

INSTRUCTION MANUAL

HITACHI
Inspire the Next

55" Colour TV 55HAK6150U A

922-1392



DVB-T2

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

4K
ULTRAHD

FreeviewPlay

dts-HD

Important - Please read these instructions fully before installing or operating and keep for future reference.

These instructions contain important information which will help you get the best from your television and ensure safe and correct installation and operation.

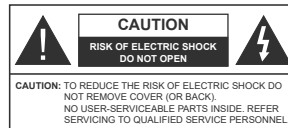
For any help concerning set up and use of your TV please call the Customer Helpline: 0345 604 0105

Lines open 8am-7pm Monday to Saturday and 10am - 4pm Sunday

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Important safety precautions



Don't operate your TV in extreme ambient conditions as this may cause damage to your TV.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock of persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

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

IMPORTANT - Please read these instructions fully before installing or operating

Preparation

Place the device on a solid even surface. For ventilation, leave a free space of at least 10 cm all around the set. To prevent any fault and unsafe situations, do not place any objects on top of the set. Use this device in moderate climates.

Operation temperature and operation humidity: 0°C up to 40°C, 85% rel. humidity max. (not blocking ventilation openings).

Intended Use

This device is used to receive and display TV programmes. The different connection options make an additional expansion of the reception and display sources possible (various external devices). This device is only suitable for dry interior use. This appliance is intended solely for private domestic use and may not be used for industrial and commercial purposes. We exclude liability in principle, if the device is not used as intended, or unauthorized modifications have been made. To operate your TV in extreme ambient conditions may cause the damage of the device.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instructions concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Children may not recognize dangers. The swallowing of batteries can be fatal. Keep batteries always out of reach of small children. If a battery is swallowed, seek immediate medical attention. Keep the packaging films out of reach of children, there is a risk of suffocation.

For optimal performance 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.

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.

Please read the following recommended safety precautions carefully for your safety.

SOME DO'S AND DON'TS ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

DO read the operating instructions before you attempt to use the equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and inter-connections between the pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug before making or changing connections.

DO consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

DO be careful with glass panels or doors on equipment.

DO route the mains lead so that it is not likely to be walked on, crushed, chafed, or subjected to excessive wear and tear or heat.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T obstruct the ventilation openings of the equipment with items such as newspapers, tablecloths, curtains, etc. Overheating will cause damage and shorten the life of the equipment.

DON'T allow electrical equipment to be exposed to dripping or splashing, or objects filled with liquids, such as vases, to be placed around the equipment.

DON'T place hot objects or naked flame sources such as lighted candles or nightlights on, or close to equipment. High temperatures can melt plastic and lead to fires.

DON'T use makeshift stands and **NEVER** fix legs with wood screws - to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T listen to headphones at high volume, as such use can permanently damage your hearing.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a stand-by mode. Switch off using the switch, on the equipment and make sure that your family know how to do this. Special arrangements may need to be made for infirm or handicapped people.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way - switch off, withdraw the mains plug and consult your dealer.

ABOVE ALL

--- **NEVER** let anyone especially children push anything into holes, slots or any other opening in the case - this could result in a fatal electrical shock;

--- **NEVER** guess or take chances with electrical equipment of any kind

--- **It is better to be safe than sorry!**

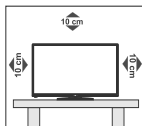
Power source

• The TV should be operated only from a 220-240 V AC, 50 Hz outlet.

⚠ WARNING: Do not leave your TV in standby or operating mode when you leave your house.

Positioning the TV

• For ventilation, please leave a clear space of at least 10cm all around the TV.





- **Do not block** the ventilation openings.
- **Do not place** the TV on sloping or unstable surfaces, the TV may tip over.
- To prevent damage to the TV, **do not place** any objects on top of the TV.

Power cord and plug

- Do not place the set, a piece of furniture, etc. on the power cord (mains lead) or pinch the cord. Handle the power cord by the plug. Do not pull the plug by holding its neck, as this could result in damage to the plug. Do not unplug the appliance by pulling from the power cord and never touch the power cord with wet hands as this could cause a short circuit or electric shock. Never make a knot in the cord or tie it with other cords. The power cords should be placed in such a way that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electric shock. When it is damaged and needs to be replaced, it should be done by qualified personnel.

- This TV receiver is supplied with a moulded mains plug. The mains plug must not be cut off, as it may contain a special radio interference filter, the removal of which could lead to impaired performance. If you wish to extend the lead, obtain an appropriate safety approved extension lead or consult your dealer.

- Observe the manufacturers instructions when connecting extension leads to the set. Check the fuse rating on the new plug; this should be fitted with a 5 Amp fuse which conforms to either ASTA or BSI (BS1362) approvals, these are easily identifiable by either the  or  symbols. If you are in any doubt about the installation of an extension lead, please consult a competent electrician.

Moisture and Water


- **Do not use** this TV in a humid or damp place (avoid bathrooms or kitchens where condensation or moisture can damage the equipment and near the washing machine).
- **Do not** expose this TV to rain or water.
- **Do not place** objects filled with liquids, such as flower vases, directly above the TV. Avoid from dripping or splashing.

• If any solid object or liquid falls into the cabinet, unplug the TV and have it checked by qualified personnel before operating it any further.


Ventilation

- The slots and openings on the TV set are intended for ventilation and to ensure reliable operation.
- To prevent overheating, these openings must not be blocked or covered in anyway.

Heat sources and Flames

- **Do not** expose the TV to direct sunlight or other heat sources.
- The TV should not be placed near to open flames and sources of intense heat such as an electric heater.
- Ensure that no open flame sources, such as lit candles, are placed on top of the TV. 

Headphone Volume

- Exercise sound pressure from earphones and headphones can cause hearing loss, please take care. 

Wall Mounting (optional)

- To prevent injury, this TV must be securely attached to the wall in accordance with the installation instructions (if the option is available).

LCD Screen


- Occasionally, a few non-active pixels may appear on the screen as a fixed blue, green or red point. Please note that this does not affect the performance of your product.
- Take care not to scratch the screen with fingernails or other hard objects.

Cleaning

- Before cleaning, unplug the TV from the wall socket.
- **Do not use** liquid or aerosol cleaners. Only use a soft, dry cloth.

Batteries

⚠ WARNING: Incorrect installation of batteries may cause battery leakage and corrosion, resulting in damage to the remote control.

- **Do not** mix old and new batteries, or batteries of different types.
- **Do not** dispose of batteries in a fire. 
- **Do not** dispose of batteries with normal household waste, take to a local recycling centre.

⚠ CAUTION: Insert the batteries / rechargeable batteries in the correct polarity. Don't try to recharge non rechargeable batteries and under no circumstances throw them into fire. Danger of explosion. Do not use


unequal batteries (old and new, Alkaline and carbon, etc.) simultaneously. If you will not use the device for a long time, remove the batteries and store the device in a dry and dust free place. Improper use of batteries may cause an explosion or leakage. If the batteries have leaked, use gloves and clean the appliance thoroughly with a dry cloth! Batteries should not be exposed to heat, such as sunshine, fire or the like.

Replacement Parts

When replacement parts are required, make sure that the service technician has used replacement parts, which are specified by the manufacturer or have the same specifications as the original one. Unauthorised substitutions may result in fire, electrical shock or other hazards.

Taking out of service and storing

Unplug the TV from the mains and pack the TV in an appropriate cardboard box. Remove the batteries from the remote control and pack the remote control with the TV set.

 **NOTE:** The TV set should be stored in a dry and dust-free room.

Connection to a Television Distribution System (Cable TV etc.) from Tuner

Device 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 cable distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11).

⚠ CAUTION

Do not put your fingers in the middle between the TV and stand, especially when you carry the TV, as they may be injured.

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.

WARNING

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.

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.

WARNING

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, see EN 60728-11)

Symbols in this Instruction Book

The following symbols are used in the Instruction Book as a marker for restrictions and precautions and safety instructions. Note such information for security reasons.

WARNING

If you do not pay attention to such a marked warning, it can cause serious injury or death. Note these warnings strictly, in order to ensure a safe operation.

CAUTION

Such a precaution is marked, you should take up or note, to avoid injury or property damage. Note these instructions strictly, in order to ensure a safe operation.

IMPORTANT

Warnings on the appliance and restrictions are displayed like this. Read this information strictly in order to operate the system correctly and avoid damage.

NOTE

Information about the operation and additional explanations are marked like this. To be aware of such information is recommended to ensure that the functions can be used optimally.

Markings on the Product

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



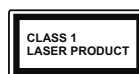
Class II Equipment: This appliance is designed in such a way that it does not require a safety connection to electrical earth.



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



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



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

The illustrations and the OSD in this operation manual are for explanation purposes and may vary slightly from the actual operations. Product design and specifications may be changed without notice.

Introduction

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

Accessories Included

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

Features

- Remote controlled colour TV
- Android™ operating system
- Google Cast
- Voice Search (Optional)
- Fully integrated digital terrestrial/cable TV (DVB-T-T2/C)
- HDMI inputs to connect other devices with HDMI sockets (HDMI 2.1a support)

- USB input
- Composite inputs for external devices (such as DVD Players, PVR, video games, etc.)
- Stereo sound system
- Teletext
- Headphone connection
- Automatic programming system
- Manual tuning
- Sleep timer
- On/Off timer
- Switch off timer
- Picture off function
- No signal auto power off function
- VGA input
- Ethernet (LAN) for Internet connectivity and service
- 802.11 a/b/g/n/ac built in WLAN Support
- HbbTV

Ultra HD (UHD)

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

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

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

Dolby Vision

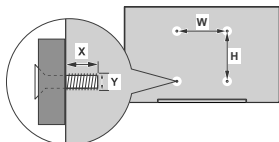
Dolby Vision™ delivers a dramatic visual experience, astonishing brightness, exceptional contrast, and vivid colour, that brings entertainment to life. It achieves this

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

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-hanging bracket.

Holes and measurements for wall mount bracket installation;



VESA WALL MOUNT MEASUREMENTS		
Hole Pattern Sizes (mm)	W	H
	200	200
Screw Sizes		
Length (X)	min. (mm)	10
	max. (mm)	13
Thread (Y)	M6	

Stand Installation & Wall Mounting

Assembling / Removing the pedestal Preparations

Take out the pedestal(s) and the TV from the packing case and put the TV onto a work table with the screen panel down on the clean and soft cloth (blanket, etc.)

- Use a flat and firm table bigger than the TV.
- Do not hold the screen panel part.
- Make sure not to scratch or break the TV.

Assembling the pedestal

1. Place the stand(s) on the stand mounting pattern(s) on the rear side of the TV.
2. Insert the screws provided and tighten them gently until the stand is properly fitted.

Removing the pedestal from the TV

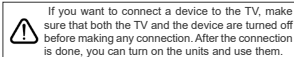
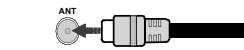
Be sure to remove the pedestal in the following way when using the wall-hanging bracket or repacking the TV.

- Put the TV onto a work table with the screen panel down on the clean and soft cloth. Leave the stand(s) protruding over the edge of the surface.
- Unscrew the screws that fixing the stand(s).
- Remove the stand(s).

Antenna Connection

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

Rear side of the TV



Other Connections



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

Connector	Type	Cables	Device
	Component Video Connection (back)	 VGA to Component Connection Cable	 To enable VGA/Component audio, you will need to use the back audio inputs with a VGA/Component audio cable for audio connection. When using the wall mounting kit (contact your dealer to purchase one, if not supplied), we recommend that you plug all your cables into the back of the TV before mounting on the wall. Insert or remove the CI module only when the TV is SWITCHED OFF. You should refer to the module instruction manual for details of the settings. The USB inputs on the TV support devices up to 500mA. Connecting devices that have current value above 500mA may damage your TV. When connecting equipment using a HDMI cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation and trouble-free transmission of high definition signals, such as 4K content, you have to use a high speed shielded (high grade) HDMI cable with ferrites.
	HDMI Connection (back&side)		
	VGA Connection (back)		
	AUDIO IN / Component Audio Connection (back)	 Component/VGA Audio Cable	
	SPDIF (Optical Out) Connection (back)		
	Composite (Audio/Video) Connection (back)	 Audio Video Cable	
	HEADPHONE / Headphone Connection (side)		
	USB Connection (side)		
	CI Connection (side)		
	LAN / Ethernet Connection (back)	 LAN / Ethernet Cable	

Turning On/Off the TV

Connect power

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

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

Plug the power 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

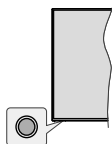
To power down the TV completely, unplug the power cord from the mains socket.

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.

TV Control & Operation



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

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

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

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

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

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

Operation with the Remote Control

Press the **Menu** button on your remote control to display Live TV settings menu when in Live TV mode. Press **Home** button to display or return to the Home Screen of the Android TV. Use the directional buttons to move the focus, proceed, adjust some settings and press **OK** to make selections in order to make changes, set your preferences, enter a sub-menu, launch an application etc. Press **Return/Back** to return to the previous menu screen.

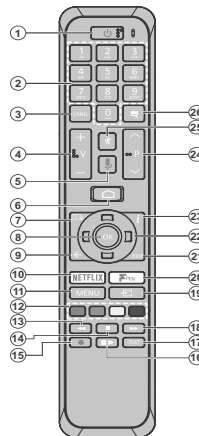
Input Selection

Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively or use the directional buttons and then press the **OK** button to switch to different sources when in Live TV mode. Or enter the **Inputs** menu on the Home Screen, select the desired source from the list and press **OK**.

Changing Channels and Volume

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

Remote Control



Inserting the Batteries into the Remote

Remove the screw that secure the battery compartment cover on the back side of the remote control first, if the cover is screwed on previously. 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.

To pair remote with the TV

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

Press and hold the **Source** button on the remote for about 5 seconds, the LED on the remote will light up. Then release the **Source** button, the LED will start to blink. That means the remote is in pairing mode.

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

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

1. **Standby:** Quick Standby / Standby / On
2. **Numeric buttons:** Switches the channel in Live TV mode, enters a number or a letter in the text box on the screen
3. **Language:** Displays and changes audio language (digital TV, where available)
4. **Volume +/-**
5. **Microphone:** Activates the microphone on the remote
6. **Home:** Opens the Home Screen
7. **Guide:** Displays the electronic programme guide in Live TV mode
8. **OK:** Confirms selections, enters to sub-menus, views channel list (in Live TV mode)
9. **Back/Return:** Returns to previous menu screen, goes one step back, closes open windows, closes teletext (in Live TV-Teletext mode)
10. **Netflix:** Launches the Netflix application
11. **Menu:** Displays Live TV Settings menu in Live TV mode
12. **Coloured Buttons:** Follow the on-screen instructions for coloured button functions
13. **Rewind:** Moves frames backwards in media such as movies
14. **Stop:** Stops the media being played
15. No function
16. **Pause:** Pauses the media being played
17. **Play:** Starts to play selected media
18. **Text:** Opens and closes teletext (where available in Live TV mode)
19. **Fast forward:** Moves frames forward in media such as movies
20. **Source:** Shows all available broadcast and content sources in Live TV mode
21. **Freeview Play:** Connects to the Freeview Play platform where you can access available catch-up TV services
22. **Exit:** Closes and exits from displayed Live TV Settings menus, closes the Home Screen
23. **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.
24. **Info:** Displays information about on-screen content
25. **Programme +/-:** Increases/Decreases channel number in Live TV mode
26. **Mute:** Completely turns off the volume of the TV

Standby Button

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

Initial Setup Wizard

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

When turned on for the first time, a search for accessories will be performed before the initial setup starts. Follow the on-screen instructions to pair your remote control (depends on the model of the remote control) and other wireless accessories with your TV. Press **Back/Return** button to end adding accessories and start the setup.

1. Welcome Message and Language Selection

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

2. Quick Setup

If you didn't primarily 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 primarily connect your TV to the internet via Ethernet a message will be displayed stating that you are connected. You can choose to continue with wired connection or change the network. Highlight **Change network** and press **OK** if you want to use wireless connection instead of wired connection.

3. Network Connection

You will be directed to the next step automatically, if you connect your TV to 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.

4. Sign in to your Google account

If connection succeeds, you can sign in to your Google account on the next screen. You need to be signed in

to a Google account in order to use Google services. This step will be skipped if no internet connection has been established in the previous step or if you already signed in to your Google account in Quick Setup step.

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

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

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

5. Terms of Service

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

6. Location

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

7. Help improve Android

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

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

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

8. Country

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

9. Password

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

10. Select TV Mode

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

11. Chromecast built-in always available

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

12. Tuner Mode

Note: If you don't want to perform a tuner scan, select one of the available options anyway. You can skip the scan at a 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** and **Cable** options are available. Highlight the option that corresponds to your environment and press **OK** or **Right** directional button to proceed.

Antenna

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

Cable

If **Cable** option is selected, the TV will search for digital cable 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.

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

Next, you will need to agree to the terms and conditions of Freeview Play to make use of the related services. Scroll the page to read the entire text using the up/down directional buttons. Highlight **Accept** and press **OK** on the remote to confirm and proceed. Highlight **Skip** and press **OK** to proceed without confirmation. For further requirements for Freeview Play services refer to the **Freeview Play Platform** section.

Depending on the country selection you made in the earlier steps of the setup a disclaimer of liability may be displayed on the screen instead of the terms and conditions of Freeview Play. You can use Up and Down directional buttons to scroll through and read the entire text. Highlight **Accept** and press **OK** to proceed.

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

Home Screen

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

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

The available options of the Home Screen are positioned in rows. To navigate through the Home Screen options use the directional buttons on the remote. Apps, YouTube, Google Play Movies & TV, Google

Play Music and Google Play related rows and rows of the applications you have installed might be available. Select a row then move the focus to the desired item in the row. Press **OK** button to make a selection or to enter a sub-menu.

On the upper left of the screen, search tools will be located. You can choose either to try a word to start a search via the virtual keyboard or type 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.

Live TV Mode Menu Content

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

Channels

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

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

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

TV Options

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

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

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

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

Power

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

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

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.

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

Advanced Options

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

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

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

HBBTV Support: Turn the HBBTV function on or off.

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

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

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

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

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

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

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

Subtitle

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.

2nd Digital Subtitle Language: Set one of the listed language options as second digital subtitle language preference. If the selected language in the **Digital Subtitle Language** option is not available, the subtitles will be displayed in this language.

Subtitle Type: Set this option as **Normal** or **Hearing Impaired**. If **Hearing Impaired** option is selected, it provides subtitle services to deaf and hard of hearing viewers with additional descriptions.

Teletext

Digital Teletext Language: Set the teletext language for digital broadcasts.

Decoding Page Language: Set the decoding page language for teletext display.

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

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

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

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

Settings

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

Network & Internet

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

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

Available networks

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

Other options

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

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

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

Ethernet

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

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

IP settings: Configure your TV's IP settings.

Channel

Channels

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

Channel Installation Mode - Antenna

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

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

Single RF Scan: Select the **RF Channel** by using the Right/Left directional buttons. **Signal Level** and **Signal Quality** of the selected channel will be shown. Press **OK** to start scan on the selected RF channel. The found channels will be stored in the channel list.

Manual Service Update: Start a service update manually.

LCN: Set your preference for LCN. LCN is the Logical Channel Number system that 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.

Favorite Network Select: Select your favourite network. This menu option will be active, if more than only 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 Sort: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel.

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

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

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

Channel Installation Mode - Cable

Channel Scan: Start a scan for digital cable channels. If available, operator options will be listed. Select the desired one and press **OK. Scan Mode, Channel Scan Type, Frequency and Network ID** options may be available. The options may vary depending on the operator and the **Scan Mode** selections. Set the **Scan Mode as Full** if you don't know how to set up other options. Highlight **Scan** and press **OK** to start the scan. You can press the **Back** button to cancel the scan. The channels that have already been found will be stored in the channel list.

Single RF Scan: Enter the **Frequency** value. **Signal Level** and **Signal Quality** of the selected **Frequency** will be shown. Highlight the **Scan** option and press **OK** to start scan. The found channels will be stored in the channel list.

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.

Favorite Network Select: Select your favourite network. This menu option will be active, if more than only 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 Sort: Replace the positions of the two selected channels in the channel list. Highlight the desired channels on the list and press **OK** to select. When the second channel is selected, the position of this channel will be replaced with the position of the first selected channel.

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

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

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

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

Channel Installation Mode

Set this option as **Antenna or Cable**.

Auto Channel Update

Turn the auto channel update function on or off.

Channel Update Message

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

Parental Controls

() To enter this menu PIN should be entered first. Default password is set to 1234. If you have defined a new password after the initial setup process use the password 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 password should be entered first.

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

Inputs Blocked: Prevent access to the selected input source content. Highlight the desired input option and press **OK** to select/unselect. To switch to a blocked input source password 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 password entry screen will be displayed. Enter the new password twice for confirmation.

Audio Language

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

2nd Audio Language

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

Open Source Licenses

Display Open Source Software license information.

Version

Displays system version number.

Accounts & Sign In

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

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

Apps

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

Recently opened apps

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

Permissions

Manage the permissions and some other features of the apps.

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

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

Security & restrictions: Using the options of this menu;

- You can allow or restrict installation of apps from sources other than the Google Play Store.
- Set the TV to disallow or warn before installation of apps that may cause harm.

Device Preferences

About: Check for system updates, change the device name, restart the TV and display system informations 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 an unique ID number for Netflix, created especially to identify your TV.

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

Timer

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

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

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

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

Language: Set your language preference.

Keyboard: Select your keyboard type and manage keyboard settings.

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

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.

Picture

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

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

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

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

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

Backlight: Adjust the backlight level off the screen manually. This item will not be available if the **Auto Backlight** is not set as **Off**.

Brightness: Adjust the brightness value off the screen.

Contrast: Adjust the contrast value off the screen.

Colour: Adjust the colour saturation value off the screen.

HUE: Adjust the hue value off 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. Set as **User** to adjust red, green and blue gain values manually. If one of these values is changed manually, **Colour Temperature** option will be changed to **User**, if not already set as **User**.

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

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

Advanced Video

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

MPEG NR: MPEG Noise Reduction cleans up block noise around outlines and noise on the back-

ground. Set your MPEG NR preference as **Low**, **Medium**, **Strong** or turn it off by setting as **Off**.

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

Local Contrast Control: Local contrast control divides each frame to defined small regions and provides ability to apply independent contrast setting for each region. This algorithm improves fine details and provides better contrast perception. It makes higher depth impression by enhancing dark and bright areas without any detail loss. Set your Local Contrast Control preference as **Low**, **Medium**, **High** or turn it off by setting as **Off**.

DI Film Mode: It is the function for 3:2 or 2:2 cadence detection for 24 fps film 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 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: 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, cyan, magenta, yellow and flesh tone (skin tone) for having more vivid or more natural image. Set the **HUE**, **Colour**, **Brightness**, **Offset** and **Gain** values manually. Highlight **Enable** and press **OK** to turn this function on.

11 Point White Balance Correction: White balance feature calibrates TV's colour temperature in detailed grey levels. By visually or measurement,

grey scale uniformity can be improved. Adjust the strength of the **Red**, **Green**, **Blue** colours and **Gain** value manually. Highlight **Enable** and press **OK** to turn this function on.

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

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

Sound

Sound Style: For easy sound adjustment, you can select a preset setting. **User**, **Standard**, **Vivid**, **Sports**, **Movie**, **Music** or **News** options will be available. Sound settings will be adjusted according to the selected sound style. Some other sound options may become unavailable depending on the selection.

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

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

Equalizer Detail: Adjust the equalizer 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: 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.

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

Home screen: Customize 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.

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

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

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

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

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

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

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

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

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

Volume: Adjust the volume level of the audio commentary.

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

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

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

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

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 a connected device. Highlight the device and press **OK**, then highlight **Change name** and press **OK** again. Press **OK** again use the virtual keyboard to change the name of the device.

Channel List

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

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** 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.

Note: If any option except **Broadcast** is selected in the **Select Type** menu, you can only scroll through the channels that are currently listed in the channel list using the **Program +/-** buttons on the remote.

Editing the Channels and the Channel List

You can edit the channels and the channel list using the **Channel Skip**, **Channel Sort**, **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 Sort**, **Channel Move** and **Channel Edit** may not be available and appear as grayed out depending on the operator selection and operator related settings.

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 **Yellow** button to open the **Favorite List Selection** menu in order to switch from one list to another. Select the desired list and press the **OK** button. 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 Favorites** 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.

Programme Guide

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

In order to access the Electronic Programme Guide you can launch the **TV Guide** application in the Freeview

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

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

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

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.

Integrated Catch-Up Services

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

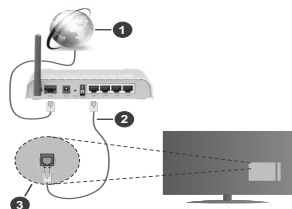
Make sure that your TV is connected to your home network in order to use the catch-up services. For further information regarding this matter and other requirements for Freeview Play services refer to the **Connectivity** and **Freeview Play Platform** sections.

Connecting to the Internet

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

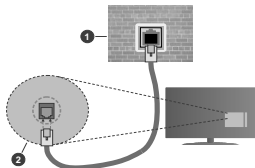
Wired Connection

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



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

You might be able to connect your TV to a network wall socket depending on your network's configuration. In that case, you can connect your TV directly to the network using an Ethernet cable.

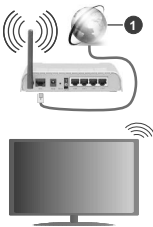


1. Network wall socket
2. LAN input on the rear side of the TV

Wireless Connection

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

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



1. Broadband ISP connection

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

A Wireless-N router (IEEE 802.11a/b/g/n/ac) with simultaneous 2.4 and 5 GHz bands is designed to increase bandwidth. These are 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.

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**.

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 16TB are not supported.

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

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

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

From a Mobile Device via DMR

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

CEC

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

The TV comes 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 (AV 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 > 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 (same as other optical or co-axial digital audio outputs). 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**.

Google Cast

With the built-in Google Cast technology you can cast the content from your mobile device straight to your TV. If your mobile device has Google Cast feature, you can mirror your device's screen to your TV wirelessly. Select Cast screen option on your android device. Available devices will be detected and listed. Select your TV from the list and tap on it to start casting. You can get the network name of your TV from the **Settings>Device Preferences>About** menu on the Home screen. **Device name** will be one of the shown articles. You can also change the name of your TV. Highlight **Device name** and press **OK**. Then highlight **Change** and press **OK** again. You can either select one of the predefined names or enter a custom name.

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

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

2. Tap on 'Device Connectivity'
3. Tap on the 'Easy projection' and enable 'Wireless projection'. Available devices will be listed
4. Select the TV you would like to cast to

or

1. Slide down the notification panel
2. Tap on 'Wireless projection'
3. Select the TV you would like to cast to

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

To cast an app to the TV screen...

1. On your smartphone or tablet, open an app that supports Google Cast
2. Tap the Google Cast icon
3. Select the TV you would like to cast to
4. The app you selected should start playing on TV

Notes:

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

The menu options and namings for Google Cast function on your Android device can differ from brand to brand and can change with time. Refer to your device's manual for latest information on Google Cast function.

HBBTV System

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

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

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

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

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

Freeview Play Platform

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

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

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

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

Requirements

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

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

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

Quick Standby Search

If earlier an automatic search is performed, your TV will search for new or missing digital channels at 05:00 am every morning while in quick standby mode. Any new found broadcasts will be added to the channel list and missing ones will be deleted if you confirm at the next power on. The search will be performed for the set **Tuner Mode** in the **Channels>New Channels Available>Tuner** menu in Live TV mode. This feature will not be functional if the TV is in standby mode.

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.

Software update via internet

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

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

Troubleshooting & Tips

TV does not switch on

- Make sure the power cord is plugged in securely to power outlet.
- Disconnect the power 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 infra red LED flicker through the camera, the remote control is working. The TV needs to be checked.

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

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

No Channels

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

No picture / distorted picture

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

No sound / poor sound

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

Input sources - can not be selected

- Make sure that the device is connected to the TV.
- Make sure that all cables are properly connected.
- Make sure that you select the right input source which is dedicated to the connected device.

VGA Input Typical Display Modes

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

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

AV and HDMI Signal Compatibility

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

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

Supported File Formats for USB Mode

Video

Video Codec	Resolution	Bit Rate	Profile	Container
MPEG 1/2	1080P@60fps	80Mbps	MP@HL	MPEG program stream (.DAT, .VOB, .MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), MP4 (.mp4, .mov), 3GPP (.3gpp, .3gp), AVI (.avi), MKV (.mkv), ASF (.asf)
MPEG4	1080P@60fps	40Mbps	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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, 1.0, 0.8, 6.0	MPEG transport stream (.ts, .trp, .tp)
WMV3	1080P@60fps	40Mbps		ASF (.asf), AVI (.avi), MKV (.mkv), WMV (.wmv)
VC1	1080P@60fps	40Mbps	<ul style="list-style-type: none"> Advanced Profile @ Level 3 Simple Profile Main Profile 	MPEG program stream (.MPG, .MPEG), MPEG transport stream (.ts, .trp, .tp), ASF (.asf), WMV (.wmv), AVI (.avi), MKV (.mkv)
Motion JPEG	1080P@30fps	10Mbps		AVI (.avi), 3GPP (.3gpp, .3gp), MP4 (.mp4, .mov), MKV (.mkv), ASF (.asf)
VP8	1080P@60fps	20Mbps		MKV (.mkv), WebM (.webm)
VP9	4096x2176@60fps	100Mbps	Profile0/2	MKV (.mkv), WebM (.webm)
RV30/RV40	1080P@60fps	40Mbps		RM (.rm, .rmvb)

Audio

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

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

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

Picture

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

Subtitle

Internal

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

External

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

Supported DVI Resolutions

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

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

Specification

TV Broadcasting	PAL BG/II/DK SECAM BG/DK
Receiving Channels	VHF (BAND IIII) - UHF (BAND U) - HYPERBAND
Digital Reception	Fully integrated digital terrestrial-cable TV (DVB-T-C) (DVB-T2 compliant)
Number of Preset Channels	2 200
Channel Indicator	On Screen Display
RF Aerial Input	75 Ohm (unbalanced)
Operating Voltage	220-240V AC, 50Hz.
Audio	DTS HD
Audio Output Power (WRMS.) (10% THD)	2x10
Power Consumption (W)	140
Networked Standby Power Consumption (W)	< 2
TV Dimensions DxLxH (with foot) (mm)	281 x 1243 x 763
TV Dimensions DxLxH (without foot) (mm)	53/82 x 1243 x 720
Display	55"
Operation temperature and operation humidity	0°C up to 40°C, 85% humidity max

Wireless LAN Transmitter Specifications

Frequency Ranges	Max Output Power
2400 - 2483.5 MHz (CH1-CH13)	< 100 mW
5150 - 5250 MHz (CH36 - CH48)	< 200 mW
5250 - 5350 MHz (CH52 - CH64)	< 200 mW
5470 - 5725 MHz (CH100 - CH140)	< 200 mW

Country Restrictions

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

Country	Restriction
Bulgaria	General authorization required for outdoor use and public service
Italy	If used outside of own premises, general authorization is required
Greece	In-door use only for 5470 MHz to 5725 MHz band
Luxembourg	General authorization required for network and service supply(not for spectrum)

Country	Restriction
Norway	Radio transmission is prohibited for the geographical area within a radius of 20 km from the centre of Ny-Alesund
Russian Federation	In-door use only
Israel	5 GHz band only for 5180 MHz-5320 MHz range

The requirements for any country may change at any time. It's recommended that user checks with local authorities for the current status of their national regulations for 5 GHz wireless LAN's.

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[European Union]

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

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

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

[Business users]

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

[Other Countries outside the European Union]

These symbols are only valid in the European Union. Contact your local authority to learn about disposal and recycling.

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

Some collection points accept products free of charge.

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



1. Products
2. Battery

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- **Simple help and advice on setting up your digital equipment (image).**
- **Guidance on connecting other devices to your television such as a DVD player, Sky, home cinema system or a games console.**
- **Order spare parts, including remote controls.**
- **Any other technical issues you may need assistance with.**

Call us today: 0 345 604 0105

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The guarantee is subject to the following provisions:

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- The product must be correctly installed and operated in accordance with the instructions contained in this manual.
- It must be used solely for domestic purpose.
- The guarantee will be rendered invalid if the product is re-sold or has been damaged by inexpert repair.
- Specifications are subject to change without notice.
- The manufacturer disclaims any liability for the incidental or consequential damages.
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- In the event of a problem with the product with in the guarantee period call the **Customer Helpline:0345 604 0105**

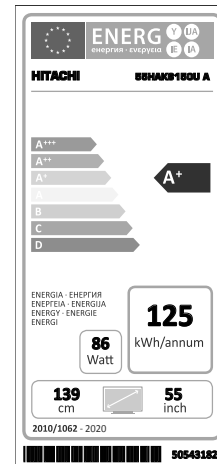
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Energy Label

Product Fiche		
Commercial Brand:HITACHI		
Product No.	10130554	
Model No.	55HAK6150U A	
Energy efficiency class	A+	
Visible screen size (diagonal,approx.) (inch/cm)	55 inches	139 cm
On mode average power consumption (Watt)	86,0	
Annual energy consumption (kWh/annum) (*)	125	
Standby power consumption (Watt)	0,50	
Off mode power consumption (Watt)	N/A	
Display resolution (px)	3840x2160	

Hereby, HITACHI Europe Ltd., declares that the radio equipment type TV is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://estadoc.hitachi.eu/estadoc/index.htm>
Hitachi Europe Ltd. Whitebrook Park, Lower Cookham Road, Maidenhead, Berkshire.
SL6 8YA. UK



Standby Power Consumption (approx.)	0,5
Screen Resolution	3840x2160

HITACHI

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Whitebrook Park,
Lower Cookham Road,
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