

BRAVIA

KD-65X9005B/55X9005B

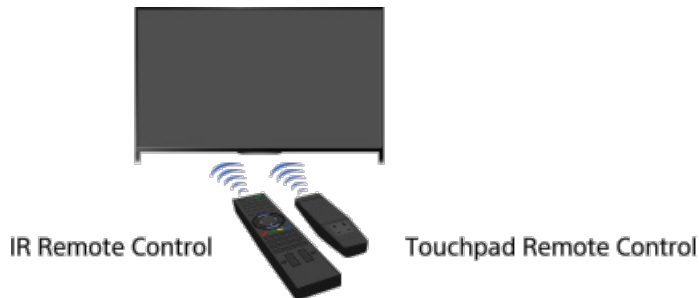
Basic Operations

- [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](#)

How to Use Remote

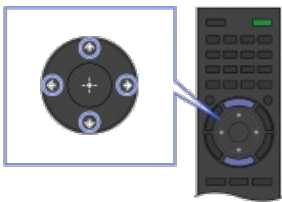
Two Remote Controls

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

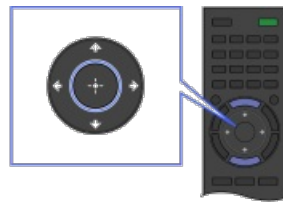


Using the IR Remote Control

Basic operation of this TV's functions and settings can be made by using the and buttons.



1 Highlight an item on the screen using the buttons.



2 Press the button to select the item.

To return to the previous screen

Press the RETURN button.

Using the Touchpad Remote Control

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



1 Slide your finger on the touchpad to highlight an item.



2 Press the touchpad until it clicks to select the item.

To return to the previous screen

Press the RETURN button.

To register the Touchpad Remote Control to the TV



Press the HOME button of the IR Remote Control, select [Settings] → [System Settings] → [Touchpad Remote Control Setup], then follow the on-screen instructions.

To customise the Touchpad Remote Control

You can adjust the touchpad sensitivity and enable/disable the Touchpad Operation Guide. Press the HOME button, then select [Settings] → [System Settings] → [Touchpad configurations] → the desired item.

To start the tutorial for the Touchpad Remote Control

You need to register your Touchpad Remote Control to the TV before going through the tutorial.

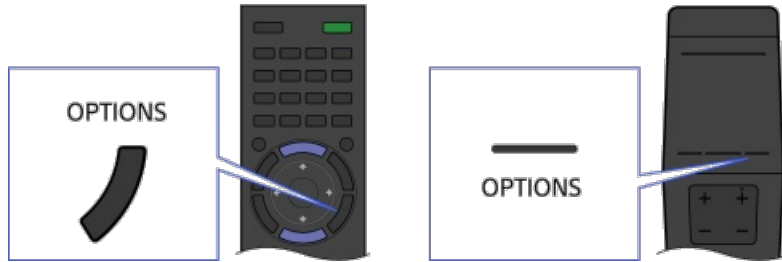
Press the HOME button, then select  [Settings] →  [System Settings] → [Touchpad configurations] → [Start Tutorial].

To view the Touchpad Operation Guide

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

OPTIONS button

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



Operating Functions by the Colour Buttons

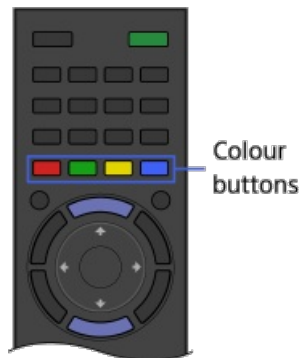
The colour buttons and available functions are indicated at the bottom of the screen.

Press the colour 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 colour buttons varies depending on your region/country.



To use the colour buttons with the Touchpad Remote Control

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

Related Information

- [How to Use the i-Manual](#)

Finding Contents More Easily ("Discover" Screen)

Overview

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



Steps

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



2. Highlight the desired category using the **▲/▼** buttons.
(When using the Touchpad Remote Control, flick up/down.)
3. Highlight the desired item using the **◀/▶** buttons, then press the **⊕** button to select.
(When using the Touchpad Remote Control, slide left/right to highlight the item, then press the touchpad to select.)
The selected content is displayed.

To change the Discover settings




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

Tips

- Some option settings require the TV's clock to be set.


Home Menu Screen

Overview



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



Steps

1. Press the HOME button.
2. Select the desired category using the  buttons.
(When using the Touchpad Remote Control, slide left/right.)



3. Press the  button, then select the desired subcategory using the  buttons.
(When using the Touchpad Remote Control, slide down, then slide left/right.)
When you move the cursor beyond the left/right edge of the subcategory, the next subcategory is displayed.



4. Select the thumbnail of the desired content.
The content is played back.

Categories in the Home Menu

[Channel]

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

[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 favourite applications ([My Apps]) are displayed. To view all applications, select [All Apps] at the bottom of the Home Menu.

Tips

- Subcategories may be subject to change without notice.

Icons in the Home Menu

[Search]

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

[Inputs]

You can select an input device connected to the TV.

[Media Server]

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

[Settings]

You can change TV settings (e.g. Display, Sound, Channel).


[Help]


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


[Network Status]

You can view the network connection status.


You can view a description of the network connection status by selecting the icon.


: Connected to a wired LAN.


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





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

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

: This mark indicates a network connection error. This mark also appears when the network set-up was not completed. (In this case, the tooltip shows [No network setup].)

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

: This mark indicates that the TV is temporarily disconnected from your network, or currently trying to connect to the network. If the network is correctly set up, the connection will recover automatically.

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

Related Information

- [Enjoying Music](#)
- [Enjoying Photos](#)
- [Using Applications](#)


Adjusting various picture settings (e.g. picture brightness/colour)

Overview

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



Steps

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




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

Available Options

[Target Inputs]

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

[Picture Mode]

Enables selection of a picture mode according to your preference.
Press the  button (or press the touchpad on the Touchpad Remote Control) to jump to "Selecting picture mode" for details.

[Jump to the page](#)

[Reset]

Resets all the [Picture] settings to the factory settings excluding [Target Inputs], [Picture Mode] and [Advanced Settings].

[Backlight]

Adjusts the brightness of the backlight. Reducing the brightness of the screen will reduce the power consumption.

[Contrast]

Adjusts picture contrast.

[Brightness]

Adjusts the brightness of the picture.

[Colour]

Adjusts colour intensity.

[Hue]

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

[Colour Temperature]

Adjusts the whiteness of the picture.

[Cool]: Gives white colours a bluish tint.

[Neutral]: Gives white colours a neutral tint.

[Warm 1]/[Warm 2]: Gives white colours 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 optimises picture quality with noise reduction.

(This function is available only for the analogue RF input, the SCART connection and the composite video input.)

It is recommended to select [Intelligent] for a low quality analogue input signal.

[Off]: Turns off the function.

[MPEG Noise Reduction]

[Auto]: Automatically reduces noise in MPEG-compressed videos.

[High]/[Medium]/[Low]: Reduces noise in MPEG-compressed videos.

[Off]: Turns off the function.

[Dot Noise Reduction]

[Auto]: Automatically reduces dot noise.

[Off]: Turns off the function.

[Reality Creation]

Adjusts detail and noise for a realistic picture.

[Mastered in 4K]

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

[Resolution]

Adjusts the detail and clarity of the picture.

[Noise Filtering]

Adjusts to reduce noise of the picture.

[Smooth Gradation]

Creates smooth gradations on flat surfaces of the picture.

[Motionflow]

[Smooth]: Provides smoother picture movement; especially effective for film-based content.

[Standard]: Provides smoother picture movement for standard use.

[Clear]: Reduces motion blur while maintaining brightness for high-speed picture content.

[Clear Plus]: Reduces motion blur for high-speed picture content more than [Clear].

[Impulse]: Provides for a cinema-like picture, which may flicker.

[True Cinema]: Images, such as a movie created in 24 frames per second, are reproduced at the original framerate.

[Off]: Use this setting if [Smooth], [Standard], [Clear], [Clear Plus], [Impulse] or [True Cinema] results in a distorted picture.

(Depending on the picture content, you may not see the effect visually even if you have changed the settings.)

[Film Mode]/[Cinema Drive]/[CineMotion]*

* Option name differs depending on your region/country.

[Auto]: Displays film-based content with picture expression close to the original by applying a film-specific process.

[Off]: Turns off the function.

(If the image contains irregular signals or too much noise, this setting is automatically turned off even if [Auto] is selected.)

[Advanced Settings]

[Reset]: Resets all [Advanced Settings] to the default values (except for [White Balance]).

[Black Corrector]: Enhances black areas of the picture for stronger contrast.

[Adv. Contrast Enhancer]: Automatically optimises [Backlight] and [Contrast] according to the

[Adv. Contrast Enhancer]: Automatically optimises [Backlight] and [Contrast] according to the brightness of the screen. This setting is effective for dark images and scenes.

[Gamma]: Adjusts the balance between light and dark areas of the picture.

[LED Dynamic Control]: Optimises contrast by adjusting brightness in individual sections of the screen. ([LED Dynamic Control] is available depending on the TV model.)

[Auto Light Limiter]: Reduces glare such as in scenes where the entire screen is white.

[Clear White]: Emphasises whiteness in the picture.

[Live Colour]: Makes colours 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 Naturaliser]: Detects faces and reproduces natural skin tone.

[Display Speed Preference]: Reduces the picture delay to optimise the response to game controllers/PC mouse operation by selecting [On].

How to Use the i-Manual

Searching for Information

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



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

Select from the **1/2/3** tabs.

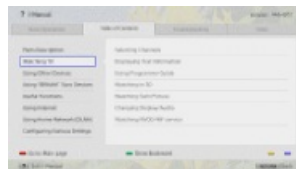
Tips

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

Steps

Procedure example: "Table of Contents" search

1. In the main page of this manual, highlight the "Table of Contents" tab using the **←/→** buttons. (When using the Touchpad Remote Control, slide left/right.)
2. Highlight a title on the left of the screen using the **↑/↓** buttons, then press the **⊕** button to select. (When using the Touchpad Remote Control, slide up/down to highlight a title, then press the touchpad to select.)
The titles on the right side of the screen change according to the title selected on the left side of the screen.



3. Highlight a title on the right side of the screen using the **↑/↓** buttons, then press the **⊕** button to select. (When using the Touchpad Remote Control, slide up/down to highlight a title, then press the touchpad to select.)
The page of the selected title appears.
4. Press the **▶** button to proceed to the next page. To return to the previous page, press the **◀** button. (When using the Touchpad Remote Control, slide left/right.)



To go to the main page

Press the corresponding colour 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 colour 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 colour button. For details on how to bookmark, press the colour button that corresponds to [Show Bookmark] at the bottom of the screen.

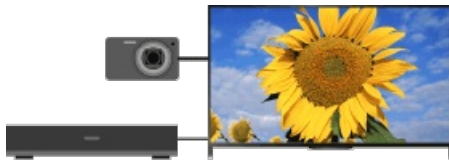
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the colour button that corresponds to [Show Bookmark], then press the touchpad to select.)

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 programme 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 programme in full screen

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

To enter a search keyword

The social network service area shows tweets related to the programme 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 Tweet 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.

- [Screen Format]/[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 during Social Viewing. Use the device's own remote 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].

Parts Description

TV Set

[Front](#)

[Control buttons on the rear](#)

[Terminals on the rear \(centre\)](#)

[Terminals on the rear \(right\)](#)

Remote Control

[Top](#)

[Upper](#)

[Middle](#)

[Lower](#)

[Bottom](#)

Touchpad Remote Control

[Upper](#)

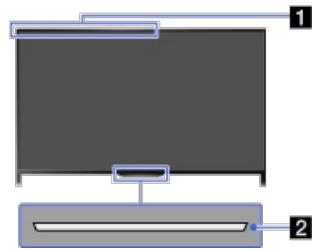
[Lower](#)

[Displaying the Screen Key Pad](#)

[Finding Contents More Easily \(“Discover” Screen\)](#)

[Home Menu Screen](#)

Front



1. Built-in camera

For use with video calling applications.
The location varies depending on your model.

2. Sensors/Illumination/Microphone

- Remote control sensor
Receives signals from the remote.
Point the remote at the Sony logo to operate the TV.
Do not place anything near the sensor. Doing so may affect its function.
- Light sensor
Senses the room light level and adjusts the screen brightness accordingly.
Do not place anything near the sensor. Doing so may affect its function.
- Built-in microphone
For use with video calling applications.

Illumination LED

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



Blinking

(Blinking speed depends on status)

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



*1

When the built-in camera or microphone is operating



Blinking

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



*1

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



*1

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

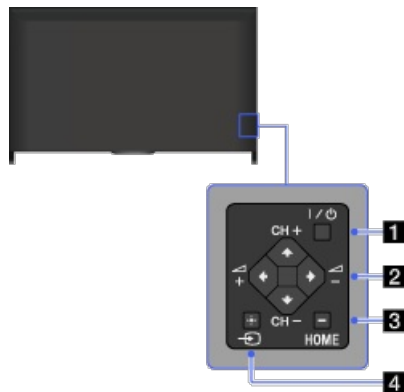
- For simultaneous conditions, the upper condition in the table has priority.
- The Illumination LED does not light up when the TV is in standby mode, except when a recording is in progress or the timer is set.

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

continuously but links as feedback for operations.

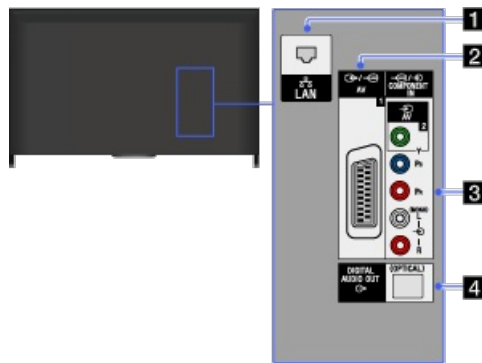
*2: This function is available depending on your region/country.

Control buttons on the rear



1. **I/O (Power)**
Press to turn on the TV or to enter standby mode.
2. **CH +/- (Channel)/▲/▼, ▲ +/- (Volume)/◀/▶**
Press to select the next (+) or previous (-) channel.
Press to adjust the volume.
 - In the TV Home Menu, these buttons will work as ▲/▼/◀/▶.
3. **HOME**
Press to display the TV Home Menu.
4. **↵ (Input select)/⏏ (Select/Confirm)**
Press to display a list of inputs.
To select a connected device input, press this button repeatedly.
 - In the TV Home Menu, this button will work as ⏏ (select/confirm).

Terminals on the rear (centre)



1. LAN

Connects to an existing network using an Ethernet cable.

2. AV1

Connect with a SCART cable. When you connect an analogue decoder, the TV tuner outputs scrambled signals to the decoder, and the decoder unscrambles the signals before outputting them.

- The SCART out setting must be made when outputting digital RF on certain models or in certain regions. Press the OPTIONS button, then select [SCART REC on].

3. AV2, COMPONENT IN

This input can be used as a composite video input or as a component video input. When connecting a mono device, connect to the L (MONO) audio jack (socket).

For a composite connection, use AV2 for video signals, and also connect to L (L/R) of COMPONENT IN for audio signals.

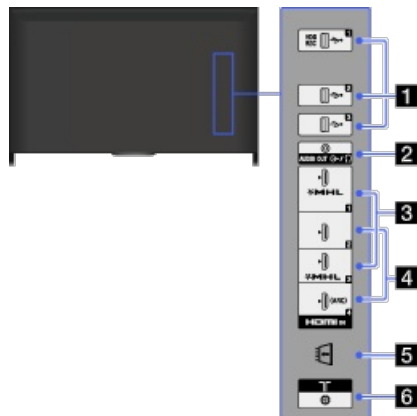
For a component connection, use Y, PB, PR for video signals, and also connect to L (L/R) for audio signals.

- The TV will automatically detect and switch between AV2 and COMPONENT IN. To manually set the input type, press the HOME button, then select [Settings] → [External Inputs] → [AV2/Component Input].

4. DIGITAL AUDIO OUT (OPTICAL)

You can listen to the TV's sound on a connected home theatre system with digital audio input (optical).

Terminals on the rear (right)



1. **USB 1/2 (HDD REC)/3**

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

For USB 2 (HDD REC), you can also record a digital broadcast onto an external USB HDD device.

2. **AUDIO OUT**

Connect your headphones or stereo system to listen to the TV's sound through the connected equipment.

To listen to the TV's sound through the connected equipment, press the HOME button, then select [Settings] → [Sound] → [Headphone/Audio Out] → [Headphone] or [Audio Out].

- When you set [Audio Out] in [Headphone/Audio Out], select [Fixed] or [Variable], press the HOME button, then select [Settings] → [Sound] → [Audio Out].

3. **HDMI IN 2/MHL, HDMI IN 4/MHL**

HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and an HDMI-equipped audio/video device.

You can view photos in 4K resolution by connecting a digital still camera that supports HDMI 4K output.

Moreover, you can connect your MHL (Mobile High-definition Link) device using an HD quality MHL cable.

Both HDMI/MHL support BRAVIA Sync for communication with a connected compatible device.

- Be sure to use an authorised HIGH SPEED HDMI cable bearing the HDMI logo.
- If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

4. **HDMI IN 1/3**

HDMI (High-Definition Multimedia Interface) provides an uncompressed, all-digital audio/video interface between this TV and an HDMI-equipped audio/video device.

You can view photos in 4K resolution by connecting a digital still camera that supports HDMI 4K output.

In addition, when you connect a BRAVIA Sync-compatible device, communication with the connected device is supported.

- Be sure to use an authorised HIGH SPEED HDMI cable bearing the HDMI logo.
- If connecting a digital audio system that is compatible with Audio Return Channel (ARC) technology, use HDMI IN 1. If not, an additional connection with DIGITAL AUDIO OUT (OPTICAL) is necessary.

5. **CAM (Conditional Access Module)**

Provides access to pay TV services. For details, refer to the instruction manual supplied with your CAM.

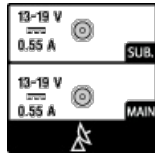
- Do not insert the smart card directly into the TV CAM slot. It must be fitted into the Conditional Access Module provided by your authorised dealer.

- CAM is not supported in some countries/areas. Check with your authorised dealer.
- A CAM message may appear when you switch to a digital programme after using the Internet video.

6. ㊦




RF input that connects to your cable or antenna (aerial).

- For satellite-compatible models, a satellite input is also available.
- Connect your satellite antenna to the jack (socket) labelled “MAIN.”
- The jack (socket) labelled “SUB” will be available after a software update is released in the future.



Top



-  **(Input select/Text hold)**
In TV mode: Press to select the connected device input.
In Text mode: Press to hold the current page.
-  **(TV standby)**
Press to turn on or to turn off the TV (standby mode).
-  **(Subtitle setting)**
Press to turn subtitles on or off (when the feature is available).
- **AUDIO**
Press to change the dual sound mode.
For digital mode, press to change the language for the programme currently being viewed.
- **SYNC MENU**
Press to display the BRAVIA Sync Menu to operate a connected BRAVIA Sync-compatible device.
- **RELATED SEARCH**
When the TV is connected to the Internet, you can search for related content while watching various content on the TV. (What you can search depends on your region/country or other circumstances.)
- **TV PAUSE**
Press to pause the currently viewing programme.

Upper



- **Buttons for connected devices**
Use these buttons to operate a connected BRAVIA Sync-compatible device and/or a USB HDD device.
- **TITLE LIST**
Press to display the Title list.
- **REC**
Press to record the current programme with the USB HDD recording function.
- **Colour buttons**
When the colour 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.
- **GUIDE**
Press to display the digital programme guide.
The Guide feature may not be available in some regions/countries.
- **RETURN/BACK**
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



- **DIGITAL/ANALOG**
Press to switch between digital and analogue mode.
When viewing pictures from a connected device, press to return to the last viewed TV mode.
- **EXIT**
Press to return to the previous screen or exit from the menu. When an Interactive Application service is available, press to exit from the service.
- **INFO/? (Info/Text reveal)**
Press to display information.
- **? i-MANUAL**
Press to display the on-screen instruction manual (this manual).
- **Number buttons/Alphabet buttons**
In TV mode: Press to select channels.
In Text mode: Press to enter a page number and/or alphabetical characters.
When an Interactive Application service is available, you can also enter letters of the alphabet.
- **TV/RADIO**
Press to switch between TV or RADIO broadcasts.
- **TEXT (Text)**
Press to display text information.

Bottom



-  **+/- (Volume)**
Press to adjust the volume.
-  **(Muting)**
Press to mute the sound. Press again to restore the sound.
- **PROG +/-**  
In TV mode: Press to select the next (+) or previous (-) channel.
In Text mode: Press to select the next () or previous () page.
- **3D**
Press to select the 3D display mode.



Upper



- **SOCIAL VIEW**
You can enjoy watching TV with friends far and near, using social network services.
- **⏻ (TV standby)**
Press to turn the TV on or off (Standby mode).
- **Control Bar (••••)**
Press to open the Screen Key Pad at the top of the TV screen. Slide left/right to move left/right, then press the touchpad to select a key.
- **Touchpad**
Press or slide to operate the TV with the touchpad.
- **RETURN**
Press to return to the previous screen, or exit from a menu.
- **HOME**
Press to display the TV Home Menu.
- **OPTIONS**
Press to display a list of convenient functions and menu shortcuts. The menu items vary based on the current input and/or content.

Lower



-  **+/- (Volume)**
Press to adjust the volume.
- **PROG +/-**
Press to select the next (+) or previous (-) channel.
-  **(NFC)**
Touch the device (e.g. some models of Xperia) corresponding to the One-touch mirroring function, then its screen is displayed on the TV.

Displaying the Screen Key Pad

Overview

You can display the Screen Key Pad.



Steps

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

Watching TV

[Selecting Channels](#)

[Enjoying Football More](#)

[Displaying Text Information](#)

[Using the Programme Guide](#)

[Using the TV Guide Search Function](#)

[Watching in 3D](#)

Watching Twin Picture

[Displaying picture-in-picture \(PIP\)](#)

[Displaying left-and-right pictures \(P&P\)](#)

Changing Display Info/Pic. Size/Audio

[Display information](#)

[Subtitles](#)

[Screen format/Wide mode](#)

[Audio](#)

[Watching NVOD/MF service](#)




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. Select the desired TV broadcast system using the  buttons.
(When using the Touchpad Remote Control, flick up/down.)
3. Select the desired thumbnail using the  buttons, 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 DIGITAL/ANALOG button to select digital/analogue mode.
2. 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.


About the information banner

When changing the channel, an information banner appears briefly. The following icons may be indicated on the banner.

- : Data service (Broadcast application)
- : Radio service
- : Scrambled/Subscription service
- : Multiple audio languages available
- : Subtitles available
- : Subtitles and/or audio available for the hearing impaired
- : Recommended minimum age for current programme (from 3 to 18 years)
- : Parental Lock
- : Digital Programme Lock

 Audio available for the visually impaired

 Spoken subtitle audio available

 Multi-channel audio available

Enjoying Football More

Overview

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



Steps

1. Press the FOOTBALL button.

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

2. Press the ⊕ button.

(When using the Touchpad Remote Control, press the touchpad.)

The Live Football Mode is turned on. The roar of the crowd is emphasised, and [Picture Mode] is set to [Vivid] or [Standard].

To turn off the Live Football Mode, press the FOOTBALL button, then press the ⊕ button.

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

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

To view movies and information related to football

Press the FOOTBALL button, then select the desired service (such as [Football Videos]).

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

An Internet connection is required to use this feature.

Services may be changed or discontinued without notice.

Displaying Text Information

Overview

You can view a range of text and text-based graphical information, including national news, weather information and TV schedules. Information of interest can be chosen from several pages by entering a number.



Steps

Press the button to display text information.

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

To close text information, press the button.

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

About the Text Information Screen



1. Page number entry

Jumps directly to a page by selecting the page number on the screen or entering the page number directly.

2. Page-catch cursor

Selects a new text page with the cursor by pressing the button (or pressing the touchpad on the Touchpad Remote Control).

3. Fastext

Accesses the desired pages quickly by pressing the corresponding colour button if available.

(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the corresponding colour button, then press the touchpad to select.)

Press the button to hold the page.

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

Press the button to reveal hidden information (often used for quiz pages).

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

About the Digital Text Information Service

The digital text service offers graphically rich content with smooth graphics and images. Various functions, such as page links and an easy-to-use navigation method, can be used. The service is supported by numerous broadcasters. (This function is available depending on your model/region/country.)



About the Digital Interactive Application Service

The interactive application service offers high-quality digital text and graphics, along with advanced options. The service is supported by broadcasters. (This function is available depending on your model/region/country.)



Notes

- The interactive service is only available if provided by the broadcaster.
- Available functions and screen content vary depending on the broadcaster.
- If subtitles are selected and the user launches a digital text application via the 'text' key, subtitles may, under certain circumstance stop being displayed. When the user exits the digital text application, subtitle decoding will resume automatically.

Using the Programme Guide

Overview

You can quickly find your preferred programmes and the detailed programme information. The current programme information and weekly programme guides for the next eight days are provided. (This function is available only for digital broadcasts, and depends on your region/country. In some countries, it is available only on the setting of [Settings] → [System Settings] → [General Set-up] → [GUIDE Key Behaviour] → [Launch Guide].)



Steps

1. Press the GUIDE button to display the digital programme guide.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the GUIDE button, then press the touchpad to select.)
2. Select the programme to watch.



To close the digital programme guide, press the GUIDE button.

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

To search for programmes by genre

Press the OPTIONS button, select [Programme Genre List], the desired genre, then the desired programme.

To register your preferred channels

Press the OPTIONS button, select [Guide Favourites Set-up]/[Favourites Set-up]*, the desired category, then follow the on-screen instructions to register channels.

* Option name differs depending on your region/country.

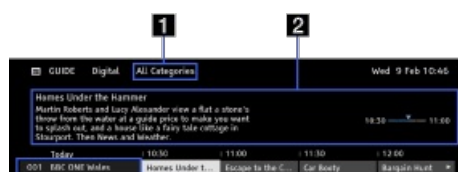
To set reminders

You can set reminders for future programmes. After selecting a future programme in the guide, select [Reminder].

To view a list of programmes with reminders set, press the HOME button, then select [Channel] → [Recordings] → [Timer List].

(This function may not be available depending on your model/region/country.)

About the Digital Programme Guide Screen





1. Category

Indicates a category name (e.g. [Guide Favourites 1]) which contains all channels corresponding to the category.

2. Information box

Shows information about the highlighted programme.

3. Channel information

Displays a channel title and number for a broadcaster.

4. Programme listing grid

Enables selection of a programme to watch or to be set as a reminder*.

* The availability of setting as a reminder, depends on your region/country.

Using the TV Guide Search Function

Overview

You can search for information on TV programmes, 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

- 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.)
- Press the HOME button, then select **[Channel]**.
- Select **[Guide]**.
Displays detailed information about TV programmes.

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

Notes

- Guide and Search can launch only when [GUIDE Key Behaviour] is [Launch Guide and Search].

To search for TV programmes by entering a keyword.

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

To change the display to the Programme guide by pressing the GUIDE button or GUIDE icon

You can set up the Programme guide as follows:

Press the HOME button, then select **[Settings]** → **[System Settings]** → **[General Set-up]** → **[GUIDE Key Behaviour]** → **[Launch Guide and Search]**.

You can also select [Launch Guide] from the Options menu to change to the Broadcast Programme Guide.

Tips

- If the displayed channel differs from the selected channel, select [Assign Programme] 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 Programme guide, by pressing the OPTIONS button, you can create a favourite channel list or switch between the Digital/Set/Set-top box

create a favourite channel list, or switch between the Digital/Sat/Set-top box programme guides.

Digital/Sat/Set-top box programme guide switching is only available on satellite-compatible models or IR Blaster compatible models.

Notes

- A TV programme will appear blank if no data is contained in a channel.
- Channel information may not be displayed correctly.

Watching in 3D (*This function is available depending on your model/region/country.)

Overview

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

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

Use of the Active 3D Glasses with this TV requires registration in advance. If you use the Active 3D Glasses with another TV, you will need to re-register.

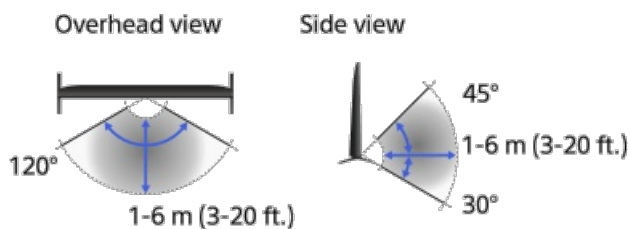


TV and Active 3D Glasses communication range

The preferred viewing position needs to be kept within the proper range. See the following chart.

The recommended minimum viewing distance is 3 times the screen height.

The working distance depends on obstacles (person, metal, walls, etc.) and/or electromagnetic interference.




Tips


- If you purchase the optional Active 3D Glasses, choose model TDG-BT500A.

Steps

- When using the Active 3D Glasses for the first time, remove the battery's insulation sheet.



- When using the Active 3D Glasses for the first time, hold the glasses within 50 cm (1.6 ft.) of the TV, turn on the TV, then press and hold the  (Power) button/indicator on the glasses for 2 seconds.

The Active 3D Glasses turn on and registration starts (The  (Power) button/indicator blinks green and yellow). When registration is finished, a message appears in the bottom right corner of the TV screen for 5 seconds, and the indicator will light up in green for 3 seconds. This process is only required one time.

If registration fails, the Active 3D Glasses will turn off automatically. In this case, repeat the above procedure.





3. Display the content to watch in 3D on the TV screen.
4. Put the Active 3D Glasses on.
While watching a 3D image, the ⏻ (Power) indicator blinks green every 2 seconds.
If no 3D effect is achieved, perform the following steps.
5. Press the 3D button to display the [3D Display] screen.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to highlight the 3D button, then press the touchpad to select.)
6. Press the 3D button repeatedly to select the [3D Display] mode to suit the displayed content.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to highlight the 3D button, press the touchpad, slide the touchpad to highlight the desired [3D Display] mode, then press the touchpad.)
[3D (Side-by-Side)]: Displays side-by-side pictures in 3D.
[3D (Over-Under)]: Displays over-under pictures in 3D.
[3D (Simulated 3D)]: Displays regular 2D pictures in simulated 3D.
[2D (Left-Only)]: When the same picture is side-by-side, the left side picture is shown expanded, in 2D.
[2D (Top-Only)]: When the same picture is over-under, the upper picture is shown expanded, in 2D.
Depending on the input signal or format, [3D (Side-by-Side)]/[3D (Over-Under)]/[2D (Left-Only)]/[2D (Top-Only)] may not be selectable.



To turn off the Active 3D Glasses

Press down on the ⏻ (power) button of the Active 3D Glasses for 2 seconds. If no signal from the TV is detected for more than 1 minute, the Active 3D Glasses will turn off automatically. To turn them on again, press the ⏻ (power) button.

To use the Active 3D Glasses with another TV

It is required to re-register the Active 3D Glasses. Turn off the Active 3D Glasses, then perform step 2.

To deactivate the 3D effect

Press the 3D button repeatedly to select [Off] in [3D Display].

(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to highlight the 3D button, press the touchpad, slide the touchpad to highlight [Off] in [3D Display], then press the touchpad.)

To use the SimulView™ mode

(The availability of this function depends on your model.)

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

When using this mode, the Active 3D Glasses automatically change to SimulView™ mode. Press the button on the Active 3D Glasses to switch between players as follows.

- Mode: SimulView™ mode (Player 1) ← → SimulView™ mode (Player 2)
- Indicator: Yellow LED blinks once every 2 seconds with SimulView™ mode (Player 1) ← → Yellow LED blinks twice every 2 seconds with SimulView™ mode (Player 2)

To adjust the 3D settings

You can adjust the following 3D settings.

Press the HOME button, select [Settings] → [Display] → [3D Settings] → the desired option.

[3D Display]

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

[3D Depth Adjustment]

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

[Simulated 3D Effect]

Heightens/lessens the 3D effect when you display 2D pictures in simulated 3D.

[3D Glasses Brightness]

Sets the image brightness when using the 3D display mode. By selecting [Auto], image brightness through the Active 3D Glasses is automatically adjusted in conjunction with the [Picture Mode] setting.

[Auto 3D]

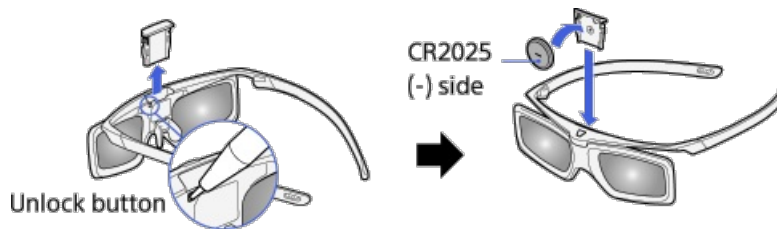
Select [Auto 1] to switch the 3D display mode automatically when a 3D signal is detected. If no 3D signal is detected, select [Auto 2], which will analyse the image for 3D information and switch the 3D display mode automatically. Select [Off] to prevent the 3D display mode from being automatically selected.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

[3D Signal Notification]

Notifies when a 3D signal is detected.

To replace the battery

If the LED indicates low battery power (indicator blinks green (yellow when SimulView™ mode) 3 times every 2 seconds), replace the battery. Use a CR2025 battery only. Press the unlock button with the tip of a pen, etc, and take out the battery case, then replace the battery with a new one. After that, be sure to lock the battery case again.



Tips

- If you wear glasses, remove the nose pad from the Active 3D Glasses by pulling it down, then wear them over your glasses.

Notes

- When [3D Display] is set to [Off], SimulView™ mode cannot be used.
- Depending on the image, one player may see another player's image when using SimulView™ mode.
- 3D effect is available only when pictures are displayed in full screen.
- If [Motionflow] is set to other than [Off], the smooth movement of the picture may be lost as the picture process to minimise screen flicker is applied. In such a case, set [Motionflow] to [Off] to display the original picture.
- Recommended viewing angle and distance may vary depending on the TV's location and room conditions.
- Simulated 3D effect may be less pronounced with some picture sources.
- Perceived simulated 3D effect may vary from person to person.
- 4K 3D signal is not detected.
- 3D effect or SimulView™ effect may be less pronounced if the ambient temperature is low.
- Maintenance of your glasses
 - Wipe the glasses gently with a soft cloth.
 - Stubborn stains may be removed with a cloth slightly moistened with a solution of mild soap and warm water.

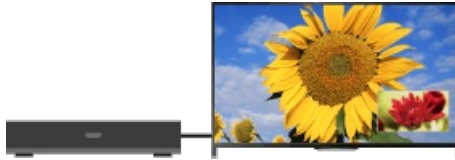
and warm water.

- If using a chemically pretreated cloth, be sure to follow the instructions provided on the package.
- Never use strong solvents such as a thinner, alcohol or benzene for cleaning.

Displaying picture-in-picture (PIP)

Overview

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



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 digital programme, the sub picture source can be:
 - Video input
 - Component input
 - HDMI input (video format)
- When the main picture source is an analogue programme, the sub picture source can be:
 - HDMI input (video format)
- When the main picture source is a video input, the sub picture source can be:
 - Digital programme
 - HDMI input (video format)
- When the main picture source is a component input, the sub picture source can be:
 - Digital programme
- When the main picture source is an HDMI input (video format or PC format), the sub picture source can be:
 - Digital programme
 - Analogue programme
 - 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] → [Motionflow] → [Off].
- This function is not available with a 4K resolution input signal.

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

Overview

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



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)



- Digital programme and video input
- Digital programme and component input
- Digital programme and HDMI input (video format)
- Analogue programme and HDMI input (video format)
- Video input and HDMI input (video format)

Notes


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

Display information




Steps

1. While watching a programme, press the  button.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the  button, then press the touchpad to select.)
In digital mode: Details of the current programme appear.
In analogue mode: Current channel number and screen mode appear.

To close the display information, press the  button.



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


Tips

- If you are viewing text information, pressing the   button reveals hidden information (e.g. answers to a quiz).
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the  button, then press the touchpad to select.)

Subtitles

Steps

1. While watching a programme with subtitles, press the  button.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to highlight the  button, then press the touchpad to select.)
2. Select the desired language or off.

To close this list, press the RETURN or  button.



(When using the Touchpad Remote Control, press the RETURN button or press the touchpad.)

Notes

- If subtitles are selected and the user launches a digital text application via the 'text' key, subtitles may, under certain circumstance stop being displayed. When the user exits the digital text application, subtitle decoding will resume automatically.

Screen format/Wide mode

Steps

Press the HOME button, then select  [Settings] →  [Display] → [Screen] → [Screen Format]/[Wide Mode]* → the desired option.

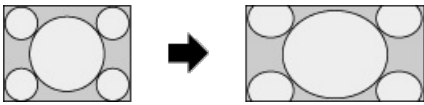
Some options may not be available depending on the picture size.

* Option name differs depending on your region/country.

Available Options (4:3 Original Source)

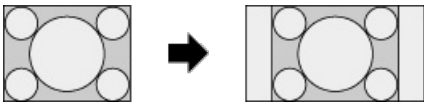
[Wide Zoom]

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



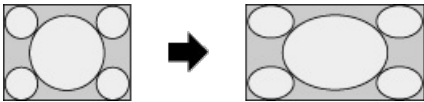
[Normal]

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



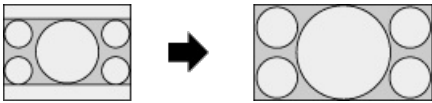
[Full]

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.



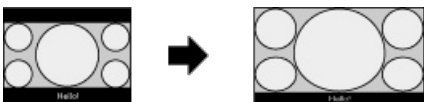
[14:9]

Displays a 14:9 picture in its original size. Side bars are shown to fill the 16:9 screen. (This option is available depending on your region/country.)



[Captions]

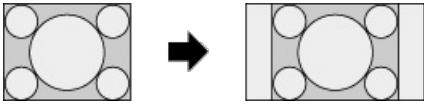
Stretches the picture horizontally to fill a 16:9 screen, while fitting captions in the screen.



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

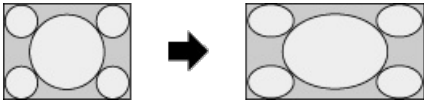
[Fine-Normal]

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



[Fine-Full]

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



[Portable Game 1]

Stretches a black-framed game picture from PlayStation®Portable.



[Portable Game 2]

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



Available Options (16:9 Original Source)

[Wide Zoom]

Enlarges the picture, preserving the original picture as much as possible.



[Normal]

Displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.



[Full]

Displays a 16:9 picture in its original size.



[Zoom]

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



[Captions]

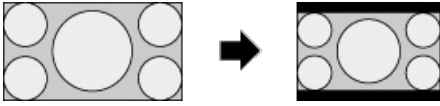
Stretches the picture horizontally, while fitting captions in the screen.



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

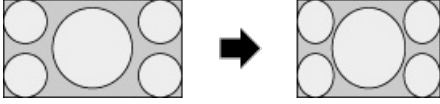
[Normal]

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



[Full]

Displays a horizontally compressed picture to fit a 16:9 (3840×2160) screen.



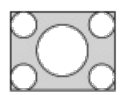
[Zoom]

Displays a 4K (4096×2160) picture in its original size.

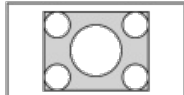


Available Options (PC Timing)

800 x 600



[Normal]



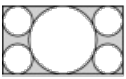
[Full 1]



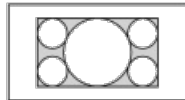
[Full 2]



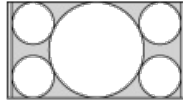
1,280 x 768



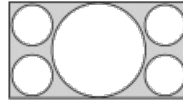
[Normal]



[Full 1]



[Full 2]





Audio

Steps

While watching a programme, press the AUDIO button repeatedly to select the desired audio signal.

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

Tips

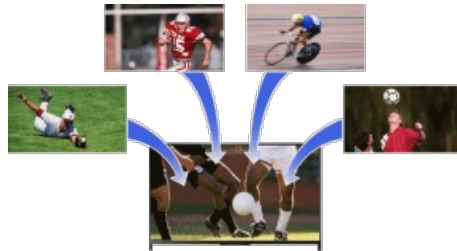
- You can also change the sound mode in the Home Menu. Press the HOME button, select  [Settings] →  [Sound] → [Dual Sound] → the desired option.

Watching NVOD/MF service

Overview

NVOD (Near Video On Demand) and MF (Multi Feed) are standards for broadcasting several programmes at the same time in one channel.

NVOD provides multiple copies of the programme on a staggered schedule, and MF allows you to select the desired programme from several programmes in one channel.



Steps

1. While watching an NVOD/MF service, press the OPTIONS button.
2. Select [Additional services] → the desired programme.

Notes

- This feature is available when broadcasters provide NVOD/MF service.

Enjoying Movies/Music/Photos

[Enjoying Movies](#)

[Enjoying Music](#)

[Enjoying Photos](#)


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.

Using Internet Services and Applications

[Using Applications](#)

[Browsing Websites](#)

[Watching Internet Videos](#)

[Enjoying Internet Services in Comfort](#)

Using Skype

[Performing initial set-up](#)

[Making a call](#)




[Making a call while watching TV](#)

Browsing Websites

Overview

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

Steps

1. Connect to a broadband Internet connection.
Press the  button to jump to the title list. Then, press the  button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Press the HOME button, then select  [Apps].



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

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

To change the character size

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

Notes




- If the TV does not support the functions provided by certain Internet services (e.g. Adobe Flash Player, PDF viewer), web content may not be displayed correctly, or some functions may not work properly. Also, the TV may not support functions developed in the future.
- In no event shall Sony be liable for any damage caused or associated with the use of the Internet browser, malfunction (including software) or communication failure.

Watching Internet Videos


Overview

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

Steps


1. Connect to a broadband Internet connection.
Press the  button to jump to the title list. Then, press the  button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Press the HOME button, then select  [Apps].
3. Select [All Apps] → the desired service → the desired content.

To seek forward/backward in video content

Press the buttons on the remote 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] →  [System Settings] → [Seamless Streaming Setting] → [Register USB device].
Note that a USB device will be formatted once registered, and all the stored data will be deleted.
To deregister a USB device, select [Deregister USB device].

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

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

To update Internet Video content services

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

Tips

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

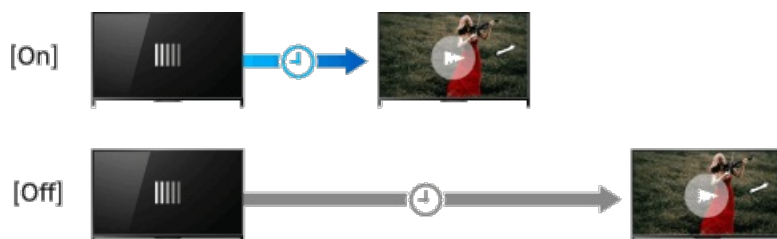
Notes

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

Enjoying Internet Services in Comfort

Overview

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



Steps

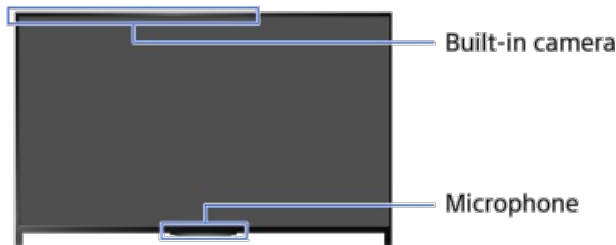
1. Start the desired Internet service.
2. Press the OPTIONS button, then select [Quick Playback] → [On].

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

Performing initial set-up



Overview

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



Steps

1. Connect to a broadband Internet connection.

Press the  button to jump to the title list. Then, press the  button again to go to "Connecting to the Internet" for details.

(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)

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



3. Select [All Apps] → [Skype].
4. Follow the on-screen instructions to create your account.

Tips

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



Tips

- For more information on Skype, please visit <http://www.Skype.com/>
- This product includes SkypeKit 4.5.1
(c) 2003-2014, Skype
Patents Pending
Skype, associated trade marks and logos and the "S" logo are trade marks of Skype. Although this product has been tested and met our certification standards for audio and video quality, it is not endorsed by Skype, Skype Communications S.a.r.l. or any of their related companies.

Notes

- No emergency calls. Skype is not a replacement for your telephone and cannot be used for emergency calling.
- Skype may not be available while some other applications are being used.
- Use of a wireless network connection may cause audio/video degradation.
- Audio and video calls are free to other people on Skype. For other Skype services such as low

cost calls to mobile phones and landlines, Skype Credit or a subscription is required.

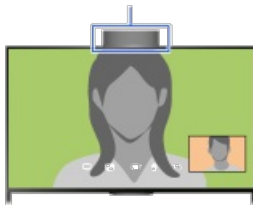
- The sound quality of the microphone may deteriorate in a noisy environment.
- A ringtone does not sound from the HDMI Audio Return Channel (ARC) and optical digital audio output. To sound a ringtone, press the HOME button, then select  [Settings] →  [Sound] → [Speakers] → [TV Speakers].
- CMU-BR200/CMU-BR100 (not supplied) or third-party camera and microphone units cannot be used with the TV.

Making a call

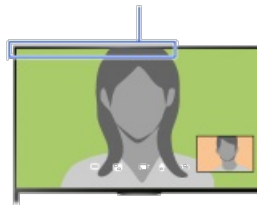
Overview

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

Camera and Microphone Unit
CMU-BR200/CMU-BR100



Built-in 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].



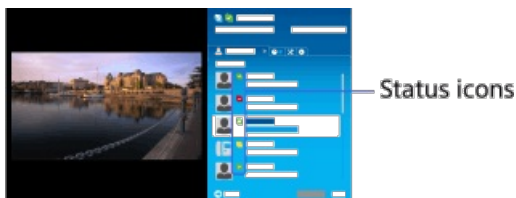
3. Select [All Apps] → [Skype] → [Contacts] or [History].

Select [Contacts] to use your Skype contact list. Select [History] to use the call history list.

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

About the status icons in the contact list

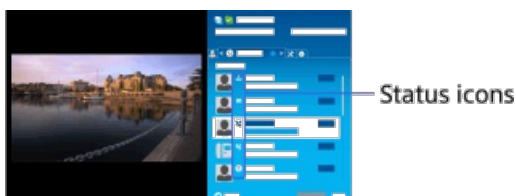
A status icon is displayed next to your contacts, so you know if they are available to have a conversation.



The list below indicates their availability:






: Online, : Away, : Do Not Disturb, : Offline, : Offline (with call forwarding enabled), : Phone contact, : Offline (with voice mail enabled)

About the status icons in the call history list




The icons in the history list indicate the following:

The icons in the history list indicate the following.


 : Missed Call,  : Incoming Call...,  : Outgoing Call...,  : Voice message,  : Contact Request

To call by entering a phone number

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



To add contacts to the contact list

You can add contacts in the following ways:

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

To receive a call

You can receive a call while watching TV or using other applications.


When the illumination LED on the front of the TV blinks and/or the incoming call notification appears, select  (Video Call) or  (Voice Call) to answer.


(While using another application, an incoming call notification is displayed full screen.)



To use call options during a call

Use the menu bar at the bottom of the screen.

When the other party is displayed in full screen, you can show/hide the menu bar by pressing the  button.

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



To end a call

Press the  button to open the menu bar, then select  [End call].

Tips

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

Making a call while watching TV

Overview

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



Steps

1. Connect to a broadband Internet connection.
Press the **+** button to jump to the title list. Then, press the **+** button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Press the SOCIAL VIEW button to start Social Viewing.
The Social Viewing screen appears. (The image size of the programme you are watching is reduced and the tweets area appears.)
3. If you are not signed in to Skype, press the SOCIAL VIEW button again to open the menu screen, select [Sign in] for [Skype], then follow the on-screen instructions to sign in.
4. While the Social Viewing screen is displayed, press the SOCIAL VIEW button again to open the menu screen, then select [View Contacts].
The contact list appears.
5. Select the desired person from the contact list to make a call.

Tips

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

To stop watching TV during a video call

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

Tips

- If you stop watching TV and display the video call screen only, the tweets area will also be closed.

Watching TV with Friends Far and Near

[Enjoying a Chat with Your Friends while Watching TV](#)

[Inviting Friends while Watching TV](#)

[Inviting Friends Using the Programme Guide](#)

Inviting Friends while Watching TV

Overview

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





Tips

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

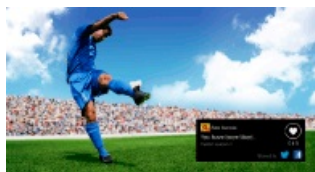
Steps

1. Connect to a broadband Internet connection.

Press the  button to jump to the title list. Then, press the  button again to go to "Connecting to the Internet" for details.

(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)

2. While watching TV, press the OPTIONS button, then select [Love].
3. Follow the on-screen instructions to log in to your Facebook account.




Tips

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

To invite friends to watch the same programme

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

To view your history

Press the HOME button, then select  [Channel] → [Friends] at the bottom of the Home Menu → [Love] or [Invitation].

Inviting Friends Using the Programme Guide

Overview

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



Tips

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

Steps

1. Connect to a broadband Internet connection.
Press the **+** button to jump to the title list. Then, press the **+** button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Press the HOME button, then select **[Channel]**.
3. Select **[Guide]**.
Detailed information about TV programmes is displayed.
4. Select the desired programme.
The detailed information of the programme appears.
5. Select **[Invite Friends]**.
6. Follow the on-screen instructions to log in to the TV with your Facebook account.
The friend selection screen appears.
7. Follow the on-screen instructions to send invitations.

Tips

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

Notes

- Guide and Search can launch only when **[GUIDE Key Behaviour]** is **[Launch Guide and Search]**.

Using Other Devices

BD/DVD Player

[HDMI connection](#)

[Component video connection](#)

[SCART connection](#)

[Composite connection](#)

USB HDD Recording Device

[Performing initial set-up](#)

[One-touch recording](#)

[Timer recording](#)

[Watching recorded content](#)

[Deleting recorded content](#)

[Pausing a currently-viewed programme](#)

Digital Still Camera/Camcorder

USB Device

PC

Viewing Photo Files in 4K Resolution

Audio System

[HDMI connection](#)

[Optical audio connection](#)

[Audio cable connection](#)

[MHL Device \(Smartphone, Tablet, etc.\)](#)

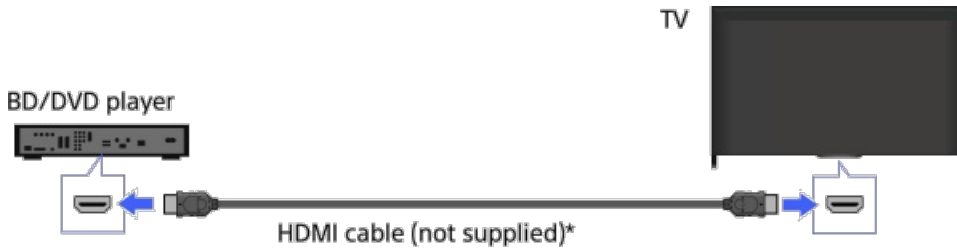
[Wireless Subwoofer \(Optional\)](#)

[Playable File Formats \(DLNA, USB devices, etc.\)](#)

HDMI connection



Making a Connection

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



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

Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the  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  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.

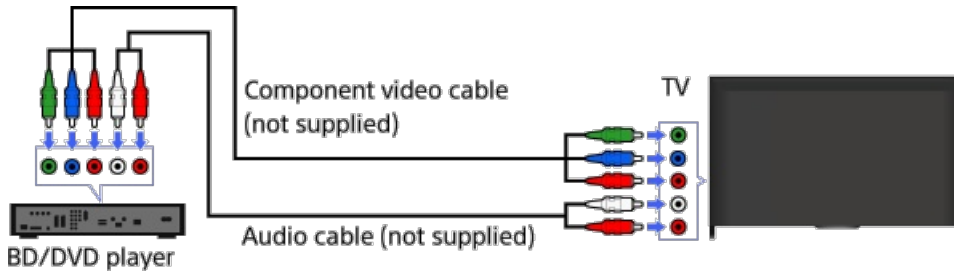
Tips

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




Component video connection

Making a Connection

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



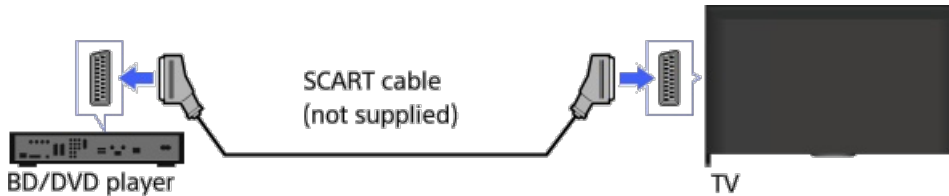
Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the  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  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.



SCART connection

Making a Connection

If your BD/DVD player has a SCART jack (socket), connect it using a SCART cable.



Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the  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  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

- While watching a digital broadcast, you can record the currently-viewed programme on the device connected via a SCART connection. Press the OPTIONS button, select [SCART REC on], then perform the recording operation on the connected device.

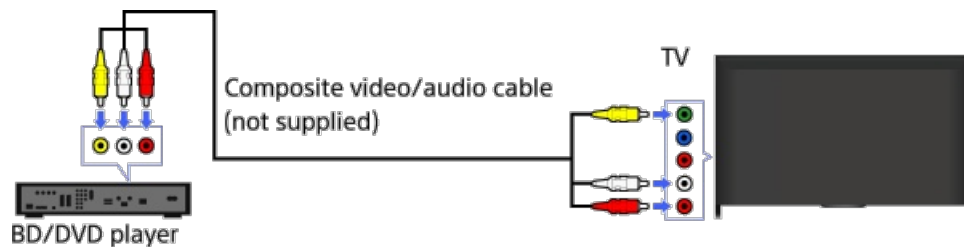
Notes

- SCART connection may provide the same picture quality as a composite connection, depending on the connected BD/DVD player.



Composite connection

Making a Connection

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



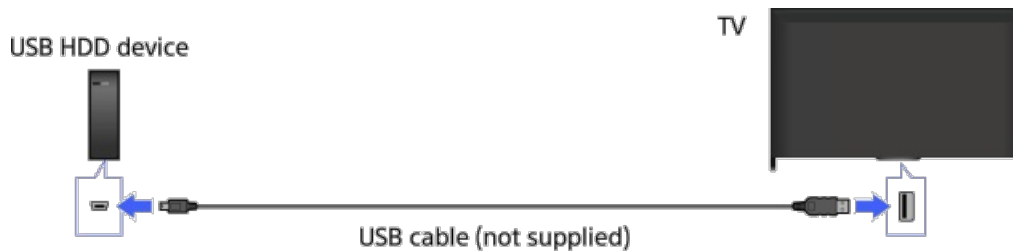
Steps

1. After making a connection, turn on the connected BD/DVD player.
2. Press the  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  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.


Performing initial set-up

Making a Connection


Connect an external USB HDD device to your TV and enjoy digital broadcast recording. If your TV has two or more USB ports, connect the USB HDD device to the port labelled "HDD REC."





Steps

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



2. Select  [System Settings] → [Recording Set-up] → [HDD Registration].
3. Follow the on-screen instructions to register the USB HDD device.

To deregister a USB device

Press the HOME button, select  [Settings] →  [System Settings] → [Recording Set-up] → [HDD Deregistration] → the device to deregister.

Notes

- USB HDD capacities of greater than 32 GB are supported.
- Connecting a USB HDD device via a USB hub is not supported. Connect the device directly to the TV.
- Any data stored in the USB HDD device will be erased when it is formatted during the registration process. The USB HDD device cannot be used with a PC once it is registered to the TV. To enable use of the USB HDD device on a PC, format it on the PC. (Note that any data in the USB HDD device will be erased).
- A maximum of 8 USB HDD devices can be registered.
- Only this TV can play the data recorded on the USB HDD.
- Recording is supported only for digital TV broadcast. Recording of data broadcasts or radio is unsupported.
- Scrambled signals cannot be recorded.
- Recording cannot be performed in the following cases:
 - The TV cannot recognise the registered USB HDD device.
 - More than 1,000 programmes are recorded on the USB HDD device.
 - The USB HDD device is full.
- USB HDD recording cannot be performed if [SCART REC on] is selected.
- Automatic selection of the programme may not be possible while it is being recorded.
- Recording is not possible if the programme is not authorised by the operator.
- If using a Conditional Access Module (CAM), avoid using its parental rating protection, which may not work during recording. As an alternative, use programme block of the TV's own

may not work during recording. As an alternative, use programme block or the TV's own parental rating if it is supported by the broadcaster.

- In Norway, some programmes cannot be recorded due to legal restrictions.
- If the TV is subjected to impact during USB HDD recording, noise may occur in the recorded content.
- In no event shall Sony be liable for recording failure or any damage or loss of recorded content caused or associated with the TV's malfunction, signal interference, or any other problem.

One-touch recording

Steps

While viewing the programme to record, press the REC button.

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


Recording starts and automatically stops at the end of the programme.

To stop recording manually, press the ■ button.




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

Timer recording



Steps

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



2. Select [Guide] → a programme to record → [Timer REC].
3. Press the  button, configure the timer setting using the  buttons, then press the  button.
(When using the Touchpad Remote Control, press the touchpad, slide up/down/left/right to configure the timer setting, then press the touchpad.)
The TV informs you if the selected programme is a split part. You can record all parts if the gap between parts are less than 3 hours. (This function is available depending on your region/country.)
4. Select [Set Timer].
If the selected programme is part of a series, you can make series recording by selecting [Set Timer As a Series]. (This function is available depending on your region/country.)

To manually set the timer by specifying date, time and channel

Press the HOME button, then select  [Channel] →  [Recordings] → [Timer List] → [Manual timer REC].

Configure the timer setting, then select [Set Timer].

To check, modify or delete timer settings

Press the HOME button, then select  [Channel] →  [Recordings] → [Timer List].

Tips


- Up to 32 timer settings can be made.
- If recording fails, the result will be listed in [Recording Error List] of the [Recordings] menu.

Notes


- Timer recording cannot be started if the AC power cord (mains lead) is disconnected.
- If the timer settings overlap, the programme that starts first has priority and the recording of the second programme starts only after the first programme has finished.

Watching recorded content

Steps


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




2. Select  [Recordings] → [Title List] → the content.

Deleting recorded content

Steps

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



2. Select  [Recordings] → [Title List] → the content.
3. Press the OPTIONS button, then select [Delete] → [One]/[Selective]/[All].

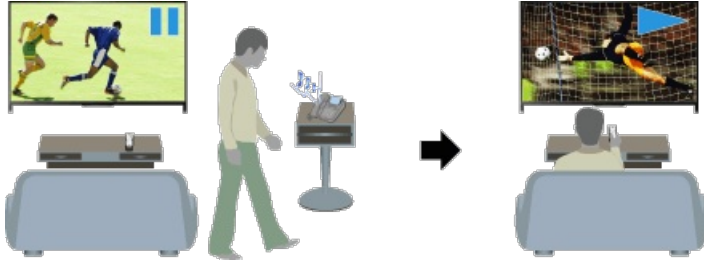
Tips

- You can also select multiple contents and delete them at one time.

Pausing a currently-viewed programme

Overview

You can pause the currently-viewed programme. This function is convenient if you need to take a break from viewing.



Steps

1. While viewing a programme, press the TV PAUSE button.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the TV PAUSE button, then press the touchpad to select.)
The TV starts recording the programme temporarily onto the USB HDD device.
2. Press the ► button to continue viewing the programme.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the ► button, then press the touchpad to select.)

To return to the live programme, press the ■ button.

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

Tips

- The programme will be paused (recorded temporarily) for up to 8 hours.

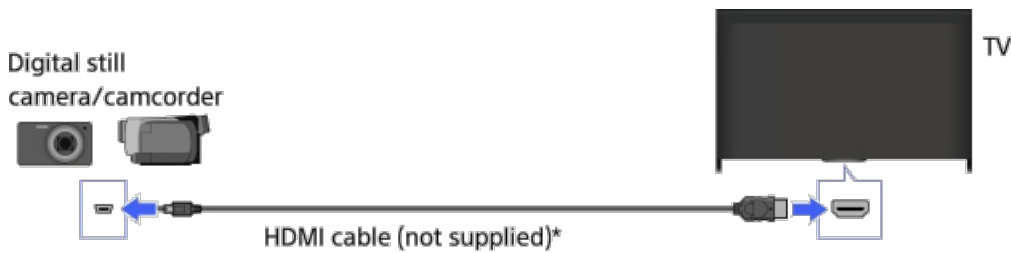
Notes

- The temporarily recorded content will be deleted from the USB HDD device once you exit the pause mode by pressing the ■ button or switching the channel.
(When using the Touchpad Remote Control, press the Control Bar (••••), slide the touchpad to highlight the ■ button, then press the touchpad to select.)
- The pause mode will be cancelled if timer recording starts. However, you can view the paused programme until the point the timer recording started.

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 (socket) for digital still camera/camcorder end, and a standard HDMI jack (socket) for the TV end.



* Be sure to use an authorised 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  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  button, press the touchpad, slide the touchpad to highlight the connected digital still camera/camcorder, then press the touchpad.)
3. Start playback on the connected digital still camera/camcorder.

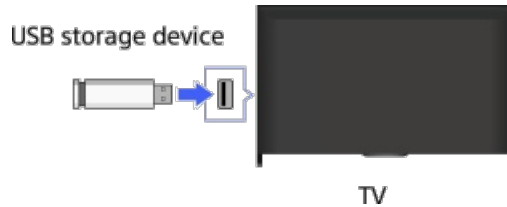
Tips

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


USB Device

Making a Connection

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



Steps

1. After making a connection, turn on the connected USB device.
2. Press the HOME button, then select  [Media Server].



3. Select [USB] → the folder or file from the list.
If you select a folder, select the desired file.
Playback starts.

To check the supported file formats

[Codec List](#)

Tips

- If there is a subtitle file in the USB, you can watch a programme with subtitles. In that case, the subtitle file should be in the same folder, and with the same name as the movie file.
(Depending on the subtitle file, subtitles may not be displayed correctly even if the format is supported.)

Notes

- USB viewer supports FAT16, FAT32, exFAT, NTFS 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 [Zoom and Crop] in the option menu of [Cropping] 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
 - For vertical scroll: 1080/4912, 1080/7152, 1920/3424, 1920/4912, 1856/12416, 1856/8192, 2160/5536, 2160/3872, 4096/10480, 1080/11520
- Video files are located in the following folder structure (hierarchical position):

/AVCHD/BDMV/STREAM/00000.MTS
/PRIVATE/AVCHD/BDMV/STREAM/00000.MTS
/MP_ROOT/100ANV01/MAHA0001.MP4

- Avoid losing your files by backing up all your media files stored on a USB device. Sony cannot accept responsibility for lost or damaged data stored on a USB device.
- Depending on the file, playback may not be possible even when using the supported formats.

Supported Codec for DLNA / USB device

DLNA/USB设备支持的编解码器

Codec Suportado para dispositivo DLNA/USB

[Photo](#) | [Music](#) | [Video](#) | [External Subtitle](#)
照片 | 音乐 | 视频 | 外挂字幕
[Foto](#) | [Música](#) | [Vídeo](#) | [Legenda Externa](#)

Photo

照片

Foto

File Format 文件格式 Formato do Arquivo	Extension 扩展名 Extensão
JPEG	*.jpg / *.jpe / *.jpeg
MPO	*.mpo
RAW	*.arw

[Go to Page Top](#)

[转到顶层页面](#)

[Ir para o início da página](#)

Music

音乐

Música

Container 封装格式 Recipiente	Extension 扩展名 Extensão	Description 描述 Descrição	Supported Sampling Rate 支持的采样速率 Taxa de amostragem suportada
-	-	LPCM	32k / 44.1k / 48k
	*.mp3	MP1L1 / MP1L2 / MP1L3 / MP2L1 / MP2L2	32k / 44.1k / 48k
		MP2L3	16k / 22.05k / 24k
		MP2.5L3	8k / 11.025k / 12k
	*.wav	WAV	32k / 44.1k / 48k
mp4	*.mp4 / *.m4a	AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
		HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
3gpp	*.3gp / *.3g2	AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
		HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
Asf	*.wma	WMA9 Standard	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k

[Go to Page Top](#)

[转到顶层页面](#)

Video

视频

Vídeo

Container 封装格式 Recipiente	Extension 扩展名 Extensão	Video Codec (Profile@Level) 视频编解码器 (Profile@Level) Vídeo Codec (Profile@Level)	Audio Codec 音频编解码器 Áudio Codec	Supported Subtitle Type 支持的字幕类型 Tipo de Legenda Surpotada	Supported Maximum Resolution 支持的最大分辨率 Resolução Máxima Suportada	Supported Minimum Resolution 支持的最小分辨率 Resolução Mínima Suportada	Supported Maximum Frame Rate 支持的最大帧率 Frame Rate Máximo Suportado
MPEG1	*.mpg / *.mpe / *.mpeg	MPEG1	MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MPEG2PS	*.mpg / *.mpe / *.mpeg	MPEG2 MP@HL, MP@H14L, MP@ML	MPEG1L1 / MPEG1L2 / LPCM / AC3	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MPEG2TS	*.m2t	MPEG2 MP@HL, MP@H14L, MP@ML	MPEG1L1 / MPEG1L2 / AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3	- Internal -	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
	*.m2ts / *.mts	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0		- Internal -	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
MP4	*.mp4	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
avi	*.avi	Xvid	MPEG1L1 / MPEG1L2 / MPEG1L3 / AC3 / E-AC3	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		Motion JPEG	μ-LAW / PCM(U8) / PCM(S16LE)	External 外部 Externo	1280x720	QCIF (176x144)	1280x720@30fps
Asf	*.asf	VC1 AP@L3, MP@HL, SP@ML	WMA9 Standard	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
	*.wmv						
		Xvid	DTS core / AC3 / AAC- LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3		1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		AVC / H.264 BP@L3, MP@L4.2,					

MKV	*.mkv	HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis AC3 / AAC- LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	Internal / External 内部 / 外部 Interno / Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		VP8			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
3gpp	*.3gp / *.3g2	MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
RealMedia	*.rm / *.rmvb / *.rv	RealVideo RV8 / RV9 / RV10	RealAudio sipro / cook / aac	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
MOV	*.mov	AVC / H.264 BP@L3, MP@L4.2, HP@L4.2 AVC / H.264 BP@L3, MP@L4.0, HP@L4.0	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2 / μ -LAW / PCM(U8) / PCM(S16BE) / PCM(S16LE)	External 外部 Externo	1920x1080	QCIF (176x144)	1920x1080@60fps 1920x1080@30fps 1280x720@60fps
		MPEG4 SP@L6, ASP@L5, ACEP@L4			1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps
		Motion JPEG			1280x720	QCIF (176x144)	1280x720@30fps
WebM	*.webm	VP8	Vorbis	Internal / External 内部 / 外部 Interno / Externo	1920x1080	QCIF (176x144)	1920x1080@30fps 1280x720@60fps

[Go to Page Top](#)

[转到顶层页面](#)

[Ir para o início da página](#)

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

Audio Codec 音频编解码器 Áudio Codec	Supported Sampling Rate 支持的采样速率 Taxa de Amostragem Suportada
LPCM	44.1k / 48k

MPEG1L1 / MPEG1L2	32k / 44.1k / 48k
MPEG1L3	32k / 44.1k / 48k
AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k
HE-AAC v1 / v2	24k / 32k / 44.1k / 48k
AC3	32k / 44.1k / 48k
E-AC3	32k / 44.1k / 48k
Vorbis	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k
WMA9	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k
DTS core	8k / 11.025k / 12k / 24k / 16k / 22.05k / 32k / 44.1k / 48k
RealAudio(sipro)	8k / 16k
RealAudio(cook)	8k / 11.025k / 22.05k / 44.1k
RealAudio(aac)	24k / 32k / 44.1k / 48k
μ-LAW	8k
PCM(U8)	8k
PCM(S16LE)	11.025k / 16k / 44.1k
PCM(S16BE)	11.025k / 16k / 44.1k

[Go to Page Top](#)

[转到顶层页面](#)

[Ir para o início da página](#)

External Subtitle

外挂字幕

Legenda Externa

File Format 文件格式 Formato do Arquivo	Extension 扩展名 Extensão	Supported Use Case 支持范围 Caso de Uso Suportado
SubStation Alpha	*.ass / *.ssa	USB
SubRip	*.srt	USB
MicroDVD	*.sub / *.txt	USB
SubViewer	*.sub	USB
SAMI	*.smi	USB

[Go to Page Top](#)

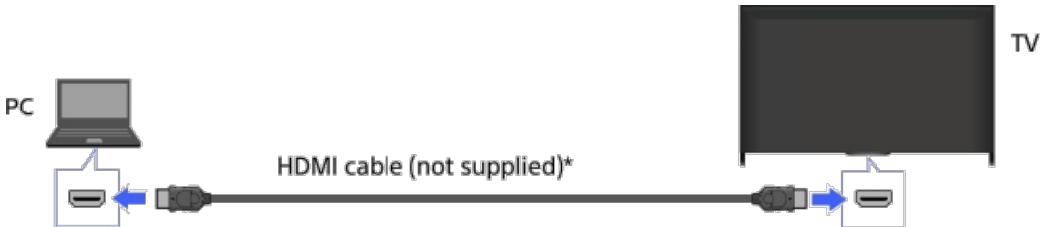
[转到顶层页面](#)

[Ir para o início da página](#)

PC

Making a Connection

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



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

Corresponding PC input signal

(Resolution, Horizontal frequency/Vertical frequency)

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

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

Notes

- This TV does not support interlaced signals.
- For optimum picture quality, it is recommended that you use the signals in the chart. In plug and play, signals with a 60 Hz vertical frequency will be detected automatically. (PC reboot may be necessary.)
- Depending on the connection status, the image may be blurred or smeared. In this case, change the PC's settings, then select another input signal in "Corresponding PC input signal".
- 1920 pixel x 1080 line/60Hz output may not be available, depending on your PC. Even if 1920 pixel x 1080 line/60Hz output is selected, the actual output signal may differ. In this case, change the PC's settings, then select another input signal in "Corresponding PC input signal".

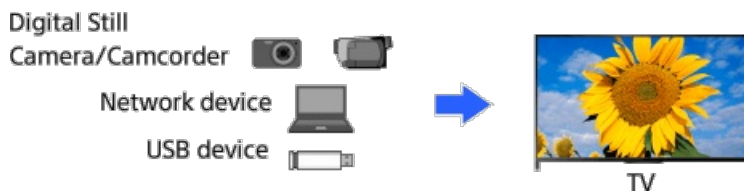
Viewing Photo Files in 4K Resolution

Overview

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


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

This function is available depending on your region/country.




Steps

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


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



2. Select  [Display] → [4K Photo Playback] → [On].

When the set-up is completed, see the next page for making the connection and displaying.

USB or home network connections

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





3. Select [All Apps] → [Media Player] → the USB device, server or preset folder containing the file to play → the folder or file from the list.

If you select a folder, select the file.


The photo is displayed.


HDMI cable connection

1. Connect a digital still camera or camcorder that supports HDMI output, to the HDMI IN jack (socket) of the TV, using an HDMI cable.
2. Press the  button repeatedly to select the connected device.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to highlight the  button, press the touchpad, slide the touchpad to highlight the connected



device, then press the touchpad.)

3. Set the connected device to 4K output.
4. Start playback on the connected device.

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

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

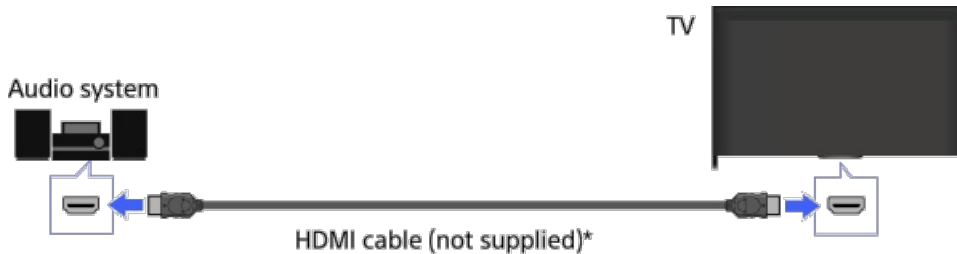
Notes

- Twin Picture cannot be displayed.
- A 3D picture is displayed in 2D.
- A panoramic photo cannot be scrolled.
- If you change the picture by pressing the   buttons or sliding the touchpad left/right, it may take time to display.

HDMI connection

Making a Connection

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





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

Tips

- When connecting a BRAVIA Sync-compatible digital audio system with Audio Return Channel (ARC) technology, find the HDMI jack (socket) that carries the “ARC” mark (HDMI IN 1 or HDMI IN 2, depending on your model/region/country), then connect to that HDMI jack (socket) 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.
- See the instruction manual of the audio system for details on connection of other devices and for set-up before use.


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.

Tips

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

Notes

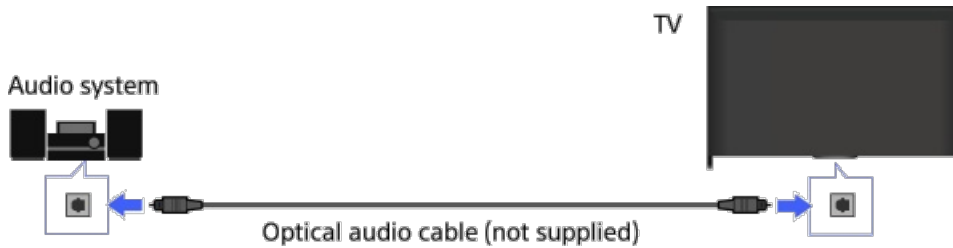
- You need to configure the [Digital Audio Out] settings according to your audio system. Press the  button (or press the touchpad on the Touchpad Remote Control) to jump to “Setting sound for digital audio output” for details.

[Jump to the page](#)

Optical audio connection

Making a Connection



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




Tips

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

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.

Notes

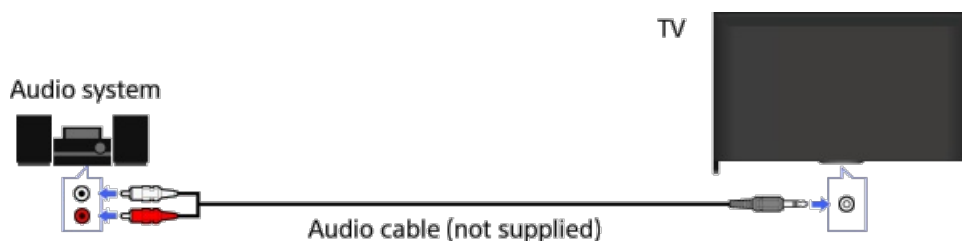
- You need to configure the [Digital Audio Out] settings according to your audio system. Press the  button (or press the touchpad on the Touchpad Remote Control) to jump to “Setting sound for digital audio output” for details.

[Jump to the page](#)

Audio cable connection

Making a Connection



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







Tips

- See the instruction manual of the audio system for details on connection of other devices and for the set-up 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.

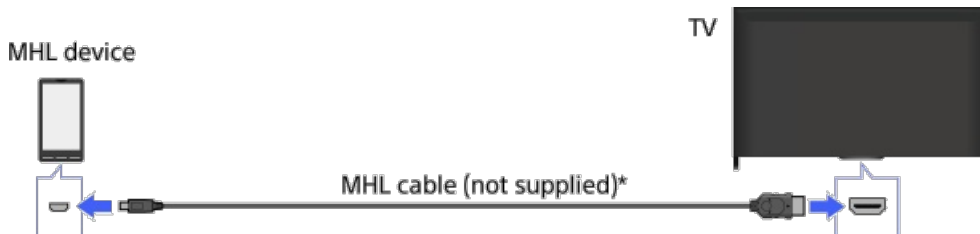
Tips

- When using an external audio system, the audio out of the TV can be controlled using the TV's remote 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 2/MHL port or HDMI IN 4/MHL port, using an MHL cable. If your MHL device supports 4K output, connect it to the HDMI IN 2/MHL port to display 4K resolution images.





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

Steps

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



To switch to the MHL input automatically

Press the HOME button, then select  [Settings] →  [External Inputs] → [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.

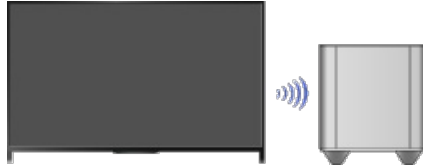
Tips

- When the TV is in standby mode, if [MHL Charging during Standby] 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] →  [External Inputs] → [MHL Charging during Standby] → [On].

Wireless Subwoofer (Optional)

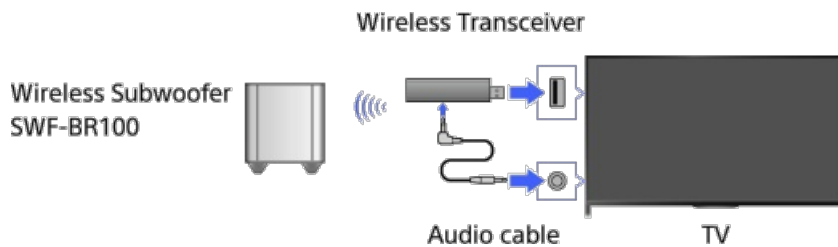
Overview

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 (socket) 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](#)

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](#)


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.





Steps

1. Turn on the connected device.
2. Press the HOME button, then select  [Settings].





3. Select  [External Inputs] → [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.



To not turn off the connected device automatically when turning off the TV

Press the HOME button, then select  [Settings] →  [External Inputs] → [BRAVIA Sync Settings] → [Auto Devices Off] → [Off].

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






Press the HOME button, then select  [Settings] →  [External Inputs] → [BRAVIA Sync Settings] → [Auto TV On] → [Off].

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

Press the HOME button, then select  [Settings] →  [External Inputs] → [BRAVIA Sync Settings] → [Auto Input Change(MHL)] → [On].

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.



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 not available if you have

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 ( +/- buttons) and mutes the sound ( button) of the connected AV amplifier through the TV's remote.

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.

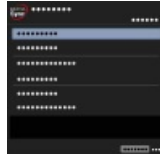
Notes

- "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.



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.

[Device Control]

Displays the menu, options and title list of the connected device, or turns the device off.

[Use TV speakers for audio output]/[Use audio system for audio output]

Switches the speaker output between the TV and the connected audio device.

[TV Control]

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


[Return to TV]

Returns to TV channels.

[TV control with the TV remote]/[Device control by TV remote]


Switches the device to be controlled by the TV's remote, between the TV and the connected device.

Tips


- Any BRAVIA Sync-compatible device (except an audio system) is listed as a new input source under  [Inputs] in the Home Menu.

Setting Buttons to Control an HDMI/MHL Device

Steps

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



2. Select  [External Inputs] → [BRAVIA Sync Settings] → [Device Control Keys] → the desired option.

Available Options

[None]

Deactivates control by the TV's remote.

[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 PROG +/- buttons or the 0 - 9 buttons, etc.

Useful when you control a tuner or set-top box, etc., via the remote.

[Menu Keys]

Enables basic operations and operation of the HOME/OPTIONS buttons.


Useful when you control BD player menus, etc., via the remote.

[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  [External Inputs] → [BRAVIA Sync Settings] → [BRAVIA Sync Device List].

Useful Functions

Picture/Sound Auto Adjustment

[Selecting a picture and sound setting suitable for the content](#)

[Automatically adjusting picture brightness according to ambient light](#)

[Adding Favourite Applications](#)

Using Search Function

[Current View Information Search](#)

[Keyword Search](#)

Saving Power Consumption

[Saving power by picture brightness](#)

[Saving power by automatically adjusting the backlight drive](#)

[Turning the TV off by monitoring idle time](#)

Using Clock/Timers

[Setting the current time manually](#)

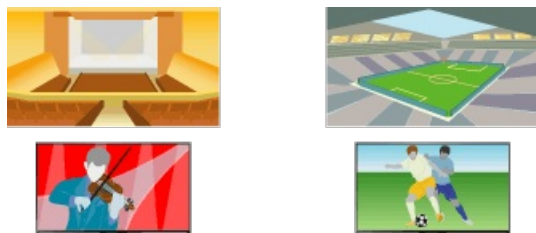
[Setting the on timer](#)

[Setting the sleep timer](#)


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  [System Settings] → [Scene Select] → the desired option.

Available Options

[Auto]

Automatically selects the scene based on the viewing content.

[Auto (24p Sync)]

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

[General]

Turn off Scene Select for general content.

[Cinema]

Optimal picture and sound for watching movies.

[Sports]

Optimal picture and sound for watching sports.

[Music]

Optimal sound for listening to music.

[Animation]

Optimal picture for watching animation.

[Photo]

Optimal picture for viewing photos. This setting will apply to 2160p (25/30Hz), 1080i/p (50/60Hz) and 480/576p formats only. (2160p (25Hz), 1080i/p (50Hz) and 576p are available depending on your region/country.)

[Game]

Optimal picture and sound for playing video games.

[Graphics]

Optimal picture

Optimal picture for viewing tables and characters.


Automatically adjusting picture brightness according to ambient light

Overview


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



Steps



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



2. Select  [System Settings] → [Eco] → [Light Sensor] → [On].

Adding Favourite 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 programme 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 programme, video or music is playing, press the RELATED SEARCH button.



When watching a TV programme, information related to the programme will appear. Move to step 4.

For content other than TV programmes, 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 programme 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. [Playback] 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 programmes.
- For customers in the USA or Canada: When watching TV by a cable signal, you cannot search information on TV programmes.



Keyword Search

Overview

You can search for information on TV programmes, 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 categorised 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  [System Settings] → [Eco] → [Power Saving] → the desired option.

Available Options

[Picture Off]

Maximum power saving. Picture turns off; sound remains on.

[High]

High power saving. Picture darkens.

[Low]

Low power saving. Picture darkens slightly.

[Off]

No power saving.

Tips

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

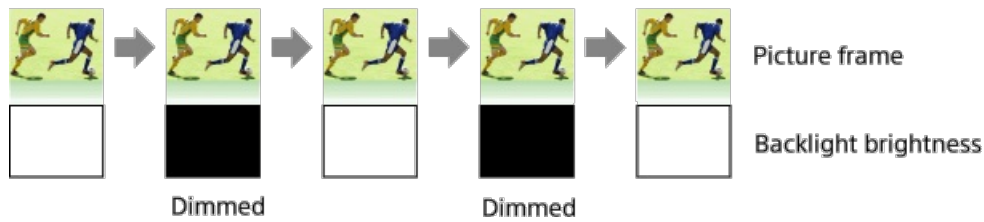
Saving power by automatically adjusting the backlight drive

Overview


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

Example of backlight adjustment:


Example of backlight adjustment:



Steps

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

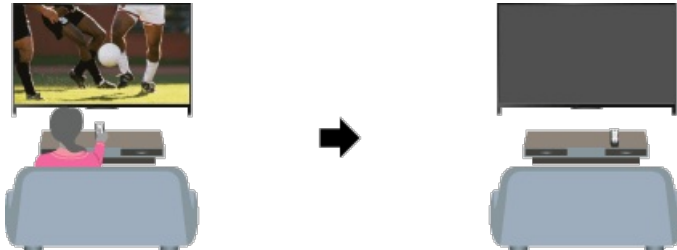


2. Select  [System Settings] → [Eco] → [Scene Select Sync] → [On].


Turning the TV off by monitoring idle time

Overview


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



Steps

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




2. Select  [System Settings] → [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



Overview

The current time is automatically set if the TV receives the time from a digital broadcast signal. If the TV cannot receive a digital broadcast signal, manually set the current time.



Steps

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





2. Select  [System Settings] → [Clock/Timers] → [Clock Set].
3. Press the  button in [Date], then set the date → select [Time] → set the time.
(When using the Touchpad Remote Control, press the touchpad in [Date].)

To set the time zone you are in

Press the HOME button, select  [Settings] →  [System Settings] → [Clock/Timers] → [Time Zone] → the desired option.

(This setting is available depending on your region/country.)

To automatically switch between summer and winter time according to the calendar

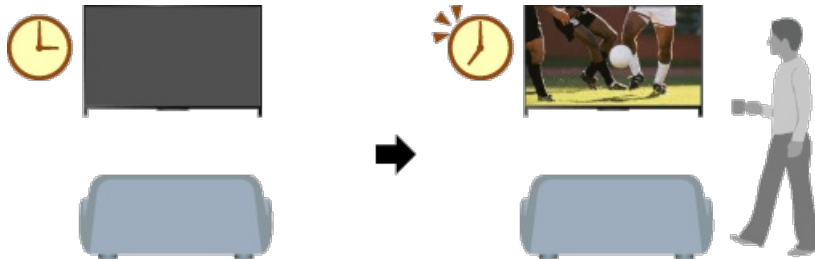
Press the HOME button, then select  [Settings] →  [System Settings] → [Clock/Timers] → [Auto DST] → [On].

(This setting is available depending on your region/country.)


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].

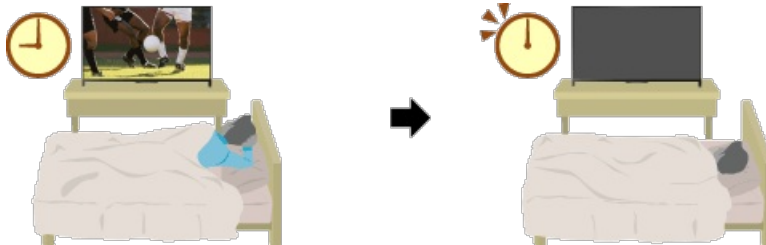


2. Select  [System Settings] → [Clock/Timers] → [On Timer].
3. Press the  button in [On Timer], then select [On] → the setting item → set the item.
(When using the Touchpad Remote Control, press the touchpad in [On Timer].)


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  [System Settings] → [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].

Connecting to the Internet

[Wireless Connection \(Built-in Wireless LAN\)](#)

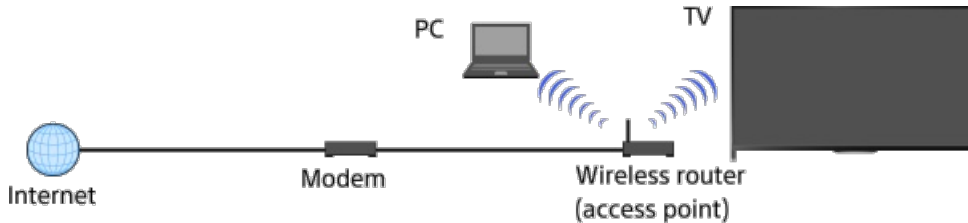
[Wired Connection \(with a LAN Cable\)](#)

[Setting IPv6](#)


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 Set-up] → [Set up network connection] → [Easy].
4. Follow the on-screen instructions to complete the set-up.
5. After completing the set-up, 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 Set-up] → [Scan].
- To use the WPS PIN method, select [Expert] → [Wi-Fi Set-up] → [WPS (PIN)].

Notes

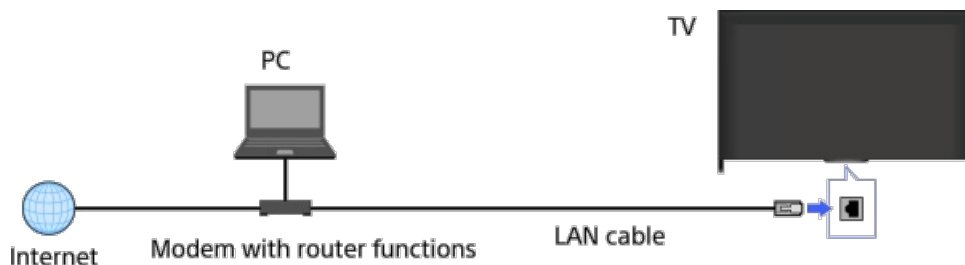
- The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those supplied with the router. Or contact the person who set up the

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 Set-up] → [Set up network connection] → [Easy].
4. Follow the on-screen instructions to complete the set-up.
5. After completing the set-up, select [Refresh Internet Content].

Notes

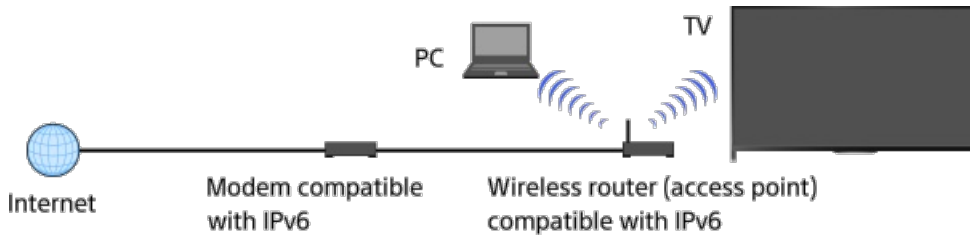
- The setting items (e.g. IP address, subnet mask, DHCP) may vary depending on the Internet service provider or router. For details, refer to the instruction manuals provided by the Internet service provider, or those supplied with the router. Or contact the person who set up the network (network administrator).

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 Set-up] → [Set up IPv6 connection].
4. Follow the on-screen instructions to complete the set-up.

Notes

- If your network environment does not support IPv6, turn off IPv6 of the TV.

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 \(One-touch mirroring\)](#)

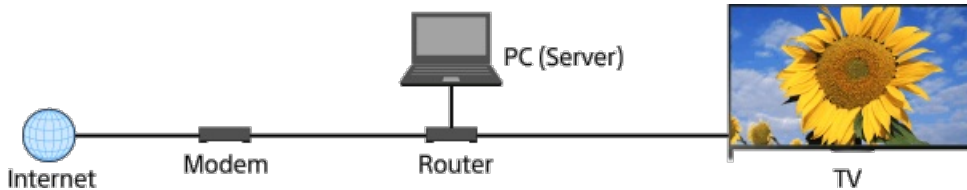
[Displaying the Smartphone's Screen on the TV \(Screen mirroring\)](#)

[Sharing Photos](#)

Playing Content on a PC

Overview

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



Steps

1. Connect the TV to your home network, following the steps in "Connecting to the Internet."
Press the button to jump to the title list. Then, press the button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Press the HOME button, then select [Apps].



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

To check the supported file formats

[Codec List](#)

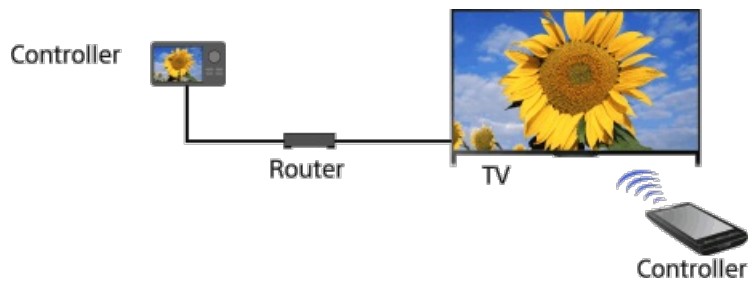
Notes

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





Steps

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



Allowing/blocking access from controller

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Network] → [Home Network Setup] → [Remote Device / Renderer] → [Renderer Access Control] → the controller to change the access permission setting → [On] or [Off].
Select [On] to allow access from the controller. Select [Off] to block access from the controller.

Making advanced renderer settings

Steps

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

Available Options

[Automatic 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] → [Server Display Settings] → the server to display or not display → [Yes] or [No].

Checking the server connection

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Network] → [Home Network Setup] → [Server Diagnostics].
3. Follow the on-screen instructions to perform the diagnostics.


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

Overview


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



Steps

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



2. Select  [Network] → [Wi-Fi Direct] → [On].
3. Select [Wi-Fi Direct Settings].
4. Select the TV name displayed on the TV screen with the Wi-Fi Direct device.
If the device does not support Wi-Fi Direct, press the OPTIONS button, then select [Manual].
5. Operate the Wi-Fi Direct/Wi-Fi device to connect with the TV.
6. Send the content from the Wi-Fi Direct/Wi-Fi device to the TV.
For details, refer to the instruction manual of the device.

If the connection does not succeed

When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Manual].

Select [WPS (Push Button)] if the device supports WPS. Otherwise, select [Other Methods] and follow the on-screen instructions to complete the set-up.

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 dialogue when attempting to connect a device with the TV

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

When the standby screen for the Wi-Fi Direct Settings is displayed, press the OPTIONS button, then select [Registration Notification].

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

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

To change the band setting (for experts)

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

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

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

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

Note that when you select this option, the TV cannot connect with devices that support 2.4GHz only.

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

Tips

- For information about the supported wireless band of your device, refer to the instruction manual of your device.
- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, you can only use [Auto] and [Select a Channel].

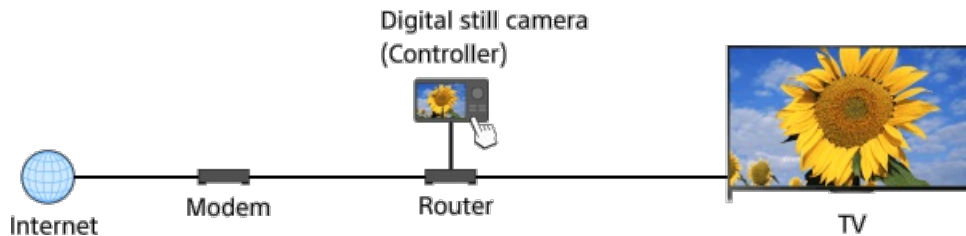
Notes

- If the TV is connected with a wireless router (or access point) at 5GHz:
 - The 5GHz connection will be disconnected when [Wi-Fi Direct] is set to [On]. While the connection is disconnected, communication via the Internet (such as an incoming call) is stopped.
 - The connection will be resumed when [Wi-Fi Direct] is set to [Off].
- The 5GHz band may not be supported depending on your region/country. If the 5GHz band is not supported, the TV can only connect to a wireless router (access point) using the 2.4GHz band.



Playing Content with the Renderer Function

Overview

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



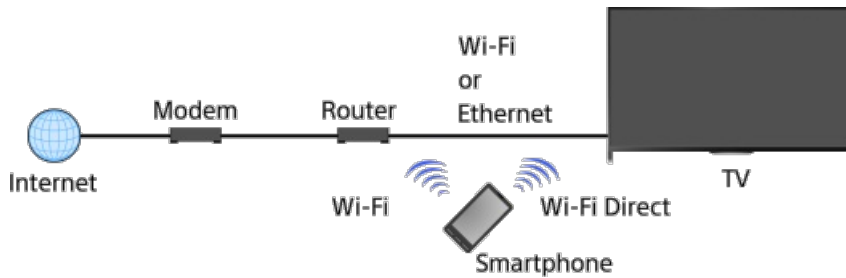
Steps

1. Connect the TV to your home network, following the steps in "Connecting to the Internet."
Press the  button to jump to the title list. Then, press the  button again to go to "Connecting to the Internet" for details.
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Connecting to the Internet" for details.)
2. Operate the controller to start playing the content on the TV screen.

Using a Smartphone/Tablet as a Remote

Overview

You can control the TV from the touch panel of a mobile device (such as a smartphone or tablet) with the "TV SideView" application installed. To use your mobile device as a TV's remote, 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
- 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 (One-touch mirroring)

Overview

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

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



Steps

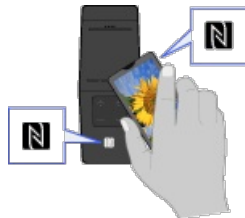
1. Set the NFC* setting of your smartphone to on.

* NFC: Near Field Communication

2. Touch the NFC detection area of the smartphone to the **N** mark on the Touchpad Remote Control for about 2 seconds.

Remove the smartphone from the remote when the device confirmation completion message appears at the bottom of the TV screen.

When the smartphone is connected with the TV, the screen displayed on the smartphone will also be displayed on the TV.



To optimise the One-touch mirroring function (for experts)

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

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

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

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

Notes

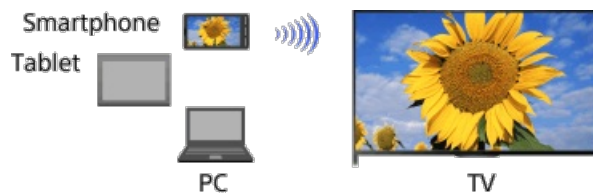
- For connection with Xperia, release the screen lock of Xperia, then touch.
- For the position of the NFC detection area on the smartphone, refer to the instruction manual of the smartphone.
- If the TV cannot recognise and connect with the smartphone, try again.

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



Overview

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

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



Steps


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

Configuring Various Settings

Picture/Screen Settings

- [Selecting picture mode](#)
- [Adjusting various picture settings \(e.g. picture brightness/colour\)](#)
- [Setting the screen size/position](#)

Sound Settings

- [Adjusting various sound settings \(e.g. bass/treble/balance\)](#)
- [Setting the sound according to the TV position](#)

Digital Channel Settings

- [Setting subtitles](#)
- [Setting audio for digital broadcasts](#)
- [Tuning digital channels automatically](#)
- [Tuning digital channels manually](#)
- [Improving the picture quality of the selected channel](#)
- [Storing new digital services automatically](#)
- [Sorting digital channels](#)
- [Transferring a programme list using a USB device](#)
- [Tuning satellite channels automatically](#)
- [Sorting satellite channels](#)
- [Storing new satellite services automatically](#)

Analogue Channel Settings

- [Tuning analogue channels automatically](#)
- [Presetting analogue programmes manually](#)
- [Changing channels only by 1-digit number buttons](#)
- [Sorting analogue channels](#)
- [Editing programme labels](#)

Programme Information & Service Settings

- [Displaying the analogue programme list](#)
- [Setting the information banner](#)
- [Displaying wallpaper for radio broadcasts](#)
- [Changing over channels automatically](#)
- [Accessing a pay TV service](#)
- [Setting interactive applications](#)

Setting Parental Control

- [Setting the parental lock password](#)
- [Setting an age restriction](#)
- [Blocking specific programmes](#)
- [Blocking interactive channels](#)
- [Blocking recorded content](#)

General Settings

- [Turning off the key tone of remote operations](#)

Turning off the start-up logo

Turning on/off and adjusting the brightness of the illumination

Setting Notification

Setting the menu language

Setting Touchpad Remote Control

Setting a Bluetooth Device

Restoring factory settings

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

Setting sound for digital audio output

Setting the headphone speaker link

Setting sound for Home Theatre Control

External Input Settings

Managing external inputs

Switching the video input

Making detailed settings of video input

Running Initial Set-up

Support

Checking system information

Uploading operation history

Software Update

Updating broadcast/service software

Updating the TV's software



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  [Display] → [Picture] → [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

[Vivid]

Enhances picture contrast and sharpness.

[Standard]

Provides standard picture for basic home use.

[Custom]

Stores your preferred settings.

[Cinema 1]

Provides film-based content for a cinema-like environment.

[Cinema 2]

Provides film-based content for basic home use.

[Sports]

Optimises picture quality for viewing sports.

[Game-Standard]

Provides standard pictures suitable for games.

[Game-Original]

Adjusts the game picture according to your preference.

[Graphics]

Optimises picture quality for viewing graphics.

[Photo-Vivid]

Enhances contrast, sharpness, and colour of photographs.

[Photo-Standard]

Optimises picture quality for viewing photographs.

[Photo-Original]

Enhances the visual warmth of photographs.

[Photo-Custom]

Adjusts the detailed settings for viewing photographs and stores your preferred settings.

[Animation]

Optimises picture quality for viewing animations.


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  [Display] → [Screen] → the desired option.

Available Options (for inputs other than a PC)

[Target Inputs]

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

[Screen Format]/[Wide Mode]*

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

* Option name differs depending on your region/country.

[Wide Zoom]: Enlarges the picture, preserving the original picture as much as possible.

[Normal]: For 4:3 original source, displays a 4:3 picture in its original size, with side bars to fill the 16:9 screen. For 16:9 original source, displays a 4:3 picture that has been horizontally stretched to 16:9, in 4:3 format.

For 4K (4096 x 2160) original source, shrink the picture vertically to show the entire picture in the correct aspect ratio.

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

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

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

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

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

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

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

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

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

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

[Auto Format]/[Auto Wide]*

* Option name differs depending on your region/country.

Automatically changes [Screen Format]/[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 [Screen Format]/[Wide Mode] is set to [Full].)

[Screen Position]

Adjusts the vertical position and horizontal position of the picture.

This function is not available with an input signal resolution of 3840 × 2160 or 4096 × 2160.

[Vertical Size]

Adjusts the vertical size of the picture.

This function is not available with an input signal resolution of 3840 × 2160 or 4096 × 2160.

Available Options (for PC input)

[Reset]

Resets all PC screen settings to factory settings.

[Screen Format]/[Wide Mode]*

* Option name differs depending on your region/country.


[Normal]: Displays the original picture.

[Full 1]: Enlarges the picture to fill the display area, maintaining the original picture.

[Full 2]: Enlarges the picture to fill the display area.

Adjusting various sound settings (e.g. bass/treble/balance)

Steps

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



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

Available Options

[Target Inputs]

Applies custom sound settings to the current input or to common memory shared by other inputs.

[Sound Mode]

[Standard]: Optimises sound quality for general content.
[Cinema]: Optimises 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.

[Equaliser]

Adjusts the sound according to specific frequencies.

[Voice Zoom]

Emphasises voice or ambient sounds.

[Live Football Mode]

You can emphasise the roar of the crowd on sporting events, as though you are watching from the stands of the stadium.
[On]: Emphasises the roar of the crowd.
[Off]: Turns off the function.
When this function is turned on, other sound settings except for [Sound Booster] and [Equaliser] 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 programme or input.
[Off]: Turns off the function.
[Normal]: Normal mode.
[Night]: Compresses the dynamic range for a more consistent level for viewing at night

[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 [Target Inputs] is set to the current input.

[Balance]


Emphasises sound from the left or right speaker.

[Reset]

Resets the selected input settings to the initial value.

Setting the sound according to the TV position

Steps

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



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

Available Options

[Table-Top Stand]



Provides the best sound quality when you place the TV on a TV stand.

[Wall Mount]

Provides the best sound quality when you hang the TV on a wall.

Setting subtitles

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Subtitle Set-up] → the desired option.

Available Options

[Subtitle Setting]

[Off]: Turns off subtitles.

[Basic]: Displays subtitles.

[For Hard Of Hearing]: Displays visual aids for the hearing impaired with subtitles (if available).

[Primary Preferred Language]

Sets the most preferred subtitle language.

[Secondary Preferred Language]



Sets the secondary preferred subtitle language.

Notes

- [Subtitle Set-up] is available depending on your region/country.
- [Primary Preferred Language] and [Secondary Preferred Language] are available depending on your region/country.

Setting audio for digital broadcasts

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Audio Set-up] → the desired option.

Available Options

[Audio Type]

Switches to a broadcast for the hearing impaired when you select [For Hard Of Hearing].

[Primary Preferred Language]

Sets the most preferred language. Some digital channels may broadcast several audio languages for a programme.

[Secondary Preferred Language]

Sets the secondary preferred language.

[Audio Description]

Provides an audio description (narration) of visual information, when available.

[Mixing Level]

Adjusts the TV main audio and [Audio Description] output levels.

[Dynamic Range]

Compensates for differences in the audio level between different channels (only for Dolby Digital audio).

(The effect of this setting may vary depending on the programme content.)

[MPEG Audio Level]

Adjusts the MPEG audio sound level.

[HE-AAC Audio Level]



Adjusts the HE-AAC audio sound level.

Notes



- Available options may vary depending on your region/country.
- Depending on the audio, the [Audio Description] function may not work during Social Viewing.

Tuning digital channels automatically

Steps

1. Make sure that the antenna (aerial) cable is properly connected to the TV.
2. Press the HOME button, then select  [Settings].
3. Select  [Digital Set-up] → [Digital Auto Tuning].
4. Follow the on-screen instructions to tune in all available digital channels and store their settings in the TV.

To change the tuning range (available depending on your region/country)

Press the HOME button, then select  [Settings] →  [Digital Set-up] → [Auto Tuning Range] → [Normal]/[Full].



- [Normal]: Searches for available channels within your region/country.
- [Full]: Searches for available channels regardless of region/country.

Tips

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



Tuning digital channels manually

Steps

1. Make sure that the antenna (aerial) cable is properly connected to the TV.
2. Press the HOME button, then select  [Settings].
3. Select  [Digital Set-up] → [Digital Manual Tuning].
4. Select [Scan Type], then select [Channel] or [Frequency].
5. Set the other items accordingly.
6. Select [Scan Up] or [Scan Down].

Improving the picture quality of the selected channel

Steps



1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [LNA] → [On].

Notes

- [LNA] may not be available depending on the situation.

Storing new digital services automatically

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Digital Auto Service Update] → [On].

Tips

- It is recommended that you set [Digital Auto Service Update] to [On], so as to allow new digital services to be automatically added as they become available. If set to [Off], new digital services will not be automatically added. (Depending on your region/country, new services will be notified by an on-screen message.) The availability of this function depends on your region/country. If unavailable, perform [Digital Auto Tuning] to add new services.

Notes

- [Digital Auto Service Update] is available depending on your region/country.

Sorting digital channels

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Digital Programme Sorting] → choose the programme you want to move to a new position → choose the new position where you want to move the selected programme.



Notes

- Available options may vary depending on your region/country.
- [Digital Programme Sorting] is available depending on your region/country.

Transferring a programme list using a USB device



Steps

You can copy your list of tuned programmes to another TV set or edit the list with a computer.

1. Connect the USB device to the TV so as to import/export your list of tuned programmes.
2. Press the HOME button, then select  [Settings].
3. Select  [Digital Set-up] → [Programme List Transfer], then select [Import] or [Export].
4. Follow the on-screen instructions to complete transfer.

Tuning satellite channels automatically

Steps



1. Make sure that the antenna (aerial) cable is properly connected to the TV.
2. Press the HOME button, then select  [Settings].
3. Select  [Digital Set-up] → [Satellite Auto Tuning].
4. Follow the on-screen instructions to tune in all available satellite channels and store their settings in the TV.

Tips

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

Sorting satellite channels

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Satellite Programme Sorting] → choose the programme you want to move to a new position → choose the new position where you want to move the selected programme.

To remove unwanted channels

Choose the programme you want to delete, then press the blue button.

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



The availability of this function depends on your region/country.

Notes

- [Satellite Programme Sorting] may not be available depending on the service provider or your region.



Storing new satellite services automatically

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Digital Set-up] → [Satellite Auto Service Update], then select [Preferred Satellite] or [General Satellite].
3. Select [On].

Tuning analogue channels automatically

Steps



1. Press the HOME button, then select  [Settings].
2. Select  [Analogue Set-up] → [Auto Tuning].
3. Follow the on-screen instructions to tune in all available analogue channels and store their settings in the TV.

Tips

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

Presetting analogue programmes manually

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Analogue Set-up] → [Manual Programme Preset] → the desired option.

Available Options

[Programme]

Selects a programme number to tune manually.

[TV System]

Selects a TV broadcast system.

[Channel]

Enables selection of [S]/[Z]* for cable channels or [C]/[DS]* for terrestrial channels.

* Option name differs depending on your region/country.

[AFT]

Allows you to fine-tune analogue channels to adjust picture quality.

[Audio Filter]

Improves the sound of the selected channel in mono broadcasts.

[Skip]

Skips unused analogue channels.

[LNA]

Improves the picture quality of the selected channel when the broadcast signal is weak.

([LNA] may not be available depending on the situation.)

[Colour System]

Sets the colour system according to the channel.

[Signal Level]



Displays the signal level for current programme.

Notes

- You cannot select a programme number that is set to [Skip].
- Available options may vary depending on your region/country.

Changing channels only by 1-digit number buttons

Steps


1. Press the HOME button, then select  [Settings].
2. Select  [Analogue Set-up] → [1 Digit Direct] → [On].

Notes

- You cannot select channel numbers 10 and above by entering two digits on the remote if [1 Digit Direct] is set to [On].




Sorting analogue channels

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Analogue Set-up] → [Programme Sorting] → choose the programme you want to move to a new position → choose the new position where you want to move the selected programme.

Editing programme labels

Steps


1. Press the HOME button, then select  [Settings].
2. Select  [Analogue Set-up] → [Programme Labels] → the programme you want to edit the name.
3. Enter the new name, then press the  button (or press the touchpad on the Touchpad Remote Control).

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  [System Settings] → [Parental Lock] → [PIN Code] → enter the password.
3. Re-enter the password using the number buttons to confirm, then press the  button.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide the touchpad to select the number buttons to re-enter the password, then press the touchpad.)

Tips


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

Setting an age restriction



Overview

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

Steps

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




2. Select  [System Settings] → [Parental Lock].
3. Press the  button in [PIN Code], enter the password, then select [Parental Rating] → set the age.
(When using the Touchpad Remote Control, press the touchpad in [PIN Code].)

Blocking specific programmes



Overview

You can block programmes by specifying the programme number.

Steps

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



2. Select  [System Settings] → [Parental Lock].
3. Press the  button in [PIN Code], enter the password, then select [Digital Programme Lock] or [Satellite Programme Lock] → programme to be blocked → [Locked].

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


You can also select the programme by entering the programme number using the number buttons.

Blocking interactive channels



Overview

You can block interactive channels by displaying a guidance that requires password input to access.

Steps

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




2. Select  [System Settings] → [Parental Lock].
3. Press the  button in [PIN Code], enter the password, then select [Interactive Channel Lock] → [Guidance].
(When using the Touchpad Remote Control, press the touchpad in [PIN Code].)
Select [Never] to not display the guidance.

Blocking recorded content



Overview

You can block recorded content by displaying a guidance that requires password input to access.

Steps



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



2. Select  [System Settings] → [Parental Lock].
3. Press the  button in [PIN Code], enter the password, then select [Guidance Block for Recorded Titles] → [On].
(When using the Touchpad Remote Control, press the touchpad in [PIN Code].)



Turning off the key tone of remote operations

Steps

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

Turning off the start-up logo

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [System Settings] → [General Set-up] → [Start-up Logo] → [Off].

Turning on/off and adjusting the brightness of the illumination

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [System Settings] → [General Set-up] → [Illumination LED] → the desired option.

Available Options

[Demo]

The lamp blinks all the time the TV power is on.

[Auto Brightness Adjust]

Optimise brightness according to the ambient light.

[Dark]

Lowers the brightness of the lamp.

[Simple Response]

Illumination lights in response to operations. It will not stay lit, even if you set the timer, timer rec* or reminder*.

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



[Off]

The lamp does not light under normal use.

Setting Notification

Steps

You can enable this function to receive notifications from applications and services. Highlight an application or service in the notification area to view its notification.
(Notifications vary depending on your model/region/country.)



1. Press the HOME button, then select  [Settings] →  [System Settings] → [Notification Settings].
2. Follow the on-screen instructions to complete the set-up.

Notes

- When you receive a notification, it may hide subtitles or other information.



Setting the menu language

Steps

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



Setting Touchpad Remote Control

Steps

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

Setting a Bluetooth Device

Steps

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



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

Notes

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



Restoring factory settings

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [System Settings] → [General Set-up] → [Factory Settings] → [Yes] → [Yes].
After completing this process, the initial set-up screen is displayed.

Selecting speakers to output sound

Steps



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

Notes

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



Outputting sound from headphones or another audio system

Steps

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



Controlling the volume of an audio system with the TV's remote

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. Select [Variable] to adjust the volume with the TV's remote when using an external audio system.



Setting sound for digital audio output

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Sound] → [Digital Audio Out] → [Auto] or [PCM].
Select [Auto] if the device connected via DIGITAL AUDIO OUT (OPTICAL) is compatible with Dolby Digital. Select [PCM] if the device is not compatible with Dolby Digital.

Setting the headphone speaker link



Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Sound] → [Headphone Speaker Link] → [On] or [Off].
Select [On] to not output sound from the TV's internal speakers when you connect headphones to the TV. Select [Off] to output sound from both the TV's internal speakers and headphones.

Setting sound for Home Theatre Control

Steps

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




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

Tips

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

Managing external inputs

Steps



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

Notes

- For a SCART connection, skip cannot be set.

Switching the video input

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [External Inputs] → [AV2/Component Input] → the desired option.

Available Options

[Auto]

Automatically switches the input to either [Component] or [AV2] by detecting the terminal connection.

[Component]

Switches to component video input.

[AV2]



Switches to composite video input.

Notes

- You cannot use [Component] and [AV2] at the same time.

Making detailed settings of video input

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [Display] → [Video Input Settings] → the desired option.

Available Options

[Video Colour Space (x.v.Colour)]

Adjusts the colour space of the original video to an image quality appropriate for the source.

[x.v.Colour]: This is a video colour space that supports the xvYCC international standards and enables a wider colour gamut for vivid representation of colours in the natural world, such as the brilliant hues of flowers and the wide array of beautiful ocean hues.

[Photo Colour Space]

Adjusts the colour space of a still picture to an image quality appropriate for the source.

[sRGB]: A still image colour space specified before Exif version 2.1; sRGB is an international standard with a narrower colour reproduction gamut than Adobe RGB and sYCC.

[sYCC]: A still image colour space specified after Exif version 2.2; sYCC is an international standard that covers nearly all visible colours while maintaining compatibility with sRGB colour space.

[Adobe RGB]: A still image colour space specified in Exif version 2.21; Adobe RGB is an international standard that covers the colour gamut for printing devices.

[Colour Matrix]

Reproduces the colour-difference signals. It is recommended to leave this at the factory default setting.

[Dynamic Range]

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

[SBM]

Creates gradations using Super Bit Mapping technology.

[Colour System]



Sets the colour system according to the signal from the input source.

Notes

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

Running Initial Set-up

Steps

1. Press the HOME button, then select  [Settings].
2. Select  [System Settings] → [Auto Start-up].
3. Follow the on-screen instructions to run the initial set-up 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 system information

Steps

1. Press the HOME button, then select **?** [Help].
2. Select **?** [Customer Support] → [System Information].
TV-specific information, such as serial number and software version, is displayed.

Uploading operation history

Steps

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

Tips

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

Notes

- This feature may not be available in some regions/countries.

Updating broadcast/service software

Steps

1. Press the HOME button, then select **?** [Help].
2. Select **?** [Customer Support] → [Automatic Software Download] → [On] → [Software Download Time] → the time to check for a software update.

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

Notes

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

Updating the TV's software

Steps

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

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

Troubleshooting

[Self Diagnostics](#)

[Power Symptoms](#)

[Picture/Screen Symptoms](#)

[Broadcast Reception Symptoms](#)

[3D Picture/Glasses Symptoms](#)

[Sound Symptoms](#)

[Connected Device Symptoms](#)

[USB Recording Symptoms](#)

[Network Connectivity Test Results](#)

[Network/Application Symptoms](#)

[Home Network Symptoms](#)

[Remote Symptoms](#)

[Touchpad Remote Control Symptoms](#)

[Bluetooth Mouse Symptoms](#)

[Screen mirroring Symptoms](#)

[One-touch mirroring Symptoms](#)

[TV SideView Symptoms](#)

[Photo Share Symptoms](#)

[Notes](#)

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 [On Timer].
- Check if [Idle TV Standby] in [Eco] is activated.

The TV turns on automatically.

- Check if [On Timer] is activated.

Picture/Screen Symptoms

- [Picture quality is not as good as viewed at the store.](#)
- [Distorted picture.](#)
- [The screen flickers.](#)
- [No colour/Dark picture/Colour is not correct/Picture is too bright](#)
- [Dark screen. How to brighten the screen.](#)
- [Colour is not correct. How to adjust the colour tone.](#)
- [There is lag between video and sound.](#)
- [Screen format/wide mode changes automatically.](#)
- [Suddenly the picture becomes small.](#)
- [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 (aerial)/cable connection.
- Keep the antenna (aerial)/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 [Film Mode]/[Cinema Drive]/[CineMotion] to another setting. (Option name differs depending on your region/country.)
- Set [LNA] to [Off] to improve picture reception. ([LNA] may not be available depending on the situation/region/country.)
- Perform [AFT] in [Manual Programme Preset] to improve picture for analogue reception.
- Make sure that the antenna (aerial) is connected using a 75-ohm coaxial cable.

The screen flickers.

- Set [Motionflow] to other than [Impulse] (e.g. [Standard]).

No colour/Dark picture/Colour is not correct/Picture is too bright

- Press the OPTIONS button, then select [Picture] to make adjustments.
- Select [Reset] in [Picture].
- 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 [Contrast] in [Picture].
- Check the [Power Saving] option setting. If it is [Low] or [High], the screen darkens. Set [Power Saving] to [Off] to brighten the screen.

Colour is not correct. How to adjust the colour tone.

- Adjust [Hue] or [Colour Temperature] in [Picture].
- To deepen the colour tone, adjust [Colour] or [Live Colour] in [Picture].

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 [Auto Format]/[Auto Wide] in [Screen] is set to [On], the current [Screen Format]/[Wide Mode] setting is automatically changed according to the input signal. To lock the [Screen Format]/[Wide Mode] setting, set [Auto Format]/[Auto Wide] to [Off].
- Check the [Auto Format]/[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 Format]/[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 [Screen Format]/[Wide Mode] setting if desired, which will remain in effect until you change the channel/input or manually change the [Screen Format]/[Wide Mode] setting again.



Black bands appear at the edges of the screen.

- Some wide screen programmes are filmed in aspect ratios that are greater than 16:9 (this is especially common with theatrical releases). Your TV will show these programmes 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 programme provider).
- Programmes in 4:3 aspect ratio will have bands on the left and right sides of the screen.
- Programmes 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 Format]/[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 [Screen Format]/[Wide Mode] to [Wide Zoom] or [Zoom], which will remain in effect until you change the channel/input or manually change the [Screen Format]/[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 [Auto Start-up] from the  [Settings] -  [System Settings] menu.

A notification appears and hides subtitles or other information.

- Set not to display notifications. Press the HOME button, then select  [Settings] →  [System Settings] → [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.](#)
- [Noisy picture.](#)
- [Some channels are blank.](#)
- [Poor reception or poor picture quality with digital terrestrial broadcasts.](#)
- [You cannot view digital channels.](#)
- [Poor reception or poor picture quality with satellite broadcasts. \(Satellite compatible models only\)](#)
- [You cannot view satellite channels. \(Satellite compatible models only\)](#)
- [Not all channels are tuned.](#)

Check these things first to troubleshoot your TV reception.

- Make sure that the antenna (aerial) cable is firmly connected to the TV.
 - Make sure that the antenna (aerial) cable is not loose or disconnected.
 - Make sure that the centre conductor of the antenna (aerial) cable connector is not bent.

Ghosting or double images appear.

- Check cable or antenna (aerial) connections.
- Check the antenna (aerial) 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 (aerial) is broken or bent.
- Check if the antenna (aerial) 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 analogue 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.)

Noisy picture.

- Make sure that the antenna (aerial) is connected using a 75-ohm coaxial cable.
- Keep the antenna (aerial) cable away from other connecting cables.
- To avoid TV interference, make sure to use an undamaged antenna (aerial) 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 (aerial) to maximise the antenna (aerial) signal level. Make sure that the direction of the antenna (aerial) 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 (aerial) and the TV, it may affect the TV reception. Directly connect the antenna (aerial) 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 (aerial).

Poor reception or poor picture quality with satellite broadcasts. (Satellite compatible models only)

- Poor weather conditions can affect satellite broadcast systems. Wait for the weather to clear.

You cannot view satellite channels. (Satellite compatible models only)

- Ask a local installer if satellite services are provided in your area.
- Check your LNB device and settings.

Not all channels are tuned.

- Try to preset channels manually by configuring the settings in [Manual Programme Preset]. (Availability of [Manual Programme Preset] and its options may vary depending on the region/country/situation.)

3D Picture/Glasses Symptoms

- 3D pictures are not displayed. The 3D effect is weak.
- Black bars appear on both sides of the screen when watching 3D pictures.
- 3D display automatically switches on when 3D signal is detected.
- The message [3D signal is detected.] automatically appears when 3D signal is detected.
- You cannot turn the Active 3D Glasses on.
- The LED indicator on the Active 3D Glasses blinks.



3D pictures are not displayed. The 3D effect is weak.

- Be sure that there are no obstacles between the TV and the Active 3D Glasses.
- Replace the battery in the Active 3D Glasses.
- Be sure that the Active 3D Glasses are powered on.
- If two pictures are displayed side-by-side, press the 3D button repeatedly until [3D (Side-by-Side)] appears. If two pictures are displayed one above the other, press the 3D button repeatedly until [3D (Over-Under)] appears.
(When using the Touchpad Remote Control, press the Control Bar (■■■■), slide to highlight the 3D button, press the touchpad, slide the touchpad to highlight [3D (Side-by-Side)] or [3D (Over-Under)], then press the touchpad.)
- If the [3D Display] screen appears and 3D pictures are not displayed, turn off the device that plays 3D content and turn it on again.
- 3D signal of 4K cannot be displayed.
- Perceived 3D effect may vary from person to person.
- It is necessary to register your Active 3D Glasses to the TV before use. To use the glasses with another TV, it is necessary to re-register. Turn off the glasses before re-registering. For details on how to register, press the ⊕ button to jump to the title list. Then, press the ⊕ button again to go to "Watching in 3D."
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Watching in 3D" for details.)
- Wireless devices or microwave ovens may affect the communication between the 3D Glasses and the TV as the TV uses the 2.4GHz band. In this case, try to register again.
- If a device that is not 3D-compatible (such as a home theatre system) is connected between the TV and a 3D-compatible device, the TV will not display 3D pictures. Connect the 3D-compatible device directly to the TV via an authorised HIGH SPEED HDMI cable bearing the HDMI logo.



Black bars appear on both sides of the screen when watching 3D pictures.

- Black bars appear on both sides of the screen in order to process 3D signals for the simulated 3D display mode or when adjusting the depth of 3D pictures in [3D Depth Adjustment].



3D display automatically switches on when 3D signal is detected.

- Set to manually turn the 3D display on or off. Press the HOME button, then select  [Settings] →  [Display] → [3D Settings] → [Auto 3D] → [Off].

The message [3D signal is detected.] automatically appears when 3D signal is detected.

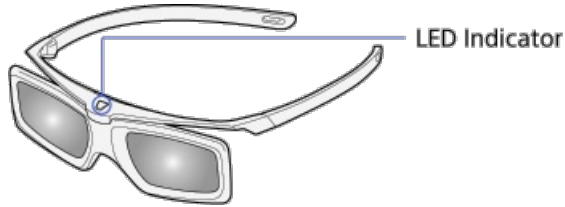
- Deactivate the [3D Signal Notification] setting. Press the HOME button, then select  [Settings] →  [Display] → [3D Settings] → [3D Signal Notification] → [Off].

You cannot turn the Active 3D Glasses on.

- Replace the battery. (Applies only to TDG-BT400A/BT500A.)
For details on how to replace the battery, press the  button to jump to the title list. Then, press the  button again to go to "Watching in 3D."
(When using the Touchpad Remote Control, press the touchpad. Then, press the touchpad again to go to "Watching in 3D" for details.)

The LED indicator on the Active 3D Glasses blinks.

- Lights up for 3 seconds: Indicates when turning on the glasses.





- Blinks every 2 seconds: Indicates the glasses are powered on.
- Blinks 3 times: Indicates the glasses have been powered off.
- Blinks green and yellow alternately: Indicates the glasses have started the registration process.
- Blinks 3 times every 2 seconds: Indicates the battery capacity is almost running out. Replace the battery.

Sound Symptoms

- [No sound but good picture.](#)
- [Audio noise.](#)
- [No audio or low audio with a home theatre system.](#)
- [Distorted sound.](#)



No sound but good picture.

- Check the volume control.
- Press  or  + 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 (aerial) is connected using a 75-ohm coaxial cable.
- Keep the antenna (aerial) cable away from other connecting cables.
- To avoid TV interference, make sure to use an undamaged antenna (aerial) cable.

No audio or low audio with a home theatre system.

- Set [Speakers] to [Audio System] in the [Sound] setting.
- Set [Headphone/Audio Out] to [Audio Out] and set [Audio Out] to [Fixed] in the [Sound] setting.
- If you select an analogue (RF) channel and pictures are displayed correctly, change the TV broadcast system. Press the HOME button, then select  [Settings] →  [Analogue Set-up] → [Manual Programme Preset] → [TV System]. (Availability of [Manual Programme Preset] or option name differs depending on the region/country/situation.)



Distorted sound.

- Check the antenna (aerial)/cable connection.
- Keep the antenna (aerial)/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.
- Perform [AFT] in [Manual Programme Preset] to improve sound for analogue reception.
- Set [Audio Filter] to [Low] or [High] to improve sound for analogue 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 programmes on digital sources display a loss of detail.](#)
- [Photo images appear small on the screen.](#)
- [Photo images or folders take time to display.](#)
- [No picture from a device connected via SCART.](#)
- [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  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  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 [AV Preset]/[Video Labels]/[Label Video Inputs] and confirm the [Always] setting for the input sources. (Option name differs depending on your region/country.)

Certain programmes 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 with USB cable, it may take up to a couple of

- 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.

No picture from a device connected via SCART.

- Some models may require the following operation: Press the OPTIONS button, then select [SCART REC on].

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.

USB Recording Symptoms

- [You cannot use a USB HDD device.](#)
- [Recording cannot be performed./Recording failed.](#)
- [Recorded content disappeared.](#)
- [The pause mode is cancelled unintentionally.](#)
- [The USB HDD device operates even though it is not turned on.](#)

You cannot use a USB HDD device.

- Check that the USB HDD device is:
 - connected properly.
 - turned on.
 - registered to the TV.
- Connecting the USB HDD device via a USB hub is not supported.
- Perform [HDD Performance check] to check that the USB HDD's specifications meet the requirements.


Recording cannot be performed./Recording failed.

- Check the remaining space in the HDD. If little space is left, delete unnecessary content.
- The following programmes cannot be recorded.
 - Copy-protected programmes
 - Analogue programmes
 - Programmes from external inputs (including programmes from a connected set-top box)
 - Broadband videos
- Timer recording may not be possible if the broadcasting time of the programme is changed.

Recorded content disappeared.

- Recording cannot be performed if the AC power cord (mains lead) or connecting cable is disconnected during recording. Do not disconnect any cable during recording. Otherwise, the content being recorded or all recorded content may be lost.

The pause mode is cancelled unintentionally.

- The pause mode is cancelled if the following remote buttons are pressed, and the temporarily recorded content is deleted.
 - , RETURN, GUIDE, i-MANUAL, HOME, PROG +/-, , number buttons.

The USB HDD device operates even though it is not turned on.

- The connected USB HDD may spin or the device's LED indicator may light up while the TV obtains EPG data during standby mode.

Network Connectivity Test Results

- The test results are “Failed”/“Failed”/“Failed”.
- The test results are “OK”/“Failed”/“Failed”.
- The test results are “OK”/“OK”/“Failed” or “OK”/“OK (IPv6 Only)”/“Failed”.
- The test results are “OK”/“OK (IPv6 Only)”/“OK (IPv6 Only)” or “OK”/“OK”/“OK (IPv6 Only)”.

The test results are “Failed”/“Failed”/“Failed”.

- When using the wired LAN function, make sure that the cable is firmly connected.
- When using the wireless LAN function, unplug the TV from the AC power, wait for a while, then plug it in again.

The test results are “OK”/“Failed”/“Failed”.

- The router function of your router may be turned off. Turn it on and try again.
- When using the wireless LAN function, check the items below:
 - If [Wireless Device on TV] is set to [Off], set [Built-in Wi-Fi] to [On].
 - An incorrect security (WPA or WEP) key may have been entered. Make sure that the correct security key is entered.
 - If you select a network (SSID) from the scan list, ensure that you select a correct network (SSID). If you enter an SSID manually, make sure that you enter the correct SSID.
 - To find the correct security key and SSID, consult with the person who set up your network or refer to the router's instruction manual or website, or consult the router's manufacturer.
 - If you configured the TV's wireless LAN function to connect to a wireless router (or access point) at 5GHz, the connection with the wireless router is disconnected while [Wi-Fi Direct] is [On]. When you turn off [Wi-Fi Direct], the connection will automatically recover.

The test results are “OK”/“OK”/“Failed” or “OK”/“OK (IPv6 Only)”/“Failed”.

- Your router (broadband router) may be incorrectly set up to connect to your Internet service provider (such as an incorrect PPPoE setting). To set up your router correctly, refer to the router's instruction manual or website, or consult the router's manufacturer. If you are uncertain about the set-up 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 (mains lead) 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].

- Perform [Factory Settings] to restore the TV to the factory setting. Press the HOME button, then select  [Settings] →  [System Settings] → [General Set-up] → [Factory Settings] → [Yes] → [Yes].

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 Set-up] → [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 Set-up] → [View Network setting 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 Set-up].
- 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 Set-up] → [View Network setting and status].

Server is inaccessible.

- Check your LAN cable/wireless connection or your server. The TV may have lost connection with the server.
- Perform [Server Diagnostics] to check if your media server is properly communicating with the TV. Press the HOME button, then select  [Settings] →  [Network] → [Home Network Setup] → [Server Diagnostics].



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)].

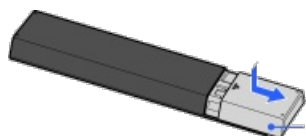
Remote Symptoms

- [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 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.

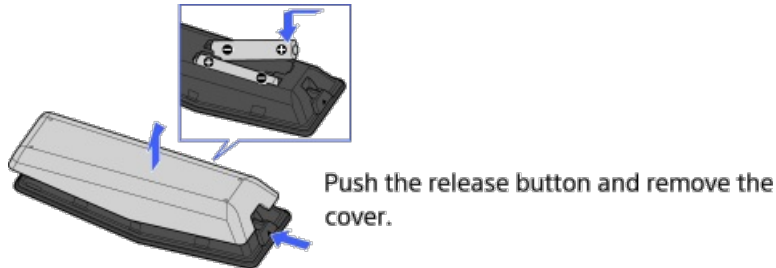
- Point the remote at the remote control sensor located at the front of the TV.
- Keep the remote control sensor area clear from obstacles.
- Fluorescent light can interfere with remote operation; try turning off any fluorescent light.

Touchpad Remote Control Symptoms

- [Touchpad Remote Control does not operate, or does not operate properly.](#)
- [The batteries drain quickly.](#)

Touchpad Remote Control does not operate, or does not operate properly.

- Replace the batteries.



- Re-register the Touchpad Remote Control.
- The Touchpad Remote Control uses the 2.4GHz band, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference.
If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or Touchpad Remote Control may not work on a metal rack due to wireless communication interference.
- The Touchpad Remote Control can control only the last registered TV.
- Only one Touchpad Remote Control can be registered to the TV.
- It is recommended to use the Touchpad Remote Control within 7 m (23 ft.) of the TV.

The batteries drain quickly.

- If you keep waving your NFC compatible device over the NFC touch point of the remote, it will increase battery drain of the remote and/or the device.
- Do not leave the Touchpad Remote Control face down.

Bluetooth Mouse Symptoms

- [Operation cuts out, or a device does not work.](#)

Operation cuts out, or a device does not work.

- Check if the device is turned on.
- Replace the batteries of the device.
- Re-register the device.
- Bluetooth devices use the 2.4GHz band, therefore communication speed may deteriorate or cut out occasionally due to wireless LAN interference.
If household electric appliances (e.g. microwaves or smartphones) are placed nearby, radio wave interference is more likely.
- The TV or mouse may not work on a metal rack due to wireless communication interference.
- For usable communication distances between the TV and other devices, refer to the instruction manuals of the devices.


Screen mirroring Symptoms

- [What kind of devices can be connected to use the Screen mirroring function?](#)
- [The TV cannot connect to a Miracast device.](#)
- [Video or sound sometimes cuts out.](#)
- [Some pay contents cannot be played.](#)
- [Screen mirroring does not work./The TV cannot be found by a Screen mirroring compatible device.](#)

What kind of devices can be connected to use the Screen mirroring function?

- Sony Screen mirroring compatible devices (e.g. some models of Xperia) can be connected. The Screen mirroring function works by Miracast technology, making it possible to connect with a device that conforms with Miracast.

The TV cannot connect to a Miracast device.

- If connecting a Miracast device (e.g. note PC) fails, press the HOME button, then select  [Inputs] → [Screen mirroring] to show the standby screen for the Screen mirroring function.


Video or sound sometimes cuts out.

- Devices emitting radio waves, such as other wireless LAN devices or microwave ovens, may interfere with the Screen mirroring function using wireless LAN. Keep the TV or Sony Screen mirroring compatible devices (e.g. some models of Xperia) away from such devices, or turn them off if possible.
- Communication speed may change according to the distance or obstacles between devices, device configuration, radio wave condition, line congestion or the device you use. Communication may cut out due to the radio wave condition.

Some pay contents cannot be played.

- The source device needs to meet HDCP (High-bandwidth Digital Content Protection) 2.0/2.1/2.2 standards. Some pay contents may not be displayed via a source device which does not meet HDCP 2.0/2.1/2.2 standards.


Screen mirroring does not work./The TV cannot be found by a Screen mirroring compatible device.

- If you are using Screen mirroring with another device, turn off Screen mirroring first and try again.
- If your device does not support 5GHz and you set the [Band Setting] option to [Auto (5GHz Band)], try changing it to [Auto].
- Press the HOME button, then select  [Inputs] → [Screen mirroring] to show the standby screen for Screen mirroring and try again.

One-touch mirroring Symptoms

- [One-touch mirroring does not work./Target device cannot be recognised.](#)

One-touch mirroring does not work./Target device cannot be recognised.

- Make sure that the NFC function of the One-touch mirroring compatible device is turned on.
- For connection with a One-touch mirroring compatible Xperia, the TV cannot connect with the Xperia when its screen is locked. Release the screen lock, then touch.
- Determine the position of the NFC detection area on the One-touch mirroring compatible device, then try touching again. For the position of the NFC detection area, refer to the instruction manual of the compatible device.
- Move the compatible device away from the Touchpad Remote Control, then try touching again.
- If you are using Screen mirroring with another device, turn off Screen mirroring first and try again.
- If your device does not support 5GHz and you set the [Band Setting] option to [Auto (5GHz Band)], try changing it to [Auto].
- Press the HOME button, select  [Inputs] → [Screen mirroring] to open the standby screen for Screen mirroring, then try again.
- Check whether your device supports One-touch mirroring. Even if you touch an incompatible device, the TV may show some reaction but cannot start Screen mirroring.
- It is necessary to register the Touchpad Remote Control to the TV before use.
- Set the NFC setting of the compatible device to on.

TV SideView Symptoms

- [The TV cannot be turned on and controlled by using the TV SideView application when \[Remote Start\] is set to \[On\].](#)
- [The TV does not appear on the TV SideView screen. The TV cannot be registered with the TV SideView application.](#)

The TV cannot be turned on and controlled by using the TV SideView application when [Remote Start] is set to [On].

- When devices that cause radio wave interference (microwave ovens, cordless phones, etc.) are placed nearby, the TV SideView function may not work. In this case, keep such devices away from the wireless router (access point) or TV, or turn them off.
- In the following cases, the TV SideView function may not work. Turn on the TV and re-connect to the wireless router (access point).
 - Turn on/off the wireless router (access point) power during TV standby mode
 - Reset the wireless router (access point) during TV standby mode
 - Change the wireless router (access point) channel during TV standby mode
- The TV SideView function may not work with business-use wireless routers (access points) that require re-connection periodically.
- The TV SideView function may not work depending on the settings of the wireless router (access point) (e.g. Multi SSID and Power saving mode).
- If Wi-Fi Direct is used to connect the TV SideView application to the TV, the TV may not be turned on from standby mode depending on your smartphone/tablet.
- The TV should be in the power-on or standby mode. Do not turn off the TV by disconnecting its AC power cord (mains lead).
- 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]
 - [Remote Start] of [Home Network Setup] 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
 - [Remote Start] of [Home Network Setup] under [Network] is set to [On]

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.

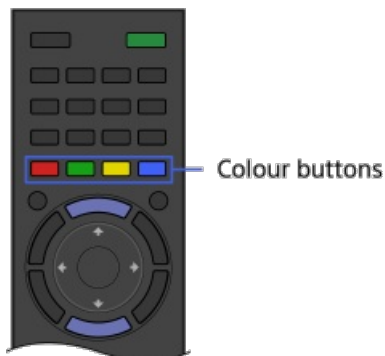
How to Use Bookmarks

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

To save a page

In the page to bookmark, press the yellow 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 yellow button, then press the touchpad to select.)



To access the bookmarked page

Press the green 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 green 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 yellow 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 yellow 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](#)

[↑ Top of Page](#)

Parts Description

TV Set

- [Front](#)
- [Control buttons on the rear](#)
- [Terminals on the rear \(centre\)](#)
- [Terminals on the rear \(right\)](#)

Remote Control

- [Top](#)
- [Upper](#)
- [Middle](#)
- [Lower](#)
- [Bottom](#)

Touchpad Remote Control

- [Upper](#)
- [Lower](#)
- [Displaying the Screen Key Pad](#)

[Finding Contents More Easily \("Discover" Screen\)](#)

[Home Menu Screen](#)

[↑ Top of Page](#)

Watching TV

- [Selecting Channels](#)
- [Enjoying Football More](#)
- [Displaying Text Information](#)
- [Using the Programme Guide](#)
- [Using the TV Guide Search Function](#)
- [Watching in 3D](#)
- [Watching Twin Picture](#)
 - [Displaying picture-in-picture \(PIP\)](#)
 - [Displaying left-and-right pictures \(P&P\)](#)
- [Changing Display Info/Pic. Size/Audio](#)
 - [Display information](#)
 - [Subtitles](#)
 - [Screen format/Wide mode](#)
 - [Audio](#)
- [Watching NVOD/MF service](#)

[↑ Top of Page](#)

Enjoying Movies/Music/Photos

- Enjoying Movies
- Enjoying Music
- Enjoying Photos

[↑ Top of Page](#)

Using Internet Services and Applications

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

[↑ Top of Page](#)

Watching TV with Friends Far and Near

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

[↑ Top of Page](#)

Using Other Devices

- BD/DVD Player
 - HDMI connection
 - Component video connection
 - SCART connection
 - Composite connection
- USB HDD Recording Device
 - Performing initial set-up
 - One-touch recording
 - Timer recording
 - Watching recorded content
 - Deleting recorded content
 - Pausing a currently-viewed programme
- Digital Still Camera/Camcorder
- USB Device
- PC
- Viewing Photo Files in 4K Resolution
- Audio System
 - HDMI connection
 - Optical audio connection
 - Audio cable connection
- MHL Device (Smartphone, Tablet, etc.)
- Wireless Subwoofer (Optional)
- Playable File Formats (DLNA, USB devices, etc.)

[↑ Top of Page](#)

Using BRAVIA Sync Devices

Setting BRAVIA Sync

Setting BRAVIA Sync
Using the Sync Menu
Setting Buttons to Control an HDMI/MHL Device
Displaying the BRAVIA Sync Device List

[↑ Top of Page](#)

Useful Functions

Picture/Sound Auto Adjustment

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

Adding Favourite Applications

Using Search Function

- Current View Information Search
- Keyword Search

Saving Power Consumption

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

Using Clock/Timers

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

[↑ Top of Page](#)

Connecting to the Internet

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

[↑ Top of Page](#)

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 (One-touch mirroring)

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

Sharing Photos

[↑ Top of Page](#)

Configuring Various Settings

Picture/Screen Settings

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

Sound Settings

Adjusting various sound settings (e.g. bass/treble/balance)

Setting the sound according to the TV position

Digital Channel Settings

Setting subtitles

Setting audio for digital broadcasts

Tuning digital channels automatically

Tuning digital channels manually

Improving the picture quality of the selected channel

Storing new digital services automatically

Sorting digital channels

Transferring a programme list using a USB device

Tuning satellite channels automatically

Sorting satellite channels

Storing new satellite services automatically

Analogue Channel Settings

Tuning analogue channels automatically

Presetting analogue programmes manually

Changing channels only by 1-digit number buttons

Sorting analogue channels

Editing programme labels

Programme Information & Service Settings

Displaying the analogue programme list

Setting the information banner

Displaying wallpaper for radio broadcasts

Changing over channels automatically

Accessing a pay TV service

Setting interactive applications

Setting Parental Control

Setting the parental lock password

Setting an age restriction

Blocking specific programmes

Blocking interactive channels

Blocking recorded content

General Settings

Turning off the key tone of remote operations

Turning off the start-up logo

Turning on/off and adjusting the brightness of the illumination

Setting Notification

Setting the menu language

Setting Touchpad Remote Control

Setting a Bluetooth Device

Restoring factory settings

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

Setting sound for digital audio output

Setting the headphone speaker link

Setting sound for Home Theatre Control

External Input Settings

Managing external inputs

Switching the video input

Making detailed settings of video input

Running Initial Set-up

Support

Support

[Checking system information](#)

[Uploading operation history](#)

Software Update

[Updating broadcast/service software](#)

[Updating the TV's software](#)

[↑ Top of Page](#)

Troubleshooting

[Self Diagnostics](#)

[Power Symptoms](#)

[Picture/Screen Symptoms](#)

[Broadcast Reception Symptoms](#)

[3D Picture/Glasses Symptoms](#)

[Sound Symptoms](#)

[Connected Device Symptoms](#)

[USB Recording Symptoms](#)

[Network Connectivity Test Results](#)

[Network/Application Symptoms](#)

[Home Network Symptoms](#)

[Remote Symptoms](#)

[Touchpad Remote Control Symptoms](#)

[Bluetooth Mouse Symptoms](#)

[Screen mirroring Symptoms](#)

[One-touch mirroring Symptoms](#)

[TV SideView Symptoms](#)

[Photo Share Symptoms](#)

[Notes](#)

Troubleshooting

[Self Diagnostics](#)

[Power Symptoms](#)

[Picture/Screen Symptoms](#)

[Broadcast Reception Symptoms](#)

[3D Picture/Glasses Symptoms](#)

[Sound Symptoms](#)

[Connected Device Symptoms](#)

[USB Recording Symptoms](#)

[Network Connectivity Test Results](#)

[Network/Application Symptoms](#)

[Home Network Symptoms](#)

[Remote Symptoms](#)

[Touchpad Remote Control Symptoms](#)

[Bluetooth Mouse Symptoms](#)

[Screen mirroring Symptoms](#)

[One-touch mirroring Symptoms](#)

[TV SideView Symptoms](#)

[Photo Share Symptoms](#)

[Notes](#)