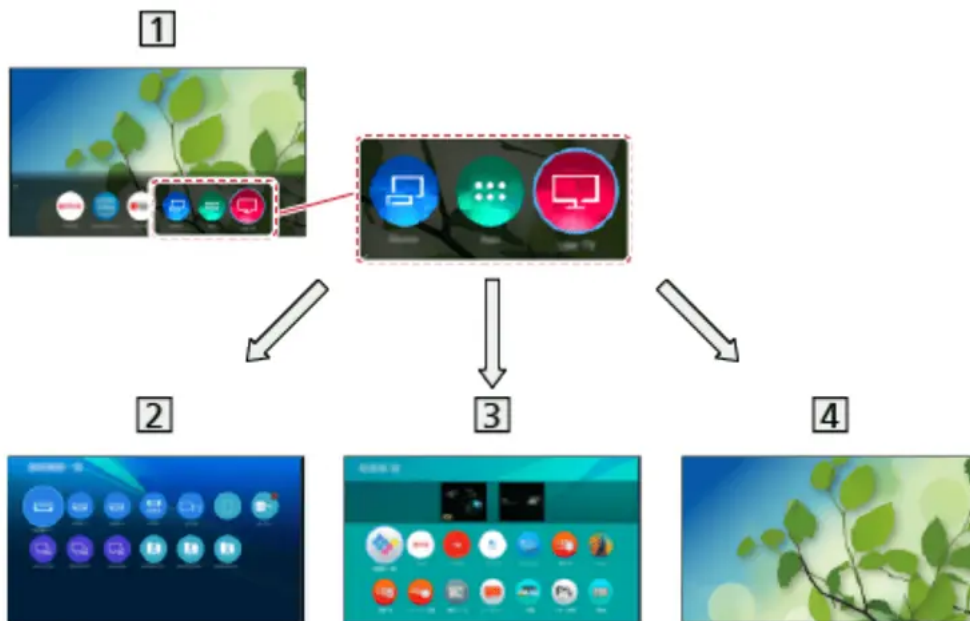


## Using Home

### Home

#### Information


- “Home” is a gateway to the TV programs, applications and connected devices.
- Home is displayed by pressing **HOME** and it provides you an easy way to access all the features as shown below (example)



#### 1. Home


##### 2. Devices

- Gateway to connected devices (HDMI equipment, USB device, network equipment, etc.)

 → Using Home > Devices


##### 3. Apps

- Gateway to various applications (Internet content, etc.)

 → Using Home > Apps

##### 4. Live TV

- Gateway to TV programs

 → Using Home > Live TV

Be sure to update the software when a software update notice is displayed on the TV screen. If the software is not updated, you may not be able to use Home. You can update the software later manually

 → Network services > Network settings > Software update

### How to use


From Home, you can access all the features such as TV programs, applications and connected devices.


1. Display Home with **HOME**.

(Example)



- Press  $\Delta$ / $\nabla$  to display the tabs which provide you with the relevant program information, recommended content, etc.
- A broadband network environment is required to use internet services.

 → Network services > Connect to network > Network connection types

2. Select Devices / Apps / Live TV and press  to access.

- To watch full-screen TV, select Live TV.

(Example)






= Note =

- The design and specifications are subject to change without notice.



## Search

You can search for content from various sources.

1. Display Home with **HOME**.
2. Press  to select Search and press  to access.
  - A search history may be displayed and you can select it for keyword search.
  - To delete the search history
    1. Select Search or a keyword and press **OPTION**.
    2. Select Delete all histories / Delete a history and press .
3. Follow the on-screen instructions.

## Settings

You can set up Home, tabs, etc.

1. Display Home with **HOME**.
2. Press  repeatedly to display the setting tab.
3. Select one of the following items and press  to access. Tab Settings / Enable Auto Pin / Disable Auto Pin
4. Follow the on-screen instructions.

### Tab Settings




- Edits the tabs of Home.


### Enable Auto Pin / Disable Auto Pin

- Selects whether to automatically add a shortcut for a feature frequently used on Home.

## **Pin to HOME**

You can add a shortcut for frequently used feature on **HOME**.

1. Display Home with HOME.
2. Select Devices / Apps / Live TV and press  to access.
3. Select a feature (device / application / TV program).
4. Display the option menu with **OPTION**.
5. Select Pin to HOME and press  to set.
6. Select the position to add on Home and press  to set.
  - To remove a shortcut from Home, set Unpin from HOME.

 → Using Home > Home > Option menu

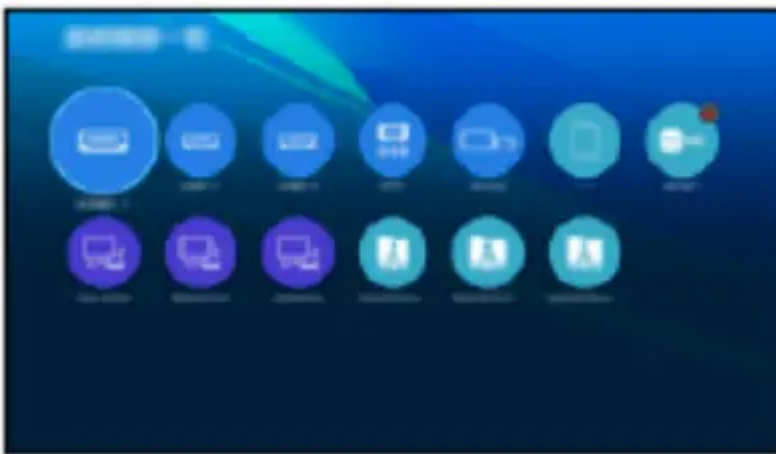
## Devices







### How to use

Connected devices (HDMI equipment, USB device, network equipment, etc.) can be accessed easily from Devices.

1. Display Home with **HOME**.
2. Select Devices and press to access.



(Example)




- To exit Devices RETURN / EXIT
  - To add a shortcut icon  → Using Home > Home > Pin to HOME
3. Select a device and press  to access.
    - For external equipment  → Watching TV > Blu-ray, DVD, Game Console, etc.
    - For devices for Media Player  → Media player > Get started
    - For network equipment  → Home network > Get started
    - For mirroring function  → Convenience features > Control by Smartphone, etc. > Mirroring

### Option menu


1. Display the option menu with **OPTION**.

2. Select one of the following items and press  to access. Pin to HOME / Accessibility / Switch to Component / Switch to Video / Show Info.
3. Set the item and press  to store.

### Pin to HOME

- Adds a shortcut for a frequently used feature on Home.  → Using Home > Home > Pin to HOME

### Accessibility

- Guidance settings for visually impaired users  → Convenience features > Using Voice guidance > Voice guidance

### Switch to Component / Switch to Video

- You can select Component and Video in AV.


### Show Info.

- Displays the information about the selected device.

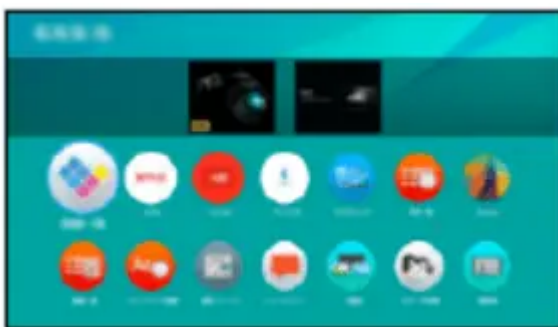
## **Apps**

### **How to use**


Various applications (Internet content, etc.) can be accessed easily from Apps.


1. Display Home with **HOME**.
2. Select Apps and press  to access.

(Example)





- To exit Apps RETURN / EXIT
- To add a shortcut icon  → Using Home > Home > Pin to HOME


- You can assign a favorite application to MY APP of the TV's remote control.  →  
Using Home > Apps > Option menu

3. Select an application and press  to access.
4. Follow the on-screen instructions.

### Option menu


1. Display the option menu with **HOME**.
2. Select one of the following items and press  to access. Pin to HOME / Set as My App / Move / Lock / Unlock / Uninstall / Show Info.
3. Set the item and press  to store

#### Pin to HOME

- Adds a shortcut for a frequently used feature on Home.  → Using Home > Home > Pin to HOME

#### Set as My App

Assigns your favorite application to MY APP of the TV's remote control.


-  is displayed on the assigned application.
- To change the assignment, set Set as My App while the cursor is on another application.

#### Move

- Arranges the position of the applications

#### Lock, Unlock

Locks / unlocks a specific application to restrict access (if available).

- Password is required to access to locked application.  → Convenience features > Parental control > Password setting

#### Uninstall

- Deletes an application from Apps (if available).

#### Show Info.

- Displays the information about the selected application.



## Live TV

### How to use

Live TV is a gateway to the TV programs.

1. Display Home with **HOME**.
2. Select Live TV.
3. Press to access. (Example)



- For details of watching TV  → Watching TV > Antenna / Cable service without a box
- To add a shortcut icon  → Using Home > Home > Pin to HOME

## Watching TV

### Cable / Satellite / Fiber Optic box

#### Initial setting

Depending on the model, it may be necessary to remove the terminal cover / cable cover before connecting or disconnecting cables.

#### 1. Connecting

Select the wiring method connecting your box to the TV, AV IN or Antenna/ Cable in.

- HDMI will provide the best HD picture

#### 2. Change INPUT



Press the **INPUT** button to select the proper connection. Wait for 2 seconds.

- The menu choices vary depending on which input is selected.

#### 3. Power on your Cable, Satellite or Fiber Optic box

Use the box's remote control to change channels.

- If the box is connected to the TV using a COAX cable (Antenna/Cable in), then set the TV channel to CH3 or CH4. Note that the picture will not be in HD.
- CC/SAP is not available when watching TV with a Cable or Satellite box connected via HDMI.
- If you have a High Definition box, ensure that it is outputting 720p or 1080i signal. Tip: press the TV's **INFO** button to verify.
- Check your box's "aspect" or "format" settings. It should be set to 16:9, Widescreen or Full.
- If the audio volume is too low, check the box's audio settings.
- Contact your Cable or Satellite provider for instructions of any box settings.

## Antenna / Cable service without a box

### Initial setting

Depending on the model, it may be necessary to remove the terminal cover / cable cover before connecting or disconnecting cables.

#### 1. Connect coax

Connect a COAX wire from either an Antenna or Basic Cable service to the TV's "ANTENNA/CABLE IN" screw terminal.



**1** TV (ANTENNA/CABLE IN)

**2** Antenna

#### 2. Scan the channel

 **MENU** → Menu > Setup > ANTENNA/Cable setup > ANTENNA/ Cable signal, Auto program

1. Select either Cable or Antenna programming source in ANTENNA/ Cable signal.
2. Select Auto program and then the appropriate scan mode: (All channels / Analog only / Digital only)

### 3. Start scanning.

- The tuner setup menu (auto scan, etc.) is only available when INPUT is set to TV.
- If no channels are found by the end of the scan, then check the following:
  - Antenna's position - or availability of Cable service.
  - Cable, Satellite or Fiber Optic services with a box are typically connected to the TV's A/V inputs, preferably HDMI, for best HD picture. In such case, the channel scanning is not needed.

## Closed Caption

### Viewing with Closed Caption



Switches the Closed Caption mode. (On mute / On / Off)

- CC is not available when watching TV with a Cable or Satellite box connected via HDMI.
- Contact your Cable or Satellite operator for instructions on enabling CC with their box.
- The TV's CC button does not operate the Satellite or Cable box's CC function.
- For viewing the CC of digital broadcasting, set the aspect to Full (If viewing with JUST, ZOOM or 4:3, characters might be cut off).
- If the CC is set to On on both the receiver and TV when the signal is 480i (except for the HDMI connection), the CC may overlap on the TV.
- If a digital program is being output in analog format, the CC data will also be output in analog format.
- If the recorder or output monitor is connected to the TV, the CC needs to be set up on the recorder or output monitor.

## 4K compatible equipment

### Connecting and viewing

You can watch content in the 4K format that has twice the horizontal and vertical resolution of the 1080p signal.





- External equipment and cables shown are not supplied with this TV.
- To watch 4K content, connect the 4K compatible equipment to the HDMI input with a 4K compatible HDMI cable respectively.
- Depending on the model, it may be necessary to remove the terminal cover / cable cover before connecting or disconnecting cables.

### Connections for 4K contents



- 1 HDMI IN
- 2 HDMI cable (4K compatible cable)
- 3 HDMI OUT
- 4 4K compatible equipment

1. Connect device
2. Select input and display

1. Display Input select menu (with the connected equipment turned On)  **INPUT**
2. Select HDMI input using   and press .

### About 4K format

4K format refers to approximately 4,000 pixels of horizontal resolution which has several different digital formats.


- This TV supports 4K UHD and DCI 4K (4,096 x 2,160).

#### 4K format of HDMI

- 4K UHD: 3,840 x 2,160 (60p, 50p, 30p, 25p, 24p)
  - Aspect is fixed to FULL.
- DCI 4K: 4,096 x 2,160 (60p, 50p, 30p, 25p, 24p)
  - Actual resolution is 3,840 x 2,160p.
  - Aspect is fixed to V Full.

The above signals are reformatted for optimal viewing on your display.

Aspect is fixed to FULL when watching the content of 4K format except DCI 4K

- For more information about Aspect  → Watching TV > For best picture > Screen mode for 4K format

### Blu-ray, DVD, Game Console, etc.


#### Connecting and viewing

1. Connect device





Verify that the device is connected to the TV properly and connect to desired terminal. Note which terminal the device is connected to (HDMI, Component or Video)

Component and Composite (Video) in terminals are shared.



Please be careful not to confuse the connection when you use Component or Video.

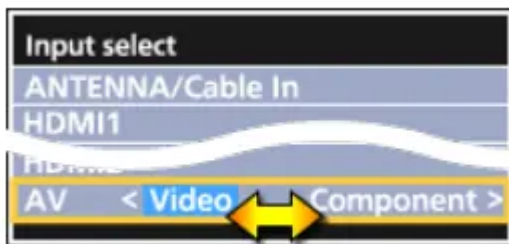
- For Example of AV connections  → Watching TV > Blu-ray, DVD, Game Console, etc. > Example of AV connections


## 2. Select Input

1. Display Input select menu (with the connected equipment turned On)  **INPUT**
2. Select the input used in step 1 Select correct input source, using  /  and press .

When you connect to Component or Video input, you need to select Video or Component.

- Press **INPUT** and select AV: Video ↔ Component.
- Press  /  to choose Video or Component.



- To edit and customize the TV's input label  → All settings > Setup > Display customization

## 3) Operate using your device's remote control

The menu choices vary depending on which input is selected.

### Example of AV connections

Some features are not available on all models.

External equipment and cables shown are not supplied with this TV.

- Depending on the model, it may be necessary to remove the terminal cover / cable cover before connecting or disconnecting cables.

### Connecting to the HDMI input (Best for HD viewing)

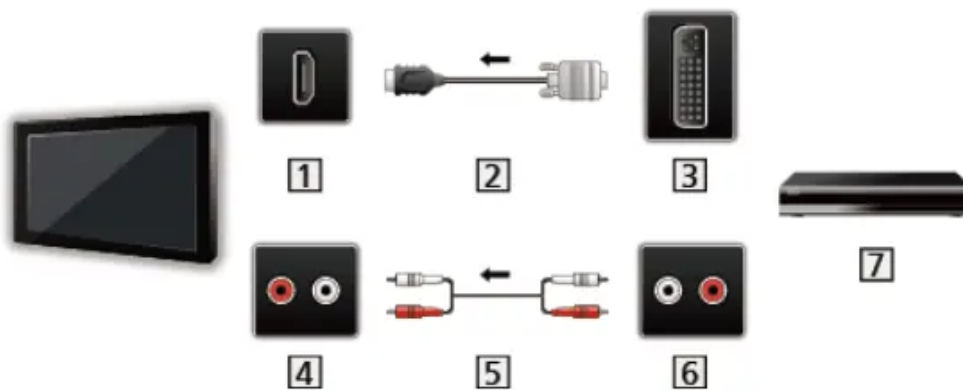
Recommended to use this connection, if the connected equipment has HDMI terminal.



- 1 HDMI IN
- 2 HDMI cable
- 3 HDMI OUT
- 4 AV Equipment (e.g. Blu-ray Disc player)

For devices with DVI output

Recommended to use this connection, if the connected equipment has DVI terminal only.

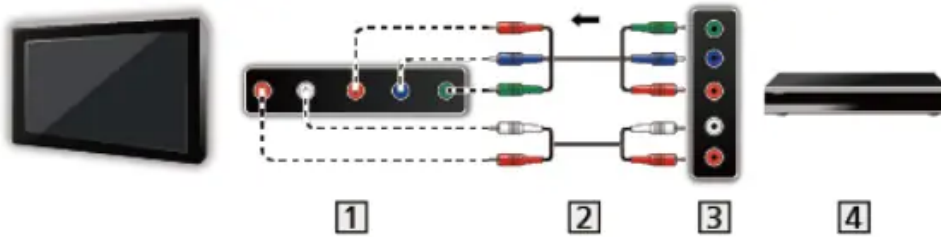


- 1 HDMI IN
- 2 HDMI-DVI Conversion cable
- 3 DVI OUT
- 4 AUDIO IN

- 1. HDMI IN
- 2. HDMI-DVI Conversion cable
- 3. DVI OUT
- 4. AUDIO IN
- 5. Audio cables (Shielded)
  - Use shielded audio cables.
- 6. AUDIO OUT
- 7. AV Equipment (e.g. Blu-ray Disc player)

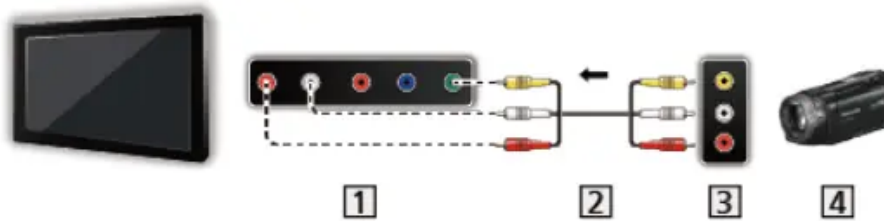
Connecting to the COMPONENT input

Recommended to use this connection, if the connected equipment has the Component terminal only







- 1 COMPONENT IN
- 2 Component cables (Shielded)
  - Use shielded component cables.
- 3 COMPONENT OUT
- 4 AV Equipment (e.g. Blu-ray Disc player)

Connecting to the VIDEO input (For SD (Standard Definition) only)



- 1 COMPOSITE IN
- 2 Composite cables (Shielded)
  - Use shielded composite cables.
- 3 COMPOSITE OUT
- 4 AV Equipment (e.g. Camcorder)

### HDMI HDR setting


1. Display the Menu and select Setup.  **MENU** → Menu > Setup
2. Select HDMI HDR setting and press .
3. Set the item and press   → All settings > Setup > Useful settings

### HDMI connection notice

HDMI (High-Definition Multimedia Interface) allows you to enjoy highdefinition digital images and high-quality sound by connecting the TV unit and HD devices.

HDMI-compatible equipment\*1 with an HDMI or DVI output terminal, such as a Cable or Satellite box or a DVD player, can be connected to the HDMI connector using an HDMI compliant (fully wired) cable.

- HDMI is the world's first complete digital consumer AV interface complying with a non-compression standard.
- If the external equipment has only a DVI output, connect to the HDMI terminal via a DVI to HDMI adapter cable\*2 .
- When the DVI to HDMI adapter cable is used, connect the audio cable to the audio input terminal.
- Input audio signal: LPCM, Dolby Audio (Dolby Digital, Dolby Digital Plus, Dolby TrueHD), Dolby Atmos
  - Audio settings can be made on HDMI audio format in the Sound Menu.

 → All settings > Sound > Advanced settings

\*1 : The HDMI logo is displayed on an HDMI-compliant device.

\*2 : Inquire at your local digital equipment retailer shop.

### HDMI connection caution

- Audio settings can be made on HDMI audio format / HDMI input in the Sound menu.

 → All settings > Sound > Advanced settings

- If the connected device has an aspect adjustment function, set the aspect ratio to "16:9".
- The HDMI connectors are "type A".
- The HDMI connectors are compatible with HDCP (High-Bandwidth Digital Content Protection) copyright protection.
- Devices with no digital output terminal may be connected to the input terminal of either "COMPONENT IN", or "VIDEO IN" to receive analog signals



## All settings



### How to use


#### Setting the menu


Various menus allow you to set the picture, sound and other functions.


- Some menus are grayed out depending on the input signal or condition. (e.g. Zoom adjustments will be grayed out if the aspect is not set to ZOOM.)

1. Display the menu.   → Menu

2. Select the menu from menu bar. Select the desired menu using  from menu bar and press .

3. Select the item and adjust. Select the desired item using .

- You can also access to the desired menu using .

- Adjust the item: Using .

- Set/change the item: Using .

- Displays the functions that can be adjusted.
- Some functions will be disabled depending on the type of input signal.
- Some settings in Picture menu may also affect the menu screen when watching the 4K contents.
- Depending on the model, the initial setting value of Picture mode may differ between Home and Store even when selecting the same picture mode. The setting value can be adjusted by pressing **MENU** and selecting Picture.

## Picture

### Basic settings

Some features are not available on all models. Available menu items are displayed on your TV screen.

*Adjust the image or picture quality.*

 **MENU** → Menu > Picture

Picture mode: (Vivid / Standard / Professional photo / Home theater / THX Cinema /THX Bright Room / Cinema / Custom / Professional1 / Professional2 / Dolby Vision Vivid / Dolby Vision Bright / Dolby Vision Dark) Select from preset picture modes for optimal viewing. Mode is saved separately for each input.

Luminance level: Adjusts the panel's luminance (light intensity).

- Gray-out if Professional mode (isfcc) Lock is on.

Back light: Adjusts backlight's luminance (light intensity)

Contrast, Brightness, Color, Tint, Sharpness

Adjusts the color, brightness, etc. for each picture mode to suit your preference.

- Display range
  - Contrast / Color / Sharpness: 0 - 100
  - Brightness / Tint: -50 - +50

- Gray-out conditions:
  - Professional mode (isfccc) Lock is on.
  - 1080p pixel by 4pixels is set to On. (only for Sharpness)

### Color temp.

Selects color temperature preference, from “cool” (bluish) to “warm” (reddish) or normal.

- Gray-out if Professional mode (isfccc) Lock is on.

### **HDR brightness setting**

 **MENU** → Menu > Picture > HDR brightness setting

### Dynamic HDR Effect (On / Off)

Automatically adjusts the luminance according to an HDR video signal.

- Not valid when Picture mode is set to Dolby Vision Vivid, Dolby Vision Bright or Dolby Vision Dark

### HDR auto brightness (On / Off)

Automatically adjusts the luminance according to a lighting condition.

### HDR brightness enhancer

Adjusts the luminance when watching an HDR video in a bright environment.

- Not valid when Picture mode is set to Dolby Vision Vivid, Dolby Vision Bright or Dolby Vision Dark
- Supporting HDR does not increase the peak brightness capabilities of the TV panel.

### **Other settings**

Some features are not available on all models. Available menu items are displayed on your TV screen.

### Lock settings

- Locks the picture menu for Professional1/Professional2 and each input.
- Settings are basic picture settings and Pro settings.

### Copy adjustments

- You can copy the selected Cinema, Custom, Professional1, Professional2, Dolby Vision Bright or Dolby Vision Dark settings and apply them to all or another input.
- Settings are basic picture settings and Pro settings.

### Reset to defaults

- Resets all picture adjustments to factory default settings except for the advanced settings.

## Sound

### Basic settings

Some features are not available on all models. Available menu items are displayed on your TV screen.

Adjusts audio quality.

 **MENU** → Menu > Sound

### Sound mode

(Standard / Music / Speech / Stadium / User)

Selects your favorite sound mode.

- The selected mode affects all input signals.

Standard: Provides the suitable sound quality for all types of scenes.

Music: Improves sound quality for watching music videos, etc.

Speech: Improves sound quality for watching news, drama, etc.

Stadium: Improves sound quality for watching sports, etc.

User: Adjusts the sounds manually by using the equalizer to suit your favorite sound quality.

- For the User mode, Equalizer will appear on the Sound Menu instead of Bass and Treble. Select Equalizer and adjust the frequency.
- Gray-out when using the Home Theater.

### Bass

Increases or decreases the bass response.

- Gray-out if Sound mode is set to User.
- Gray-out when using Home Theater

### Treble


Increases or decreases the treble response.

- Gray-out if Sound mode is set to User.
- Gray-out when using Home Theater.

Equalizer (150Hz / 250Hz / 500Hz / 1kHz / 2kHz / 4kHz / 8kHz / 12kHz / Reset to defaults)

Adjusts the frequency level to suit your favorite sound quality.

- This function is available when Sound mode is set to User.
- Select the frequency and change the frequency level by using the cursor button.

- To enhance the bass sound, raise the level of the lower frequency. To enhance the treble sound, raise the level of the higher frequency.
- To reset the levels of each frequency to the default settings, select Reset to defaults by using the cursor button, and then press the  button.
- Gray-out when using Home Theater.

### Balance

Adjusts the volume level of speakers.

L/R: Adjusts the volume level of Front Left, Upward-firing Left speakers and Front Right, Upward-firing Right speakers.

Center: Adjusts the volume level of center speaker and other speakers.

Up/Down: Adjusts the volume level of Upward-firing speakers and others.

Reset to Defaults: Resets Balance to the default settings.

- Gray-out when using Home Theater.

### Dolby Atmos (On / Off)

- Provides the precise sound of Dolby Atmos when playing Dolby Atmos content. Set to On for general use.

### Sound Field Creation (Standard / Studio / Theater / Stadium / Direct Through)









- Selects your favorite sound field setting.

## Support / FAQ

### Help menu

#### Using Help menu

The TV's built-in self-help resources.

1. Display the menu.  **MENU**  Menu
2. Select Help from menu bar. Select the desired menu using  /  from menu bar and press .
3. Select the Help menu. Select the desired menu using  /  and press .

(eHELP / TV Self-test / Version / Device information)

eHELP: This screen

TV Self-test: Verifies proper function of the TV for picture and sound.

- Follow the instructions on the screen to complete the self test.

Version: Displays TV's software (firmware) version. Device information: Displays the device information of this TV.

## FAQ

### Picture - Viewing

#### Frequently Asked Questions


For updated information, please visit Panasonic web site.

1. How do I view the picture from devices such as: Cable/Satellite box, game console, Blu-ray or DVD player?
  - Press the INPUT button on the remote to select the correct input source.
  - Check that the device is turned on and functioning correctly.
2. Why doesn't the picture look like it is in High Definition?
  - Press the INFO button on the remote to confirm the type of signal being received. HD signal should be 720p, 1080i or 1080p.
  - Select a High Definition channel from your HD source (Cable, Satellite or fiber optic service). HD channels sometimes broadcast non-HD content.
  - Ensure that your HD source (HD box, Blu-ray player, etc.) is connected to the TV with an HDMI or Component cable and set to output an HD video signal.

### Picture - Snowy / none


1. Why is there no picture or just a blue, black or snowy screen being displayed?
  - Press MENU and select Help. Then select TV Self-test. If the test picture displays correctly, then the problem is with the external device (e.g. Cable box, DVD player, etc.) or its connection to the TV.
  - Check if the power cord is plugged in and the TV is turned on (front red LED light should be on; not blinking)
  - Press the INPUT button on the remote to select the correct input source.
  - Ensure all connections are correct and secure. Especially check for Component and VIDEO connection since these terminals are shared.
  - When using an external video source, such as a Cable/Satellite box or DVD player, check that the device is on and functioning correctly.
  - Press MENU on the TV's remote control. If the menu is displayed, then the TV is working; recheck above steps.

## 2. Why is the picture snowy when ANTENNA/Cable setup is selected?

- When using a cable service (without a box), check that all connections are secure.
- When using a cable or satellite box, change the connection (wiring) to Composite, Component or HDMI.
- If you're using an antenna, then check that connections are secure. Change the position or direction of the antenna and check the Signal meter.   
Menu > Setup > ANTENNA/Cable setup > Signal meter

### Picture - Distortion

#### 1. The picture is distorted after selecting the "AV" input. What should I do?

- Ensure that the device is connected correctly to the TV's Video/ Component green connector.
- If using VIDEO or COMPONENT: Press INPUT, scroll to AV, press  to select Video or Component.



#### 2. Why do black bars appear on the top and bottom and/or sides of the screen?


- Change the format (aspect ratio) of the picture by pressing the FORMAT button on the remote control.
- Check the aspect settings on your external video source, such as Cable/ Satellite box, DVD/Blu-ray Disc player, etc.
- Some content, such as film-based movies, are available in extra-wide format. Top and bottom bars are unavoidable.




#### 3. Why is the picture chaotic and/or torn and/or with a buzz in the speakers?

- Check if electrical products such as kitchen appliances, fluorescent lights or light dimmers are nearby. They may interfere with the TV's picture.
- Try viewing a picture from another device, such as a DVD player or a game console, to narrow down the source of the problem.

### Picture - Unusual




#### 1. Why the pictures from external equipment are unusual when the equipment is connected via HDMI?

- Check the HDMI cable is connected properly.  Watching TV > Blu-ray, DVD, Game Console, etc. > Connecting and viewing
- Turn the TV and equipment off, then turn them on again.

- Check an input signal from the equipment.  → Watching TV > Blu-ray, DVD, Game Console, etc. > Input signal
- Use equipment compliant with EIA/CEA-861/861D.
- Set HDMI auto setting in the Setup Menu to Mode1.  → Watching TV > 4K compatible equipment > Connecting and viewing
- The valid 4K format varies depending on the HDMI terminal.  → Watching TV > 4K compatible equipment > About 4K format

## Picture - Continue



Some features are not available on all models.

1. Why is there a black box on the screen?
  - Check the settings of Closed Caption (CC).
2. Why do some small spots on the screen remain bright or dark?
  - The panel is made up of a few million pixels and is produced with advanced technology through an intricate process. Sometimes, a few pixels may be bright or dark.
  - These pixels do not indicate a defective panel and will have no impact on the performance of the TV.
3. Why is the picture brightness changing?
  - Turn the C.A.T.S. feature off.   → Menu > Picture > C.A.T.S.
4. Why does the screen turn off?
  - Check if the TV is in energy saving mode.  → Convenience features > Eco navigation > Eco navigation
5. Why is there a short black image on the screen?
  - A black image is displayed to avoid picture distortion when an input signal changes.

Only for the OLED TV
6. A white horizontal line appears in Standby mode.
  - A white horizontal line may appear on the screen for a while to adjust the panel. This is not a malfunction.


## Sound - None

## 1. Why is there no sound coming from the TV?

- Make sure the volume is up and mute is off.
- Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control.
- If the TV is connected to a Panasonic Home Theater via HDMI cable, then check VIERA Link controls.
- If the TV is connected to a Home Theater via optical cable, then: Check the connection, the audio system is on, the correct input is selected.
- Check HDMI in analog/digital audio settings.   → Menu > Sound > HDMI input

## Sound - Unusual

### 1. Why is the sound unusual, distorted, low volume or in another language?

- Check that the correct SAP (Secondary Audio Program) is selected by pressing the SAP button on the remote control.
- Check that all connections of external equipment connected to the TV are secure.
- When using Cable or Satellite box, check the device's audio settings. (Example: try changing the box's Audio Range to "narrow")
- Set HDMI auto setting in the Setup Menu to Mode1.  → Watching TV > 4K compatible equipment > Connecting and viewing

### 2. Why is there a clicking, ticking or buzzing sound coming from the TV unit?

- When TV power is turned on or shut off there are electrical components that make a click sound. This is normal operation.
- Changes in the temperature and humidity of the room may cause thermal expansion and contraction that can produce sounds. This is not a sign of faulty operation or a malfunction.

## Networking

How do I get Internet services to work on my TV?

1. You need a broadband (High-Speed) Internet service with a speed of no less than 1.5 Mbps.
2. Connect the TV to the Internet through your router by an Ethernet cable or a Panasonic Wireless LAN (built-in).
3. Start Network connection wizard, then follow the directions on the screen to connect. If the connections still fails, then check with your Internet service provider or router/modem

manufacturer if there are firewall, content filter or proxy settings that may block the TV from accessing the Internet.

## Software update

1. How do I check for the latest software (firmware) version for my TV?


- In the main menu, select Network. Select Software update. The current version and latest version software will be displayed. If software update is grayed out, the TV is not connected to the Internet. If a newer version is available, update your TV. Follow the on screen instructions, do not power off the TV until the update is complete. Be patient; firmware update may take a while.

2. How do I get the software update information and download periodically?

- In the main menu, select Network. Highlight New software notice. Make sure that setting is On. When the TV is turned On, update message is displayed if available. Follow the directions on the screen to download.


## Voice guidance

How does the voice guidance feature work?

- This function provides you with useful voice guidance for basic features.
- For more information about settings or operation of voice guidance, please refer to the page below.  → Convenience features > Using Voice guidance

## Eco navigation

Why does my picture look dim and/or sometimes changes brightness levels?

- This TV is equipped with a money saving feature called Eco Navigation. The TV automatically dims the brightness to save energy. It also puts the picture in “Standard” mode and enables the C.A.T.S. feature so it will adjust the picture brightness automatically depending on the rooms ambient lighting conditions. This mode will also turn the TV power off if no signal is detected for 10 minutes.
- For more information about Eco navigation, please refer to the page below.  → Convenience features > Eco navigation > Eco navigation

## Other

Some features are not available on all models. Available menu items are displayed on your TV screen.

1. What is the easiest and best way to connect a High-Definition Cable or Satellite box to the TV?

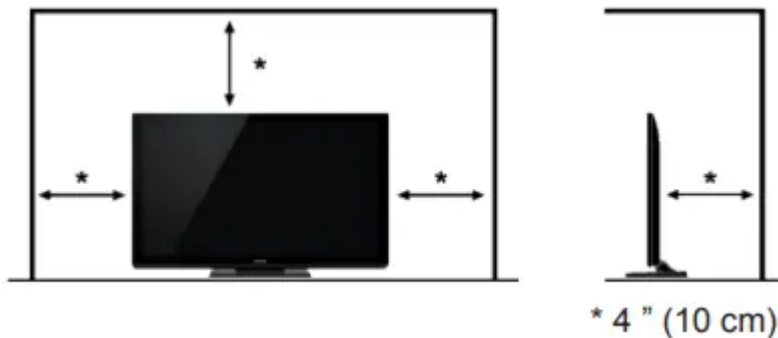
- Use an HDMI cable. It carries both digital video and audio signal in HD. The HDMI cable is the only cable needed to connect an HD device to the TV.

## 2. Why does the CC button not display Closed Caption?

- Check if the setting is turned On or CC on mute.
- When viewing TV via an HDMI connected device, such as a Cable or Satellite box, CC must be enabled on the device.
- Closed Caption is available only for supported TV programming and supported contents via Video (Composite) input.

## 3. Why does the screen and back cover of the TV get warm?


- The main unit radiates heat and some of the parts may become hot. This is normal operation and does not affect the performance of the set.
- Ensure good ventilation.
- Do not block the ventilation holes of the TV and do not place the TV on top of other equipment.



## 4. Where is the power source and power consumption?

- For information about the power source and power consumption, refer to the nameplate on the rear enclosure.


## 5. LED does not light.

- Set Power LED Indicator in the Setup Menu to On.  → Convenience features  
> Power LED Indicator > Using Power LED Indicator

## 6. LED turns to orange.

- LED turns to orange during adjustment of the panel (approx. 10 minutes to maximum 80 minutes). LED turns to orange again in standby mode when the TV is turned on / off before the panel adjustment is completed.



7. The panel maintenance notification is displayed when turning the TV off.

- Perform the panel maintenance. Select Turn the TV off now and press  to start the panel maintenance.
  - The panel maintenance is interrupted when selecting Don't start panel maintenance this time or turning the TV off while the notification is displayed.

## Menu - Gray-out or missing items

Why the Antenna/Cable option or available inputs are not listed in the Input select menu?

- When you label an input as Not used, then it will be hidden from the Input select menu. To make the input visible again:


1. Display the Menu and select Setup.
2. Select Input labels from Display customization and press .
3. Select the desired input and press  to change the label.

Some menu items are grayed-out and unable to be selected. Why?

- Depending on certain modes or the selected input, some options are not available.

## Reset to factory defaults

How do I reset my TV to all factory defaults and settings?

- In the main menu, select Setup and then select System. Highlight Factory defaults and press .

Enter your password (if locked).

Confirmation message will be displayed.

Follow the directions on screen to reset the TV to its original factory defaults.

### Warning

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