** buttons on the remote. Highlight the desired channel/s on the list and press **OK** to select/unselect.

Channel Sort: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, the first selected channel will be moved to the position of that channel.

Channel Edit: Edit channels in the channel list. Edit the name and channel number of the selected channel and display **Network Name, Frequency, Color System, Sound System, Modulation and Symbol Rate** informations related to that channel. Depending on the channel other options may also be editable. You can press the **Blue** button to delete the highlighted channel.

Analog Channel Fine-tune: Fine-tune an analogue channel. A list of available analogue channels will be displayed. Select the desired one from the list and press **OK** button. Then change the frequency of the channel by pressing Left/Right directional buttons. Press **OK** to store the new frequency for that channel. Press **Back** to cancel. This item may not be visible, depending on whether or not the last watched channel was analogue.

Clear Channel List: Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** button to proceed. Highlight **Cancel** and press **OK** to cancel.

Channel Installation Mode - Preferred/General Satellite/Satellite

Satellite Re-scan: Start a satellite scan beginning with the operator selection screen for the **Preferred Satellite** channel installation mode or with the satellite selection screen for the **General Satellite** or **Satellite** channel installation mode. When this scanning option is preferred, some scanning configurations will not be

available and thus the preferences you made during the initial setup process may not be changed.

Satellite Add: Add satellite and perform a satellite scan.

Satellite Update: Search for any updates by repeating the previous scan with the same settings. You will also be able to configure these settings before the scan. If **Channel Installation Mode** is set to **Preferred Satellite** this option may be named differently depending on the available services. Highlight the satellite and press **OK** button to configure detailed satellite parameters. Press the **Right** directional button to proceed.

Satellite Manual Tuning: Start a manual satellite scan.

Favorite Network Select: Select your favourite network. This menu option will be active, if more than only one network is available. This option may not be available depending on the selected country during the initial setup process.

Channel Skip: Set channels to be skipped when switching the channels via **Program +/-** buttons on the remote. Highlight the desired channel/s on the list and press **OK** to select/unselect.

Channel Sort: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, the first selected channel will be moved to the position of that channel.

Channel Edit: Edit channels in the channel list. Edit the name and channel number of the selected channel and display **Network Name, Frequency, Color System and Sound System** informations related to that channel if available. Depending on the channel other options may also be editable. You can press the **Blue** button to delete the highlighted channel.

Clear Channel List: Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** button to proceed. Highlight **Cancel** and press **OK** to cancel.

Note: Some options may not be available and appear as grayed out depending on the operator selection and operator related settings.

Channel Installation Mode

Set this option as **Antenna, Cable, Preferred Satellite, General Satellite** or **Satellite**.

Auto Channel Update

Turn the auto channel update function on or off.

Channel Update Message

Turn the channel update message function on or off. This item may not be visible, depending on the **Channel Installation Mode** selection.

Parental Controls

() To enter this menu PIN should be entered first. Default password is set to **1234**. If you have defined a new password after the initial setup process use the password that you have defined. Some options may not be available or vary depending on the country selection during the initial setup.*

Channels Blocked: Select channel/s to be blocked from the channel list. Highlight a channel and press **OK** to select/unselect. To watch a blocked channel password should be entered first.

Program Restrictions: Block programmes according to the age rating informations that are being broadcasted with them. You can turn on or off restrictions, set ratings systems, restriction levels and age limits using the options of this menu.

Inputs Blocked: Prevent access to the selected input source content. Highlight the desired input option and press **OK** to select/unselect. To switch to a blocked input source password should be entered first.

Change PIN: Change the default PIN. Highlight this option and press **OK**. You will need to enter the old PIN first. Then new password entry screen will be displayed. Enter the new password twice for confirmation.

Audio Channel

Set the audio channel preference, if available. This item may not be visible, depending on whether or not the last watched channel was analogue.

Audio Language

Set one of the listed language options as first audio language preference. This item may not be visible, depending on whether or not the last watched channel was digital.

2nd Audio Language

Set one of the listed language options as second audio language preference. If in the **Audio Language** setting selected language option is not supported, this language preference will be considered. This item may not be visible, depending on whether or not the last watched channel was digital.

Open Source Licenses

Display Open Source Software license information.

Version

Displays system version number.

Accounts & Sign In

Google: This option will be available if you have signed in to your Google account. You can configure your data syncing preferences or remove your registered account

on the TV. Highlight a service listed in the **Choose synced apps** section and press **OK** to enable/disable data sync. Highlight **Sync now** and press **OK** to sync all enabled services at once.

Add account: Add a new one to available accounts by signing in to it.

Apps

Using the options of this menu, you can manage the apps on your TV.

Recently opened apps

You can display recently opened apps. Highlight **See all apps** and press **OK** to see all the apps installed on your TV. The amount of storage space that they needed will also be displayed. You can see the version of the app, open or force to stop the running of the app, uninstall a downloaded app, see the permissions and turn them on/off, turn on/off the notifications, clear the data and cache etc. Highlight an app and press **OK** to see available options.

Permissions

Manage the permissions and some other features of the apps.

App permissions: The apps will be sorted by permission type categories. You can enable/disable permissions for the apps from within these categories.

Special app access: Configure some app features and special permissions.

Security & restrictions: Using the options of this menu;

- You can allow or restrict installation of apps from sources other than the Google Play Store.
- Set the TV to disallow or warn before installation of apps that may cause harm.

Device Preferences

About: Check for system updates, change the device name, restart the TV and display system informations such as network addresses, serial numbers, versions etc. You can also display legal information, manage advertisings, display your advertising ID, reset it and turn on/off the personalised advertisings based on your interests.

Netflix ESN: Display your ESN number. ESN number is an unique ID number for Netflix, created especially to identify your TV.

Date & time: Set the date and time options of your TV. You can set your TV to automatically update the time and date data over the network or over the broadcasts. Set corresponding to your environment and preference. Disable by setting as **Off** if you want to manually change the date or time. Then set date, time, time zone and hour format options.

Timer

Power On Time Type: Set your TV to turn on by itself. Set this option as **On** or **Once** to enable a power on timer to be set, set as **Off** to disable. If set as **Once** the TV will turn on only once at the defined time in **Auto Power On Time** option below.

Auto Power On Time: Available if the **Power On Time Type** is enabled. Set the desired time for your TV to come on from standby using the directional buttons and press **OK** to save the new set time.

Power Off Time Type: Set your TV to turn off by itself. Set this option as **On** or **Once** to enable a power off timer to be set, set as **Off** to disable. If set as **Once** the TV will turn off only once at the defined time in **Auto Power Off Time** option below.

Auto Power Off Time: Available if the **Power Off Time Type** is enabled. Set the desired time for your TV to go to standby using the directional buttons and press **OK** to save the new set time.

Language: Set your language preference.

Keyboard: Select your keyboard type and manage keyboard settings.

Inputs: Show or hide an input terminal, change the label for an input terminal, and configure the options for HDMI CEC(Consumer Electronic Control) function.

Power

Sleep Timer: Define an idle time after which you want your TV to enter sleep mode automatically.

Picture off: Select this option and press **OK** to turn the screen off. Press a button on the remote or on the TV to turn the screen on again. Note that you can not turn the screen on via the **Volume +/-**, **Mute** and **Standby** buttons. These buttons will function normally.

Switch off timer: Define a time after which you want your TV to switch off automatically. Set as **Off** to disable.

No Signal Auto Power Off: Set the behaviour of the TV, when no signal is detected from the currently set input source. Define a time after which you want your TV to turn itself off or set as **Off** to disable.

Picture

Picture Mode: Set the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: **User**, **Standard**, **Vivid**, **Sport**, **Movie** and **Game**. You can use **User** mode to create customised settings.

Dolby Vision Modes: If Dolby Vision content is detected Dolby Vision Dark and Dolby Vision Bright picture mode options will be available instead of other picture modes.

Brightness, Contrast, Colour, HUE, Sharpness settings will be adjusted according to the selected picture mode. If one of these settings is changed

manually, **Picture Mode** option will be changed to **User**, if not already set as **User**.

Dolby Vision Notification: Set your notification appearance preference for Dolby Vision content. When turned on, Dolby Vision logo will be displayed on the screen when Dolby Vision content is detected.

Auto Backlight: Set your auto backlight preference. **Off**, **Low**, **Middle** and **Eco** options will be available. Set as **Off** to disable.

Backlight: Adjust the backlight level off the screen manually. This item will not be available if the **Auto Backlight** is not set as **Off**.

Brightness: Adjust the brightness value off the screen.

Contrast: Adjust the contrast value off the screen.

Colour: Adjust the colour saturation value off the screen.

HUE: Adjust the hue value off the screen.

Sharpness: Adjust the sharpness value for the objects displayed on the screen.

Gamma: Set your gamma preference. **Dark**, **Middle** and **Bright** options will be available.

Colour Temperature: Set your colour temperature preference. **User**, **Cool**, **Standard** and **Warm** options will be available. Set as **User** to adjust red, green and blue gain values manually. If one of these values is changed manually, **Colour Temperature** option will be changed to **User**, if not already set as **User**.

Display Mode: Set the aspect ratio of the screen. Select one of the predefined options according to your preference.

HDR: Turn the HDR function on or off. This item will be available if HDR content is detected.

Advanced Video

DNR: Dynamic Noise Reduction (DNR) is the process of removing noise from digital or analogue signal. Set your DNR preference as **Low**, **Medium**, **Strong**, **Auto** or turn it off by setting as **Off**.

MPEG NR: MPEG Noise Reduction cleans up block noise around outlines and noise on the background. Set your MPEG NR preference as **Low**, **Medium**, **Strong** or turn it off by setting as **Off**.

Adaptive Luma Control: Adaptive Luma control adjusts contrast settings globally according to content histogram in order to provide deeper black and brighter white perception. Set your Adaptive Luma Control preference as **Low**, **Medium**, **Strong** or turn it off by setting as **Off**.

Local Contrast Control: Local contrast control divides each frame to defined small regions and provides ability to apply independent contrast set-

ting for each region. This algorithm improves fine details and provides better contrast perception. It makes higher depth impression by enhancing dark and bright areas without any detail loss. Set your Local Contrast Control preference as **Low**, **Medium**, **High** or turn it off by setting as **Off**.

DI Film Mode: It is the function for 3:2 or 2:2 cadence detection for 24 fps film contents and improves the side effects (like interlacing effect or judder) which are caused by these pull down methods. Set your DI Film Mode preference as **Auto** or turn it off by setting as **Off**. This item will not be available if Game Mode or PC Mode is turned on.

Blue Stretch: Human eye perceives cooler whites as brighter white, Blue Stretch feature changes White balance of mid-high grey levels to cooler colour temperature. Turn the Blue Stretch function on or off.

Game Mode: Game mode is the mode which cuts down some of the picture processing algorithms to keep up with video games that have fast frame rates. Turn the Game Mode function on or off.

PC Mode: PC Mode is the mode which cuts down some of the picture processing algorithms to keep signal type as it is. It can be usable especially for RGB inputs. Turn the PC Mode function on or off.

HDMI RGB Range: This setting should be adjusted according to input RGB signal range on HDMI source. It can be limited range (16-235) or full range (0-255). Set your HDMI RGB range preference. **Auto**, **Full** and **Limit** options will be available. This item will not be available, if the input source is not set as HDMI.

Colour Tuner: Colour saturation, hue, brightness can be adjustable for red, green, blue, cyan, magenta, yellow and flesh tone (skin tone) for having more vivid or more natural image. Set the **HUE**, **Colour**, **Brightness**, **Offset** and **Gain** values manually. Highlight **Enable** and press **OK** to turn this function on.

11 Point White Balance Correction: White balance feature calibrates TV's colour temperature in detailed grey levels. By visually or measurement, grey scale uniformity can be improved. Adjust the strength of the **Red**, **Green**, **Blue** colours and **Gain** value manually. Highlight **Enable** and press **OK** to turn this function on.

Reset to Default: Reset the video settings to factory default settings.

Note: Depending on the currently set input source some menu options may not be available.

Sound

Sound Style: For easy sound adjustment, you can select a preset setting. **User**, **Standard**,

Vivid, **Sports**, **Movie**, **Music** or **News** options will be available. Sound settings will be adjusted according to the selected sound style. Some other sound options may become unavailable depending on the selection.

Balance: Adjust the left and right volume balance for speakers and headphones.

Sound Surround: With Sound Surround, you can enrich (expand and deepen) the sound quality of the TV speakers. Turn this option on/off by pressing **OK**.

Equalizer Detail: Adjust the equalizer values according to your preferences.

Speakers: To hear the TV audio from the connected compatible audio device set as **External Audio System**. Set as **TV Speakers** to use the speakers of your TV for sound output.

Digital Output: Set the digital sound output preference. **Auto**, **Bypass**, **PCM**, **Dolby Digital Plus** and **Dolby Digital** options will be available. Highlight the option you prefer and press **OK** to set.

SPDIF Delay: Adjust the SPDIF delay value.

Auto Volume Control: With Auto Volume Control, you can set the TV to automatically level out sudden volume differences. Typically at the beginning of adverts or when you are switching channels. Turn this option on/off by pressing **OK**.

Downmix Mode: Press **OK** to see the options and set. **Stereo** and **Surround** options will be available. Highlight the option you prefer and press **OK** to set.

Dolby Audio Processing: With Dolby Audio Processing, you can improve the sound quality of your TV. Press **OK** to see the options and set. Some other sound options may become unavailable and appear as grayed out depending on the settings made here.

Dolby Audio Processing: Highlight this option and press **OK** to turn this function on/off.

Sound Mode: If the **Dolby Audio Processing** option is turned on **Sound Mode** option will be available to set. Highlight the **Sound Mode** option and press **OK** to see the preset sound modes. **Smart**, **Movie**, **Music** and **News** options will be available. Highlight the option you prefer and press **OK** to set.

Reset to Default: Resets the sound settings to factory defaults.

Storage: View the total storage space status of the TV and connected devices if available. To see detailed information on the usage details highlight and press **OK**. There will also be options for ejecting and formatting the connected storage devices.

Home screen: Customise your home screen. Select channels which will be displayed on the home screen.

Organize apps and games, change their order or get more of them.

Store mode: Highlight **Store mode** and press **OK**. Read the description, highlight **Continue** and press **OK** if you want to proceed. Then highlight **On** to activate or **Off** to deactivate and press **OK**. In store mode your TV's settings will be configured for store environment and the supported features will be displayed on the screen. Once activated, **Store messaging** and **PQ Demo** settings will become available. Set according to your preferences. It is recommended not to activate store mode for home use.

Google Assistant: Select your active account, view permissions, select which apps to include in search results, activate safe search filter, active offensive word blocking and view open source licenses.

Screen saver: Set screensaver and sleep mode options for your TV. You can choose a screensaver, set wait time for the screensaver, set when the TV goes into sleep mode or start the screensaver mode.

Location: You can allow the use of the wireless connection to estimate the location, see the recent location requests and allow or restrict the listed apps to use your location information.

Usage & Diagnostics: Automatically send usage data and diagnostic information to Google. Set according to your preference.

Accessibility: Configure **Visually Impaired**, **AC4 Dialogue Enhancement**, **Captions**, **Text to speech**, **Accessibility shortcut** settings and/or turn **Audio Description**, **Hearing Impaired**, **High contrast text** on/off. Some of the caption settings may not be applied.

Visually Impaired: Digital TV channels can broadcast special audio commentary describing on-screen action, body language, expressions and movements for people with visual disabilities.

Speaker: Turn this option on if you want to hear the audio commentary through the TV speakers.

Headphone: Turn this option on if you want to route the sound of the audio commentary to the TV's headphone output.

Volume: Adjust the volume level of the audio commentary.

Pan and Fade: Turn this option on if you want to hear the audio commentary more clearly, when it is available through broadcast.

Audio for the Visually Impaired: Set the audio type for visually impaired. Options will be available depending on the selected broadcast.

Fader Control: Adjust the volume balance between the main TV audio (**Main**) and audio commentary (**AD**).

Reset: Reset all TV settings to the factory default. Highlight **Reset** and press **OK**. A confirmation message will be displayed, select **Erase everything** to proceed with resetting. The TV will switch off/on first and the initial setup will start. Select **Cancel** to exit.

Bluetooth Remotes & Accessories

You can use Bluetooth accessories, such as your remote control (depends on the model of the remote control), headphones, keyboards or game controllers with your Android TV. Add devices to use them with your TV. Select this option and press **OK** to start searching available devices in order to pair them with your TV. If available highlight **Add accessory** option and press **OK** to start the search. Set your device to pairing mode. Available devices will be recognized and listed or pairing request will be displayed. Select your device from the list and press **OK** or highlight **OK** and press **OK** to start pairing.

Connected devices will also be listed here. To unpair a device, highlight it and press **OK**. Then highlight **Unpair** option and press **OK**. Then select **OK** and press **OK** again to unpair the device from the TV. You can also change the name of an connected device. Highlight the device and press **OK**, then highlight **Change name** and press **OK** again. Press **OK** again use the virtual keyboard to change the name of the device.

Channel List

The TV sorts all stored channels in the **Channel List**. Press the **OK** button to open the **Channel List** in Live TV mode. You can press the **Red** button to scroll up the list page by page, or press the **Green** button to scroll down.

If desired, you can filter or sort the channels or find a channel in the channel list. Press the **Yellow** button to display the **Select More** options. Available options are **Select Type**, **Sort** and **Find**. **Sort** option may not be available depending on the selected country during the initial setup process.

To filter the channels highlight **Select Type** and press the **OK** button. You can select among **Digital**, **Radio**, **Free**, **Encrypted**, **Analogue** and **Network** options to filter the channel list or select **Broadcast** option to see all installed channels in the channel list.

To sort the channels highlight **Sort** and press the **OK** button. Select one of the available options and press **OK** again. The channels will be sorted according to your selection.

To find a channel highlight **Find** and press the **OK** button. Virtual keyboard will be displayed. Enter all or a portion of the name or number of the channel you

want to find, highlight the check mark symbol on the keyboard and press **OK**. Matching results will be listed.

Note: If any option except **Broadcast** is selected in the **Select Type** menu, you can only scroll through the channels that are currently listed in the channel list using the **Program +/-** buttons on the remote.

Editing the Channels and the Channel List

You can edit the channels and the channel list using the **Channel Skip**, **Channel Sort**, **Channel Move** and **Channel Edit** options under the **Settings>Channel>Channels** menu. You can access the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

Note: The options **Channel Sort**, **Channel Move** and **Channel Edit** may not be available and appear as grayed out depending on the operator selection and operator related settings. You can turn off the **LCN** setting in the **Settings>Channel** menu, as it prevents channel editing. This option might be set to **On** by default depending on the selected country during the initial setup process.

Managing Favourite Channel Lists

You can create four different lists of your favourite channels. These lists include only the channels that are specified by you. Press the **OK** button to display the channel list. Then press **Blue** button to access favourite lists. If one of the lists is being displayed on the screen you can press the **Yellow** button to open the **Favorite List Selection** menu in order to switch from one list to another. Select the desired list and press the **OK** button. Highlight a channel in the list and press the **OK** button to watch.

To add the currently watched channel to one of your favourite lists select the desired favourite list as described above and press the **Menu** button on the remote. Then enter the **Channels** menu, highlight **Add to My Favorites** option and press **OK**. The channel will be added to the selected favourite list. To remove that channel from the list open the favourite list, highlight the channel and press **Blue** button. In this way only the currently watched channel can be added or removed.

Programme Guide

By means of Electronic Programme Guide (EPG) function of your TV you can browse the event schedule of the currently installed channels on your channel list. It depends on the related broadcast whether this feature is supported or not.

In order to access the Electronic Programme Guide on the Home Screen press the **EPG** button on the remote. Electronic Programme Guide is also available in Live TV mode. You can switch to Live TV mode by either launching the **Live TV** application on the Home Screen or selecting **Channels** input source from the **Inputs** menu on the Home Screen. To access the programme

guide while in Live TV mode, press the **EPG** button on your remote.

Use the directional buttons to navigate through the programme guide. You can use the Up/Down directional buttons or **Programme +/-** buttons to switch to previous/next channel on the list and Right/Left directional buttons to select a desired event of the currently highlighted channel. If available, the full name, start-end time and date, genre of the highlighted event and a brief information about it will be displayed on the screen.

Press **Blue** button to filter the events. Due to the large variety of filter options you can find events of the desired type quicker. Press **Yellow** button to see detailed information on the highlighted event. You can also use Red and Green buttons to see events of previous day and next day. The functions will be assigned to the coloured buttons on the remote when they are available. Follow the on-screen informations for accurate button functions.

The guide can not be displayed if TV input source is blocked from the **Settings>Channel>Parental Controls>Inputs Blocked** menu in Live TV mode or on Home Screen.

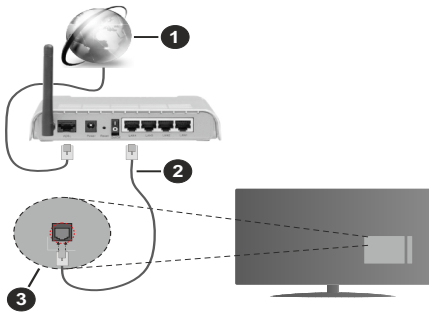
Connecting to the Internet

You can access the Internet via your TV, by connecting it to a broadband system. It is necessary to configure the network settings in order to enjoy a variety of streaming content and internet applications. These settings can be configured from **Settings>Network & Internet** menu. You can also highlight the Connected/Not Connected icon on the Home screen and press **OK** to access this menu. For further information refer to **Network & Internet** section under the title of **Home Screen**.

Wired Connection

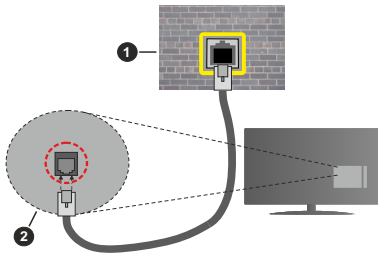
Connect your TV to your modem/router via an Ethernet cable. There is a LAN port on the rear side of your TV.

The status of the connection under the **Ethernet** section in the **Network & Internet** menu will be changed from **Not connected** to **Connected**.



1. Broadband ISP connection
2. LAN (Ethernet) cable
3. LAN input on the rear side of the TV

You might be able to connect your TV to a network wall socket depending on your network's configuration. In that case, you can connect your TV directly to the network using an Ethernet cable.

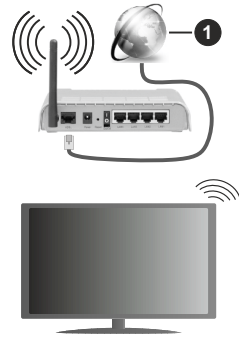


1. Network wall socket
2. LAN input on the rear side of the TV

Wireless Connection

A wireless LAN modem/router is required to connect the TV to the Internet via wireless LAN.

Highlight **Wi-Fi** option in the **Network & Internet** menu and press **OK** to enable wireless connection. Available networks will be listed. For more information refer to **Network & Internet>Wi-Fi** section under the title of **Home Screen**.



1. Broadband ISP connection

A network with hidden SSID can not be detected by other devices. If you want to connect to a network with hidden SSID, highlight the **Add new network** option under the **Network & Internet** menu on the Home Screen and press **OK**. Add the network by entering its name manually using the related option.

A Wireless-N router (IEEE 802.11a/b/g/n/ac) with simultaneous 2.4 and 5 GHz bands is designed to increase bandwidth. These are optimized for smoother and faster HD video streaming, file transfers and wireless gaming.

Use a LAN connection for quicker data transfer between other devices like computers.

The transmission speed differs depending on the distance and number of obstructions between the transmission products, the configuration of these products, the radio wave conditions, the line traffic and the products that you use. The transmission may also be cut off or may get disconnected depending on the radio wave conditions, DECT phones or any other WLAN 11b appliances. The standard values of the transmission speed are the theoretical maximum values for the wireless standards. They are not the actual speeds of data transmission.

The location where the transmission is most effective differs depending on the usage environment.

The Wireless feature of the TV supports 802.11 a,b,g,n & ac type modems. It is highly recommended that you should use the IEEE 802.11n communication protocol in order to avoid any possible problems while watching videos.

You must change your modem's SSID when there are any other modems around with the same SSID. You can encounter connection problems otherwise. Use a wired connection if you experience problems with a wireless connection.

A stable connection speed is required to play back streaming content. Use an Ethernet connection if the wireless LAN speed is unstable.

Multi Media Player

On the Home Screen scroll to **Apps** row, select **Multi Media Player (MMP)** and press the **OK** button to launch.

Select the media type on the main media player screen. On the next screen, you can press the **Menu** button to access a list of menu options while the focus is on a folder or a media file. Using the options of this menu you can change the media type, sort the files, change the thumbnail size and turn your TV into a digital photo frame. You will also be able to copy, paste and delete the media files using the related options of this menu, if a FAT32 formatted USB storage device is connected to the TV. Additionally you can switch the viewing style by selecting either **Normal Parser** or **Recursive Parser**. In **Normal Parser** mode the files will be displayed with folders if any available. So only the selected type of media files in the root folder or in the selected folder will be displayed. If there isn't any media files of the selected type, the folder will be assumed as empty. In **Recursive Parser** mode the source will be searched for all available media files of the selected type and the found files will be listed. Press the **Back/Return** button to close this menu.

In order to activate photo frame feature select **Photo** as the media type. Then press the **Menu** button, highlight **Photo Frame** and press **OK**. If you select **One Photo mode** option and press **OK** the image that you set as photo frame image earlier will be displayed when photo frame feature is activated. If you select the USB storage device option the first file (in **Recursive Parser** mode) will be displayed. To set the photo frame image press the **Menu** button while the photo file of your choice is displayed, highlight **Photo Frame Image** and press **OK**.

While browsing for the video files a preview of the highlighted video will be displayed in a small window on the left side of the screen if the view style is set to List View. Press the **Blue** button to switch between the List View and Grid View. You can also use **Programme +/-** buttons to jump directly to the first and last folder or file if the view style is set to Grid View.

Video Files

Press **OK** to play back the highlighted video file.

Info: Display the info bar. Press twice to display the extended information and the next file.

Play/pause: Pause and resume the playback.

Rewind: Start reverse playback. Press consecutively to set the rewind speed.

Fast Forward: Start fast forward playback. Press consecutively to set the forward playback speed.

Stop: Stop the playback and return to the media player screen.

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

Music Files

Press **OK** to play back the highlighted music/audio file.

Info: Display the extended information and the next file.

Play/pause: Pause and resume the playback.

Rewind: Press and hold to rewind.

Fast Forward: Press and hold to fast forward.

Stop: Stop the playback.

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

If you press **Back/Return** button without stopping the playback first the playback will continue while you are browsing in the multimedia player. You can use the media player buttons to control the playback. The playback will stop if you exit the media player or switch the media type to **Video**.

Photo Files

Press **OK** to display the highlighted photo file. When you press the **Play** button slide show will start and all photo files in the current folder or in the storage device, depends on the viewing style, will be displayed in order. If the **Repeat** option is set to **None** only the files between the highlighted one and the last listed one will be displayed. The slide show will stop after the last listed file is displayed.

Info: Display the info bar. Press twice to display the extended information.

Play/pause: Pause and resume the slide show.

Green button (Rotate/Duration): Rotate the image / Set the interval between the slides.

Yellow button (Zoom/Effect): Zoom in on the image / Apply various effects to the slide show.

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

Text Files

When you press the **OK** button slide show will start and all text files in the current folder or in the storage device, depends on the viewing style, will be displayed in order. If the **Repeat** option is set to **None** only the files between the highlighted one and the last listed one will be displayed. The slide show will stop after the last listed file is displayed.

Info: Display the info bar. Press twice to display the extended information.

Play/pause: Pause and resume the slide show.

Programme +: Switch to next file.

Programme -: Switch to previous file.

Directional buttons (Down or Right / Up or Left): Switch to next page. / Switch to previous page.

Back/Return: Stop the slide show and return to the media player screen.

Menu Options

Press the **Menu** button to see available options while playing back or displaying media files. The content of this menu differs depending on the media file type.

Pause/Play: Pause and resume the playback or the slide show.

Repeat: Set the repeat option. Highlight an option and press **OK** to change the setting. If **Repeat One** option is selected the current media file will be repeatedly played back or displayed. If the **Repeat All** option is selected all media files of the same type in the current folder or in the storage device, depends on the viewing style, will be repeatedly played back or displayed.

Shuffle On/Off: Turn the shuffle option on or off. Press **OK** to change the setting.

Duration: Set the interval between the slides. Highlight an option and press **OK** to change the setting. You can also press the **Green** button to set. This option will not be available if the slide show is paused.

Rotate: Rotate the image. The image will be rotated 90 degrees clockwise each time you press **OK**. You can also press the **Green** button to rotate. This option will not be available if the slide show is not paused.

Effect: Apply various effects to the slide show. Highlight an option and press **OK** to change the setting. You can also press the **Yellow** button to set. This option will not be available if the slide show is paused.

Zoom: Zoom in on the image that is currently being displayed. Highlight an option and press **OK** to change the setting. You can also press the **Yellow** button to zoom in. This option will not be available if the slide show is not paused.

Font: Set the font options. Size, style and colour can be set according to your preferences.

Show Info: Display the extended information.

Photo Frame Image: Set the currently displayed image as photo frame image. This image will be displayed if the **One Photo mode** is selected instead of the connected storage device while activating the photo frame feature. Otherwise all files will be played back as a slide show when photo frame feature is activated.

Hide/Show Spectrum: Hide or show the spectrum if available.

Lyric Options: Display lyric options if available.

Picture Off: Open the power menu of your TV. You can use the **Picture off** option here to turn the screen off. Press a button on the remote or on the TV to turn the screen on again.

Picture Settings: Display the picture settings menu.

Sound Settings: Display the sound settings menu.

Audio Settings: Set the soundtrack option if more than one available.

Last Memory: Set to **Time** if you want to resume the playback from the position where it was stopped next time you open the same video file. If set to **Off** the playback will start from the beginning. Highlight an option and press **OK** to change the setting.

Seek: Jump to a specific time of the video file. Use the numeric and directional buttons to enter the time and press **OK**.

From USB Connection

IMPORTANT! Back up the files on your USB storage devices before connecting them to the TV. Manufacturer will not be responsible for any file damage or data loss. Certain types of USB devices (e.g. MP3 Players) or USB hard disk drives/memory sticks may not be compatible with this TV. The TV supports FAT32 and NTFS disk formatting. FAT32 formatted devices with a storage capacity larger than 192TB are not supported. NTFS formatted devices with a storage capacity larger than 16TB are not supported.

You can view your photos, text documents or play your music and video files installed on a connected USB storage device on the TV. Plug in the USB storage device to one of the USB inputs on the TV.

On the main media player screen select the desired media type. On the next screen, highlight a file name from the list of available media files and press the **OK** button. Follow the on-screen instructions for more information on other available button functions.

Note: Wait a little while before each plugging and unplugging as the player may still be reading files. Failure to do so may cause physical damage to the USB player and the USB device itself. Do not pull out your drive while playing a file.

From a Mobile Device via DMR

Make sure that your mobile device is connected to the same network as your TV. On the TV, scroll to **Apps** row on the Home Screen, select **Multi Media Player (MMP)** and press the **OK** button to launch. Select the media type on the main media player screen. On the next screen, press the **Blue** button to switch the List View layout. Then press the **Back** button. **DMR** (Digital Media Renderer) option will appear among the media type options. Highlight the **DMR** option and press the **OK** button. The TV is ready to receive the

media file sent from your mobile device. On the mobile device, open the file you want to share and tap on the sharing icon or on the related option from the options menu of your mobile device. Available devices will be listed. Select your TV from the list. You can get the device name of your TV from the **Settings>Device Preferences>About** menu on the Home screen. If desired, the name of the TV can also be changed by either selecting one of the predefined names or entering a custom name using the options of the **Device name** menu. If the connection is successfully established the selected media file will be played/displayed on your TV.

USB Recording

To record a programme, you should first connect a USB disk to your TV while the TV is switched off. You should then switch on the TV to enable the recording feature. To record long duration programmes such as movies, it is recommended to use USB Hard disk drives (HDD's). Recorded programmes are saved into the connected USB disk. If desired, you can store/copy recordings onto a computer; however, these files will not be available to be played on a computer. You can play the recordings only via your TV.

Lip Sync delay may occur during the timeshifting. Radio record is supported.

If the writing speed of the connected USB disk is not sufficient, the recording may fail and the timeshifting feature may not be available.

It is recommended to use USB hard disk drives for recording HD programmes.

Do not pull out the USB/HDD during a recording. This may harm the connected USB/HDD.

Some stream packets may not be recorded because of signal problems, as a result sometimes videos may freeze during playback.

If a recording starts from timer when teletext is on, a dialogue will be displayed. If you highlight **Yes** and press **OK** teletext will be turned off and recording will start.

The recording function has been designed for private use and entertainment in your environment.

Please note that any commercial use of the recording function could lead to copyright infringement of authors' rights. Toshiba asks you to respect the intellectual property rights of third parties.

Instant Recording

Press **Record** button to start recording an event instantly while watching a programme. Press **Stop** button to cancel instant recording.

You can not switch broadcasts during the recording mode.

Watching Recorded Programmes

Select **Record List** from the **Record** menu in Live TV mode and press **OK**. Select a recorded item from the list (if previously recorded). Press the **OK** button to watch.

Press the **Stop** or **Back/Return** button to stop a playback.

The recordings will be named in the following format: Channel Name_Date(Year/Month/Day)_Duration(Hour/Minute/Second).

Timeshift Recording

In order to use timeshift recording feature **Time Shift Mode** option in the **Record>Time Shift Mode** menu should be enabled first.

In timeshifting mode, the programme is paused and simultaneously recorded to the connected USB disk. Press **Pause/Play** button while watching a broadcast to activate timeshifting mode. Press **Pause/Play** button again to resume the paused programme from where you stopped. Press the **Stop** button to stop timeshift recording and return to the live broadcast.

When this feature is used for the first time **Disk Setup** wizard will be displayed when the **Pause/Play** button is pressed. You can either choose **Auto** or **Manual** setup mode. In **Manual** mode, if you prefer, you can format your Disk and specify the storage space that will be used for timeshift function. When the setup is completed result will be displayed. Press **Exit** button. Timeshift function will not be available for radio broadcasts.

Disk Format

When using a new USB storage device, it is recommended that you first format it using the **Format** option in the **Record>Device Info** menu in Live TV mode. Highlight the connected device on the **Device Info** screen and press **OK** or Right directional button to see the list of available options. Then highlight **Format** and press **OK** to proceed. A confirmation dialogue will be displayed. Highlight **Yes** and press **OK** to start formatting.

IMPORTANT: Formatting your USB storage device will erase ALL the data on it and it's file system will be converted to FAT32. In most cases operation errors will be fixed after a format but you will lose ALL your data.

Schedule List

You can add reminders or record timers using the **Schedule List** menu. You can access the **Schedule List** from the **Record** menu in Live TV mode. Highlight **Schedule List** and press **OK**. Previously set timers will be listed if any available.

Press **Record** button to add a timer while the **Schedule List** menu is displayed on the screen. You can

define the type of the timer by setting the **Schedule Type** option as **Reminder** or **Record**. When other parameters are set highlight **Add** and press **OK**. The timer will be added to the list.

If any available, you can also edit or delete the timers on this list. Highlight the timer of your choice and press **OK**. **Edit** and **Delete** options will appear at the bottom of the screen. Highlight the desired option and press **OK**. After you edited a timer you can choose either to replace it or add it as a new timer. If you choose the **Replace** option, the timer will be saved with the new settings. If you choose the **Add** option, the timer will be added to the list as a new timer. Highlight **Replace** or **Add** according to your preference and press **OK** to proceed. When you choose to delete a timer a confirmation dialogue will be displayed on the screen. Highlight **Yes** and press **OK** to delete the selected timer.

A warning message will be displayed if the time intervals of two timers overlap. You can not set more than one timer for the same time interval.

Press **EXIT** button to close the Schedule List.

CEC

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

The TV comes CEC function switched on. Make sure that all CEC settings are properly set up on the connected CEC device. The CEC functionality has different names on different brands. CEC function might not work with all devices. If you connect a device with HDMI CEC support to your TV, the related HDMI input source will be renamed with the connected device's name.

To operate the connected CEC device, select the related HDMI input source from the **Inputs** menu on the Home Screen. Or press the **Source** button if the TV is in Live TV mode and select the related HDMI input source from the list. To terminate this operation and control the TV via the remote again, press the **Source** button, which will still be functional, on the remote and switch to another source.

The TV remote is automatically able to control the device once the connected HDMI source has been selected. However not all buttons will be forwarded to the device. Only devices that support CEC Remote Control function will respond to the TV remote control.

The TV supports also ARC(Audio Return Channel) feature. This feature is an audio link meant to replace other cables between the TV and the audio system (A/V receiver or speaker system). Connect the audio

system to the HDMI2 input on the TV to enable ARC feature.

In order to activate ARC feature the **Speakers** option should be set as **External Audio System**. You can access this option from the **TV options** or **TV options->Settings>Device Preferences>Sound** menu in Live TV mode or from **Settings>Device Preferences>Sound** menu on the Home Screen. When ARC is active, TV will mute its other audio outputs automatically. So you will hear audio from connected audio device only (same as other optical or co-axial digital audio outputs). The volume control buttons of the remote will be directed to connected audio device and you will be able to control the volume of the connected device with your TV remote.

Note: ARC is supported only via the HDMI2 input.

The CEC functions are set to **On** by default. To switch off completely do the following:

1 - Enter the **Settings>Device Preferences>Inputs** menu on the Home Screen or **TV options>Settings>Device Preferences>Inputs** menu in Live TV mode.

2 - Scroll down to **Consumer Electronic Control (CEC)** section. Highlight **HDMI control** option and press **OK**.

Google Cast

With the built-in Google Cast technology you can cast the content from your mobile device straight to your TV. If your mobile device has Google Cast feature, you can mirror your device's screen to your TV wirelessly. Select **Cast screen** option on your android device. Available devices will be detected and listed. Select your TV from the list and tap on it to start casting. You can get the network name of your TV from the **Settings>Device Preferences>About** menu on the Home screen. **Device name** will be one of the shown articles. You can also change the name of your TV. Highlight **Device name** and press **OK**. Then highlight **Change** and press **OK** again. You can either select one of the predefined names or enter a custom name.

To cast your device's screen to the TV screen...

1. On your android device, go to 'Settings' from the notification panel or home screen
2. Tap on 'Device Connectivity'
3. Tap on the 'Easy projection' and enable 'Wireless projection'. Available devices will be listed
4. Select the TV you would like to cast to
or
 1. Slide down the notification panel
 2. Tap on 'Wireless projection'
 3. Select the TV you would like to cast to

If the mobile app is Cast-enabled, such as YouTube, Dailymotion, Netflix, you can cast your app to your TV. On the mobile app, look for the Google Cast icon and tap on it. Available devices will be detected and listed. Select your TV from the list and tap on it to start casting.

To cast an app to the TV screen...

1. On your smartphone or tablet, open an app that supports Google Cast
2. Tap the Google Cast icon
3. Select the TV you would like to cast to
4. The app you selected should start playing on TV

Notes:

Google Cast works on Android and iOS. Make sure that your mobile device is connected to the same network as your TV.

The menu options and namings for Google Cast function on your Android device can differ from brand to brand and can change with time. Refer to your device's manual for latest informations on Google Cast function.

HBBTV System

HbbTV (Hybrid Broadcast Broadband TV) is a standard that seamlessly combines TV services delivered via broadcast with services delivered via broadband and also enables access to Internet only services for consumers using connected TVs and set-top boxes. Services delivered through HbbTV include traditional broadcast TV channels, catch-up services, video-on-demand, electronic programme guide, interactive advertising, personalisation, voting, games, social networking and other multimedia applications. HbbTV applications are available on channels where they are signalled by the broadcaster.

The HbbTV applications are generally launched with the press of a coloured button on the remote. Generally a small red button icon will appear on the screen in order to notify the user that there is an HbbTV application on that channel. Press the button indicated on the screen to launch the application.

HbbTV applications use the buttons on the remote control to interact with the user. When an HbbTV application is launched, the control of some buttons are owned by the application. For example, numeric channel selection may not work on a teletext application where the numbers indicate teletext pages.

HbbTV requires AV streaming capability for the platform. There are numerous applications providing VOD (video on demand) and catch-up TV services. The **OK** (play&pause), **Stop**, **Fast forward**, and **Rewind** buttons on the remote control can be used to interact with the AV content.

*Note: You can enable or disable this feature from the **HBBTV Settings>TV Options>Advanced Options>** menu in Live TV mode.*

Quick Standby Search

If earlier an automatic search is performed, your TV will search for new or missing digital channels at 05:00 am every morning while in quick standby mode.

And if the **Auto Channel Update** option in the **Settings>Channel** menu is enabled the TV will wake up within 5 minutes after it is switched into quick standby mode and search for channels. Standby LED will blink during this process. Once the standby LED stops blinking the search process is completed. Any new found channels will be added to the channel list. If the channel list is updated, you will be informed on the changes at the next power on.

Software Update

Your TV is capable of finding and updating the firmware automatically via Internet.

To experience the best use of your TV and benefit from the latest improvements make sure your system is always up to date.

Software update via internet

On the Home Screen enter the **Settings>Device Preferences>About** menu in order to update your Android system version. Move the focus to the **System update** option and press **OK**. You will be informed about the system status and the time at which the device was last checked for an update will be displayed. The **Check for update** option will be highlighted, press **OK** if you want to check for an available update.

Note: Do not unplug the power cord during the reboot process. If the TV fails to come on after the upgrade, unplug, wait for two minutes then plug it back in.

Troubleshooting & Tips

TV does not switch on

- Make sure the power cord is plugged in securely to power outlet.
- Disconnect the power cable from the power outlet. Wait for one minute then reconnect it.
- Press the **Standby/On** button on the TV.

TV does not respond to the remote control

- The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behaviour.
- 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 batteries may be exhausted. Replace the batteries. If the remote is still not working, the remote control might be broken and needs to be checked.

This method of checking the remote control is not possible with remote controls which are wirelessly paired with the TV.

No Channels

- Make sure that all cables are properly connected and that the correct network is selected.
- Make sure that the correct channel list is selected.
- Make sure that you have entered the correct channel frequency if you have done manual tuning.

No picture / distorted picture

- Make sure that the antenna is properly connected to the TV.
- Make sure that the antenna cable is not damaged.
- Make sure that the correct device is selected as the input source.
- Make sure that the external device or source is properly connected.
- Make sure that the picture settings are set correctly.
- 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.
- Change to a different picture format, if the picture does not fit the screen
- Make sure that your PC uses the supported resolution and refresh rate.

No sound / poor sound

- 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, increase the volume to check.
- Make sure that the TV audio output is connected to the audio input on the external sound system.
- Sound may be coming from only one speaker. Check the balance settings from **Sound** menu.

Input sources - can not be selected

- Make sure that the device is connected to the TV.
- Make sure that all cables are properly connected.
- Make sure that you select the right input source which is dedicated to the connected device.

VGA Input Typical Display Modes

The following table is an illustration of some of the typical video display modes. Your TV may not support all resolutions.

Index	Resolution	Frequency
1	640x480	60Hz
2	640x480	72Hz
3	640x480	75Hz
4	800x600	56Hz
5	800x600	60Hz
6	800x600	72Hz
7	800x600	75Hz
8	1024x768	60Hz
9	1024x768	70Hz
10	1024x768	75Hz
11	1152x864	75Hz
12	1280x768	60Hz
13	1280x768	75Hz
14	1280x960	60Hz
15	1280x960	75Hz
16	1280x1024	60Hz
17	1280x1024	75Hz
18	1360x768	60Hz
19	1366x768	60Hz
20	1400x1050	59Hz
21	1400x1050	60Hz
22	1400x1050	75Hz
23	1440x900	60Hz
24	1440x900	75Hz
25	1600x1200	60Hz
26	1680x1050	59Hz
27	1680x1050	60Hz
28	1920x1080	60Hz

AV and HDMI Signal Compatibility

Source	Supported Signals	
Composite / Back AV	PAL	
	SECAM	
	NTSC4.43	
	NTSC3.58	
Component / YPbPr	480i, 480p	60Hz
	576i, 576p	50Hz
	720p	50Hz,60Hz
	1080i	50Hz,60Hz
HDMI	480i	60Hz
	480p	60Hz
	576i, 576p	50Hz
	720p	50Hz,60Hz
	1080i	50Hz,60Hz
	1080p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz
	3840x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz
	4096x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz

In some cases a signal on the TV may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc.). If you do experience such a problem please contact your dealer and also the manufacturer of the source equipment.

Supported File Formats for USB Mode

Video

Video Codec	Resolution	Bit Rate	Profile	Container
MPEG 1/2	1080P@60fps	80Mbps	MP@HL	MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
MPEG4	1080P@60fps	40Mbps	<ul style="list-style-type: none"> Simple Profile Advanced Simple Profile@Level 5 GMC is not supported 	MPEG program stream (.MPG, .MPEG), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
Sorenson H.263	1080P@60fps	40Mbps		FLV (.flv), AVI (.avi), SWF (.swf)
H.263	1080P@60fps	40Mbps		MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv)
H.264	4096x2176@60fps 1080P@60fps	135Mbps	<ul style="list-style-type: none"> Main Profile High Profile @Level 5.1 	FLV (.flv), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
HEVC/H.265	4096x2176@60fps	100Mbps	Main/Main10 Profile, High Tier @Level 5.1	MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), MKV (.mkv)
MVC	1080P@30fps	80Mbps		MPEG transport stream (.ts, .trp, .tp)
AVS	1080P@60fps	40Mbps	Jizhun profile @ Level 6.0	MPEG transport stream (.ts, .trp, .tp)
AVS+	1080P@60fps	50Mbps	Broadcasting profile@ Level 6.0.1.08.60	MPEG transport stream (.ts, .trp, .tp)
WMV3	1080P@60fps	40Mbps		ASF (.asf), AVI (.avi), MKV (.mkv), WMV (.wmv)
VC1	1080P@60fps	40Mbps	<ul style="list-style-type: none"> Advanced Profile @ Level 3 Simple Profile Main Profile 	MPEG program stream (MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
Motion JPEG	1080P@30fps	10Mbps		AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MKV (.mkv), ASF (.asf)
VP8	1080P@60fps	20Mbps		MKV (.mkv), WebM (.webm)
VP9	4096x2176@60fps	100Mbps	Profile0/2	MKV (.mkv), WebM (.webm)
RV30/RV40	1080P@60fps	40Mbps		RM (.rm, .rmvb)

Audio

Audio Codec	Sample rate	Channel	Bit Rate	Container	Note
MPEG1/2 Layer1	16KHz ~ 48KHz	Up to 2	32Kbps ~ 448Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: MP3 (.mp3), WAV (.wav)	

Audio Codec	Sample rate	Channel	Bit Rate	Container	Note
MPEG1/2 Layer2	16KHz ~ 48KHz	Up to 2	8Kbps ~ 384Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: MP3 (.mp3), WAV (.wav)	
MPEG1/2 Layer3	16KHz ~ 48KHz	Up to 2	8Kbps ~ 320Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), SWF (.swf) Music: MP3 (.mp3), WAV (.wav), MP4 (.m4a)	
AC3	32KHz, 44.1KHz, 48KHz	Up to 5.1	32Kbps ~ 640 Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: AC3 (.ac3), MP4 (.m4a)	
EAC3	32KHz, 44.1KHz, 48KHz	Up to 5.1	32Kbps ~ 6 Mbps	Movie: 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: EAC3 (.ec3), MP4 (.m4a)	
AAC-LC, HEAAC	8KHz ~ 48KHz	Up to 5.1		Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), RM (.rm, .rmvb) Music: AAC (.aac), MP4 (.m4a)	
WMA	8KHz ~ 48KHz	Up to 2	128bps ~ 320Kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	WMA 7, WMA 8, WMA 9, Standard
WMA 10 Pro M0	48KHz	Up to 2	< 192kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	No LBR mode
WMA 10 Pro M1	48KHz	Up to 5.1	< 384kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	
WMA 10 Pro M2	96KHz	Up to 5.1	< 768kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	
VORBIS	Up to 48KHz	Up to 2		Movie: Matroska (.mkv), WebM (.webm), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: MP4 (.m4a), OGG (.ogg)	Supports stereo decoding only
DTS	Up to 48KHz	Up to 5.1	< 1.5Mbps	Movie: MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MP4 (.mp4, .mov), Matroska (.mkv)	

Audio Codec	Sample rate	Channel	Bit Rate	Container	Note
LPCM	8KHz ~ 48KHz	Up to 5.1	64Kbps ~ 1.5Mbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream, (.DAT, .VOB, .MPG, .MPEG) Music: WAV (.wav), MP4 (.m4a)	
IMA-ADPCM MS-ADPCM	8KHz ~ 48KHz	Up to 2	384Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: WAV (.wav), MP4 (.m4a)	
G711 A/mu-law	8KHz	Up to 2	64Kbps ~ 128Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: WAV (.wav), MP4 (.m4a)	
LBR (cook)	8KHz 11.025KHz, 22.05KHz, 44.1KHz	Up to 5.1	6Kbps ~ 128Kbps	Movie: RM (.rm, .rmvb)	
FLAC	8KHz~96KHz	Up to 5.1	< 1.6Mbps	Movie: Matroska (.mkv, .mka) Music: FLAC(.flac)	
DTS LBR	12KHz, 22KHz, 24KHz, 44.1KHz, 48KHz	Up to 5.1	up to 2Mbps	Movie: MP4 (.mp4, .mov)	
DTS XLL	Up to 96KHz	Up to 6		Movie: MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov)	
DRA	8KHz~96KHz	Up to 7.1	< 1533Kbps	Movie: MPEG transport stream (.ts, .trp)	

Picture

Image	Photo	Resolution (width x height)
JPEG	Base-line	15360x8640 (1920x8 x 1080x8)
	Progressive	1024x768
PNG	non-interlace	9600x6400
	interlace	1200x800
BMP		9600x6400
MPO	Base-line	15360x8640 (1920x8 x 1080x8)
	Progressive	1024x768
GIF		6400x4800 (800x8 x 600x8)

Subtitle

Internal

File Extension	Container	Subtitle Codec
dat, mpg, mpeg, vob	MPG, MPEG	DVD Subtitle
ts, trp, tp	TS	DVB Subtitle
mp4	MP4	DVD Subtitle UTF-8 Plain Text
mkv	MKV	ASS SSA UTF-8 Plain Text VobSub DVD Subtitle
avi	AVI(1.0, 2.0), DMF0, 1, 2	XSUB XSUB+

External

File Extension	Subtitle Parser	Remark
.srt	SubRip	
.ssa/ .ass	SubStation Alpha	
.smi	SAMI	
.sub	SubViewer MicroDVD DVDSubtitleSystem SubIdx (VobSub)	SubViewer 1.0 & 2.0 Only
.txt	TMPlayer	

Supported DVI Resolutions

When connecting devices to your TV's connectors by using DVI converter cable(DVI to HDMI cable - not supplied), you can refer to the following resolution information.

	56Hz	60Hz	66Hz	70Hz	72Hz	75Hz
640x480		x				x
800x600	x	x				x
1024x768		x		x		x
1280x768		x				x
1280x960		x				
1360x768		x				
1366x768		x				
1280x1024		x		x		x
1400x1050		x				
1600x900		x				

Disposal Information

The following information is only for EU-member states:

Disposal of products

The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.

The black bar indicates that the product was placed on the market after August 13, 2005.

By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.



Disposal of batteries and/or accumulators

The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.

If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the European Battery Directive, then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol.

By participating in separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health. For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.

