BRAVIA

XBR-65X850B/55X850B/49X850B

Basic Operations
Parts Description
Watching TV
Enjoying Movies/Music/Photos
Using Internet Services and Applications
Watching TV with Friends Far and Near
Using Other Devices
Using BRAVIA Sync Devices
Useful Functions
Connecting to the Internet
Using Home Network
Configuring Various Settings
Troubleshooting
How to Use Bookmarks

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- How to Use Remote
- Enjoy “Discover”
- Home Menu Screen
- Picture Adjustment
- How to Use the i-Manual
- Watch Connected Device
- Enjoy Social Viewing
- Using Applications

Parts Description
Watching TV
Enjoying Movies/Music/Photos
Using Internet Services and Applications
Watching TV with Friends Far and Near
Using Other Devices
Using BRAVIA Sync Devices
Useful Functions
Connecting to the Internet
Using Home Network
Configuring Various Settings
Troubleshooting
How to Use Bookmarks

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Parts Description

TV Set

Front

Control buttons on the rear

Terminals on the rear (center)

Terminals on the rear (right)

Remote Control

Top

Upper

Middle

Lower

Bottom

Touchpad Remote Control

Upper

Lower

Displaying the Screen Key Pad

Finding Contents More Easily (“Discover” Screen)

Home Menu Screen
Watching TV

Selecting Channels

Enjoying Football More

Using the TV Guide Search Function

Watching in 3D

Watching Twin Picture

  Displaying picture-in-picture (PIP)

  Displaying left-and-right pictures (P&P)

Changing Display Info/Pic. Size/Audio

  Display information

  Subtitles/Closed captions

  Screen format/Wide mode

  Audio (for analog mode)
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Enjoying Movies
Enjoying Music
Enjoying Photos
Using Internet Services and Applications

Using Applications

Browsing Websites

Watching Internet Videos

Enjoying Internet Services in Comfort

Using Skype

Performing initial setup

Making a call

Making a call while watching TV
Watching TV with Friends Far and Near

Enjoying a Chat with Your Friends while Watching TV
Inviting Friends while Watching TV
Inviting Friends Using the Program Guide
Using Other Devices

BD/DVD Player
- HDMI connection
- Component video connection
- Composite connection

Digital Still Camera/Camcorder

USB Device

PC
- Viewing Photo Files in 4K Resolution

Audio System
- HDMI connection
- Optical audio connection
- Audio cable connection

MHL Device (Smartphone, Tablet, etc.)

Wireless Subwoofer (Optional)

Playable File Formats (DLNA, USB devices, etc.)
Using BRAVIA Sync Devices

Setting BRAVIA Sync

Using the Sync Menu

Setting Buttons to Control an HDMI/MHL Device

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- Selecting a picture and sound setting suitable for the content
- Automatically adjusting picture brightness according to ambient light

Adding Favorite Applications

Using Search Function

- Current View Information Search
- Keyword Search

Saving Power Consumption

- Saving power by picture brightness
- Saving power by automatically adjusting the backlight drive
- Turning the TV off by monitoring idle time
- Turning the TV off by monitoring input signal

Using Clock/Timers

- Setting the current time manually
- Setting the on timer
- Setting the sleep timer
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- **Wireless Connection (Built-in Wireless LAN)**
- **Wired Connection (with a LAN Cable)**
- **Setting IPv6**

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Using Home Network

Playing Content on a PC

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- Enabling the renderer function
- Allowing/blocking access from controller
- Making advanced renderer settings
- Selecting servers to display
- Checking the server connection
- Connecting via Wi-Fi Direct (without a wireless router)

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- Using a Smartphone/Tablet as a Remote

Displaying the Smartphone’s Screen on the TV (One-touch mirroring)

Displaying the Smartphone’s Screen on the TV (Screen mirroring)

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- Selecting picture mode
- Adjusting various picture settings (e.g. picture brightness/color)
- Locking picture adjustment
- Setting the screen size/position

Sound Settings
- Adjusting various sound settings (e.g. bass/treble/balance)
- Setting the sound according to the TV position

Channel Settings
- Checking signal information
- Selecting the cable/antenna signal
- Tuning channels automatically
- Adding digital channels
- Setting channels to surf with the CH +/- buttons
- Editing channel labels
- Fine adjusting analog channels

Program Information & Service Settings
- Setting the information banner
- Setting closed captions

Setting Parental Control
- Setting the parental lock password
- Setting a viewing restriction
- Blocking specific channels
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Turning off the key tone of remote control operations
Turning off the start-up logo
Turning on/off and adjusting the brightness of the illumination
Setting the menu language
Setting your region
Setting Touchpad Remote Control
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Selecting speakers to output sound
Outputting sound from headphones or another audio system
Controlling the volume of an audio system with the TV’s remote control
Setting the headphone speaker link
Setting sound for Home Theater Control

External Input Settings

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Uploading operation history

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Updating the TV’s software
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- Sound Symptoms
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- Network/Application Symptoms
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- Touchpad Remote Control Symptoms
- Bluetooth Mouse Symptoms
- Screen mirroring Symptoms
- One-touch mirroring Symptoms
- TV SideView Symptoms
- Photo Share Symptoms
- Notes
How to Use Bookmarks

You can save frequently viewed pages in this manual. Use the color buttons indicated at the bottom of the screen.

To save a page
In the page to bookmark, press the red button that corresponds to [Add Bookmark] at the bottom of the screen.

(When using the Touchpad Remote Control, press the Control Bar (dots), slide to highlight the red button, then press the touchpad to select.)

To access the bookmarked page
Press the blue button that corresponds to [Show Bookmark] at the bottom of the screen to display the bookmark list. (When using the Touchpad Remote Control, press the Control Bar (dots), slide the touchpad to highlight the blue button, then press the touchpad to select.) Select the desired title.

To return to the previous screen
Press the RETURN button.

To remove a bookmark
In a bookmarked page, press the red button that corresponds to [Remove Bookmark] at the bottom of the screen.

(When using the Touchpad Remote Control, press the Control Bar (dots), slide to highlight the red button, then press the touchpad to select.)
Basic Operations

How to Use Remote
Enjoy “Discover”
Home Menu Screen
Picture Adjustment
How to Use the i-Manual
Watch Connected Device
Enjoy Social Viewing
Using Applications

Parts Description

TV Set

Front
Control buttons on the rear
Terminals on the rear (center)
Terminals on the rear (right)

Remote Control

Top
Upper
Middle
Lower
Bottom

Touchpad Remote Control

Upper
Lower

Displaying the Screen Key Pad
Finding Contents More Easily (“Discover” Screen)
Home Menu Screen
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Selecting Channels
Enjoying Football More
Using the TV Guide Search Function
Watching in 3D
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  Displaying picture-in-picture (PIP)
  Displaying left-and-right pictures (P&P)
Changing Display Info/Pic. Size/Audio
  Display information
  Subtitles/Closed captions
  Screen format/Wide mode
  Audio (for analog mode)

Enjoying Movies/Music/Photos

Enjoying Movies
Enjoying Music
Enjoying Photos

Using Internet Services and Applications

Using Applications
Browsing Websites
Watching Internet Videos
Enjoying Internet Services in Comfort
Using Skype
  Performing initial setup
  Making a call
  Making a call while watching TV

Watching TV with Friends Far and Near

Enjoying a Chat with Your Friends while Watching TV
Inviting Friends while Watching TV
Inviting Friends Using the Program Guide

**Using Other Devices**

BD/DVD Player
- HDMI connection
- Component video connection
- Composite connection

Digital Still Camera/Camcorder

USB Device

PC

Viewing Photo Files in 4K Resolution

Audio System
- HDMI connection
- Optical audio connection
- Audio cable connection

MHL Device (Smartphone, Tablet, etc.)

Wireless Subwoofer (Optional)

Playable File Formats (DLNA, USB devices, etc.)

**Using BRAVIA Sync Devices**

Setting BRAVIA Sync

Using the Sync Menu

Setting Buttons to Control an HDMI/MHL Device

Displaying the BRAVIA Sync Device List

**Useful Functions**

Picture/Sound Auto Adjustment
- Selecting a picture and sound setting suitable for the content
- Automatically adjusting picture brightness according to ambient light

Adding Favorite Applications

Using Search Function
- Current View Information Search
Keyword Search

Saving Power Consumption

- Saving power by picture brightness
- Saving power by automatically adjusting the backlight drive
- Turning the TV off by monitoring idle time
- Turning the TV off by monitoring input signal

Using Clock/Timers

- Setting the current time manually
- Setting the on timer
- Setting the sleep timer

Connecting to the Internet

- Wireless Connection (Built-in Wireless LAN)
- Wired Connection (with a LAN Cable)
- Setting IPv6

Using Home Network

- Playing Content on a PC
- Home Network Settings
  - Enabling the renderer function
  - Allowing/blocking access from controller
  - Making advanced renderer settings
  - Selecting servers to display
  - Checking the server connection
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- Playing Content with the Renderer Function
- Using a Smartphone/Tablet as a Remote
- Displaying the Smartphone’s Screen on the TV (One-touch mirroring)
- Displaying the Smartphone’s Screen on the TV (Screen mirroring)
- Sharing Photos

Configuring Various Settings

- Picture/Screen Settings
Selecting picture mode
Adjusting various picture settings (e.g. picture brightness/color)
Locking picture adjustment
Setting the screen size/position

Sound Settings
Adjusting various sound settings (e.g. bass/treble/balance)
Setting the sound according to the TV position

Channel Settings
Checking signal information
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Tuning channels automatically
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Editing channel labels
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Setting Parental Control
Setting the parental lock password
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Blocking specific channels

General Settings
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Turning off the start-up logo
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   Managing external inputs
   Switching the video input
   Making detailed settings of video input
   Setting the IR Blaster

Running Initial Set-up

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   Uploading operation history

Software Update
   Updating broadcast/service software
   Updating the TV’s software

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Power Symptoms
Picture/Screen Symptoms
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One-touch mirroring Symptoms
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Photo Share Symptoms
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How to Use Remote

Two Remote Controls

To operate the TV, you can use either the IR (infrared) Remote Control or the Touchpad Remote Control. The supply of a Touchpad Remote Control with the TV depends on your model/region/country. An optional Touchpad Remote Control is available.

Using the IR Remote Control

Basic operation of this TV's functions and settings can be made by using the ▲/▼/◄/► and ◎ buttons.

1. Highlight an item on the screen using the ▲/▼/◄/► buttons.
2. Press the ◎ button to select the item.

To return to the previous screen
Press the RETURN button.

Using the Touchpad Remote Control

Basic operation of this TV’s functions and settings can be made by sliding and pressing the touchpad. To use buttons that are not on the Touchpad Remote Control, use the Screen Key Pad. You need to
register your Touchpad Remote Control with the TV before use.

1. Slide your finger on the touchpad to highlight an item.
2. Press the touchpad until it clicks to select the item.

**To return to the previous screen**
Press the RETURN button.

**To register the Touchpad Remote Control to the TV**
Press the HOME button of the IR Remote Control, select [Settings] → [Preferences] → [Touchpad Remote Control Setup], then follow the on-screen instructions.

**To customize the Touchpad Remote Control**
You can adjust the touchpad sensitivity and enable/disable the Touchpad Operation Guide. Press the HOME button, then select [Settings] → [Preferences] → [Touchpad configurations] → the desired item.

**To start the tutorial for the Touchpad Remote Control**
You need to register your Touchpad Remote Control to the TV before going through the tutorial.
Press the HOME button, then select [Settings] → [Preferences] → [Touchpad configurations] → [Start Tutorial].

**To view the Touchpad Operation Guide**
Touch and keep your finger on the center of the touchpad to display the Touchpad Operation Guide, which shows gestures that are available for the current TV screen.

**OPTIONS button**

By pressing the OPTIONS button, the Options Menu appears and provides quick access to the functions that are available for the currently displayed screen. (The items in the Options Menu differ depending on the selected screen.) This provides faster access to functions than from the Home Menu.
Operating Functions by the Color Buttons

The color buttons and available functions are indicated at the bottom of the screen.
Press the color button that corresponds to the function you want to use.
The available functions differ depending on the screen.

Tips

• The illustration to the right is an example. The order of the color buttons varies depending on your region/country.

To use the color buttons with the Touchpad Remote Control

Press the Control Bar (･･･) to open the Screen Key Pad, slide the touchpad to highlight the desired color button, then press the touchpad to select.

Related Information

• How to Use the i-Manual

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Finding Contents More Easily (“Discover” Screen)

Overview

You can use Discover to search for content (such as TV programs, Internet contents, etc.). Contents that appear in Discover vary depending on your model/region/country.

Steps

1. Press the DISCOVER button to launch the Discover app. (When using the Touchpad Remote Control, touch and slide up your finger from the bottom area.)

2. Highlight the desired category using the ↑/↓ buttons. (When using the Touchpad Remote Control, flick up/down.)

3. Highlight the desired item using the ←→ buttons, then press the ☰ button to select. (When using the Touchpad Remote Control, slide left/right to highlight the item, then press the touchpad to select.)

The selected content is displayed.

To change the Discover settings

To change the Discover settings, press the OPTIONS button while Discover is displayed, then select the desired item.
Tips

- Some option settings require the TV’s clock to be set.
Home Menu Screen

Overview

The Home Menu can be displayed by pressing the HOME button. Categories such as [Channel], [Movies] and [Apps] are displayed at the top of the Home Menu. You can play back content by selecting its thumbnail in a subcategory. You can also use functions (such as setting change) by selecting its icon. The number of categories and available items vary depending on your region/country.

Steps

1. Press the HOME button.
2. Select the desired category using the buttons.  
   (When using the Touchpad Remote Control, slide left/right.)
3. Press the button, then select the desired subcategory using the buttons.  
   (When using the Touchpad Remote Control, slide down, then slide left/right.)
   When you move the cursor beyond the left/right edge of the subcategory, the next subcategory is displayed.
4. Select the thumbnail of the desired content. The content is played back.

Categories in the Home Menu

[Channel]
You can view thumbnails of live and future broadcasts and recorded content. Select the desired subcategory to change the source. You can also change the broadcast system by using [Channel List] at the bottom of the Home Menu.

[4K Movies]
You can watch 4K movies from online movie service providers by connecting a 4K media player (not supplied). The 4K media player may not be available depending on your region/country.

[Movies]
You can watch movies from online movie service providers, connected USB devices, or your home network. Select the desired subcategory to change the source.

[Album]
You can view photos from online service providers, connected USB devices, or your home network. Select the desired subcategory to change the source.

[Music]
You can play back music content from online music service providers, connected USB devices, or your home network. Select the desired subcategory to change the source.

[Apps]
You can launch applications. Thumbnails of featured applications ([Featured]) and your favorite applications ([My Apps]) are displayed. To view all applications, select [All Apps] at the bottom of the Home Menu.

Tips
• Subcategories may be subject to change without notice.

Icons in the Home Menu
[Search]
You can input a keyword to search for content. You can also select keywords searched in the past. (The availability of this function depends on your region/country.)

[Inputs]
You can select an input device connected to the TV.

[Media Server]
You can select a media server (e.g. USB flash drive, home network) to browse its content using the Media Player.

[Settings]
You can change TV settings (e.g. Picture & Display, Sound, Channel).

[Help]
You can view information about self diagnostics and customer support. You can also view this i-Manual.

[Network Status]
You can view the network connection status. You can view a description of the network connection status by selecting the icon.

- : Connected to a wired LAN.
- : Connected to a wireless LAN. The number of wave lines indicates the signal strength.
- : Connected to a mobile network. The number of bars indicates the signal strength. (This function is available depending on your region/country.)

The following marks are added to the icon to indicate a specific status.

- : This mark indicates a network connection error. This mark also appears when the network setup was not completed. (In this case, the tooltip shows [No network setup].)
- : This mark indicates that the TV is connected to your home network but cannot connect to the Internet.
- : This mark indicates that the TV is temporarily disconnected from your network, or currently trying to connect to the network. If the network is correctly set up, the connection will recover automatically.

If or is displayed, check your network settings and status. Press the HOME button, then select [Settings] → [Network] → [Network Setup] → [View Network settings and status].

Related Information

- Enjoying Music
- Enjoying Photos
- Using Applications
Adjusting various picture settings (e.g. picture brightness/color)

Overview

You can adjust various picture settings, such as picture brightness/color, etc.

Steps

1. Press the HOME button, then select 📦 [Settings].

2. Select 📺 [Picture & Display] → [Picture Adjustments] → the desired option.

Available Options

[Setting Memory]
Applies custom picture settings to the current input or to common memory shared by other inputs. To use the same picture settings for more than one input, select [Common] and adjust the picture settings.

[Picture Mode]
Enables selection of a picture mode according to your preference. Press the ✂ button (or press the touchpad on the Touchpad Remote Control) to jump to “Selecting picture mode” for details.
[**Reset**]  
Resets all the [Picture Adjustments] settings to the factory settings excluding [Setting Memory], [Picture Mode] and [Advanced Settings].

[**Backlight**]  
Adjusts the brightness of the backlight. Reducing the brightness of the screen will reduce the power consumption.

[**Picture**]  
Adjusts picture contrast.

[**Brightness**]  
Adjusts the brightness of the picture.

[**Color**]  
Adjusts color intensity.

[**Hue**]  
Adjusts green and red tones.  
([Hue] is available depending on the color system.)

[**Color Temperature**]  
Adjusts the whiteness of the picture.  
[Cool]: Gives white colors a bluish tint.  
[Neutral]: Gives white colors a neutral tint.  
[Warm 1]/[Warm 2]: Gives white colors a reddish tint. [Warm 2] gives a redder tint than [Warm 1].

[**Sharpness**]  
Adjusts the sharpness of the picture.

[**Noise Reduction**]  
[Auto]: Automatically reduces picture noise.  
[High]/[Medium]/[Low]: Modifies the effect of noise reduction.  
[Intelligent]: Automatically optimizes picture quality with noise reduction. (This function is available only for the analog RF input and the composite video input.)  
It is recommended to select [Intelligent] for a low quality analog input signal.  
[Off]: Turns off the function.

[**MPEG Noise Reduction**]  
[Auto]: Automatically reduces noise in MPEG-compressed videos.  
[High]/[Medium]/[Low]: Reduces noise in MPEG-compressed videos.  
[Off]: Turns off the function.

[**Dot Noise Reduction**]
[Auto]: Automatically reduces dot noise.
[Off]: Turns off the function.

[Reality Creation]
Adjusts detail and noise for a realistic picture.

[Mastered in 4K]
Provides image quality suitable for Blu-ray Disc™ “Mastered in 4K” releasing from Sony Pictures Home Entertainment. This function is available only for 2D image HDMI/MHL input signals, at 1920 x 1080/24p resolution, and [Scene Select] set to [Cinema].

[Resolution]
Adjusts the detail and clarity of the picture.

[Noise Filtering]
Adjusts to reduce noise of the picture.

[Smooth Gradation]
Creates smooth gradations on flat surfaces of the picture.

[Motionflow]
[Smooth]: Provides smoother picture movement; especially effective for film-based content.
[Standard]: Provides smoother picture movement for standard use.
[Clear]: Reduces motion blur while maintaining brightness for high-speed picture content.
[True Cinema]: Images, such as a movie created in 24 frames per second, are reproduced at the original framerate.
[Off]: Use this setting if [Smooth], [Standard], [Clear] or [True Cinema] results in a distorted picture.
(Depending on the picture content, you may not see the effect visually even if you have changed the settings.)

[CineMotion]*
* Option name differs depending on your region/country.
[Auto]: Displays film-based content with picture expression close to the original by applying a film-specific process.
[Off]: Turns off the function.
(If the image contains irregular signals or too much noise, this setting is automatically turned off even if [Auto] is selected.)

[Advanced Settings]
[Reset]: Resets all [Advanced Settings] to the default values (except for [White Balance]).
[Black Corrector]: Enhances black areas of the picture for stronger contrast.
[Adv. Contrast Enhancer]: Automatically optimizes [Backlight] and [Picture] according to the brightness of the screen. This setting is
effective for dark images and scenes.
[Gamma]: Adjusts the balance between light and dark areas of the picture.
[LED Dynamic Control]: Optimizes contrast by adjusting brightness in individual sections of the screen. ([LED Dynamic Control] is available depending on the TV model.)
[Auto Light Limiter]: Reduces glare such as in scenes where the entire screen is white.
[Clear White]: Emphasizes whiteness in the picture.
[Live Color]: Makes colors more vivid.
[White Balance]: Adjusts the red, green and blue level of the picture.
[Detail Enhancer]: Enhances the details of the picture.
[Edge Enhancer]: Enhances the edges of the picture.
[Skin Naturalizer]: Detects faces and reproduces natural skin tone.
[Display Speed Preference]: Reduces the picture delay to optimize the response to game controllers/PC mouse operation by selecting [On].
How to Use the i-Manual

Searching for Information

This i-Manual explains how to use the TV's functions. On the main page of the i-Manual, you can select the desired method to search for information.

1. Table of Contents: Searches from a title list.
2. Troubleshooting: Searches for solutions to problems.
3. Index: Searches by function/feature name.

Select from the 1/2/3 tabs.

Tips

- The supplied paper manual contains important information such as cautions and operating instructions to prevent accidents. Read the supplied paper manual thoroughly for safe use.

Steps

Procedure example: “Table of Contents” search

1. In the main page of this manual, highlight the “Table of Contents” tab using the ←/→ buttons.
   (When using the Touchpad Remote Control, slide left/right.)

2. Highlight a title on the left of the screen using the ↑/↓ buttons, then press the ⊗ button to select.
   (When using the Touchpad Remote Control, slide up/down to highlight a title, then press the touchpad to select.)
The titles on the right side of the screen change according to the title selected on the left side of the screen.

3. Highlight a title on the right side of the screen using the ↑/↓ buttons, then press the □ button to select.
   (When using the Touchpad Remote Control, slide up/down to highlight a title, then press the touchpad to select.)
   The page of the selected title appears.

4. Press the ▶ button to proceed to the next page.
   To return to the previous page, press the ◀ button.
   (When using the Touchpad Remote Control, slide left/right.)

**To go to the main page**
Press the corresponding color button indicated at the bottom of the screen.
(When using the Touchpad Remote Control, press the Control Bar (・・・) to open the Screen Key Pad, then select the corresponding color button.)

**To close the i-Manual**
Press the i-MANUAL button.
(When using the Touchpad Remote Control, press the Control Bar (・・・) to open the Screen Key Pad, then select the i-MANUAL button.)
If you press the i-MANUAL button again, the previously displayed page reappears. If you press the i-MANUAL button after the TV is turned off and on again, the main page appears.

**Displaying the Page Again While Operating the TV**
Press the i-MANUAL button repeatedly to toggle between the TV screen and the previously displayed page of the i-Manual. In this way, you can refer to the i-Manual while operating the TV.
(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the i-MANUAL button, then press the touchpad to select.)
Saving Frequently Viewed Pages (Bookmark)

You can save frequently viewed pages in this manual using a color button. For details on how to bookmark, press the color button that corresponds to [Show Bookmark] at the bottom of the screen.

(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the color button that corresponds to [Show Bookmark], then press the touchpad to select.)
Watch Connected Device

Overview

Connect various devices (e.g. BD recorder, digital still camera, PC, smartphone, tablet) to the TV. You can enjoy playing content such as pictures and music on the connected device.

There are two ways to connect.
Enjoying a Chat with Your Friends while Watching TV

Overview

Social Viewing allows you to use your social network services while watching content on your TV. Enjoy chatting with your friends and check what others are saying about the show from on-screen comments. (Features that can be used with Social Viewing vary depending on your model/region/country.)

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the SOCIAL VIEW button to start Social Viewing.
   The Social Viewing screen appears. (The image size of the program you are watching is reduced and the tweets area appears.)

3. Press the SOCIAL VIEW button again to open the menu screen, then log in to the desired social network service.
After logging in, your account name is displayed next to the service name in the menu screen.

To stop Social Viewing, while the Social Viewing screen is displayed, press the SOCIAL VIEW button to open the menu screen, then press the SOCIAL VIEW button again.

**To view the program in full screen**

Press the SOCIAL VIEW button to open the menu screen, then select [Layout] → [Screen:] → [Overlay].

**To enter a search keyword**

The social network service area shows tweets related to the program you are watching. You can also enter a search keyword. While the Social Viewing screen is displayed, press the SOCIAL VIEW button to open the menu screen, select [Set Twitter Search Keyword], then enter the desired keyword.

**Tips**

- You can enjoy Twitter without logging in; however, you can use additional features of Twitter and enjoy it more if you log in to it.

**Notes**

- If you do not have a social network service account, create one using a computer.
- 3D images cannot be displayed during Social Viewing.
- [Wide Mode] is changed to [Full] during Social Viewing.
- When you launch the Discover app during Social Viewing, some categories will not be displayed.
- A BRAVIA Sync device cannot be controlled via the TV’s remote control during Social Viewing. Use the device’s own remote control to control it.
Using Applications

Overview

Press the SEN/APPS button or select [Apps] from the Home Menu to open the Apps category, which serves as a gateway to Internet content. From this screen, you can access various services and applications. The items on the Apps category differ depending on your region/country, and are subject to change.

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the SEN/APPS button or select [Apps] from the Home Menu to open the Apps category.

3. Select the desired thumbnail to run the application.
   You can select [All Apps] at the bottom of the Home Menu to view all applications.

Tips

- Depending on the service, registration may be required before use.

To add an application to [My Apps]
Select the + icon to view all applications, select the desired application, then select [Add to My Apps]. Or, select [All Apps] at the bottom of the Home Menu to view all applications, select the desired application, then select [Add to My Apps].
Front

1 Built-in camera
For use with video calling applications.
The location varies depending on your model.

2 Sensors/Illumination/Microphone
- Remote control sensor
  Receives signals from the remote control.
  Point the remote control at the Sony logo to operate the TV.
  Do not place anything near the sensor. Doing so may affect its function.

- Light sensor
  Senses the room light level and adjusts the screen brightness accordingly.
  Do not place anything near the sensor. Doing so may affect its function.

- Built-in microphone
  For use with video calling applications.

Illumination LED
The Illumination LED lights up or blinks in response to remote control operations and lights up in different colors according to the status of the TV.

Blinking
(Blinking speed depends on status)
The TV is turned on
The TV is receiving an incoming call *2
The TV is in Picture off mode
Software update is in progress

*1
When the built-in camera or microphone is operating

**Blinking**
When the TV and a mobile device (e.g. smartphone) are connected wirelessly

*1
During recording (including SCART REC) or the TV is in pause mode *2

*1
The following Timer functions are set:
On Timer, Sleep Timer, Reminder (*2), REC Timer (*2)

- For simultaneous conditions, the upper condition in the table has priority.
- The Illumination LED does not light up when the TV is in standby mode, except when a recording is in progress or the timer is set.

*1: If [Simple Response] is selected in [Illumination LED], the illumination LED does not light continuously but blinks as feedback for operations.

*2: This function is available depending on your region/country.
Control buttons on the rear

1. (Power)
   Press to turn on the TV or to enter standby mode.

2. CH +/- (Channel)/+/–, +/- (Volume)/+/–
   Press to select the next (+) or previous (–) channel.
   Press to adjust the volume.
   - In the TV Home Menu, these buttons will work as ↑/↓/←/→.

3. HOME
   Press to display the TV Home Menu.

4. (Input select)/[(Select/Confirm)
   Press to display a list of inputs.
   To select a connected device input, press this button repeatedly.
   - In the TV Home Menu, this button will work as (select/confirm).
Terminals on the rear (center)

1. **LAN**
   Connects to an existing network using an Ethernet cable.

2. **VIDEO IN 1**
   Connect with a composite video cable. When connecting mono equipment, connect to the L (MONO) audio jack.

3. **VIDEO IN 2, COMPONENT IN**
   This input can be used as a composite video input or as a component video input. When connecting a mono device, connect to the L (MONO) audio jack.
   
   For composite connection, use VIDEO IN 2 for video signals, and also connect to (L/R) of COMPONENT IN for audio signals.
   
   For component connection, use Y, PB, PR for video signals, and also connect to (L/R) for audio signals.
   
   - The TV will automatically detect and switch between VIDEO IN 2 and COMPONENT IN. To manually set the input type, press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga] → [Video 2/Component Selection].

4. **DIGITAL AUDIO OUT (OPTICAL)**
   You can listen to the TV’s sound on a connected home theater system with digital audio input (optical).
**Terminals on the rear (right)**

1. **USB 1/2/3**
   You can enjoy photo, music and video files stored on a USB device.

2. **AUDIO OUT/**
   Connect your headphones or stereo system to listen to the TV’s sound through the connected equipment.
   To listen to the TV’s sound through the connected equipment, press the HOME button, then select [Settings] → [Sound] → [Headphone/Audio Out] → [Headphone] or [Audio Out].
   - When you set [Audio Out] in [Headphone/Audio Out], select [Fixed] or [Variable], press the HOME button, then select [Settings] → [Sound] → [Audio Out].

3. **HDMI IN 2/MHL, HDMI IN 4/MHL**
   HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and an HDMI-equipped audio/video device.
   You can view photos in 4K resolution by connecting a digital still camera that supports HDMI 4K output.
   Moreover, you can connect your MHL (Mobile High-definition Link) device using an HD quality MHL cable.
   Both HDMI/MHL support BRAVIA Sync for communication with a connected compatible device.
• Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

• If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

4 HDMI IN 1/3
HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and an HDMI-equipped audio/video device. You can view photos in 4K resolution by connecting a digital still camera that supports HDMI 4K output. In addition, when you connect a BRAVIA Sync-compatible device, communication with the connected device is supported.

• Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

• If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

5 REMOTE
(Your TV may not be equipped with these jacks, depending on your model/region/country.) These jacks are for receiving the external control signal. Enables extended control of the TV using RS232C via the IR IN and Serial Control jacks. IR IN : connect to the IR out terminal of the home controller. Serial Control : connect to the RS232C terminal of the home controller.

• Take care to not connect to headphones or an external audio system.

• If [RS232C Control] is set to [On], [BRAVIA Sync Settings] is not available.

6 RF
RF input that connects to your cable or antenna.
• **INPUT**
  Press to display a list of inputs.

• **POWER**
  Press to turn on or to turn off the TV (standby mode).

• **PIC OFF**
  Press to turn the picture off, while sound remains on.

• **SYNC MENU**
  Press to display the BRAVIA Sync Menu to operate a connected BRAVIA Sync-compatible device.

• **3D**
  Press to select the 3D display mode.

• **RELATED SEARCH**
  When the TV is connected to the Internet, you can search for related content while watching various content on the TV. (What you can search depends on your region/country or other circumstances.)
Upper

- **Buttons for connected devices**
  Use these buttons to operate a connected BRAVIA Sync-compatible device.

- **Color buttons**
  When the color buttons are available, an operation guide appears on the screen.
  Follow the operation guide to perform a selected operation.

- **SOCIAL VIEW**
  You can enjoy watching TV with friends far and near, using social network services.

- **FOOTBALL**
  Press to change the Live Football Mode.
Middle

- **DISCOVER**
  Press to bring up Discover to search for content.

- **SEN/APPS**
  Press to open the Apps category of the Home Menu.

- **NETFLIX**
  Press to access the “NETFLIX” online service. This feature (button) may not be available in some regions/countries.

- **↑/↓/←/→/RETURN**
  Press to select/confirm a highlighted item and return to the previous screen, or exit from a menu.

- **OPTIONS**
  Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.

- **HOME**
  Press to display the TV Home Menu.
• **KEY PAD**
  Press to open the Screen Key Pad at the top of the TV screen. You can use the arrows buttons to operate the Screen Key Pad.

• **DISPLAY**
  Press once to display information about the channel/program/input you are viewing. Press again to exit.

• **GUIDE**
  Press to display the digital program guide.
  The Guide feature may not be available in some regions/countries.

• **i-MANUAL**
  Press to display the on-screen instruction manual (this manual).

• **0-9**
  Press the 0-9 buttons to select a channel.

• **CC/SUBTITLE**
  Use with the 0-9 buttons to select digital channels. For example, to enter 2.1, press 2, then 1.

Press to turn closed captions/subtitles on or off (when the feature is available).
Bottom

- **VOL +/-**
  Press to adjust the volume.

- **MUTING**
  Press to mute the sound. Press again to restore the sound.

- **CH +/-**
  Press to select the next (+) or previous (–) channel.

- **JUMP**
  Press to jump back and forth between two channels or inputs. The TV alternates between the current channel or input and the last channel or input that was selected.
• SOCIAL VIEW
You can enjoy watching TV with friends far and near, using social network services.

• POWER
Press to turn the TV on or off (Standby mode).

• Control Bar (…)
Press to open the Screen Key Pad at the top of the TV screen. Slide left/right to move left/right, then press the touchpad to select a key.

• Touchpad
Press or slide to operate the TV with the touchpad.

• RETURN
Press to return to the previous screen, or exit from a menu.

• HOME
Press to display the TV Home Menu.

• OPTIONS
Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.
**Lower**

- **VOL +/-**
  Press to adjust the volume.

- **CH +/-**
  Press to select the next (+) or previous (−) channel.

- **NFC**
  Touch the device (e.g. some models of Xperia) corresponding to the One-touch mirroring function, then its screen is displayed on the TV.
Displaying the Screen Key Pad

Overview

You can display the Screen Key Pad.

Steps

1. Press the Control Bar (⋯) on the Touchpad Remote Control. The Screen Key Pad is displayed on the screen.
2. Slide left/right to select a button, then press the touchpad.
Selecting Channels

Overview

You can select channels using Discover, the Home Menu, or number buttons.

Selecting channels using Discover

1. Press the DISCOVER button to launch the Discover app.
   (When using the Touchpad Remote Control, touch and slide up your finger from the bottom area.)
2. Use the ↑/↓ buttons to select the desired TV broadcast system.
   (When using the Touchpad Remote Control, flick up/down.)
3. Use the ←→ buttons to select the desired thumbnail, then press the + button.
   (When using the Touchpad Remote Control, slide left/right to highlight the thumbnail, then press the touchpad to select.)

Selecting channels using the Home Menu

1. Press the HOME button.
2. Select [Channel] at the top of the Home Menu.
3. Select the desired broadcast system using [Channel List] at the bottom of the Home Menu.
4. Select the desired channel.

Selecting channels using the number buttons
1. Press the number button(s) to select a channel.
   For channel numbers 10 and above, press the second digit number button quickly after the first digit.
Enjoying Football More

Overview

You can obtain more realistic picture and audio, as though you are watching from the stands of the stadium. You can also view movies and information related to football.

Steps

1. Press the FOOTBALL button.
   (When using the Touchpad Remote Control, press the Control Bar (•••), slide the touchpad to highlight the FOOTBALL button, then press the touchpad.)

2. Press the button.
   (When using the Touchpad Remote Control, press the touchpad.)
   The Live Football Mode is turned on. The roar of the crowd is emphasized, and [Picture Mode] is set to [Vivid] or [Standard].

To turn off the Live Football Mode, press the FOOTBALL button, then press the button.
(When using the Touchpad Remote Control, press the Control Bar (•••), slide the touchpad to highlight the FOOTBALL button, press the touchpad, then press the touchpad again.)

The Live Football Mode is turned off. [Scene Select] is restored to its original state.

To view movies and information related to football
Press the FOOTBALL button, then select the desired service (such as [Football Videos]).

(When using the Touchpad Remote Control, press the Control Bar (•••), slide the touchpad to highlight the FOOTBALL button, press the touchpad, slide the touchpad to highlight the desired service, then press the touchpad.)

An Internet connection is required to use this feature.

Services may be changed or discontinued without notice.
Using the TV Guide Search Function

Overview

You can search for information on TV programs, and cast/crew details.

Tips

- As of March 2014, this function is available in the following regions/countries.
  Czech Rep. / Denmark / Germany / Switzerland / Austria / United Kingdom / Ireland / Spain / France / Italy / Netherlands / Belgium / Luxembourg / Norway / Poland / Russia / Slovakia / Finland / Sweden / New Zealand / Australia / United States / Canada / Brazil
- Guide and Search can launch only when [Cable/Antenna] is set to [Antenna] or a set-top box via an IR Blaster is ready.

Steps

1. Connect to a broadband Internet connection.
   Press the \(\oplus\) button to jump to the title list. Then, press the \(\ominus\) button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Channel].

3. Select [Program Guide].
   Displays detailed information about TV programs.
To return to the last viewed source, press the RETURN button a few times.

**To search for TV programs by entering a keyword.**

You can select [Program Search] from the Options menu to search for TV programs by entering a keyword (title, etc.).

**Tips**

- If the displayed channel differs from the selected channel, select [Assign Channel] by pressing the OPTIONS button, then select the desired channel from the channel list. If the desired channel is not in the list, search by entering a keyword (broadcaster name). This function is not available on channels on a set-top box.

- While displaying the Program guide, by pressing the OPTIONS button, you can switch between the Digital/Set-top box program guides. Digital/Set-top box program guide switching is only available on IR Blaster compatible models.

**Notes**

- A TV program will appear blank if no data is contained in a channel.
- Channel information may not be displayed correctly.
Watching in 3D
(This function is available depending on your model/region/country.)

Overview

You can experience powerful 3D entertainment, such as stereoscopic 3D games and Blu-ray 3D Discs. You can also watch regular 2D content with a 3D effect.

To watch in 3D, connect a 3D-compatible device directly to the TV via an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Recommended viewing distance range for a 3D image

If the viewing distance is not appropriate, a double image may appear. It is recommended to sit directly in front of the TV.

Steps

1. Display the content to watch in 3D on the TV screen.
2. Put the Passive 3D Glasses on.
If no 3D effect is achieved, perform the following steps.

3. Press the 3D button to display the [3D Display] screen.
   (When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the 3D button, then press the touchpad to select.)

4. Press the 3D button repeatedly to select the [3D Display] mode to suit the displayed content.
   (When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the 3D button, press the touchpad, slide the touchpad to highlight the desired [3D Display] mode, then press the touchpad.)

[3D (Side-by-Side)]: Displays side-by-side pictures in 3D.
[3D (Over-Under)]: Displays over-under pictures in 3D.
[3D (Simulated 3D)]: Displays regular 2D pictures in simulated 3D.
[2D (Left-Only)]: When the same picture is side-by-side, the left side picture is shown expanded, in 2D.
[2D (Top-Only)]: When the same picture is over-under, the upper picture is shown expanded, in 2D.

Depending on the input signal or format, [3D (Side-by-Side)]/[3D (Over-Under)]/[2D (Left-Only)]/[2D (Top-Only)] may not be selectable.

To deactivate the 3D effect
Press the 3D button repeatedly to select [Off] in [3D Display].
(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the 3D button, press the touchpad, slide the touchpad to highlight [Off] in [3D Display], then press the touchpad.)

To use the SimulView™ mode
(The availability of this function depends on your model.)
This TV features SimulView™. When using this feature, only use the glasses for SimulView™.

SimulView™ allows two players to view independent screen images in full screen while playing the same game on a shared screen. The image is displayed in 2D. To use this feature, the game software must support
SimulView™.

To adjust the 3D settings

You can adjust the following 3D settings. Press the HOME button, select [Settings] → [Picture & Display] → [3D Settings] → the desired option.

[3D Display]
Opens [3D Display] to switch the display modes.

[3D Depth Adjustment]
Adjusts the depth of 3D pictures on the screen (available only for content with 3D signals). Select [Auto(High)] to always optimize to a visually comfortable depth. Select [Auto(Low)] to provide a visually comfortable depth which is close to the original picture. You can also manually set the adjustment value.

[Simulated 3D Effect]
Heightens/lessens the 3D effect when you display 2D pictures in simulated 3D.

[Auto 3D]
Select [Auto 1] to switch the 3D display mode automatically when a 3D signal is detected. If no 3D signal is detected, select [Auto 2], which will analyze the image for 3D information and switch the 3D display mode automatically. Select [Off] to prevent the 3D display mode from being automatically selected. Depending on the input signal or format, the 3D display mode may not switch automatically. In such a case, press the 3D button to select the 3D display mode manually. (When using the Touchpad Remote Control, press the Control Bar (●●●), slide the touchpad to highlight the 3D button, then press the touchpad to select.)

[3D Signal Notification]
Notifies when a 3D signal is detected.

Notes

• When [3D Display] is set to [Off], SimulView™ mode cannot be used.
• Depending on the image, one player may see another player’s image when using SimulView™ mode.
• 3D effect is available only when pictures are displayed in full screen.
• Recommended viewing angle and distance may vary depending on the TV’s location and room conditions.
• Simulated 3D effect may be less pronounced with some picture sources.
• Perceived simulated 3D effect may vary from person to person.
• 4K 3D signal is not detected.
• Maintenance of your glasses
  - Wipe the glasses gently with a soft cloth.
  - Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.
  - If using a chemically pretreated cloth, be sure to follow the instructions provided on the package.
  - Never use strong solvents such as a thinner, alcohol or benzene for cleaning.
Displaying picture-in-picture (PIP)

Overview

You can watch two pictures (main and sub) simultaneously. The main picture can be displayed in full screen, and the sub picture can be displayed in an inset window (e.g. HDMI input (PC format) and TV program).

Steps

1. Press the OPTIONS button, then select [Twin Picture].
   If the displayed source is other than a PC, select [PIP].

2. Press the ﬂ buttons to switch the audio output between the two pictures.
   (When using the Touchpad Remote Control, slide left/right to switch the audio output.)

To exit the PIP mode, press the RETURN button.

To move the inset window

Press the ▲/▼ buttons.
(When using the Touchpad Remote Control, slide up/down.)

Available Combinations of Two Pictures

• When the main picture source is a TV program or video input, the sub
picture source can be:
- HDMI input (video format)
• When the main picture source is an HDMI input (video format or PC format), the sub picture source can be:
  - TV program
  - Video input

**Notes**

• If two pictures with different vertical frequency signals (e.g. a picture in full screen with 24p and a picture in an inset window with 60i) are displayed simultaneously, the smooth movement of the picture in the inset window may be lost.
• This function is not available with a 4K resolution input signal.
• If [Motionflow] is set to other than [Impulse]/[Off], the smooth movement of the picture in an inset window may be lost. (For [Motionflow] compatible models only.) To remedy this, set to [Off]. Press the OPTIONS button, then select [Picture Adjustments] → [Motionflow] → [Off].
Displaying left-and-right pictures (P&P)

Overview

You can watch two pictures (left and right) simultaneously (e.g. connected device and TV program).

Steps

1. Press the OPTIONS button, then select [Twin Picture] → [P&P].

2. Press the ≤/≥ buttons to switch the audio output between the two pictures.

   (When using the Touchpad Remote Control, slide left/right to switch the audio output.)
   
   The highlighted picture is audible.

To exit the P&P mode, press the RETURN button.

To change the picture size

Press the ↑/↓ buttons repeatedly to change the size.

(When using the Touchpad Remote Control, slide up/down repeatedly to change the size.)

Available Combinations of Two Pictures

(Left and right, or vice versa)

- TV program and HDMI input (video format)
• Video input and HDMI input (video format)

**Notes**

• This function is not available with PC format signals.
• If two pictures with different vertical frequency signals (e.g. a left picture with 24p and a right picture with 60i) are displayed side-by-side, the smooth movement of the right picture may be lost.
• This function is not available with a 4K resolution input signal.
Display information

Steps

While watching a program, press the DISPLAY button. 
(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the DISPLAY button, then press the touchpad to select.)

The information about the current channel/program/input appears. The information will time out in a few seconds or press the DISPLAY button again to exit. 
(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the DISPLAY button, then press the touchpad to select.)
Subtitles/Closed captions

Steps

While watching a program with subtitles/closed captions, press the CC/SUBTITLE button to turn the subtitles/closed captions on or off.

(When using the Touchpad Remote Control, press the Control Bar (....), slide the touchpad to highlight the SUBTITLE/CC button, then press the touchpad to select.)
Screen format/Wide mode

Steps

Press the HOME button, then select [Settings] → [Picture & Display] → [Screen] → [Wide Mode] → the desired option.

Some options may not be available depending on the picture size.

Tips

- Based on the original signal source, a black frame or black bars may surround the picture.

Available Options (4:3 Original Source)

[Wide Zoom]
Enlarges the picture to fill a 16:9 screen, preserving the original picture as much as possible.

[Normal]
Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

[Full]
Stretches a 4:3 picture horizontally, to fill the 16:9 screen.

[Zoom]
Displays a 16:9 picture that has been converted into 4:3 letter box
format, in the correct aspect ratio.

[Captions]
Stretches the picture horizontally to fill a 16:9 screen, while fitting captions in the screen.

If component input (480p) is selected and [Scene Select] is set to [Game] or [Graphics], the available options change to [Fine-Normal]/[Fine-Full]/[Portable Game 1]/[Portable Game 2].

[Fine-Normal]
Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

[Fine-Full]
Stretches a 4:3 picture horizontally, to fill the 16:9 screen.

[Portable Game 1]
Stretches a black-framed game picture from PlayStation®Portable.

[Portable Game 2]
Stretches a black-framed picture (e.g. browser) from PlayStation®Portable.

Available Options (16:9 Original Source)

[Wide Zoom]
Enlarges the picture, preserving the original picture as much as possible.
[Normal]  
Displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.

[Full]  
Displays a 16:9 picture in its original size.

[Zoom]  
Displays a 16:9 picture that has been converted into 4:3 letter box format, in the correct aspect ratio.

[Captions]  
Stretches the picture horizontally, while fitting captions in the screen.

Available Options (4K (4096×2160) Original Source)

[Normal]  
Displays a 4K (4096×2160) picture as 16:9 (3840×2160). Bars appear at the top and bottom of the screen.

[Full]  
Displays a horizontally compressed picture to fit a 16:9 (3840×2160) screen.
[Zoom]
Displays a 4K (4096×2160) picture in its original size.

## Available Options (PC Timing)

<table>
<thead>
<tr>
<th>Resolution</th>
<th>[Normal]</th>
<th>[Full 1]</th>
<th>[Full 2]</th>
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<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
</tr>
<tr>
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<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
<td><img src="image6" alt="Image" /></td>
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Audio (for analog mode)

Steps

1. Press the HOME button, then select [Settings].

2. Select [Sound] → [MTS Audio] → the desired option.

Tips

- To select sound on digital channels, press the OPTIONS button, then select [Alternate Audio].

Available Options

[Stereo]

Adjusts sound for stereo reception.

[Auto SAP]

Adjusts sound for second channel audio of programs such as bilingual.

[ Mono]

Adjusts sound for monaural reception. Use this option when the stereo signal is unstable.
Enjoying Movies

Overview

You can watch movies from online service providers, connected USB devices or your home network.

When a 4K media player (not supplied) is connected to your TV, you can select the [4K Movies] category to watch 4K movies from online service providers. The 4K media player may not be available depending on your region/country.

Steps

1. Press the HOME button, then select [Movies] or [4K Movies].
2. Select the desired subcategory.
3. Select the desired thumbnail to watch the movie.
Enjoying Music

Overview

You can play back music content from online music service providers, connected USB devices, or your home network.

Steps

1. Press the HOME button, then select 🎵 [Music].
2. Select the desired subcategory.
3. Select the desired thumbnail to play back the music content.
Enjoying Photos

Overview

You can view photos from online service providers, connected USB devices or your home network.

Steps

1. Press the HOME button, then select [Album].
2. Select the desired subcategory.
3. Select the desired thumbnail to view the content.
Browsing Websites

Overview

When the TV is connected to the Internet, you can browse websites.

Steps

1. Connect to a broadband Internet connection.
   Press the ▼ button to jump to the title list. Then, press the ▼ button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Apps].

3. Select [All Apps] → [Internet Browser].

   To return to the last viewed source, press the HOME button.

To change the character size

Press the OPTIONS button, select [Show] → [Zoom], then the desired option.

Notes

- If the TV does not support the functions provided by certain Internet services (e.g. Adobe Flash Player, PDF viewer), web content may not be displayed correctly, or some functions may not work properly. Also, the TV may not support functions developed in the future.

- In no event shall Sony be liable for any damage caused or associated with the use of the Internet browser, malfunction (including software) or
communication failure.
Watching Internet Videos

Overview

You can enjoy Internet video content, including movies and cartoons, by accessing a gateway that delivers a variety of on-demand entertainment.

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Apps].

3. Select [All Apps] → the desired service → the desired content.

To seek forward/backward in video content

Press the buttons on the remote control that correspond with the control indications on the screen.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the buttons that correspond with the control indications on the screen, then press the touchpad to select.)

To avoid video/sound interruption

Depending on your network environment or the data size of content, video or sound interruption may occur.
The interruption can be avoided by temporarily storing the content on a USB device (not supplied), and you can enjoy smooth video playback.
This function is available with services that are indicated by the icon when you select them.
Perform the following to use this function.

- **USB device connection**
  Connect a USB device that supports USB 2.0 or higher to the TV’s USB port.

- **USB device registration**
  Press the HOME button, then select 📈 [Settings] → ⚙️ [Preferences] → [Seamless Streaming Setting] → [Register USB device].
  Note that a USB device will be formatted once registered, and all the stored data will be deleted.
  To deregister a USB device, select [Deregister USB device].

When you view content of an available service, connect a registered USB device to the TV’s USB port. The content will be stored temporarily on the USB device should an interruption occur during playback.

This registered USB device will not appear in the list of devices connected to the TV.

**To update Internet Video content services**

Press the HOME button, then select 📈 [Settings] → ⚙️ [Network] → [Refresh Internet Content].

**Tips**

- Information about the highlighted icon appears in the information banner.
- The interface to Internet content depends on the Internet content providers.

**Notes**

- If you experience difficulties, check that the Internet connection is set up properly.
- Services block video content based on the [Parental Lock] setting of the TV. Some service providers do not support this function.
Enjoying Internet Services in Comfort

Overview

By enabling the “Quick Playback for Internet Services” mode, you can enjoy Internet services, such as videos and photos, in comfort. This feature allows those services to start more quickly by preloading data in background. (Additional data charges may apply depending on your Internet service provider. This feature may not be available for some Internet services.)

Steps

1. Start the desired Internet service.
2. Press the OPTIONS button, then select [Quick Playback] → [On].

To disable this feature, start the Internet service, press the OPTIONS button, then select [Quick Playback] → [Off].
Performing initial setup

Overview

Enjoy widescreen video calls by using the built-in camera and microphone.

Steps

1. Connect to a broadband Internet connection. Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details. (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Apps].

3. Select [All Apps] → [Skype].

4. Follow the on-screen instructions to create your account.

Tips

• Although you can create a new account using the TV, it is recommended that you use a computer to create a new account.
**Tips**

- For more information on Skype, please visit [http://www.Skype.com/](http://www.Skype.com/)

- This product includes SkypeKit 4.5.1  
  (c) 2003-2014, Skype  
  Patents Pending  
  Skype, associated trade marks and logos and the “S” logo are trade marks of Skype.  
  Although this product has been tested and met our certification standards for audio and video quality, it is not endorsed by Skype, Skype Communications S.a.r.l. or any of their related companies.

**Notes**

- No emergency calls. Skype is not a replacement for your telephone and cannot be used for emergency calling.

- Skype may not be available while some other applications are being used.

- Use of a wireless network connection may cause audio/video degradation.

- Audio and video calls are free to other people on Skype. For other Skype services such as low cost calls to mobile phones and landlines, Skype Credit or a subscription is required.

- The sound quality of the microphone may deteriorate in a noisy environment.

- A ringtone does not sound from the HDMI Audio Return Channel (ARC) and optical digital audio output. To sound a ringtone, press the HOME button, then select [Settings] → [Sound] → [Speakers] → [TV Speakers].

- CMU-BR200/CMU-BR100 (not supplied) or third-party camera and microphone units cannot be used with the TV.
Making a call

Overview

You can make free video and voice calls to friends and family anywhere in the world from the comfort of your living room. If you want to call a friend who is not on Skype, you can call them on their landline or mobile using Skype. CMU-BR200/CMU-BR100 (not supplied) cannot be used with a built-in camera model.

Tips

- Audio and video calls are free to other people on Skype. For other Skype services such as low cost calls to mobile phones and landlines, Skype Credit or a subscription is required.

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Apps].
3. Select [All Apps] → [Skype] → [Contacts] or [History].
   Select [Contacts] to use your Skype contact list. Select [History] to use the call history list.

4. Select the contact or phone number to call → 📞 (Video Call) or 📞 (Voice Call).

**About the status icons in the contact list**
A status icon is displayed next to your contacts, so you know if they are available to have a conversation.

The list below indicates their availability:
- 🌐: Online,
- 📞: Away,
- 📌: Do Not Disturb,
- 📧: Offline,
- 📧: Offline (with call forwarding enabled),
- 📞: Phone contact,
- 📧: Offline (with voice mail enabled)

**About the status icons in the call history list**

The icons in the history list indicate the following:
- 📞: Missed Call,
- 📞: Incoming Call..., 📞: Outgoing Call..., 📧: Voice message,
- 📞: Contact Request

**To call by entering a phone number**

Press the HOME button, then select 📞 [Apps] → [All Apps] → [Skype] → [Tools] → [Call Phone Number]. Enter a phone number, then select [Call].

**To add contacts to the contact list**

You can add contacts in the following ways:

- Press the HOME button, then select 📞 [Apps] → [All Apps] → [Skype] → [Tools] → [Find Contacts]. Enter a Skype name, full name or e-mail address, select [Search], the Skype name/full name to call, then select [Add to Contacts].
From the call history list, select the contact or phone number, then [Add to Contacts].

- After entering a phone number, select [Save], then the desired option.

**To receive a call**

You can receive a call while watching TV or using other applications. When the illumination LED on the front of the TV blinks and/or the incoming call notification appears, select 📞 (Video Call) or 📞 (Voice Call) to answer.
(While using another application, an incoming call notification is displayed full screen.)

**To use call options during a call**

Use the menu bar at the bottom of the screen.
When the other party is displayed in full screen, you can show/hide the menu bar by pressing the DISPLAY button.
(When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the DISPLAY button, then press the touchpad to select.)

**To end a call**

Press the DISPLAY button to open the menu bar, then select 📞 [End Call].

**Tips**

- For the best audio quality during a Skype call, use the speakers that are built into the TV instead of using an external audio system. To use the TV speakers, press the OPTIONS button, then select [Speakers] → [TV Speakers].
Making a call while watching TV

Overview

You can use Social Viewing to make a video call to family or friends while watching TV.

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the SOCIAL VIEW button to start Social Viewing.
   The Social Viewing screen appears. (The image size of the program you are watching is reduced and the tweets area appears.)

3. If you are not signed in to Skype, press the SOCIAL VIEW button again to open the menu screen, select [Sign in] for [Skype], then follow the on-screen instructions to sign in.

4. While the Social Viewing screen is displayed, press the SOCIAL VIEW button again to open the menu screen, then select [Start Call]. The contact list appears.

5. Select the desired person from the contact list to make a call.

Tips

- When you answer an incoming Skype call on your TV, Social Viewing starts automatically and you can talk to the caller while continuing to

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watch TV.

**To stop watching TV during a video call**

You can stop watching TV and display the video call screen only. Press the SOCIAL VIEW button, then select [Launch Skype].

**Tips**

• If you stop watching TV and display the video call screen only, the tweets area will also be closed.
Inviting Friends while Watching TV

Overview

While watching a program, you can express that you like the program. You can also invite friends to watch the same program.

Tips

- As of March 2014, this function is available in the following regions/countries.
  Czech Rep. / Denmark / Germany / Switzerland / Austria / United Kingdom / Ireland / Spain / France / Italy / Netherlands / Belgium / Luxembourg / Norway / Poland / Russia / Slovakia / Finland / Sweden / New Zealand / Australia / United States / Canada / Brazil

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. While watching TV, press the OPTIONS button, then select [Love].

3. Follow the on-screen instructions to log in to your Facebook account.
Tips

- You can register up to six Facebook accounts with the TV.
- After your account is registered, you can select it from the account list to log in.

To invite friends to watch the same program
While watching a program, press the OPTIONS button, then select [Invite Friends] to invite friends to watch the same program.

To view your history
Press the HOME button, then select [Channel] → [Friends] at the bottom of the Home Menu → [Love] or [Invitation].
Inviting Friends Using the Program Guide

Overview

You can use the program guide to invite friends to watch the same program or express that you like certain programs.

Tips

- As of March 2014, this function is available in the following regions/countries.
  Czech Rep. / Denmark / Germany / Switzerland / Austria / United Kingdom / Ireland / Spain / France / Italy / Netherlands / Belgium / Luxembourg / Norway / Poland / Russia / Slovakia / Finland / Sweden / New Zealand / Australia / United States / Canada / Brazil

Steps

1. Connect to a broadband Internet connection.
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Channel].

3. Select [Program Guide].
   Detailed information about TV programs is displayed.

4. Select the desired program.
The detailed information of the program appears.

5. Select [Invite Friends].

6. Follow the on-screen instructions to log in to the TV with your Facebook account.
   The friend selection screen appears.

7. Follow the on-screen instructions to send invitations.

**Tips**

- You can register up to six accounts with the TV.
- After your account is registered, you can select it from the account list to log in.

**Notes**

- Guide and Search can launch only when [Cable/Antenna] is set to [Antenna] or a set-top box via an IR Blaster is ready.
HDMI connection

Making a Connection

HDMI connection is recommended for optimum picture quality. If your BD/DVD player has an HDMI jack, connect it using an HDMI cable.

Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repeatedly to select the connected BD/DVD player.
   (When using the Touchpad Remote Control, press the Control Bar (ˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌˌ duyệt
Component video connection

Making a Connection

If your BD/DVD player has component video jacks, connect it to the TV, using a component video cable and an audio cable.

Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repeatedly to select the connected BD/DVD player.
   (When using the Touchpad Remote Control, press the Control Bar (....), slide the touchpad to highlight the INPUT button, press the touchpad, slide the touchpad to highlight the connected BD/DVD player, then press the touchpad.)
3. Start playback on the connected BD/DVD player.
Composite connection

Making a Connection

If your BD/DVD player has composite jacks, connect it using a composite video/audio cable.

Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the INPUT button repeatedly to select the connected BD/DVD player.
   (When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the INPUT button, press the touchpad, slide the touchpad to highlight the connected BD/DVD player, then press the touchpad.)
3. Start playback on the connected BD/DVD player.
Digital Still Camera/Camcorder

Making a Connection

Connect your Sony digital still camera or camcorder using an HDMI cable. Use a cable that has an HDMI mini jack for digital still camera/camcorder end, and a standard HDMI jack for the TV end.

* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Steps

1. After making a connection, turn on the connected digital still camera/camcorder.

2. Press the INPUT button repeatedly to select the connected digital still camera/camcorder.
   (When using the Touchpad Remote Control, press the Control Bar (....), slide the touchpad to highlight the INPUT button, press the touchpad, slide the touchpad to highlight the connected digital still camera/camcorder, then press the touchpad.)


Tips

- If you connect a BRAVIA Sync-compatible device, you can control it by simply using the TV’s remote control. Make sure that the device is BRAVIA Sync-compatible. Some devices may not be compatible with BRAVIA Sync even though they have an HDMI jack.
USB Device

Making a Connection

Connect a USB storage device to enjoy photo, music and video files stored in the device.

Steps

1. After making a connection, turn on the connected USB device.
2. Press the HOME button, then select [Media Server].
3. Select [USB] → the folder or file from the list.
   If you select a folder, select the desired file.
   Playback starts.

To check the supported file formats

Codec List

Notes

- USB viewer supports FAT16, FAT32 and exFAT file systems.
- When connecting a Sony digital still camera to the TV with a USB cable, USB connection settings on your camera need to be set to [Auto] or [Mass Storage] mode.
- If your digital still camera does not work with your TV, try the following:
Set the USB connection settings on your camera to [Mass Storage].
Copy the files from the camera to a USB flash drive, then connect the drive to the TV.

- [Face Zoom] and [Expanded] in the option menu of [Display Size] may not work for some image files.
- Only panoramic JPEG files in the following horizontal/vertical sizes can be scrolled. (If the JPEG file is edited on a PC, etc., scrolling may not be possible.)
  - For horizontal scroll: 4912/1080, 7152/1080, 3424/1920, 4912/1920, 12416/1856, 8192/1856, 5536/2160, 3872/2160, 10480/4096, 11520/1080
- Video files are located in the following folder structure (hierarchical position):
  /AVCHD/BDMV/STREAM/00000.MTS
  /PRIVATE/AVCHD/BDMV/STREAM/00000.MTS
  /MP_ROOT/100ANV01/MAHA0001.MP4
- Avoid losing your files by backing up all your media files stored on a USB device. Sony cannot accept responsibility for lost or damaged data stored on a USB device.
- Depending on the file, playback may not be possible even when using the supported formats.
PC

Making a Connection

Connect your PC with an HDMI cable to enjoy music, pictures and other content stored in it.

* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Corresponding PC input signal

(Resolution, Horizontal frequency/Vertical frequency)

- 640 x 480, 31.5 kHz/60 Hz
- 800 x 600, 37.9 kHz/60 Hz
- 1024 x 768, 48.4 kHz/60 Hz
- 1280 x 768, 47.4 kHz/60 Hz and 47.8 kHz/60 Hz
- 1360 x 768, 47.7 kHz/60 Hz
- 1280 x 1024, 64.0 kHz/60 Hz
- 1920 x 1080, 67.5 kHz/60 Hz*
- 3840 x 2160, 30 Hz

* The 1080p timing, when applied to the HDMI input, will be treated as a video timing and not a PC timing. This will affect the [Preferences] and [Picture & Display] settings. To view PC content, set [Scene Select] to [Graphics], [Wide Mode] to [Full], and [Display Area] to [+1]. ([Display Area] is configurable only when [Auto Display Area] is set to [Off].)

Notes
• This TV does not support interlaced signals.

• For optimum picture quality, it is recommended that you use the signals in the chart. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)

• Depending on the connection status, the image may be blurred or smeared. In this case, change the PC’s settings, then select another input signal in “Corresponding PC input signal”.

• 1920 pixel x 1080 line/60Hz output may not be available, depending on your PC. Even if 1920 pixel x 1080 line/60Hz output is selected, the actual output signal may differ. In this case, change the PC’s settings, then select another input signal in “Corresponding PC input signal”.

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Viewing Photo Files in 4K Resolution

Overview

A photo with 4K or higher resolution can be displayed in 4K resolution (3840×2160). You can connect a digital still camera/camcorder that supports HDMI 4K output to HDMI IN of the TV to display high resolution photos stored on the camera. You can also display high resolution photos stored in connected USB devices or your home network.

High resolution photos stored in a device installed with a 4K-capable application (such as PlayMemories Studio™) can be also displayed in 4K resolution.

This function is available depending on your region/country.

Steps

These settings are required to display a photo that is stored on a USB device or network device in 4K resolution.

1. Press the HOME button, then select [Settings].

2. Select [Picture & Display] → [4K Photo Display] → [On].

When the setup is completed, see the next page for making the connection and displaying.

USB or home network connections
1. Connect the USB device or network device to the TV.
2. Press the HOME button, then select [Apps].

3. Select [All Apps] → [Media Player] → the USB device, server or preset folder containing the file to play → the folder or file from the list.
   If you select a folder, select the file.
   The photo is displayed.

**HDMI cable connection**

1. Connect a digital still camera or camcorder that supports HDMI output, to the HDMI IN jack of the TV, using an HDMI cable.
2. Press the INPUT button repeatedly to select the connected device.
   (When using the Touchpad Remote Control, press the Control Bar (･･･), slide the touchpad to highlight the INPUT button, press the touchpad, slide the touchpad to highlight the connected device, then press the touchpad.)
3. Set the connected device to 4K output.
4. Start playback on the connected device.

   To return to the last viewed source, press the INPUT button.
   (When using the Touchpad Remote Control, press the Control Bar (･･･), slide the touchpad to highlight the INPUT button, then press the touchpad to select.)

**Notes**

- Twin Picture cannot be displayed.
- A 3D picture is displayed in 2D.
- A panoramic photo cannot be scrolled.
- If you change the picture by pressing the buttons or sliding the touchpad left/right, it may take time to display.
- While viewing a photo in 4K resolution, some picture setting changes are not effective in real time. Press the button to return to the photo screen for the changes to take effect.
HDMI connection

Making a Connection

Connect an audio system (e.g. home theater system) with HDMI output to the TV, using an HDMI cable.

* Be sure to use an authorized HIGH SPEED HDMI cable bearing the HDMI logo.

Tips

- When connecting a BRAVIA Sync-compatible digital audio system with Audio Return Channel (ARC) technology, find the HDMI jack that carries the “ARC” mark (HDMI IN 1 or HDMI IN 2, depending on your model/region/country), then connect to that HDMI jack with an HDMI cable. However, if connecting a system that is not BRAVIA Sync-compatible or Audio Return Channel capable, an additional audio connection via DIGITAL AUDIO OUT (OPTICAL) is necessary.

Steps

1. After making a connection, press the HOME button, then select 📺 [Settings].
2. Select 🎧 [Sound] → [Speakers] → [Audio System].
   The connected audio system is turned on automatically. The volume can be controlled using the TV’s remote control.

Tips

- If you connect a BRAVIA Sync-compatible device, you can control it by...
simply using the TV’s remote control.
Optical audio connection

Making a Connection

Connect an audio system (e.g. home theater system) with digital input to the TV, using an optical audio cable.

Steps

1. After making a connection, press the HOME button, then select [Settings].
2. Select [Sound] → [Speakers] → [Audio System].
3. Press the HOME button twice to return to the last viewed source.
4. Turn on the connected audio system, then adjust the volume.
Audio cable connection

Making a Connection

Connect an audio system (e.g. amplifier) to the TV, using an audio cable.

![Audio system diagram]

**Steps**

1. After making a connection, press the HOME button, then select [Settings].
2. Select [Sound] → [Headphone/Audio Out] → [Audio Out].
3. Press the HOME button twice to return to the last viewed source.
4. Turn on the connected audio system, then adjust the volume.

**Tips**

- See the instruction manual of the audio system for details on connection of other devices and for the setup before use.

- When using an external audio system, the audio out of the TV can be controlled using the TV’s remote control if [Audio Out] is set to [Variable]. Press the HOME button, then select [Settings] → [Sound] → [Audio Out] → [Variable].

- When connecting a subwoofer, press the HOME button, then select [Settings] → [Sound] → [Headphone/Audio Out] → [Subwoofer].
Making a Connection

Connect your MHL device (e.g. smartphone, tablet) with MHL output to the TV's HDMI IN 2/MHL port or HDMI IN 4/MHL port, using an MHL cable. If your MHL device supports 4K output, connect it to the HDMI IN 2/MHL port to display 4K resolution images.

* Be sure to use an authorized MHL 2 or MHL 3 cable bearing the MHL logo.

Steps

1. After making a connection, press the HOME button, then select [Inputs].
2. Select [HDMI 2/MHL] or [HDMI 4/MHL].

To switch to the MHL input automatically

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga] → [BRAVIA Sync Settings] → [Auto Input Change(MHL)] → [On]. (Depending on the MHL device, input may not be switched.) If the TV is in standby mode, it will not switch automatically.

To charge an MHL device

When the TV is on, an MHL device can be charged from the TV, using an MHL cable.

Tips

- When the TV is in standby mode, if [Charge MHL during Power Off] is set
to [On], an MHL device can also be charged from the TV, using an MHL cable.

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga] → [Charge MHL during Power Off] → [On].
Wireless Subwoofer (Optional)

Overview

You can use the optional Wireless Subwoofer SWF-BR100 to extend the bass response of the TV’s sound.

Connect the Wireless Transceiver supplied with the Wireless Subwoofer SWF-BR100 to use the Wireless Subwoofer.

Making a Connection

1. Connect the audio cable (supplied) to the Wireless Transceiver.
2. Connect the other end of the audio cable to the AUDIO OUT (Headphone/Audio Out) jack of the TV.
3. Connect the Wireless Transceiver to the USB (Headphone/Audio Out) port of the TV. [Headphone/Audio Out] is automatically set to [Subwoofer].
4. Position the Wireless Subwoofer and connect it to the AC power. It is recommended that the Wireless Subwoofer be placed as close as possible to the TV.

Tips

- When the Wireless Transceiver is disconnected, [Headphone/Audio Out] is automatically restored to its original setting.
For details on how to set up the Wireless Subwoofer, refer to the instruction manual supplied with the Wireless Subwoofer.

**Steps**

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Wireless Subwoofer].

**Available Options**

The recommended values for your TV have already been set.

**[Subwoofer Level]**
Adjusts the volume level of the Wireless Subwoofer.

**[Cut Off Frequency]**
Adjusts the cut off frequency of the Wireless Subwoofer. All frequencies below the cut off frequency are output to the Wireless Subwoofer instead of the TV speakers.

**[Phase]**
Sets the phase polarity.
Select the setting based on your preference.

**[Power]**
Sets the power control method of the Wireless Subwoofer.
When you do not use the Wireless Subwoofer, select [Off].
You can also set this option using the Options menu.

**[Reset]**
Resets the Wireless Subwoofer settings to their initial values.
Playable File Formats (DLNA, USB devices, etc.)

Checking supported file formats

Codec List
Setting BRAVIA Sync

Overview

If a BRAVIA Sync-compatible device (e.g. BD player, AV amplifier) is connected with an HDMI cable, or a BRAVIA Sync-compatible device (e.g. smartphone, tablet) is connected with an MHL cable, this TV allows you to control the device with the TV’s remote control.

Steps

1. Turn on the connected device.
2. Press the HOME button, then select [Settings].
3. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [BRAVIA Sync Control] → [On].
4. Activate BRAVIA Sync on the connected device.

When a specific Sony BRAVIA Sync-compatible device is connected and powered on, and [BRAVIA Sync Control] is set to [On], BRAVIA Sync is automatically activated on that device.
For details, refer to the instruction manual of the connected device.

* Option name differs depending on your region/country.

To not turn off the connected device automatically when turning off the TV
Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [Device Auto Power Off] → [Off].

* Option name differs depending on your region/country.

**To not turn on the TV automatically when turning on the connected device**

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [TV Auto Power On] → [Off].

* Option name differs depending on your region/country.

**To switch the TV input to the corresponding device connected with an MHL cable**

Press the HOME button, then select [Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [Auto Input Change(MHL)] → [On].

* Option name differs depending on your region/country.

**Available BRAVIA Sync Operations**

**BD/DVD player**

- Automatically turns the BRAVIA Sync-compatible device on and switches the input to that device when you select it from the Home Menu or Sync Menu.
- Automatically turns the TV on and switches the input to the connected device when the device starts to play.
- Automatically turns the connected device off when you turn the TV off.
- Controls menu operation ( num/num buttons), playback (e.g. button) and channel selection of the connected device through the TV’s remote control.

**AV amplifier**

- Automatically turns the connected AV amplifier on and switches the sound output from the TV speaker to the audio system when you turn the TV on. This function is only available if you have previously used the AV amplifier to output the TV’s sound.
- Automatically switches the sound output to the AV amplifier by turning the AV amplifier on when the TV is turned on.
- Automatically turns the connected AV amplifier off when you turn the TV off.
- Adjusts the volume (VOL +/- buttons) and mutes the sound (MUTING button) of the connected AV amplifier through the TV’s remote control.
**Video camera**

- Automatically turns the TV on and switches the input to the connected video camera when the connected video camera is turned on.
- Automatically turns the connected video camera off when you turn the TV off.
- Controls menu operation (↑/↓/←/→ buttons), playback (e.g. ► button) and channel selection of the connected video camera through the TV’s remote control.

**Notes**

- “BRAVIA Sync Control” (BRAVIA Sync) is only available for a connected BRAVIA Sync-compatible device that has the BRAVIA Sync logo.
Using the Sync Menu

Steps

1. Press the SYNC MENU button.
   (When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the SYNC MENU button, then press the touchpad to select.)

2. Select the desired item in the Sync Menu.

   ![](image)

   To exit the Sync Menu, press the SYNC MENU button.
   (When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the SYNC MENU button, then press the touchpad to select.)

Tips

- If you press the SYNC MENU button, the promotion screen is displayed in the following cases.
  - An HDMI or MHL device is not connected.
  - [BRAVIA Sync Control] is set to [Off].

Available Items

[Device Selection]
Enables selection of a BRAVIA Sync-compatible device to be controlled by the TV’s remote control.

[Device Control]
Displays the menu, options and title list of the connected device, or turns the device off.
[Use TV speakers to output sound]/[Use audio system for audio output]
Switches the speaker output between the TV and the connected audio device.

[TV Control]
Displays the menu and options of the TV, or shows/hides the display items on the TV screen.

[Return to TV]
Returns to TV channels.

[TV control with the TV remote]/[Device control with the TV remote]
Switches the device to be controlled by the TV’s remote control, between the TV and the connected device.

Tips
• Any BRAVIA Sync-compatible device (except an audio system) is listed as a new input source under [Inputs] in the Home Menu.
Setting Buttons to Control an HDMI/MHL Device

Steps

1. Press the HOME button, then select [Settings].

2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [Device Control Keys] → the desired option.

* Option name differs depending on your region/country.

Available Options

[None]
Deactivates control by the TV’s remote control.

[Normal]
Enables basic operations, such as navigation buttons (up, down, left or right, etc.).

[Tuning Keys]
Enables basic operations and operation of channel-related buttons, such as the CH +/- buttons or the 0 - 9 buttons, etc. Useful when you control a tuner or set-top box, etc., via the remote control.

[Menu Keys]
Enables basic operations and operation of the HOME/OPTIONS buttons. Useful when you control BD player menus, etc., via the remote control.

[Tuning and Menu Keys]
Enables basic operations and operation of the HOME/OPTIONS buttons and channel-related buttons.
Displaying the BRAVIA Sync Device List

Steps

1. Press the HOME button, then select [Settings].

2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [BRAVIA Sync Settings] → [BRAVIA Sync Device List].

* Option name differs depending on your region/country.
Top Page > Useful Functions > Selecting a picture and sound setting suitable for the content

## Selecting a picture and sound setting suitable for the content

### Overview

You can select a preset picture and sound setting (e.g. [Auto], [Cinema], [Sports]) that suits the content.

![Image of TV and football field]

### Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Scene Select] → the desired option.

### Available Options

**[Auto]**

Automatically selects the scene based on the viewing content.

**[Auto (24p Sync)]**

Automatically selects "Cinema" for 24Hz signal content. Behaves as "Auto" for all other signals.

**[General]**

Turn off Scene Select for general content.
<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cinema</strong></td>
<td>Optimal picture and sound for watching movies.</td>
</tr>
<tr>
<td><strong>Sports</strong></td>
<td>Optimal picture and sound for watching sports.</td>
</tr>
<tr>
<td><strong>Music</strong></td>
<td>Optimal sound for listening to music.</td>
</tr>
<tr>
<td><strong>Animation</strong></td>
<td>Optimal picture for watching animation.</td>
</tr>
<tr>
<td><strong>Photo</strong></td>
<td>Optimal picture for viewing photos. This setting will apply to 2160p (25/30Hz), 1080i/p (50/60Hz) and 480/576p formats only. (2160p (25Hz), 1080i/p (50Hz) and 576p are available depending on your region/country.)</td>
</tr>
<tr>
<td><strong>Game</strong></td>
<td>Optimal picture and sound for playing video games.</td>
</tr>
<tr>
<td><strong>Graphics</strong></td>
<td>Optimal picture for viewing tables and characters.</td>
</tr>
</tbody>
</table>
Automatically adjusting picture brightness according to ambient light

Overview

The picture brightness can be automatically adjusted according to the ambient light. You can save power consumption with an optimized picture brightness.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Eco] → [Light Sensor] → [On].
Adding Favorite Applications

Steps

1. Display an application to add to [My Apps].
   Press the HOME button, then select [Apps] → [All Apps] → the desired application.

2. Press the ☰ button, then select [Add to My Apps].
   (When using the Touchpad Remote Control, press the touchpad.)

To access items added to [My Apps]
Press the HOME button, select [Apps], then the desired item.

To remove an item from [My Apps]
Display the item to delete, press the OPTIONS button, then select [Remove from My Apps].

To sort the list of applications
Press the HOME button, then select [Apps].
Highlight the desired item, press the OPTIONS button, then select [Move Application]. The selected applications move to the desired positions by using the ←/↑/→/↓ buttons at the sorting applications screen. Press the ☰ button to apply the change.
(When using the Touchpad Remote Control, slide left/right/up/down to move to the desired positions, then press the touchpad.)
Current View Information Search

Overview

This feature searches for information about the TV program you are watching, or the currently playing music title/artist name on your TV, from an Internet database. Music playing on a device connected to the TV can also be searched. You can also search for related information from your search results.

Tips

- As of March 2014, this function is available in the following regions/countries.
  - Czech Rep. / Denmark / Germany / Switzerland / Austria / United Kingdom / Ireland / Spain / France / Italy / Netherlands / Belgium / Luxembourg / Norway / Poland / Russia / Slovakia / Finland / Sweden / New Zealand / Australia / United States / Canada / Brazil

Steps

1. Connect to a broadband Internet connection.
   Press the \( \text{ि} \) button to jump to the title list. Then, press the \( \text{ि} \) button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. While a TV program, video or music is playing, press the RELATED SEARCH button.
   - When watching a TV program, information related to the program will appear. Move to step 4.
   - For content other than TV programs, information related to the music that is currently playing will appear. Move to step 3.
3. After a message appears in the bottom right corner of the screen stating the search is complete, press the button. 
   (When using the Touchpad Remote Control, press the touchpad.)

4. Detailed information about the currently playing program or music will appear. 
   To view related detailed information, switch the tabs using the buttons. 
   (When using the Touchpad Remote Control, slide left/right to switch the tabs.)

To operate the search result
You can use various operations (e.g. [Play] and [Tune]). The available operations depend on the conditions.

Notes

- Information may not be obtainable depending on what you watch.
- When watching TV via an external input, you cannot search information on TV programs.
- For customers in the USA or Canada: When watching TV by a cable signal, you cannot search information on TV programs.
**Keyword Search**

**Overview**

You can search for information on TV programs, music, and videos by entering a keyword (track title, album name, video title, etc.). You can also search and play Internet video. The search target may differ depending on your region/country.

**Steps**

1. Connect to a broadband Internet connection.
   
   Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
   
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Search].

3. Select the text input area, enter a keyword, then select [Enter].
   
   You can also select keywords searched in the past.
   
   The search result will be categorized by the type of content, then displayed. Select a category to display the search results for that category.

4. Select a search result.
   
   To return to the last viewed source, press the RETURN button a few times.
Saving power by picture brightness

Overview

You can reduce power consumption by changing the picture brightness.

Steps

1. Press the HOME button, then select \[Settings\].

2. Select \[Preferences\] → \[Eco\] → \[Power Saving\] → the desired option.

Available Options

[Picture Off]
Maximum power saving. Picture turns off; sound remains on.

[High]
High power saving. Picture darkens.

[Low]
Low power saving. Picture darkens slightly.

[Off]
No power saving.

**Tips**

- If the power is turned off while [Picture Off] is set, [Power Saving] will be set to [Off] when the power is turned on next time.
Saving power by automatically adjusting the backlight drive

Overview

The TV adjusts the backlight brightness according to the [Scene Select] setting. You can save power by enabling this function.

Example of backlight adjustment:

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Eco] → [Scene Select Sync] → [On].
Turning the TV off by monitoring idle time

Overview

You can set the TV to automatically turn off after it has been idle for a preset period of time.

Steps

1. Press the HOME button, then select Settings.

2. Select [Preferences] → [Eco] → [Idle TV Standby] → the period. When the set time passes, power will turn off automatically. If [Off] is selected, power will not turn off.
Turning the TV off by monitoring input signal

Overview

You can set the TV to automatically turn off when no broadcast or external input signal is detected for 15 minutes.

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Eco] → [Auto Shut-off] → [On].
Setting the current time manually

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Clock/Timers] → [Current Time].

3. Press the button in [Date (Month/Day/Year)], then set the date → select [Time Zone] → set the time zone → select [DST] → set the DST setting → select [Time] → set the time.

(When using the Touchpad Remote Control, press the touchpad in [Date (Month/Day/Year)].)
Setting the on timer

Overview

You can set the TV to turn on from standby mode at a selected time.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Clock/Timers] → [Timer].

3. Press the button in [Timer], then select [On] → the setting item → set the item.

(When using the Touchpad Remote Control, press the touchpad in [Timer].)
Setting the sleep timer

Overview

You can set the TV to turn off after a preset period.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Clock/Timers] → [Sleep Timer] → the desired option.

Notes

- When you turn off the TV and turn it on again, [Sleep Timer] is reset to [Off].
Wireless Connection (Built-in Wireless LAN)

Making a Connection

The built-in wireless LAN device allows you to access the Internet and enjoy the benefits of networking in a cable-free environment.

Steps

1. Set up your wireless router (or access point).
   For details, refer to the instruction manual of your wireless router (or access point), or contact the person who set up the network (network administrator).

2. Press the HOME button, then select [Settings].

3. Select [Network] → [Network Setup] → [Set up network connection] → [Easy].

4. Follow the on-screen instructions to complete the setup.

5. After completing the setup, select [Refresh Internet Content].

To turn off the built-in wireless LAN

Press the HOME button, then select [Settings] → [Network] → [Built-in Wi-Fi] → [Off].

Tips

- For smooth video streaming:
- Change the setting of your wireless router (or access point) to 802.11n if possible. For details on how to change the setting, refer to the instruction manual of your wireless router (or access point), or contact the person who set up the network (network administrator).

- If the above does not bring any improvement, change the setting of your wireless router (or access point) to 5GHz, which may help improve the video streaming quality.

- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, the TV can only connect to a wireless router (access point) using the 2.4GHz band.

  • To use WEP security with a wireless router (or access point), select [Expert] → [Wi-Fi Setup] → [Scan].

  • To use the WPS PIN method, select [Expert] → [Wi-Fi Setup] → [WPS (PIN)].

**Notes**

• The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those supplied with the router. Or contact the person who set up the network (network administrator).
Wired Connection (with a LAN Cable)

Making a Connection

A wired LAN connection allows you to access the Internet and your home network. Connect a LAN cable to your TV.

Steps

1. Set up your LAN router.
   For details, refer to the instruction manual of your LAN router, or contact the person who set up the network (network administrator).

2. Press the HOME button, then select [Settings].

3. Select [Network] → [Network Setup] → [Set up network connection] → [Easy].

4. Follow the on-screen instructions to complete the setup.

5. After completing the setup, select [Refresh Internet Content].

Notes

- The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those
supplied with the router. Or contact the person who set up the network (network administrator).
Setting IPv6

Making a Connection

If your provider’s service is compatible with IPv6, you can connect this TV to the Internet by IPv6.

Example of wireless connection:

![Diagram of network setup](image)

Steps

1. Connect to a broadband Internet connection.
   Press the  button to jump to the title list. Then, press the  button again to go to “Wireless connection” or “Wired connection” in “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Wireless connection” or “Wired connection” in “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Settings].

3. Select [Network] → [IPv6 Setup] → [Set up IPv6 connection].

4. Follow the on-screen instructions to complete the setup.

Notes

- If your network environment does not support IPv6, turn off IPv6 of the TV.
Playing Content on a PC

Overview

You can play photo/music/video files stored on a server (e.g. PC) that is connected to the same home network that the TV is connected to.

Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
   Press the ▼ button to jump to the title list. Then, press the ▼ button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Press the HOME button, then select [Apps].

3. Select [All Apps] → [Media Player] → [Photo], [Music] or [Video] → the server containing the file to play → the folder or file from the list.
   If you select a folder, select the desired file.
   Playback starts.

To check the supported file formats

Codec List

Notes
• The server is required to be DLNA-certified (e.g. VAIO).
• Depending on the file, playback may not be possible even when using the supported formats.
• Only panoramic JPEG files in the following horizontal/vertical sizes can be scrolled. (If the JPEG file is edited on a PC, etc., scrolling may not be possible.)
  - For horizontal scroll: 4912/1080, 7152/1080, 3424/1920, 4912/1920, 12416/1856, 8192/1856, 5536/2160, 3872/2160, 10480/4096, 11520/1080
• [Face Zoom] and [Expanded] in the option menu of [Display Size] may not work for some image files.
Enabling the renderer function

Overview

By enabling the renderer function, you can play photo/music/video files in a controller (e.g. digital still camera) on the TV screen by operating the device directly. Also, a mobile device (e.g. smartphone) can work as the TV’s remote control via the home network.

Steps

1. Press the HOME button, then select [Settings].
2. Select [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Remote Device / Renderer] → [On].
Allowing/blocking access from controller

Steps

1. Press the HOME button, then select [Settings].

2. Select [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Renderer Access Control] → the controller to change the access permission setting → [Allow] or [Block].

   Select [Allow] to allow access from the controller. Select [Block] to block access from the controller.
Making advanced renderer settings

Steps

1. Press the HOME button, then select [Settings].
2. Select [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Renderer Options] → the desired option.

Available Options

[Auto Access Permission]
Permits access to the TV automatically when a controller accesses the TV for the first time.

[Smart Select]
Responds to infrared signals sent from controllers.
Selecting servers to display

Steps

1. Press the HOME button, then select 🗃️ [Settings].
2. Select 🌐 [Network] → [Home Network Setup] → [Show/Hide Media Servers] → the server to display or not display → [Shown] or [Hidden].
Checking the server connection

Steps

1. Press the HOME button, then select [Settings].
2. Select 🌐 [Network] → [Home Network Setup] → [Media Server Troubleshooting].
3. Follow the on-screen instructions to perform the diagnostics.
Connecting via Wi-Fi Direct (without a wireless router)

Overview

The TV can be directly connected to a Wi-Fi/Wi-Fi Direct device (e.g. smartphone, PC) that also supports the “DLNA Push controller” function. Content such as photos/music/videos on the device can be played on the TV. No wireless router (or access point) is required to use this feature.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Network] → [Wi-Fi Direct] → [On].

3. Select [Wi-Fi Direct Settings].

4. Select the TV name displayed on the TV screen with the Wi-Fi Direct device.

   If the device does not support Wi-Fi Direct, press the OPTIONS button, then select [Manual].

5. Operate the Wi-Fi Direct/Wi-Fi device to connect with the TV.

6. Send the content from the Wi-Fi Direct/Wi-Fi device to the TV.

   For details, refer to the instruction manual of the device.
If the connection does not succeed
When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Manual]. Select [WPS (Push Button)] if the device supports WPS. Otherwise, select [Other Methods] and follow the on-screen instructions to complete the setup.

To connect another device
Follow the steps above to connect devices. Up to 10 devices can be connected at the same time. To connect another device when 10 devices are already connected, disconnect an unnecessary device, then connect the device.

To change the name of the TV shown on the connected device
Press the HOME button, then select [Settings] → [Network] → [Device Name].

To list connected devices/deregister devices
When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Show Device List / Delete].
To deregister a device, select the device in the list to delete, then press the button (or press the touchpad on the Touchpad Remote Control). Then, select [Yes] in the confirmation display.
To deregister all devices, press the OPTIONS button in the list, select [Delete All], then [Yes] in the confirmation display.

Icons on the left of the list show the following.
✓ (check icon): Connected devices
☐ (display icon): Screen mirroring compatible devices

To display dialog when attempting to connect a device with the TV
Activating this function can avoid an unintended device from being connected.
When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Registration Notification].
Note that once you decline registration request from a device, you will not be able to connect the device unless you delete it from the device list.
To connect the declined device, press the OPTIONS button, select [Show Device List / Delete], then delete the declined device. Then, make a new connection with the device.

To change the band setting (for experts)
When your TV is not connected to any routers by wireless, you can
select the wireless band for the Wi-Fi Direct function. When the standby screen for the Wi-Fi Direct setting is displayed, press the OPTIONS button, then select [Band Setting].

[Auto]: Normally use this option. It automatically selects an appropriate band for the Wi-Fi Direct function.

[Auto (2.4GHz Band)]: Use this option when connecting with devices that support 2.4GHz only. This option may support more devices than other options.

[Auto (5GHz Band)]: Use this option when connecting with devices that support 5GHz. This option may improve video streaming quality. Note that when you select this option, the TV cannot connect with devices that support 2.4GHz only.

[Select a Channel]: Use this option to select a specific wireless channel.

**Tips**

- For information about the supported wireless band of your device, refer to the instruction manual of your device.

- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, you can only use [Auto] and [Select a Channel].

**Notes**

- If the TV is connected with a wireless router (or access point) at 5GHz:
  - The 5GHz connection will be disconnected when [Wi-Fi Direct] is set to [On]. While the connection is disconnected, communication via the Internet (such as an incoming call) is stopped.
  - The connection will be resumed when [Wi-Fi Direct] is set to [Off].

- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, the TV can only connect to a wireless router (access point) using the 2.4GHz band.
Playing Content with the Renderer Function

Overview

You can play photo/music/video files in a controller (e.g. digital still camera) on the TV screen by operating the controller directly. The controller should also be renderer-compatible.

Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
   Press the \button to jump to the title list. Then, press the \button again to go to “Connecting to the Internet” for details.
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Operate the controller to start playing the content on the TV screen.
Using a Smartphone/Tablet as a Remote

Overview

You can control the TV from the touch panel of a mobile device (such as a smartphone or tablet) with the "TV SideView" application installed. To use your mobile device as a TV's remote control, register it to the TV as a remote device. (Registration is required only for the first time.)

Available operations using the mobile device with the “TV SideView” application installed

- Powering on and controlling the TV, as a remote control
- Entering text using the mobile device’s keyboard

For comprehensive information about the “TV SideView” application, refer to the following website:
http://info.tvsideview.sony.net
For details on how to use the “TV SideView” application, refer to the application’s help.

Tips

- You can search and download the “TV SideView” application from:
  - Google Play (for Android OS)
  - App Store (for iOS)

Steps

1. Connect the TV to your home network, following the steps in “Connecting to the Internet.”
Press the button to jump to the title list. Then, press the button again to go to “Connecting to the Internet” for details.
(When using the Touchpad Remote Control, press the touchpad.
Then, press the touchpad again to go to “Connecting to the Internet” for details.)

2. Connect the mobile device to the home network that the TV is connected to.

3. Launch the “TV SideView” application on the mobile device, then search for the TV in the home network or in the available Wi-Fi Direct devices.
   The detected device list appears on the mobile device.

4. Select the TV in the detected device list, then perform the required operation on your device.

Mutual registration (the above steps) are required only for the first time.

**Tips**

- You can also connect the “TV SideView” application to the TV using Wi-Fi Direct. Turn on the Wi-Fi Direct function of the TV by selecting [Settings] → [Network] → [Wi-Fi Direct] → [On], then navigate to the [Wi-Fi Direct Settings] page of the TV by selecting [Settings] → [Network] → [Wi-Fi Direct Settings].

**To turn on the TV from “TV SideView” on your mobile device**

Press the HOME button, then select [Settings] → [Network] → [Home Network Setup] → [Remote Start] → [On].
The standby power consumption will increase if [On] is set.

**Notes**

- Make sure that [Remote Device / Renderer] is set to [On]. To confirm the setting, press the HOME button, then select [Settings] → [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Remote Device / Renderer].
- The name and available functions of “TV SideView” are subject to change.
Top Page > Using Home Network > Displaying the Smartphone’s Screen on the TV (One-touch mirroring)

Displaying the Smartphone’s Screen on the TV (One-touch mirroring)

Overview

By simply touching a mobile device (such as a smartphone or tablet) on the Touchpad Remote Control, you can display its screen on your large TV screen.

You can use this “One-touch mirroring” function with a One-touch mirroring compatible device (e.g. some models of Xperia).

Steps

1. Set the NFC* setting of your smartphone to on.
   * NFC: Near Field Communication

2. Touch the NFC detection area of the smartphone to the mark on the Touchpad Remote Control for about 2 seconds.
   Remove the smartphone from the remote control when the device confirmation completion message appears at the bottom of the TV screen.
   When the smartphone is connected with the TV, the screen displayed on the smartphone will also be displayed on the TV.
To optimize the One-touch mirroring function (for experts)

When the standby screen for Screen mirroring is displayed, press the OPTIONS button, then select [Optimize One-touch mirroring].

[Off]: Normally use this option. It uses the same wireless channel at 2.4GHz as the wireless router (or access point) is using.

[Auto]: This option uses a wireless channel that may improve video streaming quality. When you select this setting, the wireless connection between the TV and the wireless router (access point) is disconnected during One-touch mirroring, therefore communication via the Internet (such as an incoming call) is stopped.

When your TV is connected to a wireless router (or access point) at 2.4GHz, you can optimize the wireless connection for the One-touch mirroring function.

Notes

- For connection with Xperia, release the screen lock of Xperia, then touch.
- For the position of the NFC detection area on the smartphone, refer to the instruction manual of the smartphone.
- If the TV cannot recognize and connect with the smartphone, try again.
Displaying the Smartphone's Screen on the TV
(Screen mirroring)

Overview

You can display the screen of a mobile device (such as a smartphone or tablet) on the TV to view photos, videos or websites.

“Screen mirroring” is a function to display the screen of a Screen mirroring compatible device (such as a smartphone or PC) on the TV by Miracast technology. A wireless router (access point) is not necessary to use this function.

Steps

1. Press the INPUT button, then select [Screen mirroring].
   (When using the Touchpad Remote Control, press the Control Bar (･･･), slide the touchpad to highlight the INPUT button, press the touchpad, slide the touchpad to highlight [Screen mirroring], then press the touchpad.)

2. Operate your smartphone to connect with the TV.

   When the smartphone is connected with the TV, the screen displayed on the smartphone will also be displayed on the TV. For details, refer to the instruction manual of your smartphone.

To change the name of the TV shown on the connected device

Press the HOME button, then select 🗄️ [Settings] → ⚙️ [Network] → [Device Name].

To list connected devices/deregister devices
When the standby screen for the Screen mirroring is displayed, press the OPTIONS button, then select [Show Device List / Delete].

To deregister a device, select the device in the list to delete, then press the button (or press the touchpad on the Touchpad Remote Control). Then, select [Yes] in the confirmation display.

To deregister all devices, press the OPTIONS button in the list, select [All Delete], then [Yes] in the confirmation display.

Icons on the left of the list show the following.
✓ (check icon): Connected devices
❑ (display icon): Screen mirroring compatible devices

**To display dialog when attempting to connect a device with the TV**

Activating this function can avoid an unintended device from being connected.

When the standby screen for the Screen mirroring is displayed, press the OPTIONS button, then select [Registration Notification] → [On].

Note that once you decline registration request from a device, you will not be able to connect the device unless you delete it from the device list.

To connect the declined device, press the OPTIONS button, select [Show Device List / Delete], then delete the declined device. Then, make a new connection with the device.

**To change the band setting (for experts)**

When the standby screen for Screen mirroring is displayed, press the OPTIONS button, then select [Band Setting].

[Auto]: Normally use this option. It automatically selects an appropriate band for the Screen mirroring function.

[Auto (2.4GHz Band)]: Use this option when connecting with devices that support 2.4GHz only. This option may support more devices than other options.

[Auto (5GHz Band)]: Use this option when connecting with devices that support 5GHz. This option may improve video streaming quality.

Note that when you select this option, the TV cannot connect with devices that support 2.4GHz only (except for the standby screen for Screen mirroring).

[Select a Channel]: Use this option to select a specific wireless channel. Note that when your TV is connected to a wireless router (access point), [Band Setting] cannot be changed.

**Tips**
- For information about the supported wireless band of your device, refer...
to the instruction manual of your device.

- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, you can only use [Auto] and [Select a Channel].

- A different band might be used depending on the connected wireless device.

**Notes**

- While the standby screen for the Screen mirroring is displayed, the wireless connection between the TV and your wireless router (access point) is disconnected, therefore communication via the Internet (such as an incoming call) is stopped.
### Sharing Photos

#### Overview

Gather around the TV with your family or friends, connect your smartphones/tablets to the TV and view your favorite photos on the large screen TV. Furthermore, if you like a photo on someone else’s smartphone/tablet, you can copy the photo to your device.

![Photo Sharing Graphic]

#### Steps

1. Press the HOME button, then select [Apps] → [Photo Share].
   - The introduction to the steps to connect your smartphone/tablet to the TV appears.
2. Press the button (or press the touchpad on the Touchpad Remote Control) to start the steps.
3. Follow the on-screen instructions to connect each smartphone/tablet to the TV.
4. After all connections are established, press.
   - (When using the Touchpad Remote Control, slide right.)
5. Open the web browser on your smartphone/tablet and follow the on-screen instructions to access the URL shown on the TV screen.
6. To display a photo on the TV, tap [Start] on your smartphone/tablet, tap , select the photo on your smartphone/tablet, then tap . The photo appears on the TV screen and its thumbnail is displayed on each smartphone/tablet.
7. To save a photo displayed on the TV, tap its thumbnail on your smartphone/tablet, then touch and hold the photo to open the context
menu. Select [Save] to save the photo. You can tap 📷 to view the photo on the TV screen again.

Notes

- The thumbnail history keeps up to 5 photos. You can also connect a USB flash drive to the TV to keep up to 55 photos.
  Do not disconnect a USB flash drive while using the Photo Share application. Otherwise, data in the drive may be corrupted.
- If the TV uses the 5GHz band to connect to a wireless router (or access point), the connection is disconnected when Photo Share is started.
- Up to 10 smartphone/tablet can be connected to the TV at the same time. To connect another device when 10 devices are already connected, disconnect an unnecessary device, then connect the device.
- The default browser for Android 2.3 or later is supported.
- The default browser for iOS is supported; however, some functions cannot be used depending on the version of your iOS.
- The maximum file size of photos is 10MB.
### Selecting picture mode

#### Overview

You can select the picture mode according to your preference. The [Picture Mode] setting works in accordance with the [Scene Select] setting.

#### Steps

1. Set [Scene Select].
   
   Press the \( \oplus \) button to jump to the title list. Then, press the \( \oplus \) button again to go to “Selecting a picture and sound setting suitable for the content” for details.
   
   (When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to “Selecting a picture and sound setting suitable for the content” for details.)

2. Press the HOME button, then select \( \equiv \) [Settings].

3. Select \( \equiv \) [Picture & Display] → [Picture Adjustments] → [Picture Mode] → the desired option.

#### Available Options

- **[Vivid]**
  
  Enhances picture contrast and sharpness.

- **[Standard]**
  
  Provides standard picture for basic home use.

- **[Custom]**
  
  Stores your preferred settings.
[Cinema 1]
Provides film-based content for a cinema-like environment.

[Cinema 2]
Provides film-based content for basic home use.

[Sports]
Optimizes picture quality for viewing sports.

[Game-Standard]
Provides standard pictures suitable for games.

[Game-Original]
Adjusts the game picture according to your preference.

[Graphics]
Optimizes picture quality for viewing graphics.

[Photo-Vivid]
Enhances contrast, sharpness, and color of photographs.

[Photo-Standard]
Optimizes picture quality for viewing photographs.

[Photo-Original]
Enhances the visual warmth of photographs.

[Photo-Custom]
Adjusts the detailed settings for viewing photographs and stores your preferred settings.

[Animation]
Optimizes picture quality for viewing animations.
Locking picture adjustment

Steps

1. Press the HOME button, then select 🗽 [Settings].

2. Select 🗼[Preferences] → [Picture Adjustments Lock] → [Lock] to prevent the picture adjustments from being changed.
Setting the screen size/position

Overview

You can set the screen size and position according to your preference.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Picture & Display] → [Screen] → the desired option.

Available Options (for inputs other than a PC)

[Setting Memory]
Applies custom screen settings to the current input or to common memory shared by other inputs.

[Wide Mode]
(This function is not available with an input signal resolution of 3840 × 2160.)

[Wide Zoom]: Enlarges the picture, preserving the original picture as much as possible.
[Normal]: For 4:3 original source, displays a 4:3 picture in its original size, with side bars to fill the 16:9 screen. For 16:9 original source, displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.
For 4K (4096 x 2160) original source, shrink the picture vertically to show the entire picture in the correct aspect ratio.

[Full]: Enlarges the picture horizontally to fill the screen when the input signal is 4:3. When the input signal is 16:9 (High-definition source), select this option to display the 16:9 picture in its original size.

[Zoom]: Displays a 16:9 picture that has been converted into 4:3 letter box format, in the correct aspect ratio.

For 4K (4096 x 2160) original source, fill the screen in the correct aspect ratio. (The left/right side edges will not be displayed.)

[14:9]: Displays the 14:9 picture in the correct proportion. As a result, side bars are shown on the screen. ([14:9] is available depending on your region/country.)

[Captions]: Enlarges the picture horizontally, while fitting captions in the screen.

If component input (480p) is selected and [Scene Select] is set to [Game] or [Graphics], the available options change to [Fine-Normal]/[Fine-Full]/[Portable Game 1]/[Portable Game 2].

[Fine-Normal]: Displays a 4:3 picture in its original size. Side bars are shown to fill the 16:9 screen.

[Fine-Full]: Stretches a 4:3 picture horizontally, to fill the 16:9 screen.

[Portable Game 1]: Stretches a black-framed game picture from PlayStation®Portable.

[Portable Game 2]: Stretches a black-framed picture (e.g. browser) from PlayStation®Portable.

[Auto Wide]
Automatically changes [Wide Mode] to match the input signal.

[4:3 Default]
Sets the default screen format for a 4:3 input signal.

[Auto Display Area]
Automatically adjusts the picture to the most appropriate display area.

[Display Area]
[Full Pixel]: Displays the original picture when parts of the picture are cut.
[+1]: Displays the picture using the TV’s maximum display area.
[Normal]: Displays the recommended size picture.
[-1]: Enlarges the picture.
([Full Pixel] is available only when the input signal is 1080i/1080p and [Wide Mode] is set to [Full].)

[Screen Position]
Adjusts the vertical position and horizontal position of the picture. This function is not available with an input signal resolution of 3840 × 2160 or 4096 × 2160.

[Vertical Size]
Adjusts the vertical size of the picture. This function is not available with an input signal resolution of 3840 × 2160 or 4096 × 2160.

Available Options (for PC input)

[Reset]
Resets all PC screen settings to factory settings.

[Wide Mode]
[Normal]: Displays the original picture.
[Full 1]: Enlarges the picture to fill the display area, maintaining the original picture.
[Full 2]: Enlarges the picture to fill the display area.
Adjusting various sound settings (e.g. bass/treble/balance)

**Steps**

1. Press the HOME button, then select [Settings].

2. Select [Sound] → [Sound] → the desired option.

**Available Options**

**[Setting Memory]**
- Applies custom sound settings to the current input or to common memory shared by other inputs.

**[Sound Mode]**
- [Standard]: Optimizes sound quality for general content.
- [Cinema]: Optimizes surround sound for movies.
- [Sports]: Reproduces realistic sound, like that in a stadium.
- [Music]: Lets you experience dynamic and clear sound, like that of a concert.
- [Game]: Broadens your game-playing experience with superb sound quality.
- [Compressed Audio]: Improves the sound quality of low bit rate compressed audio content.

**[Surround Effect]**
- Adjusts the surround sound effect.
  - If [Sound Mode] is set to [Cinema], [Sports], [Music] or [Game], a surround sound technology developed by Sony reproduces a surround sound field.
[Auto Surround]
Automatically outputs 5.1 surround sound when the TV receives a 5.1 surround sound signal from the input source.

[Sound Booster]
[On]: Enhances treble/bass and reproduces dynamic sound.
[Off]: Provides natural sound.

[Equalizer]
Adjusts the sound according to specific frequencies.

[Voice Zoom]
Emphasizes voice or ambient sounds.

[Live Football Mode]
You can emphasize the roar of the crowd on sporting events, as though you are watching from the stands of the stadium.
[On]: Emphasizes the roar of the crowd.
[Off]: Turns off the function.
When this function is turned on, other sound settings except for [Sound Booster] and [Equalizer] are deactivated.
This function is turned off when a channel is changed, input is changed or the TV is turned off.

[Advanced Auto Volume]
Automatically compensates for the volume level that may vary by program or input.
[Off]: Turns off the function.
[Normal]: Normal mode.
[Night]: Compresses the dynamic range for a more consistent level for viewing at night.

[Volume Offset]
Adjusts the current volume level relative to other inputs, when [Setting Memory] is set to the current input.

[Balance]
Emphasizes sound from the left or right speaker.

[Reset]
Resets the selected input settings to the initial value.
Setting the sound according to the TV position

Steps

1. Press the HOME button, then select [Settings].

2. Select [Sound] → [TV Position] → the desired option.

Available Options

[Table-Top Stand]
Provides the best sound quality when you place the TV on a TV stand.

[Wall Mount]
Provides the best sound quality when you hang the TV on a wall.
Checking signal information

Steps

1. Press the HOME button, then select ? [Help].
2. Select ☰ [Customer Support] → [Signal Diagnostics].
Selecting the cable/antenna signal

Steps

1. Press the HOME button, then select [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Cable/Antenna], then select [Cable] or [Antenna] to set the received signal.

* Option name differs depending on your region/country.

Tips

• After changing this setting, it is recommended to run [Auto Program].
Tuning channels automatically

Steps

1. Press the HOME button, then select \( \text{Settings} \).
2. Select \( \text{Channels & Inputs}/[\text{Channels, Inputs & Ginga}]^* \to [\text{Auto Program}] \).
3. Follow the on-screen instructions to tune in all available channels and store their settings in the TV.

* Option name differs depending on your region/country.

Tips

- You can run [Auto Program] after moving to a new residence, changing service providers, or to search for newly launched channels.
Adding digital channels

Steps

1. Press the HOME button, then select ☰ [Settings].
2. Select ☰ [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Add Digital Channels].
3. Follow the on-screen instructions to add digital channels.

* Option name differs depending on your region/country.
Setting channels to surf with the CH +/- buttons

Steps

1. Press the HOME button, then select [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Show/Hide Channels].
3. Select the desired channel, then select [Shown] or [Hidden].
   Select [Shown] to select with the CH +/- buttons. Select [Hidden] to not select with the CH +/- buttons.
4. Repeat step 3 to set other channels.

* Option name differs depending on your region/country.

Tips

- The [Show/Hide Channels] settings are applied also in the channel list of [TV Channel List] under [Channel] in the Home Menu.
Editing channel labels

Steps

1. Press the HOME button, then select [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Edit Channel Labels] → the desired channel.
3. Enter the new name.

* Option name differs depending on your region/country.
Fine adjusting analog channels

Steps

1. Press the HOME button, then select 🛠️ [Settings].
2. Select ☐ [Channels & Inputs]/[Channels, Inputs & Ginga] → [Analog Channel Adjustment].
3. Select [Channel] → the channel you want to adjust.
4. Select [Fine Tune], then select [Auto] or [Custom]. Select [Custom] to change the frequency.
5. Press the RETURN button, then select [Audio Filter].
6. Select [High], [Low] or [Off] to set the audio quality.

* Option name differs depending on your region/country.
Setting the information banner

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Info Banner] → the desired option.

Tips

- This setting does not affect the operation of the DISPLAY button, which displays full information about the currently viewed content.

Available Options

[Small]
Shows the current channel number or input name.

[Medium]
Shows the current channel number and program information.

[Large]
Shows the current channel number and detailed program information.

Notes

- Available options may differ depending on your region/country.
Setting closed captions

Steps

1. Press the HOME button, then select 
   [Settings].
2. Select 
   [Preferences] → [Closed Captions (CC)] → the desired option.

Available Options

[CC Display]
Displays [Closed Captions (CC)]. Select [On when Muting] to automatically display closed captions when the TV is muted.

[Analog CC]
Sets the basic analog closed caption options.

[Digital CC]
Sets the digital closed caption options.

[Display Options]
Customizes the closed caption appearance.
**Setting the parental lock password**

**Overview**

Set a 4-digit password for parental lock. The password will be required when you change the parental lock settings.

**Steps**

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Parental Lock] → [Password] → enter the password.

3. Re-enter the password using the number buttons to confirm, then press the button.
   (When using the Touchpad Remote Control, press the Control Bar (....), slide the touchpad to select the number buttons to re-enter the password, then press the touchpad.)

**Tips**

- For the password, refer to Troubleshooting in the paper manual supplied with this TV.
Setting a viewing restriction

Overview

You can lock any event rated as unsuitable for below a specified limit. (This function is available depending on your region/country.)

Steps

1. Press the HOME button, then select \[Settings\].

![Settings Menu]

2. Select \[Preferences\] → \[Parental Lock\].

3. Press the \[\] button in \[Password\], enter the password, then select [Country]* → the country in which you apply parental rating* → [Rating]/[Digital Rating] → [Child], [Youth], [Young Adult] or [Custom]. (When using the Touchpad Remote Control, press the touchpad in [Password].) When selecting [Custom], select the desired option.

* This step may not be available depending on your region/country. Skip this step if unavailable.

To download digital rating data (available depending on your region/country)

Press the HOME button, select \[Settings\] → \[Preferences\] → [Parental Lock] → [Password], then enter the password. Select [Downloadable U.S. Rating]/[Digital Rating] → [Custom] → the desired options.

To block programs or movies without a rating (available depending on your region/country)

Press the HOME button, select \[Settings\] → \[Preferences\] → [Parental Lock] → [Password], then enter the password. Select
[Unrated] → [Block].
Blocking specific channels

Overview

You can block channels regardless of program ratings, by specifying the channel number.

Steps

1. Press the HOME button, then select [Settings].

2. Select [Preferences] → [Parental Lock].

3. Press the button in [Password], enter the password, then select [Channel Block]/[Analog Channel Block] → the channel to be blocked → [Blocked].

   (When using the Touchpad Remote Control, press the touchpad in [Password].)

   You can also select the channel by entering the channel number using the number buttons.
Turning off the key tone of remote control operations

Steps

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Key Tone] → [Off].
Turning off the start-up logo

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Startup Logo] → [Off].
Turning on/off and adjusting the brightness of the illumination

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Front Panel Illumination] → [Illumination LED] → the desired option.

Available Options

[Demo]
The lamp blinks all the time the TV power is on.

[Auto Brightness Adjust]
Optimizes brightness according to the ambient light.

[Dark]
Lowers the brightness of the lamp.

[Simple Response]
Illumination lights in response to operations. It will not stay lit, even if you set the timer, timer rec* or reminder*.
* This function is available depending on your region/country.

[Off]
The lamp does not light under normal use.
Setting the menu language

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Language] → the desired language.
Setting your region

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Region] → your location.

Tips

- By setting your location, you can receive services from Internet content providers.
Setting Touchpad Remote Control

Steps

1. Press the HOME button of the IR Remote Control, then select 📽️ [Settings].
2. Select ⬅️ [Preferences] → [Touchpad Remote Control Setup].
3. Follow the on-screen instructions to register the Touchpad Remote Control.
   After completing this process, the Touchpad Remote Control can be used.
Setting a Bluetooth Device

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Bluetooth Settings]*.
3. Follow the on-screen instructions to complete the setup.

* This option is available depending on your model/region/country.

Notes

• Only Bluetooth mice (up to Bluetooth v3.0) can be registered to the TV. You can register up to 2 mice.
• Pointer operation of the Bluetooth mouse can be performed only on an internet browser.
Selecting speakers to output sound

Steps

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Speakers] → [TV Speakers] or [Audio System].

Notes

- To use multi-channel audio, connect to an external audio system compatible with Dolby Digital using an optical cable, and select [Audio System].
- [Audio System] must be selected to listen to 5.1 multi-channel audio.
Outputting sound from headphones or another audio system

Steps

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Headphone/Audio Out] → [Headphone], [Audio Out] or [Subwoofer].
   To output sound from headphones, select [Headphone]. To output from an audio system connected to the TV, select [Audio Out]. To output from a subwoofer, select [Subwoofer].
Controlling the volume of an audio system with the TV’s remote control

Steps

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Headphone/Audio Out] → [Audio Out] in the sound setting menu → [Fixed] or [Variable]. Select [Fixed] to adjust the volume using the connected audio system’s remote control. Select [Variable] to adjust the volume with the TV’s remote control when using an external audio system.
Setting the headphone speaker link

Steps

1. Press the HOME button, then select 📦 [Settings].
2. Select 🎧 [Sound] → [Headphone Speaker Link] → [Speakers Off] or [Speakers On].
   Select [Speakers Off] to not output sound from the TV’s internal speakers when you connect headphones to the TV. Select [Speakers On] to output sound from both the TV’s internal speakers and headphones.
Setting sound for Home Theater Control

Steps

You can connect the TV to the Internet and use setup applications for audio systems (such as Sound Bars).

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Home Theater Control].

Tips

- An Internet connection is required to set up and use this function.
Managing external inputs

Steps

1. Press the HOME button, then select [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Manage Inputs] → the input → [Auto] or [Always].
   Select [Auto] to display icons or names only when the device is connected, or [Always] to display regardless of connection status.
3. Select the device name → [Edit] to enter your preferred name.
   After entering the name, press the button, then select the icon.
   (When using the Touchpad Remote Control, slide right, then select the icon.)

* Option name differs depending on your region/country.
Switching the video input

Steps

1. Press the HOME button, then select [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Video 2/Component Selection] → the desired option.

* Option name differs depending on your region/country.

Available Options

**[Auto]**
Automatically switches the input to either [Component] or [Video 2] by detecting the terminal connection.

**[Component]**
Switches to component video input.

**[Video 2]**
Switches to composite video input.

Notes

- You cannot use [Component] and [Video 2] at the same time.
Making detailed settings of video input

Steps

1. Press the HOME button, then select [Settings].
2. Select [Picture & Display] → [Pro Picture Setup] → the desired option.

Available Options

[Video Color Space (x.v.Color)]
Adjusts the color space of the original video to an image quality appropriate for the source.
[x.v.Color]: This is a video color space that supports the xvYCC international standards and enables a wider color gamut for vivid representation of colors in the natural world, such as the brilliant hues of flowers and the wide array of beautiful ocean hues.

[Photo Color Space]
Adjusts the color space of a still picture to an image quality appropriate for the source.
[sRGB]: A still image color space specified before Exif version 2.1; sRGB is an international standard with a narrower color reproduction gamut than Adobe RGB and sYCC.
[sYCC]: A still image color space specified after Exif version 2.2; sYCC is an international standard that covers nearly all visible colors while maintaining compatibility with sRGB color space.
[Adobe RGB]: A still image color space specified in Exif version 2.21; Adobe RGB is an international standard that covers the color gamut for printing devices.

[Color Matrix]
Reproduces the color-difference signals. It is recommended to leave this at the factory default setting.

[Dynamic Range]
 Produces a natural picture by changing the tone reproduction of input signals. For standard use of HDMI input, [Auto] is recommended as this
changes the tone reproduction automatically. For Screen mirroring input, [Limited] is recommended. Select [Full] if black/white colors appear smeared.

[SBM]
Creates gradations using Super Bit Mapping technology.

[Color System]
Sets the color system according to the signal from the input source.

Notes

- [Video Color Space (x.v.Color)], [Photo Color Space] and [Color System] are available depending on your TV model/region/country.
Setting the IR Blaster

Steps

This function is available depending on your model/region/country.

1. Press the HOME button, then select 📦 [Settings].
2. Select 📷 [Channels & Inputs]/[Channels, Inputs & Ginga]* → [IR Blaster setup].
3. Select the external device to be controlled ([Set-top box control setup] or [AV receiver control setup]).
4. Follow the on-screen instructions to complete the setup.

* Option name differs depending on your region/country.
Running Initial Set-up

Steps

1. Press the HOME button, then select [Settings].
2. Select [Preferences] → [Initial Setup].
3. Follow the on-screen instructions to run the initial setup that appeared when you first connected the TV.

Tips

- This setting is useful when you change the settings after moving to a new residence, or when you search for newly launched channels.
Checking Sony contact information

Steps

1. Press the HOME button, then select 🎥 [Help].
2. Select 📢 [Customer Support] → [Contact Sony].

Sony contact information is displayed for your convenience.
Uploading operation history

Steps

1. Press the HOME button, then select [Help].

2. Select [Customer Support] → [Upload TV Usage and Statistics] → [On].

Tips

• The uploaded information will be used as feedback for software quality check, feature improvement and feature enhancement.

Notes

• This feature may not be available in some regions/countries.
Updating broadcast/service software

Steps

1. Press the HOME button, then select [Help].
2. Select [Customer Support] → [Automatic Software Download] → [On].

After the download is complete, a confirmation message about starting an update appears when you turn on the TV.

Notes

- The software is downloaded when the TV is in standby mode.
Updating the TV’s software

Steps

1. Press the HOME button, then select ⚫ [Help].
2. Select ⚫ [Customer Support] → [Software Update].

A confirmation message about starting an update appears. If no software has been downloaded, the TV will start searching for an update via the Internet (if connected).
Self Diagnostics

- How to check if the TV is working properly.

How to check if the TV is working properly.

- Press the HOME button, then select [Help] → [Customer Support] → [Problem Diagnosis] → [Self Diagnostics].
**Power Symptoms**

- The TV turns off automatically.
- The TV turns on automatically.

**The TV turns off automatically.**

- Check if [Sleep Timer] is activated, or check the [Duration] setting of [Timer].
- Check if [Idle TV Standby] in [Eco] is activated.
- Check if [Auto Shut-off] in [Eco] is activated.

**The TV turns on automatically.**

- Check if [Timer] is activated.
**Picture/Screen Symptoms**

- Picture quality is not as good as viewed at the store.

- Distorted picture.

- No color/Dark picture/color is not correct/Picture is too bright

- Dark screen. How to brighten the screen.

- Color is not correct. How to adjust the color tone.

- There is lag between video and sound.

- Screen format/wide mode changes automatically.

- Suddenly the picture becomes small.

- A black box appears on the screen.

- Black bands appear at the edges of the screen.

- Demonstration mode appears in the screen.

- A notification appears and hides subtitles or other information.

**Picture quality is not as good as viewed at the store.**

- Picture quality depends on the signal content. See the specifications to display the best possible picture for that signal.

**Distorted picture.**

- Check the antenna/cable connection.

- Keep the antenna/cable away from other connecting cables.

- When installing an optional device, leave some space between the device and TV.

- Set [Motionflow] to [Standard] or [Off]. (For [Motionflow] compatible models only.)

- Change the current setting of [CineMotion] to another setting.

- Set [LNA] to [Off] to improve picture reception. ([LNA] may not be available
depending on the situation/region/country.)

- Make sure that the antenna is connected using a 75-ohm coaxial cable.

**No color/Dark picture/color is not correct/Picture is too bright**

- Press the OPTIONS button, then select [Picture Adjustments] to make adjustments.
- Select [Reset] in [Picture Adjustments].
- If you set [Power Saving] to [Low] or [High], the black level will be enhanced.

**Dark screen. How to brighten the screen.**

- Adjust [Backlight] or [Picture] in [Picture Adjustments].
- Check the [Power Saving] option setting. If it is [Low] or [High], the screen darkens. Set [Power Saving] to [Off] to brighten the screen.

**Color is not correct. How to adjust the color tone.**

- Adjust [Hue] or [Color Temperature] in [Picture Adjustments].
- To deepen the color tone, adjust [Color] or [Live Color] in [Picture Adjustments].

**There is lag between video and sound.**

- When enjoying Karaoke from a connected device, set [Scene Select] to [Game].

**Screen format/wide mode changes automatically.**

- When changing the channel or video input, if [Wide Mode] in [Screen] is set to [On], the current [Wide Mode] setting is automatically changed according to the input signal. To lock the [Wide Mode] setting, set [Auto Wide] to [Off].
- Check the [Auto Wide] setting in [Screen].

**Suddenly the picture becomes small.**

- The picture becomes smaller during commercials due to the method used
by the provider to broadcast content. When HD content channels switch to SD content (commercials), the picture may be small with a black border.

- [Auto Wide] will not expand the picture while the content switches, since the content information is regulated by the channel signal provider. You can manually change the [Wide Mode] setting if desired, which will remain in effect until you change the channel/input or manually change the [Wide Mode] setting again.

**A black box appears on the screen.**

- A text option is selected although no text is available. To deactivate this feature, set [CC Display] to [Off]. If you are trying to select closed captioning, select [CC1] instead of [Text1] - [Text4] (options may not be available depending on your region/country).

**Black bands appear at the edges of the screen.**

- Some wide screen programs are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programs with black bands at the top and bottom of the screen. For more details, check the documentation that came with your DVD (or contact your program provider).
- Programs in 4:3 aspect ratio will have bands on the left and right sides of the screen.
- Programs broadcasted in HD formats (720p and 1080i) with 4:3 content will commonly have black bands on the left and right sides of the screen which are added by the broadcaster.
- [Auto Wide] will not expand the picture when the black bands on the sides of the screen are added by the broadcaster. You can manually set [Wide Mode] to [Wide Zoom] or [Zoom], which will remain in effect until you change the channel/input or manually change the [Wide Mode] setting again.
- Some cable and satellite set-top boxes can also control the size of the picture. If you are using a set-top box, refer to the manufacturer of the set-top box for more information.

**Demonstration mode appears in the screen.**

- Press the OPTIONS button on the remote control and select [Suspend Demo]. Then, press the HOME button on the remote control, and select [Settings] → [Preferences] → [Shop Front Display Setting]. Set [Demo Mode] and [Picture Reset Mode] to [Off].
A notification appears and hides subtitles or other information.

• Set not to display notifications. Press the HOME button, then select [Settings] → [Preferences] → [Notification Settings].
Check these things first to troubleshoot your TV reception.

- Make sure that the antenna cable is firmly connected to the TV.
  - Make sure that the antenna cable is not loose or disconnected.
  - Make sure that the center conductor of the antenna cable connector is not bent.

Ghosting or double images appear.

- Check cable or antenna connections.
- Check the antenna location and direction.
- Set [Motionflow] to [Standard] or [Off]. (For [Motionflow] compatible models only.)
Only snow noise or a black picture appears on the screen.

- Check if auto tuning is performed.
- Check if the antenna is broken or bent.
- Check if the antenna has reached the end of its serviceable life (3-5 years for normal use, 1-2 years at a seaside location).

There is picture or sound noise when viewing a TV channel.

- Perform [Fine Tune]/[AFT] to obtain better picture reception. (Option name differs depending on your region/country.)
- Set [Audio Filter] to [Off], [Low] or [High] to improve sound for analog reception. ([Audio Filter] may not be available depending on your region/country.)
- Set [LNA] to [Off] to improve picture reception. ([LNA] may not be available depending on the situation/region/country.)

You cannot receive any channels.

- Check the antenna/cable connection.
- Make sure the [Cable/Antenna] setting is correct for your TV signal source.
- If using CATV STB, refer to its instruction manual for installation.

You cannot receive or select channels.

- Perform [Auto Program] to add receivable channels that are not present in the TV’s memory.
- To receive or select cable channels, make sure that signal type in the channel settings is set to [Cable].
- To receive or select channels by antenna, make sure signal type is set to [Antenna].

Some digital cable channels are not displayed.

- Certain cable companies have limitations on the broadcast of digital cable channels. Check with your cable company for more information.
- The digital cable channel may be set to [Hidden] in [Show/Hide Channels].

Broadcast HD formats have poor quality.
• Content and signal quality are regulated by the signal provider. Many HD channels and content are actually upscaled versions of standard-definition broadcasts. The picture is affected by the quality of the signal received, which varies between channel and program.

**Noisy picture.**

• Make sure that the antenna is connected using a 75-ohm coaxial cable.
• Keep the antenna cable away from other connecting cables.
• To avoid TV interference, make sure to use an undamaged antenna cable.

**Some channels are blank.**

• The channel is for scrambled/subscription service only. Subscribe to a pay TV service.
• The channel is used only for data (no picture or sound).
• Contact the broadcaster for transmission details.

**Poor reception or poor picture quality with digital terrestrial broadcasts.**

• Change the position, direction and angle of the terrestrial television antenna to maximize the antenna signal level. Make sure that the direction of the antenna is not changed unintentionally (such as by wind).
• If you are using a TV signal booster, adjust its signal gain.
• If equipment (such as a TV signal distributor) is connected between the antenna and the TV, it may affect the TV reception. Directly connect the antenna and the TV to check if the reception is improved.

**You cannot view digital channels.**

• Ask a local installer if digital transmissions are provided in your area.
• Upgrade to a higher gain antenna.
3D Picture/Glasses Symptoms

- 3D pictures are not displayed. The 3D effect is weak.
- Black bars appear on both sides of the screen when watching 3D pictures.
- 3D display automatically switches on when 3D signal is detected.
- The message [3D signal has been detected] automatically appears when 3D signal is detected.

3D pictures are not displayed. The 3D effect is weak.

- If two pictures are displayed side-by-side, press the 3D button repeatedly until [3D (Side-by-Side)] appears. If two pictures are displayed one above the other, press the 3D button repeatedly until [3D (Over-Under)] appears. (When using the Touchpad Remote Control, press the Control Bar (•••), slide to highlight the 3D button, press the touchpad, slide the touchpad to highlight [3D (Side-by-Side)] or [3D (Over-Under)], then press the touchpad.)
- If the [3D Display] screen appears and 3D pictures are not displayed, turn off the device that plays 3D content and turn it on again.
- View the TV front on. The 3D effect may be less pronounced depending on the viewing position. Adjust the viewing angle to the screen.
- Perceived 3D effect may vary from person to person.
- 3D signal of 4K cannot be displayed.

Black bars appear on both sides of the screen when watching 3D pictures.

- Black bars appear on both sides of the screen in order to process 3D signals for the simulated 3D display mode or when adjusting the depth of 3D pictures in [3D Depth Adjustment].

3D display automatically switches on when 3D signal is detected.
• Set to manually turn the 3D display on or off. Press the HOME button, then select ⌈Settings⌉ → ⌊Picture & Display⌋ → [3D Settings] → [Auto 3D] → [Off].

**The message [3D signal has been detected] automatically appears when 3D signal is detected.**

• Deactivate the [3D Signal Notification] setting. Press the HOME button, then select ⌈Settings⌉ → ⌊Picture & Display⌋ → [3D Settings] → [3D Signal Notification] → [Off].
Sound Symptoms

- No sound but good picture.
- Audio noise.
- No audio or low audio with a home theater system.
- Distorted sound.

No sound but good picture.

- Check the volume control.
- Press MUTING or VOL + button to cancel muting.
- Set [Speakers] to [TV Speakers] in the [Sound] setting. If it is set to [Audio System], the TV speakers do not output sound regardless of the TV’s volume control.
- When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not provide an audio signal.

Audio noise.

- Make sure that the antenna is connected using a 75-ohm coaxial cable.
- Keep the antenna cable away from other connecting cables.
- To avoid TV interference, make sure to use an undamaged antenna cable.

No audio or low audio with a home theater system.

- Set [Speakers] to [Audio System] in the [Sound] setting.

Distorted sound.

- Check the antenna/cable connection.
- Keep the antenna/cable away from other connecting cables.
• Keep the TV away from electrical noise sources such as cars, hair-dryers, Wi-Fi units, mobile phones, or optical devices.

• When installing an optional device, leave some space between the device and TV.


• Set [Audio Filter] to [Low] or [High] to improve sound for analog reception. ([Audio Filter] may not be available depending on your region/country.)
Connected Device Symptoms

- No picture from a connected device.
- You cannot select a connected device in the Home Menu.
- Some input sources cannot be selected.
- Certain programs on digital sources display a loss of detail.
- Photo images appear small on the screen.
- Photo images or folders take time to display.
- You cannot find a connected BRAVIA Sync HDMI device.
- You cannot control a second AV receiver.
- The TV does not output picture and/or sound from the MHL device.
- An external device (such as a set-top box or AV receiver) cannot be controlled via the IR Blaster.

No picture from a connected device.

- Turn the connected device on.
- Check the cable connection between the device and TV.
- Press the INPUT button to display the list of inputs, then select the desired input.
  (When using the Touchpad Remote Control, press the Control Bar (・・・), slide the touchpad to highlight the INPUT button, then press the touchpad to select.)
- Correctly insert the USB device.
- Make sure that the USB device has been properly formatted.
- Operation is not guaranteed for all USB devices. Also, operations differ depending on the USB device features or the video files being played.

You cannot select a connected device in the Home Menu.
• Check the cable connection.

**Some input sources cannot be selected.**

• Select [Manage Inputs] and confirm the [Always] setting for the input sources.

**Certain programs on digital sources display a loss of detail.**

• Less detail than usual or artifacts (small blocks, dots or pixelation) may appear on the screen, due to the digital compression of the source content used by certain digital broadcasts and DVDs. The degree of visible artifacts depends on the clarity and resolution of the TV.

**Photo images appear small on the screen.**

• Photo images may not be displayed in full screen depending on the resolution or aspect ratio of the file.

**Photo images or folders take time to display.**

• Depending on the image dimension, file size, and number of files in a folder, some photo images or folders take time to display.

• The first time a USB device is connected to the TV via USB cable, it may take up to a couple of minutes for the photos to display.

**You cannot find a connected BRAVIA Sync HDMI device.**

• Check that your device is BRAVIA Sync-compatible.

• Make sure that [Control for HDMI] is set up on the BRAVIA Sync-compatible device and [BRAVIA Sync Control] is set up on the TV.

**You cannot control a second AV receiver.**

• Only one BRAVIA Sync-compatible AV receiver can be used.

**The TV does not output picture and/or sound from the MHL device.**

• Disconnect the MHL cable, then reconnect it. Or turn the MHL device off, then turn on again and release the screen lock of the device.
An external device (such as a set-top box or AV receiver) cannot be controlled via the IR Blaster.

- Make sure that the IR Blaster is correctly set up and the IR transmitter is located near the IR receiver of the external device.
- Make sure that your TV supports the external device.
- If you press and hold a button on the remote control, the operation may not be transmitted. Instead, press the button repeatedly.
- Some external devices may not respond to some buttons on the Screen Key Pad.
Network Connectivity Test Results

- The test results are “Failed”/“Failed”/“Failed”.
- The test results are “OK”/“Failed”/“Failed”.
- The test results are “OK”/“OK”/“Failed” or “OK”/“OK (IPv6 Only)”/“Failed”.
- The test results are “OK”/“OK (IPv6 Only)”/“OK (IPv6 Only)” or “OK”/“OK”/“OK (IPv6 Only)”.

The test results are “Failed”/“Failed”/“Failed”.

- When using the wired LAN function, make sure that the cable is firmly connected.
- When using the wireless LAN function, unplug the TV from the AC power, wait for a while, then plug it in again.

The test results are “OK”/“Failed”/“Failed”.

- The router function of your router may be turned off. Turn it on and try again.
- When using the wireless LAN function, check the items below:
  - If [Wireless Device on TV] is set to [Off], set [Built-in Wi-Fi] to [On].
  - An incorrect security (WPA or WEP) key may have been entered. Make sure that the correct security key is entered.
  - If you select a network (SSID) from the scan list, ensure that you select a correct network (SSID). If you enter an SSID manually, make sure that you enter the correct SSID.
  - To find the correct security key and SSID, consult with the person who set up your network or refer to the router’s instruction manual or website, or consult the router’s manufacturer.
  - If you configured the TV’s wireless LAN function to connect to a wireless router (or access point) at 5GHz, the connection with the wireless router is disconnected while [Wi-Fi Direct] is [On]. When you turn off [Wi-Fi Direct], the connection will automatically recover.
The test results are “OK”/“OK”/“Failed” or “OK”/“OK (IPv6 Only)”/“Failed”.

• Your router (broadband router) may be incorrectly set up to connect to your Internet service provider (such as an incorrect PPPoE setting). To set up your router correctly, refer to the router’s instruction manual or website, or consult the router’s manufacturer. If you are uncertain about the setup information of your provider (such as your account name and password), consult your provider.

The test results are “OK”/“OK (IPv6 Only)”/“OK (IPv6 Only)” or “OK”/“OK”/“OK (IPv6 Only)”.

• Your TV uses only IPv6 to establish an Internet connection, and may not be able to use certain network functions. Your router (broadband router) or Internet service provider may support only IPv6. Refer to the router’s instruction manual or website, or consult the router’s manufacturer to check whether the router supports IPv4. If you are uncertain whether your contract includes the IPv4 connection, consult your provider.
Network/Application Symptoms

- Sometimes video streaming quality is poor when using the wireless LAN.
- Wireless LAN connection fails or radio reception conditions are poor.
- The TV cannot connect with your wireless router (or access point) at 5GHz.
- Poor picture on Internet Videos.
- Certain Internet video content displays a loss of detail.
- Good picture quality but no sound on Internet video content.
- Apps are inaccessible.
- Serious Error 5006 Contact Sony appears when trying to perform [Refresh Internet Content].
- Some applications in [Apps] are not available./Disappeared from [All Apps].
- The TV cannot access the Internet when IPv6 is set.

Sometimes video streaming quality is poor when using the wireless LAN.

- The wireless network connection quality varies depending on the distance or obstacles (e.g. wall) between the TV and the wireless router (access point), environmental interference, and the quality of the wireless router (access point). In this case, use a wired connection for the Internet, or try the 5GHz band.
- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, the TV can only connect to a wireless router (access point) using the 2.4GHz band.

Wireless LAN connection fails or radio reception conditions are poor.
Check the installation location of the TV and wireless router (access point). Signal condition may be affected for the following reasons.
- Other wireless devices, microwaves, fluorescent lights, etc., are placed nearby.
- There are floors or walls between the wireless router (access point) and TV.
If the problem persists even after checking the above, try making a wired LAN connection.

**The TV cannot connect with your wireless router (or access point) at 5GHz.**

- While [Wi-Fi Direct] is set to [On], you cannot connect to a wireless router (or access point) at 5GHz. Set [Wi-Fi Direct] to [Off]. Press the HOME button, then select [Settings] → [Network] → [Wi-Fi Direct] → [Off].

**Poor picture on Internet Videos.**

- Quality depends on the original video provided by the video content provider and your connection bandwidth.

**Certain Internet video content displays a loss of detail.**

- Video quality and picture size depend on broadband speed and delivery by content providers.

**Good picture quality but no sound on Internet video content.**

- Quality depends on the original content provided by the video content provider and your connection bandwidth.
- Due to the nature of Internet video, not all videos will contain sound.

**Apps are inaccessible.**

- Check that the LAN cable or AC power cord of the router/modem* has been connected properly.
  * Your router/modem must be set in advance to connect to the Internet. Contact your Internet service provider for router/modem settings.
- Try using apps later. The app content provider’s server may be out of service.
Serious Error 5006 Contact Sony appears when trying to perform [Refresh Internet Content].

- This error may occur if [Refresh Internet Content] did not complete successfully. Use the following steps, re-checking the Internet content status after completing each step:

1. Perform [Refresh Internet Content].
   Press the HOME button, then select [Settings] → [Network] → [Refresh Internet Content].

2. If the problem still exists, perform step 1 again.

3. If the problem persists, troubleshoot the Internet connection via the following:
   - Check that an active Internet connection exists with a wired router, wireless bridge, or wireless gaming adapter.
   - Reset the network equipment, such as cable modem, wired/wireless router, by powering off and on, then attempt step 1 again.
   - If the problem continues, wait a while and try step 1 again.
   - Confirm the Internet speed meets the minimum recommended specification of 2.5 Mbps for standard definition (SD) content and 10 Mbps for High Definition (HD) content.
   - Test the quality of service of your LAN connection by checking ping, jitter and packet loss. (Ping should be under 30ms, jitter should be less than 3ms, and packet loss should be 0.)

Some applications in [Apps] are not available./Disappeared from [All Apps].

- Reset the TV to the factory setting. To reset the TV, refer to “Troubleshooting” in the paper manual supplied with this TV.

The TV cannot access the Internet when IPv6 is set.

- IPv6 may not be available, in which case set IPv6 to off. Press the HOME button, then select [Settings] → [Network] → [IPv6 Setup] → [Set up IPv6 connection] → [No].
Home Network Symptoms

- Your TV cannot connect to the server.
- A message appears stating that the TV cannot connect to your network.
- Server is inaccessible.
- Some media files in the USB device or server are not displayed.
- When using the renderer function, music files cannot be played back.
- The TV cannot be found by a Wi-Fi Direct device.

Your TV cannot connect to the server.

- Check the LAN cable or wireless connection to your server and your TV.
- Check if your network is properly configured on your TV.

A message appears stating that the TV cannot connect to your network.

- Check the current network settings. Press the HOME button, then select [Settings] → [Network] → [Network Setup] → [View Network settings and status]. Check your network connections and/or server’s instruction manual for connection information, or contact the person who set up the network (network administrator).
- Reconfigure your network settings by pressing the HOME button, then select [Settings] → [Network] → [Network Setup].
- If the LAN cable is connected to an active server and the TV has acquired an IP address, check your server’s connections and configurations. Press the HOME button, then select [Settings] → [Network] → [Network Setup] → [View Network settings and status].

Server is inaccessible.

- Check your LAN cable/wireless connection or your server. The TV may have lost connection with the server.
Perform [Media Server Troubleshooting] to check if your media server is properly communicating with the TV. Press the HOME button, then select 🛠 [Settings] → 🌐 [Network] → [Home Network Setup] → [Media Server Troubleshooting].

**Some media files in the USB device or server are not displayed.**

- Unsupported files may not be displayed.
- The accessible file or folder limit in a directory is 1,000 for USB and 30,000 for a server. This limit includes non-supported files or just folders. Files or folders are populated based on their timestamps. Photo, music files or folders exceeding the limit will not be displayed.

**When using the renderer function, music files cannot be played back.**

- Some applications display a photo file pre-installed in the PC simultaneously with music playback when using the renderer function. Depending on the pre-installed photo file, music playback may not be possible, but may become possible by changing the photo file.

**The TV cannot be found by a Wi-Fi Direct device.**

- Set [Wi-Fi Direct] to [On]. Press the HOME button, then select 🛠 [Settings] → 🌐 [Network] → [Wi-Fi Direct] → [On].
- If the TV cannot be found even though [Wi-Fi Direct] is [On], set [Band Setting] to [Auto (2.4GHz Band)]. Press the HOME button, then select 🛠 [Settings] → 🌐 [Network] → [Wi-Fi Direct Settings] → press the OPTIONS button → [Band Setting] → [Auto (2.4GHz Band)].
Remote Control Symptoms

- The remote does not operate.

The remote does not operate.

- Press a button on the TV to determine if the problem is with the remote control or not.
- Check that the orientation of each battery matches the positive (+) and negative (-) symbols in the battery compartment.
- Battery power may be low. Replace the batteries with new ones.
  For details on how to insert the batteries, refer to the paper manual supplied with this TV.

Point the remote control at the remote control sensor located at the front of the TV.
- Keep the remote control sensor area clear from obstacles.
- Fluorescent light can interfere with remote control operation; try turning off any fluorescent light.
Touchpad Remote Control Symptoms

- Touchpad Remote Control does not operate, or does not operate properly.
- The batteries drain quickly.

Touchpad Remote Control does not operate, or does not operate properly.

- Replace the batteries.

Re-register the Touchpad Remote Control.

- The Touchpad Remote Control uses the 2.4GHz band, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference.
  If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or Touchpad Remote Control may not work on a metal rack due to wireless communication interference.
- The Touchpad Remote Control can control only the last registered TV.
- Only one Touchpad Remote Control can be registered to the TV.
- It is recommended to use the Touchpad Remote Control within 7 m (23 ft.) of the TV.

The batteries drain quickly.

- If you keep waving your NFC compatible device over the NFC touch point of the remote control, it will increase battery drain of the remote and/or the device.
• Do not leave the Touchpad Remote Control face down.
Bluetooth Mouse Symptoms

- Operation cuts out, or a device does not work.

Operation cuts out, or a device does not work.

- Check if the device is turned on.
- Replace the batteries of the device.
- Re-register the device.
- Bluetooth devices use the 2.4GHz band, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference. If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or mouse may not work on a metal rack due to wireless communication interference.
- For usable communication distances between the TV and other devices, refer to the instruction manuals of the devices.
Screen mirroring Symptoms

- What kind of devices can be connected to use the Screen mirroring function?
- The TV cannot connect to a Miracast device.
- Video or sound sometimes cuts out.
- Some pay contents cannot be played.
- Screen mirroring does not work./The TV cannot be found by a Screen mirroring compatible device.

What kind of devices can be connected to use the Screen mirroring function?

- Sony Screen mirroring compatible devices (e.g. some models of Xperia) can be connected.
  The Screen mirroring function works by Miracast technology, making it possible to connect with a device that conforms with Miracast.

The TV cannot connect to a Miracast device.

- If connecting a Miracast device (e.g. note PC) fails, press the HOME button, then select [Inputs] → [Screen mirroring] to show the standby screen for the Screen mirroring function.

Video or sound sometimes cuts out.

- Devices emitting radio waves, such as other wireless LAN devices or microwave ovens, may interfere with the Screen mirroring function using wireless LAN. Keep the TV or Sony Screen mirroring compatible devices (e.g. some models of Xperia) away from such devices, or turn them off if possible.
- Communication speed may change according to the distance or obstacles between devices, device configuration, radio wave condition, line
congestion or the device you use. Communication may cut out due to the radio wave condition.

Some pay contents cannot be played.

- The source device needs to meet HDCP (High-bandwidth Digital Content Protection) 2.0/2.1/2.2 standards. Some pay contents may not be displayed via a source device which does not meet HDCP 2.0/2.1/2.2 standards.

Screen mirroring does not work./The TV cannot be found by a Screen mirroring compatible device.

- If you are using Screen mirroring with another device, turn off Screen mirroring first and try again.
- If your device does not support 5GHz and you set the [Band Setting] option to [Auto (5GHz Band)], try changing it to [Auto].
- Press the HOME button, then select [Inputs] → [Screen mirroring] to show the standby screen for Screen mirroring and try again.
One-touch mirroring Symptoms

- One-touch mirroring does not work./Target device cannot be recognized.

One-touch mirroring does not work./Target device cannot be recognized.

- Make sure that the NFC function of the One-touch mirroring compatible device is turned on.

- For connection with a One-touch mirroring compatible Xperia, the TV cannot connect with the Xperia when its screen is locked. Release the screen lock, then touch.

- Determine the position of the NFC detection area on the One-touch mirroring compatible device, then try touching again. For the position of the NFC detection area, refer to the instruction manual of the compatible device.

- Move the compatible device away from the Touchpad Remote Control, then try touching again.

- If you are using Screen mirroring with another device, turn off Screen mirroring first and try again.

- If your device does not support 5GHz and you set the [Band Setting] option to [Auto (5GHz Band)], try changing it to [Auto].

- Press the HOME button, select [Inputs] → [Screen mirroring] to open the standby screen for Screen mirroring, then try again.

- Check whether your device supports One-touch mirroring. Even if you touch an incompatible device, the TV may show some reaction but cannot start Screen mirroring.

- It is necessary to register the Touchpad Remote Control to the TV before use.

- Set the NFC setting of the compatible device to on.
TV SideView Symptoms

- The TV cannot be turned on and controlled by using the TV SideView application when [Remote Start] is set to [On].

- The TV does not appear on the TV SideView screen. The TV cannot be registered with the TV SideView application.

The TV cannot be turned on and controlled by using the TV SideView application when [Remote Start] is set to [On].

- When devices that cause radio wave interference (microwave ovens, cordless phones, etc.) are placed nearby, the TV SideView function may not work. In this case, keep such devices away from the wireless router (access point) or TV, or turn them off.

- In the following cases, the TV SideView function may not work. Turn on the TV and re-connect to the wireless router (access point).
  - Turn on/off the wireless router (access point) power during TV standby mode
  - Reset the wireless router (access point) during TV standby mode
  - Change the wireless router (access point) channel during TV standby mode

- The TV SideView function may not work with business-use wireless routers (access points) that require re-connection periodically.

- The TV SideView function may not work depending on the settings of the wireless router (access point) (e.g. Multi SSID and Power saving mode).

- If Wi-Fi Direct is used to connect the TV SideView application to the TV, the TV may not be turned on from standby mode depending on your smartphone/tablet.

- The TV should be in the power-on or standby mode. Do not turn off the TV by disconnecting its AC power cord.

- Check the following has been set for your TV.
  When the wireless router (access point) and TV are connected with
wireless LAN
- Built-in wireless LAN model TV is used
- [Built-in Wi-Fi] under [Network] is set to [On]
- TV is connected to the wireless router (access point)

When the wireless router (access point) and TV are connected with wired LAN

The TV does not appear on the TV SideView screen. The TV cannot be registered with the TV SideView application.

- Make sure that the TV is turned on.
- Make sure that the TV and your smartphone/tablet have joined the same home network.
  (However, when connecting via Wi-Fi Direct, a home network connection is not necessary.)
- The maximum number of registration devices may have been reached.
  Delete unnecessary registrations before registering another smartphone/tablet.
- For detailed information, refer to the following website:
  http://info.tvsideview.sony.net/faq/
Photo Share Symptoms

- Supported Photo Format

Supported Photo Format

- Only jpeg files are supported.
- The maximum size of photos is 16384 × 16384.
- The minimum size of photos is 16 × 16.
- Panorama scrolling is not supported.
- The maximum file size of photos is 10MB.
Notes

- This manual is the simple version of the TV's built-in i-Manual. For details, refer to that i-Manual.
### Supported Codec for DLNA / USB device

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### Music

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### Video

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### External Subtitle

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**Video**

**Vídeo**
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<th>Resolution</th>
<th>Frame Rate</th>
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<th>Audio Codec</th>
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</table>

- AVC: Advanced Video Coding
- H.264: High Efficiency Video Coding
- MPEG: Moving Picture Experts Group
- AAC-LC: Adaptive Multi-Rate Low Complexity
- HE-AAC: High Efficiency Advanced Audio Coding
- AC3: Audio Codec 3
- E-AC3: Enhanced Audio Codec 3
- PCM: Pulse Code Modulation
- μ-LAW: μ-Law
- PCM(U8): 8-bit PCM
- PCM(S16BE): 16-bit Big Endian PCM
- PCM(S16LE): 16-bit Little Endian PCM
- QCIF: Quarter Common Intermediate Format
- Internal / External

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## Supported Audio Codec Sampling Rate in Video Content

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<th>Audio Codec</th>
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**External Subtitle**

**Legenda Externa**
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