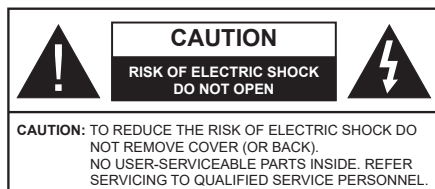


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Safety Information



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.
- This TV is designed for mobile use in vehicles such as caravans, motorhomes, boats, etc. However, it should never be installed in any position where it may be visible to the driver or may interfere with the safe operating of the vehicle.

WARNING

- Supplied AC Adapter is for use with the product only, do not use for any other purpose.
- 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
- Quick Start Guide
- DC 12 V Input Power Adaptor

Features

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

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

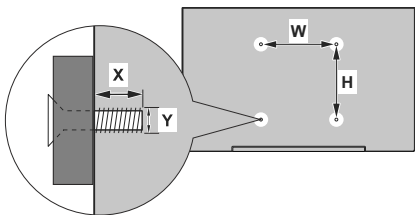
Be sure to remove the pedestal in the following way when using the wall mount bracket or repacking the TV.

- 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;



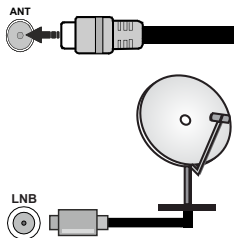
VESA WALL MOUNT MEASUREMENTS

Hole Pattern Sizes (mm)	W	H
	75	75
Screw Sizes		
Length (X)	min. (mm)	5
	max. (mm)	8
Thread (Y)	M4	

Antenna Connection

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

Rear side of the TV



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)		
	VGA Connection (back)		
AUDIO IN 	VGA Audio Connection (back)	 VGA Audio Cable	
SPDIF 	SPDIF (Coaxial Out) Connection (back)		
COMPOSITE 	Composite (Audio/Video) Connection (back)	 Audio Video Cable	
HEADPHONE 	Headphone Connection (side)		
	USB Connection (side)		
	CI Connection (side)		
	12V DC Connection (back)	DC 12V Input	

To enable VGA audio, you will need to use the back audio inputs with a VGA audio cable for audio connection. When using the wall mounting kit (contact your dealer to purchase one, if not supplied), we recommend that you plug all your cables into the back of the TV before mounting on the wall. Insert or remove the CI module only when the TV is SWITCHED OFF. 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 a 12 V DC supply. For this, an adaptor is used which gives 12 V voltage.

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

Connect the supplied adaptor to a system that supplies **100-240V AC, 50/60Hz**. The TV will switch on automatically.

In order to supply the power via the cigarette lighter socket of your vehicle, plug one end of the cigarette lighter adaptor cable (car plug - can be purchased separately if not supplied with the TV) into the vehicle socket and plug the other end of the adaptor cable into the DC 12V terminal on the back side of the TV.

Be sure to ground the connection properly

Connect the ground terminal of the AC adaptor with the ground terminal provided at the power outlet using the enclosed power cord. If the provided plug does not fit your outlet, consult an electrician for replacement of the obsolete outlet.



Surely connect the ground wire.

To switch on the TV from standby

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

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

The TV will then switch on.

To switch the TV into standby

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

To switch off the TV

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

Quick Standby Mode

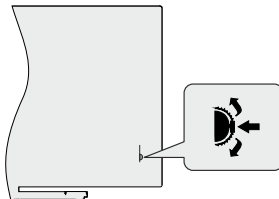
In order to switch the TV into quick standby mode either;

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

- Press the centre of the control switch on the TV in.
Press again to go back to operating mode.

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

TV Control & Operation



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

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

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

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

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

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

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

Operation with the Remote Control

Press the **Menu** button on your remote control to display Live TV settings menu when in Live TV mode. Press 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.

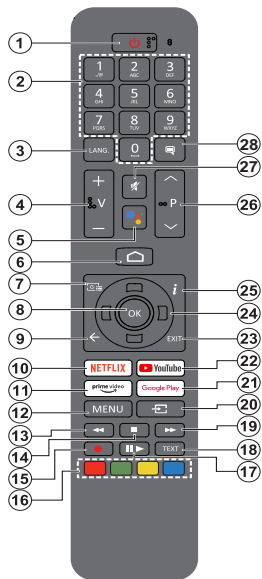
Input Selection

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



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.

To pair remote with the TV

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

Press and hold the **Source** button on the remote until the LED on the remote starts to blink, then release the **Source** button. That means the remote is in pairing mode.

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

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

In order to pair your remote later on, you can go to **Settings** menu, highlight **Remotes and Accessories** option and press **OK** to start a search for accessories.

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. **Volume +/-:** Increases/decreases the volume level
5. **Microphone:** Activates the microphone on the remote if the remote is paired with the TV previously
6. **Home:** Opens the Home Screen
7. **Guide:** Displays the electronic programme guide for Live TV channels
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. **Prime Video:** Launches the Amazon Prime Video 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. **Record:** Records programmes in Live TV mode
16. **Coloured Buttons:** Follow the on-screen instructions for coloured button functions
17. **Pause:** Pauses the media being played, starts timeshift recording in Live TV mode
Play: Resumes playing the paused media
18. **Text:** Opens and closes teletext (where available in Live TV mode)
19. **Fast forward:** Moves frames forward in media such as movies
20. **Source:** Shows all available broadcast and content sources, is also used in pairing process of the remote.
21. **Google Play:** Launches the Google Play Store 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. **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
25. **Info:** Displays information about on-screen content
26. **Programme +/-:** Increases/decreases channel number in Live TV mode
27. **Mute:** Completely turns off the volume of the TV
28. **Subtitles:** Turns subtitles on and off, opens the subtitle settings menu (where available)

Standby Button

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

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 **Factory 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

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.

6. Network Connection

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).

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 and 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.

10. Google Assistant

If you have signed in to your Google account in the previous steps, you can also allow sharing your requests with your TV's apps and turn on personal results for Assistant by choosing the related options when prompted. Press **OK** consecutively to proceed.

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

11. Password

Depending on the country selection you made in the earlier steps, you may be asked to define a 4-digit password (PIN) at this point. Press **OK** to proceed. The selected PIN cannot be '0000'. This PIN will be required in order to access some menus, content or to release locked channels, sources, etc. You will have to enter it if you are asked to enter a PIN for any menu operation later.

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. Chromecast built-in always available

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

14. Tuner Mode

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

When the channel scan with the selected tuner is completed, the installation wizard will bring you back to this step. In case you want to continue scanning channels with another tuner, you can proceed as explained below. If you don't want to continue and finish the setup highlight **Next** and press **OK**.

Aerial

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

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

Cable

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

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

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

Satellite

If the **Satellite** option is selected, the **Antenna Type** screen will be displayed next. If you have a Direct satellite system, you can proceed to the next step quickly by selecting the **Next** option here. Highlight **More** and press **OK** to set the antenna type manually. **Single**, **Tone Burst**, **DiSEqC**, and **Unicable** options are available. Highlight the antenna type that

corresponds to your satellite system and press **OK** or the **Right** directional button to proceed to the next step.

Next screen will be the **Select Operator** screen. You can select only one operator from the list. Highlight the desired operator and press **OK** or the **Right** directional button to proceed. Some of the options in the following steps may be preset and/or additional steps may be added or some steps may be skipped depending on the selected operator in this step. Check the parameters in each step before proceeding and adjust if necessary. You can highlight **General** and press **OK** or **Right** directional button to proceed with normal satellite installation.

LNB List screen will be displayed next. You may be able to set up different satellites depending on the selected country, antenna type and operator in the previous steps. Highlight the desired satellite option and press **OK** or the **Right** directional button to set the parameters. The **Satellite Status** of the first satellite option will be set as **On**. In order to enable channel scan on the satellite, this option should be set as **On** first.

Following satellite parameters will be available. You may not be able to change all settings depending on the previous selections.

Satellite Status: Set the status option to **On** to enable channel search on the selected satellite. Highlight this option and press **OK** to change the status.

Satellite Selection: Select the satellite on which you want to perform a channel search.

Scan Mode: Set your scan mode preference. **Full** and **Network** options will be available. If you are going to perform a network scan, make sure that you have adjusted the **Frequency**, **Symbol Rate** (**Ksym/s**), and **Polarisation** parameters under the **Transponder** option accurately.

Scan Type: You can perform a scan for free or encrypted channels only. If the **Only Free Channels** option is selected encrypted channels will not be installed. Select **All** to scan all channels.

Store Type: You can select to store TV channels (referred to as 'Digital Channels' in the menu) or radio channels only. Select **All** to store all channels.

Transponder: Adjust the **Frequency**, **Symbol Rate** (**Ksym/s**), and **Polarisation** parameters for the selected satellite if necessary.

LNB Configurations: Set the parameters for LNB. For DiSEqC antenna type select the correct DiSEqC port corresponding to your satellite system. Set other parameters in accordance with your satellite system if necessary.

Signal Quality: The signal quality status is displayed as a percentage.

Signal Level: The signal level status is displayed as a percentage.

Press the **Back/Return** button and select next satellite you want to set. After you completed the configuration changes, highlight **Next** on the **LNB List** screen and press **OK** or **Right** directional button to proceed.

If **Load Preset List** option is selected in the previous step next steps will be skipped and the preset channel list installation will start. If the correct satellite has not been selected for SatcoDX installation, a warning dialogue will be displayed on the screen. The satellite/s that can be selected will be listed. Press **OK** to close the dialogue and then set the satellite accordingly.

Channel Scan screen will be displayed next. Select **Skip Scan** to proceed without performing a scan and complete the initial setup. Select **Scan** and press **OK** or the **Right** directional button to start the search. While the search continues you can press the **Back/Return** button, highlight **Skip Scan** and press **OK** or **Right** directional button to stop the search. The channels that have already been found will be stored in the channel list.

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 to your modem/router. Refer to the **Network and Internet** and **Connecting to the Internet** sections for further information on how to connect your TV to the Internet.

The Home menu is the centre of your TV. From the Home menu, 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 menu may contain different items.

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

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

On the upper right of the screen, **Notifications, Inputs, Network and 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 **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 **Antenna, Cable, Satellite** or **ATV** previously, press the **Source** button and set one of these options 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 Export/Import: Export this TV's satellite channel list data to a connected USB storage device, or import a previously exported data from a connected USB storage device to this TV. The **Channel Export** and **Channel Import** options will be available. Connect a USB storage device (*) to the TV, highlight the option you want to continue with and press **OK**. The **Channel Export/Import** option will not be available if the input source is not set to **Satellite**.

(*) *The USB storage device must be formatted with the FAT32 file system.*

Channel: Open the **Channel** menu. You can use the **Channels** menu options to search for broadcast channels. 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 **Device Preferences** section for detailed information.

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

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.

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

Advanced Options

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

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

Second Audio Language: Set one of the listed language options as second audio language preference.

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.

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

Interaction Channel: Turn the Interaction Channel function on or off. This feature is useful in the UK and Ireland only.

MHEG PIN Protection: Turn the MHEG PIN protection function on or off. This setting enables or disables access some of the MHEG applications. Disabled applications can be released by entering the right PIN. This feature is useful in the UK and Ireland only.

HBBTV Settings

HBBTV Support: Turn the HBBTV function on or off.

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

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

Persistent Storage: Turn the Persistent Storage function on or off. If set as **On** cookies will be stored with an expiry date in the persistent memory of the TV.

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

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

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

Subtitle

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

Digital Subtitle: Set this option as **Off** or **On**.

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

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

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

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

Teletext

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

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

BISS Key: "Click To Add Biss Key" message will be displayed. Press **OK** button to add a biss key. **Frequency, Symbol Rate (KSym/s), Polarisation, Programme ID, and CW Key** parameters will be available to be set. Once you are done with the settings highlight **Save Key** and press **OK** to save and add the biss key. This option will not be available if the input source is not set as **Satellite**. Available options will differ depending on the selected country during the initial setup process.

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

Record

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

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

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

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

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

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

Schedule List: Add reminders or record timers using the **Schedule List** menu. Refer to the **USB Recording** section for more information.

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

Settings

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

Network and 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.

Channel

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

Channels

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

Input Source - Antenna

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

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

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

Manual Service Update: Start a service update manually.

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

Channel Scan Type: Set your scan type preference.

Channel Store Type: Set your store type preference.

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

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

Channel Swap: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel. You may need to set the **LCN** option to **Off** in order to enable this feature.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, you can press the **Blue** button and the first selected channel will be moved to the position of that channel. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK**

to go to that channel. You may need to set the **LCN** option to **Off** in order to enable this feature.

Channel Edit: Edit channels in the channel list. Edit the name and channel number (*) of the selected channel and display **Network Name**, **Channel Type** and **Frequency** information related to that channel if available. Depending on the channel other options may also be editable. Press **OK** or the **Yellow** button to edit the highlighted channel. You can press the **Blue** button to delete the highlighted channel.

() The selected channel number should not be used for another channel in the channel list. You may need to set the **LCN** option to **Off** in order to change the channel number.*

Channel Delete: Highlight the desired channel/s on the list and press **OK** or the **Yellow** button to select/unselect. Then press the **Blue** button to delete the selected channel/s. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed.

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

Input Source - Cable

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

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

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

Channel Scan Type: Set your scan type preference.

Channel Store Type: Set your store type preference.

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

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

Channel Swap: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel. You may need to set the **LCN** option to **Off** in order to enable this feature.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, you can press the **Blue** button and the first selected channel will be moved to the position of that channel. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel. You may need to set the **LCN** option to **Off** in order to enable this feature.

Channel Edit: Edit channels in the channel list. Edit the name and channel number (*) of the selected channel and display **Network Name**, **Channel Type**, **Frequency**, **Modulation** and **Symbol Rate** information related to that channel. Depending on the channel other options may also be editable. Press **OK** or the **Yellow** button to edit the highlighted channel. You can press the **Blue** button to delete the highlighted channel.

() The selected channel number should not be used for another channel in the channel list. You may need to set the **LCN** option to **Off** in order to change the channel number.*

Channel Delete: Highlight the desired channel/s on the list and press **OK** or the **Yellow** button to select/unselect. Then press the **Blue** button to delete the selected channel/s. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed.

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

Input Source - Satellite

Satellite Re-scan: Start a satellite scan beginning with the antenna selection screen. When this scanning option is preferred, some scanning configurations will not be available and thus the preferences you made during the initial setup process may not be changed.

For the **General Satellite** channel installation mode the **SatcoDX Scan** option may also be available here. For standard installation select **Normal scan**. For **SatcoDX** installation select **SatcoDX Scan** and copy the relevant sdx file into the root directory of an USB storage device and connect it to your TV. Highlight this option and press **OK**. **Download SatcoDX** option will be highlighted, press **OK** to continue. Select the sdx

file from the connected USB storage device on the next screen and press **OK**. Satellite selection screen will be displayed. The status of the first satellite option will appear as **On**. Highlight that satellite option and press **OK**. Set the parameters corresponding to your system and correct satellite and press the **Back/Return** button to return to the satellite selection screen. Highlight **Next** and press **OK** to proceed with the SatcoDX channel list installation. If the selected satellite is not correct for SatcoDX installation, a warning dialogue will be displayed on the screen. The satellite/s that can be selected will be listed. Press **OK** to close the dialogue and press **Back/Return** to return to satellite selection screen. Then set the satellite accordingly.

Satellite Add: Add satellite and perform a satellite search. This menu option will be active, if **Channel Installation Mode** is set to **General Satellite**.

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

Satellite Manual Tuning: Start a manual satellite scan. Highlight the satellite and press **OK** to configure detailed satellite parameters. Then highlight **Next** and press **OK** to proceed.

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

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

Channel Swap: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, you can press the **Blue** button and the first selected channel will be moved to the position of that channel. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed. You can press the

Yellow button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel.

Channel Edit: Edit channels in the channel list. Edit the name and channel number (*) of the selected channel and display **Network Name**, **Channel Type** and **Frequency** information related to that channel if available. Depending on the channel other options may also be editable. Press **OK** or the **Yellow** button to edit the highlighted channel. You can press the **Blue** button to delete the highlighted channel.

() The selected channel number should not be used for another channel in the channel list.*

Channel Delete: Highlight the desired channel/s on the list and press **OK** or the **Yellow** button to select/unselect. Then press the **Blue** button to delete the selected channel/s. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed.

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

Input Source - ATV

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

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

Analogue Manual Scan: Start a channel scan manually. First, enter the start frequency for the scan. Then select the scanning direction and press **OK** or the Right directional button to start scan. The found channels will be stored in the channel list.

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

Channel Swap: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel. You can press the **Yellow** button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel.

Channel Move: Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, you can press the **Blue** button and the first selected channel will be moved to the position of that channel. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed. You can press the

Yellow button and enter the number of the channel you want to select. Then highlight **OK** and press **OK** to go to that channel.

Channel Edit: Edit channels in the channel list. Edit the channel number (*), name, frequency, colour system and sound system of the selected channel and display the **Network Name** and **Channel Type** information related to that channel if available. Press **OK** or the **Yellow** button to edit the highlighted channel. You can press the **Blue** button to delete the highlighted channel.

() The selected channel number should not be used for another channel in the channel list.*

Channel Delete: Highlight the desired channel/s on the list and press **OK** or the **Yellow** button to select/unselect. Then press the **Blue** button to delete the selected channel/s. When the confirmation dialogue appears, highlight **YES** and press **OK** to proceed.

Analogue Channel Fine-tune: Select the channel you want to adjust from the list and press **OK**. Then change the frequency using the Left/Right directional buttons to find optimal reception. Press the **Back/Return** button to save and exit. When the confirmation dialogue appears, highlight **OK** and press **OK** to proceed.

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

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

Channel Installation Mode

Set this option as **Preferred Satellite** or **General Satellite**. The channel list will also change depending on the selected option here. In order to watch the channels on the satellite you want, this option should be selected accordingly. Set to **Preferred Satellite** to watch operator channels, if you have performed an operator installation. Set to **General Satellite** to watch other satellite channels, if you have performed a normal installation.

Auto Channel Update

Turn the auto channel update function on or off.

Channel Update Message

Turn the channel update message function on or off.

Parental Controls

() To enter this menu PIN should be entered first. Use the PIN that you have defined during the initial setup process. If you have changed the PIN after the initial setup use that PIN. If you didn't set a PIN during the initial setup, you can use the default PIN. The default PIN is 1234. Some options may not be available or vary depending on the country selection during the initial setup. The related options of this menu may not be available or appear greyed out if the channel installation is not completed and no channels are installed.*

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 on or off restrictions, set rating systems, age limits, and block unrated programmes using the options of this menu.

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

Change PIN: Change the PIN you defined during the initial setup. Highlight this option and press **OK**. You will need to enter the current 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.

Factory reset: Reset all TV settings to the factory defaults. Highlight **Factory reset** and press **OK**. Information on this operation will be displayed, select **Factory 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.

Note: You may be asked to enter a PIN to proceed with the reset operation. Enter the PIN you have defined during the initial setup. If you didn't set a PIN during the initial setup, you can use the default PIN. The default PIN is 1234.

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

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

to manually change the date or time. Then set date, time, time zone and hour format options.

Timer

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

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

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

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

Language: Set your language preference.

Keyboard: Select your keyboard type and manage keyboard settings.

Inputs: Show or hide an input terminal, change the name of an input terminal, and configure the options for HDMI CEC (Consumer Electronic Control) 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, **Colour Temperature** option will be changed to **User**, if not already set as **User**.

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

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.

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

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

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, ma-

genta, 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.

VGA: You can use these settings to adjust the image on VGA source.

Auto-adjustment: If the image is not centered in VGA mode use this option to automatically adjust the position of the image. Press **OK** to start the auto adjustment.

H-position: Shifts the image horizontally to the right hand side or left hand side of the screen.

V-position: Shifts the image vertically towards the top or bottom of the screen.

Phase: You may see a hazy or noisy picture on the screen. You can use phase to get a clearer picture by trial and error.

Clock: Corrects the interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.

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**, **Sport**, **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.

Speakers 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. Some options may not be available if this option is not turned on.

Sound Mode: If the **Dolby Audio Processing** option is turned on **Sound Mode** option will be available to set. Highlight the **Sound Mode** option and press **OK** to see the preset sound modes. **Game**, **Movie**, **Music**, **News**, **Stadium**, **Smart** and **User** options will be available. Highlight the option you prefer and press **OK** to set. Some options may not be available if this option is not set to **User**.

Volume Leveller: 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 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.

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

Delete and 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.*

Delete and format as removable storage: If you did previously 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 **Delete and 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. Read the description, highlight **Continue** and press **OK**

if you want to proceed. Then highlight **On** to activate or **Off** to deactivate and press **OK**. In store mode your TV's settings will be configured for store environment and the supported features will be displayed on the screen. Once activated, 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, 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 wait time for the screensaver 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 **Audio Type**, **Visually Impaired**, **Captions**, **Text to Speech** settings and/or turn **High-contrast Text** on/off. Some of the caption settings may not be applied.

Visually Impaired: Set the **Audio Type** as **Audio Description** 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.

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

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

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

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 sort the channel or find a channel in the channel list, press the **Green** button to display the **Channel Operation** options. Available options are **Sort** and **Find**. **Sort** option may not be available depending on the selected country during the initial setup process. To sort the channels highlight **Sort** and press the **OK** button. Select one of the available options and press **OK** again. The channels will be sorted according to your selection. To find a channel highlight **Find** and press the **OK** button. Virtual keyboard will be displayed.

Enter all or a portion of the name or number of the channel you want to find, highlight the check mark symbol on the keyboard and press **OK**. Matching results will be listed.

To filter the channels press **Yellow** button. The **Select Type** options will be displayed. You can select among **Categories**, **Digital**, **Radio**, **Free**, **Encrypted** and **Favourites** options 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 **Channel Skip**, **Channel Swap**, **Channel Move**, **Channel Edit** and **Channel Delete** options under the **Settings>Channel>Channels** menu. You can access the **Settings** menu from the Home Screen or from the **TV options** menu in Live TV mode.

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

Managing Favourite Channel Lists

You can create four different lists of your favourite channels. These lists include only the channels that are specified by you. Press the **OK** button to display the channel list.

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**. In order to change the position of a channel in the favourite list press the **Green** button, then highlight the **Move** option and press **OK**. Then use the **Up** and **Down** directional buttons to move the channel to the desired position and press **OK**. In order to delete a channel from the favourite

list press the **Green** button, then highlight the **Delete** option 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 Up/Down directional buttons or **Programme +/-** buttons to switch to previous/next channel on the list and Right/Left directional buttons to select a desired event of the currently highlighted channel. If available, the full name, start-end time and date, genre of the highlighted event and a brief information about it will be displayed on the screen.

Press the **Blue** button to filter the events. Due to the large variety of filter options you can find events of the desired type quicker. Press the **Yellow** button to see detailed information on the highlighted event. You can also 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.

Press the **Record** button to add a timer for the highlighted event in the guide. You can define the type of the timer by setting the **Schedule type** option as **Reminder** or **Record**. When other parameters are set press the **Green** button. The timer will be added to the schedule list. You can access the schedule list from the **Record** menu in Live TV mode.

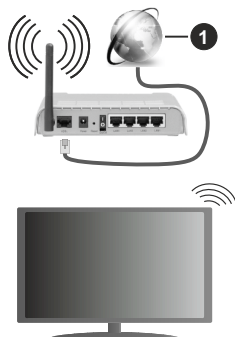
Connecting to the Internet

You can access the Internet via your TV, by connecting it to a broadband system. It is necessary to configure the network settings in order to enjoy a variety of streaming content and internet applications. These settings can be configured from **Settings>Network and 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 **Network and Internet** section under the title of **Settings**.

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 and 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 **Network and Internet** section under the title of **Settings**.



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 and 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.

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.

A stable connection speed is required to play back streaming content.

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 **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. Otherwise all files will be played back as a slide show when photo frame feature is activated.

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

Lyric Options: Display lyric options if available.

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

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.

From USB Connection

IMPORTANT! Back up the files on your USB storage devices before connecting them to the TV. Manufacturer will not be responsible for any file damage or data loss. Certain types of USB devices (e.g. MP3 Players) or USB hard disk drives/

memory sticks may not be compatible with this TV. The TV supports FAT32 disk formatting, NTFS is not supported. FAT32 formatted devices with a storage capacity larger than 2TB are not supported. Files larger than 4 GB are not supported.

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

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

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

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 to be played. The reducing priority order is as Photo, Video and Audio. That means, if there is Photo content in 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.

USB Recording

To record a programme, you should first connect a USB storage device to your TV while the TV is switched off. You should then switch on the TV to enable the recording feature.

To record long duration programmes such as movies, it is recommended to use USB Hard disk drives (HDD's). Recorded programmes are saved onto the connected USB storage device. If desired, you can store/copy recordings onto a computer; however, these files will

not be available to be played on a computer. You can play the recordings only via your TV.

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

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

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

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

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

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

Instant Recording

Press the **Record** button to start recording an event instantly while watching a programme. Press **Stop** button to stop and save the instant recording.

You can not switch broadcasts during the recording mode.

Watching Recorded Programmes

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

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

The recordings will be named in the following format: Channel Name_Date(Year/Month/Day)_Programme Name.

Timeshift Recording

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

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

When this feature is used for the first time **Disk Setup** wizard will be displayed when the **Pause/Play** button is pressed. You can either choose **Auto** or **Manual** setup mode. In **Manual** mode, if you prefer, you can format your USB storage device and specify the storage space that will be used for timeshift function. When the setup is complete, the Disk Setup Result will be displayed. Press the **OK** button to exit.

Timeshift function will not be available for radio broadcasts.

Disk Format

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

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

Schedule List

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

Press the **Yellow** button to add a timer while the **Schedule List** menu is displayed on the screen. You can define the type of the timer by setting the **Schedule Type** option as **Reminder** or **Record**. When other parameters are set press the **Green** button. The timer will be added to the list.

If any available, you can also edit or delete the timers on this list. Highlight the timer of your choice and press the **Red** button to edit. After you edited the timer press the **Green** button to save changes. Highlight the timer of your choice and press the **Blue** button to delete. When you choose to delete a timer a confirmation dialogue will be displayed on the screen. Highlight **Yes** and press **OK** to delete the selected timer.

A dialogue will be displayed if the time intervals of two timers overlap. You can not set more than one timer for the same time interval. To replace the old timer with the new one, highlight **Yes** and press **OK**.

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

CEC

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

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>Settings>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.

HBBTV System

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

HbbTV applications are available on channels where they are signalled by the broadcaster.

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

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

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

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

Quick Standby Search

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

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

Software Update

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

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

Software update via internet

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

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

Troubleshooting & Tips

TV does not switch on

- Make sure the power adaptor is plugged in securely to the power outlet.

- Disconnect the power adaptor plug from the power outlet. Wait for one minute then reconnect it.
- Press the **Standby/On** button on the TV.

TV does not respond to the remote control

- The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behaviour.
- Check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.

If you do not notice the flickering, the batteries may be exhausted. Replace the batteries. If the remote is still not working, the remote control might be broken and needs to be checked.

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

No Channels

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

No picture / distorted picture

- Make sure that the antenna is properly connected to the TV.
- Make sure that the antenna cable is not damaged.
- Make sure that the correct device is selected as the input source.
- Make sure that the external device or source is properly connected.
- Make sure that the picture settings are set correctly.
- Loud speakers, unearthed audio devices, neon lights, high buildings and other large objects can influence reception quality. If possible, try to improve the reception quality by changing the antenna direction or moving devices away from the TV.
- Change to a different picture format, if the picture does not fit the screen
- Make sure that your PC uses the supported resolution and refresh rate.

No sound / poor sound

- Make sure that the sound settings are correctly set.
- Make sure that all cables are properly connected.
- Make sure that the volume is not muted or set to zero, increase the volume to check.

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

Input sources - can not be selected

- Make sure that the device is connected to the TV.
- Make sure that all cables are properly connected.
- Make sure that you select the right input source which is dedicated to the connected device.
- Make sure that the right input source is not hidden from the **Inputs** menu.

VGA Input Typical Display Modes

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

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

AV and HDMI Signal Compatibility

Source	Supported Signals	
Composite / Back AV	PAL	
	SECAM	
	NTSC4.43	
	NTSC3.58	
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	PAL BG//DK SECAM BG/DK
Receiving Channels	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)
Number of Preset Channels	12 200
Channel Indicator	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)
Operating Voltage	100-240V AC, 50/60Hz.
Audio	German+Nicam Stereo
Audio Output Power (WRMS.) (10% THD)	2 x 2,5
Power Consumption (W)	47W
Networked Standby Power Consumption (W)	< 2
TV Dimensions DxLxH (with foot) (mm)	135 x 553 x 365
TV Dimensions DxLxH (without foot) (mm)	41/63 x 553 x 334
Display	24"
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max

Wireless LAN Transmitter Specifications

Frequency Ranges	Max Output Power
2400 - 2483,5 MHz (CH1 - CH13)	< 100 mW
5150 - 5250 MHz (CH36 - CH48)	< 200 mW
5250 - 5350 MHz (CH52 - CH64)	< 200 mW
5470 - 5725 MHz (CH100 - CH140)	< 200 mW

Country Restrictions

The Wireless LAN equipment is intended for home and office use in all EU countries, the UK and Northern Ireland (and other countries following the relevant EU and/or UK directive). The 5.15 - 5.35 GHz band is restricted to indoor operations only in the EU countries, in the UK and Northern Ireland (and other countries following the relevant EU and/or UK directive). Public use is subject to general authorisation by the respective service provider.

Country	Restriction
Russian Federation	Indoor use only

The requirements for any country may change at any time. It's recommended that user checks with local authorities for the current status of their national regulations for both 2.4 GHz and 5 GHz wireless LAN's.

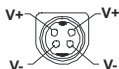
Switching On the TV Using Car Plug

5. In order to supply the power via the cigarette lighter socket of your vehicle, plug one end of the cigarette lighter adaptor cable (car plug - can be purchased separately if not supplied with the TV) into the vehicle socket and plug the other end of the adaptor cable into the DC 12V terminal on the backside of the TV. Then the standby LED will light up.
6. Press the **Standby** button on the remote control or press the centre of the control switch on the TV in. The TV will then switch on.
7. Adjust the antenna position for better reception or reinstall TV channels if necessary.

Switching Off the TV

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

ATTENTION: 12 V Input



AC Adaptor Specifications

Manufacturer Name	MOSO POWER SUPPLY TECHNOLOGY CO., LTD
Model Identifier	MSA-Z4000IC12.0-48W-Q S7017-Q0
Input Voltage (V)	100-240
Input AC Frequency (Hz)	50-60
Output Voltage (V)	12,0
Output Current (A)	4,0
Output Power (W)	48,0
Average Active Efficiency	% 87,8
Efficiency at Low Load (%10)	% 79,0
No-load Power Consumption (W)	0,10

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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]

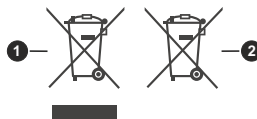
These symbols are only valid in the European Union.

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