

# BUSH

Instruction manual

DLED49FHD





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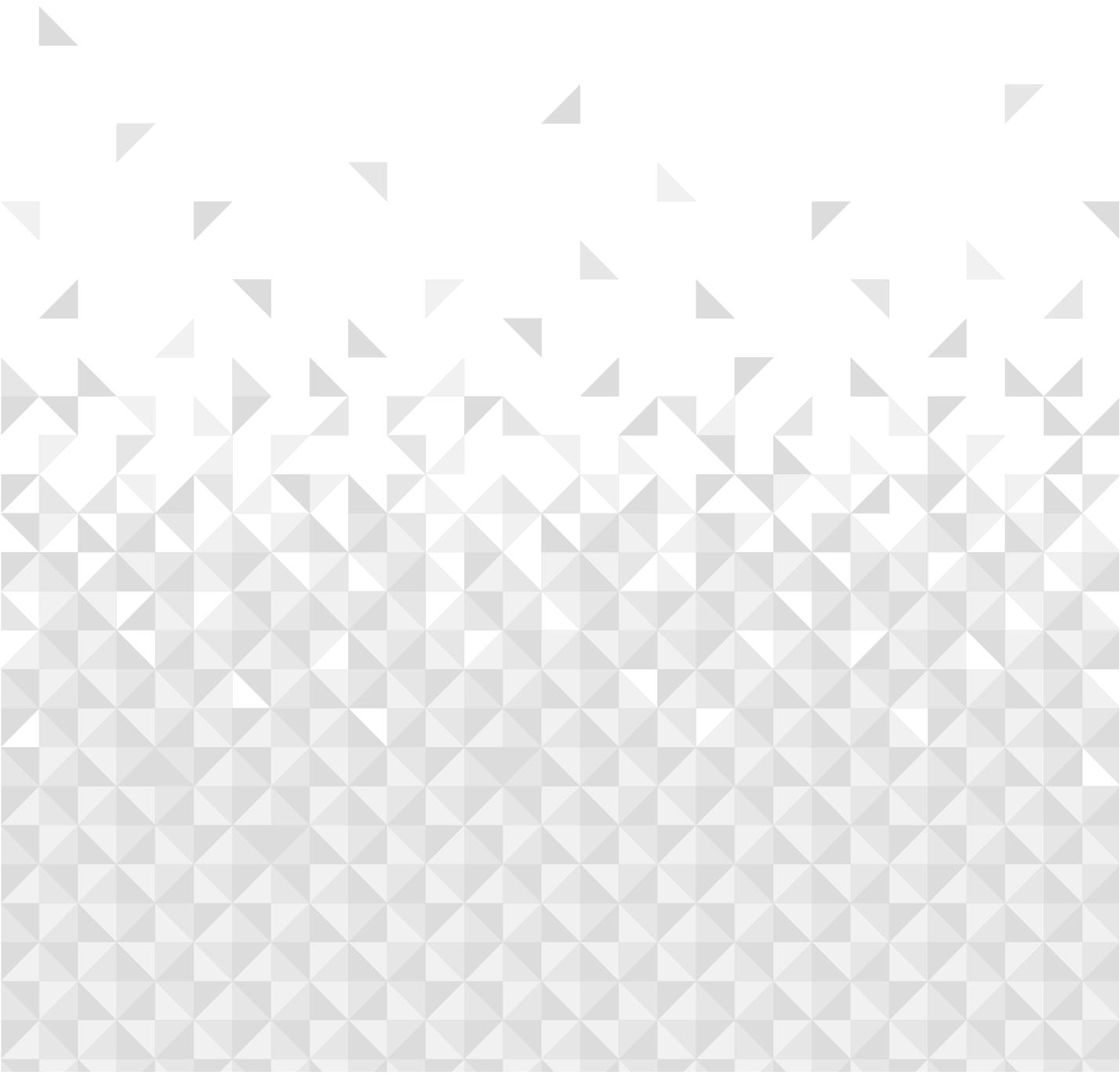
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# Safety information 1





## Safety information

**Important** - Please read these instructions fully before installing or operating



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

### 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.**



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.

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.

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

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

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.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.



## Safety information

**Important** - Please read these instructions fully before installing or operating

**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 on 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!**

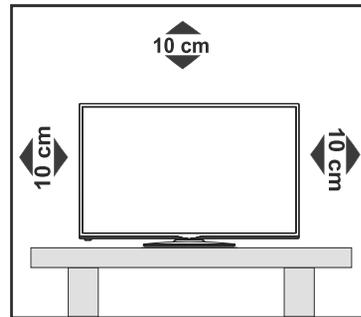
### Power source

• 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.



## Safety information

**Important** - Please read these instructions fully before installing or operating

### Moisture and Water

- **Do not** use this TV in a humid or damp place (avoid bathrooms, the sink in the kitchen, 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, on top of 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

- Excessive 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

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.



## Safety information

**Important** - Please read these instructions fully before installing or operating

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

Never place a television set in unstable or inclined locations. A television set may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as;

- Using cabinets or stands recommended by the manufacturer of the television set.
- Only using furniture that can safely support the television set.
- Ensuring the television set is not overhanging the edge of the supporting furniture.
- Not placing the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- Not standing the television set on cloth or other materials placed between the television and supporting furniture.
- Educating children about the dangers of climbing on furniture to reach the television set or its controls. If your existing television set is being retained and relocated, the same considerations as above should be applied.

### 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)

### 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.



## Safety information

**Important** - Please read these instructions fully before installing or operating

### 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.



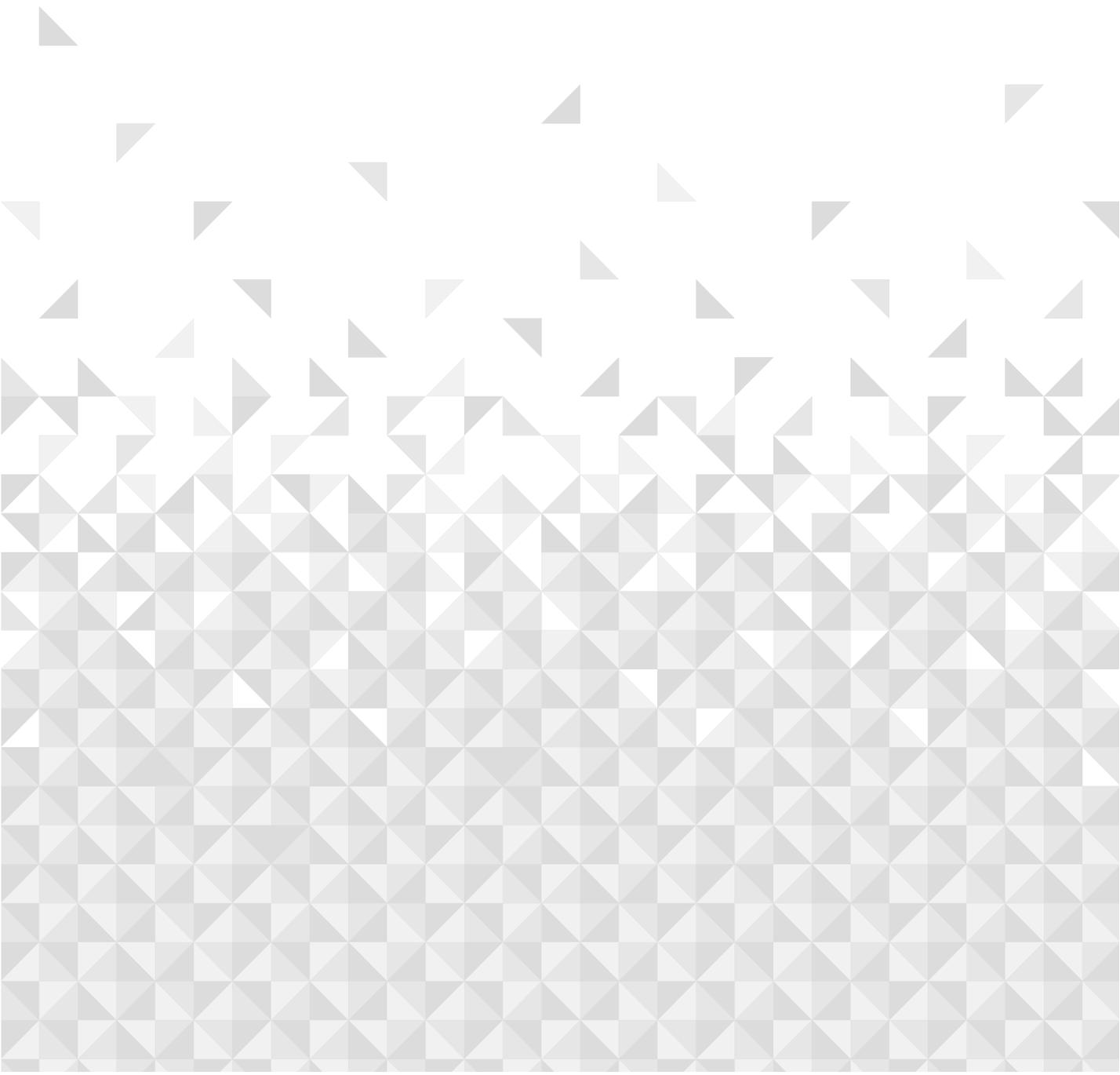
**Class 1 Laser Product:** This product contains Class 1 laser source that is safe under reasonably foreseeable conditions of operation.

**Hereby,** VESTEL Elektronik Sanayi ve Ticaret A.Ş., declares that the radio equipment type TFT IDTV is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: [doc.vosshub.com](http://doc.vosshub.com)

The illustrations and the OSD in this operation manual are for explanation purposes and may vary slightly from the actual operations.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Getting to know your TV 2



# Getting to know your TV

You'll be up and running in no time

## Ready? Let's begin...

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.

If you require any further assistance, our technical experts are happy to help. For full details, refer to the product support section at the end of these instructions.

## Accessories Included

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

## Features

- Remote controlled colour TV
- Fully integrated digital terrestrial/cable TV (DVB-T-T2/C)
- HDMI inputs to connect other devices with HDMI sockets
- USB input
- OSD menu system
- Scart socket for external devices (such as DVD Players, PVR, video games, etc.)
- Stereo sound system
- Teletext
- Headphone connection
- Automatic programming system
- Manual tuning
- Automatic power down after up to eight hours.
- Sleep timer
- Child lock
- Automatic sound mute when no transmission.
- NTSC playback
- AVL (Automatic Volume Limiting)
- PLL (Frequency Search)
- PC input
- Game Mode (Optional)
- Ethernet (LAN) for interactive services available on digital channels
- Picture off function

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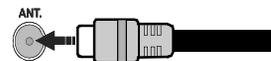


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## Antenna Connection

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

### Rear side of the TV



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

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Getting to know your TV

You'll be up and running in no time

## Inserting the Batteries into the Remote

Remove the back cover to reveal the battery compartment. Insert two size **AAA** batteries. Make sure the (+) and (-) signs match (observe correct polarity). Do not mix old and new batteries. Replace only with same or equivalent type. Place the cover back on.

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

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

## Power Connection

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

## Switching On/Off

### To Switch the TV On

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

#### To switch on the TV from standby mode either:

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

- Press the middle of the side function switch on the TV in.

### To Switch the TV Off

Press the **Standby** button on the remote control or press the middle of the side function switch on the TV in and hold it down for a few seconds, the TV will switch into standby mode.

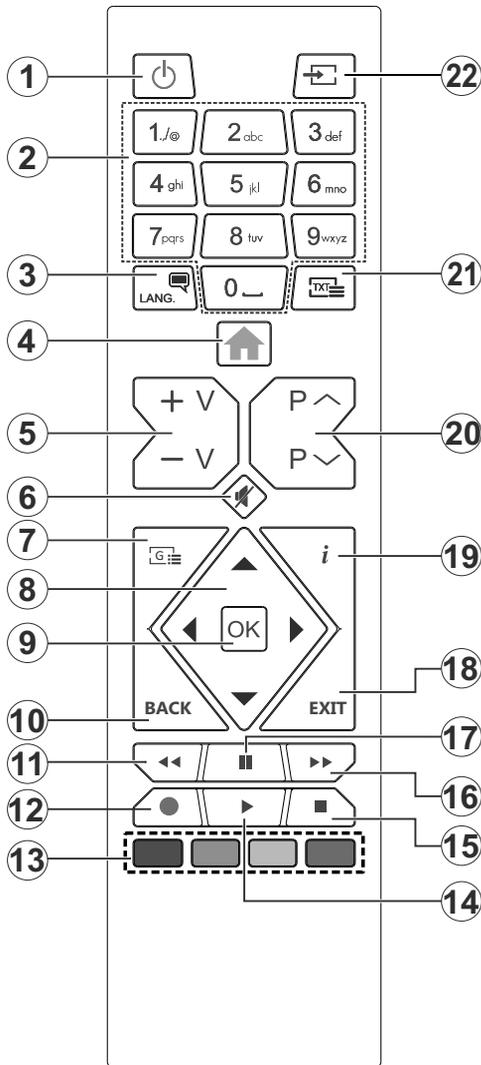
#### To power down the TV completely, unplug the power cord from the mains socket.

**Note:** When the TV is switched into standby mode, the standby LED can blink to indicate that features such as Standby Search, Over Air Download or Timer is active. The LED can also blink when you switch on the TV from standby mode.

# Getting to know your TV

You'll be up and running in no time

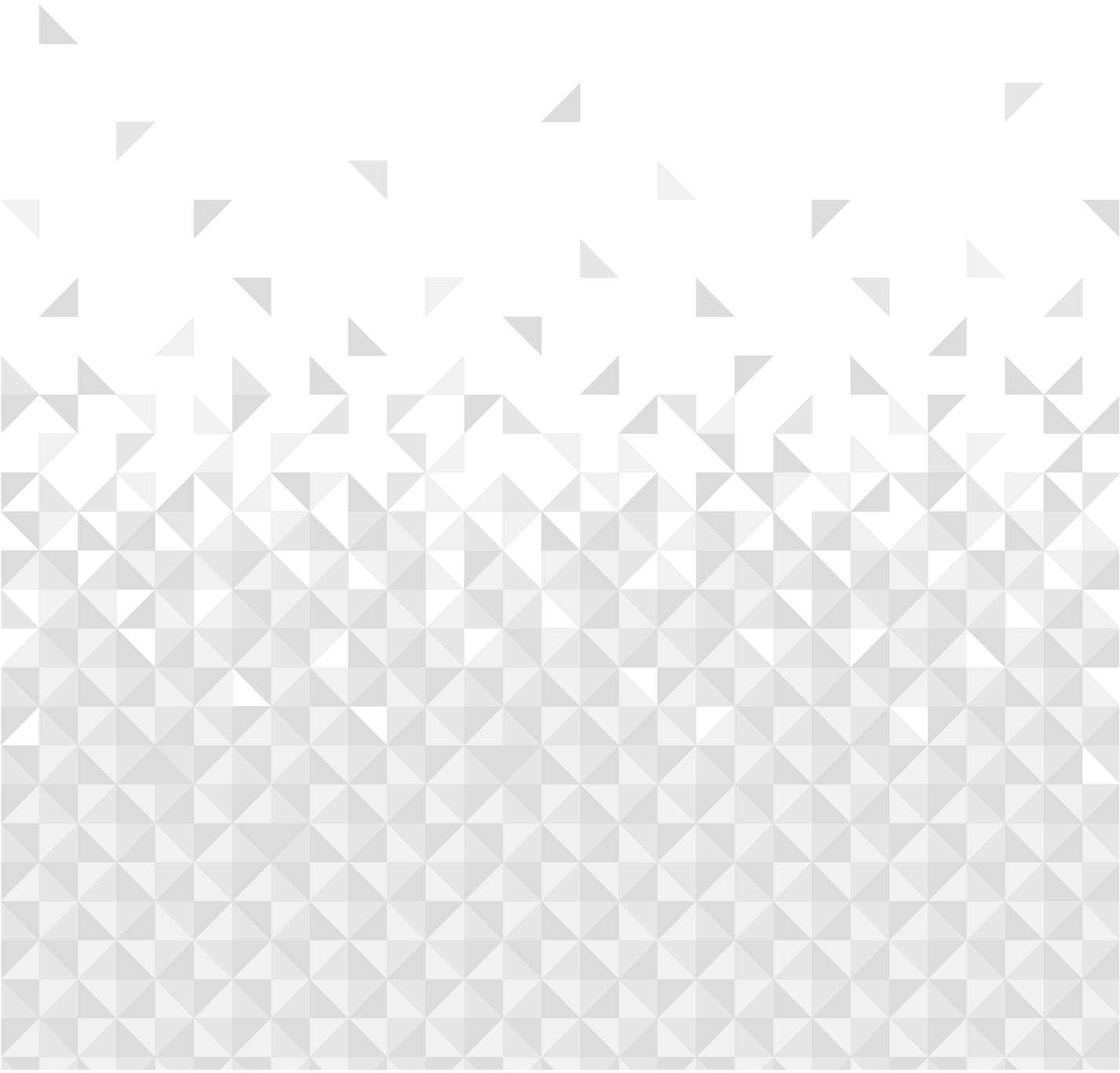
## Remote Control



- 1. Standby:** Switches On / Off the TV
- 2. Numeric buttons:** Switches the channel, enters a number or a letter in the text box on the screen.
- 3. Language:** Displays and changes audio/subtitle language and turns subtitles on or off (digital TV, where available)
- 4. Home:** Displays TV menu
- 5. Volume +/-**
- 6. Mute:** Completely turns off the volume of the TV
- 7. Guide:** Displays the electronic programme guide
- 8. Directional buttons:** Helps navigate menus, content etc. and displays the subpages in TXT mode when pressed Right or Left
- 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. Rewind:** Moves frames backwards in media such as movies
- 12. No function**
- 13. Coloured Buttons:** Follow the on-screen instructions for coloured button functions
- 14. Play:** Starts to play selected media
- 15. Stop:** Stops the media being played
- 16. Fast Forward:** Moves frames forward in media such as movies
- 17. Pause:** Pauses the media being played
- 18. Exit:** Closes and exits from displayed menus or returns to previous screen
- 19. Info:** Displays information about on-screen content, shows hidden information (reveal - in TXT mode)
- 20. Programme +/-**
- 21. Text:** Displays teletext (where available), press again to superimpose the teletext over a normal broadcast picture (mix)
- 22. Source:** Shows available broadcast and content sources

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

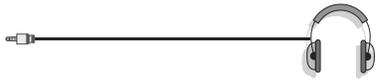
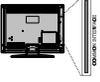
# Connections 3



# Connections

Bringing it all together

## Connections

Connector	Type	Cables	Device
	<b>Scart Connection (back)</b>		
	<b>VGA Connection (back)</b>		
<b>AUDIO IN</b> 	<b>PC/YPbPr Audio Connection (side)</b>	 YPbPr/PC Audio Cable	
	<b>HDMI Connection (back)</b>		
<b>SPDIF</b> 	<b>SPDIF (Optical Out) Connection (back)</b>		
<b>SIDE AV</b> 	<b>Side AV (Audio/Video) Connection (side)</b>	 AV Cable	
<b>HEADPHONE</b> 	<b>Headphone Connection (side)</b>		
<b>PC to YPBPR</b> 	<b>YPbPr Video Connection (back)</b>	 PC to YPBPR Connection Cable	
	<b>USB Connection (side)</b>		
	<b>CI Connection (side)</b>		
<b>LAN</b> 	<b>Ethernet Connection (back)</b>	 LAN / Ethernet Cable	

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 side audio inputs with a YPbPr/PC audio cable for audio connection. If an external device is connected via the SCART socket, the TV may automatically switch to EXT1 mode. When receiving DTV channels (Mpeg4 H.264, H.265) or while in Media Browser mode, output will not be available via the scart socket. 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 an HDMI cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation, you have to use a high speed shielded (high grade) HDMI cable with ferrites.

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

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Connections

## Bringing it all together

### First Time Installation

When turned on for the first time, the language selection screen is displayed. Select the desired language and press **OK**. In the following steps of the installation guide, set your preferences using the directional buttons and **OK** button.

On the second screen set your country preference. Depending on the country selection you may be asked to set and confirm a PIN at this point. The selected PIN cannot be 0000. You have to enter it if you are asked to enter a PIN for any menu operation later.

You can activate **Store Mode** option in the next step. This option will configure your TV's settings for store environment and depending on the TV model being used, the supported features of it may be displayed on the side of the screen as an info banner. This option is intended only for store use. It is recommended to select **Home Mode** for home use. This option will be available in **Settings>System>More** menu and can be turned off/on later. Make your selection and press **OK** to continue.

The **Network/Internet Settings** menu will be displayed next. Please refer to **Wired Network Connection** section to configure a wired connection. After the settings are completed highlight **Next** and press **OK** button to continue.

On next screen you can set broadcast types to be searched, set your encrypted channel searching and time zone (depending on the country selection) preferences. Additionally you can set a broadcast type as your favourite one. Priority will be given to the selected broadcast type during the search process and the channels of it will be listed on the top of the channel list. When finished, highlight **Next** and press **OK** to continue.

#### About Selecting Broadcast Type

To turn a search option for a broadcast type highlight it and press **OK**. The checkbox next to the selected option will be checked. To turn the search option off clear the checkbox by pressing **OK** after moving the focus on the desired broadcast type option.

**Digital Aerial:** If **D. Aerial** broadcast search option is turned on, the TV will search for digital terrestrial broadcasts after other initial settings are completed.

After the initial settings are completed TV will start to search for available broadcasts of the selected broadcast types.

While the search continues current scan results will be displayed at the bottom of the screen. After all the available stations are stored, **Channels** menu will be displayed. You can edit the channel list according to your

preferences using the **Edit** tab options or press the **Home** button to quit and watch TV.

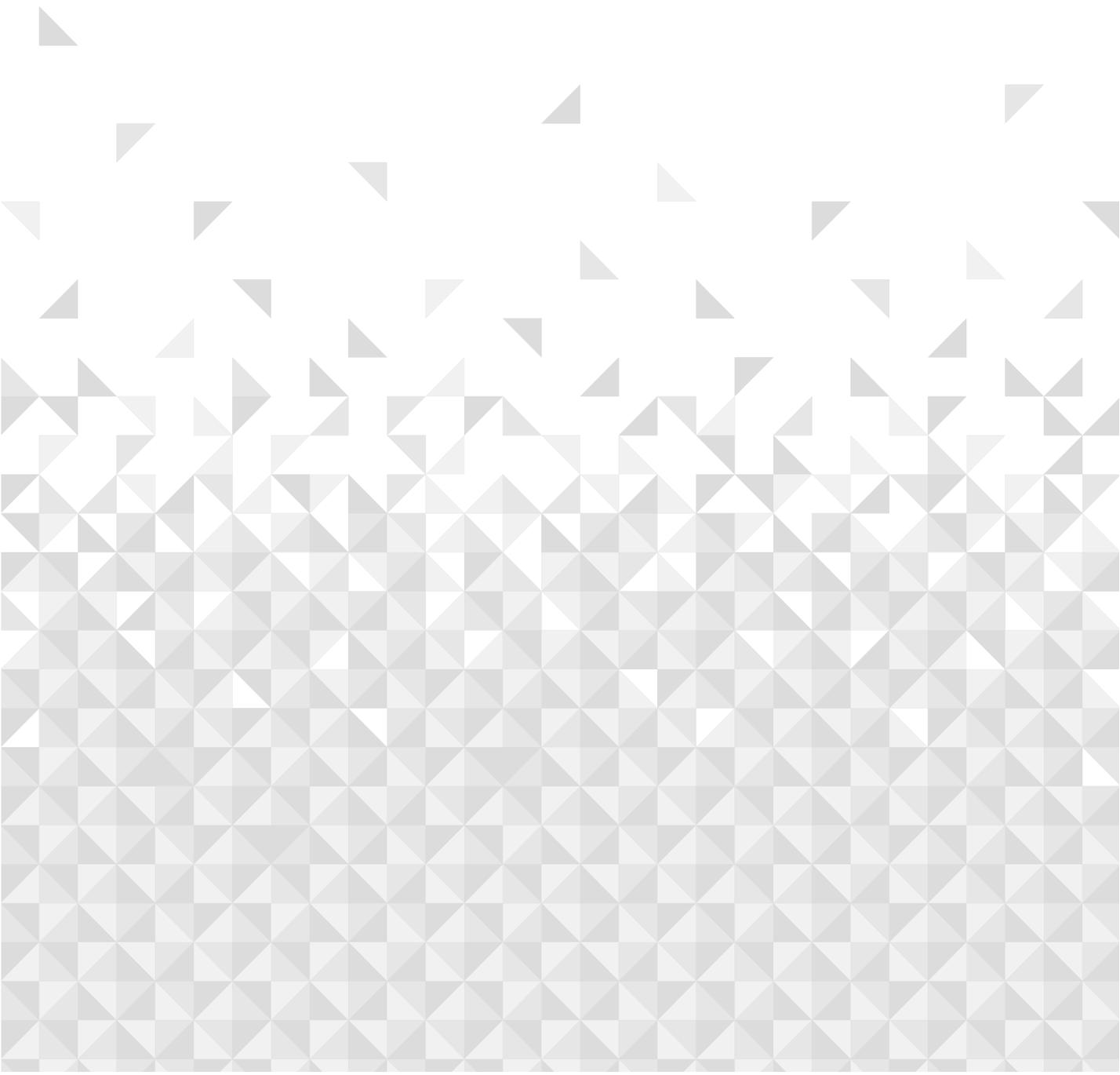
While the search continues a message may appear, asking whether you want to sort channels according to the LCN(\*). Select **Yes** and press **OK** to confirm.

(\* LCN is the Logical Channel Number system that organizes available broadcasts in accordance with a recognizable channel number sequence (if available).

**Note:** Do not turn off the TV while initializing first time installation. Note that, some options may not be available depending on the country selection.



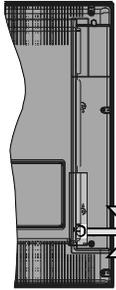
# Standard features 4



# Standard features

## Simple everyday use

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

#### Input Selection

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

#### Changing Channels and Volume

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

#### Standby Notifications

If the TV does not receive any input signal (e.g. from an aerial or HDMI source) for 3 minutes, it will go into standby. When you next switch-on, the following message will be displayed:

**"TV switched to stand-by mode automatically because there was no signal for a long time."**

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

#### 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.

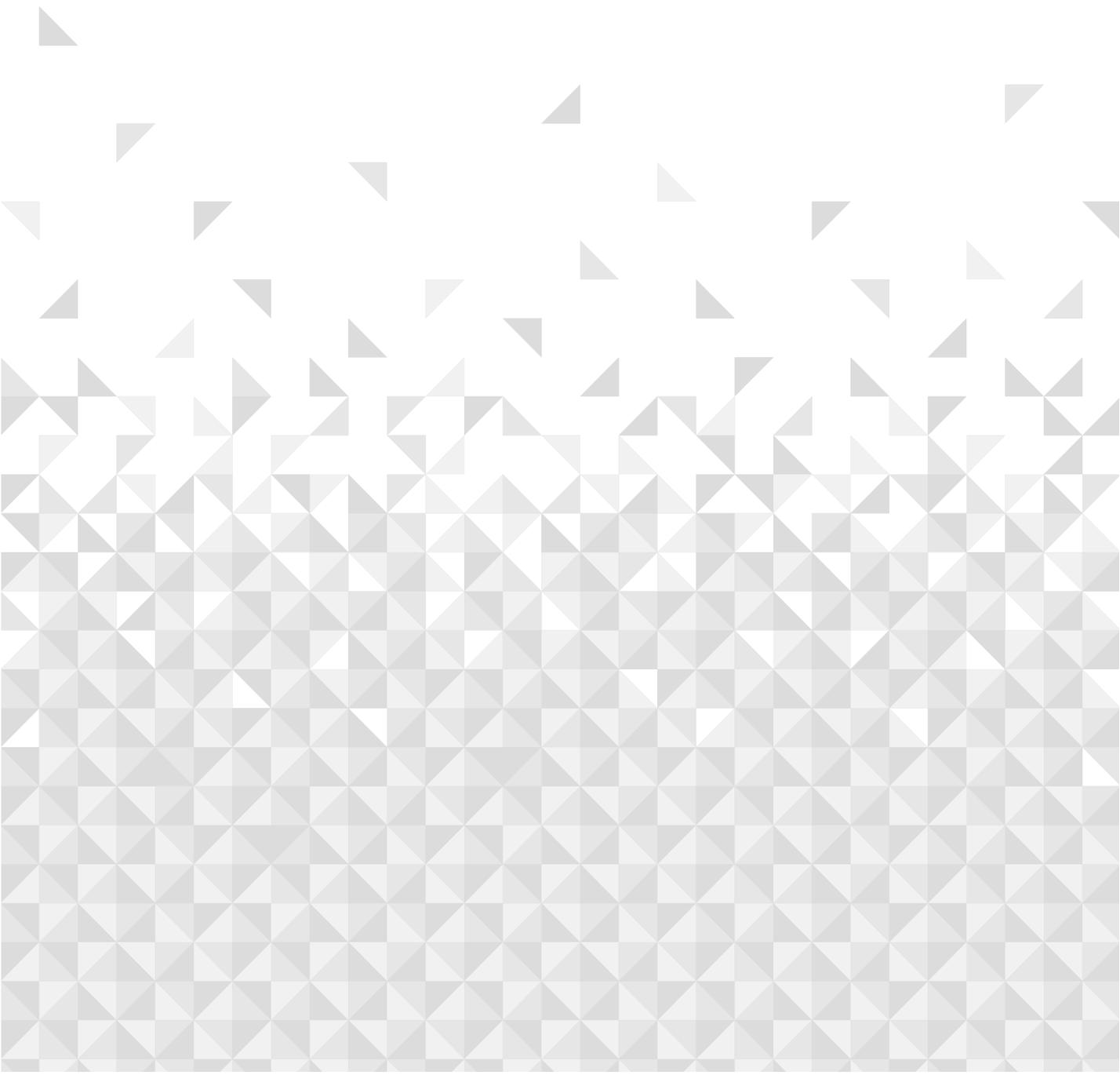
#### Managing the Favourite Lists

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.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Advanced features 5



# Advanced features

## Getting the most from your TV

### Media Playback via USB Input

You can connect 2.5" and 3.5" inch (HDD with external power supply) external hard disk drives or USB memory stick to your TV by using the USB inputs of the TV.

**IMPORTANT!** Back up the files on your storage devices before connecting them to the TV. Manufacturer will not be responsible for any file damage or data loss. Certain types of USB devices (e.g. MP3 Players) or USB hard disk drives/memory sticks may not be compatible with this TV. The TV supports FAT32 and NTFS disk formatting.

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

You can use USB hubs with your TV's USB inputs. External power supplied USB hubs are recommended in such a case.

It is recommended to use the TV's USB input(s) directly, if you are going to connect a USB hard disk.

**Note:** When viewing image files the **Media Browser** menu can only display 1000 image files stored on the connected USB device.

### Media Browser

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

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

You can set your **Media Browser** preferences by using the **Settings** menu. **Settings** menu can be accessed via the information bar which is displayed on the bottom of the screen when pressed the **Info** button while playing back a video file or displaying a picture file. Press the **Info** button, highlight the gear wheel symbol positioned on the right side of the information bar and press **OK**. **Picture Settings, Sound Settings, Media Browser Settings** and **Options** menus will be available. The contents of these menus may change according to the type of the currently open media file. Only **Sound Settings** menu will be available while playing back audio files.

Loop/Shuffle Mode Operation

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

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

### CEC

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

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

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

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

The TV supports ARC (Audio Return Channel). This feature is an audio link meant to replace other cables between the TV and an audio system (A/V receiver or speaker system). When ARC is active, the TV does not mute its other audio outputs automatically. You will need to decrease TV volume to zero manually if you wish to hear the ARC audio only (same as optical or co-axial digital audio outputs). If you want to change connected device's volume level, you should select that device from the source list. In that case volume control keys are directed to connected audio device.

**Note:** ARC is supported only via the HDMI1 input.

### System Audio Control

Allows an Audio Amplifier/Receiver to be used with the TV. The volume can be controlled using the remote

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Advanced features

## Getting the most from your TV

control of the TV. To activate this feature set the **Speakers** option in the **Settings>System>More** menu as **Amplifier**. The TV speakers will be muted and the sound of the watched source will be provided from the connected sound system.

**Note:** The audio device should support System Audio Control feature and **CEC** option should be set as **Enabled**.

### 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.

**Set PIN:** Defines a new PIN number.

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

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

Some options may not be available depending on the 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

# Advanced features

## Getting the most from your TV

event and press the **OK** button. Then select **Delete Timer on Event** option. The timer will be cancelled.

**Notes:** You cannot switch to any other channel while there is an active timer on the current channel.

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

### Teletext Services

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

#### Digital Teletext

Press the **Text** button to view digital teletext information. Operate it with the coloured buttons, cursor buttons and the **OK** button. The operation method may differ depending on the contents of the digital teletext. Follow the instructions displayed on the digital teletext screen. When the **Text** button is pressed again, the TV returns to television broadcast.

#### 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.

### Software Upgrade

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

#### Software upgrade search via user interface

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

If a new upgrade is found, it starts to download the upgrade. After the download is completed, a warning

will be displayed, press **OK** button to complete software upgrade process and restart TV.

#### 3 AM search and upgrade mode

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

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

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

# Advanced features

Getting the most from your TV

## Settings Menu Contents

Picture Menu Contents	
<b>Mode</b>	You can change the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: <b>Cinema</b> , <b>Game</b> (optional), <b>Sports</b> , <b>Dynamic</b> and <b>Natural</b> .
<b>Contrast</b>	Adjusts the light and dark values on the screen.
<b>Brightness</b>	Adjusts the brightness values on the screen.
<b>Sharpness</b>	Sets the sharpness value for the objects displayed on the screen.
<b>Colour</b>	Sets the colour value, adjusting the colours.
<b>Energy Saving</b>	For setting the <b>Energy Saving</b> to <b>Custom</b> , <b>Off</b> , <b>Minimum</b> , <b>Medium</b> , <b>Maximum</b> , <b>Auto</b> , <b>Screen Off</b> . <b>Note:</b> Available options may differ depending on the selected <b>Mode</b> .
<b>Backlight</b>	This setting controls the backlight level. The backlight function will be inactive if the <b>Energy Saving</b> is set to an option other than <b>Custom</b> .
Advanced Settings	
<b>Dynamic Contrast</b>	You can change the dynamic contrast ratio to desired value.
<b>Noise Reduction</b>	If the signal is weak and the picture is noisy, use the <b>Noise Reduction</b> setting to reduce the amount of noise.
<b>Colour Temp</b>	Sets the desired colour temperature value. <b>Cool</b> , <b>Normal</b> , <b>Warm</b> and <b>Custom</b> options are available.
<b>White Point</b>	If the <b>Colour Temp</b> option is set as <b>Custom</b> , this setting will be available. Increase the 'warmth' or 'coolness' of the picture by pressing Left or Right buttons.
<b>Picture Zoom</b>	Sets the desired image size format.
<b>Picture Shift</b>	This option may be available depending on the <b>Picture Zoom</b> setting. Highlight and press <b>OK</b> , then use directional buttons to shift the picture upwards or downwards.
<b>Film Mode</b>	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.
<b>Skin Tone</b>	Skin tone can be changed between -5 and 5.
<b>Colour Shift</b>	Adjust the desired colour tone.
<b>HDMI Full Range</b>	While watching from a HDMI source, this feature will be visible. You can use this feature to enhance blackness in the picture.
PC Position	
<b>Autoposition</b>	If the image is not centered in VGA mode use this option to automatically adjust the position of the image. Press <b>OK</b> to start the auto adjustment.
<b>H Position</b>	This item shifts the image horizontally to the right hand side or left hand side of the screen.
<b>V Position</b>	This item shifts the image vertically towards the top or bottom of the screen.
<b>Dot Clock</b>	Dot Clock adjustments correct the interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.
<b>Phase</b>	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.
<b>Reset</b>	Resets the picture settings to factory default settings (except <b>Game</b> mode).

# Advanced features

## Getting the most from your TV

While in VGA (PC) mode, some items in **Picture** menu will be unavailable. Instead, VGA mode settings will be added to the **Picture** menu while in PC mode.

Sound Menu Contents	
<b>Volume</b>	Adjusts the volume level.
<b>Equalizer</b>	Selects the equalizer mode. Custom settings can be made only when in <b>User</b> mode.
<b>Balance</b>	Adjusts whether the sound comes from the left or right speaker.
<b>Headphone</b>	Sets headphone volume. Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.
<b>Sound Mode</b>	You can select a sound mode (If the viewed channel supports).
<b>AVL (Automatic Volume Limiting)</b>	Sets the sound to obtain fixed output level between programmes.
<b>Headphone/Lineout</b>	When you connect an external amplifier to your TV using the headphone jack, you can select this option as <b>Lineout</b> . If you have connected headphones to the TV, set this option as <b>Headphone</b> . Please ensure before using headphones that this menu item is set to <b>Headphone</b> . If it is set to <b>Lineout</b> , the output from the headphone socket will be set to maximum which could damage your hearing.
<b>Dynamic Bass</b>	Enables or disables the Dynamic Bass.
<b>DTS TruSurround HD</b>	Enables or disables the <b>DTS TruSurround HD</b> .
<b>Digital Out</b>	Sets digital out audio type.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Advanced features

Getting the most from your TV

<b>Network Menu Contents</b>	
<b>Network Type</b>	Disable or enable the wired network connection.
<b>Internet Speed Test</b>	Start a speed test to check your connection bandwidth. The result will be displayed on the screen when finished.
<b>Advanced Settings</b>	Change the IP and DNS configurations of your TV.
<b>Note:</b> For detailed information on the options of this menu refer to the <b>Wired Network Connection</b> section.	

# Advanced features

Getting the most from your TV

Installation Menu Contents	
<b>Automatic channel scan (Retune)</b>	Displays automatic tuning options. <b>Digital Aerial:</b> Searches and stores aerial DVB stations.
<b>Manual channel scan</b>	This feature can be used for direct broadcast entry.
<b>Network channel scan</b>	Searches for the linked channels in the broadcast system. <b>Digital Aerial:</b> Searches for aerial network channels.
<b>Signal Information</b>	You can use this menu item to monitor signal related information such as signal level/quality, network name etc for available frequencies.
<b>First time installation</b>	Deletes all stored channels and settings, resets TV to factory settings.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Advanced features

Getting the most from your TV

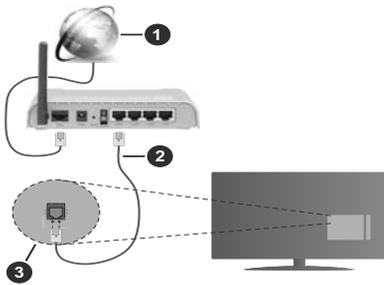
System Menu Contents	
<b>Conditional Access</b>	Controls conditional access modules when available.
<b>Language</b>	You may set a different language depending on the broadcaster and the country.
<b>Parental</b>	Enter correct password to change parental settings. You can easily adjust <b>Menu Lock</b> , <b>Maturity Lock</b> , <b>Child Lock</b> or <b>Guidance</b> in this menu. You can also set a new <b>PIN</b> or change the <b>Default CICAM PIN</b> using the related options. <b>Note:</b> Some menu options may not be available depending on the country selection in the <b>First Time Installation</b> . Default PIN could have been set to 0000 or 1234. If you have defined the PIN(is requested depending on the country selection) during the <b>First Time Installation</b> use the PIN that you have defined.
<b>Date/Time</b>	Sets date and time.
<b>Sources</b>	Edit names, enable or disable selected source options.
<b>Accessibility</b>	Displays accessibility options of the TV.
<b>Hard of Hearing</b>	Enables any special feature sent from the broadcaster.
<b>Audio Description</b>	A narration track will be played for the blind or visually impaired audience. Press <b>OK</b> to see all available <b>Audio Description</b> menu options. This feature is available only if the broadcaster supports it.
<b>More</b>	Displays other setting options of the TV.
<b>Menu Timeout</b>	Changes timeout duration for menu screens.
<b>Standby LED</b>	If set as <b>Off</b> the standby LED will not light up when the TV is in standby mode.
<b>Software Upgrade</b>	Ensures that your TV has the latest firmware. Press <b>OK</b> to see the menu options.
<b>Application Version</b>	Displays current software version.
<b>Auto TV OFF</b>	Sets the desired time for the TV to automatically go into standby mode when not being operated. This option can be set from 1 to 8 hours in steps of 1 hour. You can also disable this option by setting as Off.
<b>Store Mode</b>	Select this mode for store display purposes. Whilst <b>Store Mode</b> is enabled, some items in the TV menu may not be available.
<b>Power Up Mode</b>	This setting configures the power up mode preference. <b>Last State</b> and <b>Standby</b> options are available.
<b>CEC</b>	With this setting you can enable and disable CEC functionality completely. Press Left or Right button to enable or disable the feature.
<b>CEC Auto Power On</b>	This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press <b>Left</b> or <b>Right</b> button to enable or disable the feature.
<b>Speakers</b>	To hear the TV audio from the connected compatible audio device set as <b>Amplifier</b> . You can use the remote control of the TV to control the volume of the audio device.
<b>OSS</b>	Displays Open Source Software license information.

# Advanced features

## Getting the most from your TV

### Wired Network Connection

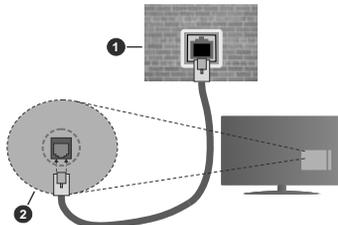
- You must have a modem/router connected to an active broadband connection.
- Connect your TV to your modem/router via an Ethernet cable. There is a LAN port at the rear (back) of your TV.



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** 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.

### Troubleshooting

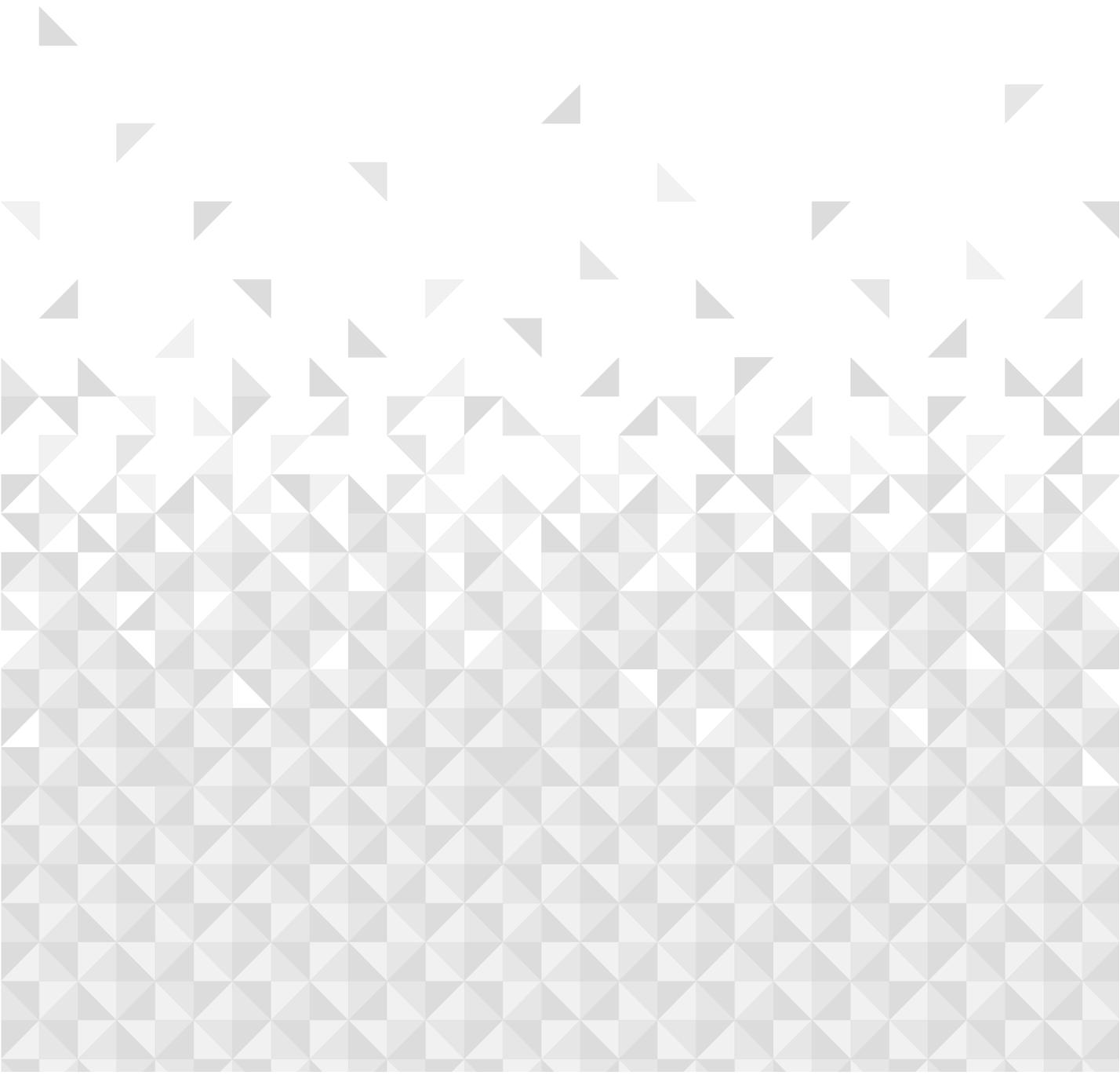
#### Internet Connection Not Available

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.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Other information 6



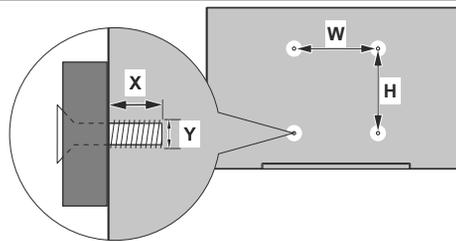
# Other information

Helpful technical information

## Specification

<b>TV Broadcasting</b>	PAL BG/I/DK
<b>Receiving Channels</b>	VHF (BAND I/III) - UHF (BAND U) - HYPERBAND
<b>Digital Reception</b>	Fully integrated digital terrestrial TV(DVB-T2)
<b>Number of Preset Channels</b>	1 000
<b>Channel Indicator</b>	On Screen Display
<b>RF Aerial Input</b>	75 Ohm (unbalanced)
<b>Operating Voltage</b>	220-240V AC, 50Hz.
<b>Audio</b>	DTS TruSurround DTS-HD
<b>Audio Output Power (WRMS.) (10% THD)</b>	2 x 8
<b>Power Consumption (W)</b>	75
<b>TV Dimensions DxLxH (with foot) (mm)</b>	235 x 1112 x 705
<b>TV Dimensions DxLxH (without foot) (mm)</b>	60/91 x 1112 x 653
<b>Display</b>	49"
<b>Operation temperature and operation humidity</b>	0°C up to 40°C, 85% humidity max

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	



## Product fiche

<b>Commercial Brand</b>	BUSH
<b>Product No.</b>	10120042
<b>Model No.</b>	DLED49FHD
<b>Energy efficiency class</b>	A++
<b>Visible screen size (diagonal, approx.) (inch/cm)</b>	49 inches / 124 cm
<b>On mode average power consumption (Watt)</b>	48,0 W
<b>Annual energy consumption (kWh/annum)</b>	70 kWh
<b>Standby power consumption (Watt)</b>	0,5 W
<b>Off mode power consumption (Watt)</b>	0 W
<b>Display resolution (px)</b>	1920 x 1080

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Other information

Helpful technical information

## 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	60 Hz
2	800x600	56 Hz
3	800x600	60 Hz
4	1024x768	60 Hz
5	1024x768	66 Hz
6	1280x768	60 Hz
7	1280x960	60 Hz
8	1280x1024	60 Hz
9	1360x768	60 Hz
10	1400x1050	60 Hz
11	1600x1200	60 Hz
12	1920x1080	60 Hz

## Other information

Helpful technical information

### AV and HDMI Signal Compatibility

Source	Supported Signals	Available	
<b>EXT (SCART)</b>	PAL 50/60	○	
	NTSC 60	○	
	RGB 50	○	
	RGB 60	○	
<b>Side AV</b>	PAL 50/60	○	
	NTSC 60	○	
<b>PC/YPbPr</b>	480I, 480P	60Hz	○
	576I, 576P	50Hz	○
	720P	50Hz,60Hz	○
	1080I	50Hz,60Hz	○
	1080P	50Hz,60Hz	○
<b>HDMI</b>	480I	60Hz	○
	480P	60Hz	○
	576I, 576P	50Hz	○
	720P	50Hz,60Hz	○
	1080I	50Hz,60Hz	○
	1080P	24Hz, 25Hz 30Hz, 50Hz, 60Hz	○

#### (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.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Other information

Helpful technical information

## Supported File Formats for USB Mode

Media	Extension	Format	Notes
Video	.mpg, .mpeg	MPEG1-2	MPEG1: 768x576 @ 30P, MPEG2:1920x1080 @ 30P
	.vob	MPEG2	1920x1080 @ 30P
	.mp4	MPEG4, Xvid, H.264	
	.mkv	H.264, MPEG4, VC-1	
	.avi	MPEG2, MPEG4, Xvid, H.264	
	.flv	H.264/VP6/ Sorenson	H.264/VP6: 1920x1080 @ 30P Sorenson: 352x288 @ 30P
	.mp4, .mov, .3gpp, .3gp, MPEG transport stream, .ts, .trp, .tp, .mkv .3gp	HEVC/H.265 MPEG4, H.264	1080P@60fps - 50Mbps 1920x1080 @ 30P
Audio	.mp3	MPEG1 Layer 2/3	Layer2: 32Kbps ~ 448Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz, 16kHz, 22.05kHz, 24kHz (Sampling rate) Layer3: 32Kbps ~ 320Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz, 16kHz, 22.05kHz, 24kHz, 8kHz, 11.025kHz, 12kHz (Sampling rate)
	(works only with video files)	AC3	32Kbps ~ 640Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz (Sampling rate)
		AAC	16Kbps ~ 576Kbps (Bit rate) / 48kHz, 44.1kHz, 32kHz, 24kHz, 22.05kHz, 16kHz, 12kHz, 11.025kHz, 8kHz (Sampling rate)
		EAC3	32Kbps ~ 6Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz (Sampling rate)
		LPCM	Unsigned 8bit PCM, Signed/Unsigned 16bit PCM (big / little endian), 24bit PCM (big endian), DVD LPCM 16/20/24bit (Bit rate) / 6kHz, 8kHz, 11.025kHz, 12kHz, 16kHz, 22.05kHz, 24kHz, 32kHz, 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz (Sampling rate)
		IMA-ADPCM/MS-ADPCM	384Kbps (Bit rate) / 8kHz ~ 48kHz (Sampling rate)
		LBR	32Kbps ~ 96Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz (Sampling rate)
Picture	.jpeg	Baseline	Resolution(WxH): 17000x10000
		Progressive	Resolution(WxH): 4000x4000
Subtitle	.bmp	-	Resolution(WxH): 5760x4096
	.sub, .srt	-	-

## Other information

Helpful technical information

### Supported DVI Resolutions

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

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

### DVB-T functionality information

This DVB receiver is only suitable for use in the country which it was designed to be used in.

Although this DVB receiver conforms to the latest DVB specifications at the time of manufacture, we cannot guarantee compatibility with future DVB transmissions due to changes that may be implemented in broadcast signals and technologies.

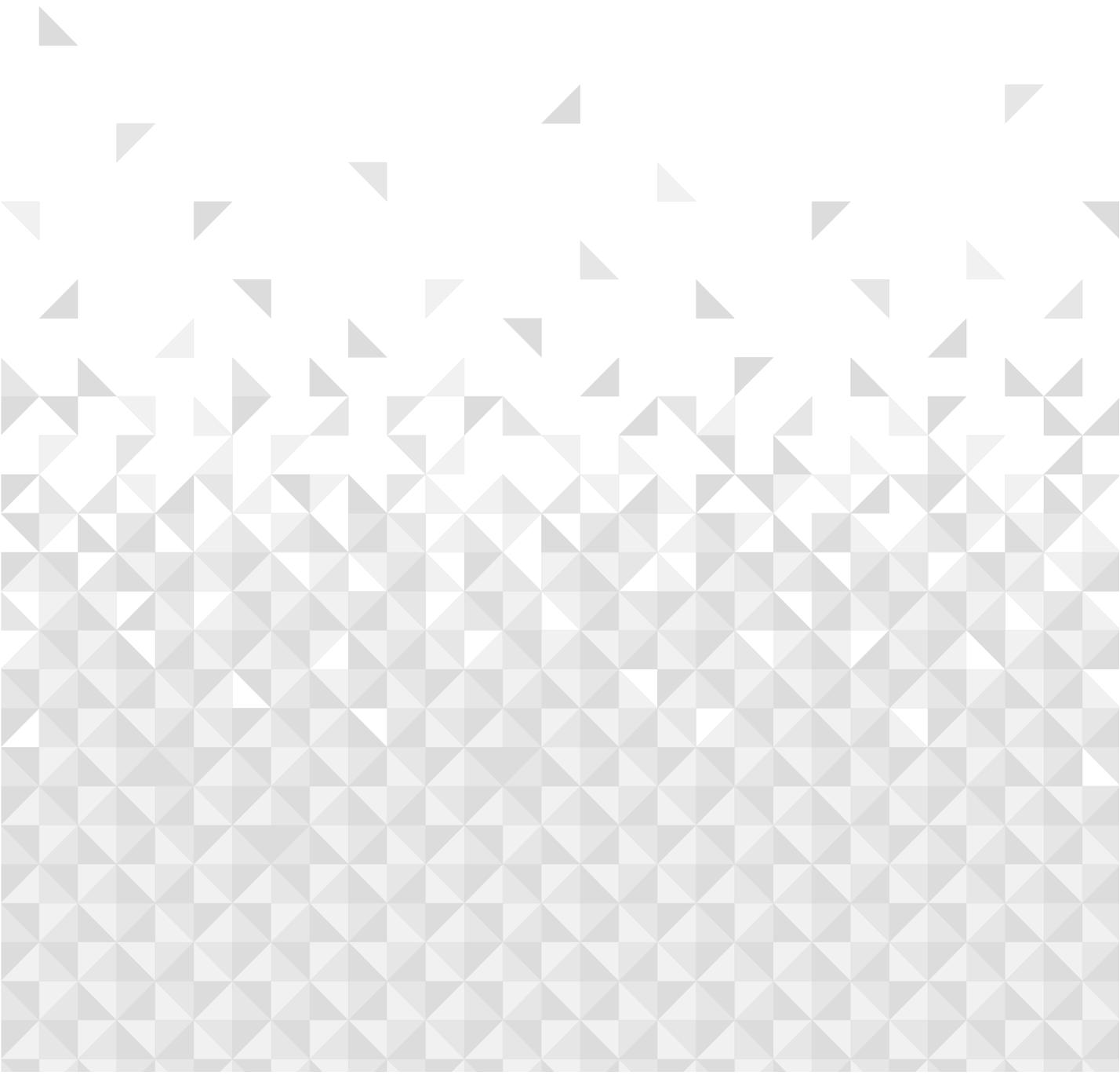
Some digital television functions may not be available in all countries.

We continually strive to improve our products; therefore, specifications may change without prior notice.

For advice on where to purchase accessories, please contact the store where you purchased your equipment.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Product support 7



# Product support

Help is always at hand

## Troubleshooting & Tips

### TV will not turn on

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

### Poor picture

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

### No picture

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

### No sound

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

### Remote control - no operation

- The batteries may be exhausted. Replace the batteries.

### Input sources - can not be selected

- If you cannot select an input source, it is possible that no device is connected. If not;
- Check the AV cables and connections if you are trying to switch to the input source dedicated to the connected device.

### The Image is not centered in VGA source

To have your TV automatically center the image, enter the **PC Position** menu in **Picture** menu highlight **Autoposition** and press **OK**. Wait for it to finish. In order to set the position of the image manually you can use **H Position** and **V position** options. Select the desired option and use Left and Right directional buttons on the remote to set.

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions.

# Product support

Help is always at hand

## Help and assistance

If you require any technical guidance or find that your TV is not operating as intended, a simple solution can often be found in the **Troubleshooting** section of these instructions or online at [www.bush-support.com](http://www.bush-support.com)

If you still require further assistance, call one of our experts on **0345 604 0105\***. To help give us give you a fast and efficient service please have the following information ready:

Model Ref.

Serial number

Date of purchase

You can find these on the rating plate - a small information panel (usually a sticker or metal plate) on the rear of your TV

This will be shown on your receipt

Local call rates applies\*

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

\*Calls to Bush enquiry lines may attract a charge and set up fee from residential lines depending on your call plan/tariff. Mobile and other providers costs may vary, see [www.bt.com/pricing](http://www.bt.com/pricing) for details.

For security and training purposes, telephone calls to and from customer service centres may be recorded and monitored. Calls from Republic of Ireland will attract international call charges.

# Product support

Help is always at hand

## Disposal information

### [European Union]

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

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

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

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

### [Business users]

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

### [Other Countries outside the European Union]

These symbols are only valid in the European Union.

Contact your local authority to learn about disposal and recycling.

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

Some collection points accept products free of charge.

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



1. Products
2. Battery

# Product support

Help is always at hand

# BUSH

## Call us now and activate your 12 month guarantee

Thank you for choosing Bush. Your new product is guaranteed against faults and breakdowns for 12 months. Don't forget to register it with us today so we can provide you with our best possible after-sales service and useful updates.

**[www.bushregistration.co.uk](http://www.bushregistration.co.uk)**

FREEPHONE\*

**0800 597 8548**

Lines are open 8am - 8pm, 365 days a year. \*Calls may be recorded and monitored.

## Your Bush Guarantee

This product is guaranteed for twelve months from the date of original purchase. Any defect that arises due to faulty materials or workmanship will be repaired free of charge (or if applicable the product will be replaced or the purchase price refunded) where possible during this period by the dealer from who your purchased the unit.

The guarantee is subject to the following provisions:

- The guarantee does not cover accidental damage, misuse, cabinet parts, knobs or consumable items.
- The product must be correctly installed and operated in accordance with the instructions contained in the manual.
- It must be used solely for domestic purposes. 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.
- Bush disclaim any liability for loss or damage arising from the breakdown of the product.
- This guarantee is in addition to and does not diminish your statutory or legal rights.

## Important Data Protection Information

To find out how we and Domestic & General Insurance Plc use your data please refer to the guarantee registration material or visit [www.bushregistrations.co.uk](http://www.bushregistrations.co.uk).

Guarantor: Argos Limited - 489 - 499 Avebury Blvd. - Milton Keynes - MK9 2NW

or online at [www.bush-support.com](http://www.bush-support.com) If you still require further assistance, call one of our experts on **0345 604 0105**





# BUSH

**Contact:**

[www.bush-support.com](http://www.bush-support.com)

Helpline: 0345 604 0105



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