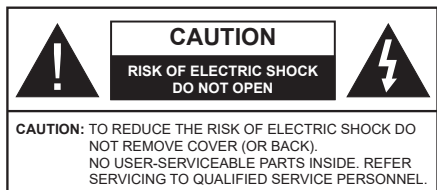


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Safety Information



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 5000 metres above the sea level, in dry locations and in regions with moderate or tropical climates.
- The TV set is intended for household and similar indoor 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 TV).

- 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 or inclined surfaces.
- To avoid danger of suffocation, keep plastic bags out of the reach of 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 TV.

| | |
|------------------------|---------------------------------|
| 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 falling. Do not over-tighten the screws.

Figures and illustrations in these operating instructions 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.

Accessories Included

- Remote Control
- Batteries: 2 x AAA
- Operating Instructions
- Power Cord
- Wall Mount Kit

Features

- Remote controlled colour TV
- Android™ operating system
- Google Cast
- Voice Search (optional)
- Fully integrated digital terrestrial/cable TV (ATSC -j.83B)
- HDMI inputs to connect other devices with HDMI sockets
- USB input
- Side AV input 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
- Ethernet (LAN) for Internet connectivity and service
- 802.11 a/b/g/n/ac built in WLAN Support

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 content is 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 2.1** 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.

Stand Installation & Wall Mounting

Assembling / Removing the pedestal

Preparations

Take out the pedestal(s) and the TV from the packing case and put the TV onto a work table with the screen panel down on a clean and soft cloth (blanket, etc.).

- Use a flat and firm table bigger than the TV.
- Do not hold the screen panel part.
- Make sure not to scratch or break the TV.

Assembling the pedestal

1. Place the pedestal(s) on the mounting pattern(s) on the rear side of the TV.
2. Insert the screws provided and tighten them gently until the pedestal(s) is/are properly fitted.

Removing the pedestal from the TV

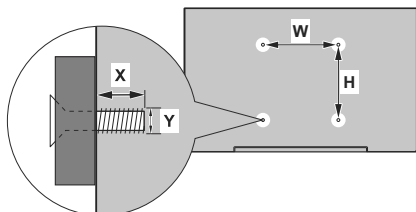
Be sure to remove the pedestal in the following way when using the wall mount bracket or repacking the TV.

- Put the TV onto a work table with the screen panel down on a clean and soft cloth. Leave the pedestal(s) protruding over the edge of the surface.
- Unscrew the screws that fix the pedestal(s).
- Remove the pedestal(s).

When using the wall mount bracket

Your TV is also prepared for a VESA-compliant wall mount bracket. If it is not supplied with your TV, contact your local dealer to purchase the recommended wall mount bracket.

Holes and measurements for the wall mount bracket installation;



VESA WALL MOUNT MEASUREMENTS

| Hole Pattern Sizes (mm) | W | H |
|----------------------------|-----------|-----|
| | XXX | XXX |
| Screw Sizes | | |
| Length (X) | min. (mm) | X |
| | max. (mm) | X |
| Thread (Y) | MX | |

Antenna Connection

Connect the aerial or cable TV plug to the antenna input (ANT) socket located on the rear side of the TV.

Rear side of the TV



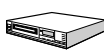




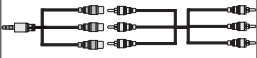
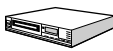











If you want to connect a device to the TV, make sure that both the TV and the device are turned off before making any connection. After the connection is done, you can turn on the units and use them.

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 |
|--|---|---|---|
|  | HDMI Connection (back&side) |  |  |
| SPDIF  | SPDIF (Coaxial Out) Connection (side) |  |  |
| Side AV  | Side AV (Audio/ Video) Connection (side) |  Side Audio/Video Connection Cable Audio/Video Cable |  |
| HEADPHONE  | Headphone Connection (side) |  |  |
|  | USB Connection (side) |  |  |
| LAN  | Ethernet Connection (back) |  LAN / Ethernet Cable |  |

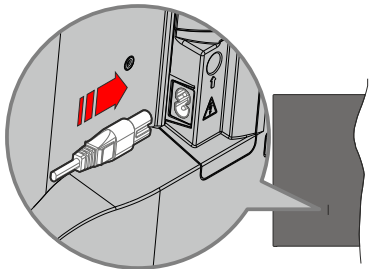
When using the wall mounting kit (contact your dealer to purchase one, if not supplied), we recommend that you plug all your cables into the back of the TV before mounting on the wall. The USB inputs on the TV support devices up to 500mA. Connecting devices that have current value above 500mA may damage 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, you have to use a high speed shielded (high grade) HDMI cable with ferrites.

Turning On/Off the TV

Connect power

IMPORTANT: The TV set is designed to operate on 100-240V AC, 50/60 Hz socket.

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



Plug one end (the two-hole plug) of the supplied detachable power cord into the power cord inlet on the rear side of the TV as shown above. Then plug the other end of the power cord into the mains socket outlet. The TV will switch on automatically.

Note: The position of the power cord inlet may differ depending on the model.

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.

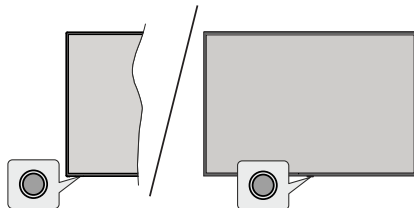
Quick Standby Mode

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 minimise energy consumption switch your TV into standby mode as explained above.

TV Control & Operation



The control button allows you to control the Quick Standby-On function 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 the **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 **Back/Return** to return to the previous menu screen.

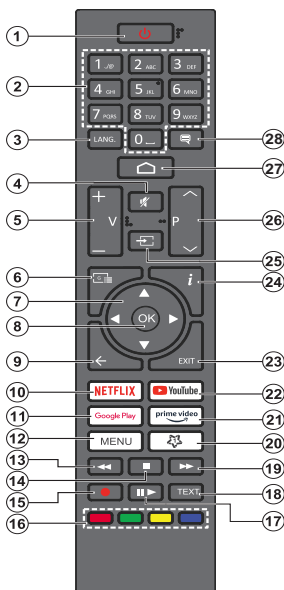
Input Selection

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. 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.

Remote Control



1. **Standby:** Quick Standby / Standby / On
2. **Numeric buttons:** Switches the channel in Live TV mode, enters a number 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. **Mute:** Completely turns off the volume of the TV
5. **Volume +/-:** Increases/decreases the volume level
6. **Guide:** Displays the electronic programme guide in Live TV mode
7. **Directional buttons:** Navigates menus, setting options, moves the focus or cursor, etc. and displays the subpages in Live TV-Teletext mode when pressed Right or Left. Follow the on-screen instructions
8. **OK:** Confirms selections, enters 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. **Google Play:** Launches the Google Play Store application
12. **Menu:** Displays the main settings menu (on other sources than Android TV Home), displays available setting options such as sound and picture
13. **Rewind:** Moves frames backwards in media such as movies
14. **Stop:** Stops the media being played
15. No function
16. **Coloured Buttons:** Follow the on-screen instructions for coloured button functions
17. **Pause:** Pauses the media being played
18. **Text:** Opens and closes teletext (where available in Live TV mode)
19. **Fast forward:** Moves frames forward in media such as movies
20. **MyButton1:** Opens the picture mode setting menu on available sources
21. **Prime Video:** Launches the Amazon Prime Video application
22. **YouTube:** Launches the YouTube application
23. **Exit:** Closes and exits from the main settings menus (on other sources than Android TV Home), closes the Home Screen and switches to last set source, exits from any running application or menu or OSD banner
24. **Info:** Displays information about on-screen content
25. **Source:** Shows all available broadcast and content sources
26. **Programme +/-:** Increases/decreases channel number in Live TV mode
27. **Home:** Opens the Home Screen
28. **Closed Captions:** Switches among available closed caption services (where available)

Inserting the Batteries into the Remote

The remote may have a screw that secures the battery compartment cover onto the remote control (or this may be in a separate bag). Remove the screw, if the cover is screwed on previously. Then remove the battery compartment cover to reveal the battery compartment. Insert two 1.5V - size **AAA** batteries. Make sure the (+) and (-) signs match (observing correct polarity). Do not mix old and new batteries. Replace only with same or equivalent type. Place the cover back on. Secure the cover again with the screw, if any.

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.

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 welcome screen will be displayed. Select your language and press **OK**. Follow the on-screen instructions to setup your TV and install channels. The installation wizard will guide you through the setup process. You can perform initial setup anytime using the **Reset** option in the **Settings>Device Preferences>About** menu. You can access the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

1. Welcome Message and Language Selection

A “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. Region/Country

In the next step select your region or country from the list and press **OK** to continue.

Depending on the selected option here, the order of the following steps may be changed and/or some of the steps may be skipped.

3. Initial Setup

After the region/country selection you can start the initial setup wizard. Highlight **Continue** and press **OK** to proceed. You will not be able to go back and change the language and region/country once you proceed. If you need to change your language or region/country selection after this step, you will have to switch the TV into standby mode so the setup process starts from the beginning when you next switch on the TV. To do this, press and hold the **Standby** button. A dialogue will be displayed. Highlight **OK** and press **OK**.

4. Search for accessories

A search for accessories will be performed after the initial setup has started. Follow the on-screen instructions to pair your remote control (depending on the model of the remote control) and other wireless accessories with your TV. Press the **Back/Return** button to end adding accessories and proceed.

5. 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 the **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.

6. Network Connection

You will be directed to the next step automatically, if you connect your TV to the 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 to has a hidden SSID (network name).

Note: To be able to connect to a wireless network, you should unplug the Ethernet cable.

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

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

7. Sign in to your Google account

If the connection succeeds, you can sign in to your Google account on the next screen. You need to be signed in to a Google account 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 the 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. You can sign in to your Google account by entering your e-mail address or phone number and your password, or create a new account.

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

8. 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 website address on which this information can also be viewed, in case internet access is not available.

9. Google Services

Select each to learn more about each service, such as how to turn it on or off later. Data will be used according to Google's Privacy Policy. Highlight **Accept** and press **OK** to confirm your selection of these Google services settings.

Use location

You can allow or disallow Google and third party apps to use your TV's location information. Highlight **Use location** and press **OK** to view detailed information and turn this feature on or off. You can change this setting later using the **Location status** option in the **Settings>Device Preferences>Location** menu.

Help improve Android

Automatically send diagnostic information to Google, like crash reports and usage data from your device and apps. Highlight **Help improve Android** and press **OK** to view detailed information and turn this feature on or off. You can change this setting later using the **Settings>Device Preferences>Usage & Diagnostics** menu.

Services and your privacy

Google Assistant sends services you talk to a unique code. That way, services can remember things like your preferences during conversations. You can view, manage and reset the data sent to services on each service's page in the Explore section of the Assistant mobile app. Learn more at g.co/assistant/idreset.

Information on Google services and some features of your TV will be displayed next.

10. Select Text to Speech

You can enable Voice Guide at a speed of your preference. Highlight the option you prefer and press **OK**. Select **Off** to disable.

11. Time Zone

You can set your time zone preference at this point. Highlight the option you prefer and press **OK**.

12. 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**. The **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.

13. Energy Options

In this step, you can configure your TV's energy mode related to its power consumption. You can select one of the **Saving Mode**, **Chromecast Built-in**, and **Wake on Network Only** options. Highlight the option you prefer and press **OK** to continue.

14. Tuner Mode

The next step is the selection of the tuner mode. Select your tuner mode preference to install channels for Live TV function. **Aerial** and **Cable** options are available. Highlight the option that corresponds to your environment and press **OK** or the **Right** directional button to proceed. If you don't want to perform a channel scan highlight **Next** and press **OK**.

Aerial

If the **Aerial** option is selected, you can scan digital terrestrial and analogue broadcasts. On the next screen highlight **Scan** and press **OK** or the **Right** directional button to start the scan or select **Skip Scan** to continue without performing a scan.

***Note:** If the country selected does not have analogue broadcasts, analogue channels may not be scanned.*

Cable

If the **Cable** option is selected, you can scan digital cable and analogue broadcasts. Highlight **Scan** and press **OK** or the **Right** directional button to start the scan or select **Skip Scan** to continue without performing a scan.

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 highlight **Scan** and press **OK** to start the scan or select **Skip Scan** to continue without performing a scan.

***Note:** If the country selected does not have analogue broadcasts, analogue channels may not be scanned.*

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

You will be asked to give your consent to the collection of your data. Read the text on the screen for detailed information. Highlight **Accept** and press **OK** to give your consent and proceed. To skip without giving your consent, select **Next**. You can change this setting later using the **Settings>Device Preferences>Manufacturer Usage & Diagnostics** menu.

Home Screen will be displayed. You can press the **Exit** button on the remote 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 Screen is the centre of your TV. From the Home Screen, you can start any application, switch to a TV channel, watch a movie, or switch to a connected device. Press the **Home** button to display Home Screen. You can also select the **Android TV Home** option from the **Inputs** menu to switch to Home Screen. To open the **Inputs** menu, press the **Source** button on the remote or press the **Menu** button on the remote when the TV is in Live TV mode, highlight the **Source** option in the **TV options** menu, and press **OK**. Depending on your TV setup and your country selection in the initial setup, the Home Screen 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** 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 **Disconnected** 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 favourite apps. If not, highlight the **Add app to favourites** option (plus sign) on the **Apps** row and press **OK**. Then select the app you want to add and press **OK**. Repeat this procedure for each app. Highlight **Live TV** and press **OK** or press the **Exit** button on the remote to switch to Live TV mode. If the source was set to an option other than **TV** previously, press the **Source** button and set to **TV** to watch live TV channels. Highlight **Multi Media Player** and press **OK** to browse the connected USB devices and play/display the installed media content on the TV. The audio can be played through the speakers of the TV or through the speaker systems connected to the TV. To browse the Internet, you will need an internet browser application. Make a search or launch the Google Play Store app, find a browser and download it.

For some countries, the Home Screen will be organised into several tabs. **Home**, **Discover** and **Apps** tabs will be available. You can scroll through the tabs using

the directional buttons. Each tab will have a featured content row at the top. In the **Home** tab, there will be rows for favourite apps, recent Live TV programmes and recommendations from streaming apps. In the **Discover** tab recommendations from streaming services will be displayed. In the **Apps** tab, all the apps installed on your TV will be displayed and you can install more from Play Store using the related option. Depending on your TV setup and your country selection in the initial setup, the tabs on the Home Screen may contain different items.

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 on the Home Screen and press **OK**. For some countries, the **Live TV** app will be situated in the **Home** tab on the Home Screen and the row with this app will be named as **Favourite Apps**.

Channels

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

Channel: Open the **Channel** menu. Refer to the **Channel** section for more information.

TV Options

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

Picture: Open the **Picture** menu. Refer to the **Device Preferences** section for detailed information.

Sound: Open the **Sound** menu. Refer to the **Device Preferences** section for detailed information.

Closed Captions: Configure the closed caption settings to suit your preferences or requirements.

Multi Audio: Set your language preference for audio. Multiple audio options may not be available depending on the broadcast or the input source.

Power

Sleep Timer: Define a time after which you want your TV to enter sleep mode automatically. Set as **Off** to disable.

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.

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.

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.

Advanced Options

The options of this menu may change and/or appear as greyed out depending on the selected input source.

Multi Audio: Set your language preference for audio. Multiple audio options may not be available depending on the broadcast or the input source.

Sound Tracks: Set your sound track preference, if any available.

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.

Settings: Open the **Settings** menu. Refer to the **Settings** section for detailed 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/Disconnected 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.

Other options

Add new network: Add networks with hidden SSID's (network name).

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

WOW: Turn this function on and off. This function allows you to turn on or awaken your TV via wireless network.

WOL: Turn this function on and off. This function allows you to turn on or awaken your TV via network.

WOC: Turn this function on and off. This function allows you to turn on or awaken your TV via Chromecast. This option will be available if the **WoW** or **WoL** option is turned on.

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

The content of this menu may change depending on the selected input source and whether the channel installation is completed.

Channel Sources

Set up the available channel sources. To start a channel installation for Live TV function, highlight the **Tuner (TV)** option and press **OK**. Then follow the on-screen instructions to complete the installation. Refer to the **Initial Setup Wizard** section for more information on the channel installation.

Customise Channel List

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. The selected channel/s will also be hidden in the channel list.

Channel Installation Mode

You can set this option as **Antenna** or **Cable**. The channel list will also change depending on the selected option here. In order to watch the channels on the installation mode you prefer, this option should be selected accordingly.

Parental Controls

() To enter this menu PIN should be entered first. You can use the default PIN, which is **1234**. If you have changed the PIN using the **Change PIN** option, enter that PIN. Some options may not be available or may vary depending on the country selection during the initial setup. The relevant options in this menu may not be available or may be greyed out if the channel installation is not complete and no channels are installed or there is no signal.*

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 PIN should be entered first.

Programme Restrictions: Block programmes according to the age rating information that is being broadcasted with them. You can turn restrictions and rating systems on or off, set the type of restriction,

block unrated programmes, and configure the RRT5 functionality settings using the options in 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 PIN should be entered first.

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

Open Source Licences

Display Open Source Software licence information.

Accounts & Sign In

Highlight this option and press **OK** to sign into your Google account. Following options will be available if you have signed into your Google account.

Google: 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.

Changing the storage location of an app

If you did priorly format your USB storage device as device storage to extend the storage capacity of your TV, you can move the app to that device. For more information refer to the **Storage** section in the **Settings>Device Preferences** menu.

Highlight the app you want to move and press **OK** to see available options. Then highlight the **Storage used** option and press **OK**. If the selected app is convenient you will see your USB storage device as an option for this app to be stored. Highlight that option and press **OK** to move the app.

Note that the apps that moved to a connected USB storage device will not be available if that device is disconnected. And if you format the device with the TV as removable storage, don't forget to back up the apps using the related option. Otherwise, the apps stored on that device will not be available after formatting. For more information refer to the **Storage** section in the **Settings>Device Preferences** menu.

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: You can allow or restrict installation of apps from sources other than the Google Play Store.

Device Preferences

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

Reset: Reset all TV settings to the factory defaults. Highlight **Reset** and press **OK**. Information on this operation will be displayed, select **Reset** to proceed with resetting. Further information will be displayed, select **Delete everything** to factory reset the TV. The TV will switch off/on first and the initial setup will start. Select **Cancel** to exit.

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

TV Lifetime: Your TV's lifetime information is displayed.

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 the automatic date & time function by setting as **Off** if you want to manually change the date or time. Then set the 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 name of an input terminal, and configure the options for the Consumer Electronic Control (CEC) function and display the CEC device list.

Power

Sleep Timer: Define a time after which you want your TV to enter sleep mode automatically. Set as **Off** to disable.

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.

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.

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.

Picture

The changes made in this menu will be applied to the current picture mode. You can use the **Reset to Default** option to reset all options to their factory default settings.

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

Some of the picture settings will be adjusted according to the selected picture mode.

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 of the screen manually. This item will not be available if the **Auto Backlight** is not set as **Off**.

Brightness: Adjust the brightness value of the screen.

Contrast: Adjust the contrast value of the screen.

Colour: Adjust the colour saturation value of the screen.

HUE: Adjust the hue value of 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. You can adjust red, green, and blue gain values manually. If one of these values is changed manually, the **Colour Temperature** option will change to **User**, if it has not already been set to **User**.

Advanced Video

DNR: Dynamic Noise Reduction (DNR) is the process of removing noise from digital or analogue signals. 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**.

Max Vivid: Manipulates contrast and colour perception, basically converts Standard Dynamic Range picture to High Dynamic Range picture. Set as **On** to enable.

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 setting 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**.

Flesh Tone: Adjusts the skin tone brightness. Set your preference as **Low**, **Medium**, or **High** to enable. Set as **Off** to disable.

DI Film Mode: It is the function for 3:2 or 2:2 cadence detection for 24 fps film content 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.

ALLM: ALLM (Auto Low Latency Mode) function allows the TV to activate or deactivate low latency settings depending on playback content. Highlight this option and press **OK** to turn the ALLM 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.

Low Blue Light: Electronic device screens emit blue light that can cause eye strain and may lead to eye problems over time. To reduce the effect of blue light set your preference as **Low**, **Middle**, or **High**. Set as **Off** to disable.

Colour Space: You can use this option to set the range of colours displayed on your TV screen. When set as **On**, colours are set according to the source signal. When set as **Auto**, the TV decides to set this function as on or off dynamically, according to source signal type. When set as **Off**, the TV's maximum colour capacity is used by default.

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

System Sounds: System sound is the sound played when navigating or selecting an item on the TV screen. Highlight this option and press **OK** to turn this function on or off.

Sound Style: For easy sound adjustment, you can select a preset setting. **User**, **Standard**, **Vivid**, **Sports**, **Movie**, **Music**, and **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: Turn the surround sound feature on or off.

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

Speaker Delay: Adjust the delay value for speakers.

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.

Digital Output Delay: Adjust the digital output 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: Set your preference to convert multi-channel audio signals to two-channel audio signals. 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 greyed out depending on the settings made here. Turn the **Dolby Audio Processing** option off if you would like to change these settings.

Dolby Audio Processing: Highlight this option and press **OK** to turn this function on/off. Other options will not be available if this option is not turned on.

Sound Mode: Highlight the **Sound Mode** option and press **OK** to see the preset sound modes. **Game**, **Movie**, **Music**, **News**, **Stadium**, **Smart**, and **User** options will be available. Highlight the option you prefer and press **OK** to set. The **Vol-**

ume Leveler option can not be set if this option is not set to **User**.

Volume Leveler: Allows you to balance the sound levels. In this way, you are minimally affected by abnormal sound rises and falls. Turn this feature on/off by pressing **OK**.

Dialogue Enhancer: This feature provides sound postprocessing options for speech-gated dialogue enhancement. **Off, Low, Medium, and High** options will be available. Set according to your preference.

Note: *This feature has an effect only if input audio format is AC-4 or dolby audio processing is enabled. This effect only applies to TV loudspeaker output.*

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 setting up the connected USB storage devices as device storage.

Migrate data to this storage / Move data to: This option will appear if you did priorly format your USB storage device as device storage. You can use this option to migrate some of the data stored on your TV to your USB storage device.

Note: *If you move data to your USB storage device, you may need to plug in your storage device to use all your apps and other content.*

Eject: To keep your content safe, eject your USB storage device before you unplug it from your TV.

Erase & format as device storage: You can use the connected USB storage device to extend the storage capacity of your TV. After doing this, that device will only be usable with the TV. Follow the on-screen instructions and read the information displayed on the screen before proceeding.

Note: *Formatting the connected storage device will erase all data installed on it. Back up the files that you want to keep before you proceed with formatting the device.*

Erase & format as removable storage: If you did priorly format your USB storage device as device storage, it will only be usable with your TV. You can use this option to format it again in order to use it with other devices. Before proceeding with the formatting, you may consider backing up the data on your device to your TV's internal storage or to another USB storage device using the **Back up apps** option. Otherwise, some apps may not work properly after formatting. Follow the on-screen instructions and read the information displayed on the screen before proceeding.

Note: *Formatting the connected storage device will erase all data installed on it. Back up the files that you want to keep before you proceed with formatting the device.*

You can also go to the **Notifications** section on the Home Screen after connecting your USB device to your TV to see the available options. Highlight the notification related to your connected USB device and press **OK**.

Browse: Opens the **Storage** menu.

Set up as device storage: Has the same functionality as the **Erase & format as device storage** option described above.

Eject: Same as described above.

Home Screen: Customise your Home Screen. Select channels which will be displayed on the Home Screen, enable/disable video and audio previews. Organise apps and games, change their order or get more of them. Display open source licences.

For some countries, the Home Screen will be organised into several tabs and this menu will contain additional options to customise the content of these tabs. Highlight **Set up** and press **OK** to sign in to a Google account, so you can browse personalised recommendations for that account in the **Discover** tab on the Home Screen. After signing in, using the related options in this menu, you can view your account activity controls and permissions, customise services and define content preferences to get better recommendations.

Store Mode: Highlight **Store Mode** and press **OK**. A dialogue will be displayed asking for your confirmation. 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, the **Store Messaging** setting will become available. Set according to your preferences. It is recommended not to activate store mode for home use.

Google Assistant: Highlight **On** and press **OK** to turn this feature on or off. Select your active account, view permissions, select which apps to include in search results, activate safe search filter, block offensive words, and view open source licences.

Chromecast Built-in: Set your remote control notification preference. Highlight **Let others control your cast media** and press **OK. Always, While Casting, and Never** options will be available. You can display open source licences and view version number and serial number under the **About** section.

Screen Saver: Set the screensaver options for your TV. You can choose a screensaver, set the screensaver timeout or start the screensaver mode.

Energy Saver: Define a time after which you want your TV to turn itself off for energy saving. Set as **Never** to disable.

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.

Manufacturer Usage & Diagnostics: If you accept, your TV will send personal data (such as MAC address, country, language, software and firmware versions, bootloader version, the source and brand of the TV, and connection type) from your device to a server located in Ireland. This data is collected and stored to ensure your device operates properly.

Accessibility: Configure **Visually Impaired**, **Captions**, **Text to Speech**, **Accessibility Shortcut**, **TalkBack** settings and/or turn **Audio Description**, **Hearing Impaired**, **High-contrast Text** on/off. Some of the caption settings may not be applied.

Visually Impaired: Turn on the **Audio Description** feature to enable this option. 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.

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**).

Restart: A confirmation message will be displayed, select **Restart** to proceed with restarting. The TV will switch off/on first. Select **Cancel** to exit.

Remotes and Accessories

You can use wireless 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 recognised and listed or pairing request will be displayed. To start pairing, select your device from the list and press **OK**, or highlight **OK** and press **OK** when the pairing request appears.

Connected devices will also be listed here. Highlight the device and press **OK** to see available options. To unpair a device, highlight the **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 a connected device. Highlight **Change name** and press **OK** again. Press **OK** again and use the virtual keyboard to change the name of the device. If the device supports it, the device's current battery life remaining information will be displayed here as well.

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 Left directional button to scroll up the list page by page, or press the Right directional button to scroll down.

To filter the channels press the Yellow button. The **Select Type** options will be displayed. You can select the **Favourites** option to filter the channel list or select the **All channels** option to see all installed channels in the channel list. Available options may differ depending on the operator selection.

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

Editing the Channels and the Channel List

You can edit the channels and the channel list using the **Customise Channel List** option under the **Settings>Channel** menu. You can access the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

***Note:** Customising the channel list may not be available depending on the operator selection and operator related settings.*

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.

To add a channel to one of the favourite lists, highlight that channel in the channel list and press the Blue button. Favourite list selection menu will be displayed. Highlight the list/s you want the channel to be added and press **OK**. The channel will be added to the selected favourite list/s.

To remove a channel from a favourite list highlight that channel in the channel list and press the Blue button. Favourite list selection menu will be displayed. Highlight the list/s you want the channel to be removed and press **OK**. The channel will be removed from the selected favourite list/s.

To set one of your favourite channel lists as the main channel list, press the **Yellow** button and set the **Select**

Type option to **Favourites**. Then highlight the desired favourite list and press **OK**.

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.

Electronic Programme Guide is available in Live TV mode. To switch to Live TV mode you can either press the **Exit** button or highlight the **Live TV** app from the **Apps** row on the Home Screen and press **OK**. For some countries, the **Live TV** app will be situated in the **Home** tab on the Home Screen and the row with this app will be named as **Favourite Apps**. In order to access the Electronic Programme Guide press the **Guide** button on the remote.

Use the directional buttons to navigate through the programme guide. You can use the Left/Right directional buttons to switch to previous/next channel on the list and the Up/Down directional buttons to select a desired event of the selected 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.

You can use the **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 information for accurate button functions.

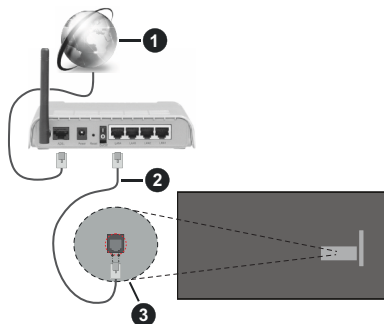
Connecting to the Internet

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 the **Settings>Network & Internet** menu. You can also highlight the **Connected/Disconnected** icon on the Home Screen and press **OK** to access this menu. For further information refer to the **Network & Internet** section.

Wired Connection

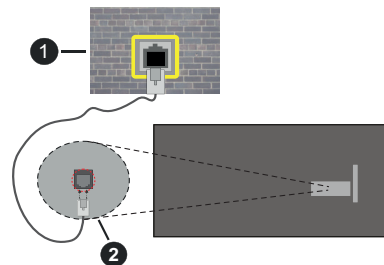
Connect your TV to your modem/router via an Ethernet cable. There is a LAN port on the rear side of your TV.

The status of the connection under the **Ethernet** section in the **Network & Internet** menu will change 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.

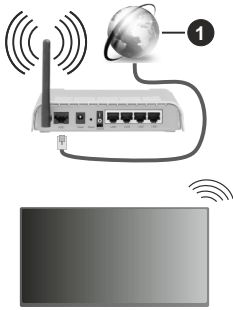


1. Network wall socket
2. LAN input on the rear side of the TV

Wireless Connection

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

Highlight the **Wi-Fi** option in the **Network & Internet** menu and press **OK** to enable wireless connection. Available networks will be listed. Select one and press **OK** to connect. For more information refer to the **Network & Internet** section.



1. Broadband ISP connection

A network with hidden SSID (network name) can not be detected by other devices. If you want to connect to a network with hidden SSID, highlight the **Add new network** option in the **Network & Internet** menu and press **OK**. Add the network by entering its name and selecting the security type manually.

Some networks may have an authorisation system that requires a second login as such in a work environment. In this case, after connecting to the wireless network you want to connect to, highlight **Notifications** situated on the upper right of the Home Screen and press **OK**. Then highlight the **Sign in to Wi-Fi network** notification and press **OK**. Enter your credentials to log in.

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 optimised 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. If this app is not available, highlight the **Add app to favourites** option (plus sign) on the **Apps** row and press **OK**. Then select the **Multi Media Player (MMP)** app and press **OK** to add. For some countries, the **Multi Media Player** app will be situated in the **Home** tab on the Home Screen and the row with this app will be named as **Favourite Apps**.

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**.

Additionally, you can toggle between browsing modes by pressing the Blue button. List View and Grid View modes are available. While browsing for the video, photo and text files a preview of the highlighted file will be displayed in a small window on the left side of the screen if the browse mode is set to List 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.

You can also enable or disable the USB Auto Play feature by pressing the **Yellow** button. Using this feature you can set your TV to start playing the media content installed on a connected USB storage device automatically. Refer to the **USB Auto Play Feature** section for more information.

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.

Pause/Play: 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.

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.

Pause/Play: 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 **OK** button as a second time slide show will also start and all photo files in the current folder or in the storage device, depending 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. Press the **OK** or **Pause/Play** button to pause or resume the slide show. The slide show will stop after the last listed file is displayed and media player screen will be displayed.

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

OK or Pause/Play: 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, depending 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. Press the **OK** or **Pause/Play** button to pause or resume the slide show. The slide show will stop after the last listed file is displayed and media player screen will be displayed.

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

OK or Pause/Play: 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 the **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, depending 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** option is selected instead of the connected storage device while activating the photo frame feature.

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.

Screen Mode: Set the aspect ratio option.

Picture Settings: Display the picture settings menu.

Sound Settings: Display the sound settings menu.

Sound Tracks: 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**.

Subtitle Encoding: Display subtitle encoding options if available.

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 (if multiple inputs are available) 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.

USB Auto Play Feature

This feature is used to start playing the media content installed on a removable device automatically. It uses the Multi Media Player application. The media content types have different priorities in order for them to be played. The reducing priority order is as Photo, Video and Audio. That means, if there is Photo content in the root directory of the removable device, the Multi Media Player will play the Photos in a sequence (in file name order) instead of Video or Audio files. If not, it will be checked for Video content and as last Audio.

You can enable the USB Auto Play feature from within the Multi Media Player app. Launch the application on the Home Screen and press the **Yellow** button on the remote to enable or disable this feature. If the feature is enabled while the USB device is already connected, unplug the device and then plug it back in to activate the feature.

This feature will only work if all of the following circumstances occur:

- The USB Auto Play feature is enabled
- The USB device is plugged in
- Playable content is installed on the USB device

If more than one USB device is connected to the TV, the last one plugged in will be used as content source.

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.

In order to make use of the CEC functionality the related option in the menu should be switched on. To check, switch on or off the CEC function, do the following:

- Enter the **Settings>Device Preferences>Inputs** menu on the Home Screen or **TV options>Set-**

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 detects both FAT32 and NTFS formatted drives, but does not support recording to NTFS formatted drives (recording functionality may not be available depending on the model of your TV). Devices with a storage capacity larger than 2TB are not supported. Files larger than 4 GB are not supported.

tings>Device Preferences>Inputs menu in Live TV mode.

- Scroll down to **Consumer Electronic Control (CEC)** section. Check if the **HDMI control** option is switched on.
- Highlight the **HDMI control** option and press **OK** to switch on or off.

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 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.

When ARC is active, TV will mute its other audio outputs automatically. So you will hear audio from the connected audio device only. The volume control buttons of the remote will be directed to the 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.

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 options. 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 information on Google Cast function.

Software Update

Your TV is capable of finding and updating the software automatically via the 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 the 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**. The TV will check to see if any update is available. When completed, you will be informed about the current system status and the time at which the device was last checked for an update. The **Check for update** option will be highlighted. Press **OK** if you want to check again.

Note: Do not unplug the power cord during the software upgrade 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 the power outlet.
- Disconnect the power cord 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.

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 setting from the **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.
- Make sure that the right input source is not hidden from the **Inputs** menu.

AV and HDMI Signal Compatibility

| Source | Supported Signals | |
|---------|-------------------|------------------------------|
| Side AV | PAL | |
| | SECAM | |
| | NTSC4.43 | |
| | NTSC3.58 | |
| HDMI | 480i | 60Hz |
| | 480p | 60Hz |
| | 576i, 576p | 50Hz |
| | 720p | 50Hz,60Hz |
| | 1080i | 50Hz,60Hz |
| | 1080p | 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 Decoder

| Video Codec | Resolution | Bit Rate | Profile | Container |
|----------------|-----------------|----------|--|--|
| VP9 | 4096x2176@60fps | 100Mbps | Profile 0 (420 8-bit) Profile 2, (420, 10-bit) | MKV (.mkv), WebM (.webm) |
| HEVC/H.265 | 4096x2176@60fps | 100Mbps | Main (8-bit)/Main10 (10-bit) Profile, High Tier @ Level 5.1 | MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), MKV (.mkv), FLV (.flv), AVI (.avi), H265 (.265) |
| MPEG1/2 | 1920x1080@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), WMV (.wmv), OGM (.ogm) |
| MPEG4 | 1920x1080@60fps | 40Mbps | <ul style="list-style-type: none"> Simple Profile Advanced Simple Profile @Level 5 GMC is not supported | MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf), WMV (.wmv), FLV (.flv), OGM (.ogm), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) |
| Sorenson H.263 | 1920x1080@60fps | 40Mbps | | FLV (.flv), AVI (.avi) |
| H.263 | 1920x1080@60fps | 40Mbps | Baseline Profile Only | FLV (.flv), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), ASF (.asf), WMV (.wmv) |
| H.264 | 4096x2304@60fps | 135Mbps | Main and high profile up to level 5.2 | FLV (.flv), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv), OGM (.ogm), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), H264 (.264) |
| AVS | 1920x1080@60fps | 50Mbps | Jizhun profile @ Level 6.0 | MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), AVS (.avs) |
| AVS+ | 1920x1080@60fps | 50Mbps | Broadcasting Profile @ Level 6.0.1.08.60 | MPEG transport stream (.ts, .trp, .tp), AVS (.avs) |
| AVS2 | 4096x2176@60fps | 100Mbps | Main (8-bit)/Main10 (10-bit) Profile @Level 8.0.60 | MPEG transport stream (.ts, .trp, .tp), AVS2 (.avs2) |
| WMV3 | 1920x1080@60fps | 40Mbps | | ASF (.asf), AVI (.avi), MKV (.mkv), WMV (.wmv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), OGM (.ogm) |
| VC1 | 1920x1080@60fps | 40Mbps | <ul style="list-style-type: none"> Advanced Profile @ Level 3 Simple Profile Main Profile | MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), VC1 (.vc1) |
| Motion JPEG | 1920x1080@30fps | 40Mbps | | AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MKV (.mkv), FLV (.flv), OGM (.ogm) |
| VP8 | 1920x1080@60fps | 50Mbps | | MKV (.mkv), WebM (.webm), FLV (.flv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), AVI (.avi), OGM (.ogm) |
| RV30/RV40 | 1920x1080@60fps | 40Mbps | | RM (.rm, .rmvb), MKV (.mkv) |
| AV1 | 4096x2176@60fps | 100Mbps | Main Profile @Level 5.1 | MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MKV (.mkv), WebM (.webm) |

Video Encoder

| Video Codec | Max Resolution | Max Bit Rate | Profile | Note |
|-------------|-----------------|--------------|-------------------------|------------------------|
| H.264 | 1920x1080@30fps | 12Mbps | Main profile, level 4.1 | Hardware video encoder |

Audio

| Audio Codec | Sample rate | Channel | Bit Rate | Container | Note |
|--------------------|-----------------------|-----------|---|--|------------------------------|
| MPEG1/2 Layer1 | 16KHz ~ 48KHz | Up to 2 | 32Kbps ~ 448Kbps | MP3 (.mp3), AVI (.avi), ASF (.asf), WMV (.wmv), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), WAV (.wav), OGM (.ogm) | |
| MPEG1/2 Layer2 | 16KHz ~ 48KHz | Up to 2 | 8Kbps ~ 384Kbps | MP3 (.mp3), AVI (.avi), ASF (.asf), WMV (.wmv), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), WAV (.wav), OGM (.ogm) | |
| MPEG1/2/2.5 Layer3 | 8KHz ~ 48KHz | Up to 2 | 8Kbps ~ 320Kbps | MP3 (.mp3), AVI (.avi), ASF (.asf), WMV (.wmv), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), WAV (.wav), OGM (.ogm) | |
| AC3(DD) | 32KHz, 44.1KHz, 48KHz | Up to 5.1 | 32Kbps ~ 640Kbps | AC3 (.ac3), AVI (.avi), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), WMV (.wmv), ASF (.asf), OGM (.ogm) | |
| EAC3(DDP) | 32KHz, 44.1KHz, 48KHz | Up to 5.1 | 32Kbps ~ 6Mbps | EAC3 (.ec3), AVI (.avi), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), WMV (.wmv), ASF (.asf), OGM (.ogm) | |
| AAC-LC, HEAAC | 8KHz ~ 48KHz | Up to 5.1 | AAC-LC: 12Kbps~576Kbps V1 6Kbps ~ 288Kbps V2: 3Kbps ~ 144Kbps | AAC (.aac), AVI (.avi), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), RM (.rm, .rmvb, .ra), WAV (.wav), WMV (.wmv), ASF (.asf), OGM (.ogm) | |
| WMA | 8KHz ~ 48KHz | Up to 2 | 128Kbps ~ 320Kbps | ASF (.asf), WMV (.wma, .wmv), AVI (.avi), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) | WMA 7, WMA 8, WMA 9 Standard |
| WMA 10 Pro M0 | 8KHz ~ 48KHz | Up to 2 | < 192Kbps | ASF (.asf), WMV (.wma, .wmv), AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) | |

| Audio Codec | Sample rate | Channel | Bit Rate | Container | Note |
|-----------------------------------|-------------------------------------|---|---------------------------------|--|-------------------------------|
| WMA 10 Pro M1 | 8KHz ~ 48KHz | Up to 5.1 | < 384Kbps | ASF (.asf), WMV (.wma, .wmv), AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) | |
| WMA 10 Pro M2 | 8KHz ~ 96KHz | Up to 5.1 | < 768Kbps | ASF (.asf), WMV (.wma, .wmv), AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) | |
| VORBIS | Up to 48KHz | Up to 2 | | MKV (.mkv, .mka), WebM (.webm), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), Ogg (.ogg), WMV (.wmv), ASF (.asf), AVI (.avi) | Supports stereo decoding only |
| DTS | Up to 48KHz | Up to 5.1 | < 1.5Mbps (Pure DTS core) | MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), WAV (.wav), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), AVI (.avi), OGM (.ogm), DTS (.dts) | |
| DTS LBR | 12KHz, 22KHz, 24KHz, 44.1KHz, 48KHz | Up to 5.1 | Up to 2Mbps | MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp) | |
| DTS XLL | Up to 96KHz | Up to 6 | Up to 6.123Mbps | MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp) | |
| DTS Master Audio | Up to 48KHz | Up to 6 | Up to 24.537Mbps | MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp) | only decode DTS core |
| LPCM | 8KHz ~ 48KHz | Mono, Stereo, 5.1 | 64Kbps ~ 1.5Mbps | WAV (.wav), AVI (.avi), MKV (.mkv, .mka), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), WMV (.wmv), ASF (.asf), FLV (.flv), OGM (.ogm) | |
| IMA-ADPCM MS-ADPCM | 8KHz ~ 48KHz | Up to 2 | 32Kbps~384Kbps | WAV (.wav), AVI (.avi), MKV (.mkv, .mka), OGM (.ogm) | |
| G711 A/mu-law | 8KHz | 1 | 64Kbps | WAV (.wav), AVI (.avi), MKV (.mkv, .mka), FLV (.flv) | |
| LBR (cook) | 8KHz, 11.025KHz, 22.05KHz, 44.1KHz | Up to 5.1 | 6Kbps ~ 128Kbps | RM (.rm, .rmvb, .ra) | |
| FLAC | 8KHz~96KHz | Up to 7.1 | < 1.6Mbps | MKV (.mkv, .mka), FLAC (.flac) | |
| OPUS | 8KHz ~ 48KHz | Up to 6 | 6Kbps ~ 510Kbps | MKV (.mkv, .mka), WebM (.webm) | |
| AC4 | 44.1KHz, 48KHz | Up to 5.1 (MS12 v1.x) Up to 7.1 (MS12 v2.x) | Up to 1521Kbps Per Presentation | MPEG transport stream (.ts, .trp, .tp), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a), AC4 (.ac4) | |
| Fraunhofer MPEG-H TV Audio System | 32KHz, 44.1KHz, 48KHz | Up to 16 core channels Up to 5.1 Channels Output | ~1.2 Mbps | 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a) | |
| AMR-NB | 8KHz | 1 | 4.75~12.2Kbps | 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a) | |
| AMR-WB | 16KHz | 1 | 6.6 ~ 23.85Kbps | 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov, m4a) | |

Picture

| Image | Photo | Resolution (width x height) |
|-------|-------------|--------------------------------|
| JPEG | Base-line | 15360 x 8640 |
| | Progressive | 1024 x 768 |
| PNG | | 9600 x 6400 |
| BMP | | 9600 x 6400 |
| GIF | | 6400 x 4800 |
| WebP | | 3840 x 2160 |
| HEIF | | 4000 x 3000 |

Subtitle

Internal

| File Extension | Container | Subtitle Codec |
|----------------|-----------|---|
| ts, trp, tp | TS | DVB Subtitle Teletext CC(EIA608) PGS |
| mp4 | MP4 | VobSub PGS TX3G |
| mkv | MKV | ASS SSA SRT VobSub PGS |

External

| File Extension | Subtitle Parser | Remark |
|----------------|---|--------|
| .srt | SubRip | |
| .ssa/.ass | SubStation Alpha Advanced SubStation Alpha | |
| .smi | SAMI | |
| .sub | MicroDVD Subldx (VobSub) | |
| .txt | TMPlayer | |

Supported DVI Resolutions

When connecting devices to your TV's connectors by using a 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 | | | | |

Specification

| | |
|--|--|
| TV Broadcasting | NTSC |
| Receiving Channels | VHF Low Bands - VHF High Bands - UHF |
| Digital Reception | Fully integrated digital terrestrial-cable TV (ATSC-j.83B) |
| Channel Indicator | On Screen Display |
| RF Aerial Input | 75 Ohm |
| Operating Voltage | 100-240V AC, 50/60Hz. |
| Audio | Dolby Audio |
| Audio Output Power (WRMS.) (10% THD) | |
| Power Consumption (W) | |
| Networked Standby Power Consumption (W) | < 2 |
| Weight (Kg) | |
| TV Dimensions DxLxH (with foot) (mm) | |
| TV Dimensions DxLxH (without foot) (mm) | |
| Display | |
| Operation temperature and operation humidity | 0°C up to 40°C, 85% humidity max |

Wireless LAN Transmitter Specifications

| Frequency Ranges | Max Output Power |
|---------------------------------|------------------|
| 2402 - 2482 MHz (CH1 - CH13) | < 100 mW |
| 5180 - 5320 MHz (CH36 - CH64) | < 200 mW |
| 5500 - 5700 MHz (CH100 - CH140) | < 200 mW |
| 5725 - 5850 MHz (CH149 - CH165) | < 200 mW |

Country Restrictions

Check with local authorities for the current status of national regulations for both 2.4 GHz and 5 GHz wireless LANs.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

IMPORTANT NOTE

FCC Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ISED Compliance Notice

CAN ICES-003 (B) / NMB-003(B)

This device contains licence-exempt transmitter(s) /receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: (1) This device may not cause interference. (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) L'appareil ne doit pas produire de brouillage; (2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The aircraft complies with RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Cet équipement est conforme aux limites d'exposition aux radiations CNR-102 établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec une distance minimale de 20 cm entre le radiateur et votre corps.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.

Les dispositifs fonctionnant dans la bande de 5 150 à 5 250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

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Disposal Information

[European Union]

These symbols indicate that the electrical and electronic equipment and the battery with this symbol should not be disposed of as general household waste at its end-of-life. Instead, the products should be handed over to the applicable collection points for the recycling of electrical and electronic equipment as well as batteries for proper treatment, recovery and recycling in accordance with your national legislation and the Directive 2012/19/EU and 2013/56/EU.

By disposing of these products correctly, you will help to conserve natural resources and will help to prevent potential negative effects on the environment and human health which could otherwise be caused by inappropriate waste handling of these products.

For more information about collection points and recycling of these products, please contact your local municipal office, your household waste disposal service or the shop where you purchased the product.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

[Business users]

If you wish to dispose of this product, please contact your supplier and check the terms and conditions of the purchase contract.

[Other Countries outside the European Union]

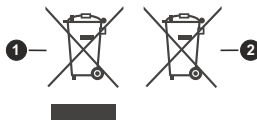
These symbols are only valid in the European Union.

Contact your local authority to learn about disposal and recycling.

The product and packaging should be taken to your local collection point for recycling.

Some collection points accept products free of charge.

Note: The sign Pb below the symbol for batteries indicates that this battery contains lead.



1. Products
2. Battery