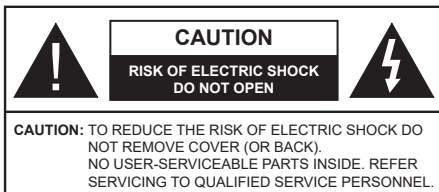


Contents

Safety Information	2	Connectivity Troubleshooting	28
Markings on the Product.....	2	Using Audio Video Sharing Network Service.....	28
Environmental Information.....	3	Apps	28
Features	3	Internet Browser	29
Accessories Included.....	4	HBTV System.....	29
Standby Notifications.....	4	Smart Center	30
TV Control Switch & Operation.....	4	Alexa Ready Feature.....	31
Using Main TV Menu	5	Mobil TV Instructions	33
Inserting the Batteries into the Remote	6	DVB functionality information	34
Power Connection	6		
Antenna Connection	6		
License Notification	6		
Disposal Information.....	7		
Specification	7		
Remote Control	9		
Connections.....	10		
Switching On/Off.....	11		
First Time Installation.....	11		
Media Playback via USB Input	12		
USB Recording.....	12		
Media Browser.....	13		
FollowMe TV.....	13		
CEC	13		
E-Manual	14		
Settings Menu Contents	15		
General TV Operation	21		
Using the Channel List	21		
Configuring Parental Settings.....	21		
Electronic Programme Guide	21		
Teletext Services	22		
Software Upgrade.....	22		
Troubleshooting & Tips	22		
PC Input Typical Display Modes.....	23		
AV and HDMI Signal Compatibility	23		
Supported File Formats for USB Mode	24		
Video File Formats	24		
Picture File Formats	24		
Audio File Formats	24		
Subtitle File Formats.....	25		
Supported DVI Resolutions	25		
Connectivity.....	26		
Wireless Connectivity	26		
Wake ON	27		
Wireless Display	27		
Connecting Other Wireless Devices.....	27		

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.

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. If you like to set the **Backlight** to a fixed value set as **Custom** and adjust the **Backlight** (located under the **Energy Saving** setting) manually using Left or Right buttons on the remote. Set as **Off** to turn this setting off.

*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.

If pressed Right button or Left button consecutively, **"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 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
- 802.11 a/b/g/n built in WLAN Support
- Audio Video Sharing
- HbbTV

Accessories Included

- Remote Control
- Batteries: 2 x AAA
- Instruction Book
- DC 12 V Input Power Adaptor
- Car Plug

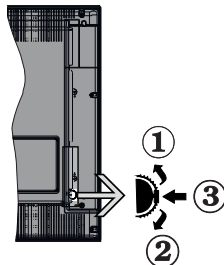
Standby Notifications

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 TV OFF** 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 TV OFF** 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 TV OFF** option from the **Settings>System>More** menu.

TV Control Switch & Operation



1. Up direction
2. Down direction
3. Volume / Info / Sources List selection and Standby-On switch

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

To change volume: Increase the volume by pushing the button up. Decrease the volume by pushing the button down.

To change channel: Press the middle of the button in, the information banner will appear on the screen. Scroll through the stored channels by pushing the button up or down.

To change source: Press the middle of the button in twice (for the second time in total), the source list will appear on the screen. Scroll through the available sources by pushing the button up or down.

To turn the TV off: Press the middle of the button in and hold it down for a few seconds, the TV will turn into standby mode.

To turn on the TV: Press the middle of the button in, the TV will turn on.

Notes:

If you turn the TV off, this cycle starts again beginning with the volume setting.

Main menu OSD cannot be displayed via 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.

Using Main TV Menu

When the **Menu** button is pressed, the main TV menu will appear at the bottom of 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. Guide

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

2.2. Channels

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

2.3. 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 be 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.

2.4. Recordings

You can manage your recordings using the options of this menu. You can playback, edit, delete or sort previously recorded events. Highlight a tab by using the Left or Right direction button and press **OK** to see available options.

Recording Settings

You can also configure your recording preferences using the **Settings** tab in the **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.

3. Settings

You can manage the settings of your TV using the options of this menu. Refer to **Settings Menu Contents** 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.

Inserting the Batteries into the Remote

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

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

Insert two 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.

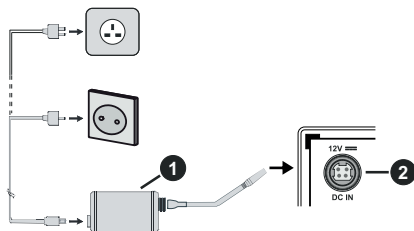
A message will be displayed on the screen when the batteries are low and must be replaced. Note that when the batteries are low, the performance of the remote control may be impaired.

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 **12 V DC** supply. For this, an adaptor is used which gives **12 V** voltage. Connect this adaptor to a system that supplies **100-240V AC, 50/60Hz**.

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



1. AC adaptor
2. Power Input, DC 12 V terminal

Important safety information

Be sure to ground the connection properly

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

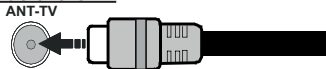


Surely connect the ground wire.

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** and **HDMI High-Definition Multimedia Interface**, and the **HDMI Logo** are trademarks or registered trademarks of **HDMI Licensing Administrator, Inc.** in the United States and other countries.



Manufactured under license from **Dolby Laboratories**. **Dolby**, **Dolby Audio** and the double-D symbol are trademarks of **Dolby Laboratories**. Confidential unpublished works. Copyright ©1992-2019 **Dolby Laboratories**. All rights reserved.

YouTube and the YouTube logo are trademarks of Google Inc.

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

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

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

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

Disposal Information

[European Union]

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

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

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

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

[Business users]

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

[Other Countries outside the European Union]

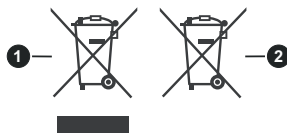
These symbols are only valid in the European Union.

Contact your local authority to learn about disposal and recycling.

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

Some collection points accept products free of charge.

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



1. Products
2. Battery

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	100-240V AC, 50/60Hz
Audio	German+Nicam Stereo
Audio Output Power (WRMS.) (10% THD)	2 x 2,5
Power Consumption (W)	47W
Networked Standby Power Consumption (W)	< 2
Weight (kg)	3,5
TV Dimensions DxLxH (with stand) (mm)	135 x 554,5 x 370
TV Dimensions DxLxH (without stand) (mm)	40/63 x 554,5 x 341
Display	24"
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max

Wireless LAN Transmitter Specifications

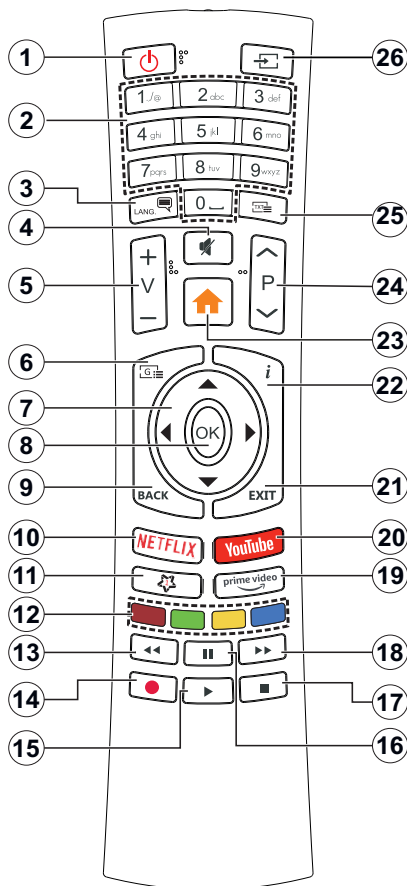
Frequency Ranges	Max Output Power
2400 - 2483,5 MHz (CH1-CH13)	< 100 mW
5150 - 5250 MHz (CH36 - CH48)	< 200 mW
5250 - 5350 MHz (CH52 - CH64)	< 200 mW
5470 - 5725 MHz (CH100 - CH140)	< 200 mW

Country Restrictions

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-Alesund
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.






















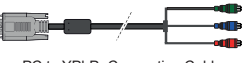









(*) MY BUTTON 1:

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.

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

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 (Coaxial 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)		
	12V DC Connection (back)	DC 12V Input	

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, 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 (100-240V AC, 50/60 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 middle of the side function switch on the TV in.

To Switch the TV Off

Press the **Standby** button on the remote control or press the middle of the side function switch on the TV in and hold it down for a few seconds, 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 image files the **Media Browser** menu can only display 1000 image files stored on the connected USB device.

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.

Record, Play, Pause, Display (for playlist dialogue) keys can not be used when teletext is on. If a recording starts from timer when teletext is on, teletext is automatically turned off. Also teletext usage is disabled when there is an ongoing recording or playback.

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. You can press **Record** button on the remote control again to record the next event after selecting the next programme from within the electronic programme guide. 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 forwarding speed.

Recording Configuration

Select the **Settings** tab in the **TV>Recordings** menu to configure the recording settings and press **OK**.

Format Disk: You can use the **Format Disk** option for formatting the connected USB disk. Your PIN will be required to use the **Format Disk** feature.

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.

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.





Media Browser

You can play back music and movie files and display photo files stored on a USB storage device by connecting it to your TV. Connect a USB storage device to one of the USB inputs located on the side of the TV.

After connecting a USB storage device to your TV **Media Browser** menu will be displayed on the screen. You can access the content of the connected USB device any time later from the **Sources** menu. Select the related USB input option from this menu and press **OK**. Then select the file of your choice and press **OK** to display or play it back.

You can set your **Media Browser** preferences by using the **Settings** menu. **Settings** menu can be accessed via the information bar which is displayed on the bottom of the screen when pressed the **Info** button while playing back a video file or displaying a picture file. Press the **Info** button, highlight the gear wheel symbol positioned on the right side of the information bar and press **OK**. **Picture Settings, Sound Settings,**

Media Browser Settings and Options menus will be available. The contents of these menus may change according to the type of the currently open media file. Only **Sound Settings** menu will be available while playing back audio files.

Loop/Shuffle Mode Operation	
Start playback and activate 	All files in the list will be continuously played in original order
Start playback and activate 	The same file will be played continuously (repeat)
Start playback and activate 	All files in the list will be played once in random order
Start playback and activate 	All files in the list will be continuously played in the same random order

To use the functions on the information bar highlight the symbol of the function and press **OK**. To change the status of a function highlight the symbol of the function and press **OK** as much as needed. If the symbol is marked with a red cross, that means it is deactivated.

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. UHD (4K, Ultra HD) channels are not supported and 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>More** 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>More** 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 does not mute its other audio outputs automatically. You will need to decrease TV volume to zero manually if you wish to hear the ARC audio only (same as optical or co-axial digital audio outputs). If you want to change connected device's volume level, you should select that device from the source list. In that case volume control keys are directed to connected audio device.

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.

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 Contents

Picture Menu Contents	
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. The backlight function will be inactive if the Energy Saving is set to an option other than Custom .
Advanced Settings	
Dynamic Contrast	You can change the dynamic contrast ratio to desired value.
Noise Reduction	If the signal is weak and the picture is noisy, use the Noise Reduction setting to reduce the amount of noise.
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.
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.
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.
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.
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.
Reset	Resets the picture settings to factory default settings (except Game mode).
<i>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.</i>	

Sound Menu Contents	
Volume	Adjusts the volume level.
Equalizer	Selects the equalizer mode. Custom settings can be made only when in User mode.
Balance	Adjusts whether the sound comes from the left or right speaker.
Headphone	Sets headphone volume. Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.
Sound Mode	You can select a sound mode (If the viewed channel supports).
Audio Link	Press OK to open the Audio Link menu screen. Using this screen you can discover and connect the sound devices to your TV wirelessly.
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.
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.
Dynamic Bass	Enables or disables the Dynamic Bass.
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>
Digital Out	Sets digital out audio type.

Network Menu Contents	
Network Type	Disable the network connection or set the connection type as Wireless Device .
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 Contents	
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. <i>(*) Availability depends on model.</i>
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 Contents	
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	<p>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.</p> <p><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></p>
Date/Time	Sets date and time.
Sources	Edit the names, enable or disable selected source options.
Accessibility	Displays accessibility options of the TV.
Hard of Hearing	Enables any special feature sent from the broadcaster.
Audio Description	<p>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.</p> <p><i>Note: Audio description sound feature is not available in recording or time shifting mode.</i></p>
Netflix	<p>If this feature is supported by your TV, you can view your ESN(*) number and deactivate Netflix.</p> <p><i>(*) ESN number is a unique ID number for Netflix, created especially to identify your TV.</i></p> <p><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></p>
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 TV OFF	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.

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.
Speakers (*)	To hear the TV audio from the connected compatible audio device set as Amplifier . You can use the remote control of the TV to control the volume of the audio device.
Smart Remote	Press OK to open the Smart Remote menu screen. Using this screen you can discover and connect the remote controller devices to your TV wirelessly.
Show All Cookies (*)	Displays all saved cookies.
Delete All Cookies (*)	Deletes all saved cookies.
OSS	Displays Open Source Software license information.

(*) 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.

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	640x480	60Hz
2	640x480	75Hz
3	800x600	56Hz
4	800x600	60Hz
5	800x600	72Hz
6	800x600	75Hz
7	1024x768	60Hz
8	1024x768	70Hz
9	1024x768	75Hz
10	1152x864	75Hz
11	1280x768	60Hz
12	1360x768	60Hz

13	1280x960	60Hz
14	1280x1024	60Hz
15	1280x1024	75Hz
16	1400x1050	60Hz
17	1440x900	60Hz
18	1440x900	75Hz
19	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, 480p	60Hz O
	576i, 576p	50Hz O
	720p	50Hz,60Hz O
	1080i	50Hz,60Hz O
	1080p	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

Extension	Video Codec	Max. Resolution & Frame Rate & Bit Rate
.mpg, .mpeg, .dat, .vob	MPEG1/2, H.264, VC1	H.264: 1080Px2@30fps - 50Mbps, 1080P@60fps - 50Mbps Other: 1080P@60fps - 50Mbps
.ts, .trp, .m2ts		
.avi	MPEG1/2, MPEG4, H.264, MJPEG	
.mp4, .m4a, .m4v, .mov, .qt, .3gp, .3g2, .3gpp	MPEG1/2, H.263, MPEG4, H.264	
.mkv	MPEG 1/2, MPEG4, H.264	
.flv	Sorenson Sp, MPEG4, H.264	
.ogm, .ogg	MPEG1/2, MPEG4	
.asf, .wmv	MPEG4, WMV3, VC1	
.rm, .rmvb	RV30, RV40	
.webm	VP9, VP8	
.mp4, .mov, .3gpp, .3gp, MPEG transport stream, .ts, .trp, .tp, .mkv	HEVC/H.265	

Picture File Formats

Extension	Specification	Resolution (width x height)
.jpg, .jpeg	Baseline	8192 x 8192
	Progressive	3000 x 3000
.bmp	RGB 1/4/8/16/24/32 bit	8192 x 8192
	RLE 4/8 bit	
.gif	87a	
	89a (Only 1 picture at animation format)	
.png	Grayscale, 24/32 bit per pixel	
	Interlace format	
	Progressive	
.tiff, .tif	Tagged image file format	
.webp	Lossy compression VP8 key frame version number support 0~3	
	Lossless compression	

Audio File Formats

Extension	Format
.mp3	.mp3
.ac3	.ac3
.aac	.AAC
.wma	.WMA
.amr	.AMR-NB, .AMR-WB
.wav	.MPEG La, .AAC, .PCM
.flac	.FLAC

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.

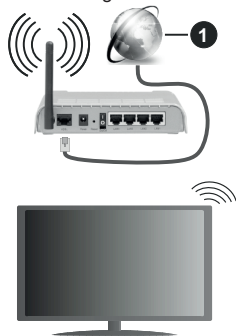
	56Hz	60Hz	66Hz	70Hz	72Hz	75Hz
640x400				x		
640x480		x	x		x	x
800x600	x	x		x	x	x
832x624						x
1024x768		x	x	x	x	x
1152x864		x		x		x
1152x870						x
1280x768		x				x
1360x768		x				
1280x960		x				x
1280x1024		x				x
1400x1050		x				x
1440x900		x				x
1600x1200		x				
1680x1050		x				
1920x1080		x				

Connectivity

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.

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 AVS(audio video sharing) 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 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.

The performance of some devices in the market, may vary due to the software architecture. In order to use Wake On feature with a better performance, please make sure that your device has latest firmware version.

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.

Connecting Other Wireless Devices

Your TV supports another short range wireless connection technology too. A pairing is required before using these kind of wireless devices with the TV set. You should do the following to pair your device with the TV:

- Set the device to pairing mode
- Start device discovery on the TV

Note: Refer to the user manual of the wireless device to learn how to set the device to pairing mode.

You can connect audio devices or remote controllers wirelessly to your TV. Unplug or switch off any other connected audio device in order for wireless connection feature to work correctly. For audio devices you should use the **Audio Link** option in the **Settings>Sound** menu, for remote controllers the **Smart Remote** option in the **Settings>System>More** menu. Select the menu option and press the **OK** button to open the related menu. Using this menu you can discover and connect the devices that use the same wireless technology and start to use them. Follow the on-screen instructions. Start the device discovery. A list of available wireless devices will be displayed. Select the device you want to connect from the list and press the **OK** button to connect. If "**Device connected**" message is displayed, the connection is successfully established. If the connection fails try it again.

Image transfer and audio streaming

You can also use this type of connection to transfer images or stream audio from your mobile device to your TV.

Pair the mobile device and the TV as described before. Start a device search in your hand-held device. Select your TV from listed devices. Confirm the request for connection on your TV screen and do the same on your hand held device screen. If no pairing is done, image transfer or audio streaming to the TV will not be possible.

The images sent by mobile device will be displayed on the TV without confirmation request, if the image file is suitable. You can also save the image file to a connected USB memory drive or set as boot logo, if this feature is supported and the file is suitable. Press the **Exit** button to terminate displaying the image.

The audio will be routed through the speakers of the TV, after confirmation is given. To start audio

streaming unpair the device from your TV if it is paired with your TV previously. After pairing is completed, a confirmation message will be displayed asking whether you want to start audio streaming from your mobile device. Select **Yes** and press the **OK** button on the remote of the TV. If the connection is succeeded, all audio will be routed through the speakers of the TV. A symbol will appear on the upper side of the TV screen as long as the audio streaming connection is active. To terminate the audio streaming, you should turn off the wireless connection of your mobile device.

Close all running applications and all the menus on the TV for a trouble-free transfer. Only image files with sizes smaller than 5 MB and in the following file formats are suitable; *.jpg*, *.jpeg*, *.png*, *.bmp*. If a file sent by the mobile device does not suit these requirements, it will not be displayed on the TV.

Note: Wireless devices may operate within the same radio frequency range and may interfere with one another. To improve the performance of your wireless device place it at least 1 meter away from any other wireless devices.

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.
- 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 Wireless Network

See the **Wireless Connectivity** chapter for detailed configuration information.

3. Enable Audio Video Sharing

Enter the **Settings>System>More** menu and enable the **AVS** 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.

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**, **Tabs** 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 (currently various channels on Astra broadcast HbbTV applications). 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.

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 **AVS** 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 information.*

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 Feature

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. With this feature you can use your voice to control functions on your TV, such as turning on or off, changing channel or input source, controlling volume, and more.

Requirements

The following requirements should be fulfilled:

- Alexa Ready Smart TV
- Amazon Alexa device
- A mobile device, such as your phone or tablet, with Smart Center and Amazon Alexa apps installed on it
- Home network with WLAN capabilities
- Amazon account

How to control your TV with an Amazon Alexa Device

- Connect your TV and mobile device to the same network with internet access as your Alexa device.

- Pair the Smart Center app with your TV. Then tap on the Amazon logo on the main screen of the Smart Center app. You will be directed to a registration page. Follow the on-screen instructions to complete your TV's registration and linking process.
- 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.
- Pair the Alexa app on your mobile device with the Alexa device, search for the skill of your TV by the brand name and enable it in the Alexa app. For more information, you can refer to the user manual of the Alexa device.
- Ask Alexa to discover your devices. Say, "discover my devices," or select **Discover Devices** in the related section of the Alexa app.

Once the discovery process is complete, you will be able to control your TV by voice.

Note:

Make sure that the devices are connected to the same network. But once these pairing and linking processes are completed the Alexa device and your TV will no longer have to be on the same network.

After you have performed First Time Installation on your TV, launch the Smart Center application and pair it with your TV again. Then tap on the Amazon logo on the main screen and check if you are logged in to your Amazon account, if not you might need to re-login and determine a Friendly Name again for your TV in order to be able to continue to control your TV with Alexa device.

Example Commands

Here are some of the commands that you'll be able give to your Alexa-enabled TV:

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

Command	Function
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)
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'.

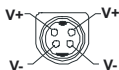
Switching the TV On Using 12 Volt

1. Connect the cigarette lighter plug cable into the cigarette lighter socket of your car.
2. Plug the other side of 12 volt cable into DC 12 socket on the back side of the TV. Then the standby LED will light up.
3. Press the **Standby** button, **Programme +/-** buttons or a numeric button on the remote control or press the middle of the side function switch on the TV in. The TV will then switch on.
4. Adjust the antenna position for better reception or reinstall TV channels if necessary.

Switching the TV Off

1. Press the **Standby** button on the remote control or press the middle of the side function switch on the TV in and hold it down for a few seconds, so the TV will switch into standby mode.
2. Unplug cable connectors and power plugs.

ATTENTION: 12 V Input



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.