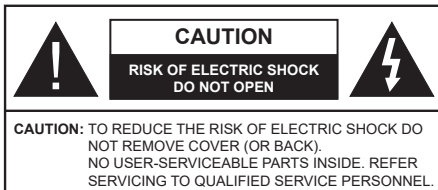


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Safety Information



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

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

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

IMPORTANT - Please read these instructions fully before installing or operating

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

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

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

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

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

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

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

Markings on the Product

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



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



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



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



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

WARNING

Do not ingest the battery, Chemical Burn Hazard. This product or the accessories supplied with the product may contain a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

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

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

Never place a television set in unstable or inclined locations. A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as;

- Using cabinets or stands recommended by the manufacturer of the television set.
- Only using furniture that can safely support the television set.
- Ensuring the television set is not overhanging the edge of the supporting furniture.
- Not placing the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- Not standing the television set on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television set or its controls. If your existing television set is being retained and relocated, the same considerations as above should be applied.

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

WALL MOUNTING WARNINGS

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

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

Environmental Information

This television is designed to be environment friendly. To reduce energy consumption, you can follow these steps:

If you set the **Energy Saving** to **Minimum, Medium, Maximum** or **Auto** the TV will reduce the energy consumption accordingly. Set as **Off** to turn this setting off. If you like to set the **Backlight** to a fixed value set as **Custom** and adjust the **Backlight** (will be located under the **Energy Saving** setting) manually using Left or Right buttons on the remote.

Note: Available **Energy Saving** options may differ depending on the selected **Mode** in the **Settings>Picture** menu.

The **Energy Saving** settings can be found in the **Settings>Picture** menu. Note that some picture settings will be unavailable to be changed.

You can also turn the screen off using the **Screen Off** option, if you want to hear the sound only and don't need to watch. If pressed Right button or Left button consecutively **Screen Off** option will be selected and "Screen will be off in 15 seconds." message will be displayed on the screen. Select **Proceed** and press **OK** to turn the screen off immediately. If you don't press any button, the screen will be off in 15 seconds. Press any button on the remote or on the TV to turn the screen on again.

Note: **Screen Off** option is not available if the **Mode** is set to **Game**.

When the TV is not in use, please switch off or disconnect the TV from the mains plug. This will also reduce or stop the energy consumption.

Features

- Remote controlled colour TV
- Fully integrated digital terrestrial/cable/satellite TV (DVB-T-T2/C)

- HDMI inputs to connect other devices with HDMI sockets
- USB input
- OSD menu system
- Stereo sound system
- Teletext
- Headphone connection
- Automatic programming system
- Manual tuning
- Automatic power down after up to eight hours.
- Sleep timer
- Child lock
- Automatic sound mute when no transmission.
- NTSC playback
- AVL (Automatic Volume Limiting)
- PLL (Frequency Search)
- PC input
- Game Mode (Optional)
- Picture off function
- Programme recording
- Programme timeshifting
- Ethernet (LAN) for Internet connectivity and service
- 802.11 a/b/g/n built in WLAN Support
- Audio Video Sharing
- HbbTV

Ultra HD (UHD)

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

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

Using this feature the TV can reproduce greater dynamic range of luminosity by capturing and then combining several different exposures. HDR/HLG promises better picture quality thanks to brighter, more realistic highlights, more realistic colour and other improvements. It delivers the look that filmmakers intended to achieve, showing the hidden areas of dark shadows and sunlight with full clarity, colour and detail. HDR/HLG contents are supported via native and market applications, HDMI, USB inputs and over DVB-S broadcasts. Set the related HDMI source input as **Enhanced** from the **Sources** option in the **Settings>System** menu 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.

Accessories Included

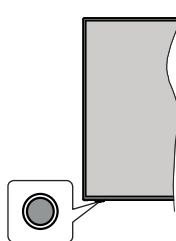
- Remote Control
- Batteries: 2 x AAA
- Instruction Book
- Quick Start Guide

Standby Notifications

If the TV does not receive any input signal (e.g. from an aerial or HDMI source) for 3 minutes, it will go into standby. When you next switch-on, the following message will be displayed: **"TV switched to stand-by mode automatically because there was no signal for a long time."**

The **Auto Power Down** option (in the **Settings>System>More** menu) could have been set to a value between 1 and 8 hours by default. If this setting is not set as **Off** and the TV has been left on and not been operated during the set time, it will switch into standby mode after the set time has expired. When you next switch-on the TV, the following message will be displayed. **"TV switched to stand-by mode automatically because no operation was made for a long time."** Before the TV switches into standby mode a dialogue window will be displayed. If you do not press any button the TV will switch into the standby mode after a waiting period of about 5 minutes. You can highlight **Yes** and press **OK** to switch the TV into standby mode immediately. If you highlight **No** and press **OK**, the TV will remain on. You can also choose to cancel the **Auto Power Down** function from this dialogue. Highlight **Disable** and press **OK**, the TV will remain on and the function will be cancelled. You can enable this function again by changing the setting of the **Auto Power Down** option from the **Settings>System>More** menu.

TV Control Button & Operation



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

Your TV has a single control button. This button allows you to control the Standby-On / Source / Programme and Volume functions of the TV.

Operating with the Control Button

- Press the control button to display the function options menu.
- Then press the button consecutively to move the focus to the desired option if needed.
- Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated.
- Press the button once again to use the function or enter the sub menu.
- To select another function option, you will need to deactivate the last activated option first. Press and hold the button to deactivate it. The icon colour of the option changes when deactivated.
- To close the function options menu do not press the button for a period of about 5 seconds. The function options menu will disappear.

To turn the TV off: Press the control button to display the function options menu, the focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to turn the TV off.

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

To change volume: Press the control button to display the function options menu and then press the button consecutively to move the focus to **Volume +** or **Volume -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to increase or decrease the volume.

To change channel: Press the control button to display the function options menu and then press the button consecutively to move the focus to **Programme +** or **Programme -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to switch to the next or previous channel in the channel list.

To change source: Press the control button to display the function options menu and then press the button consecutively to move the focus to **Source** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to display the sources list. Scroll through the available sources by pressing the button. TV will automatically switch to the highlighted source.

Note: Main menu OSD cannot be displayed via the control button.

Operation with the Remote Control

Press the **Menu** button on your remote control to display main menu. Use the directional buttons and

OK button to navigate and set. Press **Return/Back** or **Menu** button to quit a 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 to select the different sources.

Changing Channels and Volume

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

Forced Standby

If your TV stops responding to commands, you can perform forced standby which will terminate the process. In order to do this, press and hold the **Standby** button on remote controller for about 5 seconds.

Using Main TV Menu

When the **Menu** button is pressed, the main TV menu will appear on the screen. You can navigate through the menu items using the directional buttons on the remote. To select an item or see the sub-menu options of the highlighted menu press **OK** button. When you highlight a menu option some of the sub-menu items of this menu may appear on the upper side of the menu bar for quick access. To use a quick access item highlight it, press **OK** and set as desired using the Left/Right directional buttons. When finished press **OK** or **Back/Return** button to exit.

Press **Exit** button to close the main menu.

1. Home

When main menu is opened **Home** menu bar will be highlighted. The content of the **Home** menu can be customised by adding options from other menus. Just highlight an option and press the Down direction button on the remote. If you see **Add to Home** option you can add it to the **Home** menu. Same way you can delete or change the position of any item in the **Home** menu. Press the Down direction button and select **Delete** or **Move** option and press **OK**. In order to move a menu item use the Right and Left direction buttons to select the position that you want the item to move to and press **OK**.

2. TV

2.1. Search

You can search for channels, programmes, services or settings using this option. Press **OK** and enter a key word using the virtual keyboard. Then highlight **OK** and press **OK** to start the search. Results will be displayed on the screen. Highlight the desired result using the directional buttons and press **OK** to open.

2.2. Guide

You can access the electronic programme guide menu using this option. Refer to **Electronic Programme Guide** section for more information.

2.3. Channels

You can access the **Channels** menu using this option. Refer to **Using the Channel List** section for more information.

2.4. Timers

You can set timers for future events using the options of this menu. You can also review the previously created timers under this menu.

To add a new timer select the **Add Timer** tab using the Left/Right buttons and press **OK**. Set the sub-menu options as desired and when finished press **OK**. A new timer will be created.

To edit a previously created timer, highlight that timer, select the **Edit Selected Timer** tab and press **OK**. Change the sub-menu options as desired and press **OK** to save your settings.

To cancel an already set timer, highlight that timer, select **Delete Selected Timer** tab and press **OK**. A confirmation message will be displayed. Highlight **Yes** and press **OK** to proceed. The timer will be cancelled.

It is not possible to set timers for two or more events that will broadcasted in different channels at the same time interval. In this case you will be asked to choose one of these timers and cancel others. Highlight the timer you want to cancel and press **OK**, **Options** menu will be displayed. Then highlight **Set/Cancel** and press **OK** to cancel that timer. You will have to save changes after that. In order to do that press **OK**, highlight **Save Changes** and press **OK** again.

2.5. Quick AI

AI stands for artificial intelligence. By means of this feature some TV settings can be adjusted automatically depending on the genre information of the currently watched programme or depending on your preferences. Refer to the **Quick AI** section for more information.

3. Settings

You can manage the settings of your TV using the options of this menu. Refer to **Settings Menu Content** section for more information.

4. Apps

When your TV is connected to the Internet related contents will also be available, including **Apps** related contents. Using the **Apps** menu you can access and manage your applications. You can add new apps from the market or delete the existing ones. Refer to **Apps** section for more information.

5. Sources

You can manage your input source references using the options of this menu. To change the current source highlight one of the options and press **OK**.

5.1. Source Settings

Edit the names, enable or disable selected source options. There are also **Regular** and **Enhanced** options available for HDMI sources. **Regular** and **Enhanced** options are affecting the colour settings of the selected HDMI source.

You can reset your customisations on the **Home** and **Apps** menus to defaults using the **Reset Menu** option in the **Settings** menu (availability depends on TV model and its features). Highlight this option and press **OK**. A confirmation message will be displayed. Highlight **Yes** and press **OK** to proceed. Note that you will not be able to perform this operation again within the next 2 minutes.

Inserting the Batteries into the Remote

Remove the back cover to reveal the battery compartment. Insert two 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.

A message will be displayed on the screen when the batteries are low and must be replaced. Note that when the batteries are low, the performance of the remote control may be impaired.

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

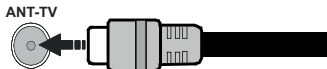
Power Connection

IMPORTANT: The TV set is designed to operate on a **220-240V AC, 50 Hz** supply. After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains. Plug the power cable to the mains socket outlet.

Antenna Connection

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

Rear side of the TV



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

License Notification

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



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Disposal Information

[European Union]

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

By disposing of these products correctly, you will help to conserve natural resources and will help to prevent potential negative effects on the environment and

human health which could otherwise be caused by inappropriate waste handling of these products.

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

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

[Business users]

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

[Other Countries outside the European Union]

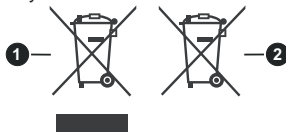
These symbols are only valid in the European Union.

Contact your local authority to learn about disposal and recycling.

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

Some collection points accept products free of charge.

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



1. Products
2. Battery

Specification

TV Broadcasting	PAL BG//DK SECAM BG/DK
Receiving Channels	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable TV (DVB-T-C) (DVB-T2 compliant)
Number of Preset Channels	1 000
Channel Indicator	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.
Audio	German+Nicam Stereo
Audio Output Power (WRMS.) (10% THD)	2 x10
Power Consumption (W)	140
Networked Standby Power Consumption (W)	< 2
TV Dimensions DxLxH (with stand) (mm)	235 x 1246,5 x 756,7
TV Dimensions DxLxH (without stand) (mm)	13/85 x 1246,5 x 727
Display	55
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max

Wireless LAN Transmitter Specifications

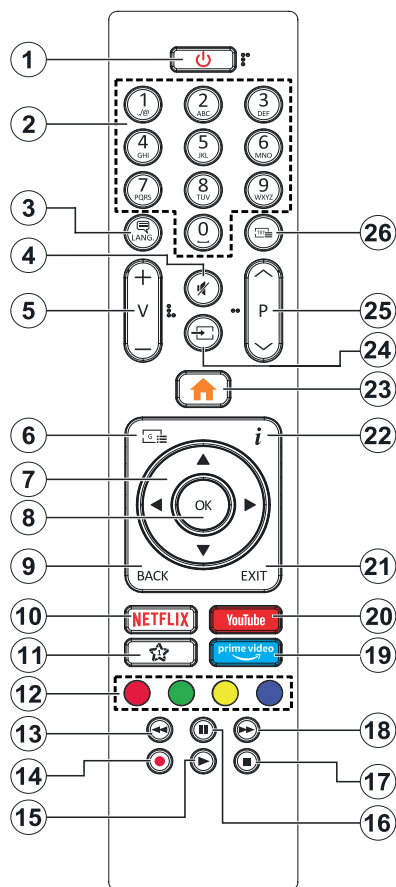
Frequency Ranges	Max Output Power
2400 - 2483,5 MHz (CH1-CH13)	< 100 mW
5150 - 5250 MHz (CH36 - CH48)	< 200 mW
5250 - 5350 MHz (CH52 - CH64)	< 200 mW
5470 - 5725 MHz (CH100 - CH140)	< 200 mW

Country Restrictions

This device is intended for home and office use in all EU countries (and other countries following the relevant EU directive) without any limitation except for the countries mentioned below.

Country	Restriction
Bulgaria	General authorization required for outdoor use and public service
Italy	If used outside of own premises, general authorization is required
Greece	In-door use only for 5470 MHz to 5725 MHz band
Luxembourg	General authorization 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
Russian Federation	In-door 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.



(*) MY BUTTON 1:

This button may have default function depending on the model. However you can set a special function to this button by pressing on it for five seconds when on a desired source or channel. A confirmation message will be displayed on the screen. Now the My Button 1 is associated with the selected function.

Note that if you perform **First Time Installation**, My Button 1 will return to its default function.

- Standby:** Switches On / Off the TV
- Numeric buttons:** Switches the channel, enters a number or a letter in the text box on the screen.
- Language:** Switches among sound modes (analogue TV), displays and changes audio/subtitle language and turns subtitles on or off (digital TV, where available)
- Mute:** Completely turns off the volume of the TV
- Volume +/-**
- Guide:** Displays the electronic programme guide
- Directional buttons:** Helps navigate menus, content etc. and displays the subpages in TXT mode when pressed Right or Left
- OK:** Confirms user selections, holds the page (in TXT mode), views **Channels** menu (DTV mode)
- Back/Return:** Returns to previous screen, previous menu, opens index page (in TXT mode). Quickly cycles between previous and current channels or sources
- Netflix:** Launches the Netflix application
- My Button 1 (*)**
- Coloured Buttons:** Follow the on-screen instructions for coloured button functions
- Rewind:** Moves frames backwards in media such as movies
- Record:** Records programmes
- Play:** Starts to play selected media
- Pause:** Pauses the media being played, starts timeshift recording
- Stop:** Stops the media being played
- Fast Forward:** Moves frames forward in media such as movies
- Prime Video:** Launches the Amazon Prime Video application
- YouTube:** Launches the YouTube application
- Exit:** Closes and exits from displayed menus or returns to previous screen
- Info:** Displays information about on-screen content, shows hidden information (reveal - in TXT mode)
- Menu:** Displays TV menu
- Source:** Shows available broadcast and content sources
- Programme +/-**
- Text:** Displays teletext (where available), press again to superimpose the teletext over a normal broadcast picture (mix)

Connections

Connector	Type	Cables	Device
	VGA Connection (back)		
AUDIO IN 	PC/YpBPr Audio Connection (back)	 YPbPr/PC Audio Cable	
	HDMI Connection (side&back)		
SPDIF 	SPDIF (Optical Out) Connection (back)		
BACK AV 	Back AV (Audio/Video) Connection (back)	 Audio Video Cable	
HEADPHONE 	Headphone Connection (side)		
YPBPR 	YPbPr Video Connection (back)	 PC to YPbPr Connection Cable	
	USB Connection (side)		
	CI Connection (side)		
LAN 	Ethernet Connection (back)	 LAN / Ethernet Cable	

See the illustrations on the left side. You can use YPbPr to VGA cable to enable YPbPr signal via VGA input. You cannot use VGA and YPbPr at the same time. To enable PC/YPbPr audio, you will need to use the back audio inputs with a YPbPr/PC audio cable for audio connection. When using the wall mounting kit (available from a third party in the market, 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/ Each USB input of your TV supports 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.



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.

Switching On/Off

To Switch the TV On

Connect the power cord to a power source such as a wall socket (220-240V AC, 50 Hz).

To switch on the TV from standby mode either:

- Press the **Standby** button, **Programme +/-** or a numeric button on the remote control.
- Press the control button on the TV.

To Switch the TV Off

- Press the **Standby** button on the remote control.
- Press the control button on the TV, the function options menu will be displayed. The focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option will change. Then press the button once again, the TV will switch into standby mode.

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

***Note:** When the TV is switched into standby mode, the standby LED can blink to indicate that features such as Standby Search, Over Air Download or Timer is active. The LED can also blink when you switch on the TV from standby mode.*

First Time Installation

When turned on for the first time, the language selection screen is displayed. Select the desired language and press **OK**. In the following steps of the installation guide, set your preferences using the directional buttons and **OK** button.

On the second screen set your country preference. Depending on the **Country** selection you may be asked to set and confirm a PIN at this point. The selected PIN cannot be 0000. You have to enter it if you are asked to enter a PIN for any menu operation later.

You can activate **Store Mode** option in the next step. This option will configure your TV's settings for store environment and depending on the TV model being used, the supported features of it may be displayed on the side of the screen as an info banner. This option is intended only for store use. It is recommended to select **Home Mode** for home use. This option will be available in **Settings>System>More** menu and can be turned off/on later. Make your selection and press **OK** to continue.

Depending on the model of your TV and the country selection **Privacy Settings** menu may appear at this point. Using this menu you can set your privacy privileges. Highlight a feature and use Left and Right directional buttons to enable or disable. Read the related explanations displayed on the screen for each highlighted feature before making any changes. You can use **Programme +/-** buttons to scroll up and down to read the entire text. You will

be able to change your preferences at any time later from the **Settings>System>Privacy Settings** menu. If the **Internet Connection** option is disabled **Network/Internet Settings** screen will be skipped and not displayed. If you have any questions, complaints or comments regarding this privacy policy or its enforcement, please contact by email at smarttvsecurity@vosshub.com.

Highlight **Next** and press **OK** button on the remote control to continue and the **Network/Internet Settings** menu will be displayed. Please refer to **Connectivity** section to configure a wired or a wireless connection. If you want your TV to consume less power in standby mode, you can disable the **Wake On** option by setting it as **Off**. After the settings are completed highlight **Next** and press **OK** button to continue.

On next screen you can set broadcast types to be searched, set your encrypted channel searching and time zone (depending on the country selection) preferences. Additionally you can set a broadcast type as your favourite one. Priority will be given to the selected broadcast type during the search process and the channels of it will be listed on the top of the channel list. When finished, highlight **Next** and press **OK** to continue.

About Selecting Broadcast Type

To turn a search option for a broadcast type highlight it and press **OK**. The checkbox next to the selected option will be checked. To turn the search option off clear the checkbox by pressing **OK** after moving the focus on the desired broadcast type option.

Digital Aerial: If **D. Aerial** broadcast search option is turned on, the TV will search for digital terrestrial broadcasts after other initial settings are completed.

Digital Cable: If **D. Cable** broadcast search option is turned on, the TV will search for digital cable broadcasts after other initial settings are completed. A message will be displayed before starting to search asking if you want to perform cable network search. If you select **Yes** and press **OK** you can select **Network** or set values such as **Frequency**, **Network ID** and **Search Step** on the next screen. If you select **No** and press **OK** you can set **Start Frequency**, **Stop Frequency** and **Search Step** on the next screen. When finished, highlight **Next** and press **OK** button to continue.

***Note:** Searching duration will change depending on the selected **Search Step**.*

Analogue: If **Analogue** broadcast search option is turned on, the TV will search for analogue broadcasts after other initial settings are completed.

After the initial settings are completed TV will start to search for available broadcasts of the selected broadcast types.

While the search continues current scan results will be displayed at the bottom of the screen. After all the available stations are stored, **Channels** menu will be displayed. You can edit the channel list according to your preferences using the **Edit** tab options or press the **Menu** button to quit and watch TV.

While the search continues a message may appear, asking whether you want to sort channels according to the LCN(*). Select **Yes** and press **OK** to confirm.

(* LCN is the Logical Channel Number system that organizes available broadcasts in accordance with a recognizable channel number sequence (if available).

Note: Do not turn off the TV while initializing first time installation. Note that, some options may not be available depending on the country selection.

Media Playback via USB Input

You can connect 2.5" and 3.5" inch (HDD with external power supply) external hard disk drives or USB memory stick to your TV by using the USB inputs of the TV.

IMPORTANT! Back up the files on your 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 but recording will not be available with NTFS formatted disks.

While formatting USB hard drives which have more than 1TB (Tera Byte) storage space you may experience some problems in the formatting process.

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.

You can use USB hubs with your TV's USB inputs. External power supplied USB hubs are recommended in such a case.

It is recommended to use the TV's USB input(s) directly, if you are going to connect a USB hard disk.

Note: When viewing media files the **Media Browser** menu can only display a maximum of 1000 media files per folder.

USB Recording

Recording a Programme

IMPORTANT: When using a new USB hard disk drive, it is recommended that you first format the disk using your TV's **Format Disk** option in the **TV>Recordings>Settings** menu.

To record a programme, you should first connect a USB disk to your TV while the TV is switched off. You should then switch on the TV to enable the recording feature. To use recording your USB drive should have 2 GB free space and be USB 2.0 compatible. If the USB drive is not compatible an error message will be displayed.

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

Lip Sync delay may occur during the timeshifting. Radio record is supported. The TV can record programmes up to ten hours.

Recorded programmes are split into 4GB partitions.

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

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

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

If the AC cord is unplugged while there is an active USB-recording timer setting, it will be cancelled.

Multipartition support is available. A maximum of two different partitions are supported. The first partition of the USB disk is used for USB Recording ready features. It also must be formatted as the primary partition to be used for the USB Recording ready features.

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

While recording a programme in the background you can use menu options, switch to another source or use **Media Browser** functions, such as viewing pictures, playing video and music files, and even play back the ongoing recording.

Timeshift Recording

Press **Pause** button while watching a broadcast to activate timeshifting mode. In timeshifting mode, the programme is paused and simultaneously recorded to the connected USB disk.

Press **Play** button again to resume the paused programme from where you stopped. Press the **Stop** button to stop timeshift recording and return to the live broadcast.

Timeshift cannot be used while in radio mode.

You can use the timeshift rewind feature after resuming normal playback or fast forward option.

Instant Recording

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

You can not switch broadcasts during the recording mode. While recording a programme or during the timeshifting, a warning message appears on the screen if your USB device speed is not sufficient.

Watching Recorded Programmes

Select **Recordings** from the **TV** menu. Select a recorded item from the list (if previously recorded). Press the **OK** button to view the **Options** menu. Select an option then press **OK** button.

Note: Viewing main menu and menu items will not be available during the playback.

Press the **Stop** button to stop a playback and return to the **Recordings**.

Slow Forward

If you press **Pause** button while watching recorded programmes, the slow forward feature will be available. You can use **Fast Forward** button to slow forward. Pressing **Fast Forward** button consecutively will change slow forward speed.

Recording Settings

You can configure your recording preferences using the **Settings** tab in the **TV>Recordings** menu. Highlight **Settings** tab by using **Left** or **Right** button and press **OK**. Then select the desired item in the sub-menu and set by using **Left** or **Right** button.

Start early: You can set recording timer's starting time to start earlier by using this setting.

End late: You can set recording timer's end time to end later by using this setting.

Max Timeshift: This setting allows you to set the maximum duration for the timeshift recording. Available options are approximate and the actual recording time may change in practice depending on the broadcast. The reserved and free storage space values will change according to this setting. Make sure that you have enough free space otherwise instant recording may not be possible.

Auto discard: You can set the **Discard** type as **None**, **Oldest**, **Longest** or **Shortest**. If it is not set to **None**, you can set the **Unplayed** option as **Included** or **Excluded**. These options determine the preferences for deleting the recordings in order to obtain more storage space for ongoing records.

Hard disk information: You can view detailed information about the USB storage device connected to your TV. Highlight and press **OK** to see and press **Back/Return** to close.

Format Disk: If you want to delete all files on the connected USB storage device and convert the disk format to FAT32, you can use this option. Press **OK** button while the **Format Disk** option is highlighted. A menu will appear on the screen, requiring you to enter the PIN(*). After you enter the PIN, a confirmation message will be displayed. Select **Yes** and press **OK** to start formatting the USB storage device. Select **No** and press **OK** to cancel.

(*) Default PIN could have been set to **0000** or **1234**. If you have defined the PIN(is requested depending on the country

selection) during the **First Time Installation** use the PIN that you have defined.

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

If **"USB disk writing speed too slow to record"** message is displayed on the screen while starting a recording, try restarting the recording. If you still get the same error, it is possible that your USB disk does not meet the speed requirements. Try connecting another USB disk.

FollowMe TV

With your mobile device you can stream the current broadcast from your smart TV using the **FollowMe TV** feature. Install the appropriate Smart Center application to your mobile device. Start the application.

For further information on using this feature refer to the instructions of the application you use.

Note: Depending on model, your TV may not support this function. The application may not be compatible with all mobile devices. Both of the devices must be connected to the same network.

CEC

This function allows to control the CEC-enabled devices, that are connected through HDMI ports by using the remote control of the TV.

The **CEC** option in the **Settings>System>Device Settings** menu should be set as **Enabled** at first. Press the **Source** button and select the HDMI input of the connected CEC device from the **Sources List** menu. When new CEC source device is connected, it will be listed in source menu with its own name instead of the connected HDMI ports name(such as DVD Player, Recorder 1 etc.).

The TV remote is automatically able to perform the main functions after the connected HDMI source has been selected. To terminate this operation and control the TV via the remote again, press and hold the "0-Zero" button on the remote control for 3 seconds.

You can disable the CEC functionality by setting the related option under the **Settings>System>Device Settings** menu accordingly.

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

When ARC is active, the TV will mute its other audio outputs automatically and volume control buttons are directed to connected audio device. To activate ARC set the **Sound Output** option in the **Settings>Sound** menu as **HDMI ARC**.

Note: ARC is supported only via the HDMI2 input.

System Audio Control

Allows an Audio Amplifier/Receiver to be used with the TV. The volume can be controlled using the remote control of the TV. To activate this feature set the **Sound Output** option in the **Settings>Sound** menu as **HDMI ARC**. When **HDMI ARC** option is selected, **CEC** option will be set as **Enabled** automatically, if it is not already set. The TV speakers will be muted and the sound of the watched source will be provided from the connected sound system.

Note: The audio device should support System Audio Control feature.

Quick AI

You can use **Quick AI** option in the **TV** menu in order to manage your AI setting preferences. **AI on Sound** and **AI on Video** options will be available. Highlight an option and press **OK** to select or unselect. Then highlight **OK** and press **OK** to apply your changes.

AI on Sound: Works on **TV** source. When enabled, TV checks programme genre and adjusts sound settings accordingly if genre information is available.

AI on Video: Works on **TV** source. When enabled, TV checks programme genre and adjusts picture settings accordingly if genre information is available.

A small icon and information message will be displayed on the screen when settings are changed via AI on TV feature.

E-Manual

You can find instructions for your TV's features in the E-Manual.

To access the E-Manual, enter **Settings** menu, select **Manuals** and press **OK**. For quick access press **Menu** button and then **Info** button.

By using the directional buttons select a desired category. Every category includes different topics. Select a topic and press **OK** to read instructions.

To close the E-Manual screen press the **Exit** or **Menu** button.

Note: Depending on model, your TV may not support this function. The contents of the E-Manual may vary according to the model.

Settings Menu Content

Picture Menu Content

Mode	You can change the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: Cinema , Game (optional), Sports , Dynamic and Natural .
Contrast	Adjusts the light and dark values on the screen.
Brightness	Adjusts the brightness values on the screen.
Sharpness	Sets the sharpness value for the objects displayed on the screen.
Colour	Sets the colour value, adjusting the colours.
Energy Saving	For setting the Energy Saving to Custom , Minimum , Medium , Maximum , Auto , Screen Off or Off . <i>Note: Available options may differ depending on the selected Mode.</i>
Backlight	This setting controls the backlight level. This option will be available if the Energy Saving is set to Custom . Highlight and use Left/Right directional buttons to set.
Picture Zoom	Sets the desired image size format.
Picture Shift	This option may be available depending on the Picture Zoom setting. Highlight and press OK , then use directional buttons to shift the picture upwards or downwards.
Iris HDR	Virtual HDR function that manipulates colour, saturation and dynamic contrast, basically converts Standard Dynamic Range picture to High Dynamic Range picture. Set as On to enable.
Advanced Settings	
Dynamic Contrast	You can change the dynamic contrast ratio to desired value.
Colour Temp	Sets the desired colour temperature value. Cool , Normal , Warm and Custom options are available.
White Point	If the Colour Temp option is set as Custom , this setting will be available. Increase the 'warmth' or 'coolness' of the picture by pressing Left or Right buttons.
Iris Blue	White colour enhancement function that makes white colour more cooler in order to make more bright picture. Set as On to enable.
Iris Dimming	Low , Medium , High and Off options are available. While Iris Dimming is active, it will enhance contrast locally for each defined zone.
Noise Reduction	If the signal is weak and the picture is noisy, use the Noise Reduction setting to reduce the amount of noise.
Iris Contour	Low , Medium , High and Off options are available. While Iris Contour is active, it will decrease the contour effects in low resolution contents and auto streaming services.
Film Mode	Films are recorded at a different number of frames per second to normal television programmes. Turn this feature on when you are watching films to see the fast motion scenes clearly.
Skin Tone	Skin tone can be changed between -5 and 5.
Colour Shift	Adjust the desired colour tone.
Gamut Mapping	You can use this option to set the range of colours displayed on your TV screen. When set as On , colours are set according to the source signal. When set as Off , the TV's maximum colour capacity is used by default (recommended option). <i>Note: This option may not be available depending on the TV model and its features.</i>
HDMI Full Range	While watching from a HDMI source, this feature will be visible. You can use this feature to enhance blackness in the picture.
Reset	Resets the picture settings to factory default settings (except Game mode).

PC Position	Appears only when the input source is set to VGA/PC.
Autoposition	If the image is not centered in VGA mode use this option to automatically adjust the position of the image. Press OK to start the auto adjustment.
H Position	This item shifts the image horizontally to the right hand side or left hand side of the screen.
V Position	This item shifts the image vertically towards the top or bottom of the screen.
Dot Clock	Dot Clock adjustments correct the interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.
Phase	Depending on the input source(computer etc.) you may see a hazy or noisy picture on the screen. You can use phase to get a clearer picture by trial and error.

While in VGA (PC) mode, some items in **Picture** menu will be unavailable. Instead, VGA mode settings will be added to the **Picture** menu while in PC mode.

Sound Menu Content

Dolby Audio	Smart, Movie, Music, News and Off options will be available. Set as Off to disable. <i>Note: Some items in Sound menu will be grayed out and unavailable if set to an option other than Off.</i>
Surround Sound	Surround sound mode can be changed as On or Off .
Sound Output	Sets the sound output preference. TV, S/PDIF and HDMI ARC options will be available. There will be no sound output except through the selected option. If HDMI ARC option is selected, CEC feature will be enabled. <i>Note: Depending on the selected option some items in Sound menu will appear as grayed out and will be unavailable.</i>
AVL (Automatic Volume Limiting)	Sets the sound to obtain fixed output level between programmes. If the Dolby Audio menu item is set to an option other than Off the AVL setting options will change. Auto, Night, Normal and Off options will be available. In Auto mode the TV will switch to Normal or Night mode automatically according to the current time information. If no time information is available this option will always function as Normal . When the TV switches to Night mode for the first time after setting this option as Auto , an information bar will pop up on the screen. Please note that compared to Normal mode Night mode provides more aggressive dynamic compression control which is suitable for silent environments.
Advanced Settings	
Equalizer	Selects the equalizer mode. Custom settings can be made only when in User mode.
Dynamic Bass	Enables or disables the Dynamic Bass.
Sound Mode	You can select a sound mode (If the viewed channel supports).
Digital Out	Sets digital out audio type. This option will not be available if the Sound Output option is not set as S/PDIF .
Headphone/ Lineout	When you connect an external amplifier to your TV using the headphone jack, you can select this option as Lineout . If you have connected headphones to the TV, set this option as Headphone . Please ensure before using headphones that this menu item is set to Headphone . If it is set to Lineout , the output from the headphone socket will be set to maximum which could damage your hearing.
Headphone	Sets headphone volume. This option will not be available if the Headphone/Lineout option is not set as Headphone . Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.
Reset	Resets some of the sound settings to factory defaults.

Network Menu Content

Network Type	Disable the network connection or change the connection type.
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Scan Wireless Networks	Start a search for wireless networks. This option will be available if the Network Type is set as Wireless Device .
Press WPS on your wifi router	If your modem/router device has WPS, you can directly connect to it using this option. Highlight this option and press OK . Go to your modem/router device and press the WPS button on it to make the connection. This option will be available if the Network Type is set as Wireless Device .
Internet Speed Test	Start a speed test to check your connection bandwidth. The result will be displayed on the screen when finished.
Advanced Settings	Change the IP and DNS configurations of your TV.
Wake On	Enable or disable this feature by setting it as On or Off .
<i>Note: For detailed information on the options of this menu refer to the Connectivity section.</i>	

Installation Menu Content	
Automatic channel scan (Retune)	Displays automatic tuning options. D. Aerial: Searches and stores aerial DVB stations. D. Cable: Searches and stores cable DVB stations. Analogue: Searches and stores analogue stations.
Manual channel scan	This feature can be used for direct broadcast entry.
Network channel scan	Searches for the linked channels in the broadcast system. D. Aerial: Searches for aerial network channels. D. Cable: Searches for cable network channels.
Analogue fine tune	You can use this setting for fine tuning analogue channels. This feature is not available if no analogue channels are stored and if currently watched channel is not an analogue channel.
Installation Settings (optional)	Displays installation settings menu. Standby Search (*): Your TV will search for new or missing channels while in standby. Any new found broadcasts will be shown. Dynamic Channel Update(*): If this option is set as Enabled, the changes on the broadcasts such as frequency, channel name, subtitle language etc., will be applied automatically while watching. (* Availability depends on model.
Clear Service List	Use this setting to clear channels stored. This setting is visible only when the Country option is set to Denmark, Sweden, Norway or Finland.
Select Active Network	This setting allows you to select only the broadcasts within the selected network to be listed in the channel list. This feature is available only for the country option of Norway.
Signal Information	You can use this menu item to monitor signal related information such as signal level/ quality, network name etc for available frequencies.
First time installation	Deletes all stored channels and settings, resets TV to factory settings.

System Menu Content	
Conditional Access	Controls conditional access modules when available.
Language	You may set a different language depending on the broadcaster and the country.
Privacy Settings (*)	Manage your privacy privileges for smart TV related applications. Press OK to enter the menu and set according to your preferences.
Parental	Enter correct password to change parental settings. You can easily adjust Menu Lock, Maturity Lock, Child Lock or Guidance in this menu. You can also set a new PIN or change the Default CICAM PIN using the related options. <i>Note: Some menu options may not be available depending on the country selection in the First Time Installation. Default PIN could have been set to 0000 or 1234. If you have defined the PIN(is requested depending on the country selection) during the First Time Installation use the PIN that you have defined.</i>
Date/Time	Sets date and time.
Sources	Edit the names, enable or disable selected source options. There are also Regular , Enhanced and Disabled options available for HDMI sources. Regular and Enhanced options are affecting the colour settings of the selected HDMI source. To be able to watch 4K or HDR/HLG images from an HDMI source related source setting should be set as Enhanced if the connected device is compatible with HDMI 2.0 and subsequent versions. Set as Regular if the connected device is HDMI 1.4 compatible. Set accordingly or disable the related HDMI source by setting as Disabled .
Accessibility	Displays accessibility options of the TV. This option will not be available if no channels are installed.
Hard of Hearing	Enables any special feature sent from the broadcaster.
Audio Description	A narration track will be played for the blind or visually impaired audience. Press OK to see all available Audio Description menu options. This feature is available only if the broadcaster supports it. <i>Note: Audio description sound feature is not available in recording or time shifting mode.</i>
Dialogue Enhancement	This feature provides sound postprocessing options for speech-gated dialogue enhancement. Off, Low, Medium and High options will be available. Set according your preference. <i>Note: This feature has an effect only if input audio format is AC-4 and this effect only applies to TV loudspeaker output.</i>
Netflix	If this feature is supported by your TV, you can view your ESN(*) number and deactivate Netflix. <i>(*) ESN number is an unique ID number for Netflix, created especially to identify your TV.</i> <i>Note: For 4K video streaming, a minimum 25Mb/s internet connection speed is required – For an example of the requirements for streaming 4K content you may find more information on the Netflix website (https://help.netflix.com/en/node/13444). When you start to stream video content via the internet the quality of your connection will be analysed and the full HD or 4K quality may take a short time to be realised, or in the event of a slow connection not be possible. You should check your internet capabilities with your internet provider if you are at all unsure.</i>
Device Settings	
CEC	With this setting you can enable and disable CEC functionality completely. Press Left or Right button to enable or disable the feature.
CEC Auto Power On	This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press Left or Right button to enable or disable the feature.
More	Displays other setting options of the TV.
Menu Timeout	Changes timeout duration for menu screens.
Standby LED	If set as Off the standby LED will not light up when the TV is in standby mode.
HBBTV (*)	You can enable or disable this feature by setting it as On or Off .
Software Upgrade	Ensures that your TV has the latest firmware. Press OK to see the menu options.

Application Version	Displays current software version.
Subtitle Mode	This option is used to select which subtitle mode will be on the screen (DVB subtitle / Teletext subtitle) if both is available. Default value is DVB subtitle. This feature is available only for the country option of Norway.
Auto Power Down	Sets the desired time for the TV to automatically go into standby mode when not being operated. This option can be set from 1 to 8 hours in steps of 1 hour. You can also disable this option by setting as Off .
Store Mode	Select this mode for store display purposes. Whilst Store Mode is enabled, some items in the TV menu may not be available.
AVS (Audio Video Sharing)	AVS feature allows you to share files stored on your smartphone or tablet pc. If you have a compatible smartphone or tablet pc and the appropriate software is installed, you can share/play photos on your TV. See instructions of your sharing software for more information.
Power Up Mode	This setting configures the power up mode preference. Last State and Standby options are available.
Virtual Remote	Enable or disable the virtual remote feature.
Show All Cookies (*)	Displays all saved cookies.
Delete All Cookies (*)	Deletes all saved cookies.
OSS	Displays Open Source Software license information.
Do Not Track	You can set your preference regarding the tracking behaviour for HbbTV services using this option.
Application Priority	You can set your preference regarding the priority between the broadcast applications and CICAM AppMMI applications using this option. In case a CICAM is inserted into the TV and a contention occurs between the applications the priority will be given to the selected type of application.

(*) These features may not be available depending on the model of your TV and the selected country in the First Time Installation.

General TV Operation

Using the Channel List

The TV sorts all stored stations in the channel list. You can edit this channel list, set favourites or set active stations to be listed by using the **Channels** menu options. Press the **OK** button to open the channel list. You can filter the listed channels or make advanced changes in the current list using the **Filter** and **Edit** tab options. Highlight the tab you want and press **OK** to see available options.

In order to add the channel you are currently watching to the **Home** menu, highlight the **Add to Home** option in the **Edit** tab in the **Channels** menu and press **OK**.

Managing the Favourite Lists

You can create four different lists of your favourite channels. Enter the **TV>Channels** menu or press the **OK** button in order to open the **Channels** menu. Highlight the **Edit** tab and press **OK** to see the editing options and select the **Tag/Untag channel** option. Select the desired channel on the list by pressing the **OK** button while the channel is highlighted. You can make multiple choices. You can also use the **Tag/Untag all** option to select all channels on the list. Then press **Back/Return** button to return to the Edit menu options. Select **Add/Remove Favourites** option and press the **OK** button again. Favourite channel list options will be displayed. Set the desired list option to **On**. The selected channel/s will be added to the list. In order to remove a channel or channels from a favourite list follow the same steps and set the desired list option to **Off**.

You can use the filtering function in the **Channels** menu to filter the channels in the channel list permanently according to your preferences. For instance, using the options of the **Filter** tab, you can set one of your four favourite lists to be displayed every time the channel list is opened.

Configuring Parental Settings

The **Parental** menu options can be used to prohibit users from viewing of certain programmes, channels and using of menus. These settings are located in the **Settings> System>Parental** menu.

To display parental lock menu options, a PIN should be entered. After coding the correct PIN, **Parental** menu will be displayed.

Menu Lock: This setting enables or disables access to all menus or installation menus of the TV.

Maturity Lock: If this option is set, TV gets the maturity information from the broadcast and if this maturity level is disabled, prohibits access to the broadcast.

Note: If the country option in the **First Time Installation** is set as **France, Italy or Austria**, **Maturity Lock's** value will be set to 18 as default.

Child Lock: If this option is set to **On**, the TV can only be controlled by the remote control. In this case the control buttons on the TV will not work.

Internet Lock: If this option is set to **ON**, the internet using applications will be disabled. Set to **OFF** to release these applications again.

Set PIN: Defines a new PIN number.

Default CICAM PIN: This option will appear as greyed out if no CI module is inserted into the CI slot of the TV. You can change the default PIN of the CI CAM using this option.

Note: Default PIN could have been set to **0000** or **1234**. If you have defined the PIN(is requested depending on the country selection) during the **First Time Installation** use the PIN that you have defined.

Some options may not be available depending on the model and/or on the country selection in the **First Time Installation**.

Electronic Programme Guide

By means of electronic programme guide 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.

To access the programme guide, press the **Guide** button on your remote. You can also use the **Guide** option under **TV** menu.

There are 2 different types of schedule layouts available, **Timeline Schedule** and **Now/Next**. To switch between these layouts highlight the tab with the name of the alternative layout on the upper side of the screen and press **OK**.

Use the directional buttons to navigate through the programme guide. Use the **Back/Return** button to use the tab options on the upper side of the screen.

Timeline Schedule

In this layout option, all events of the listed channels will be displayed by timeline. You can use the directional buttons to scroll through the list of the events. Highlight an event and press **OK** to display event options menu.

Press **Back/Return** button to use available tab options. Highlight **Filter** tab and press **OK** to see the filtering options. To change the layout highlight **Now/Next** and press **OK**. You can use the **Previous Day** and **Next Day** options to display the events of the previous and next day.

Highlight **Extras** tab and press **OK** to access below options.

Highlight Genre: Displays **Highlight Genre** menu.

Select a genre and press **OK**. The events in the programme guide matching the selected genre will be highlighted.

Guide Search: Displays searching options. Using these options, you can search the programme guide

database in accordance with the selected criteria. Matching results will be listed.

Now: Displays current event of the highlighted channel.

Zoom: Highlight and press **OK** to see events in a wider time interval.

Now/Next Schedule

In this layout option, only the current and next events of the listed channels will be displayed. You can use the directional buttons to scroll through the list of the events.

Press **Back/Return** button to use available tab options. Highlight **Filter** tab and press **OK** to see the filtering options. To change the layout highlight **Timeline Schedule** and press **OK**.

Event Options

Use the directional buttons to highlight an event and press **OK** button to display **Options** menu. The following options are available.

Select Channel: Using this option, you can switch to the selected channel in order to watch it. The programme guide will be closed.

More Info: Display detailed information on the selected event. Use up and down directional buttons to scroll through the text.

Set Timer on Event / Delete Timer on Event: Select **Set Timer on Event** option and press **OK**. You can set timers for future events. To cancel an already set timer, highlight that event and press the **OK** button. Then select **Delete Timer on Event** option. The timer will be cancelled.

Record / Delete Rec. Timer: Select the **Record** option and press the **OK** button. If the event is going to be broadcasted at a future time, it will be added to **Timers** list to be recorded. If the selected event is being broadcasted at the moment, recording will start immediately.

To cancel an already set record timer, highlight that event and press the **OK** button and select the option **Delete Rec. Timer**. The record timer will be cancelled.

IMPORTANT: Connect a USB disk to your TV while the TV is switched off. You should then switch on the TV to enable the recording feature.

Notes: You cannot switch to any other channel while there is an active recording or timer on the current channel.

It is not possible to set timer or record timer for two or more individual events at the same time interval.

Teletext Services

Press the **Text** button to enter. Press again to activate mix mode, which allows you to see the teletext page and the TV broadcast at the same time. Press once more to exit. If available, sections in the teletext pages will become colour-coded and can be selected by pressing the coloured buttons. Follow the instructions displayed on the screen.

Digital Teletext

Press the **Text** button to view digital teletext information. Operate it with the coloured buttons, cursor buttons and the **OK** button. The operation method may differ depending on the contents of the digital teletext. Follow the instructions displayed on the digital teletext screen. When the **Text** button is pressed again, the TV returns to television broadcast.

Software Upgrade

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

Software upgrade search via user interface

On the main menu select **Settings>System** and then **More**. Navigate to **Software upgrade** and press the **OK** button. Then select **Scan for upgrade** and press **OK** button to check for a new software upgrade.

If a new upgrade is found, it starts to download the upgrade. After the download is completed, a warning will be displayed, press **OK** button to complete software upgrade process and restart TV.

3 AM search and upgrade mode

Your TV will search for new upgrades at 3:00 o'clock if **Automatic scanning** option is set to **Enabled** and if the TV is connected to an aerial signal or to Internet. If a new software is found and downloaded successfully, it will be installed at the next power on.

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

All updates are automatically controlled. If a manual search is carried out and no software is found then this is the current version.

Troubleshooting & Tips

TV will not turn on

Make sure the power cord is plugged in securely to a wall outlet. Press the Power button on the TV.

Poor picture

- Check if you have correctly tuned the TV.
- Low signal level can cause picture distortion. Please check antenna connections.
- Check if you have entered the correct channel frequency if you have performed manual tuning.

No picture

- TV is not receiving any signal. Make sure the correct source has been selected.
- Is the antenna connected properly?
- Is the antenna cable damaged?
- Are suitable plugs used to connect the antenna?
- If you are in doubt, consult your dealer.

No sound

- Check if the TV sound is muted. Press the **Mute** button or increase the volume to check.
- Sound may be coming from only one speaker. Check the balance settings from Sound menu.

Remote control - no operation

- The batteries may be exhausted. Replace the batteries.
- The batteries maybe inserted incorrectly. Refer to the section "Inserting the Batteries into the Remote".

No signal on an input source

- It is possible that no device is connected.
- Check the AV cables and connections from your device.
- Check the device is switched on.

The Image is not centered in VGA source

To have your TV automatically center the image, enter the **PC Position** menu in **Picture** menu, highlight **Autoposition** and press **OK**. Wait for it to finish. In order to set the position of the image manually you can use **H Position** and **V Position** options. Select the desired option and use Left and Right directional buttons on the remote to set.

Recording unavailable

To record a programme, you should first correctly connect a USB storage device to your TV, while the TV is switched off. You should then switch on the TV to enable recording feature. If you cannot record, check the storage device is correctly formatted and there is sufficient space.

USB is too slow

If a "USB disk writing speed too slow to record" message is displayed on the screen while starting a recording, try restarting the recording. If you still get the same error, it is possible that your USB storage device does not meet the speed requirements. Try using a different USB storage device.

PC Input Typical Display Modes

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

Index	Resolution	Frequency
1	640x350	85Hz
2	640x480	60Hz
3	640x480	72Hz
4	640x480	75Hz
5	800x600	56Hz
6	800x600	60Hz
7	800x600	72Hz
8	800x600	75Hz
9	1024x768	60Hz
10	1024x768	70Hz
11	1024x768	75Hz
12	1024x768	85Hz
13	1152x864	75Hz
14	1280x768	60Hz
15	1280x768	75Hz
16	1280x960	60Hz
17	1280x960	75Hz
18	1280x1024	60Hz
19	1280x1024	75Hz
20	1360x768	60Hz
21	1366x768	60Hz
22	1400x1050	59Hz
23	1400x1050	60Hz
24	1400x1050	75Hz
25	1440x900	60Hz
26	1440x900	75Hz
27	1600x1200	60Hz
28	1680x1050	59Hz
29	1680x1050	60Hz
30	1920x1080	60Hz

AV and HDMI Signal Compatibility

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

(X: Not Available, O: Available)

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 File Formats

File Extension	Format	
	Video Codec	Audio
.mpg/.mpeg/.dat/.vob	MPEG1/2, H.264, VC1	MPEG Layer 1/2/3, AC3
.ts/.trp/.m2ts/.mts	MPEG1/2, H.264, VC1, HEVC/H.265	MPEG Layer 1/2/3, AC3, E-AC3
.avi	MPEG1/2, MPEG4, H.264, MJPEG	MPEG Layer 1/2/3, AC3, AAC, WMA
.mp4/.m4a/.m4v/.mov/.qt/.3gp/.3g2/.3gpp	MPEG1/2, H.263, MPEG4, H.264, HEVC/H.265	MPEG Layer 1/2/3, AAC LC, AC3
.mkv	MPEG 1/2, MPEG4, H.264, HEVC/H.265	MPEG Layer 1/2/3, AAC, AC3
.flv	Sorenson Spark, MPEG4, H.264	MPEG Layer 3, ADPCM, AAC LC
.ogm/.ogg	MPEG1/2, MPEG4	MP3, Vorbis
.asf/.wmv	MPEG4, WMV3, VC1	WMA, AMR-NB
.rm/.rmvb	RV30, RV40	COOK, AAC LC / HE-AA
.webm	VP9, VP8	OPUS, Vorbis

Picture File Formats

File Extension	Format
.jpg/.jpeg	JPEG, PJPEG
.bmp	BMP
.gif	GIF
.png	PNG
.tiff/.tif	TIFF
.webp	Webp

Audio File Formats

File Extension	Format	
	Video Codec	Audio
.mp3		mp3
.ac3		ac3
.aac		AAC
.wma		WMA
.wav		MPEG Layer 1/2/3, AAC, PCM
.flac		FLAC
.ogg	OGG	Vorbis
.m4a	M4A	AAC

Subtitle File Formats

External Subtitles	
Extension	Specification
.ssa	SubStation Alpha
.ass	Advanced SubStation Alpha
.srt	Subripper
.sub	Micro DVD / SubViewer
.sub + .idx	VOBSub
.txt	Micro DVD / TMPlayer / MPL2
.mpl	MPL2
.smi	Sami
.jss	JACOSUB
.ttml	TTML
.txt / .sub	DVDSUBTITLE
.lrc	-

Internal Subtitles	
Extension	Specification
.mkv	VOBSub
.mkv	ASS / SSA / TEXT
.dat, .mpg, .mpeg, .vob	DVD Subtitle
.mp4	DVD Subtitle, TEXT

Supported DVI Resolutions

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

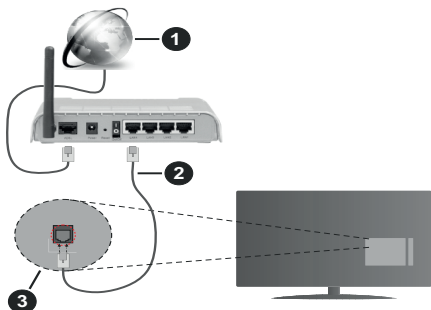
	56Hz	60Hz	66Hz	70Hz	72Hz	75Hz
640x480		x				x
800x600	x	x				x
1024x768		x		x		x
1280x768		x				x
1280x960		x				
1360x768		x				
1366x768		x				
1280x1024		x		x		x
1400x1050		x				
1600x900		x				
1920x1080		x				

Connectivity

Wired Connectivity

To Connect to a Wired Network

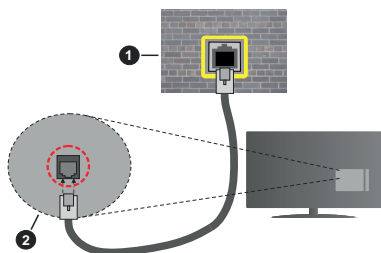
- You must have a modem/router connected to an active broadband connection.
- Connect your TV to your modem/router via an Ethernet cable. There is a LAN port at the rear (back) of your TV.



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

To configure wired settings refer to the **Network** section in the **Settings** menu.

- You might be able to connect your TV to your LAN depending on your network's configuration. In such a case, use an Ethernet cable to connect your TV directly to the network wall outlet.



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

Configuring Wired Device Settings

Network Type

The **Network Type** can be selected as **Wired Device**, **Wireless Device** or **Disabled**, in accordance with the active connection to the TV set. Select this as **Wired Device** if you are connecting via an Ethernet cable.

Internet Speed Test

Highlight **Internet Speed Test** and press the **OK** button. TV will check the internet connection bandwidth and display the result when complete.

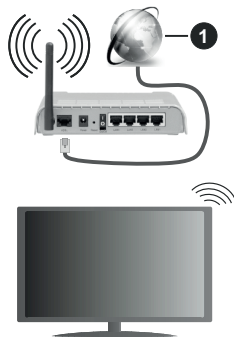
Advanced Settings

Highlight **Advanced Settings** and press the **OK** button. On the next screen you can change the IP and DNS settings of the TV. Highlight the desired one and press Left or Right button to change the setting from **Automatic** to **Manual**. Now you can enter the **Manual IP** and / or **Manual DNS** values. Select the related item in the drop down menu and enter the new values using the numeric buttons of the remote. Highlight **Save** and press the **OK** button to save settings when complete.

Wireless Connectivity

To Connect to a Wireless Network

The TV cannot connect to the networks with a hidden SSID. To make your modem's SSID visible, you should change your SSID settings via the modem's software.



1. Broadband ISP connection

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

- The frequency and channel differ depending on the area.
- 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 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.

Configuring Wireless Device Settings

Open the **Network** menu and select **Network Type as Wireless Device** to start connection process.

Highlight **Scan Wireless Networks** option and press **OK** to start a search for available wireless networks. All found networks will be listed. Highlight your desired network from the list and press **OK** to connect.

Note: If the modem supports N mode, you should set N mode settings.

If the selected network is password-protected, enter the correct key by using the virtual keyboard. You can use this keyboard via the directional buttons and the **OK** button on the remote control.

Wait until the IP address is shown on the screen.

This means that the connection is now established. To disconnect from a wireless network, highlight **Network Type** and press Left or Right buttons to set as **Disabled**.

If your router has WPS, you can directly connect to the modem/router without entering a password or adding the network first. Highlight **Press WPS on your wifi router** option and press **OK**. Go to your modem/router device and press the WPS button on it to make the connection. You will see a connection confirmation on your TV once the devices have paired. Select **OK** to proceed. No further configuration is required.

Highlight **Internet Speed Test** and press the **OK** button to check your internet connection speed. Highlight **Advanced Settings** and press the **OK** button to open the advanced setting menu. Use directional and numeric buttons to set. Highlight **Save** and press the **OK** button to save settings when complete.

Other Information

The status of the connection will be displayed as **Connected** or **Not Connected** and the current IP address, if a connection is established.

Connecting to your mobile device via WLAN

- If your mobile device has WLAN feature, you can connect it to your TV via a router, in order to access the content in your device. For this, your mobile device must have an appropriate sharing software.

Connect your TV to your router following the steps mentioned in the sections above.

Afterwards, connect your mobile device to the router and then activate the sharing software on your mobile device. Then, select files that you want to share with your TV.

If the connection is established correctly, you will be able to access the shared files installed on your mobile device via the Audio Video Sharing (AVS) feature of your TV.

Highlight the **AVS** option in the **Sources** menu and press **OK**, available media server devices in the network will be displayed. Select your mobile device and press the **OK** button to continue.

- If available, you can download a virtual remote controller application from the server of your mobile device application provider.

Note: This feature may not be supported on all mobile devices.

Wake ON

Wake-on-LAN (WoL) and Wake-on-Wireless LAN (WoWLAN) are standards that allow a device to be turned on or woken up by a network message. The message is sent to the device by a program executed on a remote device connected to the same local area network, such as a smartphone.

Your TV is WoL and WoWLAN compatible. This feature might be disabled during the First Time Installation process. To enable this feature set the **Wake On** option in the **Network** menu as **On**. It is necessary that both the device, from which the network message will be sent to the TV, and the TV are connected to the same network. Wake On feature is only supported for Android OS devices and can only be used via YouTube and Netflix applications.

In order to use this feature the TV and the remote device should be connected at least once while the TV is on. If the TV is powered off, the connection should be re-established, the next time it is switched on. Otherwise this feature will be unavailable. This does not apply, when the TV is switched into the standby mode.

If you want your TV to consume less power in standby mode, you can disable this feature by setting the **Wake On** option as **Off**.

Wireless Display

Wireless Display is a standard for streaming video and sound content. This feature provides the ability to use your TV as wireless display device.

Using with mobile devices

There are different standards which enable sharing of screens including graphical, video and audio content between your mobile device and TV.

Plug the wireless USB dongle to TV first, if the TV doesn't have internal WLAN feature.

Then press the **Source** button on the remote and switch to **Wireless Display** source.

A screen appears stating that the TV is ready for connection.

Open the sharing application on your mobile device. These applications are named differently for each brand, refer to the instruction manual of your mobile device for detailed information.

Scan for devices. After you select your TV and connect, the screen of your device will be displayed on your TV.

Note: This feature can be used only if the mobile device supports this feature. If you experience problems with the connection check if the operating system version you use supports this feature. There may be incompatibility problems with the operating system versions which are released after the production of this TV. Scanning and connecting processes differ according to the programme you use.

Connectivity Troubleshooting

Wireless Network Not Available

- Ensure that any firewalls of your network allow the TV wireless connection.
- Try searching for wireless networks again, using the **Network** menu screen.

If the wireless network does not function properly, try using the wired network in your home. Refer to the **Wired Connectivity** section for more information on the process.

If the TV does not function using the wired connection, check the modem (router). If the router does not have a problem, check the internet connection of your modem.

Connection is Slow

See the instruction book of your wireless modem to get information on the internal service area, connection speed, signal quality and other settings. You need to have a high speed connection for your modem.

Disruption during playback or slow reactions

You could try the following in such a case:

Keep at least three meters distance from microwave ovens, mobile telephones, bluetooth devices or any other WLAN compatible devices. Try changing the active channel on the WLAN router.

Internet Connection Not Available / Audio Video Sharing Not Working

If the MAC address (a unique identifier number) of your PC or modem has been permanently registered, it is possible that your TV might not connect to the internet. In such a case, the MAC address is authenticated each time when you connect to the internet. This is a precaution against unauthorized access. Since your TV has its own MAC address, your internet service provider cannot validate the MAC address of your TV. For this reason, your TV cannot connect to the internet.

Contact your internet service provider and request information on how to connect a different device, such as your TV, to the internet.

It is also possible that the connection may not be available due to a firewall problem. If you think this causes your problem, contact your internet service provider. A firewall might be the reason of a connectivity and discovery problem while using the TV in Audio Video Sharing mode or while browsing via Audio Video Sharing feature.

Invalid Domain

Ensure that you have already logged on to your PC with an authorized username/password and also ensure that your domain is active, prior to sharing any files in your media server program on your PC. If the domain is invalid, this might cause problems while browsing files in Audio Video Sharing mode.

Using Audio Video Sharing Network Service

Audio Video Sharing feature uses a standard that eases the viewing process of digital electronics and makes them more convenient to use on a home network.

This standard allows you to view and play photos, music and videos stored in the media server connected to your home network.

1. Server Software Installation

The Audio Video Sharing feature cannot be used if the server programme is not installed onto your PC or if the required media server software is not installed onto the companion device. Prepare your PC with a proper server programme.

2. Connect to a Wired or Wireless Network

See the **Wired/Wireless Connectivity** chapters for detailed configuration information.

3. Enable Audio Video Sharing

Enter the **Settings>System>More** menu and enable the **Audio Video Sharing** option.

4. Play Shared Files via Media Browser

Highlight the **AVS** option in the **Sources** menu by using the directional buttons and press **OK**. Available media server devices in the network will be listed. Select one and press **OK** to continue. The media browser will then be displayed.

Refer to the **Media Browser** menu section for further information on file playback.

If a problem occurs with the network, switch your television off at the wall socket and back on again. Trick mode and jump are not supported with the Audio Video Sharing feature.

PC/HDD/Media Player or any other devices that are compatible should be used with a wired connection for higher playback quality.

Use a LAN connection for quicker file sharing between other devices like computers.

Note: *There may be some PC's which may not be able to utilize the Audio Video Sharing feature due to administrator and security settings (such as business PC's).*

Apps

You can access the applications installed on your TV from **Apps** menu. Highlight an app and press **OK** to launch.

In order to manage the apps installed on your TV, add new apps from the market or to see all available apps in full screen mode highlight the **Add More** option and press **OK**. Using this menu option you can add an installed app to **Home** menu, launch or remove it. Removed apps will no longer be accessible from **Apps** menu. You can also add new apps from the market. In order to enter the market highlight the shopping basket logo located on the upper left side of the screen and press **OK**. Available apps in the market will be displayed. Use directional buttons to highlight an app and press **OK**. Highlight **Add to Apps** option and press **OK** again to add the selected app to **Apps** menu.

For quick access to **Add More** menu you can press the **Internet** button on the remote, if this button is available.

Notes:

Possible application dependent problems may be caused by the content service provider.

Third party internet services may change, be discontinued or restricted at any time.

Internet Browser

To use the internet browser, enter the **Apps** menu first. Then launch the internet browser application which has an orange coloured logo with earth symbol on it.

In the initial screen of the browser, the thumbnails of the predefined (if any) links to web sites available will be displayed as **Speed Dial** options along with the **Edit Speed Dial** and the **Add to Speed Dial** options.

To navigate the web browser, use the directional buttons on the remote or a connected mouse. To see the browser options bar, move the cursor to the top of the page or press the **Back/Return** button. **History**, **Tags** and **Bookmarks** options and the browser bar which contains previous/next buttons, the refresh button, the address/search bar, the **Speed Dial** and the **Vewd** buttons are available.

To add a desired website to the **Speed Dial** list for quick access, move the cursor to the top of the page or press the **Back/Return** button. The browser bar will appear. Highlight the **Speed Dial** -  button and press the **OK** button. Then select **Add to Speed Dial** option and press the **OK** button. Fill in the blanks for **Name** and **Address**, highlight **OK** and press the **OK** button to add. Whilst you are on the site you wish to add to the **Speed Dial** list, highlight the **Vewd** button and press the **OK** button. Then highlight **Add to Speed**

Dial option in the submenu and press the **OK** button again. **Name** and **Address** will be filled automatically according to the site you are visiting. Highlight **OK** and press the **OK** button to add.

You can also use the **Vewd** menu options to manage the browser. Highlight the **Vewd** button and press the **OK** button to see available page specific and general options.

There are various ways to search or visit websites using the web browser.

Enter the address of a website(URL) into the search/address bar and highlight the **Submit** button on the virtual keyboard and press the **OK** button to visit the site.

Enter keyword/s into the search/address bar and highlight the **Submit** button on the virtual keyboard and press the **OK** button to start a search for the related websites.

Highlight a Speed Dial thumbnail and press the **OK** button to visit the related website.

Your TV is compatible with USB mice. Plug your mouse or wireless mouse adaptor into the USB input of your TV for easier and quicker navigation.

Some web pages include flash content. These are not supported by the browser.

Your TV does not support any download processes from the internet via the browser.

All sites on the internet might not be supported. According to the site; content problems may occur. In some circumstances video contents might not be able to be played.

HBBTV System

HbbTV (Hybrid Broadcast Broadband TV) is a new industry 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 broadcaster marks one application as "autostart" and this one is started by the platform automatically. The autostart applications are generally launched with a small red button icon to notify the user that there is an HbbTV application on that channel. Press the red button to open the application page. After the page is displayed you can go back to the initial red button icon state by pressing the red button again. You can toggle between the red button icon mode and full UI mode of the application via pressing red button. It should

be noted that the red button switching capability is provided by the application and some application may behave differently (other colour buttons such as green, yellow, blue, may be defined for some other functions, e.g. shortcuts).

If you switch to another channel while an HbbTV application is active (either in red button icon mode or full UI mode), the following scenarios can occur.

- The application can continue running.
- The application can be terminated.
- The application can be terminated and another autostart red button application can be launched.

HbbTV allows the applications to be retrieved both from broadband or broadcast. The broadcaster may enable both ways or one of them. If the platform does not have an operational broadband connection, the platform can still launch applications transmitted on broadcast.

The autostart red button applications generally provide links to other applications. The user then can switch to other applications by using the links provided. The applications should provide a way to terminate themselves, usually **Exit** button is used for this.

HbbTV applications use keys on the remote control to interact with the user. When an HbbTV application is launched, the control of some keys 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 user can use play, pause, stop, forward, and rewind keys on the remote control to interact with the AV content.

Note: You can enable or disable this feature from the **More** menu in **Settings>System** menu. Depending on the model of your TV and the selected country option in the First Time Installation this feature might be available in the **Settings>System>Privacy Settings** menu instead of the **Settings>System>More** menu.

Smart Center

Smart Center is a mobile application running on iOS and Android platforms. With your tablet or phone, you can easily stream your favourite live shows and programmes from your smart TV. Also; you can launch your applications, use your tablet as a remote control for your TV and share media files.

Note: Being able to use all functions of this application depends on the features of your TV.

Getting Started

To be able to use internet based features, your modem/router must be connected to the internet.

IMPORTANT: Make sure the TV and mobile device are connected to the same network.

For media sharing feature **Audio Video Sharing** option should be enabled(if available). Press the **Menu** button on the remote, select **Settings>System>More** menu and press **OK**. Highlight **Audio Video Sharing** and change as **Enabled**. Your TV is ready to connect to your mobile device now.

Install the **Smart Center** application onto your mobile device.

Start the smart center application. If all connections are configured properly, you will see your TV's name on your mobile device. If your TV's name doesn't appear on the list, wait a while and tap on the **Refresh** widget. Select your TV from the list.

Mobile Device screen

On the main screen you can find tabs to access various features.

The application retrieves actual channel list from TV first when it starts.

MY CHANNELS: The programmes of first four channels from the channel list retrieved from the TV are shown. You can change the listed channels. Press on the channel thumbnail and hold. A list of channels will be displayed and you can choose your desired channel to be replaced.

TV: You can watch content through the TV tab. In this mode you can navigate through the channel list retrieved from your TV and click on thumbnails to view the detail pages.

RECORDINGS: You can view your active recordings(if available) and reminders through this tab. To delete any item, simply press on the delete icon found on each row.

EPG(Electronic programme guide): You can view the broadcast schedules of selected channel lists through this tab. You can also navigate through channels by pressing on the selected channel on the EPG grid. Please note that updating / refreshing the EPG information may take a while depending on your network and web service quality.

Note: Internet connection is required for WEB based EPG informations.

SETTINGS: Configure the application to your liking. You can change;

Auto-lock (Only in IOS): The screen of the device automatically turns off after a certain amount of time. Default is off, which means the screen will always stay on.

Auto-enable FollowMeTV: FollowMeTV function (if available) will start automatically when this setting is enabled. Default is disabled.

Auto-connection to TV: When enabled, your mobile device will automatically connect to last connected TV and skips the TV search screen.

Change TV (Only in IOS): Shows the currently connected TV. You can press on this setting to go to the "TV search" screen and change to a different TV.

Edit custom channel list: You can edit your custom channel list using this setting.

Choose channel list source: You can choose the channel list source to be used in the application. The options are "TV List" and "Custom List". Additionally you can activate "Remember my choice" option to set the selected channel list source as a constant choice. In this case if the selected source is available it will be used in the application.

Version No: Displays the current version of the application.

Detail Page

To open detail page tap on a programme. On the detail page screen you can get detailed information of the programmes you select. There are "Details", "Cast&Crew" and "Videos" tabs to find on this page.

DETAILS: This tab provides summary and information about the selected programme. Also there are links to facebook and twitter pages of the programme selected.

CAST&CREW: Shows all the people contributed to the current programme.

VIDEOS: Provides videos on Youtube related to the selected programme.

Note: For some functions an internet connection may be required.

FollowMe TV Feature (if available)

Tap on the **FOLLOW ME TV** widget located at the bottom left of the screen of your mobile device to change the layout for **FollowMe TV** feature.

Tap the play icon to start streaming of the content from the TV to your mobile device. Available if your device is in your routers operation range.

Mirror Mode

This mode of FollowMe TV feature is enabled by default and allows streaming the content from any other selected TV sources and Media Browser.

Notes:

Note that only digital(DVB-T/C/S) SD and HD channels are supported.

Multilanguage audio support and subtitle on/off features are not functional.

The streaming performance may change depending on the quality of your connection.

Media Share Page

To access the **Media Share** widget tap on the **Up-arrow** on the bottom left side of the screen.

If the Media Share widget is pressed, a screen is displayed where you can select the media file type to share with your TV.

Note: Not all image file formats are supported. This function will not work if Audio Video Sharing feature is not supported.

Smart Remote Feature

You can use your mobile device as a remote control for your TV once it has connected to the TV. To use smart remote's full features tap on the **Up-arrow** on the bottom left side of the screen.

Voice Recognition

You can tap on the **Microphone** widget and manage your application, giving voice commands such as "Volume Up/Down!", "Programme Up/Down!".

Note: This feature is only for android based devices available.

Keyboard Page

The keyboard page can be opened in two ways; by pressing the **Keyboard** widget on the application screen or automatically by receiving a command from the TV.

Requirements

1. Smart TV
2. Network connection
3. Mobile Device based on Android or iOS platform (Android OS 4.0 or higher; IOS 6 or higher version)
4. Smart Center app.(to be found on online application stores based on Android and iOS platforms)
5. Router modem
6. USB storage device in FAT32 format (required for USB Recording feature, if available)

Notes:

For Android devices, Normal(mdpi), Large(hdpi) and Extra Large(xhdpi) screen sizes are supported. Devices with 3" or smaller screen sizes are not supported.

For iOS devices, all screen sizes are supported.

User interface of the Smart Center application is subject to change according to version installed on your device.

Alexa Ready

Alexa is Amazon's cloud-based voice service available on many voice controlled assistant devices. Your TV is compatible with and ready to be utilized with Alexa devices.

Works With Alexa

By means of the Works With Alexa feature you can control the functions of your TV with Alexa devices. In order to do this, the setup process should be completed. The setup can be carried out by using the **Works With Alexa** option in the **Settings>System** menu.

Setup process

The wizard will guide you through the setup process.

- On the first screen you will be informed about the feature. Highlight **Start** and press **OK** to proceed.

- An authentication code will be created and displayed on the screen. Use your computer or any other device with internet access to go to the internet address (URL) shown on the screen. You will be directed to a page where you can sign in to your Amazon account first, if you are not already signed in. Then you will be directed to a page where you can enter the authentication code you see on the TV and link your TV to your Amazon account.
- If the linking process was successful you will be asked to determine a name for your TV, called 'Friendly Name'(**FN**). A 'Friendly Name' is a name that reminds you of your TV, such as 'Living Room TV', 'Kitchen TV', 'Dining Room TV', etc. Choose an easy-to-say name. You will say this name to tell Alexa which TV to control. When you are done, highlight **OK** and press **OK**.
- Examples about the use of the feature will be displayed on the next screen. Press **OK** to finish the setup.

Once the setup is complete, you will be able to control the functions of your TV with Alexa.

Note: Make sure that the devices are connected to the internet.

Example Commands

Here are some voice commands that you can use:

Command	Function
Alexa, turn on ' FN '	Powers on the TV
Alexa, turn off ' FN '	Powers off the TV
Alexa, play ' FN '	Starts media playback
Alexa, pause ' FN '	Pauses media playback
Alexa, resume ' FN '	Resumes media playback
Alexa, stop ' FN '	Stops media playback
Alexa, fast forward on ' FN '	Advances media in fast forward mode
Alexa, rewind on ' FN '	Rewinds media
Alexa, set the volume of ' FN ' to 50	Sets the volume to the specified level
Alexa, turn the volume up on ' FN '	Increases volume by 10 units
Alexa, turn the volume down on ' FN '	Decreases volume by 10 units
Alexa, mute ' FN '	Mutes sound
Alexa, unmute ' FN '	Unmutes sound
Alexa, change the input to "input_name" on ' FN '	The TV switches to the input source with the specified name (e.g., HDMI 1)
Alexa, change channel to "channel_number" on ' FN '	The TV switches to the channel with the specified number (e.g., channel 200)

Command	Function
Alexa, change channel to "channel_name" on ' FN '	The TV switches to the channel with the specified name
Alexa, channel up on ' FN '	The TV switches to the next higher channel, if any available
Alexa, channel down on ' FN '	The TV switches to the next lower channel, if any available
Alexa, next channel on ' FN '	The TV switches to the next channel on the channel list

FN is the abbreviation for 'Friendly Name'.

DVB functionality information

This DVB receiver is only suitable for use in the country which it was designed to be used in.

Although this DVB receiver conforms to the latest DVB specifications at the time of manufacture, we cannot guarantee compatibility with future DVB transmissions due to changes that may be implemented in broadcast signals and technologies.

Some digital television functions may not be available in all countries.

We continually strive to improve our products; therefore, specifications may change without prior notice.

For advice on where to purchase accessories, please contact the store where you purchased your equipment.