

# JVC



**INSTRUCTION MANUAL**

## Information for Users on Disposal of Old Equipment and Batteries [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.

The battery in this product is 2X AAA 1.5V Cell.

This batteries are located in the remote and are readily accessible.

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.



**Pb**

#### Notice:

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

## Logo & License



### TRADEMARK ACKNOWLEDGMENT

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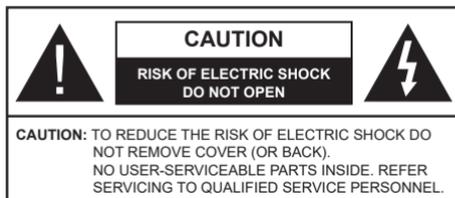


"This product is manufactured, distributed and warranted exclusively by VESTEL Ticaret A.Ş and serviced by its designated service providers. "JVC" is the trademark of JVKENWOOD Corporation, used by such companies under licence."

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## Safety Information



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

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

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

## IMPORTANT - Please read these instructions fully before installing or operating

**WARNING:** Never let people (including children) with reduced physical, sensory or mental capabilities or lack of experience and / or knowledge use electrical devices unsupervised.

- Use this TV set at an altitude of less than 5000 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 indoor 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.

|                        |                                 |
|------------------------|---------------------------------|
| Caution                | Serious injury or death risk    |
| Risk of electric shock | Dangerous voltage risk          |
| Maintenance            | Important maintenance component |

## 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.

## WARNINGS

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.

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A television may fall, causing serious personal injury or death. Many injuries, particularly to children, can be avoided by taking simple precautions such as:

- ALWAYS use cabinets or stands or mounting methods recommended by the manufacturer of the television set.
- ALWAYS use furniture that can safely support the television set.
- ALWAYS ensure the television set is not overhanging the edge of the supporting furniture.
- ALWAYS educate children about the dangers of climbing on furniture to reach the television set or its controls.
- ALWAYS route cords and cables connected to your television so they cannot be tripped over, pulled or grabbed.
- NEVER place a television set in an unstable location.
- NEVER place the television set on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the television set to a suitable support.
- NEVER place the television set on cloth or other materials that may be located between the television set and supporting furniture.
- NEVER place items that might tempt children to climb, such as toys and remote controls, on the top of the television or furniture on which the television is placed.
- The equipment is only suitable for mounting at heights  $\leq 2$  m.

If the existing television set is going to be retained and relocated, the same considerations as above should be applied.

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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)

## 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.

## Environmental Information

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.

## WARNING

To prevent fire, never place any type of candle or open flame on the top or near the TV set.



### Features

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

### Accessories Included

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

### 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.

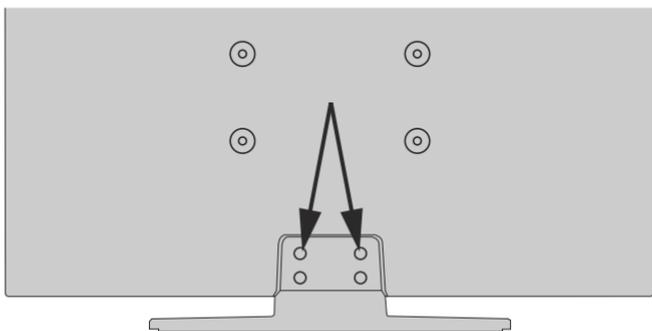
### Wall Mounting the TV

The TV can be mounted on a wall using a **MX X\*X** mm (\*) VESA mounting kit supplied separately. Remove the base stand as shown. Mount the TV according to the instructions supplied with the kit. Beware of electrical cables, gas and water pipes in the wall. In case of any doubt please contact a qualified installer. The screw thread length must not exceed **X** mm (\*) into the TV. Contact the store where you purchased the product for information on where to purchase the VESA kit.

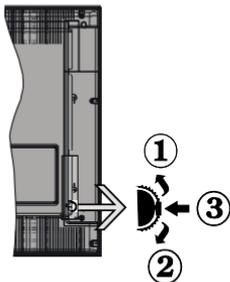
(\*) *Refer to the related additional page for the accurate VESA measurements and screw specifications.*

### Removing the base stand

- To remove the base stand, protect the screen and lay the TV flat on its face on a stable table with the base over the edge. Remove the screws fixing the stand to the TV.



## TV Control Switch & Operation (depending on the model)



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 circle 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.

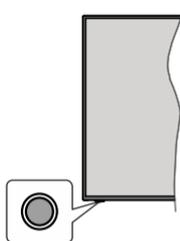
### Input Selection

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.

## TV Control Button & Operation (depending on the model)



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

Your TV has a single control button. This button allows you to control the Standby-On / Source / Programme and Volume functions of the TV.

### Operating with the Control Button

- Press the control button to display the function options menu.
- Then press the button consecutively to move the focus to the desired option if needed.
- Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated.
- Press the button once again to use the function or enter the sub menu.
- To select another function option, you will need to deactivate the last activated option first. Press and hold the button to deactivate it. The icon colour of the option changes when deactivated.
- To close the function options menu do not press the button for a period of about 5 seconds. The function options menu will disappear.

**To turn the TV off:** Press the control button to display the function options menu, the focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to turn the TV off.

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

**To change volume:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Volume +** or **Volume -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to increase or decrease the volume.

**To change channel:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Programme +** or **Programme -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to switch to the next or previous channel in the channel list.

**To change source:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Source** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to display the sources list. Scroll through the available sources by pressing the button. TV will automatically switch to the highlighted source.

**Note:** Main menu OSD cannot be displayed via the control button.

### Operation with the Remote Control

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

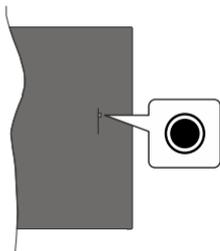
### Input Selection

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

### Changing Channels and Volume

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

### TV Control Button & Operation (depending on the model)



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

Your TV has a single control button. This button allows you to control the Standby-On / Source / Programme and Volume functions of the TV.

### Operating with the Control Button

- Press the control button to display the function options menu.
- Then press the button consecutively to move the focus to the desired option if needed.
- Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated.
- Press the button once again to use the function or enter the sub menu.
- To select another function option, you will need to deactivate the last activated option first. Press and hold the button to deactivate it. The icon colour of the option changes when deactivated.
- To close the function options menu do not press the button for a period of about 5 seconds. The function options menu will disappear.

**To turn the TV off:** Press the control button to display the function options menu, the focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to turn the TV off.

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

**To change volume:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Volume +** or **Volume -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to increase or decrease the volume.

**To change channel:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Programme +** or **Programme -** option. Press and hold the button for about 2 seconds to activate the selected option. The icon colour of the option changes when activated. Then press the button to switch to the next or previous channel in the channel list.

**To change source:** Press the control button to display the function options menu and then press the button consecutively to move the focus to **Source** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option changes when activated. Then press the button once again to display the sources list. Scroll through the available sources by pressing the button. TV will automatically switch to the highlighted source.

**Note:** Main menu OSD cannot be displayed via the 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 **Back/Return**, **Exit** or **Home** button to quit a menu screen.

### Input Selection

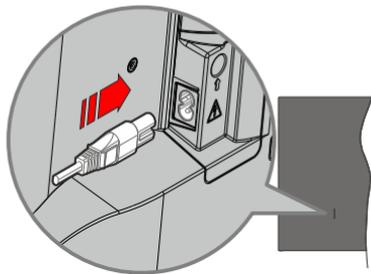
Once you have connected external systems to your TV, you can switch to different input sources. Press the **Source** button on your remote control consecutively to select the different sources.

### Changing Channels and Volume

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

### Forced Standby

If your TV stops responding to commands, you can perform forced standby which will terminate the process. In order to do this, press and hold the **Standby** button on remote controller for about 5 seconds.

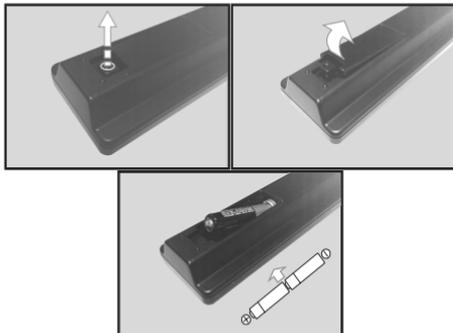


Plug one end (the two-hole plug) of the supplied detachable power cord into the power cord inlet on the rear side of the TV as shown above. Then plug the other end of the power cord into the mains socket outlet.

*Note: The position of the power cord inlet may differ depending on the model.*

### Inserting the Batteries into the Remote

Remove the screw that secure the battery compartment cover on the back side of the remote control first. Lift the cover gently. 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. Then screw the cover back on again.

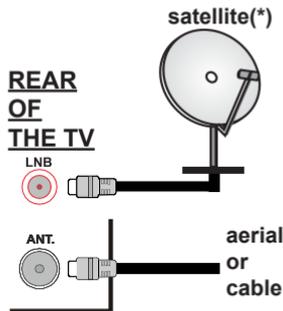


### Connect Power

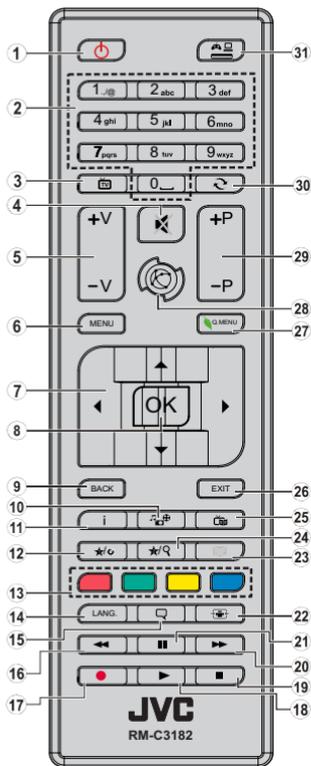
**IMPORTANT:** The TV set is designed to operate on **220-240V AC, 50 Hz** socket. After unpacking, allow the TV set to reach the ambient room temperature before you connect the set to the mains.

### 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.



(\*) if available



## (\*) 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.

## 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

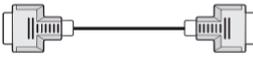
Press the **Text** button to view digital teletext information. Operate it with the coloured buttons, cursor buttons and the **OK** button. The operation method may differ depending on the contents of the digital teletext. Follow the instructions displayed on the digital teletext screen. When the **Text**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

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:** Switches to TV Source
4. **Mute:** Completely turns off the volume of the TV
5. **Volume +/-**
6. **Menu:** Displays TV menu
7. **Directional 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. **Info:** Displays information about on-screen content, shows hidden information (reveal - in TXT mode)
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. **Subtitles:** Turns subtitles on and off (where available)
16. **Rapid reverse:** Moves frames backwards in media such as movies
17. **No function**
18. **Play:** Starts to play selected media
19. **Stop:** Stops the media being played
20. **Rapid advance:** Moves frames forward in media such as movies
21. **Pause:** Pauses the media being played
22. **Screen:** Changes the aspect ratio of the screen
23. **Text:** Displays teletext (where available), press again to superimpose the teletext over a normal broadcast picture (mix)
24. **My button 2 (\*)**
25. **EPG (Electronic programme guide):** Displays the electronic programme guide
26. **Exit:** Closes and exits from displayed menus or returns to previous screen
27. **Quick Menu:** Displays a list of menus for quick access
28. **No function**
29. **Programme +/-**
30. **Swap:** Quickly cycles between previous and current channels or sources
31. **Source:** Shows all available broadcast and content sources

## Footnote:

Red, green, blue and yellow buttons are multifunction; please follow on-screen prompts and section instructions.

## Connections

| Connector  | Type   | Cables  | Device  |
|--|--|---|---|
|                      | <b>HDMI Connection (back&amp;side)</b>         |    |  |
| <b>SIDE AV</b><br>   | <b>Side AV (Audio/Video) Connection (side)</b> | <br>Side Audio/Video Connection Cable      Audio/Video Cable |  |
| <b>SPDIF</b><br>     | <b>SPDIF (Coaxial Out) Connection (side)</b>   |    |  |
| <b>HEADPHONE</b><br> | <b>Headphone Connection (side)</b>             |    |  |
|                      | <b>USB Connection (side)</b>                   |    |  |
|                      | <b>CI Connection (side)</b>                    |    |  |

See the illustrations on the left side. 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. If a CI module is used, it may block the headphone and Side AV inputs. In this case, it is recommended to make the headphone and the Side AV connections before the CI module is inserted. You should refer to the module instruction manual for details of the settings. The/Each USB input of your TV supports devices up to 500mA. Connecting devices that have current value above 500mA may damage your TV. When connecting equipment using a HDMI cable to your TV, to guarantee sufficient immunity against parasitic frequency radiation, you have to use a high speed shielded (high grade) HDMI cable with ferrites.

 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.

## Switching On/Off (depending on the model)

### To Switch the TV On

Connect the power cord to the 220-240V AC, 50 Hz.

To switch on the TV from standby mode either:

- Press the **⏻ - (Standby)** button, **"P+/P- - (Programme +/-)"** or a numeric button on the remote control.
- Press the control button on the TV.

### To Switch the TV Off

- Press the **⏻ - (Standby)** button on the remote control.
- Press the control button on the TV, the function options menu will be displayed. The focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option will change. Then press the button once again, 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 Mode Search or Over Air Download is active. The LED can also blink when you switch on the TV from standby mode.*

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### To Switch the TV Off

- Press the **⏻ - (Standby)** button on the remote control.
- Press the control button on the TV, the function options menu will be displayed. The focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option will change. Then press the button once again, 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 Mode Search or Over Air Download is active. The LED can also blink when you switch on the TV from standby mode.*

## Switching On/Off (depending on the model)

### 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 control button on the TV.

### To Switch the TV Off

- Press the **Standby** button on the remote control.
- Press the control button on the TV, the function options menu will be displayed. The focus will be on the **Standby** option. Press and hold the button for about 2 seconds to activate this option. The icon colour of the option will change. Then press the button once again, 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 Mode 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.

*(\*\*) If this feature is supported by your TV*

**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.

*(\*\*) If this feature is supported by 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.

While formatting USB hard drives which have more than 1TB (Tera Byte) storage space you may experience some problems in the formatting process.

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.

| Loop/Shuffle Mode Operation   |   |
|---|---|
| Start playback with the <b>Play</b> button and activate    | All files in the list will be continuously played in original order         |
| Start playback with the <b>OK</b> button and activate    | The same file will be played continuously (repeat)                          |
| Start playback with the <b>Play</b> button and activate    | All files in the list will be played once in random order                   |
| Start playback with the <b>Play</b> button and activate   | All files in the list will be continuously played in the same random order. |

**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 **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 and hold the "0-Zero" button on the remote control for 3 seconds. This feature can also be enabled or disabled under the **System>Settings>More** menu.

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

When ARC is active, TV does not mute its other audio outputs automatically. So you need to decrease TV volume to zero manually, if you want to hear audio from connected audio device only (same as other 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. When using the ARC connection, some

incompatibilities may occur between the TV and the connected sound system due to the difference of the used volume ranges.

*Note: ARC is supported only via the HDMI2 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 |  |
|--------------------------------|--|
| <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 colors.   |
| <b>Energy Saving</b>           | For setting the <b>Energy Saving</b> to <b>Custom</b> , <b>Minimum</b> , <b>Medium</b> , <b>Maximum</b> , <b>Auto</b> , <b>Screen Off</b> or <b>Off</b> .<br><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> .  |
| <b>Advanced Settings</b>       |  |
| <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>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>RGB Gain (Optional)</b>     | You can configure the colour temperature values using the <b>RGB Gain</b> feature.   |
| <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.   |
| <b>Reset</b>                   | Resets the picture settings to factory default settings (except <b>Game Mode</b> ).  |

| System - 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.<br>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> .<br>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>Digital Out</b>                     | Sets digital out audio type.   |

| System - Settings Menu Contents   |   |
|---|---|
| Conditional Access  | Controls conditional access modules when available.   |
| Language  | You may set a different language depending on the broadcaster and the country.  |
| Parental  | 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.<br><i>Note: Some menu options may not be available depending on the country selection in the First Time Installation. 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.</i> |
| Timers  | Sets sleep timer to turn off the TV after a certain time. Sets timers for selected programmes.  |
| Date/Time   | Sets date and time.   |
| Sources   | Enables or disables selected source options.  |
| Accessibility   | Displays accessibility options of the TV.   |
| Hard of Hearing   | Enables any special feature sent from the broadcaster.  |
| Audio Description   | A narration track will be played for the blind or visually impaired audience. Press <b>OK</b> to see all available <b>Audio Description</b> menu options. This feature is available only if the broadcaster supports it.  |
| More  | Displays other setting options of the TV.   |
| Menu Timeout  | Changes timeout duration for menu screens.  |
| Standby Mode LED  | If set as <b>Off</b> the standby mode LED will not light up when the TV is in standby mode.   |
| Software Upgrade  | Ensures that your TV has the latest firmware. Press <b>OK</b> to see the menu options.  |
| Application Version   | Displays current software version.  |
| Subtitle Mode   | This option is used to select which subtitle mode will be on the screen ( <b>DVB subtitle</b> / <b>Teletext subtitle</b> ) if both is available. Default value is <b>DVB subtitle</b> . This feature is available only for the country option of Norway.  |
| Auto TV OFF   | Sets the desired time for the TV to automatically go into standby mode when not being operated.   |
| Biss Key  | Biss is a satellite signal scrambling system that is used for some broadcasts. If you need to enter Biss key on a broadcast, you can use this setting. Highlight <b>Biss Key</b> and press <b>OK</b> to enter keys on the desired broadcast.  |
| Store Mode  | Select this mode for store display purposes. Whilst <b>Store Mode</b> is enabled, some items in the TV menu may not be available.   |
| Power Up Mode   | This setting configures the power up mode preference. <b>Last State</b> and <b>Standby Mode</b> options are available.  |
| CEC   | With this setting you can enable and disable CEC functionality completely. Press Left or Right button to enable or disable the feature.   |
| CEC Auto Power On   | This function allows the connected HDMI-CEC compatible device to turn on the TV and switch to its input source automatically. Press <b>Left</b> or <b>Right</b> button to enable or disable the feature.  |
| Speakers  | 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.   |
| OSS   | Displays Open Source Software license information.  |
| <i>Note: Some options may not be available depending on the model of your TV, its features and the selected country in the First Time Installation.</i> |   |

| Installation Menu Contents              |  |
|---|--|
| <b>Automatic channel scan (Retune)</b>  | Displays automatic tuning options. <b>Digital Aerial:</b> Searches and stores aerial DVB stations. <b>Digital Cable:</b> Searches and stores cable DVB stations. <b>Analogue:</b> Searches and stores analogue stations. <b>Satellite:</b> Searches and stores satellite 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>Digital Cable:</b> Searches for cable network channels.  |
| <b>Analogue Fine Tune</b>               | You can use this setting for fine tuning analogue channels. This feature is not available if no analogue channels are stored.  |
| <b>Satellite Settings</b>               | Displays satellite settings. <b>Satellite list:</b> Displays available satellites. You can <b>Add, Delete</b> satellites or <b>Edit</b> satellite settings on the list. <b>Antenna installation:</b> You can change satellite antenna settings and/or start a satellite scan. <b>SatcoDX:</b> You can upload or download SatcoDX data using the related options. |
| <b>Installation Settings (Optional)</b> | Displays installation settings menu. <b>Standby Mode Search:</b> Your TV will search for new or missing channels while in standby. Any new found broadcasts will be shown.   |
| <b>Clear Service List</b>               | Use this setting to clear channels stored. This setting is visible only when the <b>Country</b> option is set to Denmark, Sweden, Norway or Finland.   |
| <b>Select Active Network</b>            | 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.   |
| <b>Signal Information</b>               | You can use this menu item to monitor signal related informations 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.   |

## 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** 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 (Source 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

**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.

## 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 confirm the question asking about rebooting the TV by pressing the **OK** to continue with the reboot operation.

### 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 wall outlet. Check if batteries are exhausted. Press the Power button on the TV.

### Poor picture

- Check if you have selected the correct TV system.
- Low signal level can cause picture distortion. Please check antenna access.
- Check if you have entered the correct channel frequency if you have done manual tuning.
- The picture quality may degrade when two devices are connected to the TV at the same time. In such a case, disconnect one of the devices.

### No picture

- This means your TV is not receiving any transmission. 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 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.

## AV and HDMI Signal Compatibility

| Source  | Supported Signals | Available                         |   |
|---------|-------------------|-----------------------------------|---|
| Side AV | PAL 50/60         | O                                 |   |
|         | NTSC 60           | O                                 |   |
| HDMI    | 480I              | 60Hz                              | O |
|         | 480P              | 60Hz                              | O |
|         | 576i, 576P        | 50Hz                              | O |
|         | 720P              | 50Hz,60Hz                         | O |
|         | 1080I             | 50Hz,60Hz                         | O |
|         | 1080P             | 24Hz, 25Hz<br>30Hz, 50Hz,<br>60Hz | O |

(X: Not Available, O: Available)

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

## Supported File Formats for USB Mode

| Media    | Extension  | Format                          | Notes   |
|----------|--|---------------------------------|---|
| Video    | .mpg,<br>.mpeg   | MPEG1-2                         | MPEG1: 768x576 @ 30P, MPEG2: 1920x1080 @ 30P  |
|          | .vob   | MPEG2                           | 1920x1080 @ 30P   |
|          | .mp4   | MPEG4, Xvid,<br>H.264           |   |
|          | .mkv   | H.264,<br>MPEG4, VC-1           |   |
|          | .avi   | MPEG2,<br>MPEG4, Xvid,<br>H.264 |   |
|          | .flv   | H.264/VP6/<br>Sorenson          | H.264/VP6: 1920x1080 @ 30P<br>Sorenson: 352x288 @ 30P   |
|          | .mp4, .mov,<br>.3gpp, .3gp,<br>MPEG<br>transport<br>stream,<br>.ts, .trp, .tp,<br>.mkv | HEVC/H.265                      | 1080P@60fps - 50Mbps  |
|          | .3gp   | MPEG4 , H.264                   | 1920x1080 @ 30P   |
| Audio    | .mp3   | MPEG1 Layer<br>2/3              | Layer2: 32Kbps ~ 448Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz, 16kHz, 22.05kHz, 24kHz (Sampling rate)<br>Layer3: 32Kbps ~ 320Kbps (Bit rate) / 32kHz, 44.1kHz, 48kHz, 16kHz, 22.05kHz, 24kHz, 8kHz, 11.025kHz, 12kHz (Sampling rate)                              |
|          | (works<br>only with<br>video<br>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)<br>/ 6kHz, 8kHz, 11.025kHz, 12kHz, 16kHz, 22.05kHz, 24kHz, 32kHz, 44.1kHz, 48kHz , 88.2kHz, 96kHz, 176.4kHz, 192kHz (Sampling rate) |
|          |  | IMA-ADPCM/<br>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  |
|          | .bmp   | -                               | Resolution(WxH): 5760x4096  |
| Subtitle | .sub, .srt   | -                               | -   |

## 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   |                                     |                                     |                                     | <input checked="" type="checkbox"/> |                                     |                                     |
| 640x480   |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 800x600   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 832x624   |                                     |                                     |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1024x768  |                                     | <input checked="" type="checkbox"/> |
| 1152x864  |                                     | <input checked="" type="checkbox"/> |                                     | <input checked="" type="checkbox"/> |                                     | <input checked="" type="checkbox"/> |
| 1152x870  |                                     |                                     |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1280x768  |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1360x768  |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     |                                     |
| 1280x960  |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1280x1024 |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1400x1050 |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1440x900  |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     | <input checked="" type="checkbox"/> |
| 1600x1200 |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     |                                     |
| 1680x1050 |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     |                                     |
| 1920x1080 |                                     | <input checked="" type="checkbox"/> |                                     |                                     |                                     |                                     |

**JVC**