MITCHELL & BROWN

OPERATING INSTRUCTIONS

JB-50QLED1811

COLOUR TELEVISION

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

Table of Contents

Safety Information

<table>
<tr><td>⚠️</td><td>CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN</td><td>⚡</td></tr>
</table>

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

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

IMPORTANT - Please read these instructions fully before installing or operating

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

- Use this TV set at an altitude of less than 5000 metres above the sea level, in dry locations and in regions with moderate or tropical climates.

- The TV set is intended for household and similar indoor use but may also be used in public places.

- For ventilation purposes, leave at least 5cm of free space around the TV.

- The ventilation should not be impeded by covering or blocking the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

- The power cord/plug should be easily accessible. Do not place the TV, furniture, etc. on the power cord. A damaged power cord/plug can cause fire or give you an electric shock. Handle the power cord by the plug, do not unplug the TV by pulling the power cord. Never touch the power cord/plug with wet hands as this could cause a short circuit or electric shock. Never make a knot in the power cord or tie it with other cords. When damaged it must be replaced, this should only be done by qualified personnel.

- Do not expose the TV to dripping or splashing of liquids and do not place objects filled with liquids, such as vases, cups, etc. on or over the TV (e.g. on shelves above the TV).

- Do not expose the TV to direct sunlight or do not place open flames such as lit candles on the top of or near the TV.

- Do not place any heat sources such as electric heaters, radiators, etc. near the TV set.

- Do not place the TV on the floor or inclined surfaces.

- To avoid danger of suffocation, keep plastic bags out of the reach of babies, children and domestic animals.

- Carefully attach the stand to the TV. If the stand is provided with screws, tighten the screws firmly to prevent the TV from tilting. Do not over-tighten the screws and mount the stand rubbers properly.

- Do not dispose of the batteries in fire or with hazardous or flammable materials.

WARNING

- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.

- Excessive sound pressure from earphones or headphones can cause hearing loss.

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

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

Mains Supply

The set should be operated only from a 220-240 V AC 50 Hz outlet. Make sure the TV or its stand are not placed on the power cord. DO NOT cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance. In the UK, the fuse fitted in this plug is approved by ASTA or BSI to BS1362. It should only be replaced by a correctly rated and approved type. IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

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.

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

CLASS 1 LASER PRODUCT **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.

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

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

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

Features

• Remote controlled colour TV

• Android™ operating system

• Google Cast

• Voice Search

• Fully integrated digital terrestrial TV (DVB-T-T2)

• HDMI inputs to connect other devices with HDMI sockets

• USB input

• Stereo sound system

• Teletext

• Headphone connection

• Automatic programming system

• Manual tuning

• Sleep timer

• On/Off timer

• Picture off function

• No signal auto power off function

• Ethernet (LAN) for Internet connectivity and service

• 802.11 a/b/g/n/ac built in WLAN Support

• HbbTV

Ultra HD (UHD)

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

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

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

Dolby Vision

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

Stand Installation & Wall Mounting

Assembling / Removing the stand(s)

Preparations

Take out the stand(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 stand(s)

1. Place the stand(s) on the stand mounting pattern(s) on the rear side of the TV.

2. Insert the screws provided and tighten them gently until the stand(s) is(are) properly fitted.

Removing the stand(s) from the TV

Be sure to remove the stand(s) in the following way when using a 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 stand(s) protruding over the edge of the surface.
- Unscrew the screws that fix the stand(s).
- Remove the stand(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 wall mount bracket installation;
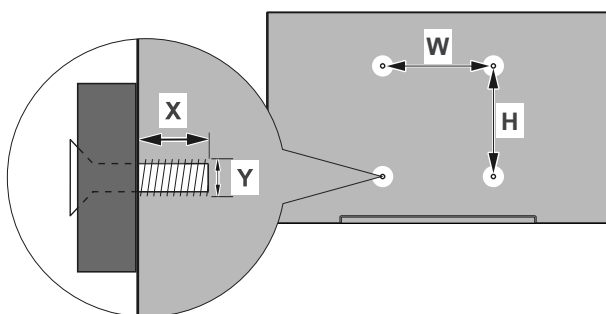
VESA WALL MOUNT MEASUREMENTS		
Hole Pattern Sizes (mm)	**W**	**H**
	200	200
Screw Sizes		
Length (X)	min. (mm)	10
	max. (mm)	13
Thread (Y)	M6	

Antenna Connection

Connect the aerial TV plug to the AERIAL INPUT (ANT) socket located on the left side of the TV.

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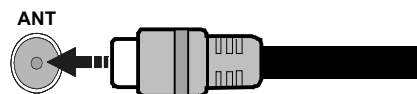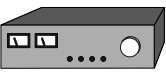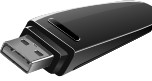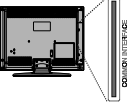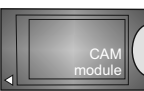
 If you want to connect a device to the TV, make sure that both the TV and the device are turned off before making any connection. After the connection is done, you can turn on the units and use them.

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	HDMI Connection (back&side)		
SPDIF	SPDIF (Optical Out) Connection (back)		
HEADPHONE	Headphone Connection (back)		
USB	USB Connection (side)	◀◀◀◀	
CI	CI Connection (side)	◀◀◀◀	CAM module
LAN	Ethernet Connection (back)	LAN / Ethernet Cable	

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

Turning On/Off the TV

Connect power

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

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

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

To switch on the TV from standby

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

• Press the "⏻" button, **Guide** button, **Netflix** button or **Freeview Play** button on the remote control.

• Press the control button on the TV.

The TV will then switch on.

To switch the TV into standby

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

To switch off the TV

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

Quick Standby Mode

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

• Press the "⏻" button on the remote.

  Press again to go back to operating mode.

• Press the control button on the TV.

  Press the control button again to go back to operating mode.

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

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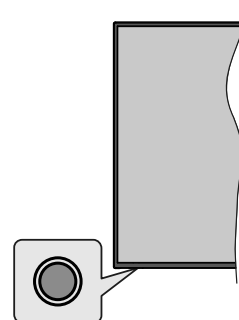
The control button allows you to control the Quick Standby-On functions of the TV.

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

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

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

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

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

Operation with the Remote Control

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

Changing Channels and Volume

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

Remote Control
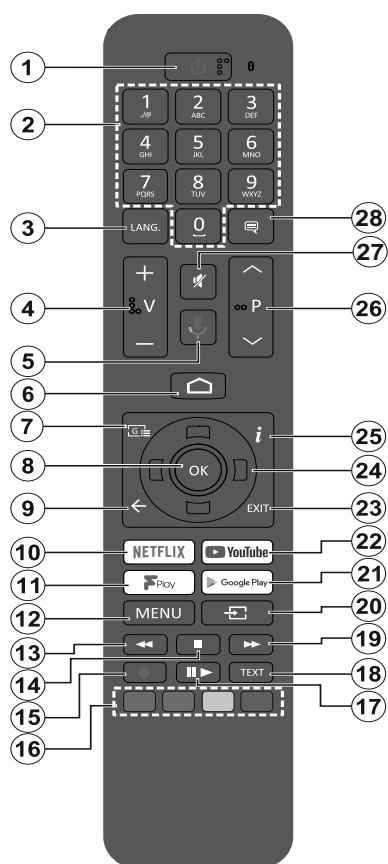
Inserting the Batteries into the Remote

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

To pair remote with the TV

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

Press and hold the **Source** button on the remote 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 the TV to find your remote. Select the name of your remote and press **OK** when it appears on the TV screen.

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

In order to pair your remote later on, you can go to **Settings** menu, highlight **Remotes & 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 or a letter in the text box on the screen
3. **Language:** Displays and changes audio language (digital TV, where available)
4. **Volume +/-**
5. **Microphone:** Activates the microphone on the remote
6. **Home:** Opens the Home Screen
7. **Guide:** Displays the electronic programme guide in Live TV mode
8. **OK:** Confirms selections, enters to sub-menus, views channel list (in Live TV mode)
9. **Back/Return:** Returns to previous menu screen, goes one step back, closes open windows, closes teletext (in Live TV-Teletext mode)
10. **Netflix:** Launches the Netflix application
11. **Freeview Play:** Connects to the Freeview Play platform where you can access available catch-up TV services
12. **Menu:** Displays Live TV Settings menu (in Live TV mode), displays available setting options such as sound and picture
13. **Rewind:** Moves frames backwards in media such as movies
14. **Stop:** Stops the media being played
15. **No function**
16. **Coloured Buttons:** Follow the on-screen instructions for coloured button functions
17. **Pause:** Pauses the media being played
    Play: Starts to play selected 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, closes the Home Screen and switches to last set source, 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 Live TV Settings menus, closes the Home Screen, exits from any running application or menu or OSD banner, switches to last set source
24. **Directional buttons:** Navigates menus, setting options, moves the focus or cursor, etc., sets record time and displays the subpages in Live TV-Teletext mode when pressed Right or Left. Follow the on-screen instructions.
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 (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 search for accessories will be performed before the initial setup starts. Follow the on-screen instructions to pair your remote control (depends on the model of the remote control) and other wireless accessories with your TV. Press **Back/Return** button to end adding accessories and start the setup.

1. Welcome Message and Language Selection

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

2. Quick Setup

If you didn't priorly connect your TV to the internet via Ethernet a screen will be displayed where you can transfer your Android phone's WLAN network and Google Account to your TV. Highlight **Continue** and press **OK** to proceed. Follow the on-screen instructions on your TV and your phone to complete the process. You can also skip this step by selecting **Skip** option. Some steps may be skipped depending on the settings made in this step.

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

3. Network Connection

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

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

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

4. Sign in to your Google account

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

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

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

- **Use your remote:** Using this option you can sign in to your Google account by entering your e-mail address or phone number and your password.

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

5. Terms of Service

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

6. Location

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

7. Help improve Android

Automatically send diagnostic information to Google, like crash reports and usage data from your device and apps. This information won't be used to identify you. Select **Yes** to confirm and press **OK**. To skip this step without confirmation, select **No** and proceed by pressing the **OK** button. You can change this setting

later using the **Settings>Device Preferences>Usage & Diagnostics** menu on the Home Screen.

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

8. Country

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

9. Password

Depending on the country selection you made in the previous step you may be asked to define a password (PIN) at this point. Press **OK** to proceed. The selected PIN cannot be 0000. This PIN will be required in order to access some menus, 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.

10. Select TV Mode

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

11. Chromecast built-in always available

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

12. Tuner Mode

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

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

Antenna

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

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

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

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

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

Home Screen

To enjoy the benefits of your Android TV, your TV must be connected to the Internet. Connect the TV to a home network with a high-speed Internet connection. You can connect your TV wirelessly or wired to your modem/router. Refer to the **Network & Internet** and **Connecting to the Internet** sections for further information on how to connect your TV to the internet.

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

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

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

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

First row will be the **Apps** row. **Live TV** and **Multi Media Player** apps will be available alongside with other apps. Highlight **Live TV** and press **OK** to switch to Live TV mode. If the source was set to an option other than **TV** previously, press the **Source** button and set as **TV** in order to watch live TV channels. Highlight **Multi Media Player** and press **OK** to browse the connected USB devices 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. You can configure your

sound output preference from the **Speakers** option in the **Settings>Device Preferences>Sound** menu.

Live TV Mode Menu Content

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

Channels

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

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

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

TV Options

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

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

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

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

Power

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

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

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

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

Advanced Options

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

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

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

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

HBBTV Settings

HBBTV Support: Turn the HBBTV function on or off.

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

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

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

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

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

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

FreeviewPlay Settings: Press **OK** to display the terms and conditions for Freeview Play services. You can accept or decline using the related options on the side of the screen. Refer to **Freeview Play Platform** section for more information.

Subtitle

Digital Subtitle: Set this options 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 **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.

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

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

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

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

Settings

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

Network & Internet

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

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

Available networks

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

Other options

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

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

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

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

Ethernet

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

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

IP settings: Configure your TV's IP settings.

Channel

Channels

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

Channel Installation Mode - Antenna

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

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

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.

Favorite 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.

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

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

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

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

Channel Installation Mode

Set this option as **Antenna**.

Auto Channel Update

Turn the auto channel update function on or off.

Channel Update Message

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

Parental Controls

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

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

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

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

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

Audio Language

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

2nd Audio Language

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

Open Source Licences

Display Open Source Software licence information.

Version

Displays system version number.

Accounts & Sign In

Google: This option will be available if you have signed in to your Google account. You can configure your data syncing preferences or remove your registered account on the TV. Highlight a service listed in the **Choose synced apps** section and press **OK** to enable/disable data sync. Highlight **Sync now** and press **OK** to sync all enabled services at once.

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

Apps

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

Recently opened apps

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

Permissions

Manage the permissions and some other features of the apps.

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

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

Security & restrictions: Using the options of this menu;

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

• Set the TV to disallow or warn before installation of apps that may cause harm.

Device Preferences

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

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

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

Timer

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

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

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

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

Language: Set your language preference.

Keyboard: Select your keyboard type and manage keyboard settings.

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

Power

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

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

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

Picture

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

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

Backlight, **Brightness**, **Contrast**, **Colour**, **Hue**, **Sharpness** settings will be adjusted according to the selected picture mode. If one of these settings is changed manually, **Picture Mode** option will be changed to **User**, if not already set as **User**.

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

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

Backlight: Adjust the backlight level 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.

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

Advanced Video

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

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

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

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

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 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.

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

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

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

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

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

Sound

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

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

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

Equaliser Detail: Adjust the equaliser values according to your preferences.

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

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

SPDIF Delay: Adjust the SPDIF delay value.

Auto Volume Control: With Auto Volume Control, you can set the TV to automatically level out sudden volume differences. Typically at the beginning of

adverts or when you are switching channels. Turn this option on/off by pressing **OK**.

Downmix Mode: 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.

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

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

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

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

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

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

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

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

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

Manufacturer Usage & Diagnostics: If you accept, your TV will send diagnostic information (such as MAC address, country, language, software and firmware versions, bootloader versions and the source of the TV) and anonymous usage data from your device to a server located in Ireland. We are not able to identify you and are only collecting and storing this diagnostic information and anonymous usage data to ensure your device operates properly.

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

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

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

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

Volume: Adjust the volume level of the audio commentary.

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

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

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

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

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

Remote & 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. Select your device from the list and press **OK** or highlight **OK** and press **OK** to start pairing.

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

Channel List

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

Several channel list options will be available. Press the **Right** and **Left** directional buttons to switch from one list to another. **Favourites, HD channels, Interactive channels, IP app channels, Radio channels** and **All channels** options can be selected. Switch to **All channels** option to see all installed channels in the channel list.

Note: If any option except All channels is selected in the channel list, you can only switch to the channels that are currently listed in the channel list.

If you press the **Yellow** button the Freeview Play's mini guide will be opened and the integrated on demand applications will be displayed. Now you can press **Blue** button to search events, **Green** button to see the recommendations and **Red** button to see what is on TV now. The functions of the coloured buttons will change depending on the selected option. Follow the instructions on the screen for current button functions.

Editing the Channels and the Channel List

You can edit the channels and the channel list using the **Channel Skip**, **Channel Swap, Channel Move** and **Channel Edit** options under the **Settings>Chan-**nel>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** and **Channel Edit** may not be available and appear as greyed out depending on the operator selection and operator related settings. You can turn off the **LCN** setting in the **Settings>Channel** menu, as it prevents channel editing. This option might be set to **On** by default depending on the selected country during the initial setup process.*

Managing Favourite Channel Lists

You can create a list of your favourite channels. This list will include only the channels that are specified by you. To add a channel to your favourite list highlight the desired channel in the channel list and press the **Blue** button on the remote. The channel will be added to your favourite list. To remove that channel from the list, highlight the channel and press **Blue** button.

If you want to list only your favourite channels, press the **Left** or **Right** directional button to switch to **Favourites** channel list option while channel list is displayed.

To add the currently watched channel to your favourite channels press the **Menu** button on the remote. Then enter the **Channels** menu, highlight **Add to My Favorites** option and press **OK**. The channel will be added to your favourite channels. To remove that channel from your favourite channels, repeat the above steps. In this way only the currently watched channel can be added or removed.

Programme Guide

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

In order to access the Electronic Programme Guide you can launch the **TV Guide** application in the Freeview Play's **TV Guide** row on the Home Screen or press the **EPG** button on the remote. Electronic Programme Guide is also available in Live TV mode. You can switch to Live TV mode by either launching the **Live TV** application on the Home Screen or selecting **Freeview Live TV** input source from the **Inputs** menu on the Home Screen. To access the programme guide while in Live TV mode, press the **EPG** button on your remote.

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

Press **Info** button to see additional information on the highlighted event. Press **Back/Return** button to go back to guide screen.

Press **Blue** button to search events. Press **Yellow** button to see Players options. Press **Green** button to see the recommendations. You can also press **Red** button to open the schedule. Using the schedule you can see events of the current day, previous or next 7 days. Highlight the day and then the time and press **OK** to see the available events. New functions may also be assigned to the coloured buttons on the remote when they are available. Follow the on-screen information for accurate button functions.

Integrated Catch-Up Services

You can enjoy Freeview Play catch-up TV services that work directly through the electronic programme guide. Whilst you are on a channel press **Red** button to open the schedule and then use the directional buttons to select day and time and press **OK**. You will see content of the selected time on the guide. Available catch-up content may change according to broadcasters and will be marked with a play icon. Highlight the content you want to play back and press the **OK** button.

Make sure that your TV is connected to your home network in order to use the catch-up services. For further information regarding this matter and other requirements for Freeview Play services refer to the **Connectivity** and **Freeview Play Platform** sections.

Connecting to the Internet

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

Wired Connection

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

The status of the connection under the **Ethernet** section in the **Network & Internet** menu will changed from **Not connected** to **Connected**.
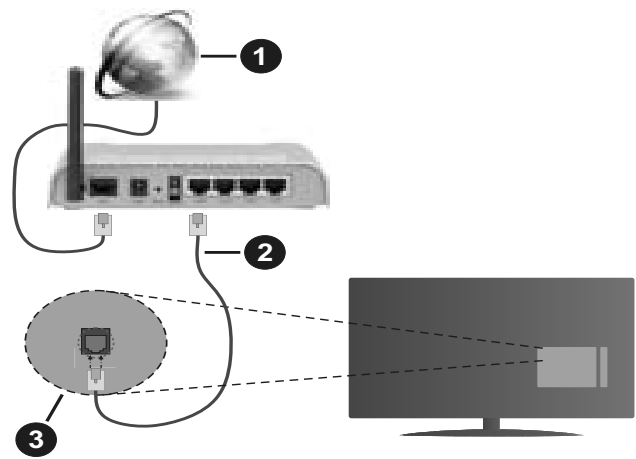
1. Broadband ISP connection
2. LAN (Ethernet) cable
3. LAN input on the rear side of the TV

You might be able to connect your TV to a network wall socket depending on your network's configuration. In that case, you can connect your TV directly to the network using an Ethernet cable.
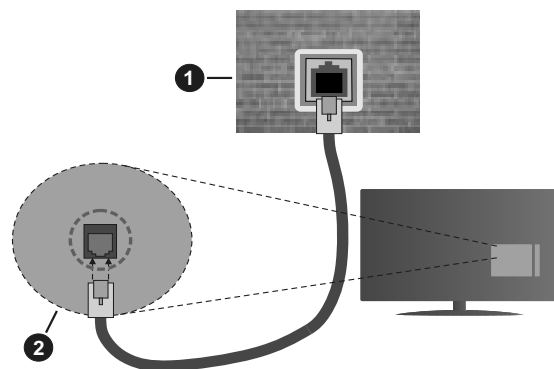
1. Network wall socket
2. LAN input on the rear side of the TV

Wireless Connection

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

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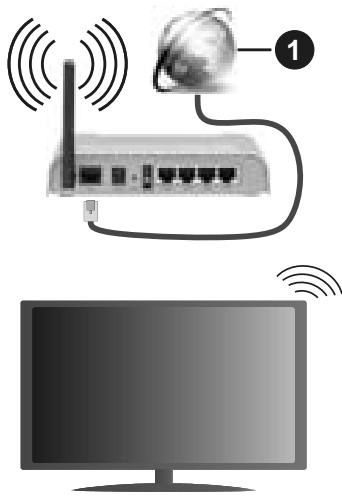
1. Broadband ISP connection

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

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

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

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

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

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

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

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

Multi Media Player

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

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

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

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

Video Files

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

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

Play/pause: Pause and resume the playback.

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

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

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

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

Music Files

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

Info: Display the extended information and the next file.

Play/pause: Pause and resume the playback.

Rewind: Press and hold to rewind.

Fast Forward: Press and hold to fast forward.

Stop: Stop the playback.

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

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

Photo Files

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

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

Play/pause: Pause and resume the slide show.

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

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

Programme +: Switch to next file.

Programme -: Switch to previous file.

Back/Return: Return to the media player screen.

Text Files

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

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

Play/pause: Pause and resume the slide show.

Programme +: Switch to next file.

Programme -: Switch to previous file.

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

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

Menu Options

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

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

Repeat: Set the repeat option. Highlight an option and press **OK** to change the setting. If **Repeat One** option is selected the current media file will be repeatedly played back or displayed. If the **Repeat All** option is selected all media files of the same type in the current folder or in the storage device, 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** is selected instead of the connected storage device while activating the photo frame feature. Otherwise all files will be played back as a slide show when photo frame feature is activated.

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

Lyric Options: Display lyric options if available.

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

Picture Settings: Display the picture settings menu.

Sound Settings: Display the sound settings menu.

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

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

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

From USB Connection

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

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

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

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

From a Mobile Device via DMR

Make sure that your mobile device is connected to the same network as your TV. On the TV, scroll to **Apps** row on the Home Screen, select **Multi Media Player (MMP)** and press the **OK** button to launch. Select the media type on the main media player screen. On the next screen, press the **Blue** button to switch the List View layout. Then press the **Back** button. **DMR** (Digital Media Renderer) option will appear among the media type options. Highlight the **DMR** option and press the **OK** button. The TV is ready to receive the media file sent from your mobile device. On the mobile device, open the file you want to share and tap on the sharing icon or on the related option from the options menu of your mobile device. Available devices will be listed. Select your TV from the list. You can get the device name of your TV from the **Settings>Device Preferences>About** menu on the Home screen. If desired, the name of the TV can also be changed by either selecting one of the predefined names or entering a custom name using the options of the **Device name** menu. If the connection is successfully established the selected media file will be played/ displayed on your TV.

CEC

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

The TV comes with the CEC function switched off. To switch on 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. Highlight **HDMI control** option and press **OK**.

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

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

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

The TV supports also ARC(Audio Return Channel) feature. This feature is an audio link meant to replace other cables between the TV and the audio system (A/V receiver or speaker system). Connect the audio system to the HDMI2 input on the TV to enable ARC feature.

In order to activate ARC feature the **Speakers** option should be set as **External Audio System**. You can access this option from the **TV options>Settings>De-**

vice Preferences>Sound menu in Live TV mode or from **Settings>Device Preferences>Sound** menu on the Home Screen. When ARC is active, TV will mute its other audio outputs automatically. So you will hear audio from 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 articles. You can also change the name of your TV. Highlight **Device name** and press **OK**. Then highlight **Change** and press **OK** again. You can either select one of the predefined names or enter a custom name.

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

1. On your android device, go to 'Settings' from the notification panel or home screen

2. Tap on 'Device Connectivity'

3. Tap on the 'Easy projection' and enable 'Wireless projection'. Available devices will be listed

4. Select the TV you would like to cast to

                            or

1. Slide down the notification panel

2. Tap on 'Wireless projection'

3. Select the TV you would like to cast to

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

To cast an app to the TV screen…

1. On your smartphone or tablet, open an app that supports Google Cast

2. Tap the Google Cast icon

3. Select the TV you would like to cast to

4. The app you selected should start playing on the 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 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.*

Freeview Play Platform

Freeview Play platform provides catch-up TV and On Demand services. Simply press the **Freeview Play** button on your remote control to connect to the Freeview Play platform.

You will have to agree to the terms and conditions for Freeview Play services first if you did not agree to them after the initial setup. Highlight **Accept** and press **OK** on the remote to confirm and proceed. You can also display the terms and conditions using the **Freeview-Play Settings** option in the **TV Options>Advanced Options** menu in Live TV mode.

Integrated TV Player applications will be displayed. Select one and press the **OK** button. Then select a content that you want to play back and press the **OK** button to watch.

Catch-up content can also be accessed and played back directly from the TV Guide. Refer to the section **Programme Guide** for more information.

Requirements

The Freeview Play services may only be used if the following requirements are fulfilled:

- Connecting the TV to the internet. A minimum broadband speed of 2Mbps is required for proper operation of catch-up and on demand services.

- Agreeing to the terms and conditions of Freeview Play

Note: Freeview Play platform usage will count towards any monthly broadband data allowance. Only selected channels provide 7-day catch-up.

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 the Internet.

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

Software update via internet

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

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

Troubleshooting & Tips

TV does not switch on

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

- Disconnect the power cord from the power outlet. Wait for one minute then reconnect it.

- Press the **Standby/On** button on the TV.

TV does not respond to the remote control

- The TV requires some time to start up. During this time, the TV does not respond to the remote control or TV controls. This is normal behaviour.

- Check if the remote control is working by means of a mobile phone camera. Put the phone in camera mode and point the remote control to the camera lens. If you press any key on the remote control and you notice the infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.

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

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

No Channels

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

- Make sure that the correct channel list is selected.

- 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.

HDMI Signal Compatibility

Source	Supported Signals	
HDMI	480i	60Hz
	480p	60Hz
	576i, 576p	50Hz
	720p	50Hz,60Hz
	1080i	50Hz,60Hz
	1080p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz
	3840x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz
	4096x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz

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

Supported File Formats for USB Mode

Video

Video Codec	Resolution	Bit Rate	Profile	Container
MPEG 1/2	1080P@ 60fps	80Mbps	MP@HL	MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
MPEG4	1080P@60fps	40Mbps	• Simple Profile • Advanced Simple Profile@Level 5 • GMC is not supported	MPEG program stream (.MPG, .MPEG), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
Sorenson H.263	1080P@60fps	40Mbps		FLV (.flv), AVI (.avi), SWF(.swf)
H.263	1080P@60fps	40Mbps		MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv)
H.264	4096x2176@60fps 1080P@60fps	135Mbps	• Main Profile • High Profile @Level 5.1	FLV (.flv), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
HEVC/H.265	4096x2176@60fps	100Mbps	Main/Main10 Profile, High Tier @Level 5.1	MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), MKV (.mkv)
MVC	1080P@30fps	80Mbps		MPEG transport stream (.ts, .trp, .tp)
AVS	1080P@60fps	40Mbps	Jizhun profile @ Level 6.0	MPEG transport stream (.ts, .trp, .tp)
AVS+	1080P@60fps	50Mbps	Broadcasting profile@ Level 6.0.1.08.60	MPEG transport stream (.ts, .trp, .tp)
WMV3	1080P@60fps	40Mbps		ASF (.asf), AVI (.avi), MKV (.mkv), WMV (.wmv)
VC1	1080P@60fps	40Mbps	• Advanced Profile @ Level 3 • Simple Profile • Main Profile	MPEG program stream (.MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
Motion JPEG	1080P@30fps	10Mbps		AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MKV (.mkv), ASF (.asf)
VP8	1080P@60fps	20Mbps		MKV (.mkv), WebM (.webm)
VP9	4096x2176@60fps	100Mbps	Profile0/2	MKV (.mkv), WebM (.webm)
RV30/RV40	1080P@60fps	40Mbps		RM (.rm, .rmvb)

Audio

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

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

Audio Codec	Sample rate	Channel	Bit Rate	Container	Note
VORBIS	Up to 48KHz	Up to 2		**Movie:** Matroska (.mkv), WebM (.webm), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) **Music:** MP4 (.m4a), OGG (.ogg)	Supports stereo decoding only
DTS	Up to 48KHz	Up to 5.1	< 1.5Mbps	**Movie:** MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MP4 (.mp4, .mov), Matroska (.mkv)	

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

Picture

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

Subtitle

Internal

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

External

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

Supported DVI Resolutions

When connecting devices to your TV's connectors by using 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

Digital Reception	Fully integrated digital terrestrial TV (DVB-T) (DVB-T2 compliant)
Number of Preset Channels	2 200
Channel Indicator	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.
Audio	DTS HD
Audio Output Power (WRMS.) (10% THD)	2 x 10
Power Consumption (W)	135
Networked Standby Power Consumption (W)	< 2
TV Dimensions DxLxH (with foot) (mm)	221 x 1119 x 692
TV Dimensions DxLxH (without foot) (mm)	32/66 x 1119 x 647
Display	50"
Operation temperature and operation humidity	0ºC up to 40ºC, 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 the UK and Northern Ireland (and other countries following the relevant EU and/or UK directive) without any limitation except for the countries mentioned below.

Country	Restriction
Bulgaria	General authorisation required for outdoor use and public service
Italy	If used outside of own premises, general authorisation is required
Greece	Indoor use only for 5470 MHz to 5725 MHz band
Luxembourg	General authorisation required for network and service supply(not for spectrum)
Norway	Radio transmission is prohibited for the geographical area within a radius of 20 km from the centre of Ny-Ålesund

Country	Restriction
Russian Federation	Indoor use only
Israel	5 GHz band only for 5180 MHz-5320 MHz range

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 5 GHz wireless LAN's.

Licences

The terms HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc.

Dolby, Dolby Vision, Dolby Audio, and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. Manufactured under licence from Dolby Laboratories. Confidential unpublished works. Copyright © 1992-2022 Dolby Laboratories. All rights reserved.

Google, Android, Android TV, Chromecast, Google Play and YouTube are trademarks of Google LLC.

For DTS patents, see http://patents.dts.com. Manufactured under licence from DTS Licensing Limited. DTS, the Symbol, DTS and the Symbol together, DTS-HD, and the DTS-HD logo are registered trademarks or trademarks of DTS, Inc. in the United States and/or other countries. © DTS, Inc. All Rights Reserved.

This product contains technology subject to certain intellectual property rights of Microsoft. Use or distribution of this technology outside of this product is prohibited without the appropriate licence(s) from Microsoft.

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

The "CI Plus" Logo is a trademark of CI Plus LLP.

This product is protected by certain intellectual property rights of Microsoft Corporation. Use or distribution of such technology outside of this product is prohibited without a licence from Microsoft or an authorised Microsoft subsidiary.

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.
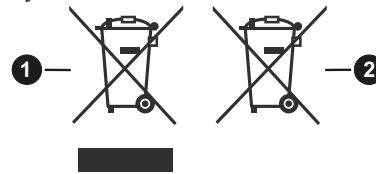
1. Products
2. Battery

Appendix : SKY Remote Control Code

The Sky Codes are:
0065, 0081, 0584, 0061, 1695, 1191, 1177, 0065

1 Turn your TV on.
2 Press TV on your Sky remote control handset.
3 Hold down **SELECT** and the **RED** button together for about two seconds, until the red light on the Sky remote control blinks twice.
4 Key in 0065 or one of the above codes. The light on the Sky remote control should blink twice.
5 Press the **STANDBY** button on your Sky remote control. If your TV switches off, press **SELECT**. The light on the Sky remote control blinks twice. Now try the other functions.

BT Vision remote codes are: 0000, 0016, 0019, 0152, 0184, 0197, 0198, 0225, 0244, 0324, 0325, 0339, 0319, 0669, 0725

Virgin remote code is: 0037

YouView remote code is: 204

Mitchell & Brown Product Registration

 Thank you for purchasing a Mitchell & Brown product.

For Consumers to register your 7 Year warranty visit www.mitchellandbrown.co.uk

**For any assistance you require with the product please call the Help Line on 01204 377693**

Hereby, VESTEL Elektronik Sanayi ve Ticaret A.Ş., declares that the radio equipment type TFT IDTV is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: doc.vosshub.com

Important Instructions

For your own safety read the following instructions carefully before attempting to connect this unit to the mains supply.

MAINS (AC) OPERATION

The wires in the mains lead are coloured in accordance with the following code :

GREEN
&
YELLOW
(Earth)
(if there is earth cable)

FUSE

BROWN
(Live)

BLUE
(Neutral)
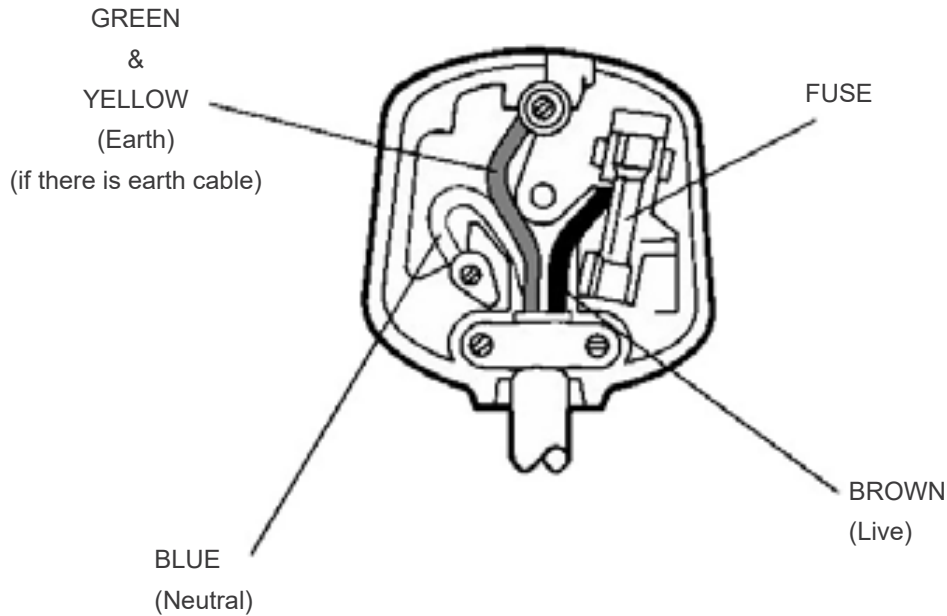
IMPORTANT

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured green and yellow must be connected to the terminal which is marked with the letter E, or by the earth symbol, or coloured green or green and yellow.

The wire which is coloured blue or black must be connected to the terminal which is marked with the letter N or coloured Black.

The wire which is coloured brown or red must be connected to the terminal which is marked with the letter L or coloured Red.

For continued protection against risk of fire, replace only with same type and rating of fuse (ASTA approved 5A 250VAC fuse).

CAUTION

TO PREVENT ELECTRIC SHOCK DISCONNECT FROM THE MAINS BEFORE REMOVING COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

SAFETY PRECAUTION

THIS EQUIPMENT MUST BE DISCONNECTED FROM THE MAINS WHEN NOT IN USE. DO NOT ALLOW THIS UNIT TO BE EXPOSED TO RAIN OR MOISTURE.

UK
CA

50653295

For any assistance you require with the product please call the Help Line on 01204 377693