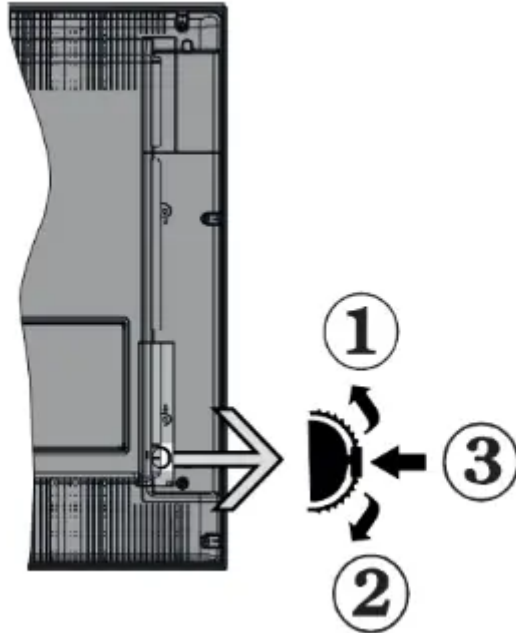


TV Control Switch & Operation



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

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

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

To change channel: Press the middle of the button in, the information banner will appear on the screen.

Scroll through the stored channels by pushing the button up or down.

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

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

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

Notes:

- If you turn the TV off, this cycle starts again beginning with the volume setting.
- Main menu OSD cannot be displayed via control button.

Operation with the Remote Control

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

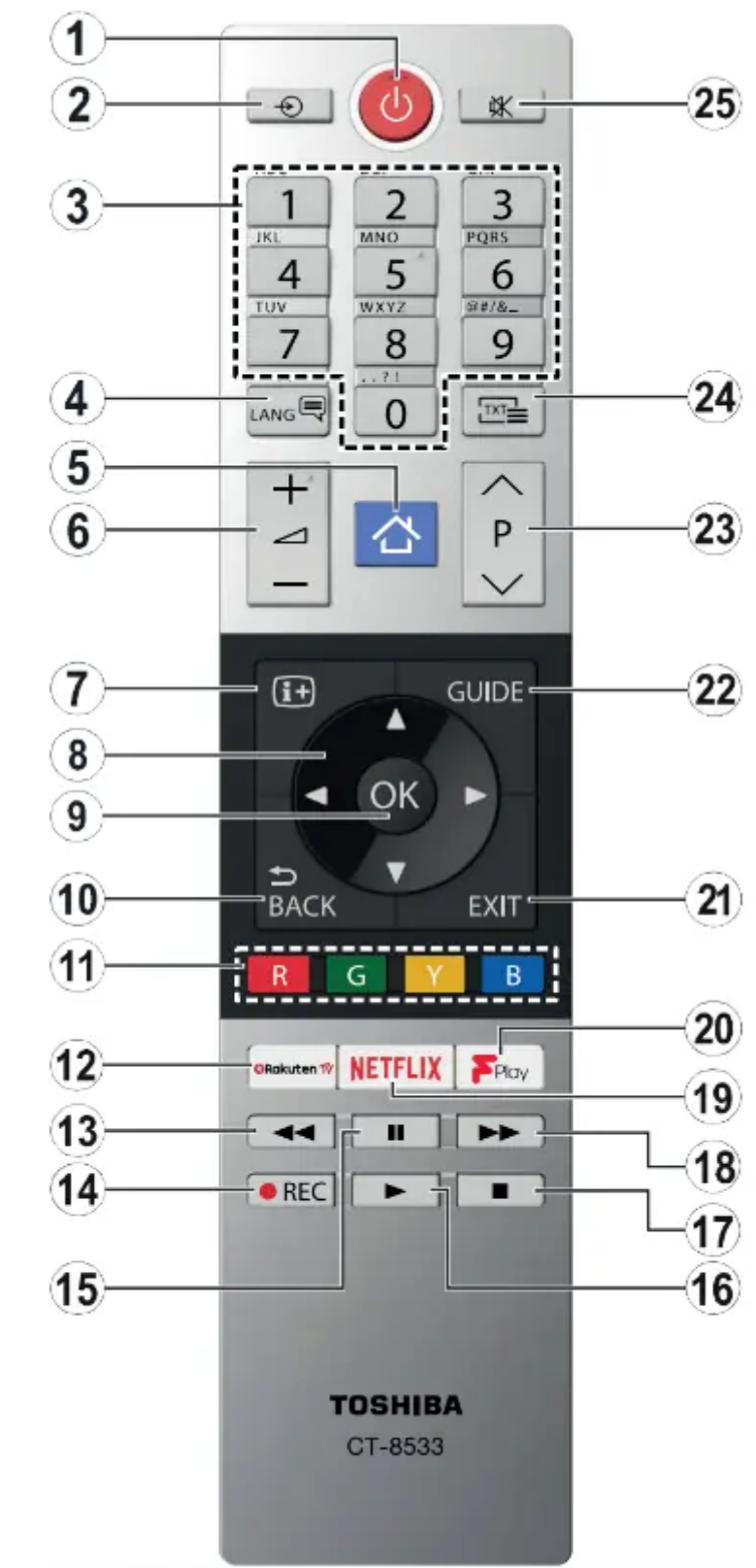
Input Selection

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

Changing Channels and Volume

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



















Remote Control




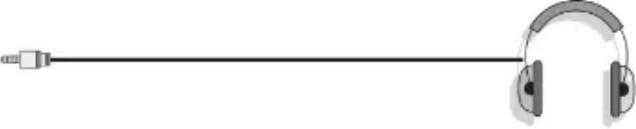


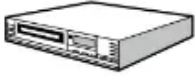







1. **Standby:** Switches On / Off the TV
2. **Source:** Shows available broadcast and content sources

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

Connections

Connector	Type	Cables	Device
	VGA Connection (back)		
AUDIO IN 	PC/YPbPr Audio Connection (back)	 YPbPr/PC Audio Cable	
	HDMI Connection (side&back)		
SPDIF 	SPDIF (Coaxial Out) Connection (back) (optional)		
SPDIF 	SPDIF (Optical Out) Connection (back) (optional)		
BACK AV 	Back AV (Audio/Video) Connection (back)	 Audio Video Cable	



<p>HEADPHONE</p> 	<p>Headphone Connection (side)</p>		
<p>YPBPR</p> 	<p>YPbPr Video Connection (back)</p>	 <p>PC to YPbPr Connection Cable</p>	
	<p>USB Connection (side)</p>		
	<p>CI Connection (side)</p>		
<p>LAN</p> 	<p>Ethernet Connection (back)</p>	 <p>LAN / Ethernet Cable</p>	

See the illustrations on the left side. You can use YPbPr to VGA cable to enable YPbPr signal via VGA input. You cannot use VGA and YPbPr at the same time.

To enable PC/YPbPr audio, you will need to use the back audio inputs with a YPbPr/PC audio cable for audio connection.

When using the wall mounting kit (available from a third party in the market, if not supplied), we recommend that you plug all your cables into the back of the TV before mounting on the wall.

Insert or remove the CI module only when the TV is SWITCHED OFF. You should refer to the module instruction manual for details of the settings. The/Each USB input of your TV supports devices up to 500mA. Connecting devices that have current value above 500mA may damage your TV. When connecting equipment using a HDMI cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation, you have to use a high speed shielded (high grade) HDMI cable with ferrites.

Settings Menu Contents

Picture Menu Contents

Mode	You can change the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: Cinema, Game(optional), Sports, Dynamic and Natural.
Contrast	Adjusts the light and dark values on the screen.
Brightness	Adjusts the brightness values on the screen.
Sharpness	Sets the sharpness value for the objects displayed on the screen.
Colour	Sets the colour value, adjusting the colours.
Energy Saving	For setting the Energy Saving to Custom, Minimum, Medium, Maximum, Auto, Screen Off or Off.
Backlight	This setting controls the backlight level. The backlight function will be inactive if the Energy Saving is set to an option other than Custom.
Advanced Settings	
Dynamic Contrast	You can change the dynamic contrast ratio to desired value.
Noise Reduction	If the signal is weak and the picture is noisy, use the Noise Reduction setting to reduce the amount of noise.
Colour Temp	Sets the desired colour temperature value. Cool, Normal, Warm and Custom options are available.
White Point	If the Colour Temp option is set as Custom, this setting will be available. Increase the 'warmth' or 'coolness' of the picture by pressing Left or Right buttons.
Picture Zoom	Sets the desired image size format.
Picture Shift	This option may be available depending on the Picture Zoom setting. Highlight and press OK, then use directional buttons to shift the picture upwards or downwards.

Film Mode	Films are recorded at a different number of frames per second to normal television programmes. Turn this feature on when you are watching films to see the fast motion scenes clearly.
Skin Tone	Skin tone can be changed between -5 and 5.
Colour Shift	Adjust the desired colour tone.
HDMI Full Range	While watching from a HDMI source, this feature will be visible. You can use this feature to enhance blackness in the picture.
PC Position	Appears only when the input source is set to VGA/PC.
Autoposition	Automatically optimizes the display. Press OK to optimize.
H Position	This item shifts the image horizontally to the right hand side or left hand side of the screen.
V Position	This item shifts the image vertically towards the top or bottom of the screen.
Dot Clock	Dot Clock adjustments correct the interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.
Phase	Depending on the input source(computer etc.) you may see a hazy or noisy picture on the screen. You can use phase to get a clearer picture by trial and error.
Reset	Resets the picture settings to factory default settings (except Game mode).

Sound Menu Contents

Volume	Adjusts the volume level.
Equalizer	Selects the equalizer mode. Custom settings can be made only when in User mode.
Balance	Adjusts whether the sound comes from the left or right speaker.
Headphone	Sets headphone volume. Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.
Sound Mode	You can select a sound mode (If the viewed channel supports).
Bluetooth (optional)	Press OK to open the Bluetooth menu screen. Using this screen you can discover and connect the Bluetooth wireless technology enabled sound devices to your TV.
AVL (Automatic Volume Limiting)	Sets the sound to obtain fixed output level between programmes.
Headphone/ Lineout	When you connect an external amplifier to your TV using the headphone jack, you can select this option as Lineout. If you have connected headphones to the TV, set this option as Headphone. Please ensure before using headphones that this menu item is set to Headphone. If it is set to Lineout, the output from the headphone socket will be set to maximum which could damage your hearing.
Dynamic Bass (optional)	Enables or disables the Dynamic Bass.
DTS TruSurround	Enables or disables the DTS TruSurround.
DTS DRC	Dynamic Range Control provides gain adjustment of the source to maintain suitable audible range at both low and high playback levels. Enable or disable the DTS DRC by setting as On or Off.
Digital Out	Sets digital out audio type.

Network Menu Contents

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

Installation Menu Contents

Automatic channel scan (Retune)	Displays automatic tuning options. D. Aerial: Searches and stores aerial DVB stations. D. Cable: Searches and stores cable DVB stations. Analogue: Searches and stores analogue stations. Satellite: Searches and stores satellite stations.
Manual channel scan	This feature can be used for direct broadcast entry.
Network channel scan	Searches for the linked channels in the broadcast system. D. Aerial: Searches for aerial network channels. D. Cable: Searches for cable network channels. Satellite: Searches for satellite network channels.
Analogue fine tune	You can use this setting for fine tuning analogue channels. This feature is not available if no analogue channels are stored and if currently watched channel is not an analogue channel.

Satellite Settings	Displays satellite settings. Satellite list: Displays available satellites. You can Add, Delete satellites or Edit satellite settings on the list. Antenna installation: You can change satellite antenna settings and/or start a satellite scan.
Installation Settings (optional)	Displays installation settings menu. Standby Search (*): Your TV will search for new or missing channels while in standby. Any new found broadcasts will be shown. Dynamic Channel Update(*): If this option is set as Enabled, the changes on the broadcasts such as frequency, channel name, subtitle language etc., will be applied automatically while watching.
Clear Service List	Use this setting to clear channels stored. This setting is visible only when the Country option is set to Denmark, Sweden, Norway or Finland.
Select Active Network	This setting allows you to select only the broadcasts within the selected network to be listed in the channel list. This feature is available only for the country option of Norway.
Signal Information	You can use this menu item to monitor signal related information such as signal level/ quality, network name etc for available frequencies.
First time installation	Deletes all stored channels and settings, resets TV to factory settings.
System Menu Contents	
Conditional Access	Controls conditional access modules when available.
Language	You may set a different language depending on the broadcaster and the country.
Privacy Settings (*)	Manage your privacy privileges for smart TV related applications. Press OK to enter the menu and set according to your preferences.
Parental	Enter correct password to change parental settings. You can easily adjust Menu Lock, Maturity Lock, Child Lock or Guidance in this menu. You can also set a new PIN or change the Default CICAM PIN using the related options.
Date/Time	Sets date and time.
Sources	Edit the names, enable or disable selected source options.

Accessibility	Displays accessibility options of the TV.
Hard of Hearing	Enables any special feature sent from the broadcaster.
Audio Description	A narration track will be played for the blind or visually impaired audience. Press OK to see all available Audio Description menu options. This feature is available only if the broadcaster supports it.
Netflix	If this feature is supported by your TV, you can view your ESN(*) number and deactivate Netflix.
More	Displays other setting options of the TV.
Menu Timeout	Changes timeout duration for menu screens.
Standby LED	If set as Off the standby LED will not light up when the TV is in standby mode.
HBBTV (*)	You can enable or disable this feature by setting it as On or Off.
Software Upgrade	Ensures that your TV has the latest firmware. Press OK to see the menu options.
Application Version	Displays current software version.
Subtitle Mode	This option is used to select which subtitle mode will be on the screen (DVB subtitle / Teletext subtitle) if both is available. Default value is DVB subtitle. This feature is available only for the country option of Norway.
Auto TV OFF	Sets the desired time for the TV to automatically go into standby mode when not being operated.
Biss Key	Biss is a satellite signal scrambling system that is used for some broadcasts. If you need to enter Biss key on a broadcast, you can use this setting. Highlight Biss Key and press OK to enter keys on the desired broadcast.
Store Mode	Select this mode for store display purposes. Whilst Store Mode is enabled, some items in the TV menu may not be available.
AVS (Audio Video Sharing)	AVS feature allows you to share files stored on your smartphone or tablet pc. If you have a compatible smartphone or tablet pc and the appropriate software is installed, you can

	share/play photos on your TV. See instructions of your sharing software for more information.
Power Up Mode	This setting configures the power up mode preference. Last State and Standby options are available.
Virtual Remote	Enable or disable the virtual remote feature.
CEC	With this setting you can enable and disable CEC functionality completely. Press Left or Right button to enable or disable the feature.
CEC Auto Power On	This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press Left or Right button to enable or disable the feature.
Speakers	To hear the TV audio from the connected compatible audio device set as Amplifier. You can use the remote control of the TV to control the volume of the audio device.
Smart Remote (optional)	Press OK to open the Smart Remote menu screen. Using this screen you can discover and connect the Bluetooth wireless technology enabled remote controller devices to your TV.
Show All Cookies (*)	Displays all saved cookies.
Delete All Cookies (*)	Deletes all saved cookies.
OSS	Displays Open Source Software license information.

General TV Operation

Using the Channel List

The TV sorts all stored stations in the channel list. You can edit this channel list, set favourites or set active stations to be listed by using the Channels menu options. Press the OK button to open the channel list.

You can filter the listed channels or make advanced changes in the current list using the Filter and Edit tab options. Highlight the tab you want and press OK to see available options.

Managing the Favourite Lists

You can create four different lists of your favourite channels. Enter the TV>Channels menu or press the OK button in order to open the Channels menu.

Highlight the Edit tab and press OK to see the editing options and select the Tag/Untag channel option.

Select the desired channel on the list by pressing the OK button while the channel is highlighted. You can make multiple choices. You can also use the Tag/ Untag all option to select all channels on the list.

Then press Back/Return button to return to the Edit menu options. Select Add/Remove Favourites option and press the OK button again. Favourite channel list options will be displayed. Set the desired list option to On. The selected channel/s will be added to the list. In order to remove a channel or channels from a favourite list follow the same steps and set the desired list option to Off.

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

Configuring Parental Settings

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

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

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

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

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

Set PIN: Defines a new PIN number.

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

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

Electronic Programme Guide

By means of electronic programme guide function of your TV you can browse the event schedule of the currently installed channels on your channel list. It depends on the related broadcast whether this feature is supported or not.

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

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

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

Timeline Schedule

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

Press Back/Return button to use available tab options.

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

Highlight Extras tab and press OK to access below options.

Highlight Genre: Displays Highlight Genre menu.

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

Guide Search: Displays searching options. Using these options, you can search the programme guide database in accordance with the selected criteria. Matching results will be listed.

Now: Displays current event of the highlighted channel.

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

Now/Next Schedule

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

Press Back/Return button to use available tab options.

Highlight Filter tab and press OK to see the filtering options. To change the layout highlight Timeline Schedule and press OK.

Event Options

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

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

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

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

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

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

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

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 use the directional buttons to scroll back in time through the timeline- based guide. You will see contents from last few days.

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.

Teletext Services (where available)

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

Digital Teletext

Press the Text button to view digital teletext information.

Operate it with the coloured buttons, cursor buttons and the OK button. The operation method may differ depending on the contents of the digital teletext. Follow the instructions displayed on the digital teletext screen.

When the Text button is pressed again, the TV returns to television broadcast.

MHEG Teletext

With digital terrestrial broadcasting (DVB-T), in addition to pictures and sound, you can also view digital teletext.

Digital teletext is sometimes broadcast at the same time with the normal broadcasting.

- Press the Text or Red button
- The digital teletext information appears
- Operate it with the coloured buttons, directional buttons and OK button

The operation method may differ depending on the contents of the digital teletext. Follow the instructions displayed on digital teletext screen. Press the Text button to return to television broadcast.

BBC Red Button+ (RB+)

While watching BBC channels, press the Red button or Text button to access Red Button+ services provided by the BBC. On the opening page you can access to BBC's main services such as BBC iPlayer, BBC News, BBC Sport and many others. There are also links to the home pages of the related applications available.

Use the navigation buttons on the TV's remote control to move through the application. Press Exit button to close and exit.

Software Upgrade

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

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

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

3 AM search and upgrade mode

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

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

Troubleshooting & Tips

TV will not turn on

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

Poor picture

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

No picture

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

No sound

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

Remote control - no operation

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

No signal on an input source

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

- Check the device is switched on.

Recording unavailable

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

USB is too slow

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

Try using a different USB storage device.

PC Input Typical Display Modes

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

Index	Resolution	Frequency
1	640x480	60Hz
2	640x480	75Hz
3	800x600	56Hz
4	800x600	60Hz
5	800x600	72Hz
6	800x600	75Hz
7	1024x768	60Hz
8	1024x768	70Hz
9	1024x768	75Hz
10	1152x864	75Hz
11	1280x768	60Hz
12	1360x768	60Hz
13	1280x960	60Hz
14	1280x1024	60Hz
15	1280x1024	75Hz
16	1400x1050	60Hz
17	1440x900	60Hz
18	1440x900	75Hz
19	1920x1080	60Hz

AV and HDMI Signal Compatibility

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

(X: Not Available, O: Available)

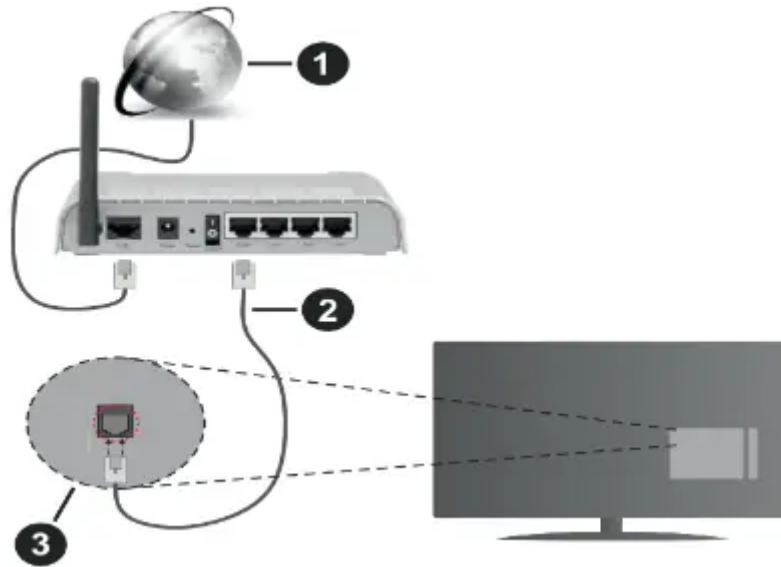
In some cases a signal on the TV may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc.). If you do experience such a problem please contact your dealer and also the manufacturer of the source equipment.

Connectivity

Wired Connectivity

To Connect to a Wired Network

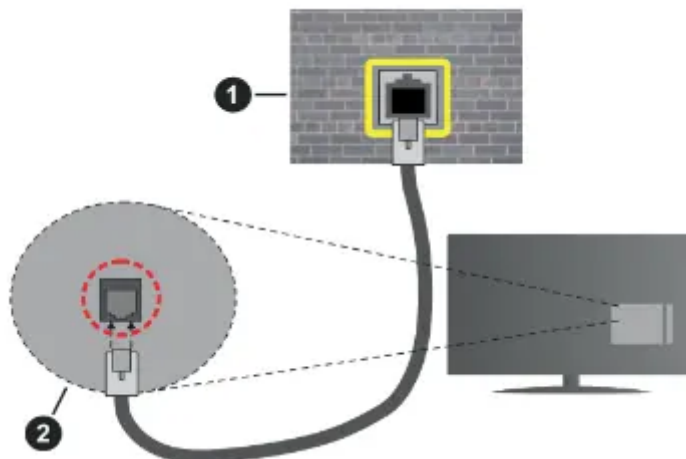
- You must have a modem/router connected to an active broadband connection.
- Connect your TV to your modem/router via an Ethernet cable. There is a LAN port at the rear (back) of your TV.



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

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

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



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

Configuring Wired Device Settings Network Type

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

Internet Speed Test

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

Advanced Settings

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

Wireless Connectivity

To Connect to a Wireless Network

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



1. Broadband ISP connection

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

- The frequency and channel differ depending on the area.
- The transmission speed differs depending on the distance and number of obstructions between the transmission products, the configuration of these products, the radio wave conditions, the line traffic and the products that you use. The transmission may also be cut off or may get disconnected depending on the radio wave conditions,

DECT phones or any other WLAN 11b appliances. The standard values of the transmission speed are the theoretical maximum values for the wireless standards. They are not the actual speeds of data transmission.

- The location where the transmission is most effective differs depending on the usage environment.
- The Wireless feature of the TV supports 802.11 a,b,g n type modems. It is highly recommended that you should use the IEEE 802.11n communication protocol in order to avoid any possible problems while watching videos.
- You must change your modem's SSID when there are any other modems around with the same SSID. You can encounter connection problems otherwise. Use a wired connection if you experience problems with a wireless connection.

Configuring Wireless Device Settings

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

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

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

Wait until the IP address is shown on the screen.

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

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

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

Other Information

The status of the connection will be displayed as

Connected or Not Connected and the current IP address, if a connection is established.

Connecting to your mobile device via WLAN

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

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

Afterwards, connect your mobile device to the router and then activate the sharing software on your mobile device.

Then, select files that you want to share with your TV.

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

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

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

Connectivity Troubleshooting

Wireless Network Not Available

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

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

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

Connection is Slow

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

Disruption during playback or slow reactions

You could try the following in such a case:

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

Internet Connection Not Available / Audio Video Sharing Not Working

If the MAC address (a unique identifier number) of your PC or modem has been permanently registered, it is possible that your TV might not connect to the internet.

In such a case, the MAC address is authenticated each time when you connect to the internet. This is a precaution against unauthorized access. Since your TV has its own MAC address, your internet service provider cannot validate the MAC address of your TV.

For this reason, your TV cannot connect to the internet.

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

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

Video Sharing mode or while browsing via Audio Video Sharing feature.

Invalid Domain

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

Using Audio Video Sharing Network Service

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

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

1. Server Software Installation

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

2. Connect to a Wired or Wireless Network

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

3. Enable Audio Video Sharing

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

4. Play Shared Files via Media Browser

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

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

If a problem occurs with the network, switch your television off at the wall socket and back on again.

Trick mode and jump are not supported with the Audio Video Sharing feature.

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

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

Specifications

Types of Discs Supported	DVD: SS/SL 4.7" (DVD-5) SS/DL 4.7" (DVD-9) DS/SL 4.7" (DVD-10) DS/DL 4.7" (DVD-18)	CD-DA CD-R CD-RW MP-3/JPEG
Video Type	MPEG-2 Video Standard Decoding (MPEG-1 supported) Full-Screen Video Display of 720 x 576 (PAL) & 720 x 480 (NTSC) pixels 50 and 60 Hz frame refresh rates (PAL & NTSC) Digital bit-stream processing rate up to 108Mbits/sec Line resolution more than 500 lines	
Audio Type	MPEG Multichannel Decoding LPCM	
Audio Output	Analog Outputs: 24 bit /48, 44.1kHz down-sampling DAC	

Warning

This content is compiled from multiple sources and is provided for reference purposes only. It may not be complete or fully applicable to all situations. If you are unable to resolve your issue, please contact the product manufacturer or an authorized service provider for official support.