OPERATING INSTRUCTIONS

COLOUR TELEVISION WITH REMOTE CONTROL
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Safety Information

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

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

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

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

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

IMPORTANT - Please read these instructions fully before installing or operating

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

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

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

WARNING - excessive sound pressure from earphones or headphones can cause hearing loss.

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

<table>
<thead>
<tr>
<th>Caution</th>
<th>Serious injury or death risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of electric shock</td>
<td>Dangerous voltage risk</td>
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<td>Maintenance</td>
<td>Important maintenance component</td>
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</tbody>
</table>
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.

**Class II Equipment With Functional Earthing:** This appliance is designed in such a way that it does not require a safety connection to electrical earth, the earth connection is used for functional purposes.

**Protective Earth Connection:** The marked terminal is intended for connection of the protective earthing conductor associated with the supply wiring.

**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.

**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.
- 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**

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

Apparatus connected to the protective earthing of the building installation through the MAINS connection or through other apparatus with a connection to protective earthing – and to a television distribution system using coaxial cable, may in some circumstances create a fire hazard. Connection to a television distribution system has therefore to be provided through a device providing electrical isolation below a certain frequency range (galvanic isolator, see EN 60728-11)

Using the special functions to change the size of the displayed image (i.e. changing the height/width ratio) for the purposes of public display or commercial gain may infringe on copyright laws.

The LCD display panels are manufactured using an extremely high level of precision technology; however, some times some parts of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

The set should be operated only from a 220-240 V AC 50 Hz outlet. Ensure that the television is not standing on the mains lead. Do not cut off the mains plug from this equipment, this incorporates a special Radio Interference Filter, the removal of which will impair its performance. It should only be replaced by a correctly rated and approved type. IF IN DOUBT PLEASE CONSULT A COMPETENT ELECTRICIAN.

Specification is subject to change without notice.
This television is designed to be environment friendly. To reduce energy consumption, you can follow these steps:

If you set the **Energy Saving** to **Minimum**, **Medium**, **Maximum** or **Auto** the TV will reduce the energy consumption accordingly. If you like to set the **Backlight** to a fixed value set as **Custom** and adjust the **Backlight** (located under the **Energy Saving** setting) manually using Left or Right buttons on the remote. Set as **Off** to turn this setting off.

*Note: Available Energy Saving options may differ depending on the selected Mode in the System>Picture menu.*

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

If pressed **Right** button while **Auto** option is selected or **Left** button while **Custom** option is selected, "**Screen will be off in 15 seconds.**" message will be displayed on the screen. Select **Proceed** and press **OK** to turn the screen off immediately. If you don’t press any button, the screen will be off in 15 seconds. Press any button on the remote or on the TV to turn the screen on again.

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

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

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**Disposal...**

The following information is only for EU-member states:

**Disposal of products**

The crossed out wheeled dust bin symbol indicates that products must be collected and disposed of separately from household waste. Integrated batteries and accumulators can be disposed of with the product. They will be separated at the recycling centres.

The black bar indicates that the product was placed on the market after August 13, 2005.

By participating in separate collection of products and batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health.

For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.

**Disposal of batteries and/or accumulators**

The crossed out wheeled dust bin symbol indicates that batteries and/or accumulators must be collected and disposed of separately from household waste.

If the battery or accumulator contains more than the specified values of lead (Pb), mercury (Hg), and/or cadmium (Cd) defined in the European Battery Directive, then the chemical symbols for lead (Pb), mercury (Hg) and/or cadmium (Cd) will appear below the crossed out wheeled dust bin symbol.

By participating in separate collection of batteries, you will help to assure the proper disposal of products and batteries and thus help to prevent potential negative consequences for the environment and human health. For more detailed information about the collection and recycling programmes available in your country, please contact your local city office or the shop where you purchased the product.
REACH information

The European Union (EU) chemical regulation, REACH (Registration, Evaluation, Authorization and Restriction of Chemicals), entered into force on 1 June 2007, with phased deadlines to 2018. Toshiba will meet all REACH requirements and is committed to provide our customers with information about the presence in our articles of substances included on the candidate list according to REACH regulation.

Please consult the following website www.toshiba-tv.com for information about the presence in our articles of substances included on the candidate list according to REACH in a concentration above 0.1 % weight by weight.

EU Conformity Statement

This product is carrying the CE-Mark in accordance with the related European Directives. Responsible for CE-Marking is Vestel UK, Langley, Berkshire, SL3 6EZ.

This product is labeled with the CE Mark in accordance with the related European Directives, notably RoHS Directive 2011/65/EU. Furthermore the product complies with the Ecodesign Directive 2005/32/EC (EuP) and 2009/125/EC (ErP) and its related implementing measures.

This equipment corresponds to requirements of the Technical Regulation on limitation of usage of certain dangerous substances in electrical and electronic equipment.
**Features**

- Remote controlled colour TV
- Fully integrated digital terrestrial/cable/satellite TV (DVB-T-T2/C/S2)
- HDMI inputs to connect other devices with HDMI sockets
- USB input
- OSD menu system
- 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)
- Picture off function

**Accessories Included**

- Remote Control
- Batteries: 2 x AAA
- Quick Start Guide
- Product Fiche
- Side AV Connection Cable**

(*) Limited Models Only

Some features may not be available dependant on your TV model, please check the product fiche for your product specifications.

For more detailed information on installation, function and control refer to the full manual on our the website at http://www.toshiba-tv.com

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**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." Press OK to continue.

If the TV is on and it isn’t being operated for a while it will go into standby. When you next switch-on, the following message will be displayed. “TV switched to stand-by mode automatically because no operation was made for a long time.” Press OK to continue.

**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 buttons.

Operation with the Remote Control
Press Menu button on your remote control to display main menu screen. Use the directional buttons to select a menu tab and press OK to enter. Use the directional buttons again to select or set an item. Press Return/Back button 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 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 Volume +/- and Programme +/- buttons on the remote.

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.

Connect Power
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.

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

License Notification
The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

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DVB is a registered trademark of the DVB Project.

[1] EIA/CEA-861-D compliance covers the transmission of uncompressed digital video with high-bandwidth digital content protection, which is being standardized for reception of high-definition video signals. Because this is an evolving technology, it is possible that some devices may not operate properly with the television.

(**) This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Rovi Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Rovi Corporation. Reverse engineering and disassembly are prohibited.

(**) Limited Models Only
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. **TV**: Displays channel list / Switches to TV Source
4. **Mute**: Completely turns off the volume of the TV
5. **Volume +/-**
6. **Menu**: Displays TV menu
7. **Navigation buttons**: Helps navigate menus, content etc. and displays the subpages in TXT mode when pressed Right or Left
8. **OK**: Confirms user selections, holds the page (in TXT mode), views channel list (DTV mode)
9. **Back/Return**: Returns to previous screen, opens index page (in TXT mode)
10. **Media browser**: Opens the media browsing screen
11. **Quick Menu**: Displays a list of menus for quick access
12. **My button 1 (*)**
13. **Coloured Buttons**: Follow the on-screen instructions for coloured button functions
14. **Language**: Switches between sound modes (analogue TV), displays and changes audio/subtitle language (digital TV, where available)
15. **Rapid reverse**: Moves frames backwards in media such as movies
16. **No function**
17. **Pause**: Pauses the media being played
18. **Play**: Starts to play selected media
19. **Subtitles**: Turns subtitles on and off (where available)
20. **Stop**: Stops the media being played
21. **Rapid advance**: Moves frames forward in media such as movies
22. **Screen**: Changes the aspect ratio of the screen
23. **My button 2 (*)**
24. **Text**: Displays teletext (where available), press again to superimpose the teletext over a normal broadcast picture (mix)
25. **EPG (Electronic programme guide)**: Displays the electronic programme guide
26. **Exit**: Closes and exits from displayed menus or returns to previous screen
27. **No function**
28. **Info**: Displays information about on-screen content, shows hidden information (reveal - in TXT mode)
29. **Programme +/-**
30. **Swap**: Quickly cycles between previous and current channels or sources
31. **Source**: Shows all available broadcast and content sources

(*) **MY BUTTON 1 & MY BUTTON 2**: These buttons may have default functions depending on the model. However you can set a special function to these buttons by pressing on them for five seconds when on a desired source or channel. A confirmation message will be displayed on the screen. Now the selected MY BUTTON is associated with the selected function.

Note that if you perform First Time Installation, MY BUTTON 1&2 will return to their default function.
Connections

<table>
<thead>
<tr>
<th>Connector</th>
<th>Type</th>
<th>Cables</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scart Connection (back)</td>
<td><img src="image" alt="Scart Connection" /></td>
<td><img src="image" alt="Scart Cable" /></td>
<td><img src="image" alt="Scart Device" /></td>
</tr>
<tr>
<td>VGA Connection (back)</td>
<td><img src="image" alt="VGA Connection" /></td>
<td><img src="image" alt="VGA Cable" /></td>
<td><img src="image" alt="VGA Device" /></td>
</tr>
<tr>
<td>PC/YPbPr Audio Connection (side)</td>
<td><img src="image" alt="PC/YPbPr Connection" /></td>
<td><img src="image" alt="PC/YPbPr Audio Cable" /></td>
<td><img src="image" alt="Audio Device" /></td>
</tr>
<tr>
<td>HDMI Connection (back)</td>
<td><img src="image" alt="HDMI Connection" /></td>
<td><img src="image" alt="HDMI Cable" /></td>
<td><img src="image" alt="HDMI Device" /></td>
</tr>
<tr>
<td>SPDIF (Coaxial Out) Connection (back)</td>
<td><img src="image" alt="SPDIF Connection" /></td>
<td><img src="image" alt="SPDIF Cable" /></td>
<td><img src="image" alt="SPDIF Device" /></td>
</tr>
<tr>
<td>SPDIF (Optical Out) Connection (back)</td>
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</tr>
<tr>
<td>Side AV (Audio/Video) Connection (side)</td>
<td><img src="image" alt="Side AV Connection" /></td>
<td><img src="image" alt="Side Audio/Video Connection Cable" /></td>
<td><img src="image" alt="AV Device" /></td>
</tr>
<tr>
<td>Side AV (Audio/Video) Connection (side)</td>
<td><img src="image" alt="Side AV Connection" /></td>
<td><img src="image" alt="Side Audio/Video Connection Cable" /></td>
<td><img src="image" alt="AV Device" /></td>
</tr>
<tr>
<td>Headphone Connection (side)</td>
<td><img src="image" alt="Headphone Connection" /></td>
<td><img src="image" alt="Headphone Cable" /></td>
<td><img src="image" alt="Headphone Device" /></td>
</tr>
<tr>
<td>PC to YPBPR Connection (back)</td>
<td><img src="image" alt="PC to YPBPR Connection" /></td>
<td><img src="image" alt="PC to YPBPR Connection Cable" /></td>
<td><img src="image" alt="PC to YPBPR Device" /></td>
</tr>
<tr>
<td>USB Connection (side)</td>
<td><img src="image" alt="USB Connection" /></td>
<td><img src="image" alt="USB Cable" /></td>
<td><img src="image" alt="USB Device" /></td>
</tr>
<tr>
<td>CI Connection (side)</td>
<td><img src="image" alt="CI Connection" /></td>
<td><img src="image" alt="CI Cable" /></td>
<td><img src="image" alt="CI Device" /></td>
</tr>
</tbody>
</table>

**NOTE:** When connecting a device via the YPbPr or the Side AV input, you must use a connection adapter 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 AV input with a YPbPr/PC audio cable for audio connection, using the Side AV connection cable’s RED and WHITE inputs (To enable PC/YPbPr audio, you will need to use the side audio inputs with a YPbPr/PC audio cable for audio connection [Depending on the model]). If an external device is connected via the SCART socket, the TV may automatically switch to AV mode. When receiving DTV channels (Mpeg4 H.264) or while in Media Browser mode, output will not be available via the scart socket. When using the wall mounting kit (available from 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. By connecting an HDMI cable to your TV, you have to use only a shielded HDMI cable to guarantee a sufficient immunity against parasitic frequency radiation.

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.

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**English** - 11 -
**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 side function switch on the TV until the TV comes on from standby.

**To Switch the TV Off**

Press the **Standby** button on the remote control or press the side function switch on the TV until the TV switches 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.

**First Time Installation**

When turned on for the first time, the language selection screen is displayed. Select the desired language and press **OK**.

On the next screen, set your preferences using the directional buttons.

*Note:* 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.

**About Selecting Broadcast Type**

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

**Digital Cable:** If **Digital Cable** broadcast search option is turned on, the TV will search for digital cable broadcasts after other initial settings are completed. According to your other preferences a confirmation message may be displayed before starting to search. Select **YES** and press **OK** to proceed. To cancel operation, select **NO** and press **OK**. You can select **Network** or set values such as **Frequency**, **Network ID** and **Search Step**. When finished, press **OK** button.

*Note:* Searching duration will change depending on the selected **Search Step**.

**Satellite**: If **Satellite** broadcast search option is turned on, the TV will search for digital satellite broadcasts after other initial settings are completed. Before satellite search is performed some settings should be made. **Antenna Type** menu will be displayed first. You can select **Antenna Type** as **Direct**, **Single Satellite Cable** or **DiSEqC switch** by using “<” or “>” buttons.

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

**Analogue:** If **Analogue** broadcast search option is turned on, the TV will search for analogue broadcasts after other initial settings are completed.

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, press **OK** to continue.

You can activate **Store Mode** option at this point. 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 top 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 **System>Settings>More** menu and can be turned off/on later.

Press **OK** button on the remote control to continue. After the initial settings are completed TV will start to search for available broadcasts of the selected broadcast types.

After all the available stations are stored, scan results will be displayed. Press **OK** to continue. The **Edit Channel List** menu will be displayed.
next. You can edit the channel list according to your preferences or press the Menu 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.

**Using SatcoDX Feature(**

You can perform SatcoDX operations using the Installation>Satellite Settings menu. In the SatcoDX menu, there are two options regarding to the SatcoDX.

You can download or upload SatcoDX data. In order to perform these functions a USB device must be connected to the TV.

You can upload current services and related satellites & transponders in TV, to a USB device. Additionally you can download one of the SatcoDx files stored in USB device, to the TV.

When you select one of these files, all services and related satellites and transponders in the selected file will be stored in the TV. If there are any installed terrestrial, cable and/or analog services, they will be kept and only satellite services will be removed.

Afterwards, check your antenna settings and make changes if necessary. An error message stating “No Signal” may be displayed if the antenna settings are not configured properly.

(**) Limited Models Only

**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 Menu**

You can play photo, music, and movie files stored on a USB disk by connecting it to your TV. Connect a USB disk to one of the USB inputs located on the side of the TV. Pressing the Menu button while in the Media Browser mode will access the Picture, Sound and Settings menu options. Pressing the Menu button again will exit from this screen. You can set your Media Browser preferences by using the Settings Menu.

<table>
<thead>
<tr>
<th>Loop/Shuffle Mode Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start playback with the Play button and activate</td>
<td>All files in the list will be continuously played in original order</td>
</tr>
<tr>
<td>Start playback with the OK button and activate</td>
<td>The same file will be played continuously (repeat)</td>
</tr>
<tr>
<td>Start playback with the Play button and activate</td>
<td>All files in the list will be played once in random order</td>
</tr>
<tr>
<td>Start playback with the Play button and activate</td>
<td>All files in the list will be continuously played in the same random order</td>
</tr>
</tbody>
</table>
**CEC and CEC RC Passthrough**

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 **System>Settings>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 **Quick Menu** button on the remote, highlight the **CEC RC Passthrough** and set as **Off** by pressing Left or Right button. This feature can also be enabled or disabled under the **System>Settings>More** menu.

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 control of the TV. To activate this feature set the **Speakers** option in the **System>Settings>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**.*
### TV Menu Contents

#### System - Picture Menu Contents

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode</strong></td>
<td>You can change the picture mode to suit your preference or requirements. Picture mode can be set to one of these options: <strong>Cinema</strong>, <strong>Game</strong> <em>(optional)</em>, <strong>Sports</strong>, <strong>Dynamic</strong> and <strong>Natural</strong>.</td>
</tr>
<tr>
<td><strong>Contrast</strong></td>
<td>Adjusts the light and dark values on the screen.</td>
</tr>
<tr>
<td><strong>Brightness</strong></td>
<td>Adjusts the brightness values on the screen.</td>
</tr>
<tr>
<td><strong>Sharpness</strong></td>
<td>Sets the sharpness value for the objects displayed on the screen.</td>
</tr>
<tr>
<td><strong>Colour</strong></td>
<td>Sets the colour value, adjusting the colors.</td>
</tr>
</tbody>
</table>
| **Energy Saving** | For setting the **Energy Saving** to **Custom**, **Minimum**, **Medium**, **Maximum**, **Auto**, **Screen Off** or **Off**.  
*Note: Available options may differ depending on the selected Mode.* |
| **Backlight**   | This setting controls the backlight level. The backlight function will be inactive if the **Energy Saving** is set to an option other than **Custom**. |

#### Advanced Settings

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dynamic Contrast</strong></td>
<td>You can change the dynamic contrast ratio to desired value.</td>
</tr>
<tr>
<td><strong>Noise Reduction</strong></td>
<td>If the signal is weak and the picture is noisy, use the <strong>Noise Reduction</strong> setting to reduce the amount of noise.</td>
</tr>
<tr>
<td><strong>Colour Temp</strong></td>
<td>Sets the desired colour temperature value. <strong>Cool</strong>, <strong>Normal</strong>, <strong>Warm</strong> and <strong>Custom</strong> options are available.</td>
</tr>
<tr>
<td><strong>White Point</strong></td>
<td>If the <strong>Colour Temp</strong> option is set as <strong>Custom</strong>, this setting will be available. Increase the ‘warmth’ or ‘coolness’ of the picture by pressing Left or Right buttons.</td>
</tr>
<tr>
<td><strong>Picture Zoom</strong></td>
<td>Sets the desired image size format.</td>
</tr>
<tr>
<td><strong>Film Mode</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Skin Tone</strong></td>
<td>Skin tone can be changed between -5 and 5.</td>
</tr>
<tr>
<td><strong>Colour Shift</strong></td>
<td>Adjust the desired colour tone.</td>
</tr>
<tr>
<td><strong>RGB Gain (Optional)</strong></td>
<td>You can configure the colour temperature values using the <strong>RGB Gain</strong> feature.</td>
</tr>
<tr>
<td><strong>HDMI Full Range</strong></td>
<td>While watching from a HDMI source, this feature will be visible. You can use this feature to enhance blackness in the picture.</td>
</tr>
</tbody>
</table>

#### PC Position

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Autoposition</strong></td>
<td>Automatically optimizes the display. Press OK to optimize.</td>
</tr>
<tr>
<td><strong>H Position</strong></td>
<td>This item shifts the image horizontally to the right hand side or left hand side of the screen.</td>
</tr>
<tr>
<td><strong>V Position</strong></td>
<td>This item shifts the image vertically towards the top or bottom of the screen.</td>
</tr>
<tr>
<td><strong>Dot Clock</strong></td>
<td>Dot Clock adjustments correct the interference that appear as vertical banding in dot intensive presentations like spreadsheets or paragraphs or text in smaller fonts.</td>
</tr>
<tr>
<td><strong>Phase</strong></td>
<td>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.</td>
</tr>
</tbody>
</table>

**Reset**

Resets the picture settings to factory default settings (except Game Mode).

*While in VGA (PC) mode, some items in Picture menu will be unavailable. Instead, VGA mode settings will be added to the Picture Settings while in PC mode.*
<table>
<thead>
<tr>
<th><strong>System - Sound Menu Contents</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Volume</strong></td>
<td>Adjusts the volume level.</td>
</tr>
<tr>
<td><strong>Equalizer</strong></td>
<td>Selects the equalizer mode. Custom settings can be made only when in <strong>User</strong> mode.</td>
</tr>
<tr>
<td><strong>Balance</strong></td>
<td>Adjusts whether the sound comes from the left or right speaker.</td>
</tr>
<tr>
<td><strong>Headphone</strong></td>
<td>Sets headphone volume. Please ensure before using headphones that the headphone volume is set to a low level, to prevent damage to your hearing.</td>
</tr>
<tr>
<td><strong>Sound Mode</strong></td>
<td>You can select a sound mode (If the viewed channel supports).</td>
</tr>
<tr>
<td><strong>AVL (Automatic Volume Limiting)</strong></td>
<td>Sets the sound to obtain fixed output level between programmes.</td>
</tr>
<tr>
<td><strong>Headphone/Lineout</strong></td>
<td>When you connect an external amplifier to your TV using the headphone jack, you can select this option as <strong>Lineout</strong>. If you have connected headphones to the TV, set this option as <strong>Headphone</strong>. Please ensure before using headphones that this menu item is set to <strong>Headphone</strong>. If it is set to <strong>Lineout</strong>, the output from the headphone socket will be set to maximum which could damage your hearing.</td>
</tr>
<tr>
<td><strong>Dynamic Bass</strong></td>
<td>Enables or disables the Dynamic Bass.</td>
</tr>
<tr>
<td><strong>DTS TruSurround</strong></td>
<td>Enables or disables the <strong>DTS TruSurround</strong>.</td>
</tr>
<tr>
<td><strong>Digital Out</strong></td>
<td>Sets digital out audio type.</td>
</tr>
<tr>
<td><strong>Conditional Access</strong></td>
<td>Controls conditional access modules when available.</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td><strong>Language</strong></td>
<td>You may set a different language depending on the broadcaster and the country.</td>
</tr>
<tr>
<td><strong>Parental</strong></td>
<td>Enter correct password to change parental settings. You can easily adjust <strong>Menu Lock</strong>, <strong>Maturity Lock</strong>, <strong>Child Lock</strong> or <strong>Guidance</strong> in this menu. You can also set a new <strong>PIN</strong> or change the <strong>Default CICAM PIN</strong> using the related options. <strong>Note:</strong> Some menu options may not be available depending on the country selection in the <strong>First Time Installation</strong>. Default PIN can be set to 0000 or 1234. If you have defined the PIN(is requested depending on the country selection) during the <strong>First Time Installation</strong> use the PIN that you have defined.</td>
</tr>
<tr>
<td><strong>Timers</strong></td>
<td>Sets sleep timer to turn off the TV after a certain time. Sets timers for selected programmes.</td>
</tr>
<tr>
<td><strong>Date/Time</strong></td>
<td>Sets date and time.</td>
</tr>
<tr>
<td><strong>Sources</strong></td>
<td>Enables or disables selected source options.</td>
</tr>
<tr>
<td><strong>Accessibility</strong></td>
<td>Displays accessibility options of the TV.</td>
</tr>
<tr>
<td><strong>Hard of Hearing</strong></td>
<td>Enables any special feature sent from the broadcaster.</td>
</tr>
<tr>
<td><strong>Audio Description</strong></td>
<td>A narration track will be played for the blind or visually impaired audience. Press <strong>OK</strong> to see all available <strong>Audio Description</strong> menu options. This feature is available only if the broadcaster supports it.</td>
</tr>
<tr>
<td><strong>More</strong></td>
<td>Displays other setting options of the TV.</td>
</tr>
<tr>
<td><strong>Menu Timeout</strong></td>
<td>Changes timeout duration for menu screens.</td>
</tr>
<tr>
<td><strong>Software Upgrade</strong></td>
<td>Ensures that your TV has the latest firmware. Press <strong>OK</strong> to see the menu options.</td>
</tr>
<tr>
<td><strong>Application Version</strong></td>
<td>Displays current software version.</td>
</tr>
<tr>
<td><strong>Subtitle Mode</strong></td>
<td>This option is used to select which subtitle mode will be on the screen (<strong>DVB</strong> subtitle / <strong>Teletext</strong> subtitle) if both is available. Default value is <strong>DVB</strong> subtitle. This feature is available only for the country option of Norway.</td>
</tr>
<tr>
<td><strong>Auto TV OFF</strong></td>
<td>Sets the desired time for the TV to automatically go into standby mode when not being operated.</td>
</tr>
<tr>
<td><strong>Biss Key(</strong>*)</td>
<td>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 <strong>Biss Key</strong> and press <strong>OK</strong> to enter keys on the desired broadcast.</td>
</tr>
<tr>
<td><strong>Store Mode</strong></td>
<td>Select this mode for store display purposes. Whilst <strong>Store Mode</strong> is enabled, some items in the TV menu may not be available.</td>
</tr>
<tr>
<td><strong>Power Up Mode</strong></td>
<td>This setting configures the power up mode preference. <strong>Last State</strong> and <strong>Standby</strong> options are available.</td>
</tr>
<tr>
<td><strong>CEC</strong></td>
<td>With this setting you can enable and disable CEC functionality completely. Press <strong>Left</strong> or <strong>Right</strong> button to enable or disable the feature.</td>
</tr>
<tr>
<td><strong>CEC Auto Power On</strong></td>
<td>This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press <strong>Left</strong> or <strong>Right</strong> button to enable or disable the feature.</td>
</tr>
<tr>
<td><strong>Speakers</strong></td>
<td>To hear the TV audio from the connected compatible audio device set as <strong>Amplifier</strong>. You can use the remote control of the TV to control the volume of the audio device.</td>
</tr>
<tr>
<td><strong>OSS</strong></td>
<td>Displays Open Source Software license information.</td>
</tr>
</tbody>
</table>

(***) Limited Models Only
### Installation Menu Contents

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Automatic channel scan (Retune)</strong></td>
<td>Displays automatic tuning options. <strong>Digital Aerial</strong>: Searches and stores aerial DVB stations. <strong>Digital Cable</strong>: Searches and stores cable DVB stations. <strong>Analogue</strong>: Searches and stores analogue stations. <strong>Satellite</strong>: Searches and stores satellite stations.</td>
</tr>
<tr>
<td><strong>Manual Channel Scan</strong></td>
<td>This feature can be used for direct broadcast entry.</td>
</tr>
<tr>
<td><strong>Network Channel Scan</strong></td>
<td>Searches for the linked channels in the broadcast system. <strong>Digital Aerial</strong>: Searches for aerial network channels. <strong>Digital Cable</strong>: Searches for cable network channels.</td>
</tr>
<tr>
<td><strong>Analogue Fine Tune</strong></td>
<td>You can use this setting for fine tuning analogue channels. This feature is not available if no analogue channels are stored.</td>
</tr>
<tr>
<td><strong>Satellite Settings</strong>(<strong>)</strong></td>
<td>Displays satellite settings. <strong>Satellite list</strong>: Displays available satellites. You can <strong>Add</strong>, <strong>Delete</strong> satellites or <strong>Edit</strong> satellite settings on the list. <strong>Antenna installation</strong>: You can change satellite anntenna settings and/or start a satellite scan. <strong>SatcoDX</strong>: You can upload or download SatcoDX data using the related options.</td>
</tr>
<tr>
<td><strong>Installation Settings (Optional)</strong></td>
<td>Displays installation settings menu. <strong>Standby Search</strong>: Your TV will search for new or missing channels while in standby. Any new found broadcasts will be shown.</td>
</tr>
<tr>
<td><strong>Clear Service List</strong></td>
<td>Use this setting to clear channels stored. This setting is visible only when the <strong>Country</strong> option is set to Denmark, Sweden, Norway or Finland.</td>
</tr>
<tr>
<td><strong>Select Active Network</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>First Time Installation</strong></td>
<td>Deletes all stored channels and settings, resets TV to factory settings.</td>
</tr>
</tbody>
</table>

**(**) Limited Models Only
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 Channel List options. Press the OK/TV button to open the Channel List. You can filter the listed channels by pressing the Blue button or open the Edit Channel List menu by pressing the Green button in order to make advanced changes in the current list.

Managing the Favourite Lists
You can create four different lists of your favourite channels. Enter the Channel List in the main menu or press the Green button while the Channel List is displayed on the screen in order to open the Edit Channel List menu. Select the desired channel on the list. You can make multiple choices by pressing the Yellow button. Then press the OK button to open the Channel Edit Options menu and select Add/Remove Favourites option. Press the OK button again. 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 Filter function in the Edit Channel List menu to filter the channels in the Channel list permanently according to your preferences. Using this Filter option, you can set one of your four favourite lists to be displayed everytime the Channel list is opened. The filtering function in the Channel list menu will only filter the currently displayed Channel list in order to find a channel and tune in to it. These changes will not remain the next time the Channel list is opened if you don’t save them. To save the changes on the list press the Red button after filtering while the Channel list is displayed on the screen.

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

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

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

Maturity Lock: If this option is set, TV gets the maturity information from the broadcast and if this maturity level is disabled, disables access to the broadcast.

Note: If the country option in the First Time Installation is set as France, Italy or Austria, Maturity Lock’s value will be set to 18 as default.

Child Lock: If this option is set to ON, the TV can only be controlled by the remote control. In this case the control buttons on the TV will not work.

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 can be 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 (EPG)
Some channels send information about their broadcast schedules. Press the Epg button to view the Programme Guide menu.

There are 3 different types of schedule layouts available, Timeline Schedule, List Schedule and Now/Next Schedule. To switch between them follow the instructions on the bottom of the screen.

Timeline Schedule
Zoom (Yellow button): Press the Yellow button to see events in a wider time interval.
Filter (Blue button): Views filtering options.
Highlight Genre (Subtitles button): Displays Highlight Genre menu. Using this feature, you can search the programme guide database in accordance with the genre. Info available in the programme guide will be searched and results matching your criteria will be highlighted.
Options (OK button): Displays event options.
Event Details (Info button): Displays detailed information about selected events.
Next/Prev Day (Programme +/- buttons): Displays the events of previous or next day.
Search (Text button): Displays Guide Search menu.
Now (Red button): Displays current event of the highlighted channel.

List Schedule(*)

(*) In this layout option, only the events of the highlighted channel will be listed.

Prev. Time Slice (Red button): Displays the events of previous time slice.

Next/Prev Day (Programme +/- buttons): Displays the events of previous or next day.

Event Details (Info button): Displays detailed information about selected events.

Filter (Text button): Views filtering options.

Next Time Slice (Green button): Displays the events of next time slice.

Options (OK button): Displays event options.

Now/Next Schedule

Navigate (Directional buttons): Press the Directional buttons to navigate through the channels and programmes.

Options (OK button): Displays event options.

Event Details (Info button): Displays detailed information about selected events.

Filter (Blue button): Views filtering options.

Event Options

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

Select Channel: Using this option, you can switch to the selected channel.

Set Timer on Event / Delete Timer on Event: After you have selected an event in the EPG menu, press the OK button. Select Set Timer on Event option and press the OK button. You can set a timer 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.

Notes: You cannot switch to any other channel or source 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.

Software Upgrade

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

Software upgrade search via user interface

On the main menu select System>Settings and then More. Navigate to Software upgrade and press the OK button. In Upgrade options menu 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 in the Upgrade options menu is set to Enabled and if the TV is connected to an aerial signal. 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.

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.

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. Your TV supports up to 1920x1080.

<table>
<thead>
<tr>
<th>Index</th>
<th>Resolution</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>640x480</td>
<td>60 Hz</td>
</tr>
<tr>
<td>2</td>
<td>800x600</td>
<td>56 Hz</td>
</tr>
<tr>
<td>3</td>
<td>800x600</td>
<td>60 Hz</td>
</tr>
<tr>
<td>4</td>
<td>1024x768</td>
<td>60 Hz</td>
</tr>
<tr>
<td>5</td>
<td>1024x768</td>
<td>66 Hz</td>
</tr>
<tr>
<td>6</td>
<td>1280x768</td>
<td>60 Hz</td>
</tr>
<tr>
<td>7</td>
<td>1280x960</td>
<td>60 Hz</td>
</tr>
<tr>
<td>8</td>
<td>1280x1024</td>
<td>60 Hz</td>
</tr>
<tr>
<td>9</td>
<td>1360x768</td>
<td>60 Hz</td>
</tr>
<tr>
<td>10</td>
<td>1400x1050</td>
<td>60 Hz</td>
</tr>
<tr>
<td>11</td>
<td>1600x1200</td>
<td>60 Hz</td>
</tr>
<tr>
<td>12</td>
<td>1920x1080</td>
<td>60 Hz</td>
</tr>
</tbody>
</table>

AV and HDMI Signal Compatibility

<table>
<thead>
<tr>
<th>Source</th>
<th>Supported Signals</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXT (SCART)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAL 50/60</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>NTSC 60</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>RGB 50</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>RGB 60</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td><strong>Side AV</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAL 50/60</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>NTSC 60</td>
<td>O</td>
<td></td>
</tr>
<tr>
<td>480I, 480P</td>
<td>60Hz</td>
<td>O</td>
</tr>
<tr>
<td>576I, 576P</td>
<td>50Hz</td>
<td>O</td>
</tr>
<tr>
<td>720P</td>
<td>50Hz, 60Hz</td>
<td>O</td>
</tr>
<tr>
<td>1080I</td>
<td>50Hz, 60Hz</td>
<td>O</td>
</tr>
<tr>
<td>1080P</td>
<td>50Hz, 60Hz</td>
<td>O</td>
</tr>
<tr>
<td><strong>PC/YPbPr</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>480I</td>
<td>60Hz</td>
<td>O</td>
</tr>
<tr>
<td>480P</td>
<td>60Hz</td>
<td>O</td>
</tr>
<tr>
<td>576I, 576P</td>
<td>50Hz</td>
<td>O</td>
</tr>
<tr>
<td>720P</td>
<td>50Hz, 60Hz</td>
<td>O</td>
</tr>
<tr>
<td>1080I</td>
<td>50Hz, 60Hz</td>
<td>O</td>
</tr>
<tr>
<td>1080P</td>
<td>24Hz, 25Hz, 30Hz, 50Hz, 60Hz</td>
<td>O</td>
</tr>
</tbody>
</table>

(X: Not Available, O: Available)
In some cases a signal on the TV may not be displayed properly. The problem may be an inconsistency with standards from the source equipment (DVD, Set-top box, etc.). If you do experience such a problem please contact your dealer and also the manufacturer of the source equipment.
# Supported File Formats for USB Mode

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

<table>
<thead>
<tr>
<th>Resolution</th>
<th>56Hz</th>
<th>60Hz</th>
<th>66Hz</th>
<th>70Hz</th>
<th>72Hz</th>
<th>75Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x400</td>
<td></td>
<td></td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>640x480</td>
<td>☑</td>
<td>☑</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>800x600</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>832x624</td>
<td></td>
<td>☑</td>
<td>☑</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1024x768</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td>☑</td>
<td></td>
</tr>
<tr>
<td>1152x864</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>1152x870</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>1280x768</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>☑</td>
</tr>
<tr>
<td>1360x768</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1280x960</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1280x1024</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400x1050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1440x900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1600x1200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1680x1050</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1920x1080</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DVD Mode *(Limited Models Only)*

Safety Information

**CAUTION**

DVD Player is a class 1 laser product. However this product uses a visible laser beam which could cause hazardous radiation exposure. Be sure to operate the player correctly as instructed.

**CLASS 1 LASER PRODUCT**

**RISK OF ELECTRIC SHOCK**

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.

**Notes on Discs**

**On handling discs**

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.
- If the disc is contaminated with any substance like glue remove before using it.

- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature can rise quickly and damage the disc.
- After playing, store the disc in its case.

**On cleaning**

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.

- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

**Licence Notification**

- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Rovi Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Rovi Corporation. Reverse engineering and disassembly are prohibited.

**How to Watch a DVD**

When placing a disc into the loader, labelled side of the disc should be on the front.

When TV set is turned on, first switch to DVD source by using the Source button on the remote control. Press play on the remote control, or directly press play button on the side panel. If there is no disc inside the loader, place a DVD first and press play.

*Note:* If you switch to another source by pressing Source, Swap or Programme +/- buttons on the remote control, DVD playback will be paused automatically. You should press Play button and resume the playback manually when you switch to DVD mode.

**DVD Control Panel Buttons**

▶ / ▶ (Play / Pause)

Plays/pauses the disc. When DVD menu (root menu) is active, this button functions as “button select” (selects the highlighted item in menu) if this is not prohibited by the disc.

■ / △ (Stop / Eject)

Stop playing disc / Eject or Load the disc.

*Note:*

- You cannot eject the disc via the remote control.
- While playing a file, you should press STOP button three times to eject.
General Playback

Basic Play
1. Press the Standby button
2. Please insert a disc into the loader.
The disc will be automatically loaded and play will commences if the disc does not have any menus recorded on it.
A menu may appear on the TV screen after a few moments or the film may start immediately. This behaviour depends on the disc content and may change.
Note: Step 3 and 4 is available only when a menu is recorded on the disc.
3. Press Down / Up / Left / Right or the numeric button(s) to select the preferred title.
4. Press OK.
To confirm the selected items. The played item may be a motion picture, a still picture or another submenu depending on the disc.

For your reference:
If an action corresponding to a button is prohibited the “🚫” symbol appears.

Notes on Playback:
1. No sound will be heard during Rapid advance or Rapid reverse.
2. No sound will be heard during Slow motion play.
3. Reverse slow motion play may not be available depending on the DVD content.
4. In some cases, the subtitle language is not changed immediately to the selected one.
5. When the preferred language is not selected even after pressing the button several times, it means that the language is not available on the disc.
6. When the player is restarted or the disc is changed, the subtitle selection is automatically changed back to the initial settings.
7. If a language is selected, not supported by the disc, the subtitle language will automatically be set to the disc’s priority language.
8. Usually a circulation will happen while switching to another language, that is you can cancel the subtitle by pressing this button a number of times until “Subtitles Off” appears on the screen.
9. When the power is turned on or the disc is removed, the language heard is the one selected at the initial settings. If this language is not recorded on the disc, only the available language on the disc will be heard.
10. Some DVDs may not contain root and/or title menus.
11. Reverse stepping is not available.
12. For your convenience: If you attempt to enter a number greater than the total time of the current title, the time search box disappears and “🚫 Input Invalid” message appears on up-left corner of screen.
13. Slide Show is disabled when the ZOOM mode is on.

DVD Troubleshooting

Poor picture quality (DVD)
• Make sure the DVD disc surface is not damaged. (Scratch, fingerprint etc.)
• Clean the DVD disc and try again.
See instructions described in “Notes on Discs” to clean your disc properly.
• Ensure that the DVD disc is in the tray with the label facing forward.
• A damp DVD disc or condensation may effect the equipment. Wait for 1 to 2 hours in Stand-by to dry the equipment.

Disc does not play
• No disc in the machine. Place a disc into the loader.
• Disc incorrectly loaded.
Ensure that the DVD disc is in the tray with the label facing forward.
• Wrong type of disc. The machine cannot play CD-ROMS etc. The region code of the DVD must match the player.

Wrong OSD language
• Select the language in the set-up menu.
• The language for the sound or subtitles on a DVD cannot be changed.
• Multilingual sound and/or subtitles not recorded on the DVD.
• Try to change the sound or subtitles using DVD’s title menu. Some DVD’s do not allow the user to change these settings without using the disc’s menu
• These functions are not available on the DVD.

No picture
• Make sure you have pressed the correct buttons on the remote control. Try once more.

No sound
• Check if volume is set to an audible level.
• Make sure the sound isn’t turned off by mistake.

Distorted sound
• Check that the appropriate listening mode setting is correct.

If nothing works
If you have tried the above solutions and none seem to work, try switching your TV-DVD off and on again. If this does not work, contact your supplier or TV-DVD repair technician. Never attempt to repair a defective TV-DVD yourself.
## Disc Types Compatible with This Unit

<table>
<thead>
<tr>
<th>Disc Types</th>
<th>Recording Types</th>
<th>Disc Size</th>
<th>Max. Playing Time</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| DVD            | Audio + Video   | 12 cm     | Single-sided; 240 min. Double-sided; 480 min. | • DVD contains excellent sound and video due to Dolby Digital and MPEG-2 System.  
• Various screen and audio functions can be easily selected through the on screen menu. |
| Audio-CD       | Audio           | 12 cm     | 74 min.           | • An LP is recorded as an analog signal with more distortion. CD is recorded as a Digital Signal with better audio quality, less distortion and less deterioration of audio quality over time. |
| MP3-CD         | Audio (xxxx.mp3)| 12 cm     | It depends on MP3 quality. | • MP3 is recorded as a Digital Signal with better audio quality, less distortion and less deterioration of audio quality over time. |
| Picture-CD     | Video (still picture) | 12 cm | It depends on JPEG quality. | • JPEG is recorded as a Digital Signal with better picture quality over time. |

For proper operation, only 12 cm discs must be used.

## Specifications

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

1. Standby
2. Numeric buttons
3. Mute
4. Volume Up / Down
5. TV Menu
6. Navigation buttons
7. OK / Select
8. Angle
9. Display time / DVD menu
10. Coloured buttons;
    Red button - Zoom
    Green button - Repeat
    Yellow button - Root
    Blue button - Title
11. Language selection
12. Rapid reverse
13. Pause
14. Play
15. Subtitle
16. Stop
17. Rapid advance
18. Image size
19. Search mode
20. Exit
21. Info
22. Source

Note: Buttons not indicated with a number are not functional in DVD mode.
### General DVD Operation (depending on model)

You can operate DVD, movie CD, music or picture CD’s content by using the proper buttons on your remote control. Below are main functions of commonly used remote control buttons.

<table>
<thead>
<tr>
<th>Buttons</th>
<th>DVD Playback</th>
<th>Movie Playback</th>
<th>Picture Playback</th>
<th>Music Playback</th>
</tr>
</thead>
<tbody>
<tr>
<td>▶️</td>
<td>Play</td>
<td>Play</td>
<td>Play</td>
<td>Play</td>
</tr>
<tr>
<td>■</td>
<td>Pause</td>
<td>Pause</td>
<td>Pause</td>
<td>Pause</td>
</tr>
<tr>
<td>◄/►</td>
<td>Stop</td>
<td>Stop</td>
<td>Stop</td>
<td>Stop</td>
</tr>
<tr>
<td>⏪</td>
<td>Skip backward/forward</td>
<td>Skip backward/forward</td>
<td>Rotate</td>
<td>Skip backward/forward</td>
</tr>
<tr>
<td>▼/▲</td>
<td>Highlights a menu item / Shifts the zoomed picture up or down (if available).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>◄/ ►</td>
<td>Rapid advance / Rapid reverse</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**MEDIA BROWSER**
Views the scene from different angles (if available)

**MY BUTTON 1**
Displays time / Views main setup menu

**INFO**
Time counter mode selection (during playback). Press repeatedly to switch between modes.

**LANGUAGE**
Auto language

**MENU**
Displays TV menu.

**OK**
Enter / View / Play

**GREEN BUTTON**
Displays repeat options.

**RETURN/BACK**
Returns back to the previous menu (if available).

**YELLOW BUTTON**
Goes back to the root folder (if available).

**MY BUTTON 2 (*)**
Direct selection of scenes or time. Selects the desired file. Selects the desired file.

**SUBTITLES**
Subtitle on-off. Press repeatedly to switch between subtitle options.

**BLUE BUTTON**
Displays disc menu (if available).

**RED BUTTON**
Zooms picture. Press repeatedly to switch between zoom options.

### Other Functions – Button Combinations (During playback)

<table>
<thead>
<tr>
<th>Buttons</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>◄/► + ▶️</td>
<td>Slow forward</td>
</tr>
<tr>
<td>(◄/► + ▶️) + ◄/►</td>
<td>Sets slow forward speed</td>
</tr>
<tr>
<td>▶️ + ▶️</td>
<td>Sets rapid advance speed</td>
</tr>
<tr>
<td>◄/◄ + ◄/◄</td>
<td>Sets rapid reverse speed</td>
</tr>
<tr>
<td>▶️ + ■</td>
<td>Confirms stop command</td>
</tr>
</tbody>
</table>

(*) You can switch to title by pressing numeric keys directly. You need to press 0 and then digit key to switch one digit titles (example: to select 5, press 0 and 5).
We’re here to help. Find out all you need to know about the latest, trend-setting TV technology on our website.

www.toshiba-tv.com

You can review your TV user manual online or download as you like.
TOSHIBA