



# **OPERATING INSTRUCTIONS FOR TV**

# **UHD 43DSW552V**



Safety Information
9
Environmental Information3
Features4
Ultra HD (UHD)4
High Dynamic Range (HDR) / Hybrid Log-Gamma
(HLG)4
Dolby Vision4
Accessories Included4
Standby Mode Picture4
Standby Notifications5
TV Control Button & Operation5
Using Main TV Menu6
Inserting the Batteries into the Remote7
Power Connection7
Antenna Connection8
Licence Notification8
Disposal Information
Specification9
Remote Control
Connections12
Switching On/Off13
First Time Installation
Media Playback via USB Input14
USB Recording15
Media Browser
FollowMe TV16
CEC16
Game Mode17
E-Manual
Settings Menu Content
General TV Operation24
Using the Channel List24
Configuring Parental Settings24
Electronic Programme Guide24
Teletext Services
Software Upgrade25
Troubleshooting & Tips25
HDMI Signal Compatibility26
Supported File Formats for USB Mode27
Video File Formats
Picture File Formats
Audio File Formats27
Subtitle File Formats
Supported DVI Resolutions

Connectivity	29
Wired Connectivity	29
Wireless Connectivity	29
Networked Standby Mode	31
Wireless Display	31
Connectivity Troubleshooting	31
Using Audio Video Sharing Network Service	32
Apps	32
Internet Browser	32
HBBTV System	33
Smart Center	33
DVB functionality information	35

# Safety Information



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

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

The mains plug is used to disconnect 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

# IMPORTANT - Please read these instructions fully before installing or operating

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

- . Use this TV set at an altitude of less than 5000 metres above the sea level, in dry locations and in regions with moderate or tropical climates
- . The TV set is intended for household and similar indoor use but may also be used in public places.
- · For ventilation purposes, leave at least 5cm of free space around the TV.
- . The ventilation should not be impeded by covering or blocking the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
- · The power cord/plug should be easily accessible. Do not place the TV, furniture, etc. on the power cord. A damaged power cord/plug can cause fire or give you an electric shock. Handle the power cord by the plug, do not unplug the TV by pulling the power cord. Never touch the power cord/plug with wet hands as this could cause a short circuit or electric shock. Never make a knot in the power cord or tie it with other cords. When damaged it must be replaced, this should only be done by qualified personnel.
- . Do not expose the TV to dripping or splashing of liquids and do not place objects filled with liquids, such as vases, cups, etc. on or over the TV (e.g. on shelves above the 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 or inclined surfaces.
- To avoid danger of suffocation, keep plastic bags out of the reach of babies, children and domestic animals.
- · Carefully attach the stand to the TV. If the stand is provided with screws, tighten the screws firmly to prevent the TV from tilting. Do not over-tighten the screws and mount the stand rubbers properly.
- Do not dispose of the batteries in fire or with hazardous or flammable materials.

#### WARNING

- · Batteries must not be exposed to excessive heat such as sunshine, fire or the like,
- · Excessive sound pressure from earphones or headphones can cause hearing loss.

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

A Caution	Serious injury or death risk	
A 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.

English - 1 -English - 2 -

#### WARNING

- . Do not ingest the battery, Chemical Burn Hazard.
- This product or the accessories supplied with the product may contain a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.
- · Keep new and used batteries away from children.
- If the battery compartment does not close securely, stop using the product and keep it away from children.
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention

#### -----

A television may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- · NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.
- The equipment is only suitable for mounting at heights ≤2 m.

If the existing television set is going to be retained and relocated, the same considerations as above should be applied.

Apparatus connected to the protective earthing of the building installation through the MAINS connection or through other apparatus with a connection to protective earthing – and to a television distribution system using

coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (aalvanic isolator).

# WALL MOUNTING WARNINGS

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

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

#### **Environmental Information**

This television is designed to be environmentally 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 adjust the energy consumption accordingly. Set as Off to turn this setting off. If you like to set the backlight to a fixed value set as Custom, highlight the Backlight (vill be located under the Energy Saving setting) and then adjust manually using Left or Right directional buttons on the remote. Note: Available Energy Saving options may differ depending on the selected Mode in the Sattings-Picture menu.

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

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

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

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

#### Features

- · Remote controlled colour TV
- Fully integrated digital terrestrial/cable/satellite TV (DVB-T-T2/C/S2)
- 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)
- Game Mode (Optional)
   Picture off function
- Programme recording
- Programme timeshifting
- . Ethernet (LAN) for Internet connectivity and service
- · 802.11 a/b/g/n built in WLAN Support
- · Audio Video Sharing
- HbbTV

# Ultra HD (UHD)

TV supports Ultra HD (Ultra High Definition - also known as 4K) which provides resolution of 3840 x 2160 (4K:2K). It equals 4 times the resolution of Full HD TV by doubling the pixel count of the Full HD TV both horizontally and vertically. Ultra HD content is supported via native and market applications, HDMI, USB input(s) and over DVB-T2 and DVB-S2 broadcasts.

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

Using this feature the TV can reproduce greater dynamic range of luminosity by capturing and then combining several different exposures. HDR/HLG promises better picture quality thanks to brighter, more realistic colour and other improvements. It delivers the look that filmmakers intended to achieve, showing the hidden areas of dark shadows and sunlight with full clarity, colour and detail. HDR/HLG content is supported win antive

and market applications, HDMI, USB inputs and over bVB-S broadcasts. Set the related HDMI source input as Enhanced from the Sources option in the Settings-System menu or from the Sources>Source Settings menu in order to watch HDRI/HLG content, if the HDRI/HLG content is received through an HDMI input. The source device should also be at least HDMI 20 accompatible in this case.

# **Dolby Vision**

Dolby Vision™ delivers a dramatic visual experience, astonishing brightness, exceptional contrast, and vivid colour, that brings entertainment to life. It achieves this stunning image quality by combining HDR and wide colour gamut imaging technologies. By increasing the brightness of the original signal and using a higher dynamic colour and contrast range, Dolby Vision presents amazing true-to-life images with stunning detail that other post-processing technologies in the TV aren't able to produce. Dolby Vision is supported via native and market applications. HDMI and USB inputs. Set the related HDMI source input as Enhanced from the Sources option in the Settings>System menu or from the Sources>Source Settings menu in order to watch Dolby Vision content, if the Dolby Vision content is received through an HDMI input. The source device should also be at least HDMI 2.0a compatible in this case. In the Settings>Picture>Mode menu two predefined picture modes will be available if Dolby Vision content is detected: Dolby Vision Bright and Dolby Vision Dark. Both allow the user to experience the content in the way the creator originally intended with different ambient lighting conditions.

#### Accessories Included

- Remote Control
- Operating Instructions

# Standby Mode Picture

You can use your TV as a digital picture frame using the Standby Mode Picture feature. In order to do this follow the steps below.

- Set the Standby Mode Picture option in the Settings-System>More menu as On. This option is set as Off by default. You can also define interval for standby mode picture slideshow using the Standby Mode Picture Interval option in this menu.
- Create a separate folder named as **standby\_picture** in the USB storage device's root directory and copy the files you want to use into that folder and then connect the USB storage device to your TV.
- Press the Standby button on the remote briefly to switch your TV into standby mode picture state.

Note that once the **Standby Mode Picture** option is set as **On**, the function of the **Standby** button on the remote will change. After this you will need to press

and hold the button to switch the TV into standby mode while the TV is in normal operating mode.

If there are more than 1 picture file available in the folder all picture files will be displayed as a slide show in succession. If the necessary folder is not created or there isn't any picture file in the folder, a warning message will be displayed on the screen for a few seconds and then disappear.

In standby mode picture state the backlight level of the screen will be decreased by 50 % and Smart Center features will not be usable, if Smart Center is available for your TV model.

To switch your TV from standby mode picture state back to normal operating mode press the **Standby** button on the remote briefly.

Beside the remote control you can also use the control unit on the TV to switch into standby mode picture state and back to normal operating mode. In order to do that follow the same instructions as described in the TV control & Operation section for switching the TV into the standby mode. Note that you will not be able to switch the TV into standby mode using the control unit on the TV while the TV is in standby mode picture state.

Note: The availability of this feature depends on the TV model and its features.

Refer to the **Supported File Formats for USB Mode** section for the supported media file formats.

# 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." You can disable this functionality by setting the No Signal Timer option in the Settings> System-Device Settings menu accordingly.

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

# TV Control Button & Operation



Note: The position of the control button may differ depending

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

# Operating with the Control Button

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

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

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

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

To change channel: Press the control button to display the function options menu and then press the button consecutively to move the focus to Programme + or Programme - option. Press and hold the button for about 2 seconds to activate the selected option.

The icon colour of the option changes when activated.

Then press the button to switch to the next or previous channel in the channel list.

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

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

#### Operation with the Remote Control

Press the **Home** button on your remote control to display main menu. Use the directional buttons and **OK** button to navigate and set. Press **Back/Return**, **Exit** or **Home** button to quit a menu screen.

#### Input Selection

Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively to select the different sources.

#### Changing Channels and Volume

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

#### Forced Standby

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

#### Using Main TV Menu

When the Home button is pressed, the main TV menu will appear on the screen. You can navigate through the menu items using the directional buttons on the remote. To select an item or see the sub-menu options of the highlighted menu press OK button. When you highlight a menu option some of the submenu items of this menu may appear on the upper or lower 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. When the Netflix application (if available) is highlighted. recommendations will be displayed in the same way as the sub-menu items. If you have already signed in to your Netflix account personalised recommendations will he seen

You can also see information on location, weather, time and date on the main TV menu screen. The green small icons indicate the current status for time, network and sync for apps. If these icons appear in green, it

means that the time information is updated, network is connected and sync is successfully completed. Otherwise the icons will appear in white.

Depending on the country selection made during first time installation, TV's life time information in hours can be displayed by pressing the **Menu** button and then the Blue button

Press Exit button to close the main menu.

#### 1. Home

When main menu is opened **Home** menu bar will be insighlighted. The content of the **Home** menu can be customised. In order to do this go to the **TV** menu, highlight the **Edit Home** option and press **OK**. The **Home** menu will switch to edit mode. In edit mode you can delete or change the position of any item in the **Home** menu. Highlight an option and press **OK**. Select the delete or move icon and press **OK**. In order to move a menu item use the Right, Left, Up and Down directional buttons to select the position that you want the item to move to and press **OK**.

You can also add options from other menus to **Home** menu. Just highlight an option and press the Up or Down directional button on the remote. If you see **Add** to **Home** option you can add it to the **Home** menu.

# 2. Search

You can search for Channels, Guide, TV menus, Applications, Web, YouTube and Videos using this option. Press **OK** and enter a key word using the virtual keyboard. Then highlight **OK** and press **OK** to start the search. Results will be displayed on the screen. Highlight the desired result using the directional buttons and press **OK** to open.

# 3. <u>TV</u>

#### 3.1. Guide

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

# 3.2. Channels

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

#### 3.3. 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 broadcasted at the same time interval. In this case you will be informed and the timer will be cancelled

#### 3.4. Edit Home

You can customise the content of the **Home** menu using this option. Highlight and press **OK**. The **Home** menu will switch to edit mode. Refer to the **Home** section for details

#### 3.5. 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 directional button and press OK to see available options. Refer to the USB Recording section for more information.

#### 3.6. More Apps

In order to manage the apps installed on your TV, you can use this option. Highlight and press **OK**. You can add an installed app to **Home** menu, launch or remove it. Highlight an app and press **OK** to see the available options.

#### 3.7. Market

You can add new apps from the application market using this option. Highlight and press **OK**. Available apps will be displayed. You can also access the application market from within the **More Apps** menu.

#### 3.8. Reset Apps

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

#### 3.9. Accessibility

You can access the accessibility settings menu directly using this option.

#### 3.10. Privacy Settings

You can access the privacy settings menu directly using this option. This option may not be available depending on the model of your TV and the selected country during the first time installation process.

#### 4. Settings

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

#### 5. Sources

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

#### 5.1. Source Settings

You can access the source settings menu directly using this option. Edit the names, enable or disable selected source options. There are also Regular and Enhanced options available for HDMI sources. Regular and Enhanced options are affecting the colour settings of the selected HDMI source.

#### Inserting the Batteries into the Remote

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

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

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

#### Power Connection

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

#### Antenna Connection

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

#### Rear side of the TV



#### 1. Satellite

#### Left side of the TV



#### 2. Aerial or cable

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.

#### Licence Notification

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

# HDMI

Dolby, Dolby Vision, Dolby Atmos, and the double-D symbol are registered trademarks of Dolby Laboratories Licensing Corporation. Manufactured under licence from Dolby Laboratories. Confidential unpublished works. Copyright © 2012-2021 Dolby Laboratories. All rights reserved.

# **■■Dolby** Vision

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 licence(s) from Microsoft.

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

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

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

English -7-

# 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 PAL BG/I/DK TV Broadcasting SECAM BG/DK VHF (BAND I/III) - UHF Receiving Channels (BAND U) - HYPERBAND Fully integrated digital terrestrial-cable-satellite Digital Reception TV(DVB-T-C-S) (DVB-T2, DVB-S2 compliant) Number of Preset 11 000 Channels Channel Indicator On Screen Display RF Aerial Input 75 Ohm (unbalanced) 220-240V AC 50Hz Operating Voltage Audio German+Nicam Stereo Audio Output Power 2 x 10 (WRMS.) (10% THD) 120W Power Consumption (W) Networked Standby Mode < 2 Power Consumption (W) TV Dimensions DxLxH 258 x 973 x 619 (with stand) (mm) TV Dimensions DxLxH 56/82 x 973 x 567 (without stand) (mm) Display 43"

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**

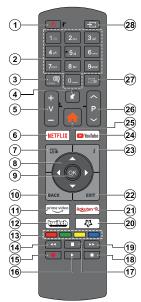
This device is intended for home and office use in all EU countries (and other countries following the relevant EU directive) without any limitation except for the countries mentioned below.

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

English - 9 - English - 10 -

# Remote Control



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

Connections					
Connector	Туре	Cables	Device	When using the wall mounting kit (available from a third party	
	HDMI Connection (side&back)			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	
SPDIF	SPDIF (Optical Out) Connection (back)	•	<u> </u>	only when the TV is SWITCHED OFF. You should refer to the module instruction manual for details of the settings. The/Each USB input	
HEADPHONE	Headphone Connection (back)	«())-		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	
I	USB Connection (side)			cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation and trouble- free transmission of high definition	
	CI Connection (side)		CAM module	signals, such as 4K content, you have to use a high speed shielded (high grade) HDMI cable with ferrites.	
LAN	Ethernet Connection (back)	LAN / Ethernet Cable	1		



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,

English - 11 -English - 12 -

#### Switching On/Off

#### To Switch the TV On

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

To switch on the TV from standby mode either:

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

#### To Switch the TV Off

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

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

Note: When the TV is switched into standby mode, the standby LED can blink to indicate that features such as Standby Mode 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.

After the language selection, you will be asked whether you want to change accessibility settings. Highlight Yes and press OK to change. Refer to System Menu Content section for detailed information on available options.

Set your country preference on the next screen. 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 TVs settings for store environment and depending on the TV model being used, the supported features of it may be displayed on the screen as an info banner or the pre-installed video file may be played back. This option is intended only for store use. It is recommended to select Home Mode for home use. Store mode option will over available in Settlings-System-More menu and your preference for this setting can be changed later. Make your selection and press OK to continue.

Depending on the model of your TV, the picture mode selection screen may appear at this point. In order for your TV to consume less energy and be more environmentally friendly select **Natural** and press **OK** to continue. If you select **Dynamic** and press **OK**, a confirmation dialogue will be displayed. Select **Yes** and press **OK** to proceed. You can change your selection later using the **Mode** option in the **Settings>Picture** menu.

Depending on the model of your TV and the country selection Privacy Settings screen may appear at this point. Using the options on this screen you can set your privacy privileges. Highlight a feature and use Left and Right directional buttons or OK button 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 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 smarttysecurity@yosshub.com.

Highlight Next and press OK button on the remote control to continue and the Network/Internet Settings screen will be displayed. Please refer to Connectivity section if you need information on configuring a wired or a wireless connection (availability depends on the model) and other available options. If you want your TV to consume less power in standby mode, you can disable the Networked Standby Mode option by setting it as Off. After the settings are completed inhightint 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 on for a broadcast type highlight it and press **OK**, Left or Right directional button. The checkbox next to the selected option will be checked. To turn the search option off clear the checkbox by pressing **OK**, Left or Right directional button 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 dialogue may be displayed depending on the country selection before starting to search asking whether you

want to perform cable network search. If you select Yes and press OK you can select Nework or set values such as Frequency, Network ID and Search Step on the next screen. If you select No and press OK or the network search dialogue is not displayed 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.

Satellite: If Satellite broadcast search option is turned on, the TV will search for digital satellite broadcasts after other initial settings are completed. Before satellite search is performed some settings should be made.

Depending on the model and the selected country the next step may be the selection of the installation type for satellite. You can select to start an operator installation or a standard installation striks point. If you want to perform an operator installation set the Install Type as Operator and then set the Satellite Operator according to your operator preference. Some of the following steps may differ or be skipped depending on the selected operator in this step. If you set the Install Type as Standard, you can continue with regular satellite installation and watch satellite channels. Press OK to proceed.

Antenna type selection screen may be displayed next. You can select Antenna type as Direct, Single Satellite Cable or DISEqC switch by using Left or Right directional buttons. After selecting your antenna type press OK to see the options to proceed. Continue, Transponder list and Configure LNB options may be available. You can change the transponder and LNB settings using the related menu options.

- Direct: If you have a single receiver and a direct satellite dish, select this antenna type. Press OK to continue. Select an available satellite on the next screen and press OK to scan for services.
- Single Satellite Cable: If you have multiple receivers and a single satellite cable system, select this antenna type. Press OK to continue. Configure settings by following instructions on the next screen. Press OK to scan for services.
- DISEqC switch: If you have multiple satellite dishes
  and a DISEqC switch, select this antenna type. Then
  set the DISEqC version and press OK to continue.
  You can set up to four satellites (if available) for
  version v1.0 and sixteen satellites for version v1.1
  on the next screen. Press OK button to scan the first
  satellite in the list.

Note: Depending on the model of your TV, DiSEqC version v1.1 may not be supported and therefore the DiSEqC version selection step may not be available.

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 the 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. You can press the Home, Back or Exit button to cancel the search. The channels that have already been found will be stored in the channel list.

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 **Home** button to quit and watch TV.

While the search continues a dialogue 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 organises available broadcasts in accordance with a recognisable channel number sequence (if available).

Note: Do not turn off the TV while initialising 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 input(s) of the TV.

IMPORTANTI 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 input(s). External power supplied USB hubs are recommended in such a case.

It is recommended to use the TV's USB input(s) directly, if you are going to connect a USB hard disk. Note: When viewing media files the Media Browser menu can only display a maximum of 1000 media files per folder.

#### **USB Recording**

#### Recording a Programme

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

To record a programme, you should first connect a USB disk to your TV while the TV is switched off. You should then switch on the TV to enable the recording feature. To use recording your USB drive should have 2 GB free space and be USB 2.0 compatible. If the USB drive is not compatible an error message will be displayed. To record long duration programmes such as movies, its recommended to use USB Hard disk drives (HDD)'s). Recorded programmes are saved onto 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 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.

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

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

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

#### Timeshift Recording

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

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

Timeshift cannot be used while in radio mode.

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

#### Instant Recording

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

You can not switch broadcasts during the recording mode. While recording a programme or during 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 / Slow Rewind

If you press Pause button while watching recorded programmes, the slow forward and slow rewind functions will be available. You can use Fast Forward button to slow forward and Rewind button to slow rewind. Pressing the button consecutively will change slow forwarding and slow rewinding speed.

#### Recording Settings

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

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

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

Max Timeshift: This setting allows you to set the maimum 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 storace 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 **Pack/Return** to close

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

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

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

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 Sources menu will be displayed on the screen. Select the related USB input option from this menu and press OK. Media Browser menu will be displayed on the screen. Then select the file of your choice and press OK to display or play it back. You can access the content of the connected USB device any time later from the Sources menu. You can also press the Source button on the remote and then select your USB storage device from the list of sources.

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 while playing back a video or an audio file or displaying a picture file. Press the Info button if the information bar has disappeared, 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 may be available depending on the media file type and the model of your TV and its features. The content of these menus may also differ 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. Both of the devices must be connected to the same network. This feature is only functional on TV source.

#### CEC

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

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

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

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

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

When ARC is active, the TV will mute its other audio outputs, except the headphone jack, automatically and volume control buttons are directed to the connected audio device. To activate ARC set the Sound Output option in the Settings-Sound menus at HDMI ARC.

Note: ARC is supported only via the HDMI2 input.

#### System Audio Control

Allows an Audio Amplifier/Receiver to be used with the TV. The volume can be controlled using the remote control of the TV. To activate this feature set the Sound Output option in the Settlings-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

#### Game Mode

You can set your TV to achieve lowest latency for games. Go to Settings>Picture menu and set the Mode option to Game. Game option will be available when the TV's input source is set to HDMI. When set the picture will be optimised for low latency.

#### Auto Low Latency Mode

You can also enable the ALLM (Auto Low Latency Mode) option in the Settings>System>Device Settings menu. If this function is enabled the TV automatically switches the picture mode to Game when ALLM mode signal is received from the current HDMI source. TV switches back to previous picture mode setting when the ALLM signal is lost. So you won't need to change the settings manually.

If the **ALLM** option is enabled, picture mode can not be changed as long as ALLM signal is received from the current HDMI source.

In order for the ALLM feature to be functional the related HDMI source setting should be set to Enhanced. You can change this setting from the Sources>Source Settings menu or from the Settings>System>Sources menu.

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

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

By using the directional buttons select a desired topic and press **OK** to read instructions. To close the E-Manual screen press the **Exit** or **Home** button.

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

Settings M	lenu (	Conter	ıt
------------	--------	--------	----

36	Settings Wend Content				
Pic	Picture Menu Content				
Mode		You can change the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: Cinema, Game, Sports, Dynamic and Natural. Note: Available options may differ depending on the input source.  Dolby Vision Modes: If Dolby Vision content is detected Dolby Vision Dark and Dolby Vision Bright picture mode options will be available instead of Cinema and Natural modes.			
	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.			
Ene	ergy Saving	For setting the Energy Saving to Custom, Minimum, Medium, Maximum, Auto, Screen Off or Off.  Note: Available options may differ depending on the selected Mode.			
	Backlight	This setting controls the backlight level. This option (will be located under the <b>Energy Saving</b> setting) will be available if the <b>Energy Saving</b> is set to <b>Custom</b> . Highlight and use Left/Right directional buttons to set.			
Pic	ture Zoom	Sets the desired image size format.			
	Picture Shift	This option (will be located under the <b>Picture Zoom</b> setting) may be available depending on the <b>Picture Zoom</b> setting. Highlight and press <b>OK</b> , then use directional buttons to shift the picture upwards or downwards.			
Ad۱	vanced Settings				
	<b>Dynamic Contrast</b>	You can change the dynamic contrast ratio to desired value.			
	Colour Temp	Sets the desired colour temperature value. Cool, Normal, Warm and Custom options are available.			
	White Point	If the Colour Temp option is set as Custom, this setting will be available (will be located under the Colour Temp setting). Increase the 'warmth' or 'coolness' of the picture by pressing Left or Right buttons.			
	Blue Stretch	White colour enhancement function that makes white colour more cooler in order to make more bright picture. Set as <b>On</b> to enable.			
	Micro Dimming	Low, Medium, High and Off options are available. While Micro Dimming is active, if will enhance contrast locally for each defined zone.			
	Noise Reduction	Low, Medium, High and Off options are available. If the signal is weak and the picture is noisy, use the Noise Reduction setting to reduce the amount of noise.			
	Film Mode	Films are recorded at a different number of frames per second to normal television programmes. Turn this feature to <b>Auto</b> 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.			
	Colour Tuner	Opens colour tuner settings. Set the Colour Tuner as Enabled to adjust the Hue, Colour and Brightness values manually.			
	Gamut Mapping	You can use this option to set the range of colours displayed on your TV screen. When set as On, colours are set according to the source signal. When set as Off, the TV's maximum colour capacity is used by default (recommended option).  Note: This option may not be available depending on the TV model and its features.			
	Gamma	You can use this option to set your gamma preference. Press Left/Right directional buttons to set to Normal, Bright or Dark. Mote: This option may not be available depending on the TV model and its features and you may not be able			
	HDMI Full Range	to change this setting depending on the current content.  While watching from a HDMI source, this feature will be visible. You can use this feature to enhance blackness in the picture.			
	Reset	Resets the picture settings to factory default settings (except <b>Game</b> mode).			
		1			

English - 17 - English - 18 -

Sound Menu Content				
Your TV supports Dolby Atmos technology. By means of this technology the sound mo around you in three-dimensional space, so you lee filled you're inside the action. You have best experience if input audio bitstream is Atmos. Auto, On and Off options wi available. If set as Auto, the TV will switch between On and Off modes automatic depending on the input audio bitstream information, if the input audio bitstream is Att this feature will work as if it is set as On. Set as Off to disable.				
Mode	Smart, Movie, Music, News and Off options will be available. Set as Off to disable.  Note: Some items in Sound menu will be greyed out and unavailable if set to an option other than Off.			
Surround Sound	Enables or disables the surround sound mode.			
	Sets the sound output preference. TV, S/PDIF, HDMI ARC, Headphone Only and Lineout options will be available. There will be no sound output except through the selected option and the headphone jack Note that, if this option is set as Headphone Only, TV speakers will be muted when headphone set is plugged in.			
Sound Output	When you connect an external amplifier to your TV using the headphone jack, you can select this option as <b>Lineout</b> . If you have connected headphones to the TV, set this option as <b>Headphone</b> Only. Please ensure before using headphones that this menu item is set to <b>Headphone</b> Only. If it is set to <b>Lineout</b> , the output from the headphone consolved will be set to maximum which could damage your hearing.			
	If HDMI ARC option is selected, CEC feature will be enabled.			
	Note: Depending on the selected option some items in Sound menu will appear as greyed out and will be unavailable.			
	Sets the sound to obtain fixed output level between programmes.			
AVL (Automatic Volume Limiting)	If the <b>Mode</b> menu item is set to an option other than <b>Off</b> the <b>AVL</b> setting options will change. <b>Auto</b> , <b>Night</b> , <b>Normal</b> and <b>Off</b> options will be available. In <b>Auto</b> mode the TV will switch to <b>Normal</b> or <b>Night</b> mode automatically according to the current time information. If no time information is available this option will always function as <b>Normal</b> . When the TV switches to <b>Night</b> mode for the first time after setting this option as <b>Auto</b> , an information bar will pop up on the screen.			
	Please note that compared to <b>Normal</b> mode <b>Night</b> mode provides more aggressive dynamic compression control which is suitable for silent environments.			
Advanced Settings				
Equalizer	Selects the equalizer mode. Custom settings can be made only when in User mode.			
Dynamic Bass	Enables or disables the Dynamic Bass.			
Sound Mode	You can select a sound mode (if the viewed channel supports).			
	Sets digital out audio type. PCM, Auto, and Passthrough options will be available.			
	PCM: This option provides two-channel uncompressed digital audio output. You can use this option if you experience compatibility problems such as not hearing sound.			
Digital Out	Auto: This option provides multi-channel digital audio output (up to 5.1 channel).			
	Passthrough: This option provides original audio output as such in HDMI ARC. It is recommended to use this option if you have an A/V receiver with eARC support. If your A/V receiver does not support source audio format you may experience compatibility problems such as not hearing sound.			
Headphone	Sets headphone volume. This option will not be available if the <b>Sound Output</b> option is set as <b>Lineout</b> .			
пеаципопе	Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.			
Balance	Sets sound balance. This feature will be activated if <b>Sound Output</b> option is set as <b>TV</b> or <b>Headphone Only</b> . Balance item adjusts the balance level of the TV speakers and headphones together.			
Reset	Resets some of the sound settings to factory defaults.			

Network Menu Content			
Network Type	Disable the network connection or change the connection type.		
Scan Wireless Networks	Start a search for wireless networks. This option will be available if the <b>Network Type</b> is set as <b>Wireless Device</b> .		
Disconnect	o disconnect from a wireless network and delete your saved wireless network profile (if reviously saved), highlighit this option and press <b>OK</b> . This option will not be available you did not connect to a wireless network. Refer to <b>Connectivity</b> section for more formation.		
Press WPS on your wifi router			
Internet Speed Test	Start a speed test to check your connection bandwidth. The result will be displayed or the screen when finished.		
Advanced Settings	Change the IP and DNS configurations of your TV.		
Networked Standby Mode	Enable or disable this feature by setting it as <b>On</b> or <b>Off</b> .		
Note: For detailed information on the options of this menu refer to the Connectivity section.			

Installation Menu Content			
Automatic channel scan (Retune)	Displays automatic tuning options. <b>D. Aerial</b> : Searches and stores aerial DVB stations. <b>D. Cable</b> : Searches and stores cable DVB stations. <b>Analogue</b> : Searches and stores and stores and stores satellite 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. <b>D. Aerial:</b> Searches for aerial network channels. <b>D. Cable:</b> Searches for cable network channels. <b>Satellite:</b> Searches for satellite 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.		
Satellite Settings	Displays satellite settings. <b>Satellite list</b> : Displays available satellites. You can <b>Add</b> , <b>Delete</b> satellites or <b>Edit</b> satellite settings on the list. <b>Antenna installation</b> : You can change satellite antenna settings and/or start a satellite scan.		
Installation Settings (optional)	Displays installation settings menu. Standby Mode Search (*): Your TV will search for new or missing channels while in standby. Any new found broadcasts will be shown. Dynamic Channel Update(*): If this option is set as Enabled, the changes on the broadcasts such as frequency, channel name, subtitle language etc., will be applied automatically while watching. (*) Availability depends on model.		
Clear Service List	Use this setting to clear channels stored. This setting is visible only when the <b>Country</b> 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.		

**English** - 19 - **English** - 20 -

_			
Зy	stem Me	nu Conte	ent
Accessibility			Displays accessibility options of the TV. Some options will not be available if no channels are installed.
	High Con	trast	Increase the contrast of the menu options and texts to make them easier to read. White Text, Yellow Text and Off options will be available.
	Hard of H	learing	Enables any special feature sent from the broadcaster.
	Audio Descripti	on	A narration track will be played for the blind or visually impaired audience. Press <b>OK</b> to see all available <b>Audio Description</b> menu options. This feature is available only if the broadcaster supports it.  Note: Audio description sound feature is not available in recording or time shifting mode (availability depends on the model of your YV and its features).
	Dialogue Enhancement		This feature provides sound postprocessing options for speech-gated dialogue enhancement. <b>Off, Low, Medium</b> and <b>High</b> options will be available. Set according your preference.
			Note: This feature has an effect only if input audio format is AC-4 and this effect only applies to TV loudspeaker output.
	Spoken S	Subtitles	Default preference of spoken subtitles is selected with this setting option. To make spoken subtitles priority higher than normal ones, this option should be set to <b>On</b> . This option may not be available depending on the model of your TV.
			Enables the use of button combinations to magnify the screen. <b>On</b> and <b>Off</b> options will be available. Set as <b>On</b> to enable.
	Magnifica	ation	Magnification support will be enabled or disabled with long-press of the numeric buttor 5. First top-left quadrant of the screen will be zoomed. After the magnification suppor is enabled, long-press of the numeric buttons 2, 4, 6, 8 will move the zoomed area to up, left, right and down.
Minimap  Click Sound			Minimap is enabled and deactivated by default. It will be activated when <b>Magnification</b> feature is enabled. With this option, you can prevent magnification feature from displaying the minimap.
		ınd	This option enables the key click sound on TV menu. Set to <b>On</b> to enable.
ĺ	Highlight programi		
	[S] St	ıbtitle	If this option is enabled and if any electronic programme guide event has "Subtitle" access service, these events will be highlighted with another colour.
	[SL] S Langi		If this option is enabled and if any electronic programme guide event has "Sign Language access service, these events will be highlighted with another colour.
	[AD] A	Audio ription	If this option is enabled and if any electronic programme guide event has "Audio Description" access service, these events will be highlighted with another colour.
anguage			You may set a different language depending on the broadcaster and the country.
Conditional Access		Access	Controls conditional access modules when available.
Privacy			
	Privacy S	ettings	Manage your privacy privileges for smart TV related applications. Press $\bf OK$ to enter the menu and set according to your preferences.
Show All Cookies		Cookies	Displays all saved cookies.
	Delete Al kies	I Coo-	Deletes all saved cookies.
	Do Not Tr	ack	You can set your preference regarding the tracking behaviour for HbbTV services using this option.

Parental		Enter correct PIN to change parental settings. You can easily adjust <b>Menu Lock</b> , <b>Maturity Lock</b> , <b>Child Lock</b> or <b>Guidance</b> in this menu. You can also set a new <b>PIN</b> or change the <b>Default CICAM PIN</b> using the related options.		
		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 1224. 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.		
Da	te/Time	Sets date and time.		
Sources		Edit the names, enable or disable selected source options. There are also <b>Regular</b> and <b>Enhanced</b> options available for HDMI sources. These options are affecting the colour settings of the selected HDMI source. To be able to watch 4K or HDR/HLG images from an HDMI source related source setting should be set as <b>Enhanced</b> if the connected device is compatible with HDMI 2.0 and subsequent versions. Set as <b>Regular</b> if the connected device is HDMI 1.4 compatible. Set accordingly or disable the related HDMI source by setting as <b>Disables</b> .		
		If this feature is supported by your TV, you can view your ESN(*) number and deactivate Netflix.		
Netflix Samba ACR		(*) ESN number is an unique ID number for Netlix, created especially to identify your TV.  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 Netlix website ( <a href="https://link.gom/ein.org/13443">https://link.gom/ein.org/e</a>		
		Samba Interactive TV powers recommendations and other apps by gathering data regarding consumption of specific on-screen content to enhance your viewing experience. Using this option you can access Samba Interactive TV settlings menu, review Samba TV's Terms of Service, Privacy Policy and manage your advertising preferences, etc. Internet connection will be required in order to access HTML based settings. You can enable or disable Interactive TV at any time from the Settings>System>Privacy>Privacy Settings menu by checking or unchecking the check box next to the related item. This option may not be available depending on the selected country during the First Time Installation process, the model of your TV and its features.		
De	vice Settings			
	CEC	With this setting you can enable and disable CEC functionality completely. Press Left or Right button to enable or disable the feature.		
	CEC Auto Power On	This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press Left or Right button to enable or disable the feature.		
ALLM  No Signal Timer  More		ALLM (Auto Low Latency Mode) function allows the TV to activate or deactivate low latency settings depending on playback content. If this option is enabled the picture mode will be set to <b>Game</b> automatically when ALLM mode signal is received from the current HDMI source. Refer to <b>Game Mode</b> section for more information.		
		If your TV does not receive any input signal (e.g. from an aerial or HDMI source) for 3 minutes, it will go into standby mode. You can enable or disable this functionality by setting this option accordingly.		
		Displays other setting options of the TV.		
	Menu Timeout	Changes timeout duration for menu screens.		
	Standby Mode LED	If set as <b>Off</b> the standby mode LED will not light up when the TV is in standby mode.		
	HBBTV	You can enable or disable this feature by setting it as <b>On</b> or <b>Off</b> . Refer to <b>HbbTV System</b> section for further information.		

English - 21 - English - 22 -

Device Identification	When this option is enabled it causes a 'Device ID' to be generated internally for each Web origin visited. When disabled all the current 'Device ID's' are cleared for each Web origin that was visited. You can enable or disable this feature by setting it as <b>On</b> or <b>Off</b> . This feature is available if channels are installed and the country option is set as Norway during the first time installation.
Software upgrade	Ensures that your TV has the latest software. Press <b>OK</b> 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 / Telefext subtitle) if both are available. Default value is DVB subtitle. This feature is available if channels are installed and the country option is set as Norway during the first time installation.
Auto Power Down	Sets the desired time for the TV to automatically go into standby mode when not being operated. This option can be set from 1 to 8 hours in steps of 1 hour. You can also disable this option by setting as $\mathbf{Off}$ .
Biss Key	Biss is a satellite signal scrambling system that is used for some broadcasts. If you need to enter Biss key on a broadcast, you can use this setting, Highlight Biss Key and press OK to enter keys on the desired broadcast. This option will appear if satellite channels are installed. Availability depends on the model of your TV and its features.
Store Mode	Select this mode for store display purposes. Whilst <b>Store Mode</b> is enabled, some items in the TV menu may not be available. For some models <b>Enabled with video</b> option may also be available. If this option is set, the TV will switch to store mode and the pre-installed video file will be played back.
Audio Video Sharing	This 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, music and videos 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 Mode options are available.
Virtual Remote	Enable or disable the virtual remote feature.
oss	Displays Open Source Software licence information.
Application Priority	You can set your preference regarding the priority between the broadcast applications and CICAM AppMMI applications using this option. In case a CICAM is inserted into the TV and a contention occurs between the applications the priority will be given to the selected type of application.
Dolby Notification	Sets the notification appearance preference for Dolby content. When set as <b>On</b> , Dolby logo will be displayed on the screen when Dolby content is detected.

Note: Some options may not be available depending on the model of your TV, its features and the selected country in the First Time Installation.

# General TV Operation

#### Using the Channel List

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

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

#### Managing the Favourite Lists

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

You can use the filtering function in the **Channels** menu to filter the channel is in the channel is the permanently according to your preferences. For instance, using the options of the Filter tab, you can set one of your four favouritie lists to be displayed every time the channel list is opened. The selected filtering options will be shown on the top of the **Channels** menu screen.

#### **Configuring Parental Settings**

The Parental menu options can be used to prohibit users from viewing of certain programmes, channels and usage 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 setting options will be displayed.

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

**Guidance:** This setting enables or disables access to some of the MHEG applications. Disabled applications can be released by entering the right PIN.

Maturity Lock: If this option is set, the 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. The event will be added to Timers list. 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

#### **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, directional buttons and OK button. The operation method may differ depending on the content 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 bradcast

#### Software Upgrade

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

#### Software upgrade search via user interface

On the main menu select Settings, then 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. You can select the satellite, which is used for updating process by setting Edit upgrade for Satellite option. The Software Upgrade option is also available in the Settings-System-More menu.

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 the 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

# Troubleshooting & Tips

#### TV will not turn on

Make sure the power cord is plugged in securely to a wall outlet. Press the **Standby** button on the remote.

#### 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 the content is received through an HDMI input, try changing the related HDMI source input setting to Enhanced or Regular from the Source Settings option in the Sources menu or the Sources option in the Settings>System menu.
- · 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 is coming from only one speaker. Check the balance settings from the Sound menu.
- Check if the Sound Output option is set correctly from the Sound menu.
- If the content is received through an HDMI input, ty changing the related HDMI source input setting to Enhanced or Regular from the Source Settings option in the Sources menu or the Sources option in the Settings-System 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.

#### 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.

HDMI Signal Compatibility					
Source	Supported S	ignals	Available		
	480i	60Hz	0		
	480p	60Hz	0		
	576i, 576p	50Hz	0		
	720p	50Hz,60Hz	0		
	1080i	50Hz,60Hz	0		
HDMI	1080p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz	0		
	3840x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz	0		
	4096x2160p	24Hz, 25Hz, 30Hz, 50Hz, 60Hz	0		

# (X: Not Available, O: Available)

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

# Supported File Formats for USB Mode

# Video File Formats

File Extension	Format			
File Extension	Video Codec	Audio		
.mpg/.mpeg/.dat/ .vob	MPEG1/2, H.264, VC1	MPEG Layer 1/2/3, AC3		
.ts/.trp/.m2ts	MPEG1/2, H.264, VC1, HEVC/H.265	MPEG Layer 1/2/3, AC3, E-AC3		
.avi	MPEG1/2, MPEG4, H.264, MJPEG	MPEG Layer 1/2/3, AC3, AAC, WMA		
.mp4/.m4a/.m4v/ .mov/. qt/.3gp/.3g2/ .3gpp	MPEG1/2, H.263, MPEG4, H.264, HEVC/H.265, AV1	MPEG Layer 1/2/3, AAC LC, AC3		
.mkv	MPEG 1/2, MPEG4, H.264, HEVC/H.265, AV1	MPEG Layer 1/2/3, AAC, AC3		
.flv	Sorenson Spark, MPEG4, H.264	MPEG Layer 3, ADPCM, AAC LC		
.asf/.wmv	MPEG4, WMV3, VC1	WMA, AMR-NB		
.webm	VP9, VP8, AV1	OPUS, Vorbis		

# Picture File Formats

File Extension	Format
.jpg/.jpeg	JPEG, PJPEG
.bmp	BMP
.png	PNG

# **Audio File Formats**

File Extension	Format			
File Extension	Video Codec	Audio		
.mp3		mp3		
.aac		AAC		
.wma		WMA		
.wav		MPEG Layer 1/2/3, AAC, PCM		
.m4a	M4A	AAC		

# Subtitle File Formats

External Subtitles			
Extension	Specification		
.ssa	SubStation Alpha		
.ass	Advanced SubStation Alpha		
.srt	Subripper		
.sub	Micro DVD / SubViewer		
.txt	Micro DVD / TMPlayer / MPL2		
.smi	Sami		

Internal Subtitles				
Extension	Specification			
.mkv	VOBSub			
.mkv	ASS / SSA / TEXT			
.dat, .mpg, .mpeg, .vob	DVD Subtitle			
mn4	DVD Subtitle TEXT			

# Supported DVI Resolutions

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

	56Hz	60Hz	66Hz	70Hz	72Hz	75Hz
640x480		х				x
800x600	х	x				x
1024x768		x		х		x
1280x768		х				х
1280x960		х				
1360x768		х				
1366x768		x				
1280x1024		x		x		x
1400x1050		х				
1600x900		х				
1920×1080		x				

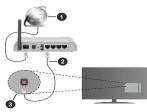
English - 27 - English - 28 -

# Connectivity

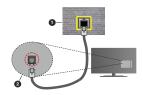
#### Wired Connectivity

#### To Connect to a Wired Network

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



- Broadband ISP connection
- 2 LAN (Ethernet) cable
- 3 LAN input on the rear side of the TV
- You might be able to connect your TV to your LAN depending on your network's configuration. In such a case, use an Ethernet cable to connect your TV directly to the network wall outlet.



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

#### **Configuring Wired Device Settings**

To configure wired connection settings go to the **Settings>Network** menu.

#### Network Type

Set Network Type as Wired Device if you are connecting via an Ethernet cable.

#### Internet Speed Test

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

#### Advanced Settings

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

#### 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. The MAC address of your TV will also be displayed on the screen.

# Wireless Connectivity

#### To Connect to a Wireless Network

 You must have a wireless modem/router connected to an active broadband connection.



1 Broadband ISP connection

A Wireless-N router (IEEE 802.11a/b/g/n) with simultaneous 24 and 5 GHz bands is designed to increase bandwidth. These are optimised for smoother and faster HD video streaming, file transfers and wireless gaming.

The 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 trained the products that you use. The transmission may also be cut off or may get disconnected depending on the radio wave conditions. DECT benes 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 TV supports 802.11 a, b, g & n type modems, It is highly recommended that you should use the IEEE 802.11n communication protocol in order to avoid any possible problems while watching videos.

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

#### **Configuring Wireless Device Settings**

To configure wireless connection settings go to the **Settings>Network** menu.

# Network Type

Set Network Type as Wireless Device to start connection process.

#### Scan Wireless Networks

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. An network with hidden SSID can not be detected by other devices. If you want to connect to a network with hidden SSID, scroll down the list of detected wireless networks, highlight the Add we Network option and press OK. Enter the name of the network and select the security type using the related options 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

Wait until the IP address is shown on the screen. This means that the connection is now established.

#### Disconnect

If you have connected to a wireless network **Dis**connect option will appear in the **Network** menu and your wireless network profile will also be saved, thus your TV will connect to the same network automatically whenever you switch to wireless connection. To disconnect from a wireless network and delete the saved wireless network profile, highlight **Disconnect** and press **OK**.

#### Press WPS on your wifi router

OK button on the remote control.

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.

#### Internet Speed Test

Highlight Internet Speed Test and press the OK button to check your internet connection speed.

# **Advanced Settings**

Highlight Advanced Settings and press the OK button to open the advanced setting menu. Use directional and numeric buttons to set. The procedure is the same as explained for wired connectivity, Highlight Save and press the OK button to save settings when complete.

# **Networked Standby Mode**

You can enable or disable the Networked Standby Mode feature by setting this option accordingly. Refer to **Networked Standby Mode** section for further information.

#### 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. The MAC address of your TV will also be displayed on the screen.

#### 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 by following the steps mentioned in the sections above.

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

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

Highlight the Audio Video Sharing 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.

#### Networked Standby Mode

Networked Standby Mode is a standard that allows 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 smarthbox

To enable this feature set the **Networked Standby Mode** 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. Networked Standby Mode feature is only supported for Android OS devices and can only be used via YouTube and Nefflix anolications.

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

If you want your TV to consume less power in standby mode, you can disable this feature by setting the **Networked Standby Mode** 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.

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 program you use.

#### Connectivity Troubleshooting

#### Wireless Network Not Available

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

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

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

#### Connection is Slow

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

# Disruption during playback or slow reactions

You could try the following in such a case:

Keep at least three metres 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 modern 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 unauthorised 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. Aftrewall 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 Sharine feature.

#### Invalid Domain

Ensure that you have already logged on to your PC with an authorised 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 on the media server connected to your home network.

#### 1. Server Software Installation

The Audio Video Sharing feature cannot be used if the server program 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 program.

#### 2. Connect to a Wired or Wireless Network

See the Wired/Wireless Connectivity sections for detailed configuration information.

# 3. Enable Audio Video Sharing

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

# 4. Play Shared Files via Media Browser

Highlight the Audio Video Sharing 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.

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

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

Note: There may be some PC's which may not be able to utilise 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 the **Home** menu. Press the **Home** button on the remote, **Home** menu will be displayed. Highlight an app and press **OK** to launch.

In order to manage the apps installed on your TV, you can use the More Apps option in the TV menu. You can add an installed app to Home menu, launch or remove it. Highlight an app and press OK to see the available options.

You can add new apps from the application market. To access the market highlight the **Market** option in the **TV** menu and press **OK**. Available apps will be displayed. You can also access the application market from within the **More Apps** menu.

You can reset your customisations on the Home menu, including app-related ones, to defaults using the Reset Apps option in the TV menu (availability depends on TV model and its features). Highlight this option appress OK A confirmation message will be displayed. Highlight Yes and press OK to proceed. Note that you will not be able to perform this operation again within the next few minutes.

#### 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 **Home** 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. 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. 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 lost, highlight the Vewd button again. Name and Address will be filled automatically according to the site you are visiting. Highlight of 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

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.

English - 31 - English - 32 -

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 guicker 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 content 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 settop boxes. Services delivered through HbbTV include traditional broadcast TV channels, catch-up services, video-on-demand, electronic programme guide, interactive advertising, personalisation, voting, games, social networking and other multimedia applications. HbbTV applications are available on channels where they are signalled by the broadcaster. The broadcaster marks one application as "autostart" and this one is started by the platform automatically. The autostart applications are generally launched with a small red button icon to notify the user that there is an HbbTV application on that channel. Press the red button to open the application page. After the page is displayed you can go back to the initial red button icon state by pressing the red button again. You can toggle between the red button icon mode and full UI mode of the application via pressing red button. It should be noted that the red button switching capability is provided by the application and some applications may behave differently (other colour buttons such as green, vellow, blue, may be defined for some other functions, e.g. shortcuts).

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

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

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

The autostart red button applications generally provide links to other applications. The user then can switch

to other applications by using the links provided. The applications should provide a way to terminate themselves, usually **Exit** button is used for this.

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

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.

If you need to change the audio description settings of your TV you should do it before a HbbTV plabactarts. You will not be able to access related settings during a playback. Go to the Settings>System>Accessibility>Audio Description menu and adjust according to your need.

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>Privacy Settings menu instead of the Settings-SystemMore menu.

#### **Smart Center**

Smart Center is a mobile application running on iOS and Android platforms. With your mobile device, you can easily stream your favourite live shows and programmes from your smart TV. Also; you can launch your applications, use your mobile device 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 **Home** button on the remote, select **Settings-System-More** menu and press **OK**. Highlight **Audio Video Sharing** and change as **Enabled**. Your TV is ready to connect to your mobile device now.

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

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

#### Mobile Device screen

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

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

MY CHANNELS: The programmes of the 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-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: 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.

**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 upper right 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 router's operational 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 upper right 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 access smart remote's full features you can use the menu at the bottom middle 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 available for android based devices.

vote. This leature is only available for anurold based device

#### **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
- Mobile device based on Android or iOS platform (Android OS 5.1 or higher; iOS 12 or higher version)
- Smart Center app.(to be found on online application stores based on Android and iOS platforms)
- 5. Router modem
- 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.

#### 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.

Sadržaj	
Bezbednosne informacije	2
Oznake na proizvodu	2
Informacije o zaštiti okoline	
Opcije	4
Ultra HD (UHD)	4
Opseg visoke dinamike (HDR) / hibridna	
logaritamska gama (HLG):	
Dolby Vision	
Uključena dodatna oprema	
Slika režima pripravnosti	
Obaveštenja o režimu pripravnosti	
Kontrolni tasteri TV-a i rukovanje	
Korišćenje glavnog menija televizora	
Postavljanje baterija u daljinski upravljač	
Povezivanje napajanja	
Povezivanje antene	
Obaveštenje o licenciranju	
Informacije o odlaganju	
Specifikacije	
Daljinski upravljač	
Veze	
Uključivanje/isključivanje	
Prva instalacija	
Reprodukcija preko USB ulaza	
USB snimanje	
Pregledač medija	
FollowMe TV	
[CEC]	
Režim igre (Game Mode)	
E-uputstvo	
Sadržaj menija Podešavanja	
Opšte rukovanje televizorom Korišćenje Liste kanala	
Koriscenje Liste kanala Konfigurisanje Roditeljski Postavki	
Rontigurisanje Roditeljski Postavki Elektronski programski vodič	
Usluge teleteksta	
Nadogradnja soπvera Rešavanje problema i saveti	
Kesavanje problema i saveti	
Podržani formati datoteka za USB režim	
Formati datoteka za video zapise	
Formati datoteka za video zapise Formati datoteka za slike	
Formati datoteka za audio zapise	
Formati datoteka za audio zapise Formati datoteka za prevode	
Podržane DVI rezolucije	
1 Out Zario D V I 1620 IU Olje	JU

Povezivanje	31
Kablovske veze	31
Bežična konekcija	31
Mrežni režim pripravnosti	33
Bežični prikaz	33
Rešavanje problema sa vezom	33
Korišćenje mrežne usluge deljenja audio-video	
sadržaja	
Aplikacije	34
nternet pregledač	34
Sistem HBBTV	35
Smart Centar	35
nformacija funkcionalnosti DVB	37

English - 35 - Srpski - 1 -

