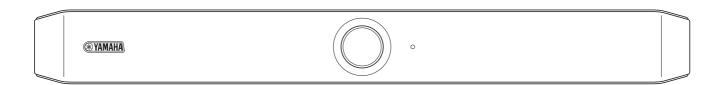


VIDEO CONFERENCE SYSTEM

CS-800





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Introduction

Thank you for purchasing the Yamaha CS-800. This product is a video conferencing system for holding remote conferences in huddle spaces and meeting rooms. It can be used as an audio/video device in combination with your unified communications setup. For comfortable remote collaboration, this device is equipped with a high-quality camera, microphone and speaker.

About this manual

This manual uses the following signal words for important information.

WARNING	This content indicates "risk of serious injury or death."
CAUTION	This content indicates "risk of injury."
NOTICE	Indicates content that you must observe in order to prevent the product from malfunctioning, being damaged, or operating incorrectly, and to avoid data loss.
IMPORTANT	Indicates content that you must know in order to operate and use the product correctly.
NOTE	Indicates information that is related to operation and use. Read this for your reference.

- The illustrations as shown in this manual are for instructional purposes only.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.
- Yamaha continuously makes improvements and updates to the software included in this product. You can download the latest software from the Yamaha website.
- The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.

Included items

- CS-800 (device)
- · Read This First
- · Safety Guide
- Quick Guide
- USB 2.0 cable (Type C-A, 5 m)
- HDMI cable (2 m)
- · Remote control
- Lens cap
- · Terminal cover
- Coin battery (CR2032) × 2
- AC adaptor with power cord (CW2002100)
- Table stand
- · Wall mounting bracket (mounting accessory)
- · Scrows
 - Terminal cover screw (2.5 mm × 8 mm) × 2
 - Hexagonal screw (M3 × 8 mm) for table stand × 2
 - Device fixing screw (M3 × 8 mm) for wall mounting bracket × 1
- · Hexagonal wrench

Separately sold items

- Monitor mounting bracket (mounting accessory) BRK-TV1
 This is required for installing the device onto the VESA mount of a TV.
- USB cables: CBL-L10AC (10 meters), CBL-L25AC (25 meters)

These are fiber optic USB cables. They are used when the device and computer are far apart. These support USB 3.2 Gen2 (Super Speed Plus) and can communicate at high speeds up to 10 Gbps.

NOTE

The VESA standards are international standards that define the spacing between screw holes used when attaching video equipment, such as TVs, to wall mounts and TV stands.

Available manuals

The manuals for this product can be downloaded in the PDF format from the following website.

▼ Yamaha websiteU.S.A. and Canada: Other Countries:

https://uc.yamaha.com/support/ https://download.yamaha.com/

☐ Read This First (included) This describes what to do first after purchasing the product.

☐ **CS-800 Safety Guide (included)** This contains the precautions for using this product safely.

☐ **CS-800 Quick Guide (included)** This provides mainly basic information for using this product, such as part names, installation procedures and setup operations, as well as

details on where to obtain other related information.

☑ CS-800 User Guide (this manual) This provides detailed information on all of the features, including

those covered in the Quick Guide. It also explains how to use the Yamaha CS Manager application on your computer to configure and

operate the device.

Available utility software

This utility software can be used to set up the device according to its use and environment. The software can be downloaded from the following website.

▼ Yamaha website

U.S.A. and Canada: Other Countries:

https://uc.yamaha.com/support/ https://download.yamaha.com/

■ Yamaha CS Manager This is software that allows you to configure and operate the device

from your computer. For details, refer to "Using Yamaha CS Manager to specify detailed settings" in this manual. (Page 26)

Updating the firmware

This product is designed to allow the firmware of the device to be updated in order to improve operability, add functions and fix problems. We recommend updating the device firmware to the latest version.

1. Download from the website.

Download the CS-800 firmware file from the following website.

▼ Yamaha website

U.S.A. and Canada: Other Countries:

https://uc.yamaha.com/support/ https://download.yamaha.com/

2. Update using Yamaha CS Manager.

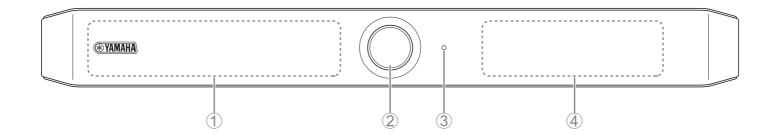
Update from the [Update] screen in the [Tools] menu of Yamaha CS Manager. (Page 49)

Related links

• Yamaha CS Manager > Updating the firmware (Page 49)

Controls and connectors

Front panel



1 Microphone

The audio captured by this microphone is delivered to the remote party of the connection.

2 Camera

The video captured by this camera is delivered to the remote party of the connection.

3 Status indicator

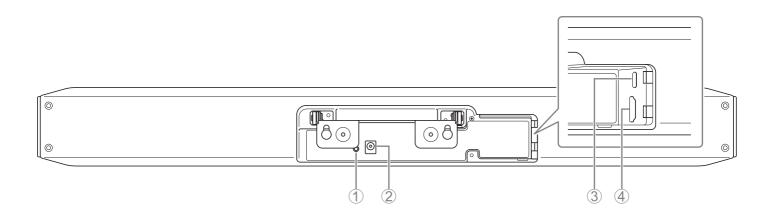
Indicates the status of the device. The lower the item in the following list, the higher the priority for indication.

Indicator	r state	Device status
White (lit)		Standby
Light blue (lit)		Camera operating
Green (lit)		During a call
Red (lit)		Microphone muted
White (flashing)	0.361 time/sec	Starting
Unlit		Turned off; power-saving standby
White (flashing)	0.3 time/sec	Monitoring off
Orange (flashing)	1 time/sec	Factory reset; activation of HDMI connection/DisplayLink function/Bluetooth
Blue (flashing)	1 time/sec	Pairing with the remote control or smart device
Blue (lit)	3 seconds	Completion notification of remote control pairing
Green (flashing)	2 times/sec	Receiving a call
Red (flashing)	2.5 times/sec	Hardware error
Orange (flashing)	2 times/sec	Receiving firmware data
Orange (flashing)	10 times/sec	Updating firmware
Orange<>Red (fla	shing alternately)	Firmware update failed

4 Speaker

Outputs the audio from the remote party.

Rear panel



① [FUNCTION] button

Can be used to pair the device with the remote control or to return the device to its factory default settings (factory reset).

② [DC-IN] jack

Connect the AC adaptor here. After connecting the AC adaptor to the [DC-IN] jack on the rear panel, insert the power plug into an electrical outlet.

Connecting the AC adaptor automatically turns on the device.

③ [USB] port (Type C)

This port is for connecting the device to a computer. This enables displaying the computer screen on the TV and configuring the device. Use the included USB 2.0 cable (Type C-A) for this connection. For details on connecting this device, refer to "Connecting devices (sample setups)" (page 11).

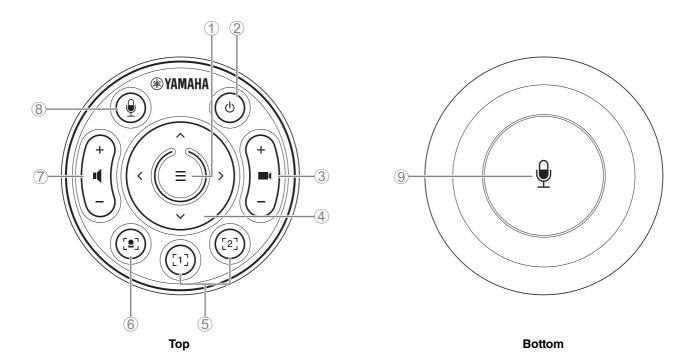
4 [HDMI] port

This port is for connecting the device to a TV. This allows the TV to display the screen of the computer connected to the [USB] port and the device's on-screen display.

Related links

- Returning to factory default settings (factory reset) (Page 54)
- · Connecting devices (sample setups) (Page 11)

Remote control



1 Menu button

Can be used to display the on-screen display menu on the TV or pair the device with the remote control.

2 Power button

Used to turn the CS-800 on/standby.

3 Camera zoom button

Used to enlarge/reduce (zoom in/out) the video being captured by the camera.

4 Pan/tilt button

Used to adjust the camera angle horizontally/vertically. It can also be used for smart framing operations or moving the cursor in the on-screen display menu displayed on the TV.

5 Camera preset 1 & 2 buttons

Two sets of PTZ (pan, tilt and zoom) settings can be saved and recalled. Long-press (for 2 seconds) this button to save the settings adjusted with buttons ③ and ④. To recall, simply press the button.

6 Smart framing button

Used to turn on/off smart framing*. For details on specifying settings for smart framing, refer to "Smart framing settings" (page 41).

Speaker volume buttons

Used to turn up/down the volume of the speakers.

8 9 Microphone mute button

Used to turn on/off the microphone.

Related links

- · Specifying camera presets
 - Yamaha CS Manager > Camera settings > 1
- Smart framing settings (Page 41)

* Smart framing

With this function, the camera follows the subject according to the mode. Select the appropriate mode according to the use.

[Group]: Frames all persons in the group

[Speaker Tracking]: Frames the person who is speaking

[Individual]: Frames a specific person

To change the smart framing mode, use the remote control, on-screen display menu (Page 25) or Yamaha CS Manager (Page 41).

[Remote control operation]

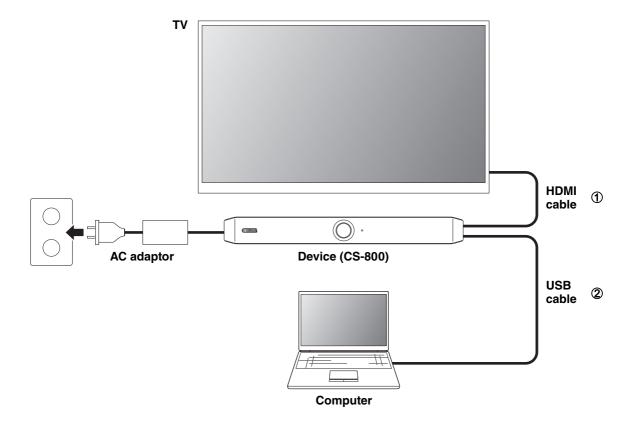
- Use button 6 to turn on smart framing.
- Use the tilt (up/down) button 4 to change the smart framing mode.
- With the [Individual] mode, use the pan (left/right) button 4 to select the person to be focused on.
- With the [Group] mode, the camera zoom button ③ is deactivated.

Setup and connections

Connecting devices (sample setups)

■ When bringing your own PC

When bringing your own computer to the videoconferencing location, make connections as shown in the example below.



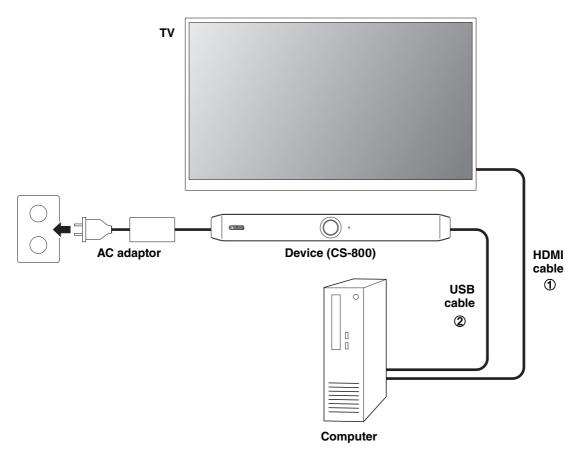
- ① Connect one end of the included HDMI cable to the [HDMI] port on the device, and connect the other end to the TV.
- ② Connect one end of the included USB cable to the [USB] port on the device, and connect the other end to the computer.

NOTE

- Be sure to first follow the procedure in "Specifying the necessary settings for using a computer you brought in or a smart device" (page 16).
- In order to display the computer screen on a TV, it may be necessary to install the DisplayLink® driver. For details, refer to "Installing the DisplayLink® driver onto your computer" (page 17).

■ When using the meeting room PC

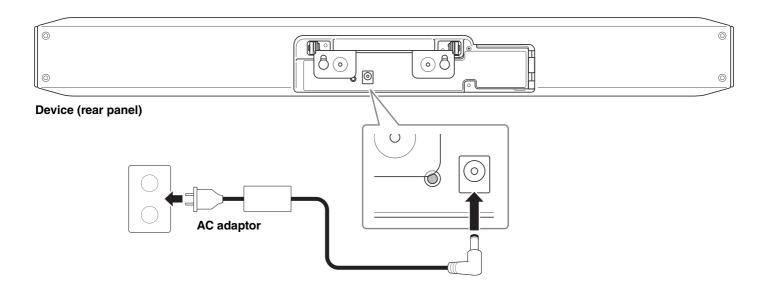
When the videoconferencing location is equipped with a dedicated computer or tablet, make connections as shown in the example below.



- ① Connect one end of the included HDMI cable to the computer, and connect the other end to the TV.
- ② Connect one end of the included USB cable to the [USB] port on the device, and connect the other end to the computer.

Connecting the power supply

Connect one end of the included AC adaptor to the [DC-IN] jack on the device, and connect the other end to an electrical outlet.



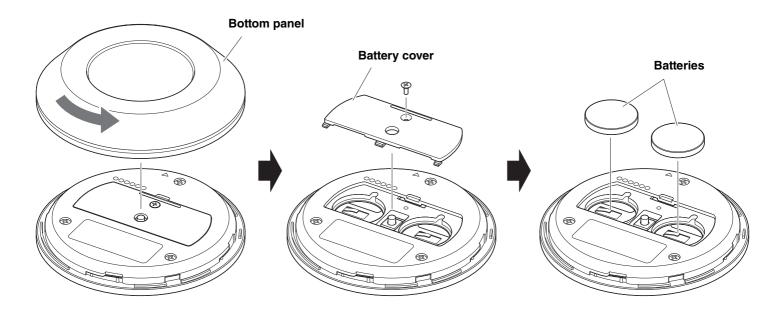
Connecting the AC adaptor automatically turns on the device.

NOTE

After the power supply has been connected, the device can be turned on or set to standby with the power button on the remote control.

Inserting/replacing the remote control batteries

Before inserting the included batteries (CR2032 \times 2) into the remote control, remove the bottom panel and battery cover. To replace the batteries, remove the old ones and install new ones (sold separately).



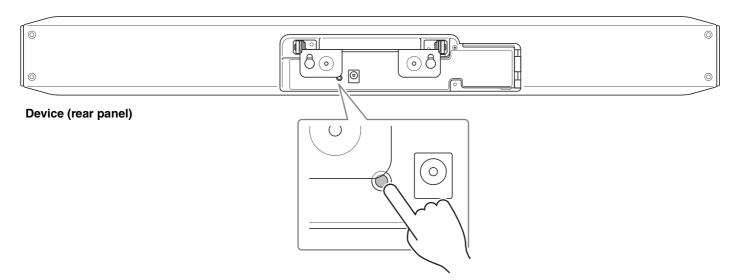
IMPORTANT

- When replacing the batteries, be sure to use the specified type (CR-2032).
- Dispose of used batteries according to the local regulations.

Pairing the device and remote control

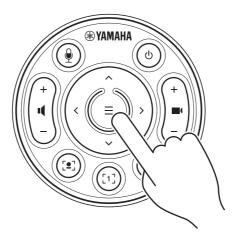
In order to operate the device with the remote control, follow the procedure below to pair them.

1. Long-press the [FUNCTION] button (on the rear panel of the device) for at least 2 seconds.



The status indicator on the front panel of the device flashes in blue.

2. Long-press the menu button on the remote control for at least 2 seconds.



Pairing is finished after the status indicator on the front panel of the device lights up in blue for 3 seconds.

NOTE

Long-pressing the [FUNCTION] button on the rear panel of the device will unpair the paired remote control. To pair the remote control again, follow the pairing procedure above.

Related links

- Remote control (Page 9)
- Specifying the necessary settings for using a computer you brought in or a smart device (Page 16)
- Configuring the device from a TV screen (on-screen display menu) (Page 25)

Specifying the necessary settings for using a computer you brought in or a smart device

Activation of the HDMI connection/DisplayLink function/Bluetooth is necessary in order to use your own computer/smart device.

NOTE

Before performing the following operation, follow the procedure in "Pairing the device and remote control" (page 15).

Long-press the menu button and camera preset 2 button on the remote control for at least 3 seconds.



Configuration is finished after the status indicator on the front panel of the device flashes in orange five times at a 0.5-second interval.

Installing the DisplayLink® driver onto your computer

In order to display the computer screen on a TV, it may be necessary to install the DisplayLink driver (DisplayLink Manager on a Mac). If the computer screen is not displayed on the TV, even after checking the following, install the DisplayLink driver.

- The device and TV are connected with an HDMI cable.
- The TV input is correctly set.
- The display settings of the computer are set to "duplicate" or "extend" the display.
- The operation described in "Specifying the necessary settings for using a computer you brought in or a smart device" (Page 16) has been performed.
- DisplayLink has been activated in Yamaha CS Manager. (Page 42)

Download the latest DisplayLink driver from the following website.

(The following website is not operated by Yamaha Corporation.)

▼ DisplayLink driver download page https://displaylink.com/downloads

Selecting the device on the computer

On your computer, select "Yamaha CS-800" as both the default audio playback device and recording device. Also, in the video conferencing software, select CS-800 as both the video device and audio device.

1. Select "Yamaha CS-800" as both the default playback device and recording device.

[For Windows]

- ① Right-click the speaker icon on the taskbar, and then select "Open Sound settings."
- 2 Select "Sound Control Panel" under "Related Settings".
- ③ From the list of devices on the [Playback] tab, select "Yamaha CS-800," and then right-click it.
- 4 Select "Set as Default Device".
- ⑤ From the list of devices on the [Recording] tab, select "Yamaha CS-800", and then right-click it.
- 6 Select "Set as Default Device".

[For macOS]

- 1 Select the Apple menu in the menu bar.
- 2 Select "Sound" in "System Preferences".
- 3 Select [Sound].
- 4 Select "Yamaha CS-800" on the [Output] tab.
- ⑤ Select "Yamaha CS-800" on the [Input] tab.

2. In the video conferencing software, select CS-800 as both the video device and audio device.

Perform the appropriate operation in the video conferencing software to select CS-800 as both the video device and audio device.

Using smart devices in meetings

By connecting a smart device (mobile phone or tablet) to this device via Bluetooth, you can hold a remote conference with someone on their smart device. (Audio only)

■ What can be done with a Bluetooth connection

Holding a conference call

Through the CS-800, you can hold a conference call with a remote person on their smart device.

From the smart device connected to this device via Bluetooth, call the smart device of the person to be included in the conference call.

Allowing someone on their smart device to remotely join a video conference

While a video conference is being held through the CS-800, a remote person on their smart device can participate in the conference by audio only. The participating remote person can talk to any other participants in the video conference.

From the smart device connected to this device via Bluetooth, call the smart device of the person to join the conference.

■ Making a Bluetooth connection

When connecting for the first time: Pairing

When connecting a Bluetooth-enabled smart device to this device for the first time, the devices must be paired.

- 1) Preparation: Activate Bluetooth on this device and the smart device.
- Activate Bluetooth on the CS-800. ("Specifying the necessary settings for using a computer you brought in or a smart device" on page 16)
- Turn on Bluetooth on the smart device.
- 2 Pairing: Pair using any of the following methods.
- With the remote control, use the on-screen display menu (Page 25) to pair.
- Use Yamaha CS Manager on the computer to pair. (Page 38)

2. When connecting for the second and subsequent times: Making a Bluetooth connection

A paired smart device can be connected by using the on-screen display menu or the smart device.

NOTE

- The camera (video) of the CS-800 cannot be used in meetings.
- A computer connected via USB and a smart device connected via Bluetooth can be connected at the same time.
- Multiple smart devices cannot be used in a call at the same time.
- If Yamaha CS Manager is used to delete pairing information (Page 36), or if Yamaha CS Manager is set to delete pairing information when a connection is cut, perform pairing again.
- The Bluetooth connection can be cut by using any of the following methods.
 - Disconnect by using the smart device.
 - Disconnect by using the on-screen display menu or Yamaha CS Manager.
 - Move the connected smart device out of the range of the Bluetooth signal.

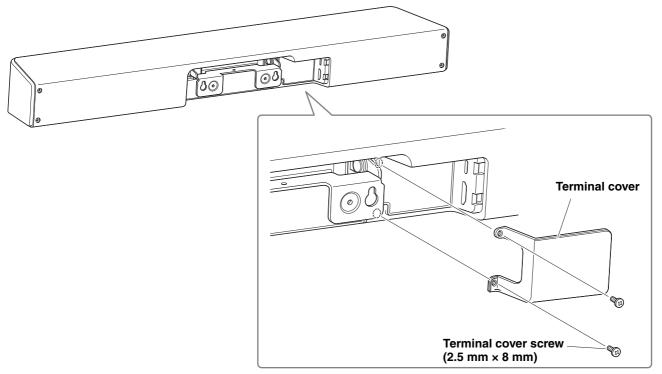
Related links

- Specifying the necessary settings for using a computer you brought in or a smart device (Page 16)
- Configuring the device from a TV screen (on-screen display menu) (Page 25)
- Yamaha CS Manager (Page 26) > Bluetooth settings (Page 36)
- Making a Bluetooth connection by using Yamaha CS Manager (Page 38)

Installing the terminal cover

After connecting the cables to the rear panel of the device, install the terminal cover. This prevents the cables from becoming disconnected and protects the ports/jack from dust.

Attach the terminal cover to the device by using the two included terminal cover screws (2.5 mm × 8 mm).

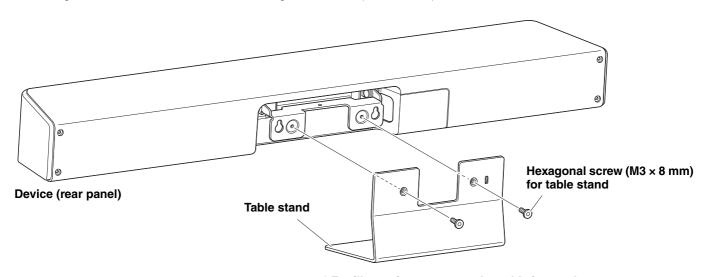


* For illustrative purposes, the cable is not shown.

Installing the table stand

Attaching the included table stand allows you to use the device placed on a surface such as a table.

With the hexagonal wrench, use the included hexagonal screws (M3 × 8 mm) to attach the table stand to the device.



* For illustrative purposes, the cable is not shown.

Installing the wall mounting bracket

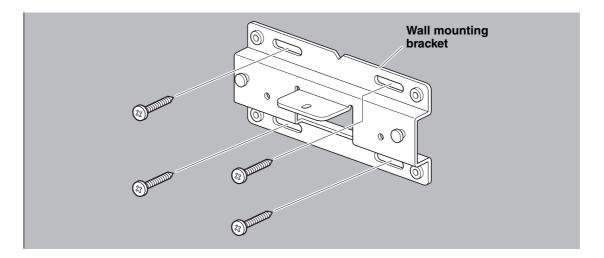


- Be sure to have the mounting bracket installed by the dealer where you purchased the product or a professional contractor.
- After installation, make sure that the CS-800 is firmly secured. Also, regularly check that there
 is no possibility of the device falling or tipping over. We cannot be held responsible for
 accidents caused by incorrect installation.
- After installation, do not lean against the CS-800 or apply a strong force to it from above. If the device falls, injuries or damage may result.

Installing on a wall

Use the included wall mounting bracket to install this device on a wall.

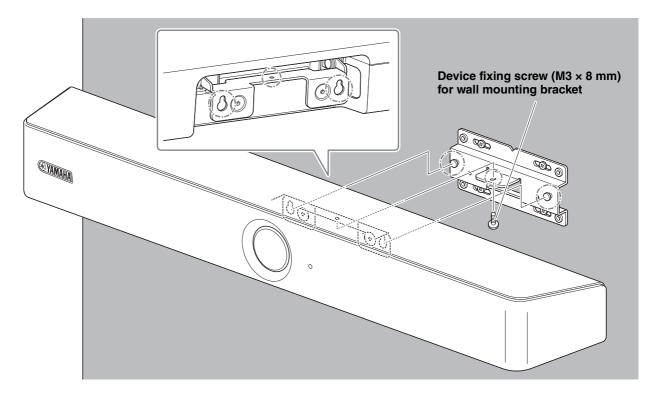
1. Attach the wall mounting bracket to the wall.





- Screws for attaching the wall mounting bracket to the wall are not included. Prepare screws that are strong enough.
- For details on screws and the installation, be sure to contact the dealer where you purchased the product or a professional contractor.

2. Hang the device on the bracket installed in step 1.



 $oldsymbol{3}$. From the underside of the wall mounting bracket, secure the device by using the included device fixing screw (M3 \times 8 mm) for wall mounting bracket.

Installing onto a TV

The device can be attached to a TV by using monitor mounting bracket (VESA) BRK-TV1 (sold separately). When mounting the device below a TV on the TV stand, prepare the following.

Items to prepare

- 1 Wall mounting bracket (including item)
 - Wall mounting bracket
 - Device fixing screw (M3 × 8 mm) for wall mounting bracket × 1

2 Monitor mounting bracket (separately sold item) BRK-TV1 * Compatible TV sizes: 48 to 70 inches

- · Monitor mounting brackets (for mounting onto wall mounting bracket, horizontal, and vertical)
- Spacer × 4
- Screw (M4 × 10 mm with washer) for bracket assembly × 12
- Screws for mounting TV (M6 \times 12 mm) \times 4 and (M6 \times 30 mm) \times 4
- Spring washer and flat washer for screws (M6) for mounting TV × 4 each
- Screws for mounting TV (M8 \times 15 mm) \times 4 and (M8 \times 35 mm) \times 4
- Spring washer and flat washer for screws (M8) for mounting TV × 4 each
- * Use only four of the above-listed screws for mounting TV.
- 3 TV stand (to be provided)
- 4 Screwdriver (to be provided)



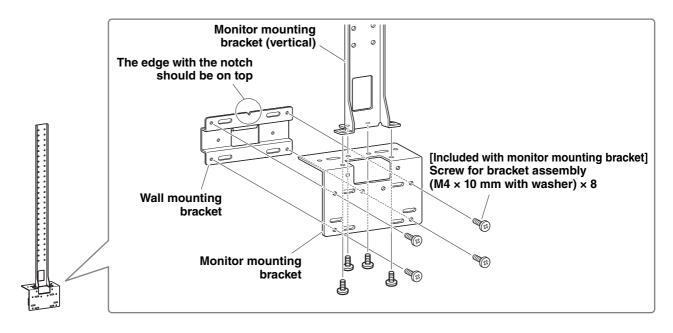
- For details on assembling the TV stand and mounting the TV to it, follow the instructions in the manual for the TV stand.
- The TV should be mounted to the TV stand by two or more people.



- Be sure to have the mounting bracket installed by the dealer where you purchased the product or a professional contractor.
- After installation, make sure that the CS-800 is firmly secured. Also, regularly check that there is no possibility of the device falling or tipping over. We cannot be held responsible for accidents caused by incorrect installation.
- After installation, do not lean against the CS-800 or apply a strong force to it from above. If the device falls, injuries or damage may result.

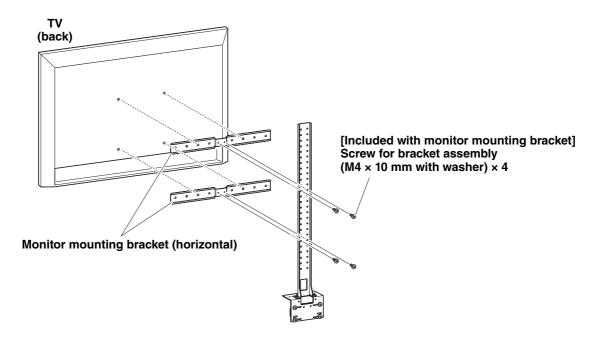
The following is an example of an installation that uses the screw holes in the TV and a TV stand.

7. Attach the monitor mounting bracket (vertical), monitor mounting bracket (for mounting onto wall mounting bracket) and the wall mounting bracket using the screws included with them.



2. Using the included screws, attach the monitor mounting brackets (horizontal) and the brackets assembled in step 1.

Align the monitor mounting brackets (horizontal) with the screw holes in the TV to determine the mounting position. After determining the mounting position, mount the brackets from step **1** at the appropriate height.

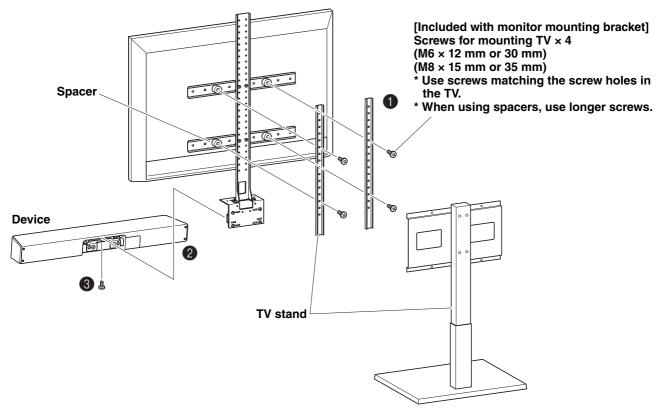


IMPORTANT

At this point, do not install the TV yet.

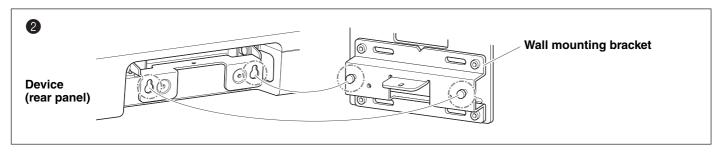
3. Attach the brackets assembled in step 2 to the TV stand, TV and device.

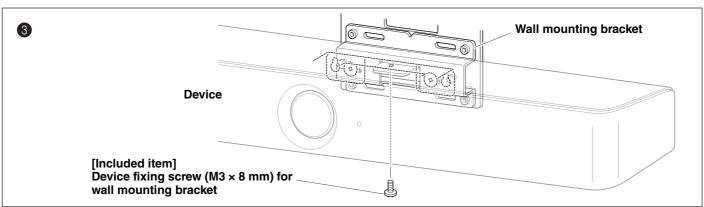
- 1 Attach the brackets from step 2 to the TV stand.
- 2 Hang the device on the wall mounting bracket installed in step 1.
- 3 From the underside of the device, secure it to the brackets from step 2 by using the screw included with the device.



IMPORTANT

- Depending on the configuration of the TV stand, also tightly secure the spacers included with monitor mounting bracket BRK-TV1.
- For details on assembling the TV stand and mounting the TV to it, follow the instructions in the manual for the TV stand.





Configuring the device from a TV screen (on-screen display menu)

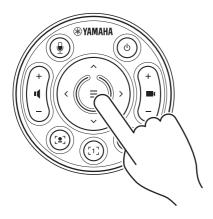
The on-screen display menu is a feature that displays the device's settings menu on a TV screen. It can be operated with the remote control.

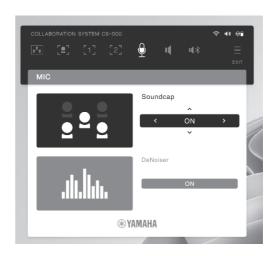
NOTE

- This function is available when using a computer that is brought in (Page 11). It cannot be used with a meeting room PC.
- In order to use this function, first follow the procedure in "Pairing the device and remote control" (page 15).
- In order to use this function, first follow the procedure in "Specifying the necessary settings for using a computer you brought in or a smart device" (page 16).

Displaying the device's settings menu

1. Press the menu button on the remote control.

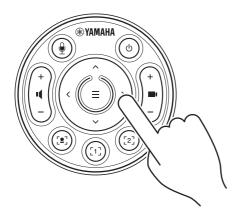




The on-screen display menu appears on the TV.

2. Navigate with the pan/tilt button on the remote control.

Use the pan/tilt button (arrow button) to move the cursor up/down/left/right.

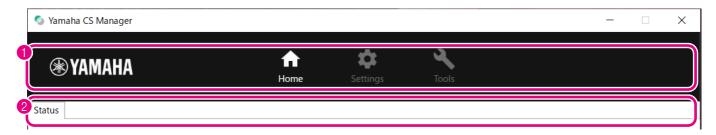


Using Yamaha CS Manager to specify detailed settings

About Yamaha CS Manager

Yamaha CS Manager is application software for specifying detailed settings for the device. In order to use Yamaha CS Manager, connect a computer installed with it to the CS-800 device by using a USB cable.

Navigating Yamaha CS Manager



Menus and functions

1 Menus	2 What can be done (functions)	
Home	Home (status information)	Page 30
	Admin settings	Page 32
	 Audio settings 	Page 34
	Bluetooth settings	Page 36
t t	Camera settings	Page 39
Settings	 Smart framing settings 	Page 41
	Display settings	Page 42
	 Network settings 	Page 43
	• Time settings	Page 48
	Updating the firmware	Page 49
Tools	 Configuration 	Page 50
Tools	• Logs	Page 51

Recommended environment

The recommended operating environment for Yamaha CS Manager is as follows.

Windows 11, Windows 10 (64 bit) macOS 12, macOS 11, macOS 10.15

Installing

In order to use Yamaha CS Manager, the application file must be downloaded.

1. Download the latest application file from the Yamaha website.

▼ Yamaha website

U.S.A. and Canada: Other Countries:

https://uc.yamaha.com/support/ https://download.yamaha.com/

2. Extract the compressed file, and then open the application file.

For Windows

Extract the ZIP file to any location. Double-click "CSManager.exe" in the folder to start.

For Mac

Extract the DMG file to any location. Double-click "CSManager" in the folder to start.

NOTE

If the Yamaha CS Manager login window does not appear, even after opening the application file, check that the computer and CS-800 are connected with a USB cable.

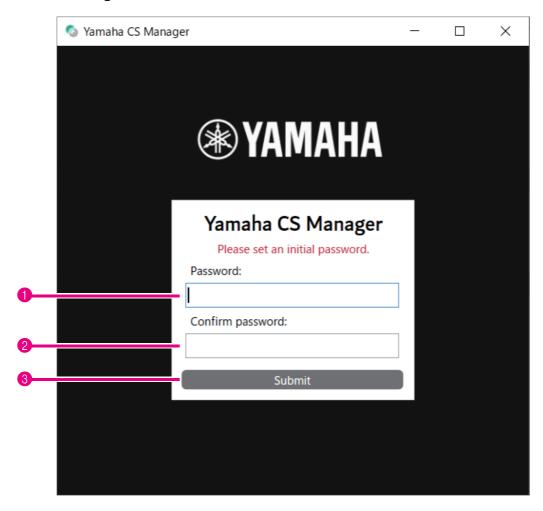
Specifying a password/Logging in

In order use Yamaha CS Manager, you must log in. When the application starts, the login window appears.

■ For the first time: Specifying the password

It is necessary to specify a password at the first startup. Specify any password.

Initial Password Setting

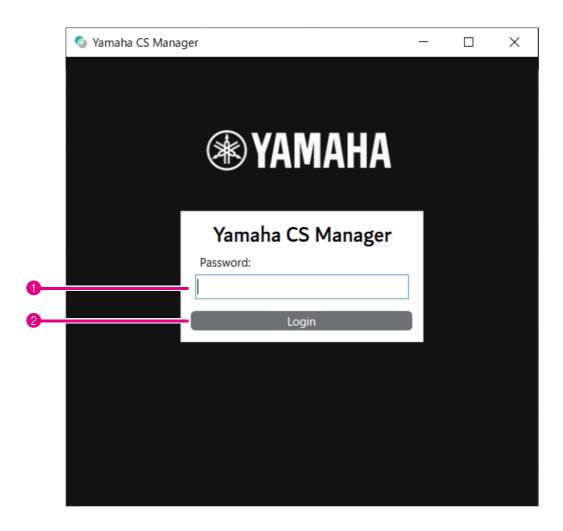


Item	Description
1 Password:	Type in a password to be specified as the login password for Yamaha CS Manager. (4 to 16 alphanumeric characters)
② Confirm Password:	Re-enter the password typed above.
3 Submit	Click to apply the password.

Logging in

When Yamaha CS Manager is started after the password has been specified, the login window appears. Type in the specified password to log in.

Login



Item	Description
1 Password:	Type in the specified password.
2 Login	Click to apply the password.

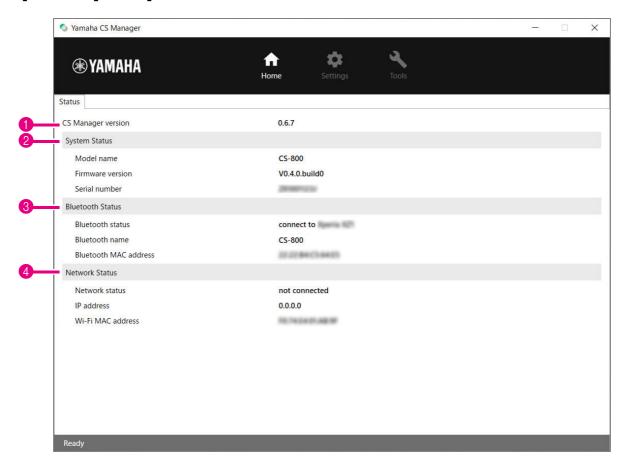
NOTE

If the specified password has been forgotten, refer to "Returning to factory default settings (factory reset)" (page 54) to return the device to its factory default settings.

Home (status information)

After logging in to Yamaha CS Manager, status information appears in the [Home] screen.

[Home] menu > [Status] screen



1 Version

Item	Description
CS Manager version	Displays the version of Yamaha CS Manager.

2 System Status

Item	Description
Model name	Displays the model name.
Firmware version	Displays the device firmware version.
Serial number	Displays the serial number of the device.

3 Bluetooth Status

Item	Description
Bluetooth status	Displays the Bluetooth connection status.
	[disable] Bluetooth is deactivated.
	[not connected] There is no Bluetooth connection.
	[connected to XXXX] Displays the name of the device currently connected to this device via Bluetooth.
Bluetooth name	Displays the name of this device when it is connecting via Bluetooth. If a device name has been specified in the [Bluetooth] screen, the specified device name will be displayed.
Bluetooth MAC address	Displays the Bluetooth MAC address.

4 Network Status

Item	Description
Network status	Displays the network (Wi-Fi) connection status.
	[disabled] Wi-Fi is deactivated.
	[not connected] There is no Wi-Fi connection.
	[connected to <ssid>] Displays the SSID name of the Wi-Fi network that the device is currently connected to. (Example: "connected to yamaha_wifi")</ssid>
IP address	Displays the IP address of this device.
Wi-Fi MAC address	Displays the MAC address of this device.

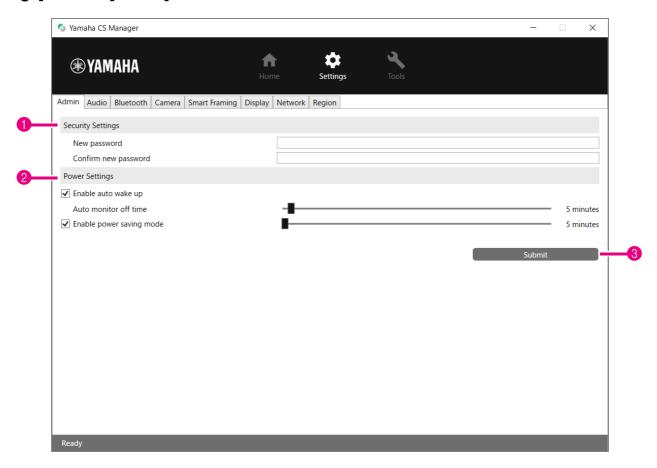
Related links

- Updating the firmware (Page 49)
- Bluetooth settings (Page 36)
- Network settings (Page 43)

Admin settings

In the [Admin] screen, various system settings, such as the connection mode, password settings and power management settings, can be specified.

[Settings] menu > [Admin] screen



Security Settings

Item	Description
New password	Type in a password to be specified as the login password for Yamaha CS Manager. (4 to 16 alphanumeric characters)
Confirm new password	Re-enter the password typed above.

NOTE

The password will not be updated if the [Submit] button is clicked while either the [New password] or [Confirm new password] box is left blank.

Power Settings

Item	Description
Enable auto wake up	Allows you to select whether to activate/deactivate the automatic power-on function (auto wakeup), which operates by detecting persons.
Auto monitor off time	Allows you to specify (by using the slider) the length of time until the monitor automatically turns off in order to prevent screen burn-in. (Units: Minutes)
Enable power saving mode	Allows you to select whether to activate/deactivate the power saving mode. Only when this is activated, a setting can be specified for the following. • [Power saving timeout] Allows you to specify (by using the slider) the length of time until the device automatically turns off. (Units: Minutes)

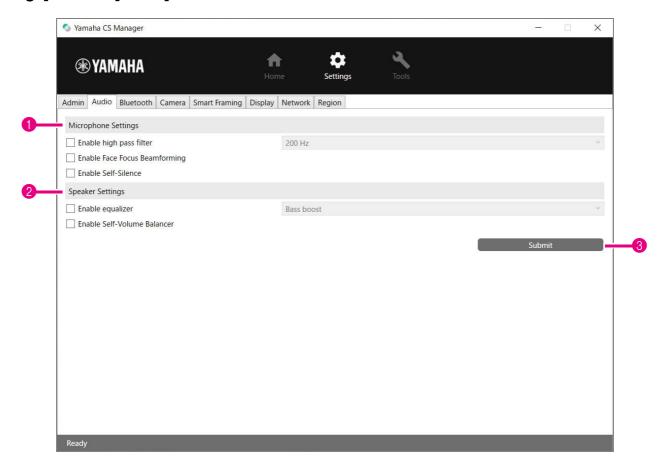
3 Submit

Item	Description
Submit	Click to apply all settings specified in the [Admin] screen.

Audio settings

In the [Audio] screen, microphone and speaker settings can be specified.

[Settings] menu > [Audio] screen



1 Microphone Settings

Item	Description
Enable high pass filter	Allows you to select whether to activate/deactivate the high pass filter for the microphone. Only when this is activated, the microphone equalizer can be selected. [200 Hz/315 Hz/500 Hz]
Enable Face Focus Beamforming	Allows you to select whether to activate/deactivate the function that detects the position of the participant by using the camera image and reduces noise other than the participant's voice. [When activated]
	In order to detect participants, remove the lens cap.
	 The target area can be specified under "2 Meeting Area Settings" for smart framing. (Page 41)
Enable Self-Silence	Allows you to select whether to activate/deactivate the function that automatically differentiates noise and human voices and reduces noise other than human voices.

2 Speaker Settings

Item	Description
Enable equalizer	Allows you to select whether to activate/deactivate the speaker equalizer. Only when this is activated, the speaker equalizer can be selected. [Bass boost/Treble boost]
Enable Self-Volume Balancer	Allows you to select whether to activate/deactivate the function that automatically adjusts the speaker volume.

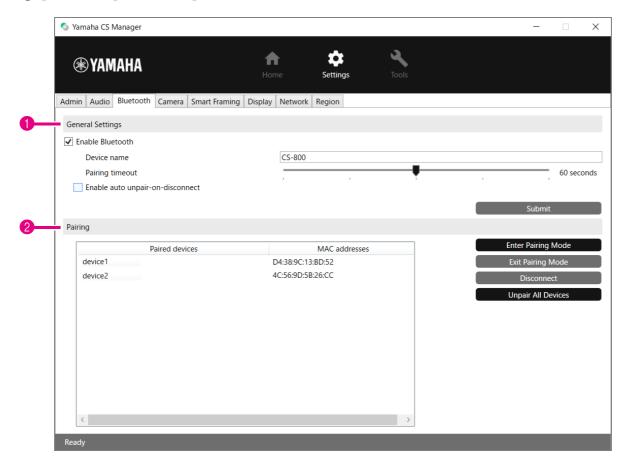
3 Submit

Item	Description
Submit	Click to apply all settings specified in the [Audio] screen.

Bluetooth settings

In the [Bluetooth] screen, Bluetooth settings can be specified and this device can be paired with a Bluetooth device.

[Settings] menu > [Bluetooth] screen



1 General Settings

Item	Description
Enable Bluetooth	Allows you to select whether to activate/deactivate Bluetooth. Only when this is activated, settings can be specified for the following.
	• [Device name] Allows you to change the name (of this device) that is displayed when this device is connected to a Bluetooth device.
	[Pairing timeout] Allows you to specify (by using the slider) the length of time until pairing mode times out. (Units: Seconds)
	• [Enable auto unpair-on-disconnect] Allows you to select whether to erase the pairing information at the same time that a connection with the Bluetooth device is cut. In order to be able to connect automatically, deactivate this.
Submit	Click to apply the settings specified under "General Settings".

Pairing

This appears when Bluetooth has been activated.

Item	Description
Paired devices	Displays the Bluetooth device name of the paired device. The name of the currently connected device appears in bold.
MAC addresses	Displays the MAC address of the paired Bluetooth device. The MAC address of the currently connected device appears in bold.
Enter Pairing Mode	Click to start pairing mode. For details, refer to "Making a Bluetooth connection by using Yamaha CS Manager" (page 38).
Exit Pairing Mode	Click to stop pairing mode.
Disconnect	Click to disconnect the device currently connected via Bluetooth.
Unpair All Devices	Click to erase all pairing information.

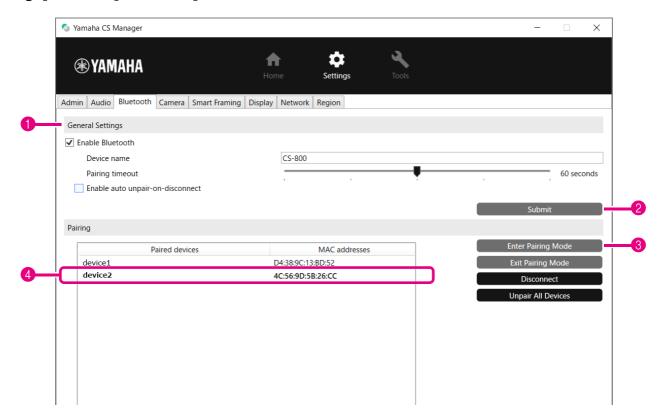
Related links

• Using smart devices in meetings (Page 18)

Making a Bluetooth connection by using Yamaha CS Manager

In order to be able to connect this device and a Bluetooth device, they first need to be paired. Follow the procedure below to pair and make a Bluetooth connection.

[Settings] menu > [Bluetooth] screen



1. Activate Bluetooth.

- 1 Select the [Enable Bluetooth] check box.
- 2 Click the [Submit] button to apply the setting.

Make sure that Bluetooth on the Bluetooth device has been turned on.

2. Start pairing.

3 Click the [Enter Paring Mode] button to start pairing mode.

If a device is already connected, the [Enter Paring Mode] button cannot be clicked. Click the [Disconnect] button to disconnect.

3. On the Bluetooth device, accept the pairing request.

The Bluetooth pairing PIN (numbers) appears in the screen of the Bluetooth device. Make sure that the numbers match those displayed in Yamaha CS Manager, and then accept on the Bluetooth device.

4. Confirm that pairing is finished.

4 Pairing is finished when the paired device is added under "Paired devices".

The Bluetooth connection is made at the same time as pairing. The name of the device currently connected via Bluetooth appears in bold.

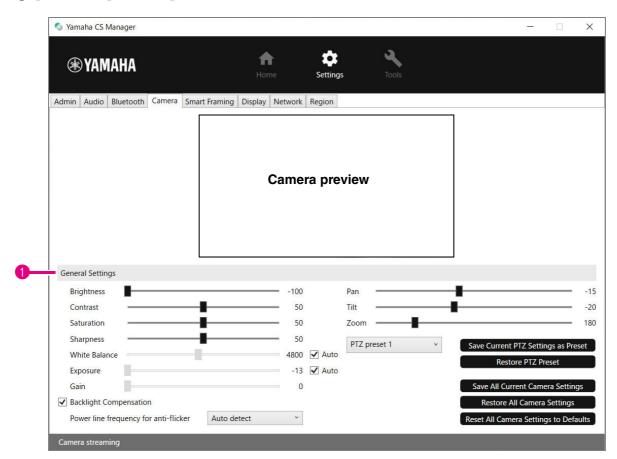
Related links

- Using smart devices in meetings (Page 18)
- Bluetooth settings (Page 36)

Camera settings

In the [Camera] screen, detailed settings for the camera built into this device can be specified.

[Settings] menu > [Camera] screen



1 General Settings

This allows you to adjust the camera settings. Setting adjustments made by using the slider, check box, etc., are applied in real time and reflected in the camera preview.

Item	Description
Brightness	Allows you to adjust (by using the slider) the brightness.
Contrast	Allows you to adjust (by using the slider) the contrast.
Saturation	Allows you to adjust (by using the slider) the saturation.
Sharpness	Allows you to adjust (by using the slider) the sharpness.
White Balance	Allows you to adjust (by using the slider) the white balance. To activate automatic adjustment, select the [Auto] check box.
Exposure	Allows you to adjust (by using the slider) the exposure. To activate automatic adjustment, select the [Auto] check box. Note that [Exposure] and [Gain] will no longer be adjustable.
Gain	Allows you to adjust (by using the slider) the gain.
Backlight Compensation	Allows you to select whether to activate/deactivate backlight correction.

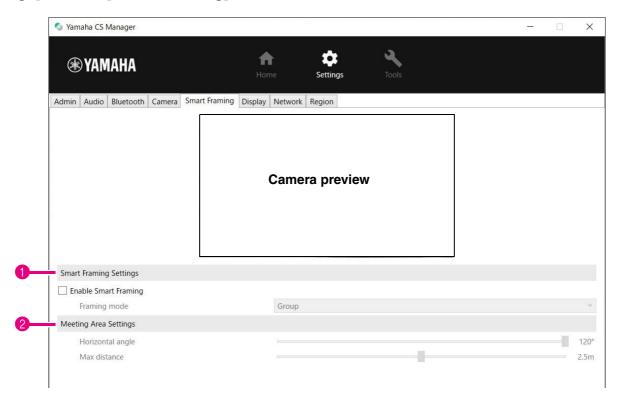
Item	Description
Power line frequency for anti-flicker	Allows you to select the power line frequency in order to reduce flickering. If flickering cannot be reduced, even after selecting "Auto detect," select the frequency for your area. [Auto detect/50 Hz/60 Hz]
Pan	This can be specified only when Zoom is set to a value other than the default (100). Allows you to adjust (by using the slider) the horizontal camera orientation.
Tilt	This can be specified only when Zoom is set to a value other than the default (100). Allows you to adjust (by using the slider) the vertical camera orientation.
Zoom	Allows you to adjust (by using the slider) the zoom ratio.
PTZ preset 1 to 5	Allows you to specify a set of camera PTZ (pan/tilt/zoom) values. (up to 5)
Save Current PTZ Settings as Preset	Select a preset name from [PTZ preset 1 to 5], and then click this button* to save the current combination of PTZ values under that name.
Restore PTZ Preset	Select a preset name from [PTZ preset 1 to 5], and then click this button* to recall the saved combination of PTZ values.
Save All Current Camera Settings	Click to save all camera settings, including the PTZ values.
Restore All Camera Settings	Click to recall the settings that were saved by clicking the [Save All Current Camera Settings] button.
Reset All Camera Settings to Defaults	Click to reset all camera settings, including the current PTZ values, to their defaults.

^{*} If a button is not available, clear the [Enable Smart Framing] check box (Page 41) in the [Smart Framing] screen or press the smart framing button on the remote control to turn off smart framing. (Page 9)

Smart framing settings

In the [Smart Framing] screen, the camera framing area for recognizing persons can be specified.

[Settings] menu > [Smart Framing] screen



1 Smart Framing Settings

Item	Description
Enable Smart Framing	Allows you to select whether to activate/deactivate smart framing.
Framing mode	This can be specified only when smart framing is activated. Allows you to select the appropriate mode for following the subject according to the use.
	• [Group]: Frames all persons in the group
	[Speaker Tracking]: Frames the person who is speaking[Individual]: Frames a specific person

Meeting Area Settings

This allows you to specify the target area for smart framing and face focus beamforming*.

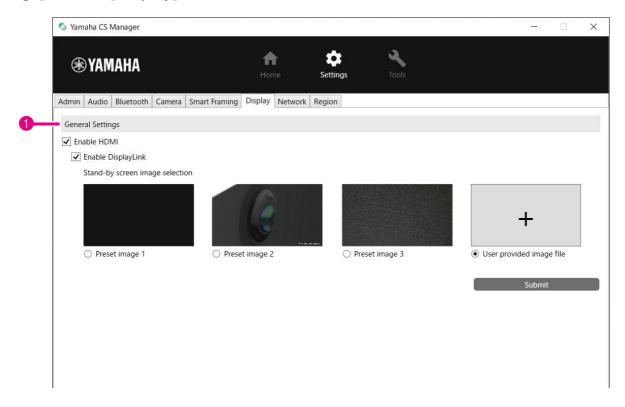
Item	Description
Horizontal angle	Allows you to specify the target area in the horizontal direction. (20° to 110°)
Max distance	Allows you to specify the target range in meters. (1 to 4.5 m; up to 3.0 m if face focus beamforming* is activated)

^{*} Face focus beamforming [Enable Face Focus Beamforming] in Audio settings (Page 34)

Display settings

In the [Display] screen, an image can be selected to be displayed on the TV screen when the device is idle.

[Settings] menu > [Display] screen



10 General Settings

Item	Description
Enable HDMI	Allows you to select whether to activate/deactivate HDMI.
Enable DisplayLink	This can be specified only when HDMI is activated. Allows you to select whether to activate/deactivate DisplayLink*.
Stand-by screen image selection	This can be specified only when the [Enable HDMI] check box has been selected. Allows you to select the standby image for this device and the computer.
	• [User provided image file] To select a new image, browse to and upload it. (Extensions of uploadable files: JPG, JPEG, PNG; Match the resolution of the image to that of your TV.)
Submit	Click to apply the specified settings.

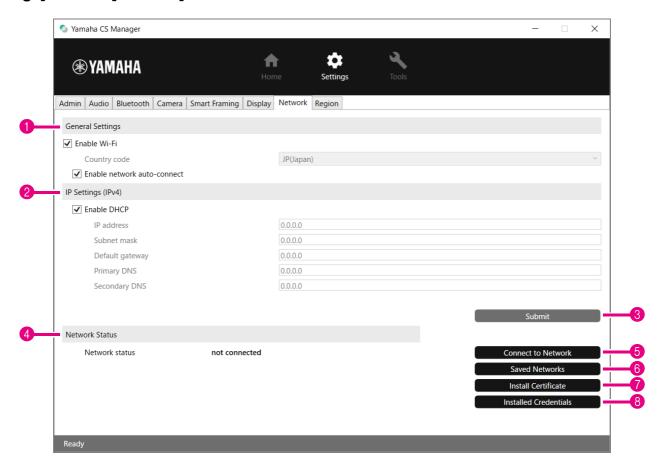
* DisplayLink

This is a function to display the computer on the TV screen when the computer and TV are connected through this device. (This device is connected to the computer via USB and to the TV via HDMI. Example: Page 11)

Network settings

In the [Network] screen, settings for connecting this device to a Wi-Fi network can be specified. Specifying Wi-Fi settings allows the time on the device to be set.

[Settings] menu > [Network] screen



1 General Settings

Item	Description
Enable Wi-Fi	Allows you to select whether to activate/deactivate Wi-Fi. Only when this is activated, settings can be specified for the following.
	Country code Allows you to select the country code (country name) for Wi-Fi. This appears when the string for [Serial Number] in the [Home] screen (Page 30) ends in anything other than "J", "U" or "A". *
	Enable network auto-connect Allows you to select whether to activate/deactivate the function that automatically connects this device to a network that it was previously connected to.

^{*} This product is designed for use in different countries/regions with different legal regulatory standards. Select the country code according to your country/region. In some countries/regions, this setting cannot be changed from the factory default.

2 IP Settings (IPv4)

Item	Description
Enable DHCP	This can be specified only when the [Enable Wi-Fi] check box has been selected.
	Allows you to select whether to activate/deactivate DHCP.
	To assign a static IP address, clear the [Enable DHCP] check box, and then specify the static IP address with the following. (Enter using the "XXX.XXX.XXX.XXX" format.)
	• IP address
	Subnet mask
	Default gateway
	• Primary DNS
	Secondary DNS

	Item	Description
3	Submit	Click to apply the settings specified under "General Settings" and "IP Settings".

4 Network Status

Item	Description
Network status	Displays the network (Wi-Fi) connection status. • disabled Wi-Fi is deactivated. • not connected There is no Wi-Fi connection. • connected to <ssid> Displays the SSID name of the Wi-Fi network that the device is currently connected to.</ssid>

	Item	Description
5	Connect to Network	Click to connect to the network. For detailed instructions, refer to "Connecting to a network" (page 45).
6	Saved Networks	Click to display a list of known networks.
7	Install Certificate	Click to install a client certificate file.
8	Installed Credentials	Click to view or delete from the list of installed credentials (CA/user certificates).

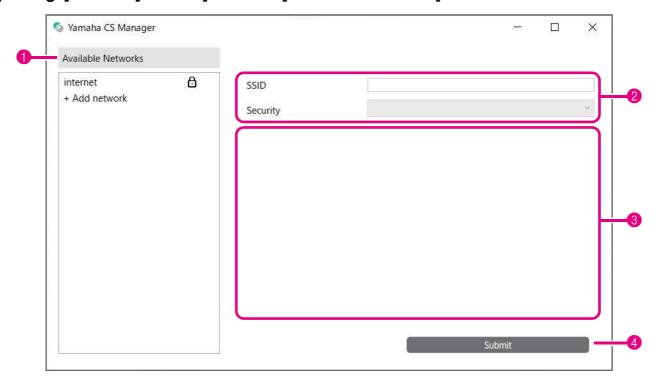
Connecting to a network

Wi-Fi settings can be specified in order to connect to a network. In order for the CS-800 to accurately keep time, connect it to a Wi-Fi network and specify the time settings.

1. Click the [Connect to network] button in the [Network] screen.

The [Connect to network] pop-up screen appears.

[Settings] menu > [Network] screen > [Connect to network] screen



2. From the list of access points (1), select the one to connect to.

1 Available Networks

Item	Description
Available Networks	Displays a list (provided by the device) of connectable wireless access points. Encrypted connections have a lock icon to the right of their SSID name. If an encrypted connection is selected, the items that appear in ② differ depending on the encryption method.
	• [+ Add network] Selecting this allows you to manually specify all of the items below [SSID].

3. The SSID name and encryption method of the selected access point appear.

The items and screens that appear differ depending on the encryption method of the selected access point. If [+ Add network] was selected in 1, specify all settings manually.

2 SSID name and encryption method

Item	Description
SSID	Displays the SSID name. (Maximum number of characters: 32)
Security	The items that appear differ depending on the encryption method.
	1) With the following, there is no need to specify other settings. Continue with
	step 4.
	• [None]
	• [Enhanced Open]
	2) With the following, only [Password] appears in 3. Type in the password.
	Then, continue with step 4 .
	• [WEP]
	• [WPA/WPA2-Personal]
	• [WPA3-Personal]
	3) With the following, various items appear in 3.
	• [WPA/WPA2/WPA3-Enterprise]
	• [WPA3-Enterprise 192-bit] With this, [EAP Method] is [TLS]. ([EAP Method] is set to [TLS] and grayed out.)

③ When [Security] is set to [WPA/WPA2/WPA3-Enterprise] or [WPA3-Enterprise 192-bit]

Item	Description
EAP method	The items that appear differ depending on the selected encryption method. • [PEAP] Phase 2 authentication, CA certificate, Identity, Anonymous identity, Password • [TLS] CA certificate, User certificate, Identity • [TTLS] Phase 2 authentication, CA certificate, Identity, Anonymous identity, Password • [PWD] Identity, Password
Phase 2 authentication	This can be specified only when [EAP method] is set to [PEAP/TTLS]. [None/PAP/MSCHAP/MSCHAPV2/GTC]
CA certificate	Allows you to select a CA certificate. A credential that includes a CA certificate is added to those displayed in the [Installed credentials] screen (displayed from the [Network] screen).
Domain	Allows you to type in the domain name authenticated by the CA certificate. This can be specified only when [CA certificate] is set to [Use system certificates].

Item	Description
User certificate	Allows you to select a user certificate. A credential that includes a user certificate is added to those displayed in the [Installed credentials] screen (displayed from the [Network] screen).
Identity	Allows you to type in the user ID.
Anonymous Identity	Allows you to type in an anonymous user name.
Password	Allows you to type in the authentication password.

4. Click the [Submit] button to start the Wi-Fi connection.

	Item	Description
4	Submit	Click to start the Wi-Fi connection.

When "Succeeded to connect to network" appears in the lower left of the screen, the connection to the network is established.

NOTE

Each time a setting is selected from a drop-down menu, the settings entered for other items return to their defaults.

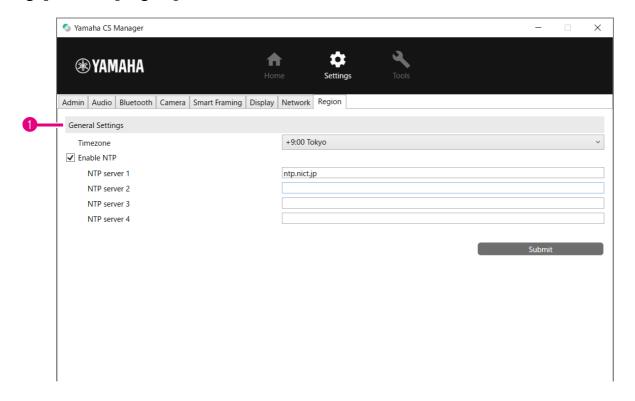
Time settings

In the [Region] screen, settings can be specified to automatically adjust the time on this device.

NOTE

In order to set the time, a Wi-Fi connection must be made by using the network settings. (Page 45)

[Settings] menu > [Region] screen



1 General Settings

Item	Description
Timezone	Allows you to select the time zone.
Enable NTP	Allows you to select whether to activate/deactivate NTP. When this is activated, the NTP server address can be specified.
	• [NTP server 1]
	• [NTP server 2]
	• [NTP server 3]
	• [NTP server 4]
Submit	Click to apply the settings specified under "General Settings".

Related links

• Connecting to a network (Page 45)

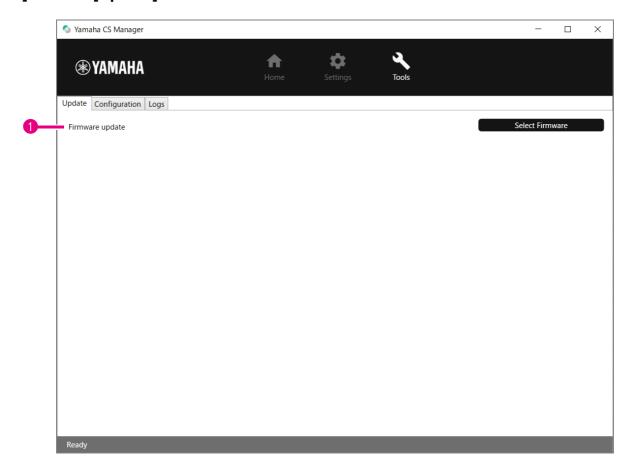
Updating the firmware

In the [Update] screen, the firmware can be updated.

NOTE

This product is designed to allow the firmware of the device to be updated in order to improve operability, add functions and fix problems. We recommend updating the device firmware to the latest version. Prepare the file for the latest firmware according to step 1 in "Updating the firmware" (page 6).

[Tools] menu > [Update] screen



1 Firmware update

Item	Description
Select Firmware	Allows you to specify the firmware file and upload it. Extension of uploadable files: "bundle"

Related links

• Updating the firmware (Page 6)

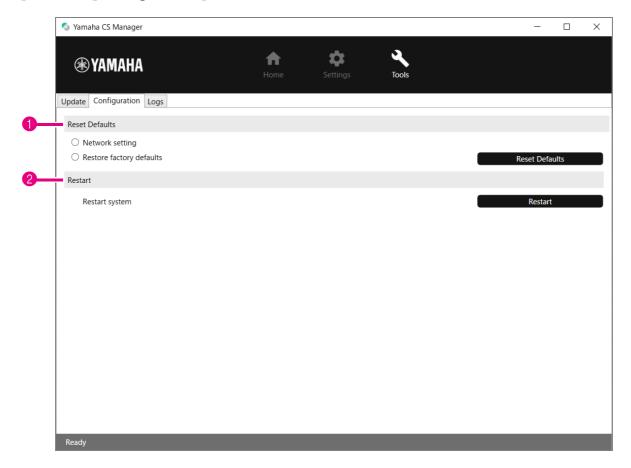
NOTE

Do not disconnect the AC adaptor or USB cable of the device while updating the firmware.

Configuration

In the [Configuration] screen, the device settings can be reset or the device can be restarted.

[Tools] menu > [Configuration] screen



1 Reset Defaults

Item	Description
Network settings	To reset the network settings, select this, and then click the [Reset Defaults] button.
Restore factory defaults	To return the device to its factory default settings (initialize), select this, and then click the [Reset Defaults] button. After the reset is finished, the initial password setting window appears.
Reset Defaults	Click to perform the reset selected above.

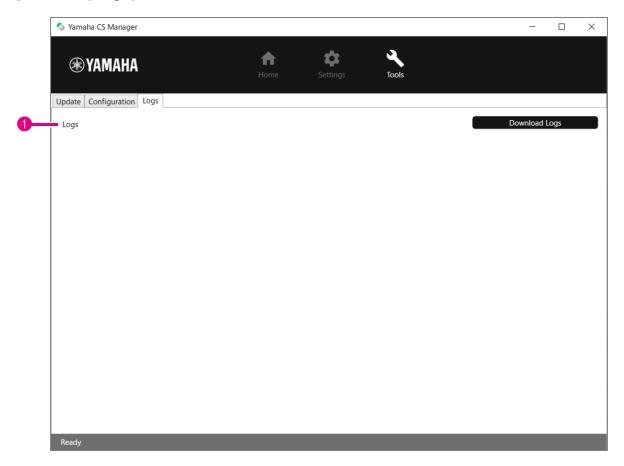
2 Restart

Item	Description
Restart	Click to restart the device. After the device is restarted, the login window appears.

Logs

In the [Logs] screen, log information can be downloaded. If you contact our support desk with a problem that you have encountered, you may be asked to download the log to be analyzed for the cause.

[Tools] menu > [Logs] screen



1 Logs

Item	Description
Download Logs	Click to save the log file. Browse to the location where the log file is to be downloaded and saved.

NOTE

The log information will be erased when the device is returned to its factory default settings (factory reset). We recommend downloading the log information before performing a factory reset (Page 54) due to a problem.

Appendix

Main specifications

General specifications

T	T	
Product type	Video Conference System	
Dimensions	620 mm (W) × 90 mm (D) × 70 mm (H)	
Weight	1.7 kg	
Power supply	100 – 240 V AC	(50/60 Hz)
Maximum power consumption	42 W	
Safety	CB/G, UL, CE, RCM, KC, CCC, BSMI, BIS	
EMC	FCC, IC, CE, RCM, KC, CCC, BSMI	
Radio interference standard	FCC, IC, CE, RCM, KC, SRRC, NCC, ANATEL	
Operating environment	Temperature	0 °C – 40 °C
Operating environment	Humidity	20% – 85% (non-condensing)
Liveriality	Temperature	−20 °C − 60 °C
Humidity	Humidity	20% – 85% (non-condensing)
Indicators	Status indicator	
Included items	AC adaptor, AC cable, remote control, USB 2.0 cable (Type C-A, 5 m), HDMI cable (2 m), Wall mounting bracket, Table stand, Lens cap, Read This First, Quick Guide, Safety Guide, Coin battery (CR2032) × 2, terminal cover, Mounting screws, Hexagonal wrench	
Separately sold items	Mounting accessory BRK-TV1 USB 3.2 Gen 2 cable (Type C-A, 10 m) CBL-L10AC USB 3.2 Gen 2 cable (Type C-A, 25 m) CBL-L25AC	
Supported operating systems	Windows 11, Windows 10, macOS 12, macOS 11, macOS 10.15, Chrome OS	

Connectivity

USB Type-C	USB 2.0/3.2 Gen 1, UAC 2.0, UVC 1.1, DisplayLink	
НДМІ	Version 1.4 Resolution: 720 × 480, 1280 × 720, 1366 × 768, 1920 × 1080 Frame rate: 30 fps HDCP: Version 1.3 HDMI-CEC: Power control, Input selection	
Bluetooth U.I	Common	Version 5.0 Supported profiles: HFP(1.7), A2DP, AVRCP, BLE Supported codec: CVSD, SBC, mSBC Wireless output: Class 1 Maximum communication distance: 10 m (32.8 ft) (no obstacles) Radio frequency (operational frequency): 2,402 to 2,480 MHz
	U.K./EU	Maximum output power (EIRP): 7.6 dBm (5.8 mW)
	USA/Canada	Maximum output power: 7.23 dBm (5.3 mW)
	Korea	Maximum output power: 0.003 W

Wi-Fi network U.K./EU Radio frequency band: 2. Available security method Maximum output power (Badio frequency (operation Maximum output power) Radio frequency (operation Maximum output power) Radio frequency (operation Maximum output power)	Common	Wireless LAN standards: IEEE 802.11b/g/n Radio frequency band: 2.4 GHz Available security method: OPEN, WEP, WPA/WPA2-PSK, WPA3-SAE
	Radio frequency (operational frequency): 2,412 to 2,472 MHz Maximum output power (EIRP): 19.7 dBm (93.3 mW)	
	Radio frequency (operational frequency): 2,412 to 2,462 MHz Maximum output power: 14.01 dBm (25.2 mW)	
	Korea	Radio frequency (operational frequency): 2,412 to 2,472 MHz Maximum output power: 0.01 W/MHz

Audio

Speaker	Full-range speaker × 1
Speaker Loudness	90 dBSPL (1 m)
Speaker frequency response	100 Hz – 20 kHz
Microphone	Hexa-microphone (MEMS × 6)
Microphone coverage	120° audio pickup Max distance: 6.0 m (19.6 ft, Face focus beamforming off) / 3.0m (9.8 ft, Face focus beamforming on)
Microphone frequency response	100 Hz – 16 kHz
Audio signal processing	Adaptive echo canceller, Noise reduction, Automatic tracking, Automatic gain control, Automatic room EQ, Dereverberation, SoundCap Eye (Face focus beamforming, Self-silence, Self-volume balancer)

Camera/video

Sensor	CMOS 8M pixels (4K)
Diagonal angle of view	120°
Focal distance	0.5 m (1.6 ft) − ∞
Frame rate	6 fps, 7.5 fps, 10 fps, 15 fps, 30 fps
Supported video resolutions	3840 × 2160, 2560 × 1440, 1920 × 1080, 1280 × 720, 640 × 360
Supported video codecs	YUY2, MJPEG, NV12
Frame control	Smart framing (Group, Individual, Speaker tracking) or manual pan-tilt-zoom (PTZ), Configurable preset × 2 Maximum zoom ratio: 5.0× People detection max distance: 4.5 m
Video signal processing	Automatic white balance, Automatic exposure control, Noise reduction

User interface

Function button	Factory default settings, Remote control pairing
Remote control	Power supply, Microphone mute \times 2, Speaker volume, Camera ePTZ, Smart framing ON/OFF, Camera preset \times 2, On-screen display menu control
On-screen display menu	Meeting area, Smart framing mode, Camera preset, Microphone, Speaker, Bluetooth
People presence detection	Auto wakeup
Yamaha CS Manager	Supported OS: Windows 11, Windows10 (64-bit), macOS 12, macOS 11, macOS 10.15 Functions: Device status monitor, Security setting, Power setting, Audio setting, Camera setting, Smart framing setting, Bluetooth setting, HDMI screen setting, Network (Wi-Fi) setting, NTP setting, Firmware upgrading, Factory default setting, Logs retrieving

Returning to factory default settings (factory reset)

This device can be returned to its factory default (initial settings) using either of the following methods.

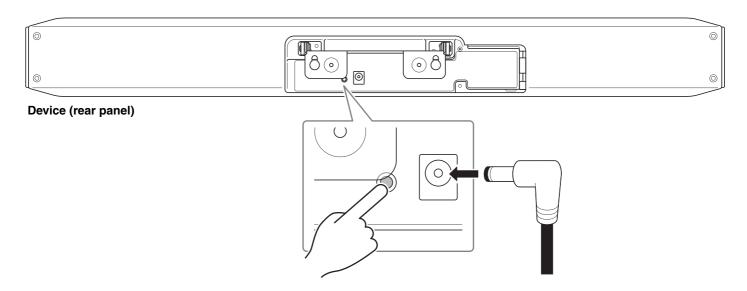
- · Initializing by using the device
- · Initializing by using Yamaha CS Manager

NOTE

The log information will be erased when the device is returned to its factory default settings (factory reset). We recommend downloading the log information before performing a factory reset due to a problem. (Page 51)

Initializing by using the device

1. Start the device by connecting the power cable while holding down the [FUNCTION] button on the rear panel of the device.



Connecting the power cable automatically turns on the device.

2. After connecting the power cable, keep the [FUNCTION] button pressed for at least 5 seconds.

The status indicator on the front panel of the device flashes in orange five times at a 0.5-second interval. Initialization is finished when the status indicator lights up in white.

Initializing by using Yamaha CS Manager

Initialize from the [Configuration] screen in the [Tools] menu of Yamaha CS Manager. (Page 50)

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