

NOKIA

androidtv



Smart TV

2400A, 3200A, 3900A, 4300A, 4300B, 5000A, 5500A, 5800A, 6500A, 7500A

User Manual

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FAQs, manuals, help and support:
nokia.com/shop/support



Register your product:
nokia.streamview.com/care

1. Safety information



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

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

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

Important: Please read these instructions fully before installing or operating

Warning

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

- Use this TV set at an altitude of less than 2000 meters above the sea level, in dry locations and in regions with moderate or tropical climates.
- The TV set is intended for household and similar general use but may also be used in public places.
- For ventilation purposes, leave at least 5cm of free space around the TV.
- The ventilation should not be impeded by covering or blocking the ventilation openings with items, such as newspapers, tablecloths, curtains, etc.
- The power cord plug should be easily accessible. Do not place the TV, furniture, etc. on the power cord. A damaged power cord/plug can cause fire or give you an electric shock. Handle the power cord by the plug, do not unplug the TV by pulling the power cord. Never touch the power cord/plug with wet hands as this could cause a short circuit or electric shock. Never make a knot in the power cord or tie it with other cords. When damaged it must be replaced, this should only be done by qualified personnel.
- Do not expose the TV to dripping or splashing of liquids and do not place objects filled with liquids, such as vases, cups, etc. on or over the TV (e.g., on shelves above the unit).
- Do not expose the TV to direct sunlight or do not place open flames such as lit candles on the top of or near the TV.
- Do not place any heat sources such as electric heaters, radiators, etc. near the TV set.
- Do not place the TV on the floor and inclined surfaces.
- To avoid danger of suffocation, keep plastic bags out of the reach of the babies, children and domestic animals.
- Carefully attach the stand to the TV. If the stand is provided with screws, tighten the screws firmly to prevent the TV from tilting. Do not over-tighten the screws and mount the stand rubbers properly.
- Do not dispose of the batteries in fire or with hazardous or flammable materials.

Warning

- Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Excessive sound pressure from earphones or headphones can cause hearing loss.
- Use only the following power supply for Nokia Smart TV 2400A: Nokia power adapter PA1240EU

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

1.1. 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.



This marking indicates that this product should not be disposed with other household wastes throughout the EU. Please recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased.

1.2. 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 (galvanic isolator).

1.3. Wall mounting warnings

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

Tighten the wall mounting screws firmly to prevent the TV from fall. Do not over-tighten the screws.

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

1.4. Simplified EU declaration of conformity

Hereby, StreamView declares that the radio equipment type product device Smart TV is complying with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: nokia.com/shop/support

1.5. Apps and performance

Download speed depends on your Internet connection. Some apps might not be available in your country or region. Netflix is available in selected countries. Streaming membership is required. More information at www.netflix.com. The availability of the language for Google Assistant depends on Google Voice Search support.

1.6. Data protection

The application providers and the providers of the services may collect and use technical data and related information, including but not limited to technical information about this device, system and application software and peripherals. They may use such information to improve products or to provide services or technologies, which do not personally identify you. Additionally, some third-party services, already provided in the device or installed by you after purchasing the product, may request a registration with your personal data. Some services may collect personal data even without providing additional warnings. StreamView cannot be held liable for a possible breach of data protection by third-party services.

2. Introduction and stand installation

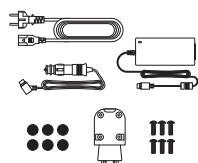
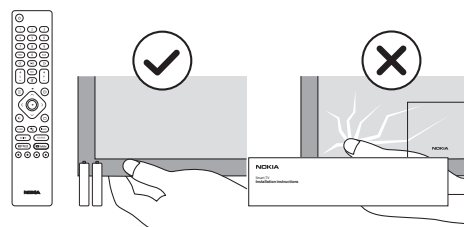
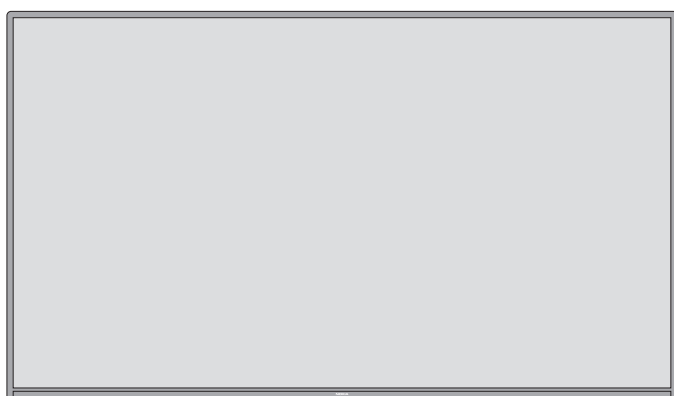
Thank you for choosing our product. You'll soon be enjoying your new TV. Please read these instructions carefully. They contain important information which will help you get the best from your TV and ensure safe and correct installation and operation.

2.1. Unpacking and installation

2.1.1. Assembling / removing the pedestal preparations

Take out the pedestal and the TV from the packing case and put the pedestal onto a work table or any other even surface.

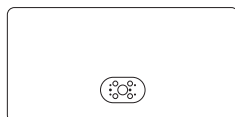
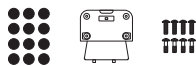
- Use a flat and firm table or similar even surface that can support the weight of the TV.
- Do not hold the screen panel part.
- Make sure not to scratch or break the TV.



24"



32"



39"-55"



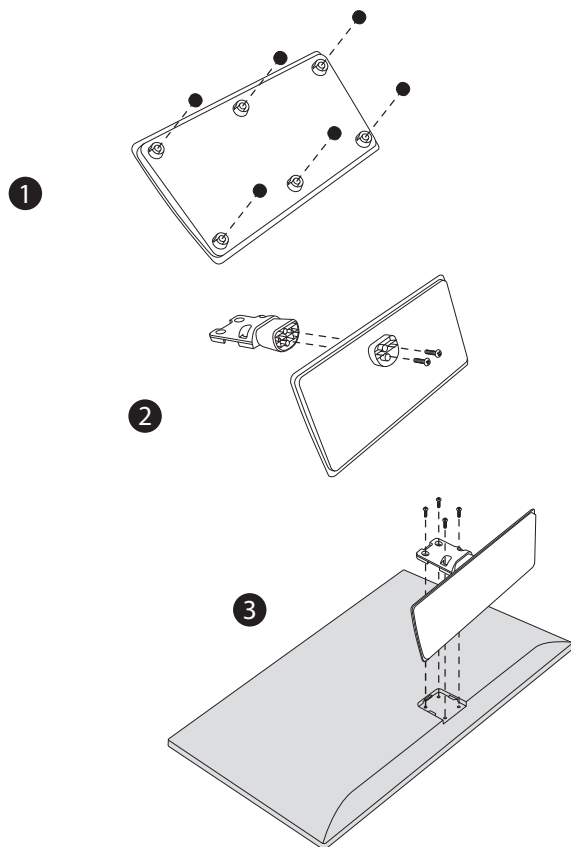
58"-65"



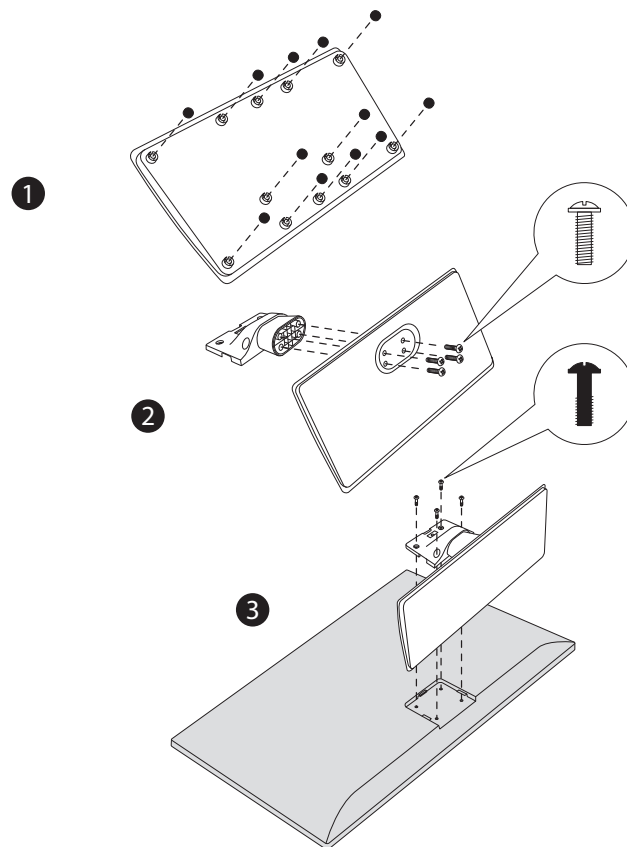
75"

2.1.2. Assembling the pedestal

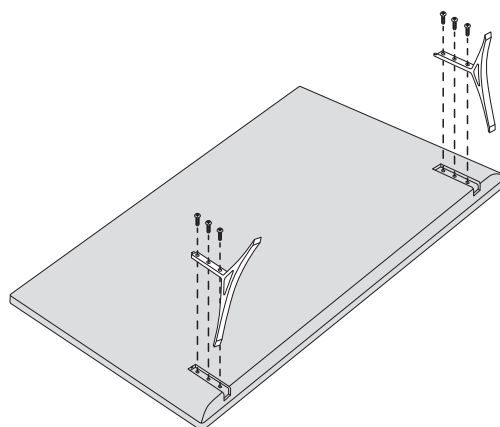
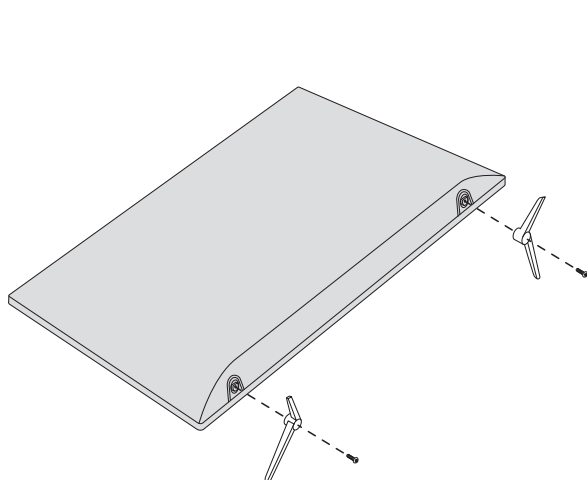
1. Place the pedestal on the table or similar even surface.
2. Hold the TV over the pedestal so that it coincides with the pedestal mounting point and then lower it to be mounted with its own weight. If the pedestal is not fitted properly, gently press down until the latch/es snap/s into place.



24"-32"



39"-55"



2.1.3. Removing the pedestal from the TV

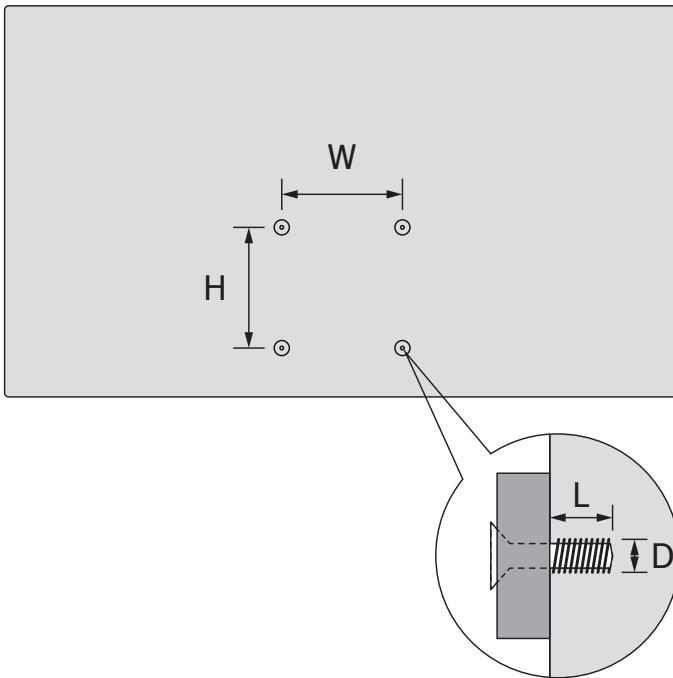
Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

- Put the TV onto a worktable with the screen panel down on the clean and soft cloth. Leave the pedestal protruding over the edge of the surface.
- Press the button/s on the rear side of the pedestal to release the latch/es.
- Remove the pedestal by pulling it away from the TV.

2.1.4. When using the wall mount bracket

Your TV is also prepared for a VESA-compliant wall mount bracket. If it is not supplied with your TV, contact your local dealer to purchase the recommended wall mount bracket.

Holes and measurements for wall mount bracket installation;



	W (mm)	H (mm)	D (mm)	L (mm)
24"	75	75	4 (M4)	5-8
32"	75	75	4 (M4)	5-8
39"	200	200	6 (M6)	10-13
43"	100	100	4 (M4)	7-8
50"	200	200	6 (M6)	10-13
55"	200	200	6 (M6)	10-13
58"	200	200	6 (M6)	10-13
65"	400	200	6 (M6)	10-13
75"	600	400	8 (M8)	15-20

2.2. Antenna connection

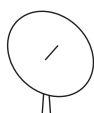
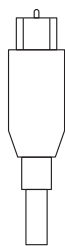
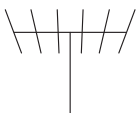
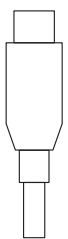
Connect the aerial or cable TV plug to the AERIAL INPUT (ANT) socket or satellite plug to the SATELLITE INPUT (LNB) socket located on the rear side of the TV.



ANTENNA



13/18 V=
300 mA max



Caution

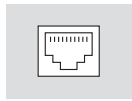
If you want to connect a device to the TV, make sure that both the TV and the device are turned off before making any connection. After the connection is done, you can turn on the units and use them.

3. Connections



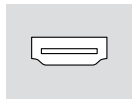
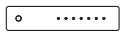
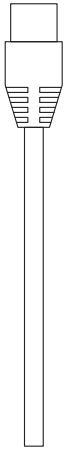
Caution

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.

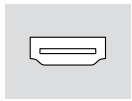
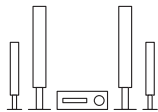
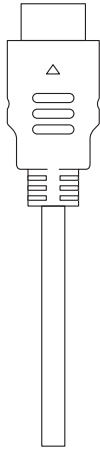


LAN

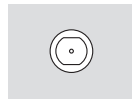
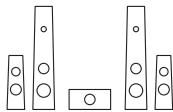
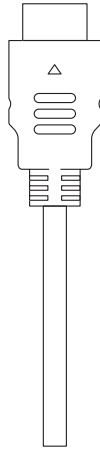
32"-75"



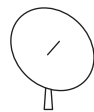
HDMI



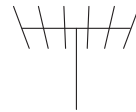
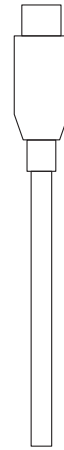
HDMI (ARC)



13/18 V=
300 mA max

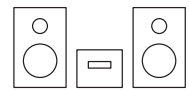


ANTENNA



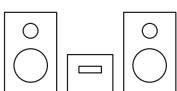
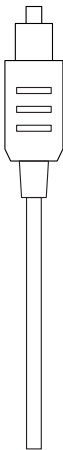
AUDIO OUT

HD/FHD TV

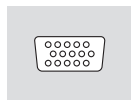
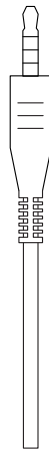


AUDIO OUT

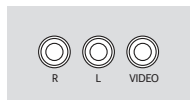
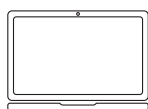
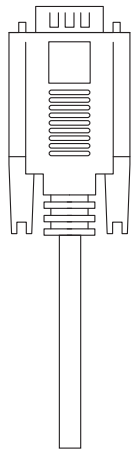
4K UHD TV



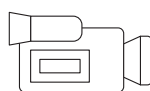
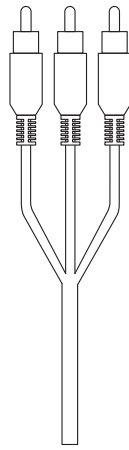
HEADPHONES



VGA

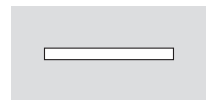
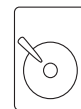
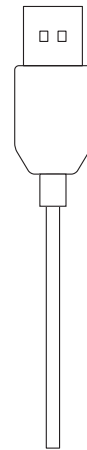


AV IN

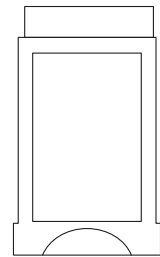


USB

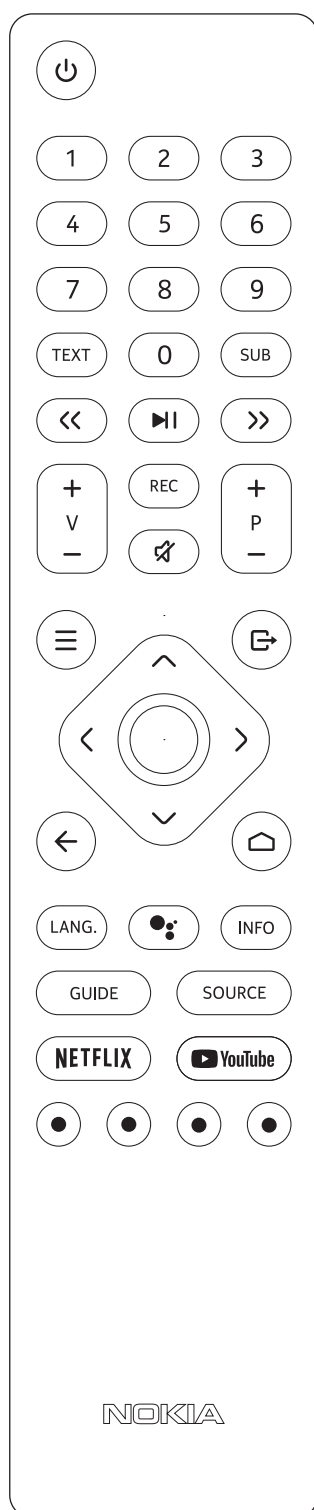
5 V=max. 500 mA



COMMON INTERFACE



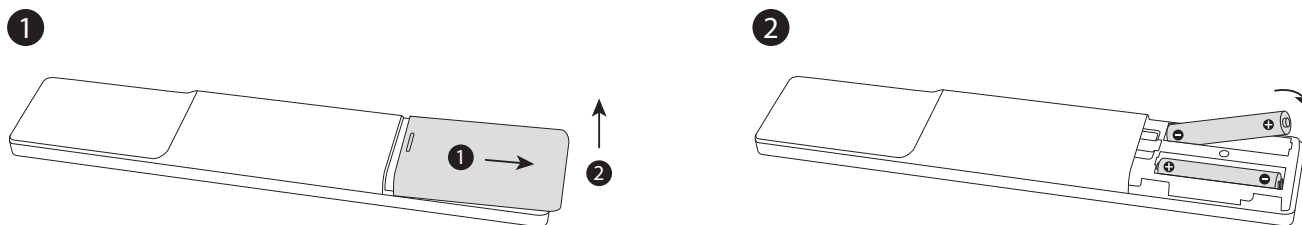
4. Remote control



	Standby: Quick Standby / Standby / On
0-9	Numeric buttons: Switches the channel in Live TV mode, enters a number or a letter in the text box on the screen
TEXT	Text: Opens and closes teletext (where available in Live TV mode)
SUB	Subtitles: Turns subtitles on and off (where available)
<< >>	Fast Forward: Moves frames forward in media such as movies Rewind: Moves frames backwards in media such as movies
⏸	Pause: Pauses the media being played Play: Starts to play selected media Stop: Press and hold this button for 3 seconds to stop playback of multimedia files
REC	Fast Forward: Moves frames forward in media such as movies Rewind: Moves frames backwards in media such as movies
	Mute: Completely turns off the volume of the TV
+ v -	Volume +/-
+ P -	Programme +/-
≡	Menu: Displays Live TV Settings menu (in Live TV mode), displays available setting options such as sound and picture
	Exit: Closes and exits from Live TV Settings menus, closes the Home Screen, exits from any running application or menu or OSD banner, switches to last set source
< > ^ v	Directional buttons: Navigates menus, setting options, moves the focus or cursor etc., sets record time and displays the subpages in Live TV-Teletext mode when pressed Right or Left. Follow the on-screen instructions
	OK: Confirms selections, enters sub-menus, views channel list (in Live TV mode). Press 5 sec. to switch the backlight of the remote control on/off
←	Back/Return: Returns to previous menu screen, goes one step back, closes open windows, closes teletext (in Live TV-Teletext mode). Exits the playback of multimedia files and returns to the MMP (Multi Medi Player) overview menu.
	Home: Opens the Home Screen
LANG.	Language: Switches among sound modes (analogue TV), displays and changes audio language (digital TV, where available)
	Microphone: Activates the microphone on the remote
INFO	Info: Displays information about on-screen content
GUIDE	Guide: Displays the electronic programme guide in Live TV mode
SOURCE	Source: Shows all available broadcast and content sources, closes the Home Screen and switches to last set source. Starts pairing of the remote control
NETFLIX	Netflix: Launches the Netflix application
	YouTube: Launches the YouTube application
◉ ◉ ◉ ◉	Coloured Buttons: Follow the on-screen instructions for coloured button functions

4.1. Inserting the batteries into the remote

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



4.2. To pair remote with the TV

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

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

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

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

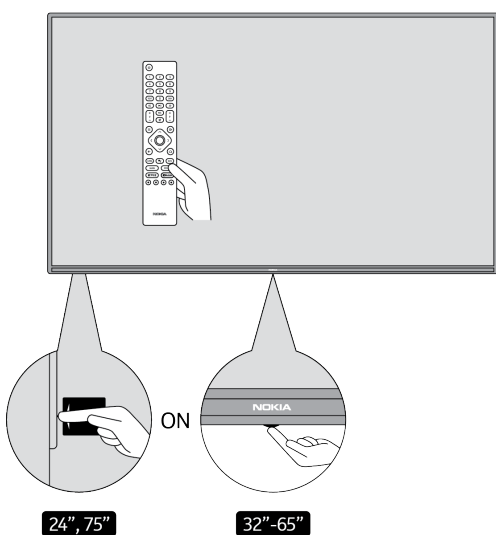
In order to pair your remote later on, you can go to **Settings** menu, highlight **Remotes & Accessories** option and press **OK** to start a search for accessories.

4.3. Standby button

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

5. Turning on/off the TV

(Turning On/Off method may vary depending to model.)



5.1. Magic button (model 7500A)

Connect power

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

After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains. Plug the power cable to the mains socket outlet. The TV will switch on automatically.

To switch on the TV from standby

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

- Press the **Standby** button on the remote control.
- To turn on the TV set, press the control switch in the center of the TV set.

To switch the TV into standby

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

To switch off the TV

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

Quick standby mode

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

- Press the **Standby** button on the remote. Press again to go back to operating mode.
- Press the centre of the control switch on the TV in and hold it down for a few seconds. Press again to go back to operating mode.

5.2. On-Off button

Connect power

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

After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains. Plug the power cable to the mains socket outlet. The TV will switch on automatically.

To switch on the TV from standby

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

- Press the **Standby** button on the remote control.
- Press the control button on the TV. The TV will then switch on.

To switch the TV into standby

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

To switch off the TV

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

Quick standby mode

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

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

5.3. Turning on/off the Nokia Smart TV 2400A

5.3.1. Connected with power adapter

Connect power

Important: The TV set is designed to operate on a 12 V DC supply. For this, an adaptor is used which gives 12 V voltage.

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

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

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

Be sure to ground the connection properly

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

To switch on the TV from standby

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

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

The TV will then switch on.

To switch the TV into standby

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

To switch off the TV

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

Quick standby mode

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

- Press the **Standby** button on the remote. Press again to go back to operating mode.
- Press the centre of the control switch on the TV in and hold it down for a few seconds.
- Press again to go back to operating mode.

5.3.2. Connected with low voltage adapter

Switching on the TV using car plug

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

Switching off the TV

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

ATTENTION: 12 V Input



6. Initial setup wizard

Note: Follow the on-screen instructions to complete the initial setup process. Use the directional buttons and the OK button on the remote to select, set, confirm and proceed.

When turned on for the first time, a welcome screen will be displayed. Select your language and press **OK**. Follow the on-screen instructions to setup your TV and install channels. The installation wizard will guide you through the setup process. You can perform initial setup anytime using the **Reset** option in the **Settings->Device Preferences** menu. You can access the **Settings** menu from the Home screen or from the **TV options** menu in Live TV mode.

6.1. Welcome message and language selection

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

6.2. Initial setup

After the country selection you can start the initial setup wizard. Highlight **Continue** and press **OK** to proceed. You will not be able to go back and change the language and country once you proceed. If you need to change the language after this step you will have to switch the TV into standby mode so the setup process starts from the beginning when you next switch on the TV. In order to do this, press and hold the **Standby** button. A dialogue will be displayed. Highlight **OK** and press **OK**.

6.3. Search for accessories

A search for accessories will be performed after the initial setup has started. Follow the on-screen instructions to pair your remote control (depends on the model of the remote control) and other wireless accessories with your TV. Press **Back/Return** button to end adding accessories and proceed.

6.4. Quick setup

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

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

6.5. Network connection

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

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

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

6.6. Sign in to your Google account

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

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

- **Use your phone or computer:** You can use a browser on your phone or computer to sign in. Highlight this option and press **OK** button. A code will be displayed on the TV screen. Make sure your phone or computer is on the same network as your TV. Open the given website (androidtv.com/setup, follow on-screen instructions for the up-to-date website url) in your phone's or computer's browser and enter the code you see on your TV screen into the related entry field. Then follow the instructions on your device and complete the process.
- **Use your remote:** Using this option you can sign in to your Google account by entering your e-mail address or phone number and your password.
If you prefer not to sign in to your Google account at this point you can **skip** this step by selecting Skip option.

6.7. Terms of service

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

6.8. Location

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

6.9. Help improve Android

Automatically send diagnostic information to Google, like crash reports and usage data from your device and apps. This information won't be used to identify you. Select **Yes** to confirm and press **OK**. To skip this step without confirmation, select **No** and proceed by pressing the **OK** button. You can change this setting later using the **Settings-> Device Preferences-> Usage & Diagnostics** menu on the Home Screen.

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

6.10. Country

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

6.11. Password

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

6.12. Select TV mode

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

6.13. Chromecast built-in

Select your Chromecast availability preference. If set as On your TV will be detected as a Google Cast device and allow Google Assistant and other services to wake your TV up to respond to commands, even when on

standby mode and the screen is off.

7. Tuner mode

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

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

7.1. Antenna

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

7.2. Cable

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

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

7.3. Satellite

If **Satellite** option is selected, **Satellite Type** screen will be displayed next. **Preferred Satellite** and **General Satellite** options will be available. Select one and press **OK** to proceed.

Note: Preferred Satellite and General Satellite options may not be available depending on the selected country. In this case the DVBS Configuration Setting screen will be displayed after selecting the tuner mode as Satellite.

If **Preferred Satellite** option is selected, next screen will be **Select Operator** screen. You can select only one operator from the list. Highlight the desired operator and press **OK** or the **Right** directional button to proceed. Some of the following options may be preset depending on the selected operator in this step. Check the parameters before proceeding and adjust if necessary.

7.4. DVB-S configuration

DVB-S Configuration Setting screen will be displayed next. First **Antenna type** should be set (This option may be named as Satellite type depending on the country selection.) **Universal**, **Single Cable** and **Jess Singlecable** options are available. Set the **Antenna Type** as **Universal** for Direct and DiSEqC satellite systems. If you set the antenna type as **Universal**, press the **Right** directional button to proceed to the next step. If the antenna type is set as **Single Cable** or **Jess Singlecable**, there will be three more additional options on the **DVB-S Configuration Setting** screen: **Tuner**, **Band frequency** and **User Defined**. **User Defined** option will be available if the **Band frequency** is set as **User Defined**. Set these options if available and press the **Right** directional button to proceed.

Depending on the country and satellite type selections you made in the earlier steps of the initial setup process, **Load Preset List** screen may be displayed next. Highlight **Load Preset List** and press **OK** or the **Right** directional button to proceed with the SatcoDX installation. You can also skip this step by selecting **Skip** option.

After the parameters on the **DVB-S Configuration Setting** screen are configured according to your environment

and preset list installation preference is selected the next step may be **Select Satellite** screen. You may be able to set up different satellites depending on the selected antenna type and operator in the previous steps. Highlight the desired satellite option and press **OK** to set the parameters (If you have a Direct satellite system, DiSEqC Set option should be set as DiSEqC A.). The **Satellite Status** of the first satellite option will be set as **On**. In order to configure other settings of the satellite and to enable scan this option should be set as **On** first. Press **Back** button and select next satellite you want to set. After you completed the configuration changes, press the **Right** directional button to proceed.

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

Channel Scan screen will be displayed next. Select **Scan** and press **OK** or the **Right** directional button to proceed with the scanning configurations. Select **Skip Scan** to proceed without performing a scan and complete the initial setup.

DVBS Scan Configure screen will be displayed next if **Scan** option is selected. Following options will be available: **Scan Mode** and **Channels**. You can choose to perform a full scan or a network scan. Set the **Scan Mode** accordingly. If you are going to perform a network scan, make sure that you have adjusted the **Frequency**, **Symbol Rate (kSym/s)** and **Polarisation** parameters under the **Transponder** option accurately on the **Satellite Setup** screen. You may not be able to change the **Scan mode** setting depending on the previous selections. If the **Channels** option is set as **Free** encrypted channels will not be installed. Additional options may also be available depending on the selected operator, configure these settings according to your preferences. Once you are done with setting the available options, press the **Right** directional button to start scan while **Scan Mode** or **Channels** is highlighted. While the search continues you can press the **Back** button to cancel the search. The channels that have already been found will be stored in the channel list.

When the initial setup is completed results will be displayed. Press **OK** to finish the setup.

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

8. Home Screen

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

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

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

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

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

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

Player and press **OK** to browse the connected USB devices or media servers and play/ display the installed media content on the TV. The audio files can be played through the speakers of the TV or through the speaker systems connected to the TV. You can configure your sound output preference from the **Speakers** option in the **Settings-> Device Preferences-> Sound** menu.

9. Live TV mode menu content

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

9.1. Channels

9.1.1. Add to my favourites

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

9.1.2. Programme guide

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

9.1.3. New channels available

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

9.2. TV options

9.2.1. Source

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

9.2.2. Picture Mode

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

9.2.3. Display mode

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

9.2.4. Speakers

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

9.2.5. Power

- **Sleep Timer:** Define an idle time after which you want your TV to enter sleep mode automatically.
- **Picture off:** Select this option and press **OK** to turn the screen off. Press a button on the remote or on the TV to turn the screen on again. Note that you can not turn the screen on via the **Volume +/-**, **Mute** and **Standby** buttons. These buttons will function normally.
- **Switch off timer:** Define a time after which you want your TV to switch off automatically. Set as **Off** to disable.
- **No Signal Auto Power Off:** Set the behaviour of the TV, when no signal is detected from the currently set input source. Define a time after which you want your TV to turn itself off or set as **Off** to disable.

9.2.6. CI card

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

9.2.7. Advanced options

- **Audio Language:** Set your language preference for audio. This item may not be available depending on the input source setting.
- **Blue Mute:** Turn this function on/off according to your preference. When turned on, blue background will be displayed on the screen when no signal is available.
- **Default Channel:** Set your default startup channel preference. When the **Select Mode** is set as User Select, Show Channels option will become available. Highlight and press **OK** to see channel list. Highlight a channel and press **OK** to make a selection. Selected channel will be displayed, every time the TV is turned back on from quick standby mode. If the Select Mode is set as Last Status, the last watched channel will be displayed.
- **Interaction Channel:** Turn the Interaction Channel function on or off.
- **MHEG PIN Protection:** Turn the MHEG PIN protection function on or off. This setting enables or disables access some of the MHEG applications. Disabled applications can be released by entering the right PIN.
- **HBBTV Settings:** Turn the HBBTV function on or off.
- **Do Not Track:** Set your preference regarding the tracking behaviour for HBBTV services.
- **Cookie Settings:** Set your cookie setting preference for HBBTV services.
- **Persistent Storage:** Turn the Persistent Storage function on or off. If set as **On** cookies will be stored with an expiry date in the persistent memory of the TV.
- **Block Tracking Sites:** Turn the Block Tracking Sites function on or off.
- **Device ID:** Turn the Device ID function on or off.
- **Reset Device ID:** Reset the device ID for HBBTV services. Confirmation dialogue will be displayed. Press **OK** to proceed, **Back** to cancel.
- **Subtitle:**
 - **Analogue Subtitle:** Set this option as **Off**, **On** or **Mute**. If Mute option is selected, the analogue subtitle will be displayed on the screen but the speakers will be muted simultaneously.
 - **Digital Subtitle:** Set this option as Off or On.
 - **Subtitle Tracks:** Set your subtitle track preference, if any available.
 - **Digital Subtitle Language:** Set one of the listed language options as first digital subtitle language preference.
 - **Second Digital Subtitle Language:** Set one of the listed language options as second digital subtitle language preference. If the selected language in the Digital Subtitle Language option is not available, the subtitles will be displayed in this language.
 - **Subtitle Type:** Set this option as Normal or Hearing Impaired. If Hearing Impaired option is selected, it provides subtitle services to deaf and hard of hearing viewers with additional descriptions.
- **Teletext:**
 - **Digital Teletext Language:** Set the teletext language for digital broadcasts.
 - **Decoding Page Language:** Set the decoding page language for teletext display.
- **BISS Key:** Click To Add Biss Key message will be displayed. Press **OK** button to add a biss key. Frequency, Symbol Rate (kSym/s), Polarisation, Programme ID and CW Key parameters will be available to be set. Once you are done with the settings highlight **Save Key** and press **OK** to save and add the biss key. This option will not be available if the **Channel Installation Mode** under the **Settings-> Channel** menu is not set as Preferred Satellite, General Satellite or Satellite. Available options will differ depending on the selected country during the initial setup process.
- **Auto Sleep:** Define an idle time after which you want your TV to enter sleep mode automatically. 4 Hours, 6 Hours and 8 Hours options are available. Set as Never to disable.
- **System Information:** Display detailed system information on the current channel such as Signal Level, Signal Quality, Frequency etc.
- **Version Info:** Display system information such as Model Name and Version.

9.3. Record

9.3.1. Record list

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

to scroll the page up and down.

9.4. Device info

- Connected USB storage devices will be displayed. Highlight the device of your choice and press **OK** to see available options.
- **Set TimeShift:** Tag the selected USB storage device or a partition on it for time shift recording.
- **Set PVR:** Tag the selected USB storage device or a partition on it for PVR.
- **Format:** Format the selected USB storage device. Refer to **USB Recording** section for more information
- **Speed Test:** Start a speed test for the selected USB storage device. The test result will be displayed when completed.
- **Schedule List:** Add reminders or record timers using the Schedule List menu.
- **Time Shift Mode:** Enable or disable timeshift recording feature. Refer to **USB Recording** section for more information.

10. Settings

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

10.1. Network & internet

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

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

When the WLAN function is turned on, available wireless networks will be listed. Highlight See all and press OK to see all networks. Select one and press OK to connect. You may be asked to enter a password to connect to the selected network, in case the network is password protected.

- **Add new network:** Add networks with hidden SSID's.
- **Scanning always available:** You can let the location service and other apps scan for networks, even when WLAN function is turned off. Press **OK** to turn it on and off.

10.1.1. WoW

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

10.1.2. WoL

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

10.1.3. Ethernet

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

10.1.4. Proxy settings

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

10.1.5. IP settings

Configure your TV's IP settings.

10.2. Channels

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

10.2.1. Channel installation mode – Antenna

- **Automatic Channel Search:** Start a scan for analogue and digital channels. You can press the **Back** button to cancel the scan. The channels that have already been found will be stored in the channel list.
- **Update Scan:** Search for updates. Previously added channels will not be deleted, but any newly found channels will be stored in the channel list.
- **Analogue Manual Scan:** Start a manual scan for analogue channels. Enter the **Start Frequency** and then select Scan Up or Scan Down. When a channel is found the scan will be completed and the found channel will be stored in the channel list.
- **Single RF Scan:** Select the RF Channel by using the Right/Left directional buttons. Signal Level and Signal Quality of the selected channel will be shown. Press **OK** to start scan on the selected RF channel. The found channels will be stored in the channel list.
- **Manual Service Update:** Start a service update manually.
- **LCN:** Set your preference for LCN. LCN is the Logical Channel Number system that organizes available broadcasts in accordance with a recognizable channel number sequence (if available).
- **Channel Scan Type:** Set your scan type preference.
- **Channel Store Type:** Set your store type preference.
- **Favourite Network Select:** Select your favourite network. This menu option will be active, if more than one network is available.
- **Channel Skip:** Set channels to be skipped when switching the channels via **Programme +/-** buttons on the remote. Highlight the desired channel/s on the list and press **OK** to select/unselect.
- **Channel Swap:** Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel. You should set the LCN option to Off or Default in order to enable this feature.
- **Channel Move:** Move a channel to the position of another channel. Highlight the channel you want to move and press **OK** to select. Then do the same for a second channel. When the second channel is selected, the first selected channel will be moved to the position of that channel. You should set the LCN option to Off or Default in order to enable this feature.
- **Channel Edit:** Edit channels in the channel list. Edit the name and channel number of the selected channel and display Network Name, Frequency, Colour System and Sound System information related to that channel if available. Depending on the channel other options may also be editable. You can press the Blue button to delete the highlighted channel.
- **Analogue Channel Fine-tune:** Fine-tune an analogue channel. A list of available analogue channels will be displayed. Select the desired one from the list and press **OK** button. Then change the frequency of the channel by pressing Left/Right directional buttons. Press **OK** to store the new frequency for that channel. Press **Back** to cancel. This item may not be visible, depending on whether or not the last watched channel was analogue.
- **Clear Channel List:** Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** button to proceed. Highlight **Cancel** and press **OK** to cancel.

10.2.2. Channel installation mode – Cable

- **Automatic Channel search:** The Smart TV searches for digital and analog channels that can be received via cable. Depending on the country, optional DVB-C cable TV providers are offered during the initial installation and are listed on the **Select operator** screen. If you receive the DVB-C signal from a non-dedicated cable TV provider, select the option **Other**. Press **OK** to start the channel search. In the **Channel Search** menu, you can select one of the three channel search options: Full, Advanced, or Quick.
 - **Full:** Automatic search of all available DVB-C channels.
 - **Advanced:** Automatic search of all available DVB-C channels. For this option, it is necessary to enter the DVB-C provider's reception parameters, frequency and network ID. With this search option, the channels are sorted by LCN of the cable providers.
 - **Quick:** Automatic search for all available DVB-C channels. This search will search all available cable transponders with the standard symbols.
- **Single RF Scan:** Manual search of DVB-C channels by transponder frequency.
- **LCN:** LCN options for DVB-C channel search.
- **Channel Scan Type:** Set your scan type preference.
- **Channel Store Type:** Set your store type preference.
- **Favourite Network Select:** Select your favourite network. This menu option will be active, if more than one network is available. This option may not be available depending on the selected country during the initial

setup process.

- **Channel Skip:** Select the channels to be skipped when switching channels using the **Programme +/-** buttons on the remote control. Highlight the desired channels in the list and press **OK** to select them.
- **Channel Swap:** Swap the position of two selected channels in the channel list. Highlight the desired channel in the list and press **OK**. Select the second desired channel and swap the position of these two channels. You should set the LCN option to Off or Default to enable this feature.
- **Channel Move:** Move a channel to the position of another one. Highlight the channel you want to move and press **OK**. Highlight the second channel and it will be moved to the position of the first channel. You should set the LCN option to Off or Default to enable this feature.
- **Channel Edit:** Edit channels in the channel list. Edit the name and the channel number of the selected channel and display information about Network Name, Frequency, Colour System, Sound System, Modulation and Symbol Rate. Depending on the channel other options may also be editable. You can press the Blue button to delete the highlighted channel.
- **Analogue Channel Fine-tune:** Fine-tune an analogue channel. A list of available analogue channels will be displayed. Select the desired channel from the list and press **OK**. Then change the frequency of the channel by pressing **Left/Right directional** buttons. Press **OK** to store the new frequency for that channel. Press **Back** to cancel. This item may not be visible, depending on whether the last watched channel was analogue or not.
- **Clear Channel List:** Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** to proceed. Highlight **Cancel** and press **OK** to cancel the deletion process.

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

10.2.3. Channel installation Mode-Preferred Satellite

- **Satellite Re-scan:** The satellite search process will be performed again.
- **Satellite Add:** This function is useful when the **General Satellite** option is selected as the TV signal type. When the **Preferred Satellite** option is selected, DiSEqC settings will be automatically determined and channels from new satellite providers will be added from new selected satellites, depending on the selected satellite provider.
- **Satellite Update:** If you select the **Scan** function, the receivable satellites and the corresponding DiSEqC settings will be determined automatically and the new channels will be added.
- **Satellite Manual Tuning:** Select the satellite on which you want to perform the manual search of the satellite transponder and press **OK**. Set the exact reception parameters of the desired satellite transponder (frequency, symbol rate and polarization). Make sure that the signal quality and signal level indicate a sufficient value and press the **Back** button. Press the **Right** directional button to start the search. The found programs will be saved at the end of the program list.
- **Channel Skip:** Select the channels to be skipped when switching channels using the **Programme +/-** buttons on the remote control. Highlight the desired channels in the list and press **OK** to select them.
- **Channel Swap:** Swap the position of two selected channels in the channel list. Highlight the desired channel in the list and press **OK**. Select the second desired channel and swap the position of these two channels. You should set the LCN option to Off or Default to enable this feature.
- **Channel Move:** This function is partially available in the “Preferred Satellite” satellite installation mode. The channel list of the selected providers cannot be edited.
- **Channel Edit:** Edit channels in the channel list. Edit the name and the channel number of the selected channel and display information about Network Name, Frequency, Colour System, Sound System, Modulation and Symbol Rate. Depending on the channel other options may also be editable. You can press the Blue button to delete the highlighted channel.
- **Clear Channel List:** Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** to proceed. Highlight **Cancel** and press **OK** to cancel the deletion process.

10.2.4. Channel installation Mode-General Satellite

- **Satellite Re-scan:** The satellite search process will be performed again. As an option, you can activate another receivable satellite and add it to the automatic search. Select another satellite and press **OK**. Set the exact reception parameters of the desired satellite, the DiSEqC connections and the reception parameters of a receivable satellite transponder (the frequency, the symbol rate and the polarization). Make sure that the signal quality and signal level indicate a sufficient value and press the **Back** button. Press the

Right directional button to start the scan. The found programs will be saved at the end of the program list.

- **Satellite Add:** Press **OK** to set the reception parameters of the satellite you want to add. Activate the satellite in the satellite status and set the exact reception parameters of the desired satellite. Set the DiSEqC ports and the reception parameters of a receivable satellite transponder (the frequency, the symbol rate and the polarization). Make sure that the signal quality and signal level indicate a sufficient value and press the **Back** button. Press the **Right directional** button to start the scan. The found channels will be stored at the end of the channel list.
- **Satellite Update:** The channel scan of the selected satellites will be started and new channels will be added to the channel list automatically.
- **Satellite Manual Tuning:** Select the satellite on which you want to perform the manual search of the satellite transponder and press **OK**. Set the exact reception parameters of the desired satellite transponder (frequency, symbol rate and polarization). Make sure that the signal quality and signal level indicate a sufficient value and press the **Back** button. Press the **Right directional** button to start the search. The found programs will be saved at the end of the program list.
- **Channel Skip:** Select the channels to be skipped when switching channels using the **Programme +/-** buttons on the remote control. Highlight the desired channels in the list and press **OK** to select them.
- **Channel Swap:** Swap the position of two selected channels in the channel list. Highlight the desired channel in the list and press **OK**. Select the second desired channel and swap the position of these two channels. You should set the LCN option to Off or Default to enable this feature.
- **Channel Move:** Move a channel to the position of another channel. Highlight the channel you want to move, press **OK** to select it and choose a new position using the number keys.
- **Channel Edit:** : Edit channels in the channel list. Edit the name and the channel number of the selected channel and display information about Network Name, Frequency, Colour System, Sound System, Modulation and Symbol Rate. Depending on the channel other options may also be editable. You can press the Blue button to delete the highlighted channel.
- **Clear Channel List:** Delete all channels stored in the channel list of the selected channel installation mode. A dialogue will be displayed for confirmation. Highlight **OK** and press **OK** to proceed. Highlight **Cancel** and press **OK** to cancel the deletion process.

10.2.5. Auto channel update

Turn the auto channel update function on or off.

10.2.6. Channel update message

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

10.2.7. Parental controls

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

- **Channels Blocked:** Select channel/s to be blocked from the channel list. Highlight a channel and press **OK** to select/unselect. To watch a blocked channel PIN should be entered first.
- **Programme Restrictions:** Block programmes according to the age rating information that is being broadcast with them. You can turn on or off restrictions, set rating systems, restriction levels and age limits using the options of this menu.
- **Inputs Blocked:** Prevent access to the selected input source content. Highlight the desired input option and press **OK** to select/unselect. To switch to a blocked input source PIN should be entered first.
- **Change PIN:** Change the default PIN. Highlight this option and press **OK**. You will need to enter the old PIN first. Then new PIN entry screen will be displayed. Enter the new PIN twice for confirmation.

10.2.8. Audio channel

Set the audio channel preference, if available. This item may not be visible, depending on whether or not the last watched channel was analogue.

10.2.9. Audio language

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

10.2.10. Second audio language

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

10.2.11. Open source licenses

Displays Open Source Software license information.

10.2.12. Version

Displays system version number.

10.3. Accounts & sign in

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

10.4. Apps

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

- **Recently opened apps:** You can display recently opened apps. Highlight **See all apps** and press **OK** to see all the apps installed on your TV. The amount of storage space that they needed will also be displayed. You can see the version of the app, open or force to stop the running of the app, uninstall a downloaded app, see the permissions and turn them on/off, turn on/off the notifications, clear the data and cache etc. Highlight an app and press **OK** to see available options.
- **Permissions:** Manage the permissions and some other features of the apps.
 - App permissions: The apps will be sorted by permission type categories. You can enable/disable permissions for the apps from within these categories.
 - Special app access: Configure some app features and special permissions.
 - Security & restrictions: Using the options of this menu; You can allow or restrict installation of apps from sources other than the Google Play Store. Set the TV to disallow or warn before installation of apps that may cause harm.

10.5. Device preferences

10.5.1. About

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

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

10.5.2. Date & time

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

10.5.3. Timer

- **Power On Time Type:** Set your TV to turn on by itself. Set this option as On or Once to enable a power on timer to be set, set as Off to disable. If set as Once the TV will turn on only once at the defined time in Auto Power On Time option below.
- **Auto Power On Time:** Available if the Power On Time Type is enabled. Set the desired time for your TV to come on from standby using the directional buttons and press **OK** to save the new set time.
- **Power Off Time Type:** Set your TV to turn off by itself. Set this option as On or Once to enable a power off timer to be set, set as Off to disable. If set as Once the TV will turn off only once at the defined time in Auto Power Off Time option below.
- **Auto Power Off Time:** Available if the Power Off Time Type is enabled. Set the desired time for your TV to go to standby using the directional buttons and press **OK** to save the new set time.

10.5.4. Language

Set your language preference.

10.5.5. Keyboard

Select your keyboard type and manage keyboard settings.

10.5.6. Inputs

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

10.5.7. Power

- **Sleep Timer:** Define an idle time after which you want your TV to enter sleep mode automatically.
- **Picture off:** Select this option and press **OK** to turn the screen off. Press a button on the remote or on the TV to turn the screen on again. Note that you can not turn the screen on via the Volume +/-, Mute and Standby buttons. These buttons will function normally.
- **Switch off Timer:** Define a time after which you want your TV to switch off automatically. Set as Off to disable.
- **No Signal Auto Power Off:** Set the behaviour of the TV, when no signal is detected from the currently set input source. Define a time after which you want your TV to turn itself off or set as Off to disable.

10.5.8. Picture

- **Picture Mode:** Set the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: User, Standard, Vivid, Sport, Movie and Game. You can use User mode to create customised settings.
- Backlight, Brightness, Contrast, Colour, Hue, Sharpness settings will be adjusted according to the selected picture mode. If one of these settings is changed manually, Picture Mode option will be changed to User, if not already set as User.
- **Auto Backlight:** Set your auto backlight preference. Off, Low, Middle and Eco options will be available. Set as Off to disable.
- **Backlight:** Adjust the backlight level of the screen manually. This item will not be available if the Auto Backlight is not set as Off.
- **Brightness:** Adjust the brightness value of the screen.
- **Contrast:** Adjust the contrast value of the screen.
- **Colour:** Adjust the colour saturation value of the screen.
- **Hue:** Adjust the hue value of the screen.
- **Sharpness:** Adjust the sharpness value for the objects displayed on the screen.
- **Gamma:** Set your gamma preference. Dark, Middle and Bright options will be available.
- **Colour Temperature:** Set your colour temperature preference. User, Cool, Standard and Warm options will be available. You can adjust red, green and blue gain values manually. If one of these values is changed manually, Colour Temperature option will be changed to User, if not already set as User.
- **Display Mode:** Set the aspect ratio of the screen. Select one of the predefined options according to your preference.
- **HDR:** Turn the HDR function on or off. This item will be available if HDR content is detected.

10.5.9. Advanced video

- **DNR:** Dynamic Noise Reduction (DNR) is the process of removing noise from digital or analogue signal. Set your DNR preference as Low, Medium, Strong, Auto or turn it off by setting as Off.
- **MPEG NR:** MPEG Noise Reduction cleans up block noise around outlines and noise on the background. Set your MPEG NR preference as Low, Medium, Strong or turn it off by setting as Off.
- **Adaptive Luma Control:** Adaptive Luma control adjusts contrast settings globally according to content histogram in order to provide deeper black and brighter white perception. Set your Adaptive Luma Control preference as Low, Medium, Strong or turn it off by setting as Off.
- **DI Film Mode:** It is the function for 3:2 or 2:2 cadence detection for 24 fps film contents and improves the side effects (like interlacing effect or judder) which are caused by these pull down methods. Set your DI Film Mode preference as Auto or turn it off by setting as Off. This item will not be available if Game Mode or PC Mode (optional) is turned on.
- **Blue Stretch:** Human eye perceives cooler whites as brighter white, Blue Stretch feature changes White balance of mid-high grey levels to cooler colour temperature. Turn the Blue Stretch function on or off.
- **Game Mode:** Game mode is the mode which cuts down some of the picture processing algorithms to keep up with video games that have fast frame rates. Turn the Game Mode function on or off.
- **PC Mode (optional):** PC Mode is the mode which cuts down some of the picture processing algorithms to keep signal type as it is. It can be usable especially for RGB inputs. Turn the PC Mode function on or off.
- **HDMI RGB Range:** This setting should be adjusted according to input RGB signal range on HDMI source. It can be limited range (16-235) or full range (0-255). Set your HDMI RGB range preference. Auto, Full and Limit options will be available. This item will not be available, if the input source is not set as HDMI.
- **Colour Tuner:** Colour saturation, hue, brightness can be adjustable for red, green, blue, cyan, magenta, yellow and flesh tone (skin tone) for having more vivid or more natural image. Set the Hue, Colour, Brightness, Offset and Gain values manually. Highlight Enable and press OK to turn this function on.
- **11 Point White Balance Correction:** White balance feature calibrates TV's colour temperature in detailed grey levels. By visually or measurement, grey scale uniformity can be improved. Adjust the strength of the Red, Green, Blue colours and Gain value manually. Highlight Enable and press OK to turn this function on.
- **Reset to Default:** Reset the video settings to factory default settings.

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

10.5.10. Sound

- **System Sounds:** System sound is the sound played when navigating or selecting an item on the TV screen. Highlight this option and press OK to turn this function on or off.
- **Sound Style:** For easy sound adjustment, you can select a preset setting. User, Standard, Vivid, Sport, Movie, Music or News options will be available. Sound settings will be adjusted according to the selected sound style. Some other sound options may become unavailable depending on the selection.
- **Balance:** Adjust the left and right volume balance for speakers and headphones.
- **Equaliser Detail:** Adjust the equaliser values according to your preferences.
- **Speakers:** To hear the TV audio from the connected compatible audio device set as External Audio System. Set as TV Speakers to use the speakers of your TV for sound output.
- **Digital Output:** Set the digital sound output preference. Auto, Bypass, PCM, Dolby Digital Plus and Dolby Digital options will be available. Highlight the option you prefer and press OK to set.
- **SPDIF Delay:** Adjust the SPDIF delay value.
- **Auto Volume Control:** With Auto Volume Control, you can set the TV to automatically level out sudden volume differences. Typically at the beginning of adverts or when you are switching channels. Turn this option on/off by pressing OK.
- **Downmix Mode:** Set your preference to convert multi-channel audio signals to two-channel audio signals. Press OK to see the options and set. Stereo and Surround options will be available. Highlight the option you prefer and press OK to set.
- **Dolby Audio Processing:** With Dolby Audio Processing, you can improve the sound quality of your TV. Press OK to see the options and set. Some other sound options may become unavailable and appear as grayed out depending on the settings made here.
- **Dolby Audio Processing:** Highlight this option and press OK to turn this function on/off.
- **Sound Mode:** If the Dolby Audio Processing option is turned on Sound Mode option will be available to set. Highlight the Sound Mode option and press OK to see the preset sound modes. Smart, Movie, Music and News options will be available. Highlight the option you prefer and press OK to set.
- **Reset to Default:** Resets the sound settings to factory defaults.

10.5.11. Storage

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

10.5.12. Home Screen

Customise your home screen. Select channels which will be displayed on the home screen. Organize apps and games, change their order or get more of them.

10.5.13. Store mode

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

10.5.14. Google assistant

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

10.5.15. Screen saver

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

10.5.16. Location

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

10.5.17. Usage & diagnostics

Automatically send usage data and diagnostic information to Google. Set according to your preference.

- **Visually Impaired:** Digital TV channels can broadcast special audio commentary describing on-screen action, body language, expressions and movements for people with visual disabilities.
- **Speaker:** Turn this option on if you want to hear the audio commentary through the TV speakers.
- **Headphone:** Turn this option on if you want to route the sound of the audio commentary to the TV's headphone output.
- **Volume:** Adjust the volume level of the audio commentary.
- **Pan and Fade:** Turn this option on if you want to hear the audio commentary more clearly, when it is available through broadcast.
- **Audio for the Visually Impaired:** Set the audio type for visually impaired. Options will be available depending on the selected broadcast.
- **Fader Control:** Adjust the volume balance between the main TV audio (Main) and audio commentary (AD).

10.5.18. Reset

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

10.6. Remote & accessories

You can use wireless accessories, such as your remote control (depends on the model of the remote control), headphones, keyboards or game controllers with your Android TV. Add devices to use them with your TV. Select this option and press **OK** to start searching available devices in order to pair them with your TV. If available highlight **Add accessory** option and press **OK** to start the search. Set your device to pairing mode. Available

devices will be recognized and listed or pairing request will be displayed. Select your device from the list and press **OK** or highlight **OK** and press **OK** to start pairing.

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

11. Channel list

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

If desired, you can filter or sort the channels or find a channel in the channel list. Press the Yellow button to display the Select More options. Available options are Select Type, Sort and Find. Sort option may not be available depending on the selected country during the initial setup process.

To filter the channels highlight **Select Type** and press the **OK** button. You can select among Digital, Radio, Free, Encrypted, Analogue, Favourite and Network options to filter the channel list or select Broadcast option to see all installed channels in the channel list.

To sort the channels highlight Sort and press the **OK** button. Select one of the available options and press **OK** again. The channels will be sorted according to your selection.

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

11.1. Editing the channels and the channel list

You can edit the channels and the channel list using the Channel Skip, Channel Swap, Channel Move and Channel Edit options under the **Settings-> Channel-> Channels** menu. You can access the Settings menu from the Home Screen or from the TV options menu in Live TV mode.

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

11.2. Managing favourite channel lists

You can create four different lists of your favourite channels. These lists include only the channels that are specified by you. Press the **OK** button to display the channel list. Then press Blue button to access favourite lists. If one of the lists is being displayed on the screen you can press the Left or Right directional button to switch from one list to another. In order to change the position of a channel highlight that channel and press the Yellow button. Then use the Up and Down directional buttons to move the channel to the desired position and press **OK**. Highlight a channel in the list and press the **OK** button to watch.

To add the currently watched channel to one of your favourite lists select the desired favourite list as described above and press the Menu button on the remote. Then enter the Channels menu, highlight **Add to My Favourites** option and press **OK**. The channel will be added to the selected favourite list. To remove that channel from the list open the favourite list, highlight the channel and press Blue button. In this way only the currently watched channel can be added or removed.

12. Programme guide

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

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

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

Press Blue button to filter the events. Due to the large variety of filter options you can find events of the desired type quicker. Press Yellow button to see detailed information on the highlighted event. You can also use Red and Green buttons to see events of previous day and next day. The functions will be assigned to the coloured buttons on the remote when they are available. Follow the on-screen information for accurate button functions.

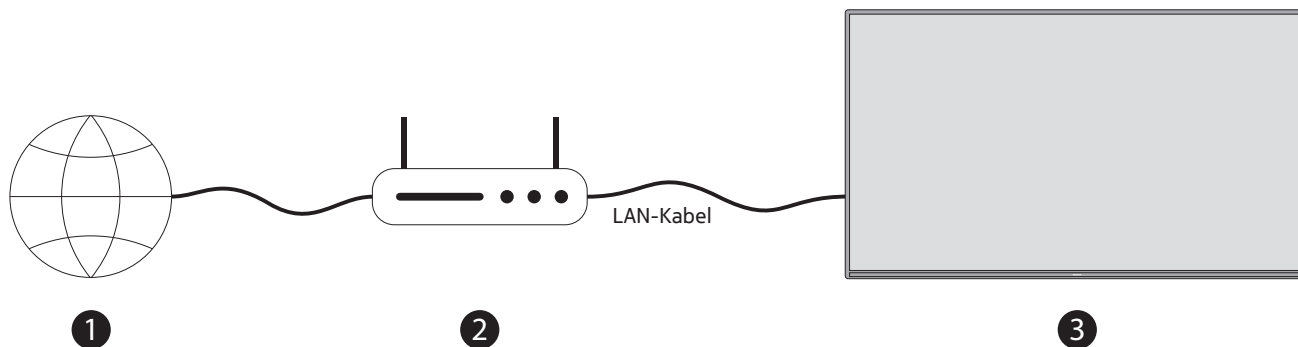
The guide can not be displayed if TV input source is blocked from the **Settings-> Channel-> Parental Controls-> Inputs Blocked** menu in Live TV mode or on Home Screen.

13. Connecting to the internet

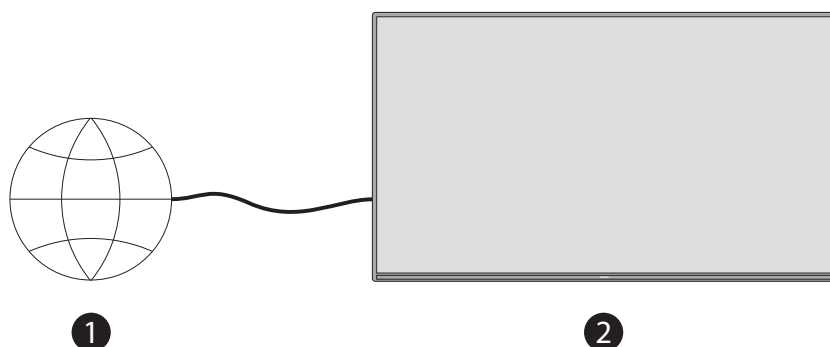
You can access the Internet via your TV, by connecting it to a broadband system. It is necessary to configure the network settings in order to enjoy a variety of streaming content and internet applications. These settings can be configured from **Settings-> Network & Internet** menu. You can also highlight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

13.1. Wired connection (optional)

Connect your TV to your modem/router via an Ethernet cable. There is a LAN port on the rear side of your TV. The status of the connection under the Ethernet section in the Network & Internet menu will be changed from Not connected to Connected.



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

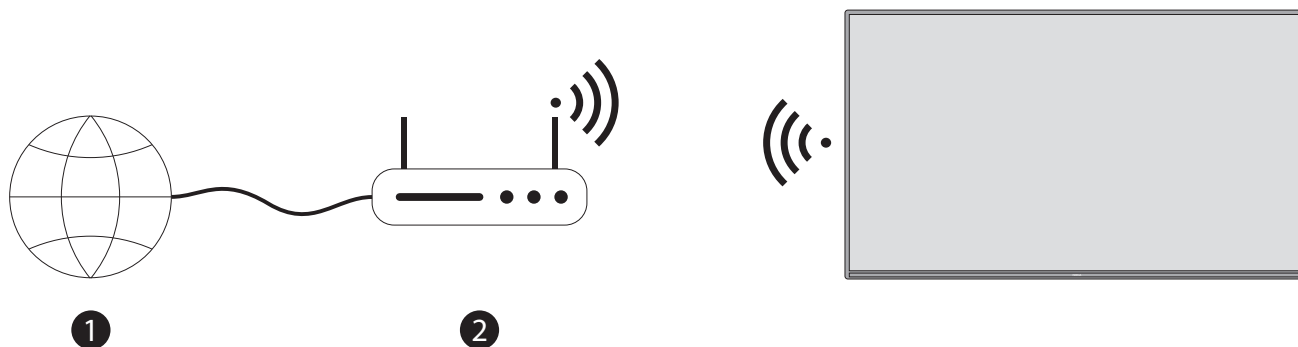


1. Network wall socket
2. LAN input on the rear side of the TV (optional)

13.2. Wireless connection

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

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



1. Broadband ISP connection

A network with hidden SSID can not be detected by other devices. If you want to connect to a network with hidden SSID, highlight the **Add new network** option under the **Settings-> Network & Internet** menu on the Home Screen and press **OK**. Add the network by entering its name manually using the related option. A Wireless-N router (IEEE 802.11a/b/g/n/ac) with simultaneous 2.4 and 5 GHz bands is designed to increase bandwidth. These are optimized for smoother and faster HD video streaming, file transfers and wireless gaming.

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

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

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

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

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

14. Multi Media Player

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

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

While browsing for the video files a preview of the highlighted video will be displayed in a small window on the left side of the screen if the view style is set to List View. Press the Blue button to switch between the List View and Grid View.

14.1. From USB connection

Important: Back up the files on your USB storage devices before connecting them to the TV. Manufacturer will not be responsible for any file damage or data loss. Certain types of USB devices (e.g. MP3 Players) or USB hard disk drives/ memory sticks may not be compatible with this TV. The TV supports FAT32 and NTFS disk formatting. FAT32 formatted devices with a storage capacity larger than 192TB are not supported. NTFS formatted devices with a storage capacity larger than 2TB are not supported.

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

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

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

14.2. From a mobile device via DMR

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

14.3. USB recording

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

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

Lip Sync delay may occur during the timeshifting. Radio record is supported. If the writing speed of the connected USB storage device is not sufficient, the recording may fail and the timeshifting feature may not be available.

It is recommended to use USB hard disk drives for recording HD programmes. Do not pull out the USB/HDD during a recording. This may harm the connected USB/HDD. Some stream packets may not be recorded because of signal problems, as a result sometimes videos may freeze during playback.

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

14.4. Instant recording

Press Record button to start recording an event instantly while watching a programme. Press and hold REC button for 3 seconds to stop and save the instant recording.

You can not switch broadcasts during the recording mode.

14.5. Watching recorded programmes

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

Press and hold REC button for 3 seconds or press Back/Return button to stop a playback.

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

14.6. Timeshift recording

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

In timeshifting mode, the programme is paused and simultaneously recorded to the connected USB storage device. Press Pause/Play button while watching a broadcast to activate timeshifting mode. Press Pause/ Play button again to resume the paused programme from where you stopped. Press and hold REC button for 3 seconds to stop timeshift recording and return to the live broadcast.

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

Timeshift function will not be available for radio broadcasts.

14.7. Disk format

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

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

14.8. Schedule list

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

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

If any available, you can also edit or delete the timers on this list. Highlight the timer of your choice and press **OK**. Edit and Delete options will appear at the bottom of the screen. Highlight the desired option and press **OK**. After you edited a timer you can choose either to replace it or add it as a new timer. If you choose the Replace option, the timer will be saved with the new settings. If you choose the Add option, the timer will be added to the list as a new timer. Highlight **Replace** or **Add** according to your preference and press **OK** to proceed. When you choose to delete a timer a confirmation dialogue will be displayed on the screen. Highlight **Yes** and press **OK** to delete the selected timer.

A warning message will be displayed if the time intervals of two timers overlap. You can not set more than one timer for the same time interval.

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

14.9. CEC

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

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

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

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

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

In order to activate ARC feature the Speakers option should be set as External Audio System. You can access this option from the TV options or **TV options-> Settings-> Device Preferences-> Sound** menu in Live TV mode or from **Settings-> Device Preferences-> Sound** menu on the Home Screen. When ARC is active, TV will mute its other audio outputs automatically. So you will hear audio from connected audio device only. The volume control buttons of the remote will be directed to connected audio device and you will be able to control the volume of the connected device with your TV remote.

Note: ARC is supported only via the HDMI2 input.

The CEC functions are set to On by default. To switch off completely do the following:

1 - Enter the **Settings-> Device Preferences-> Inputs** menu on the Home Screen or **TV options-> Settings-> Device Preferences-> Inputs** menu in Live TV mode.

2 - Scroll down to Consumer Electronic Control (CEC) section. Highlight **HDMI control** option and press **OK**.

15. Chromecast

The Nokia Smart TV has Chromecast is built-in. It allows you to cast content from Apps on your mobile device straight to your TV. Please make sure that your mobile device is connected to the same network as your TV.

Chromecast also enables you to wirelessly mirror the screen of your device to your TV using the screen mirroring application installed on your mobile device. When the App supports the Chromecast function, tap the Chromecast symbol on your Android device. Available devices will be detected and listed. Select your TV from the list and tap on it to start streaming.

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

1. On your Android device, go to 'Settings' from the notification panel or Home screen
2. Tap on 'Device Connectivity'
3. Tap on the 'Easy projection' and enable 'Wireless projection'. Available devices will be listed
4. Select the Nokia Smart TV

OR

1. Slide down the notification panel
2. Tap on 'Wireless projection'
3. Select the Nokia Smart TV

If the mobile app supports Chromecast feature, such as YouTube, Dailymotion, Netflix, you can cast your app to your TV. On the mobile app, look for the Chromecast icon and tap on it. Available devices will be detected and listed. Select your Nokia Smart TV from the list and tap on it to start casting.

To cast an app to the TV screen...

1. On your smartphone or tablet, open an app that supports Chromecast
2. Tap the Chromecast icon
3. Select the Nokia Smart TV
4. The app you selected should start playing on the Nokia Smart TV

Notes:

Chromecast works on Android and iOS. Make sure that your mobile device is connected to the same network as your TV.

The menu options and naming for Chromecast function on your Android device can differ from brand to brand and can change with time. Please refer to your mobile device's manual for latest information on Chromecast function.

16. HBBTV system

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

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

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

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

HbbTV requires AV streaming capability for the platform. There are numerous applications providing VOD (video on demand) and catch-up TV services. The **OK** (play&pause), Stop (press and hold REC button for 3 seconds), Fast forward, and Rewind buttons on the remote control can be used to interact with the AV content.

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

16.1. Quick standby search

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

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

17. Software update

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

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

17.1. Software update via internet

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

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

17.2. Software update via the broadcast signal

In live TV mode, call up the menu **TV options-> Advanced options-> OAD**. Use the **Menu** key to access the setting options. You can enable or disable the automatic download option for software upgrade.

To start a manual download: Highlight the **Manual OAD Download** option in the TV Options menu and press **OK** to manually search for an available software upgrade via the DTV broadcast signals.

Note: Do not unplug the power supply cable during the reboot. If the TV does not turn on after the upgrade, unplug the power cord, wait two minutes, and then plug it back in.

18. Troubleshooting & tips

TV does not switch on

- Make sure the power cord is plugged in securely to power outlet.
- Disconnect the power cable from the power outlet. Wait for one minute then reconnect it.
- Press the Standby/On button on the TV.

TV does not respond to the remote control

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

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

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

No channels

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

No picture / distorted picture

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

No sound / poor sound

- Make sure that the sound settings are correctly set.
- Make sure that all cables are properly connected.
- Make sure that the volume is not muted or set to zero, increase the volume to check.
- Make sure that the TV audio output is connected to the audio input on the external sound system.
- Sound may be coming from only one speaker. Check the balance settings from Sound menu.

Input sources - can not be selected

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

19. Technical specifications

19.1. VGA input typical display mode

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

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

19.2. AV and HDMI signal compatibility

Input	Supported signals	
Composite / Back AV	PAL	
	SECAM	
	NTSC4.43	
	NTSC3.58	
Component / YPbPr	480i, 480p	60 Hz
	576i, 576p	50 Hz
	720p	50 Hz,60 Hz
	1080i	50 Hz,60 Hz
HDMI	480i	60 Hz
	480p	60 Hz
	576i, 576p	50 Hz
	720p	50 Hz,60 Hz
	1080i	50 Hz,60 Hz
	1080p	24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz
	3840x2160p	24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz
	4096x2160p	24 Hz, 25 Hz, 30 Hz, 50 Hz, 60 Hz

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.

19.3. Supported file formats for USB mode

19.3.1. Video

Die folgende Tabelle zeigt einige der typischen Videoanzeigemodi. Ihr Fernsehergerät unterstützt möglicherweise nicht alle Auflösungen.

Video Codec	Resolution	Bit rate	Profile	Container
MPEG 1/2	1080P@60fps	80Mbps	MP@HL	MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
MPEG4	1080P@60fps	40Mbps	Simple Profile, Advanced Simple Profile @ Level 5, GMC is not supported	MPEG program stream (.MPG, .MPEG), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
Sorenson H.263	1080P@60fps	40Mbps		FLV (.flv), AVI (.avi), SWF(.swf)
H.263	1080P@60fps	40Mbps		MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv)
H.264	4096x2176@60fps 1080P@60fps	135Mbps	Main Profile, High Profile @ Level 5.1	FLV (.flv), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
HEVC/H.265	4096x2176@60fps	100Mbps	Main/Main10 Profile, High Tier @ Level 5.1	MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), MPEG transport stream (.ts, .trp, .tp), MKV (.mkv)
MVC	1080P@30fps	80Mbps		MPEG transport stream (.ts, .trp, .tp)
AVS	1080P@60fps	40Mbps	Jizhun profile @ Level 6.0	MPEG transport stream (.ts, .trp, .tp)
AVS+	1080P@60fps	50Mbps	Broadcasting profile @ Level 6.0.1.08.60	MPEG transport stream (.ts, .trp, .tp)
WMV3	1080P@60fps	40Mbps		ASF (.asf), AVI (.avi), MKV (.mkv), WMV (.wmv)
VC1	1080P@60fps	40Mbps	Advanced Profile @ Level 3, Simple Profile, Main Profile	MPEG program stream (.MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
Motion JPEG	1080P@30fps	10Mbps		AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MKV (.mkv), ASF (.asf)
VP8	1080P@60fps	20Mbps		MKV (.mkv), WebM (.webm)
VP9	4096x2176@60fps	100Mbps	Profile 0/2	MKV (.mkv), WebM (.webm)
RV30/RV40	1080P@60fps	40Mbps		RM (.rm, .rmvb)

19.3.2. Audio

Audio Codec	Sample Rate	Channel	Bit rate	Container	Note
MPEG1/2 Layer1	16 kHz ~ 48 kHz	Up to 2	32Kbps ~ 448Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: MP3 (.mp3), WAV (.wav)	
MPEG1/2 Layer2	16 kHz ~ 48 kHz	Up to 2	8Kbps ~ 384Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: MP3 (.mp3), WAV (.wav)	
MPEG1/2 Layer3	16 kHz ~ 48 kHz	Up to 2	8Kbps ~ 320Kbps	Movie: AVI (.avi), ASF (.asf), Matroska (.mkv), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: MP3 (.mp3), WAV (.wav)	
AC3	32 kHz, 44.1 kHz,	Up to 5.1	32Kbps ~ 640 Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: AC3 (.ac3), MP4 (.m4a)	
EAC3	48 kHz	Up to 5.1	32Kbps ~ 6 Mbps	Movie: 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Music: EAC3 (.ec3), MP4 (.m4a)	
AAC-LC, HEAAC	32 kHz, 44.1 kHz,	Up to 5.1		Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), FLV (.flv), RM (.rm, .rmvb) Music: AAC (.aac), MP4 (.m4a)	
WMA	48 kHz	Up to 2	128bps ~ 320Kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	WMA 7, WMA 8, WMA 9, Standard
WMA 10 Pro M0	8 kHz ~ 48 kHz	Up to 2	< 192kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	No LBR mode
WMA 10 Pro M1	8 kHz ~ 48 kHz	Up to 5.1	< 384kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	
WMA 10 Pro M2	48 kHz	Up to 5.1	< 768kbps	Movie: ASF (.wmv, .asf), AVI (.avi), Matroska (.mkv) Music: ASF (.wma)	
VORBIS	48 kHz	Up to 2		Movie: Matroska (.mkv), WebM (.webm), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: MP4 (.m4a), OGG (.ogg)	Supports stereo decoding only
DTS	96 kHz	Up to 5.1	< 1.5Mbps	Movie: MPEG transport stream (.ts, .trp, .tp), MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MP4 (.mp4, .mov), Matroska (.mkv)	
LPCM	8 kHz ~ 48 kHz	Up to 5.1	64Kbps ~ 1.5Mbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MPEG transport stream (.ts, .trp, .tp), MPEG program stream, (.DAT, .VOB, .MPG, .MPEG) Music: WAV (.wav), MP4 (.m4a)	
IMA-ADPCM MS-ADPCM	8 kHz ~ 48 kHz	Up to 2	384Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: WAV (.wav), MP4 (.m4a)	
G711 A/mu-law	8 kHz	Up to 2	64Kbps ~ 128Kbps	Movie: AVI (.avi), Matroska (.mkv), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov) Music: WAV (.wav), MP4 (.m4a)	

Audio Code	Sample Rate	Channel	Bit Rate	Container	Note
LBR (cook)	8 kHz 11.025 kHz, 22.05 kHz, 44.1 kHz	Up to 5.1	6Kbps ~ 128Kbps	Movie: RM (.rm, .rmvb)	
FLAC	8 kHz~96 kHz	Up to 5.1	< 1.6Mbps	Movie: Matroska (.mkv, .mka) Music: FLAC(.flac)	
DTS LBR	12 kHz, 22 kHz, 24 kHz, 44.1 kHz, 48 kHz	Up to 5.1	up to 2Mbps	Movie: MP4 (.mp4, .mov)	
DTS XLL	Up to 96 kHz	Up to 6		Movie: MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov)	
DRA	8 kHz~96 kHz	Up to 7.1	< 1533Kbps	Movie: MPEG transport stream (.ts, .trp)	

19.3.3. Picture

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

19.3.4. Subtitle

Internal

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

External

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

19.4. 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.

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

19.5. Specification

	2400A	3200A	3900A	4300A
TV Broadcasting	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK
Receiving Channels	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)
Number of Preset Channels	12 200	12 200	12 200	12 200
Channel Indicator	On Screen Display	On Screen Display	On Screen Display	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)	75 Ohm (unbalanced)	75 Ohm (unbalanced)	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.	220-240V AC, 50Hz.	220-240V AC, 50Hz.	220-240V AC, 50Hz.
Audio (DTS HD)	no	no	no	yes
Audio Output Power (WRMS.) (10% THD)	2x 2,5	2x 6	2x 8	2x 10
Power Consumption (W)	47	65	75	120
Networked Standby Power Consumption (W)	< 0,5	< 0,5	< 0,5	< 0,5
Weight (Kg)	7,25	7,5	8,6	7,5
TV Dimensions DxLxH (with foot) (mm)	553 x 135 x 365	726 x 184 x 474	892 x 235 x 571	964 x 235 x 611
TV Dimensions DxLxH (without foot) (mm)	553 x 63 x 334	726 x 66 x 428	892 x 95 x 517	964 x 66 x 560
Display	24"/60 cm	32"/80 cm	39"/98 cm	43"/108cm
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max

	4300B	5000A	5500A	5800A
TV Broadcasting	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK
Receiving Channels	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)
Number of Preset Channels	12 200	12 200	12 200	12 200
Channel Indicator	On Screen Display	On Screen Display	On Screen Display	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)	75 Ohm (unbalanced)	75 Ohm (unbalanced)	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.	220-240V AC, 50Hz.	220-240V AC, 50Hz.	220-240V AC, 50Hz.
Audio (DTS HD)	no	yes	yes	yes
Audio Output Power (WRMS.) (10% THD)	2x 8	2x 10	2x 10	2x 10
Power Consumption (W)	75	135	140	150
Networked Standby Power Consumption (W)	< 0,5	< 0,5	< 0,5	< 0,5
Weight (Kg)	8	9	13	14,5
TV Dimensions DxLxH (with foot) (mm)	964 x 2 35 x 611	1119 x 235 x 699	1233 x 235 x 763	1294 x 240 x 786
TV Dimensions DxLxH (without foot) (mm)	964 x 66 x 560	1119 x 66 x 647	1233 x 66 x 711	1294 x 66 x 752
Display	43"/108 cm	50"/126cm	55"/139cm	58"/146cm
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max

	6500A	7500A
TV Broadcasting	PAL BG/I/DK SECAM BG/DK	PAL BG/I/DK SECAM BG/DK
Receiving Channels	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)	Fully integrated digital terrestrial-cable-satellite TV (DVB-T-C-S) (DVB-T2, DVB-S2 compliant)
Number of Preset Channels	12 200	12 200
Channel Indicator	On Screen Display	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.	220-240V AC, 50Hz.
Audio (DTS HD)	yes	yes
Audio Output Power (WRMS.) (10% THD)	2x 12	2x 12
Power Consumption (W)	200	260
Networked Standby Power Consumption (W)	< 0,5	< 0,5
Weight (Kg)	20	37
TV Dimensions DxLxH (with foot) (mm)	1452 x 240 x 873	1684 x 370 x 1026
TV Dimensions DxLxH (without foot) (mm)	1452 x 72 x 836	1684 x 73 x 967
Display	65"/164cm	75"/189cm
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max	0°C up to 40°C, 85% humidity max

19.6. 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 (*)

(*) '< 100 mW' for the Ukraine

19.7. Country restrictions

Intended for indoor use only in EU member states and EFTA states.

AT BE BG CY CZ DE DK EE ES FI FR GR HR HU IE IT LT LU LV MT NL PL PT RO SI SK SE UK

19.8. Licences

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