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

© 2014 Sony Corporation

List of Contents
# Table Of Contents

BRAVIA KDL-48W600B/40W600B

**Basic Operations**
- How to Use Remote ................................................................. 1
- Enjoy “Discover” ....................................................................... 24
- Home Menu Screen ................................................................. 26
- Picture Adjustment ................................................................. 29
- How to Use the i-Manual ........................................................ 32
- Watch Connected Device ...................................................... 35
- Enjoying a Chat with Your Friends while Watching TV .......... 36
- Using Applications ............................................................... 38

**Parts Description** .................................................................. 2
- Front ....................................................................................... 40
- Control buttons on the rear .................................................... 42
- Terminals on the rear (bottom) ............................................... 43
- Terminals on the rear (center) ............................................... 44
- Terminals on the rear (right) ............................................... 46
- Top ....................................................................................... 47
- Upper ..................................................................................... 48
- Middle ................................................................................... 49
- Lower .................................................................................... 50
- Bottom .................................................................................. 51
- Finding Contents More Easily (“Discover” Screen) ............ 24
- Home Menu Screen ............................................................... 26

**Watching TV** ...................................................................... 3
- Selecting Channels .................................................................. 52
- Enjoying Football More ....................................................... 54
- Using the TV Guide Search Function .................................... 55
- Displaying picture-in-picture (PIP) ........................................ 57
- Displaying left-and-right pictures (P&P) ............................ 59
- Display information ............................................................. 61
- Subtitles/Closed captions .................................................... 62
- Screen format/Wide mode .................................................... 63
- Audio (for analog mode) ....................................................... 66

**Enjoying Movies/Music/Photos** .......................................... 4
- Enjoying Movies .................................................................. 67
- Enjoying Music ..................................................................... 68
- Enjoying Photos ................................................................... 69

**Using Internet Services and Applications** ........................... 5
Using Applications............................................................................................................38
Browsing Websites........................................................................................................70
Watching Internet Videos..............................................................................................72
Performing initial setup.................................................................................................74
Making a call..................................................................................................................76
Watching TV with Friends Far and Near.......................................................................6
Enjoying a Chat with Your Friends while Watching TV................................................36
Using Other Devices......................................................................................................7
HDMI connection..........................................................................................................79
Component video connection.......................................................................................80
Composite connection.................................................................................................81
Digital Still Camera/Camcorder.....................................................................................82
USB Device...................................................................................................................83
PC...................................................................................................................................85
HDMI connection..........................................................................................................87
Optical audio connection..............................................................................................88
Audio cable connection...............................................................................................89
MHL Device (Smartphone, Tablet, etc.).........................................................................90
Wireless Subwoofer (Optional)....................................................................................92
Playable File Formats (DLNA, USB devices, etc.).........................................................94
Using BRAVIA Sync Devices.........................................................................................8
Setting BRAVIA Sync.....................................................................................................95
Using the Sync Menu.....................................................................................................98
Setting Buttons to Control an HDMI/MHL Device.......................................................100
Displaying the BRAVIA Sync Device List..................................................................102
Useful Functions............................................................................................................9
Selecting a picture and sound setting suitable for the content........................................103
Adding Favorite Applications.......................................................................................105
Current View Information Search................................................................................106
Keyword Search............................................................................................................108
Saving power by picture brightness..............................................................................109
Turning the TV off by monitoring idle time....................................................................111
Setting the current time manually..............................................................................112
Setting the on timer.....................................................................................................113
Setting the sleep timer...............................................................................................114
Connecting to the Internet............................................................................................10
Wireless Connection (Built-in Wireless LAN)...............................................................115
Wired Connection (with a LAN Cable)..........................................................................117
Setting IPv6..................................................................................................................119
Using Home Network..................................................................................................11
Playing Content on a PC.................................................................121
Enabling the renderer function..................................................123
Allowing/blocking access from controller..................................124
Making advanced renderer settings..........................................125
Selecting servers to display.......................................................126
Checking the server connection.................................................127
Connecting via Wi-Fi Direct (without a wireless router)...........128
Playing Content with the Renderer Function.............................131
Using a Smartphone/Tablet as a Remote.................................132
Displaying the Smartphone’s Screen on the TV (Screen mirroring) 134
Sharing Photos........................................................................137
Configuring Various Settings....................................................12
Selecting picture mode.............................................................139
Adjusting various picture settings (e.g. picture brightness/color) 29
Locking picture adjustment.......................................................141
Setting the screen size/position...............................................142
Adjusting various sound settings (e.g. bass/treble/balance)......145
Setting the sound according to the TV position.........................147
Checking signal information...................................................148
Selecting the cable/antenna signal..........................................149
Tuning channels automatically...............................................150
Adding digital channels.........................................................151
Setting channels to surf with the CH +/- buttons......................152
Editing channel labels.............................................................153
Fine adjusting analog channels..............................................154
Setting the information banner.............................................155
Setting closed captions..........................................................156
Setting the parental lock password.........................................157
Setting a viewing restriction...................................................158
Blocking specific channels......................................................160
Turning off the key tone of remote control operations...............161
Turning off the start-up logo....................................................162
Setting the menu language......................................................163
Setting your region.................................................................164
Selecting speakers to output sound........................................165
Outputting sound from headphones or another audio system....166
Controlling the volume of an audio system with the TV’s remote control 167
Setting the headphone speaker link.........................................168
Setting sound for Home Theater Control..............................169
Running Initial Set-up..............................................................170
Checking Sony contact information.................................................................171
Uploading operation history...........................................................................172
Updating broadcast/service software.............................................................173
Updating the TV’s software ...........................................................................174
Troubleshooting..............................................................................................14
   Self Diagnostics.........................................................................................175
   Power Symptoms........................................................................................176
   Picture/Screen Symptoms.........................................................................177
   Broadcast Reception Symptoms.................................................................181
   Sound Symptoms.......................................................................................184
   Connected Device Symptoms....................................................................186
   Network Connectivity Test Results............................................................188
   Network/Application Symptoms.................................................................190
   Home Network Symptoms.........................................................................193
   Remote Control Symptoms........................................................................195
   Screen mirroring Symptoms.....................................................................196
   TV SideView Symptoms..............................................................................198
   Photo Share Symptoms..............................................................................200
   Notes.........................................................................................................201
How to Use Bookmarks..................................................................................15
Codec List.......................................................................................................202
## 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 (bottom)

Terminals on the rear (center)

Terminals on the rear (right)

Remote Control

Top

Upper

Middle

Lower

Bottom

Finding Contents More Easily (“Discover” Screen)

Home Menu Screen
Watching TV

Selecting Channels

Enjoying Football More

Using the TV Guide Search Function

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)
Enjoying Movies/Music/Photos

Enjoying Movies
Enjoying Music
Enjoying Photos
Using Internet Services and Applications

- **Using Applications**
- **Browsing Websites**
- **Watching Internet Videos**
- **Using Skype**
  - Performing initial setup
  - Making a call
Watching TV with Friends Far and Near

Enjoying a Chat with Your Friends while Watching TV
Using Other Devices

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

Digital Still Camera/Camcorder
USB Device

PC

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

Adding Favorite Applications

Using Search Function

Current View Information Search

Keyword Search

Saving Power Consumption

Saving power by picture brightness

Turning the TV off by monitoring idle time

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
- Connecting via Wi-Fi Direct (without a wireless router)

Playing Content with the Renderer Function

Using a Smartphone/Tablet as a Remote

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**
- **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**
General Settings

Turning off the key tone of remote control operations
Turning off the start-up logo
Setting the menu language
Setting your region

External Sound Output Settings

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

Running Initial Set-up

Support

Checking Sony contact information
Uploading operation history

Software Update

Updating broadcast/service software
Updating the TV’s software
Troubleshooting

Self Diagnostics
Power Symptoms
Picture/Screen Symptoms
Broadcast Reception Symptoms
Sound Symptoms
Connected Device Symptoms
Network Connectivity Test Results
Network/Application Symptoms
Home Network Symptoms
Remote Control Symptoms
Screen 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 (•••), 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 (•••), 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 (•••), 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 (bottom)
Terminals on the rear (center)
Terminals on the rear (right)

Remote Control

Top
Upper
Middle
Lower
Bottom

Finding Contents More Easily (“Discover” Screen)
Home Menu Screen

Watching TV
Selecting Channels
Enjoying Football More
Using the TV Guide Search Function
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)

Enjoying Movies/Music/Photos

  Enjoying Movies
  Enjoying Music
  Enjoying Photos

Using Internet Services and Applications

  Using Applications
  Browsing Websites
  Watching Internet Videos
  Using Skype
    Performing initial setup
    Making a call

Watching TV with Friends Far and Near

  Enjoying a Chat with Your Friends while Watching TV

Using Other Devices

  BD/DVD Player
    HDMI connection
    Component video connection
Composite connection
Digital Still Camera/Camcorder
USB Device
PC
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
Adding Favorite Applications
Using Search Function
  Current View Information Search
  Keyword Search
Saving Power Consumption
  Saving power by picture brightness
  Turning the TV off by monitoring idle time
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
- Connecting via Wi-Fi Direct (without a wireless router)

Playing Content with the Renderer Function

Using a Smartphone/Tablet as a Remote

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
- 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

General Settings
Turning off the key tone of remote control operations
Turning off the start-up logo
Setting the menu language
Setting your region

External Sound Output Settings
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

Running Initial Set-up

Support
Checking Sony contact information
Uploading operation history

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

Troubleshooting

Self Diagnostics
Power Symptoms
Picture/Screen Symptoms
Broadcast Reception Symptoms
Sound Symptoms
Connected Device Symptoms
Basic Operations

How to Use Remote

Using the ↑/↓/←/→ and ☺ Buttons

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.

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.

**Notes**
- Your TV does not support Touchpad Remote Control operations described in this i-Manual.

**Related Information**
- Home Menu Screen
- How to Use the i-Manual
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 (e.g. [Customize Discover] and [Category Setup]).
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.

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**

- Sub categories 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.

 Rename: Connected to a wired LAN.
 Rename: Connected to a wireless LAN. The number of wave lines indicates the signal strength.
 Rename: 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.

 Rename: 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].)

 Rename: This mark indicates that the TV is connected to your home network but cannot connect to the Internet.

 Rename: 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 Movies
- Enjoying Music
- Enjoying Photos
- Using Applications
Top Page > Configuring Various Settings > Adjusting various picture settings (e.g. picture brightness/color)

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 \( \text{[Settings]} \).

2. Select \( \text{[Picture & Display]} \) → \( \text{[Picture Adjustments]} \) → 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 \( \text{[button]} \) (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.

**[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.

**[CineMotion]**
[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.
[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].
[LED Motion Mode]: Reduces motion blur.
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.

- **Cable connection**
- **Network connection**
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].
**Sensors and Illumination**

- 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.

**Illumination LED**

The Illumination LED lights up or blinks in different colors according to the status of the TV.

**Blinking**

*Blinking speed depends on status*

- The TV is receiving an incoming call *2
- The TV is in Picture off mode
- Software update is in progress

**Blinking**

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

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

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

The TV is turned on

- 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. **(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).

4. **HOME**
   Press to display the TV Home Menu.
**Terminals on the rear (bottom)**

1. **RF**
   RF input that connects to your cable or antenna.

2. **HDMI IN 2/3/4**
   HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and an HDMI-equipped audio/video device. 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 2. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.
**Terminals on the rear (center)**

1. **DC IN 19.5 V**
   Connects the supplied mains adapter. Depending on the model of your TV, it may not be equipped with this jack. In this case, the mains adaptor will also not be supplied.

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

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 \( \scriptsize{\text{L (MONO)}} \) audio jack.
   
   For composite connection, use \( \scriptsize{\text{VIDEO IN 2}} \) for video signals, and also connect to \( \scriptsize{\text{(L/R)}} \) of \( \scriptsize{\text{COMPONENT IN}} \) for audio signals.
   
   For component connection, use \( \scriptsize{\text{Y, PB, PR}} \) for video signals, and also connect to \( \scriptsize{\text{(L/R)}} \) for audio signals.
   
   - The TV will automatically detect and switch between \( \scriptsize{\text{VIDEO IN 2}} \) and \( \scriptsize{\text{COMPONENT IN}} \). To manually set the input type, press the HOME button, then select \( \scriptsize{\text{[Settings] → [Channels & Inputs]/[Channels, Inputs & Ginga] → [Video 2/Component Selection]}} \).
/ VIDEO IN 1
Connect with a composite video cable. When connecting mono equipment, connect to the L (MONO) audio jack.

LAN
Connects to an existing network using an Ethernet cable.
**HDMI IN 1/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 also connect your MHL (Mobile High-definition Link) device using an MHL cable. 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 2 on the bottom of the TV. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

**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 USB 1/2**

You can enjoy photo, music and video files stored on a USB device.
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

© 2014 Sony Corporation
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.
### Lower

#### KEY PAD
Press to open the Screen Key Pad at the top of the TV screen. You can use the 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
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.
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.

![Image of football match with crowd](image)

Steps

1. Press the FOOTBALL button, then select [On].
   (When using the Touchpad Remote Control, press the Control Bar (***), slide the touchpad to highlight the FOOTBALL button, then press the touchpad to select.)
   The roar of the crowd is emphasized, and [Picture Mode] is set to [Sports].

To turn off the Live Football Mode, press the FOOTBALL button, then select [Off].
(When using the Touchpad Remote Control, press the Control Bar (***), slide the touchpad to highlight the FOOTBALL button, then press the touchpad to select.)
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

Steps

1. Connect to a broadband Internet connection. Press the \( \text{琴} \) button to jump to the title list. Then, press the \( \text{琴} \) 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 \( \text{琴} \) [Channel].


To return to the last viewed source, press the RETURN button a few times.
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.

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.
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 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.

- 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].

© 2014 Sony Corporation

[Top of Page]

[List of Contents]
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.
Basic Operations

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 CC/SUBTITLE 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.

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 (PC Timing)

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Normal</th>
<th>Full 1</th>
<th>Full 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>800 x 600</td>
<td><img src="image" alt="Normal" /></td>
<td><img src="image" alt="Full 1" /></td>
<td><img src="image" alt="Full 2" /></td>
</tr>
<tr>
<td>1,280 x 768</td>
<td><img src="image" alt="Normal" /></td>
<td><img src="image" alt="Full 1" /></td>
<td><img src="image" alt="Full 2" /></td>
</tr>
</tbody>
</table>
Audio (for analog mode)

Steps

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

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

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

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.

Steps

1. Press the HOME button, then select [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 \( \text{button} \) button to jump to the title list. Then, press the \( \text{button} \) 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 [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 return to the last viewed source, press the HOME button twice.

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.
Performing initial setup

Making a Connection

Enjoy widescreen video calls by connecting the optional Camera and Microphone Unit CMU-BR200/CMU-BR100.

Attach the camera to the TV, then connect the USB cable to the TV’s USB port. For details on how to attach the camera, refer to the instruction manual supplied with the camera.

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.

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

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/

• 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**

• You can only use the optional Camera and Microphone Unit CMU-BR200/CMU-BR100. Other models are not supported.

• 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.

• Connect the optional Camera and Microphone Unit directly to the TV's USB port. Do not connect it via a USB hub.

• 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].
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.

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

**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).
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].
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.

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

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.

Tips

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

![Composite connection diagram]

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.

![Diagram of TV and digital still camera/camcorder connected by an HDMI cable]

* 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 return to the last viewed source, press the HOME button twice.

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 (hierarchal 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.
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 (Full HD model only)
- 1920 x 1080, 67.5 kHz/60 Hz (Full HD model only)*

* 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 [Full Pixel]. ([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”.

© 2014 Sony Corporation
HDMI connection

Making a Connection

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

![Diagram of HDMI connection]

* 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, connect to HDMI IN 2 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.

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

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 cable connection diagram]

Tips

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

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

- 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].
MHL Device (Smartphone, Tablet, etc.)

Making a Connection

Connect your MHL device (e.g. smartphone, tablet) with MHL output to the TV's HDMI IN 1/MHL port, using an MHL cable.

Steps

1. After making a connection, press the HOME button, then select [Inputs].

2. Select [HDMI 1/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 jack of the TV.
3. Connect the Wireless Transceiver to the USB 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 cutoff frequency of the Wireless Subwoofer.

**[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 (△/▽/←/→ 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.

   ![Sync Menu]

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.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>[Use TV speakers to output sound]/[Use audio system for audio output]</strong></td>
<td>Switches the speaker output between the TV and the connected audio device.</td>
</tr>
<tr>
<td><strong>[TV Control]</strong></td>
<td>Displays the menu and options of the TV, or shows/hides the display items on the TV screen.</td>
</tr>
<tr>
<td><strong>[Return to TV]</strong></td>
<td>Returns to TV channels.</td>
</tr>
<tr>
<td><strong>[TV control with the TV remote]/[Device control with the TV remote]</strong></td>
<td>Switches the device to be controlled by the TV’s remote control, between the TV and the connected device.</td>
</tr>
</tbody>
</table>

**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.
**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.

**Steps**

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

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

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

**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>Scene</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cinema</td>
<td>Optimal picture and sound for watching movies.</td>
</tr>
<tr>
<td>Sports</td>
<td>Optimal picture and sound for watching sports.</td>
</tr>
<tr>
<td>Music</td>
<td>Optimal sound for listening to music.</td>
</tr>
<tr>
<td>Animation</td>
<td>Optimal picture for watching animation.</td>
</tr>
<tr>
<td>Photo</td>
<td>Optimal picture for viewing photos. This setting will apply to 1080i/p (50/60Hz) and 480/576p formats only. (1080i/p (50Hz) and 576p are available depending on your region/country.)</td>
</tr>
<tr>
<td>Game</td>
<td>Optimal picture and sound for playing video games.</td>
</tr>
<tr>
<td>Graphics</td>
<td>Optimal picture for viewing tables and characters.</td>
</tr>
</tbody>
</table>
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.

(When using the Touchpad Remote Control, slide left/right/up/down to move to the desired positions.)
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 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 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.
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.
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] → 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:

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.

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

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

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].

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

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

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

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].

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

To return to the last viewed source, press the HOME button twice.
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] → [Wi-Fi Direct Settings].

3. 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].

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

5. 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.

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].

**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].
  - 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.
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.

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 ☀️ button to jump to the title list. Then, press the ☀️ 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 📞 [Settings].

3. Select 🗂️ [Picture & Display] → [Picture Adjustments] → [Picture Mode] → the desired option.
   See the following page(s) for available options. Note that the options change depending on the [Scene Select] setting. (e.g. If [Scene Select] is set to [General], the options in [Picture Mode] will be [Vivid], [Standard] and [Custom].)
### Available Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Vivid]</td>
<td>Enhances picture contrast and sharpness.</td>
</tr>
<tr>
<td>[Standard]</td>
<td>Provides standard picture for basic home use.</td>
</tr>
<tr>
<td>[Custom]</td>
<td>Stores your preferred settings.</td>
</tr>
<tr>
<td>[Cinema 1]</td>
<td>Provides film-based content for a cinema-like environment.</td>
</tr>
<tr>
<td>[Cinema 2]</td>
<td>Provides film-based content for basic home use.</td>
</tr>
<tr>
<td>[Game-Standard]</td>
<td>Provides standard pictures suitable for games.</td>
</tr>
<tr>
<td>[Game-Original]</td>
<td>Adjusts the game picture according to your preference.</td>
</tr>
<tr>
<td>[Photo-Vivid]</td>
<td>Enhances contrast, sharpness, and color of photographs.</td>
</tr>
<tr>
<td>[Photo-Original]</td>
<td>Enhances the visual warmth of photographs.</td>
</tr>
<tr>
<td>[Photo-Custom]</td>
<td>Adjusts the detailed settings for viewing photographs and stores your preferred settings.</td>
</tr>
<tr>
<td>[Animation]</td>
<td>Optimizes picture quality for viewing animations.</td>
</tr>
</tbody>
</table>
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.

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

[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.
The vertical position cannot be adjusted when [Wide Mode] is set to [Wide Zoom], [Normal] or [Full].

[Vertical Size]
Adjusts the vertical size of the picture.
This function is not available when [Wide Mode] is set to [Normal] or [Full].

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] → 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.

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

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].

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

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

* 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 [Settings].
2. Select [Channels & Inputs]/[Channels, Inputs & Ginga]* → [Auto Program].
3. Follow the on-screen instructions to tune in all available channels and store their settings in the TV.

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

* 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.

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

* 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.

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

* 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.

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

* 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.

To return to the last viewed source, press the HOME button twice.
Setting the information banner

Steps

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

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

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.

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

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.)

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

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].

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

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.\n
**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.

To return to the last viewed source, press the HOME button twice.
Turning off the key tone of remote control operations

Steps

1. Press the HOME button, then select [Settings].
2. Select [Sound] → [Key Tone] → [Off].

To return to the last viewed source, press the HOME button twice.
Turning off the start-up logo

Steps

1. Press the HOME button, then select Setting [Settings].
2. Select [Preferences] → [Startup Logo] → [Off].

To return to the last viewed source, press the HOME button twice.
Setting the menu language

Steps

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

To return to the last viewed source, press the HOME button twice.
Setting your region

Steps

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

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

Tips
- By setting your location, you can receive services from Internet content providers.
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].

To return to the last viewed source, press the HOME button twice.
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] → [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.

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

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

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

Tips

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

To return to the last viewed source, press the HOME button twice.
Uploading operation history

Steps

1. Press the HOME button, then select ? [Help].
2. Select 📜 [Customer Support] → [Upload TV Usage and Statistics] → [On].

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

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.

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

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).

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

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 proceed with the [Initial Setup] from the [Settings] - [Preferences] menu.
A notification appears and hides subtitles or other information.

- Set not to display notifications. Press the HOME button, then select [Settings] → [Preferences] → [Notification Settings].
Broadcast Reception Symptoms

- Check these things first to troubleshoot your TV reception.

- Ghosting or double images appear.

- Only snow noise or a black picture appears on the screen.

- There is picture or sound noise when viewing a TV channel.

- You cannot receive any channels.

- You cannot receive or select channels.

- Some digital cable channels are not displayed.

- Broadcast HD formats have poor quality.

- Noisy picture.

- Some channels are blank.

- Poor reception or poor picture quality with digital terrestrial broadcasts.

- You cannot view digital channels.

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.
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.

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.
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:
  - 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.
- 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.

**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.

  Slide the cover to open.

- 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.
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.
## 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

**Codec Suportado para dispositivo DLNA/USB**

<table>
<thead>
<tr>
<th>Photo</th>
<th>Music</th>
<th>Video</th>
<th>External Subtitle</th>
</tr>
</thead>
<tbody>
<tr>
<td>照片</td>
<td>音乐</td>
<td>视频</td>
<td>外挂字幕</td>
</tr>
<tr>
<td>Foto</td>
<td>Música</td>
<td>Video</td>
<td>Legenda Externa</td>
</tr>
</tbody>
</table>

### Photo

#### File Format

- **Formato do Arquivo**

<table>
<thead>
<tr>
<th>Codec</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>JPEG</td>
<td>*.jpg / *.jpe / *.jpeg</td>
</tr>
<tr>
<td>MPO</td>
<td>*.mpo</td>
</tr>
<tr>
<td>RAW</td>
<td>*.arw</td>
</tr>
</tbody>
</table>

### Music

#### Container

<table>
<thead>
<tr>
<th>Recipiente</th>
<th>Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>封装格式</td>
<td>扩展名</td>
</tr>
<tr>
<td>Recipiente</td>
<td>Extensão</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Supported Sampling Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Descrição</td>
<td>Taxa de amostragem suportada</td>
</tr>
</tbody>
</table>

- 202
<table>
<thead>
<tr>
<th>Container</th>
<th>Extension</th>
<th>Video Codec (Profile@Level)</th>
<th>Audio Codec</th>
<th>Supported Subtitle Type</th>
<th>Supported Maximum Resolution</th>
<th>Supported Minimum Resolution</th>
<th>Supported Maximum Frame Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-.mp3</td>
<td>LPCM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP1L1 / MP1L2 / MP1L3 / MP2L1 / MP2L2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP2L3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>MP2.5L3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*.wav</td>
<td>WAV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mp4</td>
<td>*.mp4 / *.m4a</td>
<td>AAC-LC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HE-AAC v1 / v2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3gpp</td>
<td>*.3gp / *.3g2</td>
<td>AAC-LC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>HE-AAC v1 / v2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asf</td>
<td>*.wma</td>
<td>WMA9 Standard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Video**

**Vídeo**
<table>
<thead>
<tr>
<th>File Extension</th>
<th>Description</th>
<th>Code</th>
<th>Code Description</th>
<th>External/Internal</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>External/Internal</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPG1</td>
<td>*.mpg / *.mpe / *.mpeg</td>
<td>MPEG1</td>
<td>MPEG12</td>
<td>External/Externo</td>
<td>1920x1080</td>
<td></td>
<td>1920x1080@30fps</td>
<td>1280x720@60fps</td>
</tr>
<tr>
<td>MPG2PS</td>
<td>*.mpg / *.mpe / *.mpeg</td>
<td>MPEG2 MP@HL, MP@H14L, MP@ML</td>
<td>MPEG1L1 / MPEG1L2 / LPCM / AC3</td>
<td>External/Externo</td>
<td>1920x1080</td>
<td></td>
<td>1920x1080@30fps</td>
<td>1280x720@60fps</td>
</tr>
<tr>
<td>MPG2TS</td>
<td>*.m2t</td>
<td>MPEG2 MP@HL, MP@H14L, MP@ML</td>
<td>MPEG1L1 / MPEG1L2 / AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3</td>
<td>- Internal -</td>
<td>1920x1080</td>
<td></td>
<td>1920x1080@30fps</td>
<td>1280x720@60fps</td>
</tr>
<tr>
<td>MP4</td>
<td>*.mp4</td>
<td>AVC / H.264 BP@L3, MP@L4.2, HP@L4.2</td>
<td>AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3</td>
<td>External/Externo</td>
<td>1920x1080</td>
<td></td>
<td>1920x1080@30fps</td>
<td>1280x720@60fps</td>
</tr>
</tbody>
</table>

---

1. **MPEG1**
   - Supported File Extensions: *.mpg, *.mpe, *.mpeg
   - Code: MPEG1
   - Code Description: MPEG12
   - Resolution: 1920x1080 QCIF (176x144)
   - External/Internal: 1920x1080@30fps, 1280x720@60fps

2. **MPEG2PS**
   - Supported File Extensions: *.mpg, *.mpe, *.mpeg
   - Code: MPEG2 MP@HL, MP@H14L, MP@ML
   - Code Description: MPEG1L1 / MPEG1L2 / LPCM / AC3
   - Resolution: 1920x1080 QCIF (176x144)
   - External/Internal: 1920x1080@30fps, 1280x720@60fps

3. **MPEG2TS**
   - Supported File Extensions: *.m2t, *.m2ts, *.mts
   - Code: MPEG2 MP@HL, MP@H14L, MP@ML
   - Code Description: MPEG1L1 / MPEG1L2 / AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3
   - Resolution: 1920x1080 QCIF (176x144)
   - Internal: 1920x1080@30fps, 1280x720@60fps

4. **MP4**
   - Supported File Extensions: *.mp4
   - Code: AVC / H.264 BP@L3, MP@L4.2, HP@L4.2
   - Code Description: AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2
   - Resolution: 1920x1080 QCIF (176x144)
   - External/Internal: 1920x1080@30fps, 1280x720@60fps

---

204204
<table>
<thead>
<tr>
<th>RAW_TEXT</th>
<th>File Extension</th>
<th>Codec</th>
<th>Audio</th>
<th>Frame Rate</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>avi</td>
<td>*.avi</td>
<td>Xvid</td>
<td>MPEG1L1 / MPEG1L2 / MPEG1L3 / AC3 / E-AC3</td>
<td>External Externo</td>
<td>1920x1080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Motion JPEG</td>
<td>External Externo</td>
<td>1280x720</td>
</tr>
<tr>
<td>Asf</td>
<td>*.asf</td>
<td>VC1 AP@L3, MP@HL, SP@ML</td>
<td>WMA9 Standard</td>
<td>External Externo</td>
<td>1920x1080</td>
</tr>
<tr>
<td></td>
<td>*.wmv</td>
<td></td>
<td>Xvid</td>
<td>DTS core / AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis</td>
<td>Internal / External Interno / Externo</td>
</tr>
<tr>
<td>MKV</td>
<td>*.mkv</td>
<td></td>
<td>Xvid</td>
<td>AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0</td>
<td>Internal / External Interno / Externo</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MPEG4 SP@L6, ASP@L5, ACEP@L4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VP8</td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td>File Extensions</td>
<td>Audio/Video Formats</td>
<td>Resolution/Frame Rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>---------------------</td>
<td>-----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3gpp</td>
<td>*.3gp / *.3g2</td>
<td>MPEG4 SP@L6, ASP@L5, ACEP@L4, AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AVC / H.264 BP@L3, MP@L4.2, HP@L4.2, AVC / H.264 BP@L3, MP@L4.0, HP@L4.0</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>External Externo</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RealMedia</td>
<td>*.rm / *.rmvb / *.rv</td>
<td>RealVideo RV8 / RV9 / RV10, RealAudio sipro / cook / aac</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOV</td>
<td>*.mov</td>
<td>AVC / H.264 BP@L3, MP@L4.2, HP@L4.2, AVC / H.264 BP@L3, MP@L4.0, HP@L4.0, MPEG4 SP@L6, ASP@L5, ACEP@L4, AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2 / μ-LAW / PCM(U8) / PCM(S16BE) / PCM(S16LE)</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>External Externo</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Motion JPEG</td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1920x1080 QCIF (176x144) 1280x720@60fps</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

206 Internal /
<table>
<thead>
<tr>
<th>Audio Codec</th>
<th>Supported Sampling Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPCM</td>
<td>44.1k / 48k</td>
</tr>
<tr>
<td>MPEG1L1 / MPEG1L2</td>
<td>32k / 44.1k / 48k</td>
</tr>
<tr>
<td>MPEG1L3</td>
<td>32k / 44.1k / 48k</td>
</tr>
<tr>
<td>AAC-LC</td>
<td>16k / 22.05k / 24k / 32k / 44.1k / 48k</td>
</tr>
<tr>
<td>HE-AAC v1 / v2</td>
<td>24k / 32k / 44.1k / 48k</td>
</tr>
<tr>
<td>AC3</td>
<td>32k / 44.1k / 48k</td>
</tr>
<tr>
<td>E-AC3</td>
<td>32k / 44.1k / 48k</td>
</tr>
<tr>
<td>Vorbis</td>
<td>8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k</td>
</tr>
<tr>
<td>WMA9</td>
<td>8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k</td>
</tr>
</tbody>
</table>

**Supported Audio Codec Sampling Rate in Video Content**

**视频内容中支持的音频编解码器采样速率**

**Taxa de Amostragem do Áudio Codec em Conteúdo de Vídeo**
<table>
<thead>
<tr>
<th>File Format</th>
<th>Extension</th>
<th>Supported Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>SubStation Alpha</td>
<td>*.ass / *.ssa</td>
<td>USB</td>
</tr>
<tr>
<td>SubRip</td>
<td>*.srt</td>
<td>USB</td>
</tr>
<tr>
<td>MicroDVD</td>
<td>*.sub / *.txt</td>
<td>USB</td>
</tr>
<tr>
<td>SubViewer</td>
<td>*.sub</td>
<td>USB</td>
</tr>
</tbody>
</table>

### External Subtitle

外挂字幕

Legenda Externa

<table>
<thead>
<tr>
<th>File Format</th>
<th>Extension</th>
<th>Supported Use Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formato do Arquivo</td>
<td>Extensão</td>
<td>Caso de Uso Suportado</td>
</tr>
<tr>
<td>SubStation Alpha</td>
<td>*.ass / *.ssa</td>
<td>USB</td>
</tr>
<tr>
<td>SubRip</td>
<td>*.srt</td>
<td>USB</td>
</tr>
<tr>
<td>MicroDVD</td>
<td>*.sub / *.txt</td>
<td>USB</td>
</tr>
<tr>
<td>SubViewer</td>
<td>*.sub</td>
<td>USB</td>
</tr>
</tbody>
</table>