SONY

Television

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[1]

Getting Started

Remote control This section describes remote control buttons.

Connecting terminal

How the LEDs light up

Home menu

Selecting inputs

Accessibility features

[2] Getting Started

Remote control

Please select your remote control.





Remote control buttons

The supplied remote control, button layout, button names and available features vary depending on your model/country/region.

Click a button on the image of the remote control to display a description.



((Power)

Turns on or switches to standby/networked standby mode.

TV

Switch to a TV channel or input and display the TV menu.

(MIC)

Speak into here to use the microphone in the remote control. There is an LED above the microphone.

▶ (Quick Settings)

Display Quick Settings. For details, refer to <u>Using the Quick Settings</u> page.

→ (Input select)

Display and select the input source, etc. For details, refer to <u>Selecting inputs</u> page.

MENU

Display a menu on the TV to use button functions that are not on the remote control on the screen.

On screen menu navigation and selection.

In TV mode: Display and select programmes on other channels while watching TV (Digital/Analogue).

→(BACK)

Return to the previous screen.

் (HOME)

Display the TV Home Menu. For details, refer to <u>Home menu</u> page.

∠ +/- (Volume)

Adjust the volume.

(Google Assistant/Microphone)

Ask Google for a little help on the big screen. Press the Google Assistant (or MIC) button on the remote to get started.

For details, refer to <u>Using the remote control microphone</u> page.

Google Assistant is not available in certain languages/countries/regions.

☆ (Mute)

Mute the sound. Press again to restore the sound.

Hint

 The accessibility shortcut service can be turned on or off by pressing and holding (Mute).

CH +/- (Channel)

Select the channel.

(Dashboard)

Display Dashboard.

▶ (Play) / **| |** (Pause)

Operate media contents on the TV and connected CEC-compatible device.

(Guide)

Display the digital programme guide of the TV or TV box (TV box control compatible models only). For details, refer to <u>Using the programme</u> guide page.

App buttons (Online service)

Enjoy various video streaming services with one push. Press to watch your desired service.

[4] Getting Started | Remote control

Remote control buttons

The included remote control, as well as the layout of the buttons and the button names, vary depending on your model/country/region.

Click a button on the image of the remote control to display a description.



(i+) (Info/Text reveal)

Display information.

TV

Switch to a TV channel or input and display the TV menu.

(l) (Power)

Turns on or switches to standby/networked standby mode.

(Subtitle setting)

Turn subtitles on or off (when the feature is available).

AUDIO

Select multilingual source sound or dual sound for the programme currently being viewed (depending on programme source).

HELP

Display the Help menu. Help Guide can be accessed from here.

EXIT

Return to the previous screen or exit from the menu. When an Interactive Application service is available, press to exit from the service.

Number Button/ ⋅ (Dot)

Use with the 0-9 buttons to select digital channels.

(Text)

Display text information.

Colour buttons

Execute corresponding function at that time.

→ (Input select)

Display and select the input source, etc. For details, refer to <u>Selecting inputs</u> page.

(Quick Settings)

Display Quick Settings. For details, refer to <u>Using the Quick Settings</u> page.

▲ (Up) / ▼ (Down) / ◀ (Left) / ▶ (Right) / - † - (Enter) (Navigation D-Pad)

On screen menu navigation and selection.

→(BACK)

Return to the previous screen.

(HOME)

Display the TV Home Menu. For details, refer to Home menu page.

MENU

Display a menu on the TV to use button functions that are not on the remote control on the screen.

∠ +/- (Volume)

Adjust the volume.

← (Jump)

Jump back and forth between two channels or inputs. The TV alternates between the current channel or input and the last channel or input that was selected.

☆ (Mute)

Mute the sound. Press again to restore the sound.

Hint

 The accessibility shortcut service can be turned on or off by pressing and holding (Mute).

CH +/- (Channel)

In TV mode: Select the channel.

In Text mode: Select the (Next) or (Previous) page.

(Dashboard)

Display Dashboard.

Play) / ◄ (Fast rewind) / ■ (Pause) / ■ (Stop) / ► (Fast forward)

Operate media contents on the TV and connected CEC-compatible device.

⊞(Guide)

Display the digital programme guide of the TV or TV box. For details, refer to <u>Using the programme guide</u> page.

[5] Getting Started

Connecting terminal

The types and shapes of connectors available vary depending on your TV. For the location of the connectors, refer to the Setup Guide (printed manual).

Terminal	Description
1	USB Connects to Digital still camera/Camcorder/USB storage media.
	Note

Terminal	Description
	Connecting a large USB device may interfere with other
	devices connected next to it. In such a case, connect it to
	the other USB input.
2	USB HDD REC
	Connects to the USB HDD device or Digital still
HDD REC	camera/Camcorder/USB storage media.
	The USB HDD recording function is only available in limited
	regions/countries/TV models.
HDMI IN ▶ 1	HDMI IN
	Connects to the HDMI device. The HDMI interface can transfer th
	digital video and audio on a single cable. To enjoy high quality 4K
	contents, connect a Premium High Speed HDMI [™] Cable(s) and
	follow the instructions displayed on the screen to set the [HDMI
	signal format] of the HDMI IN port.
► 3 (eARC/ARC)	HDMI IN (eARC/ARC)
	To connect an audio system that supports eARC (Enhanced Audio
	Return Channel) or ARC (Audio Return Channel), connect to the
	HDMI port labelled "eARC/ARC" on the TV. It is a feature that
	sends audio to an audio system that supports eARC/ARC through
	an HDMI cable. If the audio system does not support eARC/ARC,
	you need to connect with DIGITAL AUDIO OUT (OPTICAL).

Hint

There may be three tactile dots, next to the HDMI input terminal depending on your model. Use them as a guide during installation.



DIGITAL AUDIO OUT (OPTICAL)

Connects to an audio system with optical audio input.

When connecting an audio system not compatible with ARC using

Terminal	Description
	an HDMI cable, you need to connect an optical audio cable to the
	DIGITAL AUDIO OUT (OPTICAL) to output digital sound.
	Hint
	There may be two tactile dots, next to the DIGITAL AUDIO OUT
	(OPTICAL) terminal depending on your model. Use them as a
	guide during installation.
	□ (RF input)
	Connects to Cable/Antenna/External Box.
	Note
	 When connecting the cable to the RF input, finger tighten only, over tightening the connection can damage the TV.
\&	
① 13-19 V ==== 0.45 A	Connects to satellite input.
	Note
	When connecting the cable to the Satellite input, finger
	tighten only, over tightening the connection can damage the
	TV.
LAN 윰	LAN
(Connect to a Router.
	Connect to the Internet using a LAN cable.
	Note
	Note
	Depending on the operating environment of the network, Depending on the operation environment of the network of the
	connection speed may differ. The communication rate and quality are not guaranteed.
	quanty are not guaranteed.
1	CAM (Conditional Access Module)

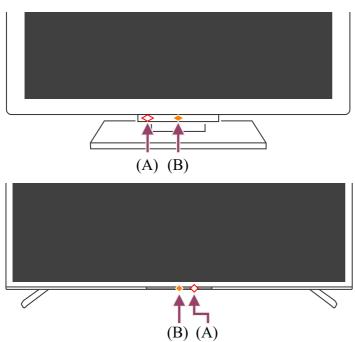
Terminal	Description
	Provides access to pay TV services. For details, refer to the instruction manual supplied with your CAM.
	Note
	 Do not insert the smart card directly into the TV CAM slot. It must be fitted into the Conditional Access Module provided by your authorised dealer. CAM is not supported 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. Do not remove the dummy card or cover (availability depends on TV model) from the TV CAM slot other than to insert a smart card fitted in CAM.

[6] Getting Started

How the LEDs light up

You can check the status of the TV by looking at how the LEDs light up.

The location of the LEDs varies by model.



- (A) Voice function LED (On the centre right at the bottom of the TV. Only TVs with a built-in MIC.*)
- (B) Operational response LED (In the centre at the bottom of the TV.)

Voice function LED

Turns "on" or "blinks" when "Ok Google" is detected and the TV is communicating with the server. The lighting pattern of this LED depends on the server communication status.

Note

- You can use the built-in MIC on the TV when the Built-in MIC switch is on. For the location of the Built-in MIC Switch, refer to the Reference Guide/Setup Guide supplied with the TV.
- After you press the Google Assistant/MIC button on the remote control and finish
 activating the built-in MIC on the TV, the voice function LED turns on in amber when
 the built-in MIC on the TV is off (when on, the Operational response LED turns on in
 amber).

Operational response LED

Turns "on" or "blinks" in white when the TV is turning on, when receiving signals from the remote control, or when updating the software using a USB storage device.

When ["Ok Google" detection] is enabled, it turns "on" in amber. (only TVs with a built-in MIC*)

* The built-in MIC may not be available depending on your region/model/language. When the Built-in MIC switch is on, it turns "on" in amber. (only TVs with a built-in MIC*)

* The built-in MIC may not be available depending on your region/model/language.

Related topics

- Using the built-in MIC on the TV (only TVs with a built-in MIC)
- You want to disable the LED so that it does not light up or blink.
- Software updates

[7] Getting Started

Home menu

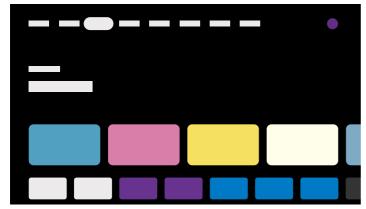
^{*} The built-in MIC may not be available depending on your region/model/language.

The screen displayed when you press the (HOME) button on the remote control is called the Home Menu. From the Home Menu, you can search for content and select recommended content, apps, and settings.

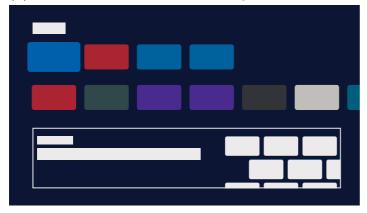
The items displayed on the Home Menu depends on whether a Google Account has been setup on the TV.

(Some features do not apply depending on your model/region/country. The images are for reference only. They may differ from the actual screen.)

(A) The Home Menu when a Google Account is setup on the TV



(B) The Home Menu when a Google Account is not setup on the TV



Setting up a Google Account and enjoying the TV

If you connect the TV to the Internet and setup a Google Account, you can install desired apps on the TV and enjoy Internet videos and use your voice to search for content.

Enjoying the TV without setting up a Google Account

Even if you do not setup a Google Account, you can watch TV broadcasts and/or view content from devices connected to the TV such as a Blu-ray player. If you connect the TV to the Internet, you can also use the Internet streaming services displayed on the Home Menu.

Note

- To setup a Google Account later and enjoy the TV, set up Google TV™ from the Home Menu or settings menu.
- If you delete the Google Account, the TV will return to the factory default settings.

Hint

- Depending on the TV settings, the Home screen will be displayed when the TV is turned on. If you change the following setting, you can change the screen that is displayed when the TV is turned on to the TV broadcast channel or external input such as HDMI that you were watching before turning off the TV.
 - 1 Press the (Quick Settings) button on the remote control.
 - 2 Select [Power-on behaviour], and then select [Last used input].

The next time the TV is turned on, the TV broadcast channel or external input such as HDMI that you were watching before turning off the TV will be displayed.

Specifications may be subject to change without notice.

For other information, see "Frequently Asked Questions" on the Sony Support Site.
 Frequently Asked Questions for Troubleshooting

[8] Getting Started

Selecting inputs

To use devices (such as a Blu-ray/DVD player or USB flash drive) connected to the TV, or to watch TV after such use, you will need to switch the input.

Press the → (Input select) button repeatedly to select the connected device.

Alternatively, press the → (Input select) button, use the ◀ (Left) / ▶ (Right) buttons to select a connected device, and then press the ---- (Enter) button.

Note

 If there are no devices connected to an HDMI input, the HDMI input may not be displayed in the [Input menu].

To edit the input items

1 Press the → (Input select) button.

- Press the ▶ (Right) button (or ◀ (Left) button depending on the TV's display language) and select ➡ (Edit).
- 3 Select the input/device you want to show or hide.
- 4 Select [Close].

Hint

- To change the order or hide a displayed item, press the ▲ (Up) button on the remote control with that item highlighted, and [Move] and [Hide] will be displayed. If you select [Move], use ◀ (Left) / ▶ (Right) on the remote control to move the item to the desired position, and then press the -‡- (Enter) button on the remote control.
- You can switch to TV broadcasting by simply pressing the TV button on the remote control.

[9] Getting Started

Accessibility features

This TV has accessibility features in [Accessibility] such as a text-to-speech function for on-screen text, Text magnification to make text easier to read and subtitles.

Note

Some features do not apply depending on your model/region/country.

Press the

(Quick Settings) button on the remote control, then select [Settings] −

[System] − [Accessibility] to configure the user assistive features.

[Accessibility] has a shortcut function so you can turn it on or off by pressing and holding the (Mute) button on the remote control for 3 seconds.

Hint

- To change the shortcut function, select [Accessibility shortcut] in [Accessibility], enable [Enable accessibility shortcut], and change the function in [Shortcut service].
- If you select [Accessibility tutorial] in [Accessibility], you can learn about user accessibility features supported by the TV. (This feature may not be available depending on your model.)
- To use text-to-speech with the Help Guide, view the Help Guide from the Sony support website using a computer or smartphone.
- For more information about accessibility, please visit the Sony support website.

[10]

Useful features

Searching for content/operating the TV with your voice

Enjoying preferred apps

Enjoying safe apps and video streaming services (Security and restrictions)

[11] Useful features

Searching for content/operating the TV with your voice

<u>Using the remote control microphone This feature is available for TVs in which the included remote control has a Google Assistant/MIC button.</u>

<u>Using the built-in MIC on the TV (only TVs with a built-in MIC)</u>

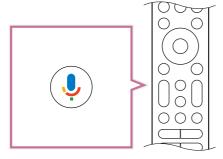
[12] Useful features | Searching for content/operating the TV with your voice

Using the remote control microphone

Remote controls that support voice control have a Google Assistant/MIC button, and a built-in microphone. Ask Google to find movies, stream apps, play music, and control the TV - all with your voice. Press the Google Assistant (or MIC) button on the remote to get started.

1 Press and hold the Google Assistant/MIC button on your remote control.

The microphone on the remote control will be activated while the button is pressed, and the LED on the remote control will light up.



Speak into the microphone while pressing and holding the Google Assistant/MIC button.

Speech examples may be displayed depending on your model.



Search results are displayed when you speak into the microphone.

Hint

 If you press the Google Assistant/MIC button on the remote control and say "Voice hints", information about how to speak and available voice commands will be displayed. This function may not be available depending on your model/region/country/language.

Note

- An Internet connection is required to use voice search.
- The type of remote control supplied with the TV, and the availability of a remote control with a built-in microphone varies depending on your model/region/country.
 An optional remote control is available in some models/regions/countries.
- To use the microphone on the remote control, you must add and set a Google Account to the TV.

[13] Useful features | Searching for content/operating the TV with your voice

Using the built-in MIC on the TV (only TVs with a built-in MIC)

The built-in MIC on the TV may not be available depending on your region/country/language.

For details about languages that support the built-in MIC on the TV feature, refer to the following Sony support website.

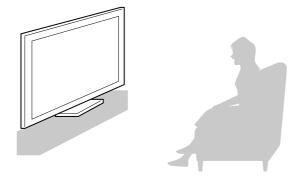
https://www.sony.net/tv-hf/aep/

Hint

• The URL is subject to change without notice.

Do more on your TV using only your voice. Just start with "Ok Google" to:

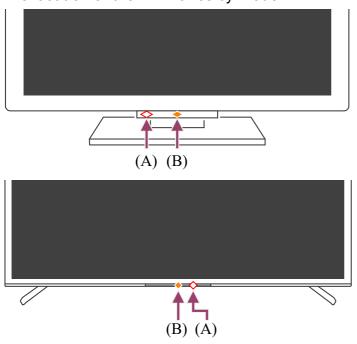
- · Control your TV and smart home devices
- · Enjoy music and entertainment
- · Get answers
- · Plan your day and manage tasks



Face the TV and say, "Ok Google" to get started.

When the voice function LED blinks white, start speaking.

The location of the LED varies by model.



- (A) The voice function LED is located at the bottom centre right of the TV.
- (B) The LED located at the bottom centre of the TV lights up amber when hands-free operation is available.

To use the built-in MIC, enable the following setting.

1 Turn on the built-in MIC switch on the TV.

For the location of the built-in MIC switch on the TV, refer to the Setup Guide.

Note

- An Internet connection is required to use the TV's built-in MIC.
- After turning on the built-in MIC switch on the TV, you need to press the Google
 Assistant/MIC button on the remote control 4 times to complete the setup,
 depending on your model/country/region. (Only models with the built-in MIC switch)
- Power consumption will increase when the built-in MIC is enabled as it is always listening.

Hint

- When the built-in MIC switch on the TV is enabled, the Operational response LED lights up in amber even when the TV is turned off (you can also set it so it does not light up).
- The TV's built-in MIC may pick up sound from the surroundings and respond unintentionally. You can use [Built-in MIC sensitivity] to change the mic sensitivity.

Press the (Quick Settings) button on the remote control, and select the following in order.

[Settings] — [System] — [Built-in MIC sensitivity]

Related topics

- Connecting to a Network
- How the LEDs light up
- You want to disable the LED so that it does not light up or blink.

[14] Useful features

Enjoying preferred apps

Installing apps

[15] Useful features | Enjoying preferred apps

Installing apps

You can install apps to the TV, just like you do with smartphones and tablets.

Note

- You can only install apps that are compatible with TVs. They may differ from apps for smartphones/tablets.
- An Internet connection and Google Account are required to install apps.

Hint

- If you do not have a Google Account or want to create a shared account, create a
 new account by accessing the following website.
 - https://accounts.google.com/signup
 - The website above may vary depending on your region/country. It is also subject to change without notice. For details, refer to the Google homepage.
- We recommend that you create a Google Account on a computer or mobile device.
 - Press the ♠(HOME) button, and from ♠ on the Home screen, say something like "Search for <app name> apps" to search for apps you want to install.

 Alternatively, select the input field and use the on-screen keyboard.
 - 2 Select an app from the search results and install it.

Hint

- If the app search does not produce the desired results, say "Google Play Store", and try searching for the app on the Google Play Store screen.
- You can also select a category from the Apps tab in the Home Menu and select a desired app.

After downloading, the app is automatically installed and added. You can select [Open] to launch the app.

Hint

• To start an installed app later, select the Apps tab in the Home Menu, and select [See all] at the right edge of the app area. Select the installed app to start it.

About paid apps

There are free apps and paid apps. To purchase a paid app, a prepaid Google Play gift card code or credit card information is required. You can purchase a Google Play gift card from

various retailers.

To delete an app

Press the (Quick Settings) button on the remote control, select [Settings] — [Apps], select an app to be deleted, and uninstall it.

Related topics

- · Connecting to a network using a LAN cable
- Using Wi-Fi to connect the TV to the Internet/Network

[16] Useful features

Enjoying safe apps and video streaming services (Security and restrictions)

You can ensure safe use of the TV by setting installation restrictions on apps that are downloaded from unknown sources, or age restrictions on programmes and videos. (Some features do not apply depending on your model/region/country.)

You can set the following [Parental controls] features so that children can safely use the TV.

- Restrict TV channels
- Restrict installation of apps from unknown sources
- Restrict use of apps (password lock feature)

You can restrict features by setting the following.

To set age restrictions on programmes

Press the (Quick Settings) button on the remote control, and then select the following in order.

[Settings] — [System] — [Parental controls] — [Channels] — [TV rating].

The options depend on your model/country/region/settings.

To restrict apps (password lock feature)

Set to restrict children from using apps such as internet browsers.

Set restrictions in [Parental controls].

If this is set, you will be required to input the PIN when starting an app.

Press the (Quick Settings) button on the remote control, and select the following in order.

```
[Settings] – [System] – [Parental controls] – [Apps]
```

- 2 Set or input the PIN.
- 3 Enable [Restrict apps].
- 4 Select the apps that you want to restrict from the app list.

 Restricted apps will change from → (Unlocked) to → (Locked). To restrict all apps, select [All apps].

To restrict the installation of apps from unknown sources

1 Press the (Quick Settings) button on the remote control, and select the following in order.

```
[Settings] — [Privacy] — [Security and restrictions] — [Unknown sources] — change the setting in [Install unknown apps].
```

Note

- If you change the [Security and restrictions] settings, your device and personal data
 are more vulnerable to attack by unknown apps from sources other than Play Store.
 You agree that you are solely responsible for any damage to your device or loss of
 data that may result from using these apps.
- If you forget the PIN, you must reset the TV to its original factory settings. Make sure
 you do not forget the PIN.

Hint

• Other separate restrictions may be available depending on the app. For details, refer to the app's Help.

[17]

Watching TV

[18] Watching TV

Watching TV programmes

<u>Using the programme guide</u> <u>Configuring channel settings</u>

[19] Watching TV | Watching TV programmes

Using the programme guide

You can quickly find your preferred programmes.

1 Press the \(\begin{align*} \left(\text{Guide} \right) \text{ button to display the digital programme guide.} \end{align*}

[20] Watching TV | Watching TV programmes

Configuring channel settings

Receiving digital broadcasts
Receiving satellite broadcasts
Sorting or editing the channels

[21] Watching TV | Watching TV programmes | Configuring channel settings

Receiving digital broadcasts

- 2 Follow the on-screen instructions to tune in all available digital channels and store them in the TV.

Hint

 You can return the TV by selecting [Auto tuning] and following the on-screen instructions after moving to a new residence, changing service providers, or to search for newly launched channels.

Related topics

• Some digital channels are missing.

[22] Watching TV | Watching TV programmes | Configuring channel settings

Receiving satellite broadcasts

If you have a satellite dish installed, you can view satellite broadcasts by configuring the tuner settings.

- 2 Follow the on-screen instructions.

Related topics

• You cannot view satellite channels.

[23] Watching TV | Watching TV programmes | Configuring channel settings

Sorting or editing the channels

You can sort the channel display according to your preferred order.

- - If multiple items are displayed, select the one you want to edit.

Note

• Available options may vary depending on your region/country.

Useful features when watching TV

Timers

Use a timer to turn the TV on and off.

Parental lock

Use [Parental controls] to set parental restrictions.

For details, refer to System.

(Subtitle setting)

You can press the MENU button on the remote control to enable subtitles.

Picture quality/sound quality adjustment

Adjust the picture quality and sound quality according to your preferences.

For details, refer to Display & Sound.

[25] Watching TV

Changing the picture and sound quality to your preferences

Adjusting the picture quality

Adjusting the sound quality

"Sound" advanced settings

Auto Volume

Balance

[26] Watching TV | Changing the picture and sound quality to your preferences

Adjusting the picture quality

You can configure various settings related to the TV display such as colour and brightness for picture quality, or screen size.

Note

 The actual display may vary or some settings may not be available depending on your model/country/region and the content you are watching.



You can change the following settings.

Picture

Adjust the picture settings such as Brightness, Colour, and Hue.

Picture mode

Change the picture quality according to the content you are watching such as movies or sports.

Auto picture mode

Automatically sets the picture mode based on the content from HDMI devices.

Light sensor

Optimises brightness according to ambient light.

Brightness

Adjust the backlight to display the brightest whites and deepest blacks.

Colour

Adjust the colour saturation level.

Advanced

You can set the following.

Brightness

You can set the following.

Brightness

Adjust the luminance level of the screen.

Contrast

Adjust the picture white level.

Gamma

Adjust the light and dark balance. Brighten or darken the brightness between white and black.

Black level

Adjust the picture black level.

Black adjust

Enhance the black in images for stronger contrast.

Adv. contrast enhancer

Automatically adjusts the contrast based on picture brightness.

Black equaliser

Brightens dark areas of the image to make it easier to identify people and objects. Applicable when [Picture mode] is set to [Game] or [Dolby Vision Game].

Auto local dimming

Optimises contrast by adjusting brightness in individual sections of the screen.

Peak luminance

Adjust peak luminance for the brightest whites.

Colour

You can set the following.

Colour

Adjust the colour saturation level.

Hue

Adjust the green and red tones.

Colour temperature

Adjust the colour temperature.

Adv. colour temperature

Adjust the colour temperature in detail.

Live Colour

Improve the vividness of colours.

Clarity

You can set the following.

Sharpness

Adjust the picture detail.

Reality Creation

Adjusts fineness and noise for realistic picture.

If you select [Manual], you can adjust [Resolution].

Resolution

Adjusts fineness and noise for realistic picture.

Random noise reduction

Reduce repetitive random noise.

Digital noise reduction

Reduce video compression noise.

Motion

You can set the following.

Motion blur reduction

Adjusts the strength of clarity by inserting a black frame to reduce motion blur. Applicable when [Picture mode] is set to [Game] or [Dolby Vision Game].

Motionflow

Refines moving images. Increases the number of image frames to display videos smoothly. If you select [Custom], you can adjust [Smoothness] and [Clearness].

Smoothness

Adjust Smoothness level.

Clearness

Adjust Clearness level.

Film mode

Optimises picture quality based on video content, such as movies and computer graphics. Smoothly reproduces the motion of filmed images (images recorded at 24 frames per second) such as movies.

Video signal

You can set the following.

HDR mode

Picture that is suitable for a High Dynamic Range signal.

HDMI video range

Select the signal range for HDMI input.

Reset

You can set the following.

Reset

Return all picture settings for current picture mode to factory default.

Screen

Adjust the aspect ratio and viewable screen area.

Wide mode

Adjust the picture size.

Hint

• When 4 096 x 2 160p is input and [Wide mode] is set to [Auto], the resolution is displayed as 3 840 x 2 160p. To display 4 096 x 2 160p, set [Wide mode] setting to [Original].

Display area

Adjust the viewable screen area. Set to [Auto] to automatically adjusts the viewable screen area based on the signal.

Screen size

Adjust the vertical and horizontal screen size.

Screen position

Adjust the vertical and horizontal screen position.

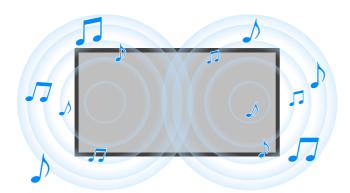
[27] Watching TV | Changing the picture and sound quality to your preferences

Adjusting the sound quality

You can configure various settings related to the TV's sound such as sound quality.

Note

 The actual display may vary or some settings may not be available depending on your model/country/region, TV settings, and the connected device.



You can change the following settings.

Sound

Adjust settings by input such as the TV or HDMI, and other common settings, to enjoy various sound effects.

You can configure settings such as those below.

Sound customisation

Adjust sound quality.

For details, refer to "Sound" advanced settings.

Volume level

Adjust the sound level of current input.

For details, refer to "Sound" advanced settings.

Auto Volume

Keeps the volume level constant for all programmes and inputs.

For details, refer to Auto Volume.

Balance

Adjust the speaker balance.

For details, refer to Balance.

TV position

Change [TV position] based on the TV Installation.

Reset

Return all sound settings to factory default settings.

Post-processing

Select the audio processing technology.

Audio output



Configure to output sound from an audio system instead of the TV speakers.

You can configure settings such as those below.

Speakers

Select TV or external speakers.

A/V sync

Adjust audio and video timing while using a Bluetooth A2DP audio device or a specific audio system connected with an HDMI cable.

Digital audio out

Configure the output method when outputting digital audio. This setting is available only when [Speakers] is set to [Audio system].

Hint

 There is less deterioration and noise from signal transmission, and the sound quality is superior compared to analogue connections.

Digital audio out volume

Applied for PCM only. The volume levels between PCM and compressed audio will differ.

Related topics

- "Sound" advanced settings
- Accessing audio system settings

[28] Watching TV | Changing the picture and sound quality to your preferences

"Sound" advanced settings

This page introduces various settings for the features you can configure in [Sound].

Note

 The actual display may vary or some settings may not be available depending on your model/country/region, TV settings, and the connected device.

[Sound customisation]

Setting	Description
Surround	Virtually reproduce realistic surround sound.
Surround effect	Adjust the surround sound effect.
Dialogue enhancer	Emphasises voice.
Equaliser	Adjust sound based on different frequencies.

[Volume level]

Setting	Description
Volume offset	Adjust the sound level of the current input relative to other inputs.
Dynamic range	Compensates for audio level difference between channels.
DTS Dynamic range	Adjusts dynamic range of DTS signal.

Related topics

· Adjusting the sound quality

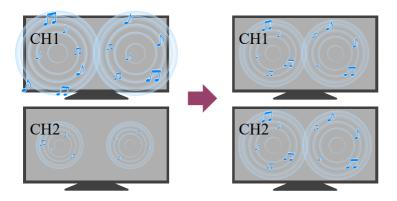
[29] Watching TV | Changing the picture and sound quality to your preferences

Auto Volume

The volume is automatically adjusted to a certain level according to changes in the volume level of broadcasts and input signals.

Reducing the volume difference that occurs when switching channels or inputs allows you to watch at a constant volume level. To enable this feature, press the \checkmark (Quick Settings) button on the remote control, then select the following settings.

[Settings] — [Display & Sound] — [Sound] — [Auto Volume]



Note

 The effect varies depending on your model/country/region, settings, broadcast, and input signal.

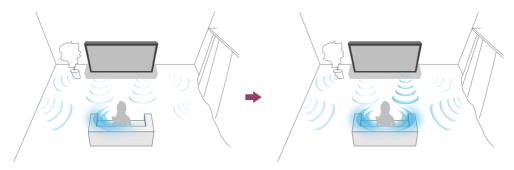
[30] Watching TV | Changing the picture and sound quality to your preferences

Balance

Adjusts the balance of the left and right sound.

Due to the distance to walls and windows and the reflection of sound, you may hear the left and right sound become unbalanced. You can adjust the volume balance. To adjust the sound balance, press the (Quick Settings) button on the remote control, then select the following settings.

[Settings] — [Display & Sound] — [Sound] — [Balance]



Note

• The effect varies depending on your model/country/region, settings, and installation environment.

[31]

Recording TV Programmes

Watching/deleting recorded content

<u>Understanding the symbols displayed in the recorded title list</u>

[32] Recording TV Programmes

Recording to a USB HDD device

Using a USB HDD device for recording

Timer recording

Information about using a USB HDD device for recording

[33] Recording TV Programmes | Recording to a USB HDD device

Using a USB HDD device for recording

This function is available only in limited regions/countries/TV models.

USB HDD recording models have [Recording Settings] in [Settings] — [Channels & Inputs].

Connect a USB HDD device to your TV to record digital broadcasts.

Connect the USB HDD device to the TV's USB port labelled "HDD REC" (if there is a blue USB port, that port supports HDD recording).



- (A) USB HDD device
- (B) USB cable (not supplied)
 - 1 Connect a USB HDD device to the USB port (blue) labelled "HDD REC" on your TV.
 - 2 Turn the USB HDD device on.
 - 3 Wait until the screen [USB drive connected] is displayed.
 - 4 Go to [Recording Settings] in [Settings] [Channels & Inputs].

5 Select Recording device and ensure PVR is enabled.

Note

 If the device is not detected in step 4, follow the instructions in the message and check that the USB HDD device for recording is connected to the Super Speed USB port (blue).

If the USB HDD device for recording is not recognised even after you have checked the connection, you need to check if the device is installed as "Removable storage" in [Settings] — [System] — [Storage] because it may have already been registered as a device for purposes other than recording. Refer to "Information about using a USB HDD device for recording" to use USB HDD device for recording.

Related topics

• Information about using a USB HDD device for recording

[34] Recording TV Programmes | Recording to a USB HDD device

Timer recording

This function is only available in limited regions/countries/TV models.

USB HDD recording models have [Recording Settings] in [Settings] — [Channels & Inputs].

- 1 Press the (Guide) button.
- 2 Highlight the desired programme in the programme guide, press MENU and select [Schedule List].
- 3 Ensure the programme timing and other information are correct, then select [Confirm].

To check, modify or delete timer settings

Checking, modifying, or deleting timer settings is performed in [Recording timer list].

- 1 Press MENU button and select [Recorded Title List] (Recorded Title List).
- 2 Press MENU again and select [Schedule List].
- 3 In Schedule List, press MENU and select ## [Edit].

- 4 Configure the timer setting.
- 5 Select [Confirm].

Note

• Timer recording will not work when the AC power cord (mains lead) is unplugged.

Related topics

• Watching/deleting recorded content

[35] Recording TV Programmes | Recording to a USB HDD device

Information about using a USB HDD device for recording

This function is only available in limited regions/countries/TV models.

USB HDD recording models have [Recording Settings] in [Settings] — [Channels & Inputs].

- The USB HDD device must be used exclusively for recording. Use a separate USB HDD device for viewing photos and videos.
- Only USB HDDs larger than 32 GB are supported.
- Connection of a USB HDD device via a USB hub is not supported. Connect the device directly to the TV.
- Only this TV will be able to play the data recorded on the USB HDD that has been recognised by this TV.
- Recording is supported only for digital TV and radio broadcasts. Recording of data broadcasts is not supported.
- Scrambled/encrypted signals cannot be recorded.
- Recording cannot be performed in the following cases:
 - The TV cannot recognise the USB HDD device.
 - More than 1,000 programmes are recorded on the USB HDD device.
 - The USB HDD device is full.
- Automatic selection of the programme may not be possible while it is being recorded.
- Recording a programme is not possible unless its recording has been authorised.
- 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 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.

[36] Recording TV Programmes

Watching/deleting recorded content

This function is only available in limited regions/countries/TV models.

USB HDD recording models have [Recording Settings] in [Settings] - [Channels & Inputs].

To watch recorded content

Press MENU button and select [Recorded Title List] (Recorded Title List). If [Recorded Title List] does not exist, select [# [Edit] and add [Recorded Title List], then select the content to be watched.

To delete recorded content

- Press MENU button and select [Recorded Title List] (Recorded Title List). If [Recorded Title List] does not exist, select [Edit] and add [Recorded Title List].
- 2 Highlight the programme you want to delete, select the (Delete icon) in the Menu list.

For information about the meaning of the symbols in the recorded title list, see <u>Understanding the symbols displayed in the recorded title list</u>.

[37] Recording TV Programmes

Understanding the symbols displayed in the recorded title list

This function is only available in limited regions/countries/TV models.

: Currently recording

Using the TV with Other Devices

USB devices

Blu-ray and DVD players

TV box

Displaying the iPhone/smartphone or iPad/tablet app screen on the TV

Computers, cameras, and camcorders

Audio system (such as an AV receiver or sound bar)

Video game consoles

Bluetooth devices

CEC-compatible devices

Viewing pictures in 4K from compatible devices

BRAVIA Connectivity Guide

[39] Using the TV with Other Devices

USB devices

Playing content stored on a USB device

Information about USB devices used for storing photos and music

Supported files and formats

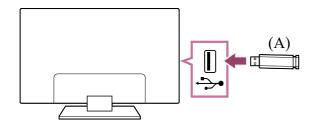
[40] Using the TV with Other Devices | USB devices

Playing content stored on a USB device

To record programmes to a USB storage device or watch recorded programmes, see <u>Recording TV Programmes</u>.

Connecting a USB device

Connect a USB storage device to the USB port of the TV to enjoy photo, music, and video files stored on the device.



(A) USB storage device

Enjoy photos/music/movies stored on a USB device

You can enjoy photos/music/movies stored on a USB device on the TV screen.

- 1 If the USB device connected to the TV has a Power switch, turn it on.
- 2 Press the 仚(HOME) button, and select Apps from the Home menu, then select [Media Player].

If the supplied remote control has an APPS button, you can press the APPS button.

- 3 Select the USB device name.
- 4 Select the folder, and select the file to play.

To check the supported file formats

Supported files and formats

Note

- Some photo images or folders take time to display depending on the image dimension, file size, and number of files in a folder.
- Displaying the USB device may take some time because the TV accesses the USB device every time the USB device is connected.
- All USB ports on the TV support Hi-Speed USB. The blue USB port supports
 SuperSpeed (USB 3.2 Gen 1, USB 3.1 Gen 1 or USB 3.0). USB hubs are not supported.
- While accessing the USB device, do not turn off the TV or USB device, do not disconnect the USB cable, and do not remove or insert recording media. Otherwise, data stored on the USB device may be corrupted.
- Depending on the file, playback may not be possible, even when using the supported formats.

Hint

For other information, see "Frequently Asked Questions" on the Sony Support Site.
 Frequently Asked Questions for Troubleshooting

Related topics

- Information about USB devices used for storing photos and music
- No picture from a connected device.

[41] Using the TV with Other Devices | USB devices

Information about USB devices used for storing photos and music

- The USB ports on the TV support FAT16, FAT32, exFAT, and 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.
- Some photos and movies may be magnified, resulting in low picture quality. Depending
 on the size and aspect ratio, images may not be displayed in full screen.
- It may take a while to display a photo, depending on the file and/or settings.
- In no event shall Sony be liable for recording failure or any damage or loss of recorded contents caused or associated with the TV's malfunction, the USB device's malfunction, or any other problem.

Related topics

Supported files and formats

[42] Using the TV with Other Devices | USB devices

Supported files and formats

Photos

Music

<u>Videos</u>

<u>Audio sampling rates (for videos)</u>

[43] Using the TV with Other Devices | USB devices | Supported files and formats

Photos

Use case: USB

File Format	Extension
JPEG	*.jpg / *.jpe / *.jpeg
HEIF	*.heic / *.heif / *.hif

Other supported files and formats

- Music
- Videos
- Audio sampling rates (for videos)
- External subtitles

[44] Using the TV with Other Devices | USB devices | Supported files and formats

Music

Use case: USB

mp4

Extension: *.mp4 / *.m4a

Description	Sampling Rate	
AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k	
HE-AAC v1 / v2	24k / 32k / 44.1k / 48k	

3gpp

Extension: *.3gp / *.3g2

Description	Sampling Rate		
AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k		
HE-AAC v1 / v2	24k / 32k / 44.1k / 48k		

Asf

Extension: *.wma

Description	Sampling Rate
WMA9 Standard	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k

ogg

Extension: *.ogg

Description	Sampling Rate	
Vorbis	8k / 11.025k / 16k / 22.05k / 32k / 44.1k / 48k	

Other

Description	Sampling Rate	
LPCM	32k / 44.1k / 48k	

Extension: *.mp3

Description	Sampling Rate
MP1L1 / MP1L2 / MP1L3 / MP2L1 / MP2L2	32k / 44.1k / 48k
MP2L3	16k / 22.05k / 24k
MP2.5L3	8k / 11.025k / 12k

Extension: *.wav

Description	Sampling Rate	
WAV *1	32k / 44.1k / 48k	

Extension: *.flac

Description	Sampling Rate	
FLAC	16k / 22.05k / 32k / 44.1k / 48k / 88.2k / 96k	

Extension: *.aac

Description	Sampling Rate		
AAC-LC	16k / 22.05k / 24k / 32k / 44.1k / 48k		
HE-AAC v1 / v2	24k / 32k / 44.1k / 48k		

^{*1} The use case of WAV is 2ch only.

Other supported files and formats

- Photos
- Videos
- Audio sampling rates (for videos)
- External subtitles

[45] Using the TV with Other Devices | USB devices | Supported files and formats

Videos

Use case: USB

MPEG1 (*.mpg / *.mpe / *.mpeg)

Subtitle Type: External

Video Codec	Audio	Max. / Min.	Max. Frame Rate
(Profile@Level)	Codec	Resolution	
MPEG1	MPEG1L2	720 x 576@30fps	720 x 576@30fps

MPEG2PS (*.mpg / *.mpe / *.mpeg)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
MPEG2 MP@HL	MPEG1L1 / MPEG1L2 / LPCM / AC3	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps

MP4 (*.mp4)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
AVC / H.264 MP@L4.2, HP@L4.2	AAC-LC / HE- AAC v1 / HE- AAC v2 / AC3 / E-AC3 / AC4 / MPEG1L1 / MPEG1L2	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@60fps
MPEG4 SP@L6, ASP@L5	AAC-LC / HE- AAC v1 / HE- AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps
AVC / H.264 MP@L5.2, HP@L5.2 *1	AAC-LC / HE- AAC v1 / HE- AAC v2 / AC3 / E-AC3 / AC4 / LPCM	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60p / 1 920 x 1 080@60fps
HEVC / H.265 MP@L5.1, Main10@L5.1	AAC-LC / HE- AAC v1 / HE-	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60p / 1 920 x 1 080@60fps

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
	AAC v2 / AC3 /		
	AC4 / E-AC3		

 $^{^{*1}}$ This line includes the XAVC S format use case. The maximum supported bitrate for XAVC S is 100 Mbps.

avi (*.avi)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
Motion JPEG	μ-LAW / PCM (U8) / PCM (S16LE)	1 280 x 720 / QCIF (176 x 144)	1 280 x 720@30fps

MKV (*.mkv)

Subtitle Type : Internal / External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
AVC / H.264 MP@L4.2, HP@L4.2	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@60fps
MPEG4 SP@L6, ASP@L5	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
VP8	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps
VP9 Profile 0, Profile 2	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2 / MPEG1L1 / MPEG1L2 / Vorbis	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60fps
AVC / H.264 MP@L5.2, HP@L5.2	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60p / 1 920 x 1 080@60fps
HEVC / H.265 MP@L5.1, Main10@L5.1	AC3 / AAC-LC / E-AC3 / HE-AAC v1 / HE-AAC v2	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60p / 1 920 x 1 080@60fps

3gpp (*.3gp)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
MPEG4 SP@L6, ASP@L5	AAC-LC / HE- AAC v1 / HE- AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
AVC / H.264 MP@L4.2, HP@L4.2	AAC-LC / HE- AAC v1 / HE- AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@60fps

MOV (*.mov)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
AVC / H.264 MP@L4.2, HP@L4.2	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2 / µ-LAW / PCM (U8) / PCM (S16BE) / PCM (S16LE)	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@60fps
MPEG4 SP@L6, ASP@L5	AAC-LC / HE-AAC v1 / HE-AAC v2 / AC3 / E-AC3 / MPEG1L1 / MPEG1L2 / µ- LAW / PCM (U8) / PCM (S16BE) / PCM (S16LE)	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps

WebM (*.webm)

Subtitle Type : External

Video Codec (Profile@Level)	Audio Codec	Max. / Min. Resolution	Max. Frame Rate
VP8	Vorbis	1 920 x 1 080 / QCIF (176 x 144)	1 920 x 1 080@30fps / 1 280 x 720@60fps
VP9 Profile 0, Profile 2	Vorbis	3 840 x 2 160 / QCIF (176 x 144)	3 840 x 2 160@60fps

Other supported files and formats

- Photos
- Music
- Audio sampling rates (for videos)
- External subtitles

[46] Using the TV with Other Devices | USB devices | Supported files and formats

Audio sampling rates (for videos)

Audio Codec	Sampling Rate
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
AC4	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
μ-LAW	8k

Other supported files and formats

- Photos
- Music
- Videos
- External subtitles

[47] Using the TV with Other Devices | USB devices | Supported files and formats

External subtitles

Use case: USB

File Format	Extension
SubStation Alpha	*.ass / *.ssa
SubRip	*.srt

Other supported files and formats

- Photos
- Music
- Videos
- Audio sampling rates (for videos)

[48] Using the TV with Other Devices

Blu-ray and DVD players

Connecting a Blu-ray or DVD player

Watching Blu-ray and DVD discs

[49] Using the TV with Other Devices | Blu-ray and DVD players

Connecting a Blu-ray or DVD player

Connect a Blu-ray/DVD player to the TV.

Use a connection method below based on the terminals available on your TV.

Note

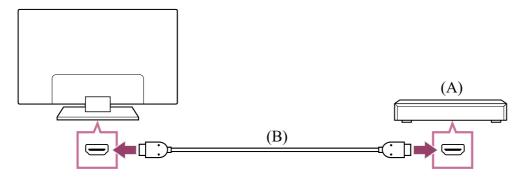
• The available terminals depend your model/region/country.

Hint

• You can also connect a TV box in the same way as a Blu-ray/DVD player.

HDMI connection

For optimum picture quality, we recommend connecting your player to the TV using an HDMI cable. If your Blu-ray/DVD player has an HDMI jack (socket), connect it using an HDMI cable.



- (A) Blu-ray/DVD player (same as connecting a TV box)
- (B) HDMI cable (not supplied)*
- * Be sure to use an authorised Premium High Speed HDMI[™] Cable(s) bearing the HDMI logo.

Related topics

• Watching Blu-ray and DVD discs

[50] Using the TV with Other Devices | Blu-ray and DVD players

Watching Blu-ray and DVD discs

You can watch content from Blu-ray/DVD discs or other content supported by your player on the TV.

- 1 Turn on the connected Blu-ray/DVD player.
- 2 Press the → (Input select) button repeatedly to select the connected Bluray/DVD player.
- 3 Start playback on the connected Blu-ray/DVD player.

Hint

 If you connect a CEC-compatible device with an HDMI connection, you can operate it by simply using the TV's remote control.

Related topics

- Connecting a Blu-ray or DVD player
- CEC-compatible devices

[51] Using the TV with Other Devices

TV box

Connecting a TV box

[52] Using the TV with Other Devices | TV box

Connecting a TV box

Connect the TV box to the TV.

Connect it to the input on your TV.

For details, refer to the Connecting a Blu-ray or DVD player page.

[53] Using the TV with Other Devices

Displaying the iPhone/smartphone or iPad/tablet app screen on the TV

Google Cast™ or AirPlay allows you to display (cast) your favourite websites and app screens on your mobile device directly to the TV.

Using Google Cast

- 1 Connect a mobile device such as a smartphone or tablet to the same network that the TV is connected to.
- 2 Launch a Google Cast supported app on the mobile device.

- 3 Select the $\sqrt{}$ (cast) icon in the app.
- 4 Select the TV as the cast destination.

The screen of the mobile device is displayed on the TV.

Note

• An Internet connection is required to use Google Cast.

Using AirPlay

This TV supports AirPlay 2.

- 1 Make sure your Apple device is connected to the same network as your TV.
- 2 The procedure depends on the content that will be displayed on the TV as follows.
 - To display video, tap

 (AirPlay Video).
 - To display photos, tap ∱ (Action share).
 - To play music, tap (AirPlay Audio).
 - To display the screen of a mobile device, tap ☐ (Mirroring).
 (In some apps, you may have to tap another icon first.)
- 3 Select AirPlay on a mobile device such as an iPhone or iPad, and select the TV to use with AirPlay.

Hint

- The TV supports Apple HomeKit.
 - You can control the TV with a mobile device such as an iPhone or iPad by pressing the (Input select) button on the remote control, selecting (AirPlay), and following the on-screen instructions to setup Apple HomeKit.
 - Available operations vary depending on the version of the app and software.
- If you select [On (Powered on by apps)] in [Remote start], you can turn on the TV with apps on a mobile device such as an iPhone or iPad.

Note

- An internet connection is required to use AirPlay.
- Operation of a mobile device such as iPhone or iPad varies depending on the OS version.

- Connecting to a network using a LAN cable
- Using Wi-Fi to connect the TV to the Internet/Network

[54] Using the TV with Other Devices

Computers, cameras, and camcorders

Connecting a computer and viewing stored content

Connecting a camera or camcorder and viewing stored content

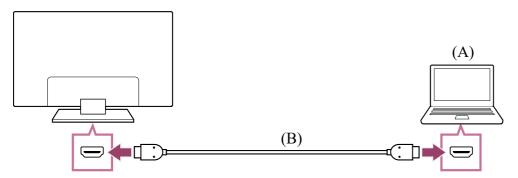
Computer video signal specifications

[55] Using the TV with Other Devices | Computers, cameras, and camcorders

Connecting a computer and viewing stored content

To connect a computer

Use an HDMI cable to connect your computer to the TV.



- (A) Computer
- (B) HDMI cable (not supplied)*
- * Be sure to use an authorised Premium High Speed HDMI[™] Cable(s) bearing the HDMI logo.

To check the video signal specifications

Computer video signal specifications

To view content stored on a computer

After connecting the computer, press the - \bigcirc (Input select) button, then select the input the computer is connected to.

To check the supported file formats

Supported files and formats

Note

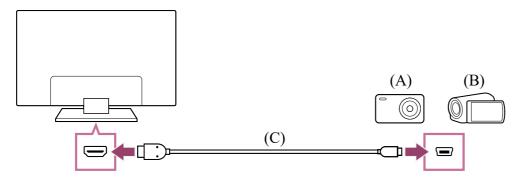
- For optimum picture quality, we recommend that you set your computer to output video signals according to one of the timings listed in "Computer video signal specifications".
- Depending on the connection status, the image may be blurred or smeared. In this
 case, change the computer's settings and select another input signal from the
 "Computer video signal specifications" list.

[56] Using the TV with Other Devices | Computers, cameras, and camcorders

Connecting a camera or camcorder and viewing stored content

To connect a camera or camcorder

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



- (A) Digital still camera
- (B) Camcorder
- (C) HDMI cable (not supplied)*

To view content stored on a digital still camera/camcorder

1 After connecting the digital still camera/camcorder, turn it on.

^{*} Be sure to use an authorised Premium High Speed HDMI[™] Cable(s) bearing the HDMI logo.

- 2 Press the (Input select) button repeatedly to select the connected digital still camera/camcorder.
- 3 Start playback on the connected digital still camera/camcorder.

To check the supported file formats

• Supported files and formats

Hint

• If you connect a CEC-compatible device, you can operate it by simply using the TV's remote control. Make sure that the device is CEC-compatible. Some devices may not be compatible with CEC even though they have an HDMI jack (socket).

Related topics

• CEC-compatible devices

[57] Using the TV with Other Devices | Computers, cameras, and camcorders

Computer video signal specifications

(Resolution, Horizontal frequency/Vertical frequency)

- 640 x 480, 31.5 kHz/60 Hz
- 800 x 600, 37.9 kHz/60 Hz
- 1 024 x 768, 48.4 kHz/60 Hz
- 1 152 x 864, 67.5 kHz/75 Hz
- 1 280 x 1 024, 64.0 kHz/60 Hz
- 1 600 x 900, 56.0 kHz/60 Hz
- 1 680 x 1 050, 65.3 kHz/60 Hz
- 1 920 x 1 080, 67.5 kHz/60 Hz *
- 3 840 x 2 160, 67.5 kHz/30 Hz
- 3 840 x 2 160, 135.0 kHz/60 Hz (8 bits)

Note

^{* 1 920} x 1 080 timing, when applied to the HDMI input, will be treated as a video timing and not computer timing. This will affect the [Screen] settings in [Display & Sound]. To view computer content, set [Wide mode] to [Full], and [Display area] to [+1]. ([Display area] is configurable only when [Auto display area] is disabled.)

 The picture may be blurry and may not be displayed correctly depending on your connection status. In this case, change the computer's settings and select a different input signal.

[58] Using the TV with Other Devices

Audio system (such as an AV receiver or sound bar)

Outputting audio from an audio system

Connecting an audio system

Adjusting an audio system

Audio formats

Accessing audio system settings

[59] Using the TV with Other Devices | Audio system (such as an AV receiver or sound bar)

Outputting audio from an audio system

You can connect audio systems such as AV receivers or sound bars to the TV. Select a connection method below according to the specifications of the audio system you want to connect.

- Connecting with an HDMI cable (For details, carefully read "Connection using an HDMI cable" below.)
- · Connecting with a digital optical cable

For connection methods, refer to the Connecting an audio system page.

Note

Refer to the instruction manual of the device to be connected.

Connection using an HDMI cable

This TV supports Audio Return Channel (ARC) or Enhanced Audio Return Channel (eARC). You can use an HDMI cable to output audio from audio systems that support ARC and eARC.

On TVs that support eARC, you can output (pass-through) audio signals from external input devices connected to the TV to eARC supported audio systems by using the HDMI

terminal bearing the text "eARC/ARC".

For connection methods, refer to the Connecting an audio system page.

Note

 The location of the HDMI terminal that supports eARC/ARC varies depending on the model. Refer to the included Setup Guide.

Related topics

Audio formats

[60] Using the TV with Other Devices | Audio system (such as an AV receiver or sound bar)

Connecting an audio system

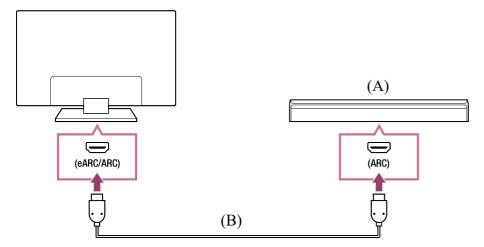
See the illustrations below to connect an audio system such as an AV receiver or sound bar.

Note

• The available terminals depend your model/region/country.

Sound bar connection

We recommend connecting the TV's HDMI input terminal (eARC or ARC) to the sound bar's HDMI output terminal (eARC or ARC) with an HDMI cable.



- (A) Sound bar
- (B) HDMI cable (not supplied)*

 $^{^*}$ We recommend Sony's Premium High Speed HDMI $^{\mathsf{TM}}$ Cable(s).

To connect a sound bar via HDMI, see "HDMI connection".

If you connect the TV to a sound bar via HDMI, you can use the following features.

- Link the power state of the sound bar and TV
- Display and configure the sound bar settings on the TV

Note

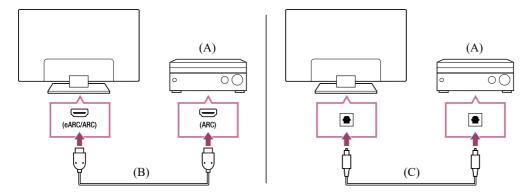
- The available functions depend on the sound bar.
- Depending on the sound bar, "eARC" or "ARC" may not be indicated on the HDMI terminal. For details on how to connect, refer to the sound bar manual.

Hint

There may be three tactile dots, next to the HDMI input terminal depending on your model. Use them as a guide during installation.

Audio amp connection

We recommend connecting the TV's HDMI input terminal (eARC or ARC) to the audio amp's HDMI output terminal (eARC or ARC) via HDMI. Depending on your audio system, you can also connect with a digital optical cable.



- (A) Audio amp
- (B) HDMI cable (not supplied)*
- (C) Digital optical cable (not supplied)

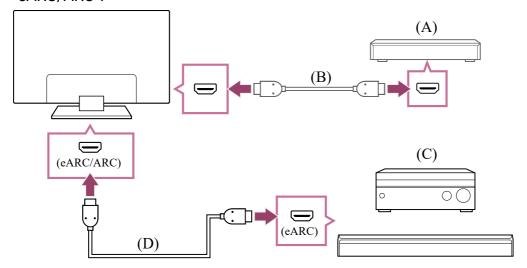
To connect an audio amp via HDMI, see "HDMI connection". To connect an audio amp with a digital optical cable, see "Digital optical cable connection".

HDMI connection (eARC supported)

 $^{^*}$ We recommend Sony's Premium High Speed HDMI[™] Cable(s).

1 Connect the external input device and TV with an HDMI cable. Connect the TV and audio system with another HDMI cable.

Connect the audio system to the TV's HDMI input terminal bearing the text "ARC" or "eARC/ARC".



- (A) External input device (such as a Blu-ray/DVD recorder)
- (B) HDMI cable (not supplied)
- (C) AV receiver or sound bar
- (D) HDMI cable with Ethernet (not supplied)*

- Press the (Quick Settings) button on the remote control, then select [Settings]
 [Display & Sound] [Audio output] [Speakers] [Audio system].
- 3 Enable the audio system's eARC feature.

Refer to the instruction manual of the device.

4 Adjusting an audio system

Note

- If audio is being output from an eARC supported device while you are watching HDMI input, the TV operates as follows:
 - audio from system sounds and audio responses is not output, and
 - the voice recognition performance of the built-in MIC may degrade (only TVs with a built-in MIC).

Hint

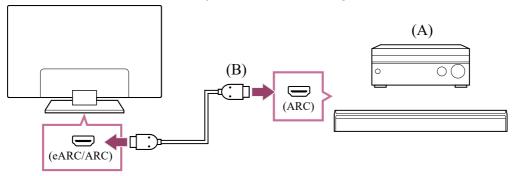
^{*} We recommend authorised Premium High Speed HDMI[™] Cable(s) bearing the HDMI logo.

There may be three tactile dots, next to the HDMI input terminal depending on your model. Use them as a guide during installation.

HDMI connection (ARC supported)

1 Connect the TV and audio system with an HDMI cable.

Connect to the TV's HDMI input terminal bearing the text "ARC" or "eARC/ARC".



- (A) AV receiver or sound bar
- (B) HDMI cable (not supplied)*

2 Adjusting an audio system

Note

 For ARC connections, voice recognition performance may degrade (only TVs with a built-in MIC).

Hint

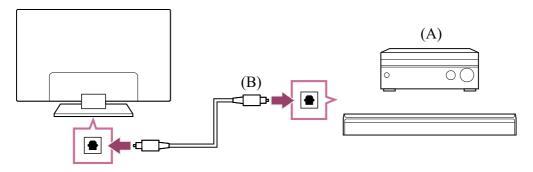
There may be three tactile dots, next to the HDMI input terminal depending on your model. Use them as a guide during installation.

Digital optical cable connection

1 Connect the TV and audio system with a digital optical cable.

Connect to the audio system's digital optical input terminal.

^{*} We recommend authorised Premium High Speed HDMI[™] Cable(s) bearing the HDMI logo.



- (A) AV receiver or Sound bar
- (B) Optical audio cable (not supplied)
- 2 Adjusting an audio system

Hint

For more information, please visit the Sony support website.
 <u>Support Site</u>

Related topics

- No sound but good picture.
- No audio or low audio with a home theatre system.

[61] Using the TV with Other Devices | Audio system (such as an AV receiver or sound bar)

Adjusting an audio system

After connecting an audio system to the TV, adjust the TV's audio output from the audio system.

Adjusting an audio system connected with an HDMI cable or digital optical cable

- After connecting the TV to your audio system, press the (Quick Settings) button on the remote control, then select [Settings] [Display & Sound] [Audio output] [Speakers] [Audio system].
- 2 Turn on the connected audio system, then adjust the volume.
 If you connect a CEC-compatible device with an HDMI connection, you can operate it by simply using the TV's remote control.

- If the audio system is not compatible with Dolby Digital or DTS, set [Settings] —
 [Display & Sound] [Audio output] [Digital audio out] to [LPCM].

Hint

- If a specific audio system is connected with an HDMI cable, you can adjust the output timing of the picture and sound.
 - Adjusting the AV sync setting

For details about supported models, refer to the support site.

- Support Site

Related topics

- <u>CEC-compatible devices</u>
- Connecting an audio system
- No sound but good picture.
- No audio or low audio with a home theatre system.

[62] Using the TV with Other Devices | Audio system (such as an AV receiver or sound bar)

Audio formats

HDMI IN 1/2/3/4

In eARC (Enhanced Audio Return Channel) mode

- 7.1 channel linear PCM: 32/44.1/48/88.2/96/176.4/192 kHz
- Dolby Audio
- Dolby Atmos
- DTS
- DTS Express
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS:X

Except eARC mode

- 7.1 channel linear PCM: 32/44.1/48/88.2/96/176.4/192 kHz
- Dolby Audio
- Dolby Atmos
- DTS
- DTS Express
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS:X

eARC/ARC (Enhanced Audio Return Channel/Audio Return Channel) (HDMI IN 3 only)

In eARC mode

- 7.1 channel linear PCM: 32/44.1/48/88.2/96/176.4/192 kHz
- Dolby Audio
- · Dolby Atmos
- DTS
- DTS-HD Master Audio
- DTS-HD High Resolution Audio
- DTS:X

In ARC mode

- Two channel linear PCM: 48 kHz 16 bits
- Dolby Audio
- · Dolby Atmos
- DTS

For details, refer to the support page.

• Support Site

Related topics

• Connecting an audio system

[63] Using the TV with Other Devices | Audio system (such as an AV receiver or sound bar)

Accessing audio system settings

You can access the audio system (such as an AV amplifier or sound bar) settings such as audio quality from the TV's Quick Settings.



- 1 Connect the audio system via the HDMI (eARC/ARC) terminal.
- Press the (Quick Settings) button on the remote control, and select an audio system setting.

For details about audio system settings, please refer to the manual of your audio system.

Note

- Audio system settings are displayed only for supported models.
 For information about supported models, refer to the support site.
 https://www.sony.net/hav_faq
- The settings that are displayed depend on the audio system model.

Hint

For settings that are not displayed by default, select a menu from ## (Edit).

Related topics

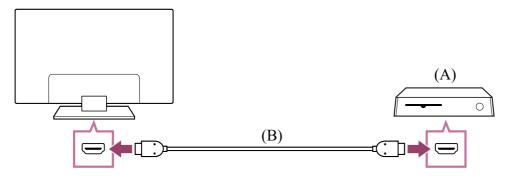
• Connecting an audio system

[64] Using the TV with Other Devices

Video game consoles

Connecting

Connect an HDMI-supported video game console to your TV with an HDMI cable.



- (A) Video game console
- (B) HDMI cable (sold separately)

Hint

• The type and position of the HDMI port differs depending on your TV. Refer to the documentation provided with the TV.

Changing HDMI input settings

After connecting, set the connected HDMI input port.

To maximise the performance of your TV and video game console, set the [HDMI signal format].

Auto setup

With the video game console turned on, connect it to the TV with an HDMI cable.

Set by following the instructions on the TV screen.

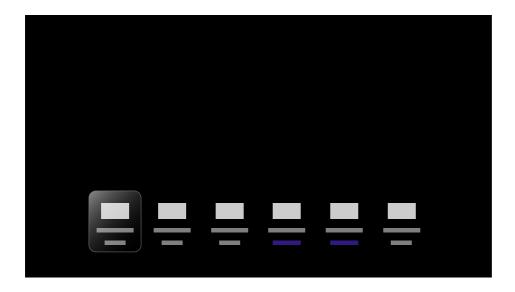
Manual setup

1 Press the (Quick Settings) button on the remote control, and select the following in order.

[Settings] — [Channels & Inputs] — [External inputs] — [HDMI signal format]
Select the optimal format for your video game console.

Game Menu

Pressing the MENU button displays a special menu for video games at the bottom of the screen.



Hint

 Depending on the connected video game console, the [Picture mode] may automatically change to [Game]. If [Game] is not selected automatically, set it manually.

Note

- The number of options may change.
- Unsupported options are greyed out (not available).

Related topics

• Connecting terminal

[65] Using the TV with Other Devices

Bluetooth devices

Connecting a Bluetooth device

Adjusting the AV sync setting

Supported Bluetooth profiles

[66] Using the TV with Other Devices | Bluetooth devices

Connecting a Bluetooth device

To pair the TV with a Bluetooth device

Only for Bluetooth A2DP-supported models that can use Bluetooth audio devices such as headphones or speakers.

Bluetooth A2DP-supported models that support Bluetooth audio devices have [A/V sync] in [Settings] — [Display & Sound] — [Audio output].

- Turn the Bluetooth device on and put it in pairing mode.
 To put your Bluetooth device in pairing mode, refer to the instruction manual of the device.
- Press the (Quick Settings) button on the remote control, then select [Settings]
 [Remotes and accessories] [Pair accessory] to put the TV in pairing mode.
 Available Bluetooth devices will be displayed.
- 3 Select the desired device, then follow the on-screen instructions.
 If you are prompted to enter a passcode, refer to the instruction manual of the device.

After pairing is completed, the device connects to the TV.

To connect to a paired Bluetooth device

- 2 Select a paired but unconnected device.
- 3 Select [Connect].

Related topics

- <u>Supported Bluetooth profiles</u>
- Operation cuts out, or a device does not work.
- You want to output sound from the headphones/Bluetooth audio device and audio system/TV speakers at the same time.

[67] Using the TV with Other Devices | Bluetooth devices

Adjusting the AV sync setting

If a Bluetooth audio device is connected, there may be a delay between the picture and sound due to the properties of Bluetooth. You can adjust the delay between the picture

and sound with the A/V sync setting. (Only for Bluetooth A2DP-supported models that can use Bluetooth audio devices.)

Bluetooth A2DP-supported models that support Bluetooth audio devices have [A/V sync] in [Settings] — [Display & Sound] — [Audio output].

Press the (Quick Settings) button on the remote control, then select [Settings]

− [Display & Sound] − [Audio output] − [A/V sync] − the desired option.

Hint

- You can also adjust the output timing of the picture and sound if a specific audio system is connected with an HDMI cable. For details about supported models, refer to the support site.
 - Support Site

Note

- Depending on the connected Bluetooth audio device, the picture and sound may not match even when the [A/V sync] setting is set to [Auto].
- To prevent the TV from displaying a black screen immediately after turning it on when a sound bar is connected wirelessly (Bluetooth), set the [A/V sync] setting to [Auto].
- If [Picture mode] is set to one of the options below, the output timing of the picture and sound is not adjusted even when the [A/V sync] setting is set to [Auto].
 - [Game]
 - [Graphics]
 - [Photo]

To adjust [A/V sync] when in any of these modes, select [On].

 The responsiveness of the TV while playing video games may feel slower due to the [A/V sync] setting adding a delay to the output timing of the picture. For games that are dependant on response time, we do not recommend you use a Bluetooth device and recommend that you use the TV speakers or a sound bar with a wired (HDMI cable/digital optical cable) connection instead.

[68] Using the TV with Other Devices | Bluetooth devices

Supported Bluetooth profiles

The TV supports the following profiles:

- HID (Human Interface Device Profile)
- HOGP (HID over GATT Profile)
- A2DP (Advanced Audio Distribution Profile)
- AVRCP (Audio/Video Remote Control Profile)
- SPP (Serial Port Profile)

Related topics

Connecting a Bluetooth device

[69] Using the TV with Other Devices

CEC-compatible devices

CEC overview

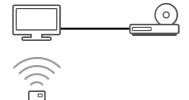
Using features available for CEC-compatible devices

Adjusting CEC settings

[70] Using the TV with Other Devices | CEC-compatible devices

CEC overview

If a CEC-compatible device (e.g., Blu-ray player, AV receiver) is connected with an HDMI cable, you can operate the device with the TV's remote control.



Related topics

- <u>Using features available for CEC-compatible devices</u>
- Adjusting CEC settings

[71] Using the TV with Other Devices | CEC-compatible devices

Using features available for CEC-compatible devices

To operate CEC-compatible devices from the TV, use the - (Input select) button on the remote control to select the device you want to operate.

Blu-ray/DVD player

- Automatically turns the TV on and switches the input to the connected Blu-ray/DVD player when the Blu-ray/DVD player starts to play.
- Automatically turns the connected Blu-ray/DVD player off when you turn the TV off.
- Allows operations such as menu operation and playback with the ▲ (Up) / ▼ (Down)
 / ◀ (Left) / ▶ (Right) buttons on the TV remote control.

AV receiver

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

Video camera

- Automatically turns the TV on and switches the input to the connected video camera when the camera is turned on.
- Automatically turns the connected video camera off when you turn the TV off.
- Allows operations such as menu operation and playback with the ▲ (Up) / ▼ (Down)
 / ◀ (Left) / ▶ (Right) buttons on the TV remote control.

Note

• "CEC control" (CEC) is only available for connected CEC-compatible devices.

Related topics

CEC overview

[72] Using the TV with Other Devices | CEC-compatible devices

Adjusting CEC settings

When CEC is set up, you will be able to turn off a connected device with the TV or set a device connected via HDMI cable to be operated with the TV's remote control.

- 1 Turn on the connected device.
- To enable [CEC control], press the (Quick Settings) button on the remote control, then select [Settings] [Channels & Inputs] [External inputs] [CEC settings] [CEC control].
- Activate CEC on the connected device.

 When a specific Sony CEC-compatible device is connected and powered on and [CEC control] is enabled, CEC is automatically activated on that device. For details, refer to the instruction manual of the connected device.

Available options

Available options are shown below. (Options vary depending on your model/region/country.)

[Auto devices off]

If disabled, the connected device does not turn off automatically when the TV is turned off.

[Auto TV on]

If disabled, the TV does not turn on automatically when the connected device is turned on.

[CEC device list]

Displays the CEC device list.

Related topics

- CEC overview
- <u>Using features available for CEC-compatible devices</u>

Viewing pictures in 4K from compatible devices

Viewing pictures in 4K resolution

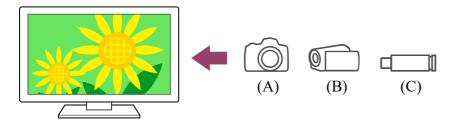
Settings for viewing pictures through HDMI input with higher quality

[74] Using the TV with Other Devices | Viewing pictures in 4K from compatible devices

Viewing pictures in 4K resolution

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. A picture with a 4K or higher resolution can be displayed in 4K resolution (3 840 × 2 160).

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



- (A) Digital still camera
- (B) Camcorder
- (C) USB device

To view pictures stored on a USB device or network device in 4K resolution

- 1 Connect the USB device or network device to the TV.
- 2 Press the ♠(HOME) button, and select Apps from the Home menu, then select [Media Player].

If the supplied remote control has an APPS button, you can press the APPS button.

- 3 Select the USB device name or network device name.
- 4 Select the folder, and then select the file to play.

To view pictures stored on a digital still camera/camcorder

- 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 \rightarrow (Input select) button repeatedly to select the connected device.
- 3 Set the connected device to 4K output.
- 4 Start playback on the connected device.

To check the supported file formats

• Supported files and formats

To view pictures in 4K resolution with higher quality

You can set the HDMI signal format to Enhanced format (ALLM) to view pictures in 4K resolution with higher quality.

For information about Enhanced format or changing the settings, refer to the <u>Settings for viewing pictures through HDMI input with higher quality</u> page.

Note

- A 3D picture cannot be displayed.
- If you change the picture by pressing the ◀ (Left) / ▶ (Right) buttons, it may take a
 moment for the picture to be displayed.

Related topics

- Computers, cameras, and camcorders
- USB devices
- Connecting to a Network

[75] Using the TV with Other Devices | Viewing pictures in 4K from compatible devices

Settings for viewing pictures through HDMI input with higher quality

To display a picture from a device connected to the HDMI input terminal in a higher quality HDMI format*1, set [HDMI signal format] in [External inputs].

^{*1} Such as 8K, 4K 100/120 Hz, 4K 60p 4:2:0 10 bit, 4K 60p 4:4:4, or 4:2:2

HDMI signal format

Follow the on-screen instructions, and set the HDMI signal format for the HDMI input terminal to a suitable format below. Available HDMI signal formats depend on your model and the HDMI input.

- Standard format
- Enhanced format (ALLM)

Note

- When using Enhanced format (ALLM), picture and sound may not be output correctly. In this case, connect the device to an HDMI IN that is in [Standard format], or change the HDMI signal format of HDMI IN to [Standard format].
- Only set to Enhanced format (ALLM) when using compatible devices.
- When you watch 4K picture with High-Quality, use a Premium High Speed HDMI[™]
 Cable(s) that supports speeds of 18 Gbps. For details on a Premium High Speed
 HDMI[™] Cable(s) that supports 18 Gbps, refer to the cable specifications.

Related topics

• Viewing pictures in 4K resolution

[76] Using the TV with Other Devices

BRAVIA Connectivity Guide

Descriptions about connecting devices to the TV are also available on the Sony support website. Refer to it as necessary.

https://www.sony.net/tv_connectivity_guide/

[77]

Connecting to a Network

Connecting to a network

[78] Connecting to a Network

Connecting to a network

Connecting to a network using a LAN cable

Connecting to a network using a wireless connection

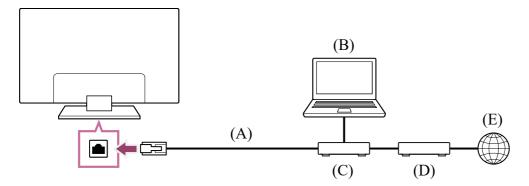
[79] Connecting to a Network | Connecting to a network

Connecting to a network using a LAN cable

Connecting to a network using a LAN cable

A wired LAN connection allows you to access the Internet.

Make sure to connect to the Internet via a router.



- (A) LAN cable
- (B) Computer
- (C) Router
- (D) Modem
- (E) Internet

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).

Note

 It is strongly recommended for security purposes to connect your TV to the Internet via a router/modem that includes router functionality. Direct connection of your TV to the Internet may expose your TV to a security threat such as extraction or tampering of content or personal information.

Contact your service provider or network administrator to confirm your network includes router functionality.

• The network-related settings that are required 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. You can also contact the person who set up the network (network administrator).

Related topics

- The TV cannot connect to the Internet/Network.
- Using Wi-Fi to connect the TV to the Internet/Network

[80] Connecting to a Network | Connecting to a network

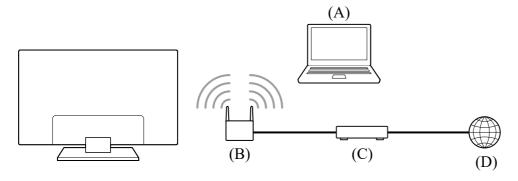
Connecting to a network using a wireless connection

Using Wi-Fi to connect the TV to the Internet/Network

[81] Connecting to a Network | Connecting to a network | Connecting to a network using a wireless connection

Using Wi-Fi to connect the TV to the Internet/Network

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



- (A) Computer
- (B) Wireless router
- (C) Modem

(D) Internet

1 Set up your wireless router.

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

- 3 Select a network you want to connect to and set the password.
 If your TV can not connect to the Internet/Network, refer to <u>The TV cannot connect to the Internet/Network.</u> page.

To turn off the built-in wireless LAN

1 To disable [Wi-Fi], press the **▶** (Quick Settings) button on the remote control, then select [Settings] — [Network and Internet] — [Wi-Fi].

Hint

- For smooth video streaming:
 - Change the setting of your wireless router to a high-speed networking standard such as 802.11n or 802.11ac if possible.
 - For details on how to change the setting, refer to the instruction manual of your wireless router, or contact the person who set up the network (network administrator).
 - If the above procedure does not deliver any improvement, change the setting of your wireless router 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 using the 2.4GHz band.

Note

- It is strongly recommended for security purposes to connect your TV to the Internet via a router/modem that includes router functionality. Direct connection of your TV to the Internet may expose your TV to a security threat such as extraction or tampering of content or personal information.
 - Contact your service provider or network administrator to confirm your network includes router functionality.
- The network-related settings that are required 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. You can also contact the person who set up the network (network administrator).

• If you keep the [Hide password] option in the password entry screen unchecked, the exposed password may be seen by other individuals.

Related topics

- Network (Internet)/apps
- The TV cannot connect to the Internet/Network.
- Connecting to a network using a LAN cable

[82] Connecting to a Network

Viewing Internet content

You can use video streaming services such as YouTube™ and Netflix to watch Internet content. The available services vary depending on your country and region. You can launch these services by selecting their apps in the Home Menu. If a Google Account is set on the TV, you can also select content that is displayed in the Home Menu.

Note

- An Internet connection is required to watch Internet content.
- Video streaming services such as Netflix and Amazon Prime are paid services.
- Supported video streaming services depend on the model/region/country, and some models/regions/countries do not support such services.

Hint

 Even if a Google Account is not setup on the TV, you can still see videos from, for example, YouTube displayed on the Home Menu, as long as the TV is connected to the Internet. To install new apps such as those for video streaming services, you must setup/add a Google Account on the TV.

Related topics

- Installing apps
- Accounts and sign-in
- Enjoying safe apps and video streaming services (Security and restrictions)
- Connecting to a network using a LAN cable
- <u>Using Wi-Fi to connect the TV to the Internet/Network</u>

[83]

Settings

The menus displayed in the TV settings vary depending on your model/region/country.

Using the Quick Settings

Using the Eco Dashboard

<u>Channels & Inputs Channels, External inputs and Recording Settings, etc.</u>

<u>Display & Sound Picture, Screen, Sound and Audio output, etc.</u>

Network and Internet

Accounts and sign-in Configure the Google Account or add other accounts.

Privacy You can restrict installation of apps from unknown sources.

Apps

<u>System Date and time, Language, System sounds, Accessibility, Parental controls and LED indicator, etc.</u>

Remotes and accessories Remote control and Bluetooth settings.

Help and feedback Provides help from Sony and Google.

[84] Settings

Using the Quick Settings

If you press the \(\mathbb{P} \) (Quick Settings) button on the remote control, you can quickly access features such as [Picture mode], [Sleep timer], and [Picture off] on the current screen. You can also display [Settings] from [Quick Settings].

Note

 The menus displayed in the TV settings vary depending on your model/region/country.



- Press the (Quick Settings) button on the remote control.
- 2 Move the focus to change a setting or select it.

To change the settings that are displayed

- 1 Press the 🔑 (Quick Settings) button on the remote control.
- 2 Move the focus left or right, and select **H** (Edit).
- 3 Select the desired setting.
- 4 Select [Close].

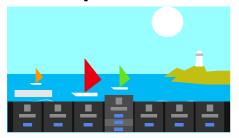
Hint

[85] Settings

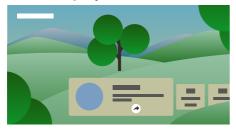
Using the Eco Dashboard

You can configure various settings to reduce power consumption, such as Power saving. You can also check descriptions for features while setting them.

Press the (Quick Settings) button on the remote control, and select [Eco Dashboard].



2 In the displayed menu, move the focus left or right and select the desired setting.



Related topics

• Using the Quick Settings

[86] Settings

Channels & Inputs

Available options

[Channels]

Configures the settings related to receiving broadcast programming. You can also configure the settings related to receiving satellite broadcast programming.

To tune digital channels

Receiving digital broadcasts

To tune your satellite

Receiving satellite broadcasts

To sort channels or edit the channel list

Sorting or editing the channels

[Channel preferences]

Configures [Subtitle settings] and [Audio settings (Broadcast)].

[External inputs]

Configures the settings of the external inputs and CEC.

For details about CEC, refer to CEC-compatible devices.

[TV button shortcut]

Configures what will be launched when the TV button on the remote control is pressed.

[Info banner]

Display programme information when channel is changed.

[Recording Settings]

Configures the settings of USB HDD devices for recording. (This option may not be available depending on your model/region/country.)

[87] Settings

Display & Sound

Available options

[Picture]

Configures display settings that adjust the picture quality, such as screen brightness. To adjust the picture quality to your preferences, refer to the <u>Adjusting the picture</u> <u>quality</u> page.

[Screen]

Adjusts the screen size and position.

[Sound]

Configures settings that adjust the sound.

To adjust the sound quality to your preferences, refer to the <u>Adjusting the sound quality</u> page.

[Audio output]

Configures selection settings related to speakers.

[88] Settings

Network and Internet

Configures settings for such things as wireless LANs and wired LANs.

Related functions

[Remote start]

Allows an external device to turn on the TV. This may increase power consumption more than the normal configuration.

[IP control]

Enable [Simple IP control] to let other devices to communicate with the TV. This may result in higher energy consumption.

Related topics

Connecting to a Network

[89] Settings

Accounts and sign-in

- 1 Press the (Quick Settings) button on the remote control, then select [Settings]
 - [Accounts and sign-in] the desired option.

Available options

When a Google Account is set on the TV

Configure the Google Account or add other accounts.

When a Google Account is not set on the TV

[Accounts and sign-in] cannot be used. To set a Google Account, set up Google TV from the settings menu.

[90] Settings

Privacy

You can restrict the installation of apps from unknown sources.

[91] Settings

Apps

Allows you to configure or uninstall apps, or clear the cache.

Related topics

· Installing apps

[92] Settings

System

Note

 Depending on the settings of the TV, some options may not be displayed or available.

Available options

[Accessibility]

Configures the settings of accessibility features and services for helping users navigate their devices more easily.

[About]

Displays information about the TV.

Here, you can reset your TV

[Date and time]

Configures the current time and auto clock display.

[Language]

Selects the menu language. The selected menu language will also set the voice recognition language.

[Keyboard]

Configures the settings of the on-screen keyboard.

[Storage]

Changes the settings related to data storage.

[Ambient mode]

Configures what is displayed on the screen when the TV is not operated after a certain amount of time while displaying content other than broadcasts and videos.

[Power and energy]

Configures the settings related to saving energy and the startup TV screen.

[Cast/Google Cast]

Configures the operation permissions when casting from an external device.

[System sounds]

Configures the [System sounds] setting.

[Parental controls]

Configures the parental lock settings for restricting usage of items such as [Channels] and [Apps].

[Built-in MIC sensitivity]*

Set the balance of sensitivity and accuracy when processing voice commands.

[LED indicator]

Configures the [Operational response] and [Voice detection status]* settings. (The displayed menu varies depending on the model.)

[Apple AirPlay and HomeKit]

Configures the settings for Apple AirPlay and HomeKit.

[Retail mode settings]

Enriches the display for shop front use by setting [Demo mode], etc.

[Restart]

Restarts the TV.

[93] Settings

Remotes and accessories

- 1 Press the 🎤 (Quick Settings) button on the remote control, then select [Settings]
 - [Remotes and accessories] the desired option.

Available options

^{*} Only TVs with a built-in MIC

You can enable or disable Bluetooth, or register Bluetooth devices.

[Bluetooth]

Enables or disables Bluetooth.

[Pair accessory]

Pairs Bluetooth devices.

[Remote control]

Setup for pairing the Voice Remote Control.

Related topics

- Bluetooth devices
- Remote control
- <u>Using the remote control microphone</u>

[94] Settings

Help and feedback

Help from Sony can be displayed here. If a Google Account is set on the TV, you can also give Google feedback.

[95]

Troubleshooting

Start here Experiencing trouble? Start here.

Picture (quality)/screen

Keyboard

Broadcast reception

Sound

Network (Internet)/apps

Remote control/accessories

Power

Connected devices

USB HDD recording

LED

Start here

Self diagnostics

Software updates

If a full reset (restart) of the TV is required

Frequently Asked Questions for Troubleshooting

[97] Troubleshooting | Start here

Self diagnostics

Check if the TV is working properly.

- 1 Press the ♠(HOME) button, and select Apps from the Home menu, then select [Help].
- 2 Select [Status & Diagnostics] [Self diagnostics].

Hint

You can also check the following symptom in [Status & Diagnostics] — [Signal diagnostics] — [Network status and diagnostics].

• [Internet connection diagnostics]

If the problem persists, try the following.

- Reset (restart) the TV. For details, refer to If a full reset (restart) of the TV is required.
- · Check and try Software updates.
- Support Site

[98] Troubleshooting | Start here

Software updates

Sony will provide software updates from time to time in order to enhance functionality and provide users with the latest TV experience. The easiest way to receive software updates is via an internet connection to the TV.

If you want to check if your software is up-to-date, select [System update] from [Settings] – [System] – [About].

Updating software via USB storage device

If you do not have a network connection, you can also update the software by using a USB storage device. Use your computer to download the latest software from the Sony support website onto a USB storage device. Insert the USB storage device to a USB port on the TV and the software update will start automatically.

If you will update the TV software by using a USB storage device, you should read the cautions for update by USB storage device on the website.

For more about the support site, please see the <u>Support Site</u> page.

Related topics

• Connecting to a Network

[99] Troubleshooting | Start here

If a full reset (restart) of the TV is required

If you have trouble such as the picture not displaying on the screen or the remote control not working, reset the TV with the following procedure.

If an external USB device is connected to the TV, disconnect the USB device from the TV before resetting.

Power Reset

1 Restart the TV with the remote control.

Press and hold the Power button on the remote control and select [Restart]. The TV will turn off and then restart after about one minute.

2 Unplug the AC power cord (mains lead).

If the problem persists after step 1, unplug the TV power cord (mains lead) from the electrical outlet and wait for 2 minutes. Then plug the power cord (mains lead) back into the electrical outlet.

Hint

• Your personal settings and data will not be lost after the TV restarts.

Factory data reset

If the problem persists after a power reset, try a factory data reset.

Note

Performing a factory reset will delete all of the TV's data and settings (such as Wi-Fi and wired network setting information, Google Account and other login information, Google Play and other installed apps).

- Press the (Quick Settings) button on the remote control, then select [Settings]

 [System] [About] [Reset] [Factory reset] [Factory reset].
- 2 Select [Erase everything].

If you have set a PIN code on your TV, you will be prompted to input it.

After the factory reset process completes successfully, the TV will start the Initial Setup wizard. You must agree to the Google Terms of Service and Google Privacy Policy.

[100] Troubleshooting | Start here

Frequently Asked Questions for Troubleshooting

For troubleshooting information, you can also refer to "Frequently Asked Questions" in our support site below.

• http://www.sony.net/androidtv-faq/

[101] Troubleshooting

Picture (quality)/screen

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

<u>Distorted picture./The screen flickers.</u>

High resolution HDR pictures are not displayed.

[102] Troubleshooting | Picture (quality)/screen

No colour/Dark picture/Colour is not

correct/Picture is too bright.

- Check the antenna (aerial)/cable connection.
- Connect the TV to the AC power (mains), and press the Power button on the TV or the remote control.
- Press the (Quick Settings) button on the remote control, and select [Settings] —
 [Display & Sound] [Picture] to make adjustments.
 - For details, refer to Adjusting the picture quality page.
- Press the (Quick Settings) button on the remote control, and check [Brightness] and [Power saving] on the Quick Settings screen.
 - You cannot set [Brightness] when [Power saving] is set to [High]. Change the [Power saving] setting.

Note

- Picture quality depends on the signal and content.
- The picture quality may improve if you change it in [Picture] under [Settings].
 Press the (Quick Settings) button on the remote control, and select [Settings] —
 [Display & Sound] [Picture] [Advanced] [Brightness], and adjust [Brightness] or [Contrast].

Related topics

Display & Sound

[103] Troubleshooting | Picture (quality)/screen

Distorted picture./The screen flickers.

Check the connection and position of the antenna (aerial) and peripheral devices

- 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 the TV.
- Make sure that the antenna (aerial) is connected using a high quality 75-ohm coaxial cable.

Check the [Motion] setting

- Press the

 (Quick Settings) button on the remote control, and select [Settings] —

 [Display & Sound] [Picture] [Advanced] [Motion] [Motionflow] [Off].
- Change the current setting of [Film mode] to [Off].
 Press the (Quick Settings) button on the remote control, and select [Settings] [Display & Sound] [Picture] [Advanced] [Motion] [Film mode].
- Check the [Analogue] settings.
 - - Disable [LNA] to improve picture reception. ([LNA] may not be available depending on your situation/region/country.)
 - Perform [AFT] to improve picture for analogue reception.
 (Availability of [Analogue] and its options may vary depending on the region/country/situation.)

[104] Troubleshooting | Picture (quality)/screen

High resolution HDR pictures are not displayed.

The following are required to watch high resolution HDR pictures such as 4K (50p/60p)*.

- Connect the 4K (50p/60p)* playable device.
- Use a Premium High Speed HDMI[™] Cable(s) that supports 18 Gbps.
- Set [HDMI signal format] to [Enhanced format (ALLM)] by selecting [Settings] —
 [Channels & Inputs] [External inputs] [HDMI signal format] the HDMI terminal you want to set.
- Check whether the connected device has the latest settings or firmware.

[105] Troubleshooting

Keyboard

You cannot operate the current screen after the on-screen keyboard is displayed.

• To return to operation of the screen behind the on-screen keyboard, press the $\stackrel{\bullet}{\supset}$ (BACK) button on the remote control.

^{*} Availability depends on your model/region/country.

Broadcast reception

Check these things first to troubleshoot your TV reception.

You cannot view digital channels.

You cannot view satellite channels.

Some digital channels are missing.

[107] Troubleshooting | Broadcast reception

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 cable or cable connector of antenna (aerial) is not damaged.
- To watch streaming content, connect the TV to the Internet.

Hint

For more information, please visit the Sony support website.
 <u>Support Site</u>

Related topics

- Using Wi-Fi to connect the TV to the Internet/Network
- Connecting to a network using a LAN cable

[108] Troubleshooting | Broadcast reception

You cannot view digital channels.

- Ask a local installer if digital transmissions are provided in your area.
- Upgrade to a higher gain antenna (aerial).

Related topics

• Check these things first to troubleshoot your TV reception.

• Some digital channels are missing.

[109] Troubleshooting | Broadcast reception

You cannot view satellite channels.

- Ask a local installer if satellite services are provided in your area.
- Check the satellite cable connection.
- When [No signal. LNB overload detected. Please turn off your TV and check the satellite connection.] message is displayed, unplug the mains lead. Then, ensure the satellite cable is not damaged and the satellite signal line is not short-circuited in the satellite connector.
- Check your LNB device and settings.
- If your TV has both "MAIN" and "SUB" jacks (sockets), and is not set to satellite twin tuner, the jack (socket) labelled "SUB" cannot be used. In this case, connect your satellite antenna (aerial) to the jack (socket) labelled "MAIN".

[110] Troubleshooting | Broadcast reception

Some digital channels are missing.

To update digital services

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

Configuring automatic service updates

We recommend that [Auto service update] is enabled to allow new digital services to be added automatically as they become available.

If disabled, you will be notified of new digital services by an on-screen message and the services will not be automatically added.

Hint

 The availability of this function depends on your region/country. If unavailable, perform [Auto tuning] to add new services.

Related topics

- Check these things first to troubleshoot your TV reception.
- You cannot view digital channels.

[111] Troubleshooting

Sound

No sound but good picture.

No audio or low audio with a home theatre system.

You want to output sound from the headphones/Bluetooth audio device and audio system/TV speakers at the same time.

You are concerned about a delay between the picture and sound.

No TV sounds such as operation sound or audio response.

You cannot establish an eARC connection.

You cannot use voice search with the built-in MIC (only TVs with a built-in MIC).

The TV responds to sound from the surroundings (only TVs with a built-in MIC).

[112] Troubleshooting | Sound

No sound but good picture.

- Check the antenna (aerial)/cable connection.
- Connect the TV to the AC power (mains), and press the Power button on the TV or the remote control.
- · Check the volume control.
- Press

 (Mute) or

 (Volume) + button to cancel muting.
- Press the

 (Quick Settings) button, then select [Speakers] − [TV speakers].
- If headphones or Bluetooth audio devices are connected, sound is not output from the TV speakers or audio system connected via eARC/ARC. Remove the headphones or disconnect the Bluetooth audio device.

Related topics

• No audio or low audio with a home theatre system.

[113] Troubleshooting | Sound

No audio or low audio with a home theatre system.

- Press the (Quick Settings) button on the remote control, then select [Settings] –
 [Display & Sound] [Audio output] [Speakers] [Audio system].
- If the audio system is not compatible with Dolby Digital or DTS, set [Settings] [Display & Sound] [Audio output] [Digital audio out] to [LPCM].
- If you select an analogue (RF) channel and pictures are not displayed correctly, you will need to change the TV broadcast system. Press the (Quick Settings) button on the remote control, then select [Settings] [Channels & Inputs] [Channels] [Channel setup] [Manual tuning] [Analogue] [Analogue manual tuning] [TV system]. (Availability of [Analogue] or option name differs depending on the region/country/situation.)
- Check if the [Digital audio out volume] setting of the TV is at maximum.
- When using HDMI input with Super Audio CD or DVD-Audio, DIGITAL AUDIO OUT (OPTICAL) may not provide an audio signal.

Related topics

• Connecting an audio system

[114] Troubleshooting | Sound

You want to output sound from the headphones/Bluetooth audio device and audio system/TV speakers at the same time.

To output sound from both the headphones/Bluetooth audio device and TV speakers

The TV cannot output sound from both the headphones or Bluetooth audio device and the TV speakers at the same time.

To output sound from both an audio system connected via eARC/ARC and TV speakers

Sound can be output from both an audio system connected to the TV and the TV speakers at the same time by satisfying the following conditions.

- Connecting the TV and audio system using a digital optical cable
- Setting [Speakers] to [TV speakers]

For details about digital optical cable connections, refer to the <u>Connecting an audio</u> <u>system</u> page.

[115] Troubleshooting | Sound

You are concerned about a delay between the picture and sound.

If a Bluetooth audio device is connected

The picture and sound do not match because the sound is delayed due to the properties of Bluetooth. You can adjust the output timing of the picture and sound with the A/V sync setting.

Set [A/V sync] to [Auto]. Press the **▶** (Quick Settings) button on the remote control, then select [Settings] — [Display & Sound] — [Audio output] — [A/V sync].

If a specific audio system is connected with an HDMI cable

If the audio device is connected with an HDMI cable, the sound may be delayed due to the properties of the audio device. In that case, you can adjust the video and audio output timing with the A/V sync setting.

Set [A/V sync] to [Auto]. Press the **▶** (Quick Settings) button on the remote control, then select [Settings] — [Display & Sound] — [Audio output] — [A/V sync].

Related topics

- Adjusting the AV sync setting
- · Adjusting an audio system

No TV sounds such as operation sound or audio response.

If the TV is connected via eARC and [Digital audio out] is set to [Prioritise pass through], TV sounds such as those from remote control operation or voice responses may not output because audio signals from the HDMI input are passed through to the eARC audio system. To output those sounds from the TV, try the following.

- Stop watching the HDMI input device.
- · Set [Digital audio out] to [Auto] or [LPCM].

[117] Troubleshooting | Sound

You cannot establish an eARC connection.

- · Connect the audio system to an HDMI cable with Ethernet.
- Connect the audio system to the TV's HDMI input terminal bearing the text "ARC" or "eARC/ARC".
- Configure the settings as follows.
 [Settings] [Display & Sound] [Audio output] [Speakers] [Audio system]
- Enable the audio system's eARC feature.

Related topics

• Connecting an audio system

[118] Troubleshooting | Sound

You cannot use voice search with the built-in MIC (only TVs with a built-in MIC).

Check if the Built-in MIC Switch is on. The voice recognition performance of the built-in MIC may also degrade in the following cases.

- · When eARC features are enabled
- When a sound bar is connected
- When [Digital audio out] is set to [Prioritise pass through]

The TV responds to sound from the surroundings (only TVs with a built-in MIC).

The TV's built-in MIC may pick up sound from the surroundings and respond unintentionally.

Change the sensitivity of the TV's built-in MIC to [Medium] or [Low].

Press the (Quick Settings) button on the remote control, and select the following in order.

[Settings] - [System] - [Built-in MIC sensitivity]

[120] Troubleshooting

Network (Internet)/apps

The TV cannot connect to the Internet/Network.

You can connect to the Internet, but not to certain apps and services.

[121] Troubleshooting | Network (Internet)/apps

The TV cannot connect to the Internet/Network.

If the wireless network does not connect or disconnects, try the following.

 Press the (Quick Settings) button on the remote control and check that the following setting is enabled.

[Settings] — [Network and Internet] — [Wi-Fi]

- Check the installation location of the TV and wireless router. Signal condition may be affected by the following:
 - Other wireless devices, microwaves, fluorescent lights, etc., are placed nearby.
 - There are floors or walls between the wireless router and TV.
- Turn the wireless router off and then on again.
- If the network name (SSID) of the wireless router to which you want to connect is not displayed, select [Add new network] to enter a network name (SSID).

If the problem is not resolved even after the procedures above or if you cannot connect even with a wired network, check the status of the network connection.

Checking the status of the network connection

Check your network connections and/or server's instruction manual for connection information, or contact the person who set up the network (network administrator).

Hint

• The solution varies depending on the network status check. For solutions based on each issue, see "Frequently Asked Questions" on the Sony Support Site.

Note

 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 (Quick Settings) button on the remote control, then select [Settings] – [Network and Internet] – [Network status].

Related topics

- <u>Using Wi-Fi to connect the TV to the Internet/Network</u>
- Connecting to a network using a LAN cable

[122] Troubleshooting | Network (Internet)/apps

You can connect to the Internet, but not to certain apps and services.

- The date and time settings of this TV may be incorrect. Depending on certain apps and services, you may not be able to connect to those apps and services if the time is incorrect.
- Check that the LAN cable and AC power cord (mains lead) of the router/modem* has been properly connected.
 - * Your router/modem must first be setup 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.

Hint

For more information, please visit the Sony support website.
 <u>Support Site</u>

Related topics

- Connecting to a network using a LAN cable
- <u>Using Wi-Fi to connect the TV to the Internet/Network</u>

[123] Troubleshooting

Remote control/accessories

The remote control does not operate.

[124] Troubleshooting | Remote control/accessories

The remote control does not operate.

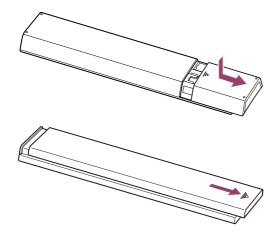
Check if the TV is working properly

- Press the Power button on the TV to determine if the problem is with the remote control
 or not. For the location of the Power button, refer to the Reference Guide/Setup Guide
 supplied with the TV.
- If the TV is not working, try resetting it.
 If a full reset (restart) of the TV is required

Check if the remote control is working properly

- Point the remote control at the remote control sensor located at the front of the TV.
- Keep the remote control sensor area clear from obstacles.
- Fluorescent light can interfere with remote control operation; try turning off any fluorescent light.
- Check that the orientation of each battery matches the positive (+) and negative (-) symbols in the battery compartment.
- Battery power may be low. Remove the remote control cover and replace the batteries with new ones.

- Sliding type



Note

- Remote controls with a Google Assistant/MIC button are connected to the TV using Bluetooth. Radio interference may occur in the following situations and cause issues such as poor operation of microphone or remote control because Bluetooth radio waves use the same frequency as radio waves emitted from microwaves and wireless LANs (IEEE 802.11a/b/g/n/ac/ax).
 - There are people or obstacles (such as metal objects or walls) between the TV and remote control.
 - A microwave is being used nearby
 - There is a wireless LAN access point nearby
 - The TV and remote control are unpaired

In these cases, try the following solutions.

- Use the remote control closer to the TV
- Remove obstacles between the TV and remote control
- Use the remote control when a microwave is not in use
- Turn off other Bluetooth devices
- Check the TV's Bluetooth setting and turn it on and off
 Press the (Quick Settings) button on the remote control and select the following in order.
 If [Settings] [Remotes and accessories] [Bluetooth] is disabled, enable it. If it is enabled, disable and then enable it again.
- Set wireless LAN access points and microwaves at least 10 m away from the TV
- If the 5 GHz band (IEEE802.11a) is available in the wireless LAN, connect to the 5 GHz band
- Pair the remote control again
 - Press the (Quick Settings) button on the remote control, and select the following in order. [Settings] [Remotes and accessories] [Remote control] [Connect via Bluetooth] [Connect a new remote] follow the on-screen instructions to reconnect the remote control. If you cannot operate the TV with the supplied remote control, select the above in order until [Connect a new remote] using another Sony TV's remote control, and then try connecting again with the supplied remote control.

Depending on your model, a Bluetooth remote control is supplied and already paired
with the TV. At the time of shipment, the supplied paired remote control cannot be
used to operate other TVs. When checking remote control operation, use with the TV
with which the remote control was supplied.

Reset the remote control

If the remote control does not operate correctly due to poor battery contact or static electricity, the problem may be resolved by resetting the remote control.

- 1 Remove the batteries from the remote control.
- 2 Press the Power button on the remote control for three seconds.
- 3 Install new batteries into the remote control.

If the problem persists, refer to <u>If a full reset (restart) of the TV is required</u> and <u>Frequently</u> <u>Asked Questions for Troubleshooting</u> pages.

Note

When you unplug the TV and plug it in again, the TV may not be able to turn on for a
while, even if you press the Power button on the remote control or the TV. This is
because it takes time to initialise the system. Wait for about 10 to 20 seconds, then
try again.

Related topics

• Using the remote control microphone

[125] Troubleshooting

Power

The TV cannot be turned off using the remote control.

The TV turns off automatically.

The TV turns on automatically.

The TV does not turn on.

The TV cannot be turned off using the remote control.

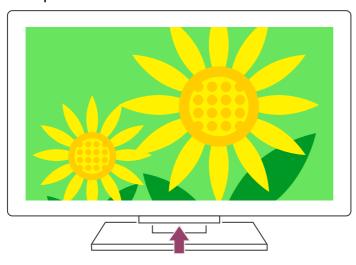
The batteries in the remote control may be depleted. Replace them with new ones or turn off the TV using the Power button on the TV.

You can press and hold the Power button on the TV to turn it off.

Note

 The location of the Power button on the TV varies depending on your model/country/region.

Example of model with the Power button under the LED



Hint

- For TV models with 1 button on the TV (Power button only), you can press the Power button on the TV to display the operation menu and adjust the volume or change channels.
- When the battery level of the remote control is low, you will see a notification on the HOME menu.

Related topics

- The remote control does not operate.
- If a full reset (restart) of the TV is required
- Home menu
- Using the Quick Settings

The TV turns off automatically.

- The screen may have been turned off due to [Sleep timer] settings.
- · Check the [Duration] setting of [On timer].
- Check if [Auto shut-off] in [Power and energy] is set.

To check the settings, press the (Quick Settings) button on the remote control and select the following in order.

[Settings] – [System] – [Power and energy] – [Auto shut-off] – the desired option.

[128] Troubleshooting | Power

The TV turns on automatically.

- · Check if the [On timer] is activated.
- Disable the [Auto TV on] setting in [CEC settings].

Related topics

CEC-compatible devices

[129] Troubleshooting | Power

The TV does not turn on.

Perform the procedures in the order below until the problem is solved.

1. Check if the TV turns on with the remote control.

Point the remote control at the sensor on the front of the TV and press the Power button on the remote control.

Check if the TV turns on.

If the TV does not turn on, try resetting (restarting) the TV.

If a full reset (restart) of the TV is required

2. Check if the TV turns on with the Power button on the TV.

Press the Power button on the TV and check if the TV turns on.

For the location of the Power button, refer to the Reference Guide/Setup Guide.

If the TV turns on with this procedure, there may be a problem with the remote control. Refer to the following topic.

• The remote control does not operate.

3. Unplug the AC power cord (mains lead).

Unplug the TV power cord (mains lead) from the electrical outlet. Then press the Power button on the TV and wait for 2 minutes, and plug the power cord (mains lead) back into the electrical outlet.

Hint

When you unplug the TV and plug it in again, the TV may not be able to turn on for a
while, even if you press the Power button on the remote control or TV. This is
because it takes time to initialise the system. Wait for about 35 to 45 seconds, then
try again.

Related topics

- The remote control does not operate.
- If a full reset (restart) of the TV is required

[130] Troubleshooting

Connected devices

No picture from a connected device.

You cannot select a connected device.

You cannot find a connected HDMI CEC device.

Operation cuts out, or a device does not work.

[131] Troubleshooting | Connected devices

No picture from a connected device.

- Turn the connected device on.
- Check the cable connection between the device and TV.
- Press the (Input select) button to display the list of inputs, then select the desired input.
- 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.
- Change the HDMI signal format of the HDMI input that does not display a picture to standard format. Press the (Quick Settings) button on the remote control, then select [Settings] — [Channels & Inputs] — [External inputs] — [HDMI signal format] — the HDMI input you want to set.

Related topics

<u>Using the TV with Other Devices</u>

[132] Troubleshooting | Connected devices

You cannot select a connected device.

· Check the cable connection.

Related topics

• <u>Using the TV with Other Devices</u>

[133] Troubleshooting | Connected devices

You cannot find a connected HDMI CEC device.

- Check that your device is CEC-compatible.
- Make sure that CEC is enabled on the CEC-compatible device, and [Settings] —
 [Channels & Inputs] [External inputs] [CEC settings] [CEC control] is set up on the
 TV.

Related topics

CEC-compatible devices

[134] Troubleshooting | Connected devices

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 mobile devices) are placed nearby,
 radio wave interference is more likely to happen.
- The TV or device 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.
- When multiple Bluetooth devices are connected to the TV, the quality of Bluetooth communication may deteriorate.

Related topics

· Bluetooth devices

[135] Troubleshooting

USB HDD recording

You cannot use a USB HDD device.

[136] Troubleshooting | USB HDD recording

You cannot use a USB HDD device.

- Check that the USB HDD device is:
 - connected properly.

Check that it is connected to the blue USB port labelled as "HDD REC".

- turned on.
- Device is detected by the TV.
- Connecting the USB HDD device via a USB hub is not supported.
- Press the (Quick Settings) button on the remote control, then select [Settings] [Channels & Inputs] [Recording Settings].

Select Recording device and ensure PVR is enabled.

Note

- Check if the USB HDD device is connected to the USB port (blue) indicated as "HDD REC".
- Ensure that the USB HDD is detected as "Removable storage", if no proceed to step 3.
- 3 Select the USB HDD, then select [Delete and format as device storage].
- 4 Follow the on-screen instructions to format the USB HDD.
- 5 Select the USB HDD, then select [Delete and format as removable storage].
- 6 Follow the on-screen instructions to format the USB HDD.

Related topics

· Information about using a USB HDD device for recording

[137] Troubleshooting

IFD

You want to disable the LED so that it does not light up or blink.

The Operational response LED blinks in red.

[138] Troubleshooting | LED

You want to disable the LED so that it does not light up or blink.

You can use the settings below to turn off the LED.

To turn off the Operational response LED (white LED)

To turn off the Operational response LED (amber LED)/voice function LED (amber LED) (only TVs with a built-in MIC)

To turn off the amber voice function LED when the Built-in MIC switch is turned off, or to turn off the amber operational response LED when the Built-in MIC switch is on, in [Settings] – [System] – [LED indicator], disable [Voice detection status].

Related topics

• How the LEDs light up

[139] Troubleshooting | LED

The Operational response LED blinks in red.

Count how many times it flashes (interval time is three seconds).

Reboot the TV by disconnecting the AC power cord from the TV for two minutes, then turn on the TV.

If the problem persists, disconnect the AC power cord, and contact Sony Customer Support with the number of times the Operational response LED flashes.

[140]

Index/Other

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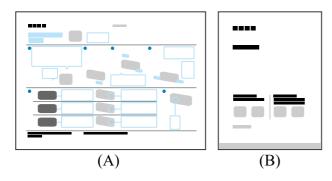
- Restart
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[142] Index/Other

About the Help Guide

This Help Guide explains how to use this TV. You can also refer to the Setup Guide for descriptions about TV installation, and the Reference Guide for information such as specifications, and wall mounting of this TV.



- (A) Setup Guide
- (B) Reference Guide

Help Guide versions

There are two versions of the Help Guide: the built-in version and the online version. The online Help Guide includes the latest information.

The online Help Guide is automatically displayed when the TV is connected to the internet, otherwise the built-in Help Guide is displayed.



Help Guide structure

For details about the structure of the Help Guide, see the Help Guide structure page.

Note

- To use the latest features described in the Help Guide, you may need to update the TV's software. For details about software updates, see the <u>Software updates</u> page.
- The names of settings in the Help Guide may differ from those displayed on the TV depending on the TV's release date or your model/country/region.
- The images and illustrations used in the Help Guide may differ depending on your TV model.
- Design and specifications are subject to change without notice.
- The Help Guide contains descriptions common across all models/regions/countries.
 Some descriptions of features do not apply depending on your model/region/country.

Hint

• This Help Guide is written for all regions/countries. Some descriptions contained in this Help Guide do not apply to some regions and countries.

Related topics

- Connecting to a network using a LAN cable
- <u>Using Wi-Fi to connect the TV to the Internet/Network</u>

[143] Index/Other

Help Guide structure

The Help Guide is structured as follows.

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- Enjoying preferred apps
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- Audio system (such as an AV receiver or sound bar).
- <u>Video game consoles</u>
- · Bluetooth devices
- <u>CEC-compatible devices</u>
- <u>Viewing pictures in 4K from compatible devices</u>
- BRAVIA Connectivity Guide

Connecting to a Network

- Connecting to a network
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Troubleshooting

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[144] Index/Other

Specifications

You can find the specification information on the Sony support website:

Please visit the product page of your TV and refer to Specifications. For more about the support website, see the <u>Support Site</u> page.



• A Specifications page may not be available depending on your model. In such cases, please refer to the Reference Guide.

Related topics

• Computer video signal specifications

[145] Index/Other

Support Site

For the latest information and Online Help Guide, please visit the Sony support website:

https://www.sony.eu/support/

[146] Index/Other

Keeping the TV updated

The TV acquires data such as programme guides while it is in standby/networked standby mode. To keep your TV updated, we recommend that you turn off the TV normally by using the Power button on the remote control or TV.

[147] Index/Other

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Note

• The availability of each service depends on your region/country.