



TOSHIBA



OWNER'S MANUAL
LED TV

HDMI™
HIGH-DEFINITION MULTIMEDIA INTERFACE

dts
TruSurround



DOLBY AUDIO™

androidtv



49U985* Series
55U985* Series
65U985* Series

Owner's Record

You will find the model number and serial number on the back of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call upon your TOSHIBA dealer regarding this product.

Model number: _____

Serial number: _____



Welcome to Toshiba

- Thank you for purchasing this Toshiba LED TV. This manual will help you use the exciting features of your new TV.
 - Instructions in this manual are based on using the remote control.
 - Please read all safety and operating instructions in this manual carefully, and keep this manual for future reference.
 - LED TV is LCD Panel with LED Backlight.
 - Design and specifications are subject to change without notice.
 - Never service or remodel the TV by yourself. It may expose you to a fire hazard or dangerous voltages.
-

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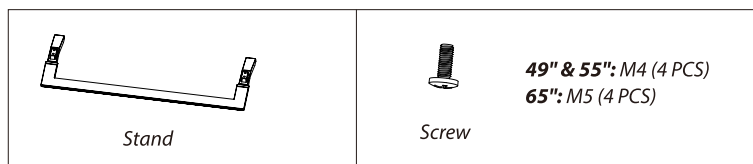
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Pedestal Stand Assembling

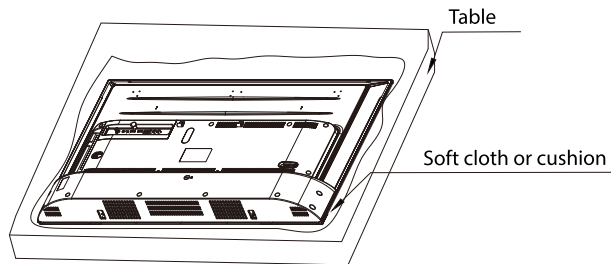
Note:

- 1) The pictures are only for reference.
- 2) Extreme care should always be used when attaching the pedestal stand to avoid damage to the LCD panel.

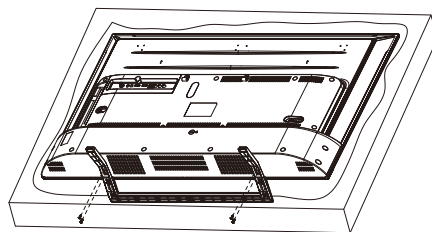
1. Please take out the accessory bag from the package and check if all below parts exist without missing, if not, please contact your local dealer.



2. Take out the TV and carefully put it (panel downward) on a stable and flat table with a soft cloth or cushion on it.



3. Connect the bases and the TV set by putting and fastening matched screws into the screw holes.



Warning:

- Ensure the power cable is not pinched when attaching the pedestal stand as this could cause an electric shock.
- Ensure the screws are securely tightened so as to avoid falling over, injury or damage.

Important Safety Instructions

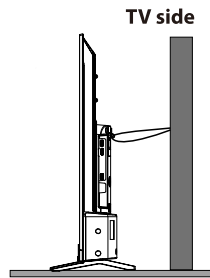
Be sure to observe the following instructions and precautions to ensure safe use of this TV.

Installation

- 1) **WARNING: To prevent injury, this apparatus must be securely attached to a stable surface/wall in accordance with the installation instructions.**

Install the TV in a horizontal, stable location.

- If the TV is not installed securely, it may lean or fall over and cause an injury.
- To prevent injury, use the exclusive optional stand or wall-hanging bracket to install this TV on a stable surface or wall securely in accordance with a qualified technician.
- To secure the TV, use a sturdy strap from the hook(s) on the rear of the TV to a wall stud, pillar, or other immovable structure. Make sure the strap is tight, secure, and parallel to the floor.



Note: The picture is only for reference.

- 2) **Never place the TV in an unstabilized location such as on a shaky table, incline or location subject to vibration.**

- Only use cabinets or stands recommended by the TV manufacturer.
- Only use furniture that can safely support the TV.
- Ensure that the TV is not hanging over the edge of the supporting furniture.
- Never place the TV on tall furniture (for example, cupboards or bookcases) without anchoring both the furniture and the TV to a suitable support.
- Never stand the TV on cloth or other material placed between the TV and supporting furniture.

The TV may drop or fall off, which may cause an injury or damage.

- 3) **Never stand or climb on the TV.**

- Educate children about the dangers of climbing on furniture to reach the TV or its controls.

Be especially careful in households with children to prevent them through climbing on top of the TV. It may move, fall over, break, become damaged or cause an injury.

- 4) **Always connect the power plug to an appropriate electrical outlet equipped with 100-240V AC, 50/60Hz.**

Never use the TV outside the specified voltage range. It may cause a fire or an electric shock.

About the fuse

In a three pin earthing-type, the fuse fitted in this plug is approved by ASTA or BSI to BS1362. It should only be replaced by a correctly rated and approved type and the fuse cover must be refitted.

About the use

- Make sure to insert the plugs firmly, when plugging the AC power cord into the TV set end and wall outlet end.
- Make sure to hold the plug, when unplugging the AC power cord.
- Never use other cord except for supplied AC power cord, and never use the supplied power cord for any other purpose.

- 5) **Never insert or remove the power plug with wet hands.**

This may cause an electric shock.

- 6) **Never block or cover the slots and openings in the cabinet.**

- Never place the TV screen upward or leaning it.
- Never place the TV in a closet, bookcase or other similar area where the ventilation is poor.
- Never drape a newspaper, tablecloth or curtain on the TV.
- When installing the TV against a wall, always keep the TV at least 10 cm away from the wall.
- Never place the TV on a soft unstable surface, such as a carpet, or a cushion.

The inside of this TV will overheat if the ventilation holes are covered, blocked or sealed, which may result in a fire.

7) Never place the TV near a heater or in direct sunlight.

The surface of the cabinet or power cord may melt and result in a fire or an electric shock.

8) Never place the TV in an area exposed to high humidity levels, such as in a bathroom or close to a humidifier.

This may cause a fire or an electric shock.

9) Never place the TV next to a stove where it will be exposed to oil, smoke, or steam, or in a location where there is a large quantity of dust.

This may cause a fire or an electric shock.

10) Precautions for moving the TV

- When moving the TV, be sure to remove the plug from the wall outlet and disconnect the aerial cable and audio/video cables, any steady ties and mounting screw. A fire or an electric shock may result if the power cord is damaged.
- When carrying the TV, at least two people are needed. Be sure to carry it upright.
- Never carry the TV with the screen facing up or down.

11) Precautions for installing on outdoor aerial

An outside aerial system should not be located in the vicinity of overhead power lines, or other electric light or power circuits.

If the aerial falls down or drops, it may cause an injury or an electric shock.

Use

1) Never place hot objects or open flame sources, such as lighted candles or nightlights, on or close to the TV.

High temperatures can melt plastic and lead to fires.

2) The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

When liquids are spilled or small items are dropped inside the TV, this may cause a fire or an electric shock.

If small objects drop inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician.

3) Never insert objects (metal or paper) or pour water inside the TV through ventilation holes and other openings.

These items may cause a fire or an electric shock.

If these objects are inserted inside the TV, turn off the TV and remove the power plug from the outlet immediately and contact a service technician. Be especially careful that children do not insert objects in the TV.

4) When the TV will not be used for a long period of time, such as during vacation or travel, remove the power plug from the wall outlet for safety.

- The TV is not completely disconnected from the power supply line, as minute current is consumed even when the \odot Power switch is turned off.
- The Mains plug or an appliance coupler is used as the disconnect device, therefore the disconnect device shall remain readily operable.

5) Never pull on the power cord when removing the plug from the wall outlet.

Always hold the plug firmly when removing it. If the power cord is yanked, the cord may become damaged and a fire or an electric shock may occur.

6) Never cut, break, modify, twist, bunch up or bent the cord or apply excessive force or tension to it.

Never place heavy objects on the cord or allow it to overheat as this may cause damage, a fire or an electric shock. Contact a service technician if the power cord is damaged.

7) If there is thunder or lightning, never touch the aerial cable or other connected cables.

You may suffer an electric shock.

8) Turn off the TV before unplugging the power cord.

Failure to do so, may cause a malfunction.

9) Listening to music at high volume levels and for extended durations can damage one's hearing.

In order to reduce the risk of damage to hearing, one should lower the volume to a safe, comfortable level, and reduce the amount of time listening at high levels.

10) In dry environment due to static electricity, the product may restart and return to the main OSD interface, USB player interface or the previous source mode.

It is normal and you can continue to use the TV when this phenomenon appears.

Service

1) Never repair, modify or disassemble the TV by yourself.

It may cause a fire or an electric shock. Consult a service technician for inspection and repairs.

2) When a malfunction occurs, or if smoke or an unusual odor comes from the TV, turn off the TV and remove the power plug from the outlet immediately.

Make sure that the smoke or smell has stopped, then contact a service technician. If the TV is still used in this condition, it may cause a fire or an electric shock.

3) If the TV is dropped or the cabinet is broken, turn off the TV and remove the power plug from the outlet immediately.

If the TV has power in this condition, it may cause a fire or an electric shock. If the cabinet is broken, be careful when handling the TV to prevent an injury. Contact a service technician for inspection and repair.

4) When the TV reaches the end of its useful life, ask a qualified service technician to properly dispose of the TV.

Cleaning

CAUTION: Avoid using chemicals (such as air refreshers, cleaning agents, etc.) on or near the TV pedestal. Studies indicate that plastics may weaken and crack over time from the combination effects of chemical agents and mechanical stress (such as weight of TV). Failure to follow these instructions could result in serious injury and/or permanent damage to TV and TV pedestal.

1) Remove the power plug before cleaning.

Never use solvents such as benzine or thinner to clean the TV.

- These solvents may distort the cabinet or damage its finish.
- If rubber or vinyl products remain in contact with the TV for a long time, a stain may result.

If the cabinet becomes dirty, clean it with a soft, dry cloth.

When cleaning the surface of the LCD display, wipe the panel surface gently with a soft, dry cloth.

2) Periodically disconnect the power plug from the outlet and check it.

If dust has collected on the power plug connectors, clean off the dust with a dry cloth.

This dust may cause a fire due to reduced insulation on the plug.

Important Information

1) About LCD screen

- If you have the LCD screen facing to the sun, the LCD screen will be damaged. Be aware of locating the TV close to a window or outdoors.
- Never press the LCD screen strongly or scratch it, and never put anything on it. These actions will damage the LCD screen.

2) About cabinet and LCD screen

Never spray volatile compounds such as insecticide on the cabinet and LCD screen. This may cause a discoloration or damage the cabinet and LCD screen.

3) About afterimage

If a still picture is displayed, an afterimage may remain on the screen, however it will disappear. This is not a sign of malfunction.

4) Some pixels of the screen do not light up

The LCD display panel is manufactured using an extremely high level of precision technology, however sometimes some pixels of the screen may be missing picture elements or have luminous spots. This is not sign of malfunction.

5) About Interference

The LCD display may cause interference in image, sound, etc. of other electronic equipment that receives electromagnetic waves (e.g. AM radios and video equipment).

6) About using under the low temperature places

If you use the TV in the room of 0°C or less, the picture brightness may vary until the LCD monitor warms up. This is not a sign of malfunction.

7) When disposing of or transferring ownership of the TV

Before disposing of or transferring ownership of the TV, perform "Resetting the TV".

Exemptions

- Toshiba is not liable for any damage caused by fires, natural disaster (such as thunder, earthquake, etc.), acts by third parties, accidents, owner's misuse, or uses in other improper conditions.
- Toshiba is not liable for incidental damages (such as profit loss or interruption in business, modification or erasure of record data, etc.) caused by use or inability to use of product.
- Toshiba is not liable for any damage caused by neglect of the instructions described in the owner's manual.
- Toshiba is not liable for any damage caused by misuse or malfunction through simultaneous use of this product and the connected equipment.

When Using a Wireless Network

CAUTION:

- *Bluetooth*® and Wireless LAN devices operate within the same radio frequency range and may interfere with one another. If you use *Bluetooth*® and Wireless LAN devices simultaneously, you may occasionally experience a less than optimal network performance or even lose your network connection.
- If you should experience any such problem, immediately turn off either your *Bluetooth*® or Wireless LAN device.
- Actual performance can vary, including lower wireless network capacity, data throughput rate, range and coverage.
- Performance depends on many factors, conditions and variables, including distance from the access point, volume of network traffic, building materials and construction, operating system used, mix of wireless products used, interference and other adverse conditions.

Wireless LAN and Your Health

Wireless LAN products, like other radio devices, emit radio frequency electromagnetic energy. The level of energy emitted by Wireless LAN devices, however, is far less than the electromagnetic energy emitted by wireless devices such as mobile phones. Because Wireless LAN products operate within the guidelines found in radio frequency safety standards and recommendations, TOSHIBA believes Wireless LAN is safe for use by consumers. These standards and recommendations reflect the consensus of the scientific community and result from deliberations of panels and committees of scientists who continually review and interpret the extensive research literature.

In some situations or environments, the use of Wireless LAN may be restricted by the proprietor of the building or responsible representatives of the organization. Such restrictions may apply in environments where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the policy that applies to the use of wireless devices in a specific organization or environment, you are encouraged to ask for authorization to use the Wireless LAN device prior to turning on the equipment.

When Using the Aspect Ratio Function

- Using these functions to change the picture size (i.e., changing the height/width ratio) for any purpose other than your private viewing may be prohibited under the Copyright Laws of the United States and other countries, and may subject you to civil and criminal liability.

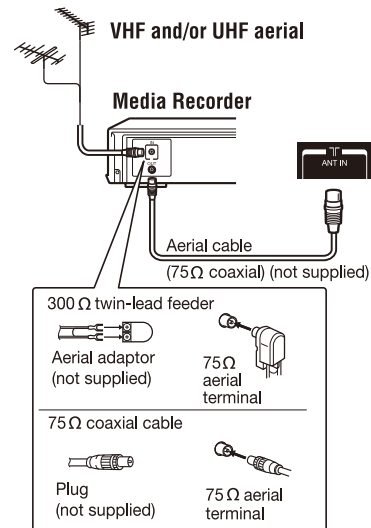
Connecting an Aerial

Optimum reception of color requires a good signal and will generally mean that an outdoor aerial must be used.

The exact type and positioning of the aerial will depend upon your particular area.

Your Toshiba dealer or service personnel can best advise you on which aerial to use in your area.

Before connecting the aerial cable, turn off all main power switches.



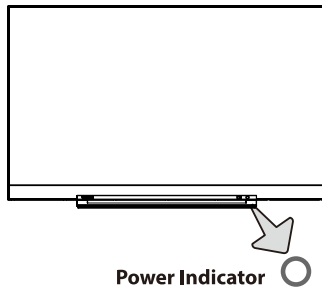
Note: The picture is only for reference.

TV Panel Controls

Power Indicator

- Lit in green:** The TV is turned on.
- Lit in red:** The TV is standby.
- Unlit:** The TV is powered off.

Front View

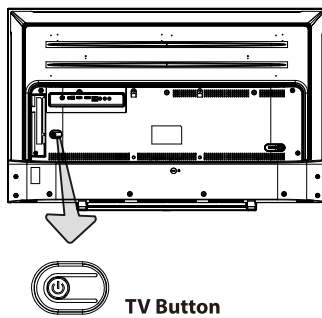


Note: The picture is only for reference.

TV Button

1. In standby mode, press it to turn on the TV.
2. When the TV is turned on:
 - Short press it to access the source menu.
 - Short press it again to select the desired source.
 - Long press it to turn the TV to standby mode.

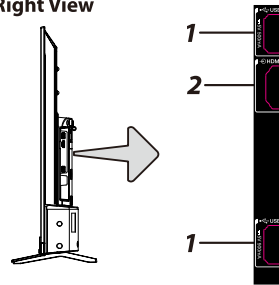
Back View



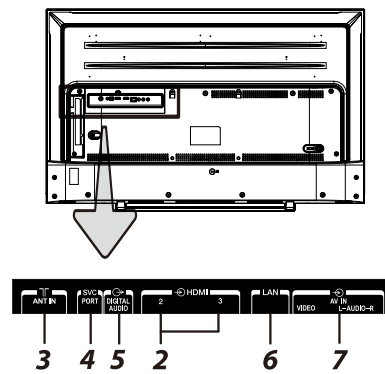
Note:
 1) The picture is only for reference.
 2) TV button can't power off the TV, and please disconnect the power cord if you want to power off the TV completely.

TV Terminal

Right View



Back View

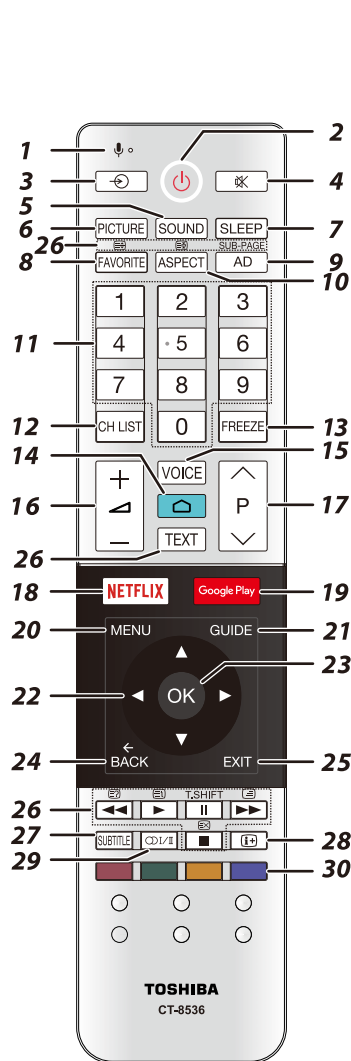


Note: The pictures are only for reference.

- 1 **USB1/2:** Connect your USB device to the TV.
- 2 **HDMI1/2/3:** Connect HDMI input signal from signal source such as DVD player.
- 3 **ANT IN:** Connect a coaxial cable to receive signal from the antenna.
- 4 **SVC PORT:** Debugging port only for service.
- 5 **DIGITAL AUDIO:** Connect the digital audio devices such as Digital Power Amplifier to the TV.
- 6 **LAN:** Network port.
- 7 **AV IN:** Connect video and audio input signal from signal source such as DVD.

Learning about the Remote Control

Remote Control Function



Note: The picture is only for reference.

1. **Microphone** (): Speak to the TV while using Google Assistant.
2. **POWER** (): Turn the TV on or standby.
3. **SOURCE** (): Select the input source.
4. **Mute** (): Mute or restore the sound.
5. **SOUND** : Select the sound mode.
6. **PICTURE** : Select the picture mode.
7. **SLEEP** : Setup the sleep timer to turn off the TV automatically.
8. **FAVORITE** : View your assigned favorite channels, or add/remove a program to/from the favorite list.
9. **AD** : Turn on the function of audio description to help the blind or visually-impaired viewers.
10. **ASPECT** : Select the aspect ratio.
11. **Number Buttons (0~9)** : Choose the channel directly.
12. **CH LIST** : Access the channel list.
13. **FREEZE** : Freeze or unfreeze the picture on the screen.
14. **HOME** (): Access the home page.
15. **VOICE** : Start the function of Google Assistant.
16. **Volume Up/Down** (): Increase or decrease the sound volume.
17. **Program Up/Down** (): Change to the next or previous program.
18. **NETFLIX** : Access the Netflix interface, or turn on the TV from standby mode.
19. **Google Play** : Access to the Google Play interface.
20. **MENU** : Access the main menu.
21. **GUIDE** : Access the EPG interface in DTV mode.
22. **Navigation buttons (Up/Down/Left/Right)** (): Navigate the menu.
23. **OK** : Confirm the selection.
24. **Back** : Exit the current menu, or return back to the previously watched program.
25. **EXIT** : Exit the current operation.
26. **USB or Teletext Buttons.**
 - <USB Play Control Buttons >
 - Play** (): Start the playback.
 - Pause** (): Pause the playback, or turn on the Time-shift function in DTV mode.
 - Stop** (): Stop the playback.
 - Fast Backward** (): Fast backward the playback.
 - Fast Forward** (): Fast forward the playback.
 - < Teletext Buttons >
 - TEXT** : Enter or exit the teletext menu.
 - SIZE** (): Enlarge the teletext display.
 - HOLD** (): Hold or release the teletext page.
 - SUB-PAGE** : Enter or exit subpage mode.
 - REVEAL** (): Display or hide the concealed information.
 - INDEX** (): Display the index page.
 - MIX** (): Superimpose the teletext over the TV program or return to normal teletext mode.
 - CANCEL** (): Return to TV program temporarily while searching for a Teletext page.
27. **SUBTITLE** : Open or close the subtitle.
28. **INFO** (): Show the detailed information.
29. **NICAM I/II** (): Select the desired sound output depending on the broadcasting channel.
30. **Color Buttons (RED/GREEN/YELLOW/BLUE)** : Execute the prompt function in specific mode.

Learning about the Remote Control

How to Pair Remote Control with the TV

This is a Bluetooth remote control, and before using it, please pair it with the TV firstly. The following steps are for your reference :

Step 1: Press **HOME** button to enter the home page.

Step 2: Select "Settings" at the home page.

Step 3: Enter "Settings" to select "Remote & accessories";

Step 4: Select "Add accessory" to enter the interface of "Searching for accessories".

Step 5: Press **HOME** and **◀** button together for a while until there shows the name of your Bluetooth remote control on the TV searching interface.

Step 6: Check and select the name, and the default name is "TV BLE Remote".

Step 7: Press **OK** button to start pairing the Bluetooth remote control. The screen will display "Pairing...".

Step 8: Then the screen will display "Connecting...".

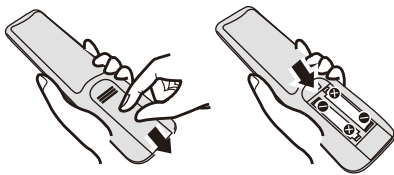
Step 9: The screen will display "Paired" if the remote control is paired successfully. After pairing, the Bluetooth remote control has been connected successfully for your usage right now.

Note: If you wait more than 2 minutes and it can't pair or the screen displayed "COULDN'T PAIR", please repeat the above steps for pairing again.

Installing the Remote Control Batteries

Remove the battery cover.

Insert two R03 (AAA) batteries matching the -/+ polarities of the battery to the -/+ marks inside the battery compartment.



Note: The picture is only for reference.

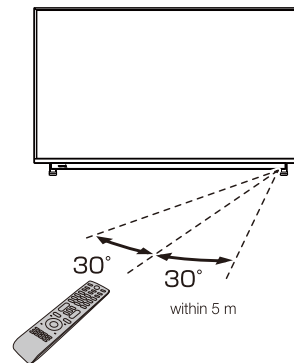
Caution:

- Dispose of batteries in a designated disposal area. Batteries must not be exposed to excessive heat such as sunshine, fire or the like.
- Attention should be drawn to the environmental aspects of battery disposal.
- Never mix battery types or combine used batteries with new ones.

Note:

- If the remote control does not operate correctly, or if the operating range becomes reduced, replace both batteries with new ones.
- If the batteries are dead or if you will not use the remote control for a long time, remove the batteries to prevent battery acid from leaking into the battery compartment.
- Batteries should be limited to alkaline batteries.

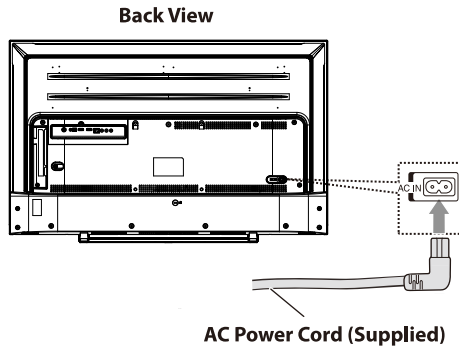
Effective Range



Note: The picture is only for reference.

Connecting the AC Power Cord to Your TV

Connect the AC power cord firmly with the TV by inserting it into the AC IN connector on the back of the TV.

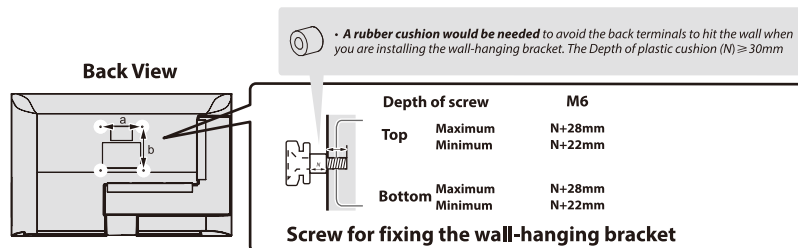


Note: The picture is only for reference.

Wall-hanging Bracket

Please contact your local dealer to purchase the recommended wall-hanging bracket.

• Holes for wall-hanging bracket installation



Note: The picture is only for reference.

• Rear of the TV

49" a: 200mm 55" a: 300mm 65" a: 400mm
 b: 200mm b: 200mm b: 200mm

Cautions:

- Failure to use a bracket or choosing to mount the unit yourself will be done at the risk of the consumer. Always be sure to ask a qualified technician to carry out set up. Incorrect fitting may cause equipment to fall, resulting in injury and product damage. Any damage resulting from not having a professional installer mount, your unit will void your warranty.
- When any optional accessories or wall hanging brackets are used, always ensure that the instructions provided are followed fully.
- Do not mount the unit directly below ceiling lights (such as spotlights or halogen lights) which typically give off high heat. Doing so may warp or damage plastic cabinet parts.
- Take care when fixing wall brackets to the wall. Wall mounted equipment shall not be grounded by metal within the wall. Always ensure that there are no electrical cables or pipes in the wall before hanging bracket.
- To prevent fall and injury, remove the TV from its fixed wall position when it is no longer in use.

Using the Basic Features

Initial Setup

When you turn on the TV for the first time, there will show a wizard to guide you to finish the following initial settings:

Step 1: Select the menu language as you need.

Step 2: (Only for some countries) Select whether or not to use an Android device to setup the TV.

Note: If you want to use your Android device to setup the TV, please operate as indicated on the screen. If you don't wanna use your Android device to setup the TV, please go on with the following operations.

Step 3: Select whether or not to connect your TV set to the Wi-Fi network.

Note: If you have connected the TV to the Wi-Fi network, it will check for updates like Google service updates and so on. Then please select whether or not to sign in to your Google account.

Step 4: Read to accept the Google terms of service and privacy policy.

Step 5: Select whether or not to let Google or third party to use your TV location.

Step 6: Select whether or not to allow Google to help improve your Android TV.

Step 7: Select a name for your TV or rename it as you like.

Step 8: Select the country.

Step 9: (Only for some countries) Input the local postal code.

Step 10: Read the software notice.

Step 11: Select the TV source.

Step 12: Select the tuner mode.

Step 13: Select whether or not to start "Channel Scan".

Note: If no, the channel scan can be performed in TV setting of global settings. Please connect signal cable firstly before starting the channel scan.

Step 14: Introduction on main functions of your Android TV.

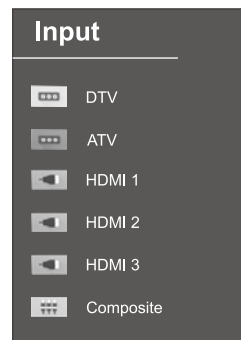
Note:

1) You need to finish all initial settings according to what is indicated on the screen.

2) If you want to restart the initial setup after the first time, you can access the home page. Open "Settings" and enter "Device" list. Then select "Factory data reset" in "Storage & reset".

Select the Input Source

- Press **SOURCE** button to access the list of input source.
- Press **▲/▼** to select the desired input source.
- Press **OK** button to enter the selected source.



Note:

1) The picture is only for reference.

2) It will appear the source of **Google Play Movies** after you update the TV system, connect the network, or log in Google account.

Electronic Program Guide (EPG)

EPG (Electronic Program Guide) is supplied by the program providers and offers information about the programs to be broadcast. You can access it in DTV mode by pressing **GUIDE** button on the remote control.



Note: The picture is only for reference.

Using the Basic Features

- 1 After entering the EPG interface, the channel you are watching will be highlighted.
- 2 Press **MENU** button to skip to the line of Programme Guide. Press **◀/▶** button to select "Time" or "Channel".
- 3 If "Channel" is selected, press **◀/▶** button in the line of "Current Select" to select the channel. After a brief moment, there will show the program list of different time periods for the selected channel.
- 4 If "Time" is selected, press **◀/▶** button in the line of "Current Select" to select the date. After a brief moment, there will show the program list of different channels for the selected date.
- 5 Press **BACK/EXIT** button to exit the EPG menu.

Time-shift Function

Brief Introduction

Time-shift is used to record a DTV program when your viewing is interrupted or delayed. Press **⏸ (T.SHIFT)** button to pause playing the DTV program and start to record the program. Press **▶** button to continue playing the program from when you paused. Press **■** button to stop time-shift function.

Note:

- 1) Before time-shift, you'd better format your USB device to ensure there is enough space for time-shift recording.
- 2) The recorded program of time-shift will be cleared automatically after playing the program or stopping time-shift function.
- 3) If time-shift recording lasts too long, and there is no more space for recording new program, the TV will start to play the program automatically from the recording beginning to release the space of program which has been played for new program recording.

Time-shift Settings

The first time when you use time-shift function, there will show a setup wizard to guide you on how to setup your USB device for the best usage of time-shift function.

Step 1: Select the USB path.

Step 2: Select the setup mode: **Auto** or **Manual**.

- If **Auto** is selected, the TV will finish related settings automatically. What you need to do is only to wait for the result.
- If **Manual** is selected, please go on with the following steps.

Step 3: Select whether or not to format the USB device.

Step 4: Select the file size for time-shift function. Choices are **512MB, 1.0GB, 1.5GB, 2.0GB, 2.5GB, 3.0GB, 3.5GB** and **4.0GB**.

Step 5: Test the speed of the USB device.

Step 6: Show the result that the USB is ready for time-shift function.

Note:

1) If you have setup for time-shift function, you will be able to use time-shift function directly without setup again.

2) If you want to change the settings for time-shift function, please select "Reset Timeshift" of "Record Setting" in "Setup" menu.

Live TV Settings

Menu Operation

Step 1: Press **MENU** button to display "Menu Options", then select "Menu" and press **OK** button to enter "Live TV Settings".

Step 2: Press **▲/▼** button to select a submenu: **Video, Audio, TV, Setup** or **Parental**.

Step 3: Press **OK** button to enter the selected submenu.

Step 4: Press **▲/▼** button to select an item.

Step 5: Press **OK** button to enter the selected item.

Step 6: Press **▲/▼** or **◀/▶** to adjust the item.

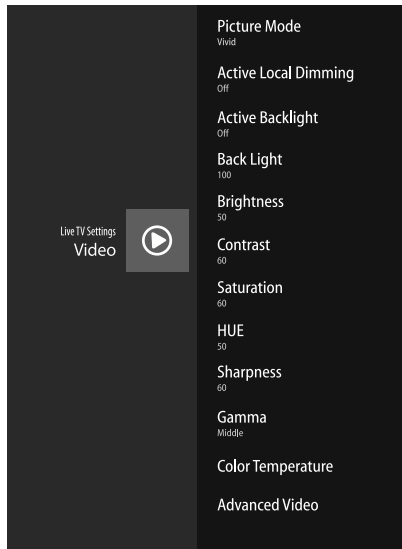
Step 7: Press **BACK** button to back to the upper-level menu.

Step 8: Press **EXIT** button to exit "Live TV Settings".

Note: Some items may not be available for some regions, some models or some input sources.

Using the Basic Features

Video



Note: The picture is only for reference.

● **Picture Mode**

Select the picture mode: **User, Cinema, Sport, Vivid** or **Hi-Bright**.

● **Active Local Dimming**

Turn on to adjust the local screen backlight automatically depending on the input signal.

● **Active Backlight**

Turn on to adjust the screen backlight automatically depending on the surrounding ambient brightness.

● **Back Light**

Adjust backlight parameter of the picture (**0~100**).

● **Brightness**

Adjust the lightness of the picture (**0~100**).

● **Contrast**

Adjust the difference between light and dark areas of the picture (**0~100**).

● **Saturation**

Adjust the colorfulness of the color relative to its own brightness (**0~100**).

● **HUE**

Adjust the color tint of the picture (**0 ~ 100**).

● **Sharpness**

Adjust the edge of the picture (**0~100**).

● **Gamma**

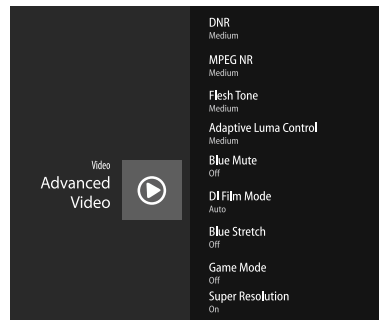
Adjust the light intensity of original image. Choices are **Dark, Middle** and **Bright**.

● **Color Temperature**

Adjust the overall color tone of the picture. Choices are **Cool, Standard** and **Warm**.

● **Advanced Video**

Make adjustments of advanced features for video performance.



Note: The picture is only for reference.

* **DNR:** Remove the noise from the video signal.

* **MPEG NR:** Reduce the noise created while compressing or converting the MPEG signal.

* **Flesh Tone:** Adjust the flesh tone of the picture.

* **Adaptive Luma Control:** Adjust the luma of the picture automatically depending on the input signal.

* **Blue Mute:** If it is set on, the screen will turn blue and the sound will be muted when there is no signal.

* **DI Film Mode:** Suppress the image shaking to achieve a stable and fluent play of the dynamic picture.

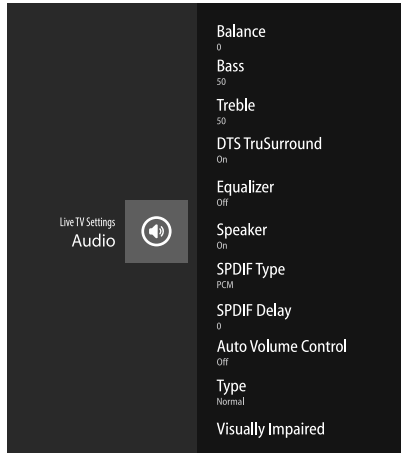
* **Blue Stretch:** Turn on to make the part of high brightness and low saturation more blue.

* **Game Mode:** Turn on to make the video played more fluently.

* **Super Resolution:** Turn on to reduce the serrations of the picture.

Using the Basic Features

Audio



Note: The picture is only for reference.

● **Balance**

Control the sound balance between right and left speakers (-50~50).

● **Bass**

Adjust the lower frequency of the sound (0~100).

● **Treble**

Adjust the higher frequency of the sound (0~100).

● **DTS TruSurround**

Turn on or turn off the DTS TruSurround sound system.

● **Equalizer**

Select the appropriate sound mode. Choices are **Off**, **Rock**, **Pop**, **Live**, **Dance**, **Techno**, **Classic** and **Soft**.

● **Speaker**

Turn on or turn off the TV speaker.

● **SPDIF Type**

Select the SPDIF sound output type. Choices are **Off**, **Dolby Digital** and **PCM**.

● **SPDIF Delay**

Adjust the value of SPDIF sound output delay (0~250).

● **Auto Volume Control**

Turn on to adjust the sound volume automatically depending on the input signal.

● **Type**

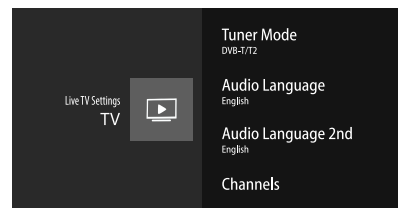
Select the preferred audio type for different purposes. Choices are **Normal** and **Visually Impaired**.

● **Visually Impaired**

Adjust related audio settings to help the blind or visually-impaired viewers understand and enjoy the program. Choices are **Speaker** and **Volume**.

*Note: This function is only available when **Type** is selected to be "Visually Impaired".*

TV



Note: The picture is only for reference.

● **Tuner Mode**

Select the tuner mode: **DVB-T/T2**, or **DVB-C**. It is only available for DTV source.

● **Country Region**

Select the country region. It is only available for Australia.

● **Audio Language**

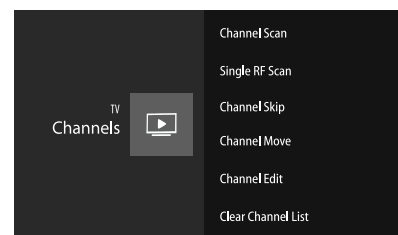
Select the primary audio language. It is only available for DTV source.

● **Audio Language 2nd**

Select the secondary audio language. It is only available for DTV source.

● **Channels**

Execute the function of channel scan, channel edit and so on.



Note: The picture is only for reference.

Using the Basic Features

* **Channel Scan:** Search for the channels automatically. Select the desired TV source before starting the channel scan. If you want to cancel the scanning, press **BACK** button, and press **OK** to continue the scanning.

* **Single RF Scan:** (Only for DTV source) Search for RF Channels Manually. Press **◀/▶** button to select the RF Channel No. If you want to cancel the scanning, press **BACK** button, and press **OK** button to continue the scanning.

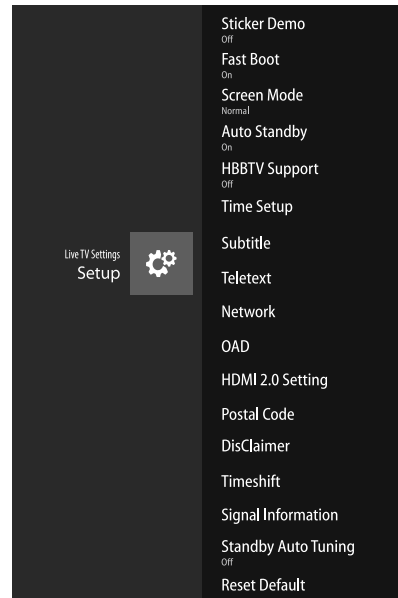
* **Analog Manual Scan:** (Only for ATV source) Search for analog channels Manually. Press **OK** button to enter the interface of inputting the start frequency. Select "Scan Up" to search towards frequency higher than the start frequency. Select "Scan Down" to search towards frequency lower than the start frequency. If you want to cancel the scanning, press **BACK** button, and press **OK** button to continue the scanning.

* **Channel Skip/Move/Edit:** Skip/move/edit the channel you want.

* **Analog Channel Fine Tune:** (Only for ATV source) If the reception is clear, you don't have to fine tune the channel, as this is done automatically during searching and storing operation. If the signal is weak or distorted, fine tune the channel manually. Press **◀/▶** button to adjust the frequency until the image is clear.

* **Clear Channel List:** Clear the channel list.

Setup




Note: The picture is only for reference.


● **Sticker Demo**

Turn on to demonstrate main features of the TV for a shop display.

● **Fast Boot**

Turn on or turn off the function of fast boot.

1) If you turn off "Fast Boot" function in "Setup" menu, and press **POWER**  to power off the TV. Both the TV and the system will close to fully save energy. In such case, it will take long time to power on the TV again.

2) If you turn on "Fast Boot" function in "Setup" menu, and press **POWER**  button to power off the TV, the TV will close, but the system still runs continuously. In such case, it will take short time to power on the TV again.

● **Screen Mode**

Select the desired screen mode. Choices are **Auto**, **Normal**, **Letterbox**, **Panorama**, **Zoom** and **Dot by Dot**.

Note:

1) This function is only available after you have searched for channels.

2) Choices differ by different input signals.

Using the Basic Features

● **Auto Standby**

Open to turn off the TV automatically if there are no signals and operations for a few minutes, or if there are signals but no operations for 4hours.

● **HBBTV Support**

Turn on or turn off the function of HBBTV support. It is only available for Australia and New Zealand.

● **Time Setup**

Setup the TV time. Choices are **Time Zone**, **Time** and **Sleep Timer**.

● **Subtitle**

Setup for the subtitle function. Choices are **Digital Subtitle**, **Digital Subtitle Language**, **Digital Subtitle Language 2nd** and **Subtitle Type**.

Note: "Hearing Impaired" in **Subtitle Type** is used to help the deaf or hearing-impaired viewers understand and enjoy the program.

● **Teletext**

Setup for the teletext function. Choices are **Digital Teletext Language**, **Decoding Page Language** and **TTX Presentation Level**.


● **Network**

Turn on the function of **Wake on Lan (WOL)** or **Wake on Wifi (WOW)**, and display the **Netflix ESN** code.

The followings are for your reference to understand the function of **WOL/WOW**:

Step 1: Turn on **WOL/WOW** function on the TV.

Step 2: Connect the TV and your mobile phone to the same wired/wireless network.

Step 3: Press  button on the remote control to turn the TV to standby mode.

Step 4: Open **YouTube** on your mobile phone.

Step 5: Click **Cast** icon on the top display of YouTube.

Step 6: Find and connect the TV as an available device

Step 7: The TV will be turned on from standby mode.

Note:


1) **WOL/WOW** can turn on the TV from standby mode by wired/wireless network. By default, **WOL/WOW** is turned off. If you turn on **WOL/WOW** function, it will consume more energy.

2) **WOL/WOW** is only available after **Fast Boot** in **Setup** menu is turned on.

● **OAD**

Select whether or not to automatically download and upgrade the TV software over the air.

Note:

1) If you want to manually download and upgrade the TV software over the air, press **MENU** button to display "Menu Options", then press  button to select "Manual OAD Download".

2) "OAD" & "Manual OAD Download" are only available for some countries.

● **HDMI 2.0 Setting**

Select HDMI signal format. Choices are

4K@60Hz 4:2:0 and **4K@60Hz 4:4:4/4:2:2**.

● **Postal Code**

Use **Number Buttons (0~9)** to input the local postal code. It is only available for Indonesia.

● **Disclaimer**

Declaration to disclaim any responsibility or liability arising from user's failure in operating the TV on network, USB and so on..

● **Timeshift**

Setup for the Time-shift function. Choices are **Device Info** and **Reset Timeshift**.

● **Signal Information**

Show the current signal information. It is only available for DTV source.

● **Standby Auto Tuning**

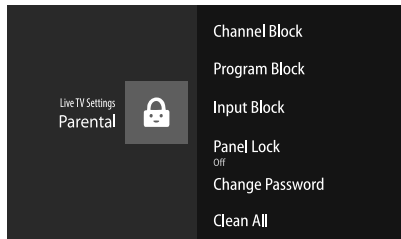
Turn on to automatically search for channels when the TV turns to standby mode. It is only available for Malaysia and Singapore.

● **Reset Default**

Restore menu settings to the factory defaults. All user settings on the TV will lose completely after operating this feature.

Parental

Password is needed for entering the parental system. The default password is "0000".



Note: The picture is only for reference.

● Channel Block

(Only for DTV & ATV source) Restrict unauthorized access to specific channel based on the Channel information.

● Program Block

Restrict unauthorized access to specific programs based on the age rating. Choices are **Rating Enable** and **Restriction of Access**.

Note:

- 1) **Age Rating** is only available when **Rating Enable** is turned on.
- 2) The choices of **Age Rating** differ by different countries.

● Input Block

Restrict unauthorized access to specific input source based on the source type.

● Panel Lock

Disable the function of TV button.

● Change Password

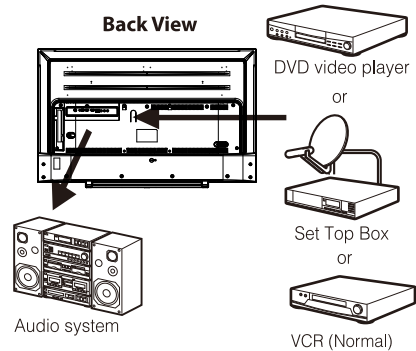
Change the current password of parental system.

● Clean All

Clean all user settings of parental system you have made.

Back Connections

Connection example



Note: The picture is only for reference.

- Before connecting any external equipment, turn off all main power switches.
- The unauthorized recording of TV programs, DVDs, video tapes and other materials may infringe upon the provisions of copyright law.
- Additional equipment and cables shown are not supplied with this TV.

Connecting an Audio System

You can enjoy high quality dynamic sound by connecting the TV to an audio system.

Note:

- Refer to the owner's manual of the connected equipment as well.
- When you connect the TV to other equipment, be sure to turn off the power and unplug all of the equipment from the wall outlet before making any connections.
- The output sound of the TV has a wide dynamic range. Be sure to adjust the audio amplifier's volume to a moderate listening level before turning on the power. Otherwise, the speakers and your hearing may be damaged by sudden high volume audio.
- Turn off the amplifier before you connect or disconnect the TV's power cord. If you leave the amplifier power on, the speakers may be damaged.

Connecting HDMI or DVI devices

- When turning on your electronic components, turn on the TV first, and then the HDMI and DVI device.
- When turning off your electronic components, turn off the HDMI and DVI device first, and then the TV.

Using the Basic Features

- This TV may not be compatible with features and/or specifications that may be added in the future.
- This TV is only operable with L-PCM and Dolby Digital on 32/44.1/48 kHz.
- This TV is able to connect with HDMI devices. But it is possible that some HDMI devices may not operate properly with this TV.

● HDMI or DVI Specifications

The HDMI input on your TV receives digital audio and uncompressed digital video from a HDMI and uncompressed digital video from a DVI device. This input is designed to accept HDCP program material in digital from CEA-861-D compliant consumer electronic devices (such as a set top box and DVD player with HDMI and DVI output). The HDMI input is designed for best performance with 480i /480p/720p/1080i/1080p(60Hz) (Video Format).

highdefinition video signals, but will also accept and display 576i /576p/720p/1080i (50Hz) (Video Format), 1080P 24Hz/25Hz/30Hz/50Hz/60Hz (Video Format), 3840X2160 24Hz/30Hz/50Hz/60Hz (Video Format).

- HDMI: High-Definition Multimedia Interface
- HDCP: High-bandwidth Digital Content Protection
- 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 TV.
- Acceptable PC signal format:
 - VGA (640 x 480) 60 Hz
 - S-VGA (800 x 600) 60 Hz
 - XGA (1024 x 768) 60 Hz
 - W-XGA (1280 x 768) 60 Hz
 - W-XGA (1360 x 768) 60 Hz
 - S-XGA (1280 x 1024) 60 Hz

However, these signal formats are converted to match the number of pixels of the LCD panel. Therefore, the TV may not display small text properly.

If you connect this unit to your PC, the compressed image is displayed in S-XGA mode, therefore the picture quality may deteriorate and characters may not be read.

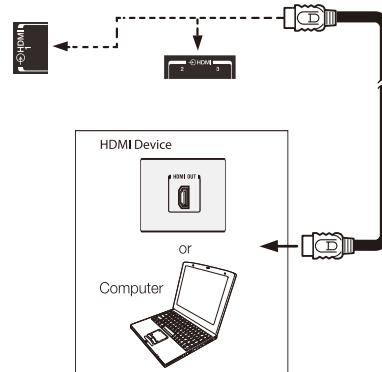
- L-PCM: Linear-Pulse Code Modulation
- Supported Audio format: L-PCM, Dolby Digital sample rate 32/44.1/48 kHz

● Connecting a HDMI Device

One HDMI cable (type A connector)

For proper operation, it is recommended that you use a short HDMI cable.

HDMI cable transfers both video and audio.



Note: The picture is only for reference.

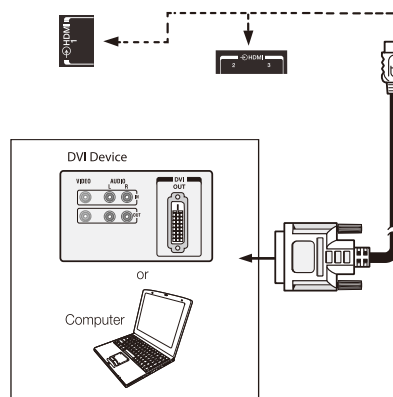
● Connecting a DVI Device

One HDMI (type A connector)-to-DVI adapter cable and audio cables.

HDMI (type A connector)-to-DVI adapter cable

For proper operation, the length of an HDMI-to-DVI adapter cable should not exceed 3 m. The recommended length is 2 m.

- Audio from DVI devices can be heard if audio cable is connected to audio (red/white) terminal of AV input.

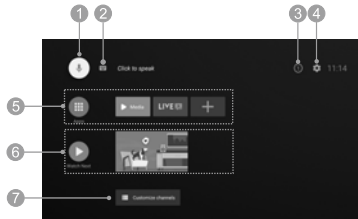


Note: The picture is only for reference.

Using the Smart Features

Displaying the Home Page

Please press **HOME** button to enter the home page to enjoy the following functions.



Note: The picture is only for reference.

- 1. Google Assistant:** Click to interact with Google Assistant of the TV.
- 2. Text Searching:** Click to start the searching by typing the text.
- 3. Notifications:** Remind you of system-critical information, such as low disk space, Google sign in or account errors, network connectivity issues, etc.
- 4. Settings:** Access the system setting of global settings.
- 5. Apps:** Show the list of favorite applications, or access the application center.
- 6. Watch Next:** Show the program you are watching or about to watch. You can add the desired program by long pressing OK button, then selecting "Add to Watch Next".
- 7. Customize Channels:** Add or remove the selected channel as you like.

Note:

- 1) The functions of home page may vary by different countries or models.
- 2) Before using network functions in home page like network applications and so on, please connect the TV to the network firstly.

Google Assistant

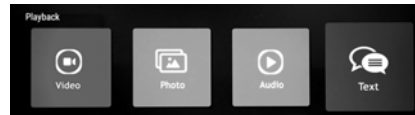
Google Assistant is available on your Android TV as your virtual personal helper. Press **VOICE** button to start and enjoy it. It is so wonderful that you will love it instantly! With Google Assistant, you can get what you want easily and quickly by using the power of your voice. There is no complicated or boring text typing, and what you need to do is just speaking to your TV.

To make the best use of Google Assistant, you could make related settings in home page. Access "Settings" at the left-bottom corner of the home Page. Select "Speech" in the list of "Preferences" setting, and then you can adjust the related settings of Google Assistant.

Note: Google Assistant is only available for some languages. Before using Google Assistant, please make sure that you have paired your Bluetooth remote control with the TV successfully.

Media Player

If you select **Media Player** and then press **OK**, the top screen of Media Player is displayed.



Note: The picture is only for reference.

Media Operation

- Step 1:** Connect your USB device to the TV.
- Step 2:** Press **HOME** button to enter the home page.
- Step 3:** Press **▲/▼/◀/▶** and **OK** button to select and enter "Media Player".
- Step 4:** Press **◀/▶** and **OK** button to select and enter a file type: **Video, Photo, Audio** or **Text**.
- Step 5:** Press **▲/▼/◀/▶** and **OK** button to select and play the desired media file which is the same file type as which you have selected in Step 4.
- Step 6:** Press **USB Play Control Buttons** (**▶/||/■/◀/▶**) to control the playback.
- Step 7:** Press **BACK** button to exit the media player.

Video Menu

While playing the video, press **MENU** button to display the video menu. It consists of the following 11 items.

Item	Description
Play/Pause	Play or pause the video playback
Repeat	None/Repeat One/Repeat All
Show Info	Show the information of the video
Picture Mode	User/Cinema/Sport/Vivid/Hi-Bright
Screen Mode	Auto/Normal/Scan/Dot by Dot
Picture Setting	Access to Menu Video
Audio Setting	Access to Menu Audio
Last Memory	Off/On
Subtitle Encoding	AUTO/UTF8/UTF16/BIG5/GB/GB18030/K01&R/ASCI

Using the Smart Features

Photo Menu

While browsing the photo, press **MENU** button to display the photo menu. It consists of the following items.

Item	Description
Play/Pause	Play or pause the photo
Repeat	None/Repeat One/Repeat All
Shuffle	Shuffle Off/Shuffle On
Duration(For Play)	Short/Medium/Long
Effect(For Play)	None/Dissolve/Wipe right/Wipe left/Wipe up/Wipe down/Box-in/Box-out/Random
Rotate(For Pause)	Rotate the picture
Zoom (For Pause)	Enlarge the photo
Show Info	Show the information of the photo

Audio Menu

While playing the audio, press **MENU** button to display the audio menu. It consists of the following items.

Item	Description
Play/Pause	Play or pause the audio
Repeat	None/Repeat One/Repeat All
Shuffle	Shuffle Off/Shuffle On
Show Info	Show the information of the audio
Lyric Options	You can set the Lyric options
Audio Setting	Access to Menu Audio

Text Menu

While reading the text, press **MENU** button to display the text menu. It consists of the following items.

Item	Description
Font	Size/Style/Color
Show Info	Show the information of the text

Settings

Device

- * **Network:** Connect the TV to wired or wireless network.
- * **Inputs:** Settings on connected inputs, standby inputs and so on.
- * **Chromecast built-in:** Make the settings related to the Chromecast built-in function, which allows your mobile or PC to be used to select and control the media playback on the TV. You can cast your favorite content from your mobile or PC to the TV in full quality.

There are two methods to cast content: the first employs mobile device and web apps that support the Chromecast Built-in technology; The second allows mirroring of content from the web browser Google Chrome (with the cast extension) running on a personal computer. In both cases, playback is initiated through the cast icon on the sender device.

- * **Sound:** Setup the system sound and surround sound as you like.
- * **Apps:** Permission settings on downloaded and system apps.
- * **Screen saver:** Select the screen saver and setup its start time and so on.
- * **Storage & reset:** Setup device & removable storage, and reset the user settings to the default value.
- * **Note:** All the user settings will lose completely after operating the function of "Factory data reset".
- * **About:** Show the detailed information about the TV.

Preferences

- * **Date & Time:** Select the type of automatic date & time, time zone and so on.
- * **Language:** Select the desired menu language.
- * **Keyboard:** Select the current keyboard as you like.
- * **Home screen:** Setup the Recommendations row, and Apps & games row of the home page.
- * **Search:** Settings on the Apps searching function, and so on.
- * **Google:** Settings on the Google searching function, and so on.
- * **Speech:** Setup the speech language and so on for the function of Google Assistant.
- * **Accessibility:** Provide a better viewing experience for the viewers who is blind or visually impaired, or who is deaf or hearing impaired. For such viewers, "watching" means listening with descriptions, or "listening" means reading the captions. You can make desired accessibility settings for different purposes in Home Page.
- * **Note:** In **Accessibility** settings, If you want to turn on (turn off) the **Talkback** function, please also turn on (turn off) the **Talkback Assistant** function together with it.

Remote & accessories

Setup to pair the Bluetooth devices with the TV.

Personal

- * **Location:** Select whether or not to share the TV location.
- * **Security & restrictions:** Setup to install safe applications into the TV.
- * **Usage & Diagnostics:** Select whether or not to allow Google to help improve the TV automatically by sending diagnostic and usage data.

Accounts

Sign into your Google account.

Appendix

Media Player Supported Formats

Video:

Video Codec(file type)	File Extension Name	Sampling rate SPEC	Bit Rate	Profile
MPEG1	AVI (.avi) ASF/WMV(.wmv .asf .asx) MP4 (.mp4 .m4v .mov .3gp) OGM (.ogm) MKV (.mkv .mks) MPEG program stream (.DAT .VOB .MPG .MPEG) TS (.ts .m2ts .tts .mpg)	720*576 @ 30fps	80Mbps	
MPEG2	AVI (.avi) ASF/WMV(.wmv .asf .asx) MP4 (.mp4 .m4v .mov .3gp) OGM (.ogm) MKV (.mkv .mks) MPEG program stream (.DAT .VOB .MPG .MPEG) TS (.ts .m2ts .tts .mpg)	1920*1080 @ 60fps	80Mbps	. Simple Profile Main Profile
MPEG4 (unsupported type:Mpeg4 V3/ Mpeg4 v2)	AVI (.avi) ASF/WMV(.wmv .asf .asx) MKV (.mkv .mks)	1920*1080 @ 60fps	80Mbps	ASP L5
H.263	ASF/WMV(.wmv .asf .asx) MP4 (.mp4 .m4v .mov .3gp)	1920*1080 @60fps	80Mbps	
H.264	AVI (.avi) ASF/WMV(.wmv .asf .asx) TS (.ts .m2ts .tts .mpg) Video ES(.m1v .m2v .m4v .264 .vc1)	3840x2304 @ 30fps 3840x2304 @ 60fps 1920*1080 @60fps	80Mbps	. Main Profile . High Profile L5,1 L5,2 L4,2
H265	AVI (.avi) MP4 (.mp4 .m4v .mov .3gp) MKV (.mkv .mks) TS (.ts .m2ts .tts .mpg) Video ES(.m1v .m2v .m4v .264 .vc1 .265)	1920*1080 @60fps 3840x2304 @ 30fps 3840x2304 @ 60fps	80Mbps	. Main Profile L4,1 L5,0 L5,1
MVC	TS (.ts .m2ts .tts .mpg)	1920*1080 @60fps	80Mbps	L4,1
WMV (unsupported type:wmi7/wmv8)	ASF/WMV(.wmv .asf .asx)	1920*1080 @60fps	80Mbps	. Simple Profile . Main Profile
VC1	TS (.ts .m2ts .tts .mpg) Video ES(.m1v .m2v .m4v .264 .vc1)	1920*1080@60fps	80Mbps	. Advanced Profile @Level 3
VP9	MKV (.mkv .mks)	1920*1080 @60fps 3840x2304 @ 30fps 3840x2304 @ 60fps	60Mbps	

Some files may not be played

Media Player Supported Formats

Audio:

Audio Codec(file type)	File Extension Name
MPEG1/2	MP4 (.mp4 .m4v .mov .3gp) MKV (.mkv .mks) MPEG program stream (.DAT, .VOB, .MPG, .MPEG)
MPEG4	ASF/WMV(.wmv .asf .asx) MPEG program stream (.DAT, .VOB, .MPG, .MPEG)
AC3	ASF/WMV(.wmv .asf .asx) MKV (.mkv .mks) MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Audio ES(.amr .ape .ac3 .ec3 .mp2 .mp3 .wav .flac .ogg)
EAC3	MKV (.mkv .mks) MPEG program stream (.DAT, .VOB, .MPG, .MPEG) Audio ES(.amr .ape .ac3 .ec3 .mp2 .mp3 .wav .flac .ogg)
AAC	AVI (.avi) ASF/WMV(.wmv .asf .asx) OGM (.ogm) MPEG program stream (.DAT, .VOB, .MPG, .MPEG)
WMA	AVI (.avi) ASF/WMV(.wmv .asf .asx) OGM (.ogm) ASF/WMV(.wmv .asf .asx)
FLAC	Audio ES(.amr .ape .ac3 .ec3 .mp2 .mp3 .wav .flac .ogg)

Some files may not be played

Media Player Supported Formats

Photo:

Container	File Extension Name	Photo	Resolution	Remark
JPEG	.jpeg	Base-line	17000x10000	
		Progressive	4000x4000	
GIF	.gif	static		No-limitation(depend on dram size)
		animation		No-limitation(depend on dram size)
PNG	.png			No-limitation(depend on dram size)
BMP	.bmp		16383x16383	

Some files may not be played

Media Player Supported Formats

Text:

Number	Container	File Extension Name
1	text	.txt


Some files may not be played

Troubleshooting

Before calling a service technician, please check the following table for a possible cause of the symptom and some solutions.

Symptom and solution


TV will not turn on

- Make sure the power cord is plugged in, and then press .
- The remote control batteries may be dead. Replace the batteries.

No picture, no sound

- Check the aerial connections.

No sound, picture OK

- The sound may be muted. Press VOL +, – or .
- The station may have broadcast difficulties. Try another channel.
- If the problem happens when DVD is connected to HDMI 1 or HDMI 2 terminal, please change the setting of "Signal Format" to be "4K@60Hz 4:2:0"(MENU->SETUP->HDMI 2.0 Setting->Signal Format), or directly switch to connect DVD with HDMI 3 terminal.

Poor sound, picture OK

- The station may have broadcast difficulties. Try another channel.

Poor picture, sound OK

- Check the aerial connections.
- The station may have broadcast difficulties. Try another channel.
- Adjust the **PICTURE** menu.

Poor reception of broadcast channels

- Check the aerial connections.
- The station may have broadcast difficulties. Try another channel.
- Make sure the **Color System** is properly set.

Teletext problems

- Check the aerial connections.
- Good performance of text depends on a good strong broadcast signal.

Some pixels of the screen do not light up

- The LCD display panel is manufactured using an extremely high level of precision technology, however, sometimes some pixels of the screen may be missing picture elements or have luminous spots. This is not a sign of a malfunction.

The picture brightness varies when you display switch the TV on.

- If you switch the TV on at 0°C and under, wait until the warms up.

Multiple images

- The station may have broadcast difficulties. Try another channel.
- Aerial reception may be poor. Use a high directional outdoor aerial.
- Check if the direction of the aerial has changed.

Poor color or no color

- The station may have broadcast difficulties. Try another channel.
- Adjust the picture settings in Video menu.

The remote control does not operate

- Remove all obstructions between the remote control and the remote control sensor on the TV. The remote control batteries may be dead. Replace the batteries.

Reference Section

Broadcast System

Broadcast transmission systems of each country or region

Asia M.E.

Country or region	Color	Sound
Bahrain, Kuwait, Israel, Oman, Qatar, United Arab Emirates, Yemen. Indonesia, Malaysia, Singapore, Thailand, etc.	PAL	B/G
China, Vietnam	PAL	D/K
China Hong Kong	PAL	I
Iraq, Islamic Republic of Iran, Lebanon, Saudi Arabia, etc.	SECAM	B/G
Russian Federation, etc.	SECAM	D/K
Myanmar, Republic of the Philippines, etc.	NTSC	M

Oceania

Country or region	Color	Sound
Australia, New Zealand, etc.	PAL	B/G

Africa

Country or region	Color	Sound
Republic of South Africa, etc.	PAL	I

South America

Country or region	Color	Sound
Brazil	PAL	M
Chile, Colombia, etc.	NTSC	M

NOTE:

PAL, SECAM and NTSC 3.58 (MHz) are different colors signal broadcast transmission systems applicable to different countries or region. NTSC 4.43 (MHz) is used in special VCRs to playback NTSC recorded video tape through PAL TV equipment.

Specifications

Power Source

100V-240V AC, 50/60Hz

Power Consumption

49": 140 W, <0.5W(standby)
55": 160 W, <0.5W(standby)
65": 250 W, <0.5W(standby)

Dimensions (With stand)

49": 1095.2 (W) X 688.9 (H) X 224.7 (D) mm
55": 1234.6 (W) X 768.2 (H) X 224.7 (D) mm
65": 1454.7 (W) X 894.5 (H) X 302.4 (D) mm

Dimensions (Without stand)

49": 1095.2 (W) X 663.2 (H) X 100.6 (D) mm
55": 1234.6 (W) X 742.6 (H) X 100.6 (D) mm
65": 1454.7 (W) X 867.3 (H) X 103.7 (D) mm

Net Weight (With stand)

49": 12.3 kg
55": 15.1 kg
65": 24.4 kg

Net Weight (Without stand)

49": 11.8 kg
55": 14.6 kg
65": 23.8 kg

Analog Broadcast Systems

Channel coverage:

PAL	B/G	(CCIR)	VHF	2 - 12
			UHF	21 - 69
			CATV	X - Z+2, S1 - S41
PAL	I	(UK)	VHF	-
			UHF	21 - 69
			CATV	-
PAL	D/K	(CHINA)	VHF	1 - 12
			UHF	13 - 57
			CATV	Z1 - Z38
SECAM	B/G	(CCIR)	VHF	2 - 12
			UHF	21 - 69
			CATV	X - Z+2, S1 - S41
SECAM	D/K	(OIRT)	VHF	1 - 12
			UHF	21 - 69
			CATV	X1 - X19
NTSC	M	(US)	VHF	2 - 13
			UHF	14 - 79
			CATV	A6 - A1, A - W, AA - ZZ, AAA, BBB

Digital Broadcast Systems

DVB-T/T2 and DVB-C Broadcast systems

Color System

PAL, SECAM, NTSC 3.58/4.43

Aspect Ratio

16:9

Visible Size (diagonal)

49": 124 cm
55": 139 cm
65": 165 cm

Number of Pixels

3840(H) X 2160(V) dots

Audio Power

10W + 10W

Speakers

257 X 85 X 65 mm (2pcs).

Operating Condition

Temperature	0°C - 35°C
Humidity	20% - 80% (No moisture condensation)

Supplied Accessories

Owner's manual (1), Remote control (1), Batteries (2), AC power cord (1), Pedestal stand (1), Screws (4).

Input/Output Terminals

↻ DIGITAL AUDIO	Output	SPDIF (Optical)
⊖ HDMI-3	Input (type A) 19 pin	A/V Digital
⊖ AV IN	Input (Video and Audio L/R)	
⊖ ANT IN	Antenna	IEC type
LAN port	RJ-45	
USB port	Media Player Interface version:	
USB 1	USB 2.0	
USB 2	USB 3.0	
	USB class: Mass Storage	
	File system: FAT16 & FAT32	
SVC PORT	Only for service	

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