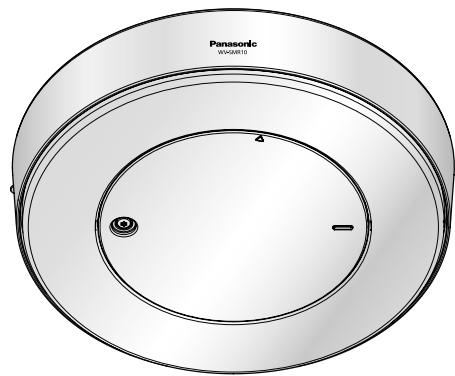


Installation Guide

Included Installation Instructions

Network Microphone

Model No. WV-SMR10



- This manual describes the installation procedures, network microphone installation, and cable connections.
- Before reading this manual, be sure to read the Important Information.

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Standard accessories

Important Information 1 pc. Installation Guide (this document) 1 set
Warranty card 1 set CD-ROM*1 1 pc.
Code label*2 1 pc.

*1 The CD-ROM contains the operating instructions and different kinds of tool software programs.
*2 This label may be required for network management. The network administrator shall retain the code label.

The following parts are used during installation procedures.

Ⓐ Attachment 1 pc. Ⓓ Adapter (for WV-SW458) 1 pc.
Ⓑ Power cable plug 1 pc. Ⓔ Installation template 1 pc.
Ⓒ Adapter 1 pc. Ⓕ Bit 1 pc.
(for WV-SF438/ WV-SF448/ WV-SF448E)

● About the [INITIAL SET] button

Follow the steps below to initialize the network microphone.

- ① Turn off the power of the microphone. When using a PoE hub, disconnect the LAN cable from the microphone. When using an external power supply, disconnect the power cable plug from the 12 V DC power supply terminal.
- ② Turn on the power of the microphone while holding down the INITIAL SET button, and then keep holding down the button for 5 seconds or more. About 3 minutes later, the microphone will start up and the settings including the network settings will be initialized.

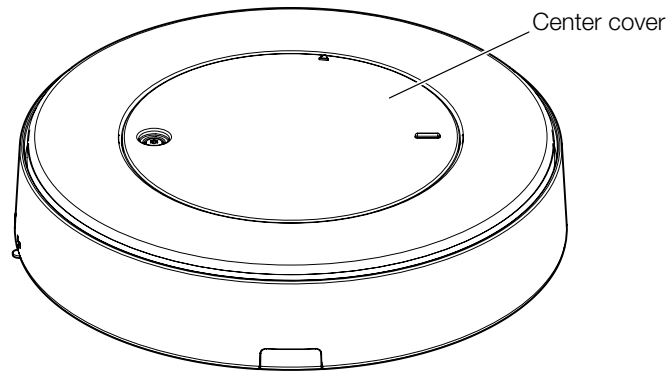
IMPORTANT:

- When the microphone is initialized, the settings including the network settings will be initialized. Note that the CRT key (SSL encryption key) used for the HTTPS protocol will not be initialized.
- Before initializing the settings, it is recommended to write down the settings in advance.
- Do not turn off the power of the microphone during the process of initialization. Otherwise, it may fail to initialize and may cause malfunction.

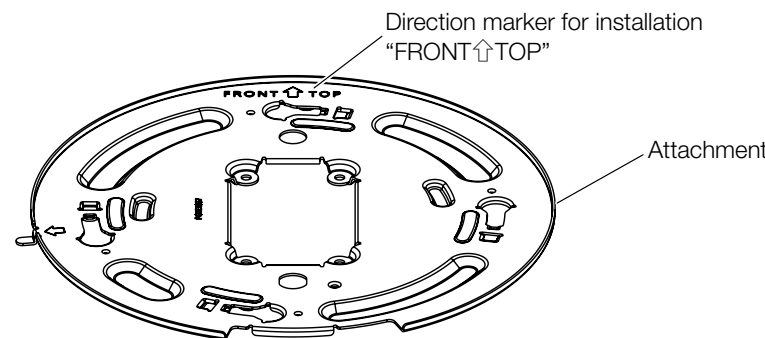
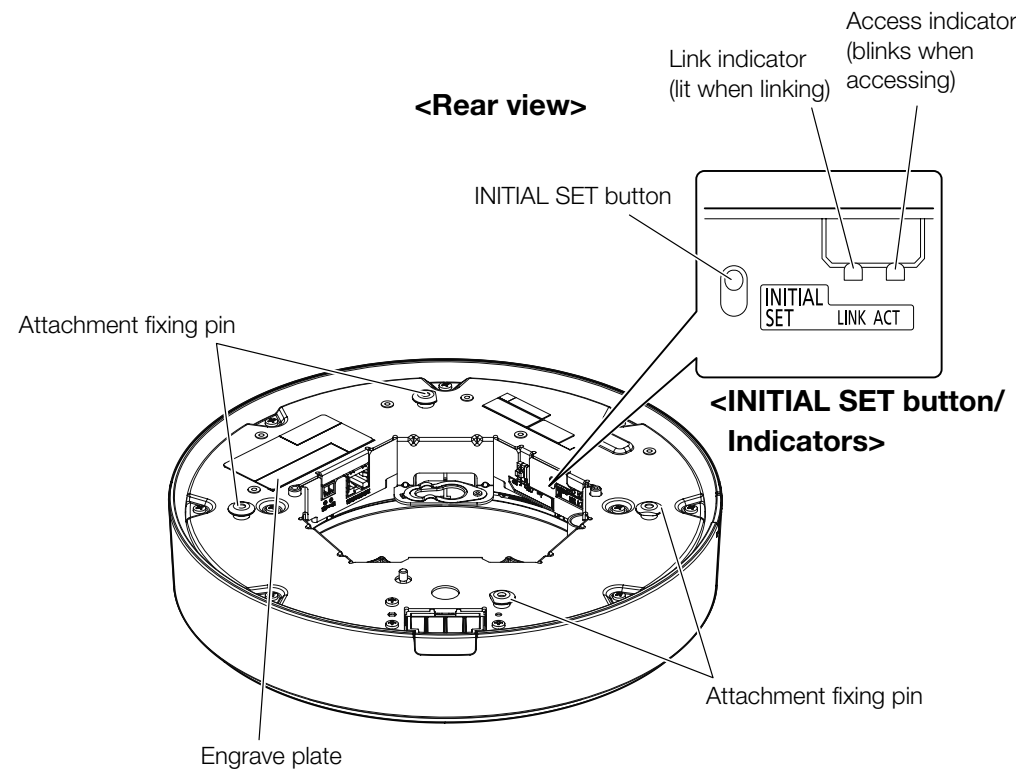
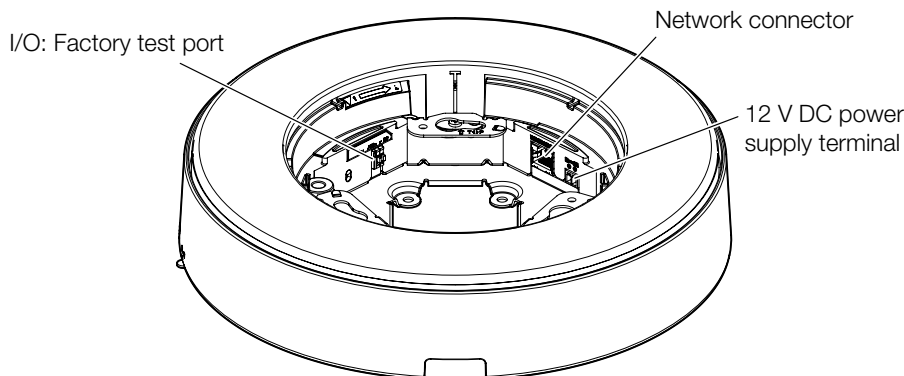
● About the indicators

The Access indicator and Link indicator can be turned off (indicators are set to light or blink in the default settings). Turn off the indicators as required according to the installation environment. For details, refer to the Operating Instructions (included in the CD-ROM).

Major operating controls



<Inside view of the center cover (with the center cover removed)>



Installation

The installation tasks are explained using 5 steps.

Step1

Check the connection cable and prepare in advance



Step2

Mount the brackets to a ceiling or wall



Step3

Mount the microphone to a bracket and connecting the cable



Step4

Mount the camera to the microphone and connect the cable to the camera



Step5

Configure the microphone audio so that it can be accessed from a PC

Step1 Check the connection cable and prepare in advance

Caution:

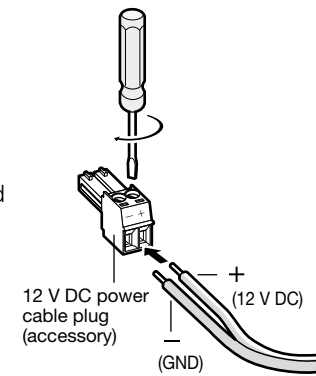
- A READILY ACCESSIBLE DISCONNECT DEVICE SHALL BE INCORPORATED TO THE EQUIPMENT POWERED BY 12 V DC POWER SUPPLY.
- ONLY CONNECT 12 V DC CLASS 2 POWER SUPPLY (UL 1310/CSA 223) or LIMITED POWER SOURCE (IEC/EN/UL/CSA 60950-1).

Before starting the connection, turn off the power of this microphone and the devices to be connected.
Check and prepare the required devices and cables for connection.

Connect the power cable

Connect the output cable of the AC adaptor to the power cable plug (accessory).

- ① Loosen the screw of the power cable plug (accessory), strip 3 mm to 7 mm {1/8 inches to 9/32 inches} from the end of the wire, twist the stripped part of the wire sufficiently to avoid short circuit, and then connect the output cable to the power cable plug (accessory).
- ② Tighten the screw of the power cable plug. (Recommended tightening torque: 0.34 N·m {0.25 lbf·ft}.)



Note:

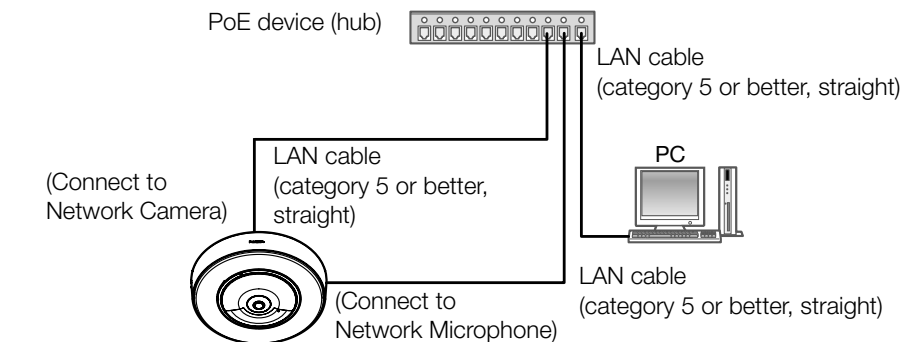
- Check whether the stripped part of the wire is not exposed and is securely connected.
- When connecting an external power supply to the microphone, use the 16 AWG to 24 AWG single-wired or stranded wired cables.

IMPORTANT:

- The 12 V DC power supply shall be insulated from the commercial AC power.
- Be sure to use the power cable plug provided with this product.
- Be sure to fully insert the power cable plug into the 12 V DC power supply terminal. Otherwise, it may damage the microphone or cause malfunction.
- When installing the microphone, make sure that excessive force is not applied to the power cable.
- Be sure to use an AC adaptor compliant with the specifications (written in the engrave plate on the bottom side of this unit) regarding power source and power consumption.

When connecting to a network using a PoE hub

Before starting the installation, check the entire system configuration. The following illustration gives a wiring example of how to connect the microphone and camera to the network via a PoE device (hub).



IMPORTANT:

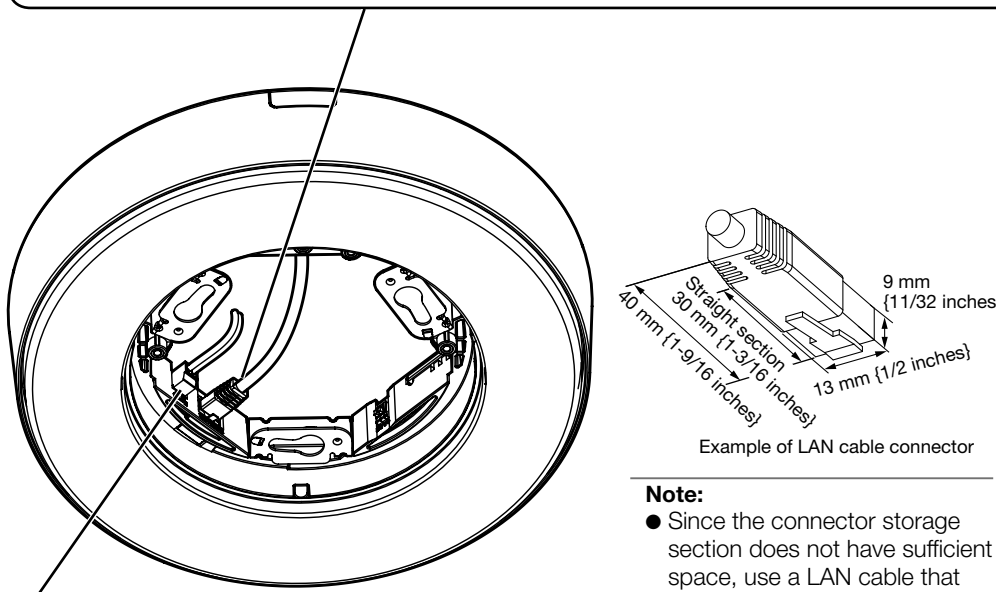
- Use a switching hub or a router which is compliant with 10BASE-T/100BASE-TX.
- If a PoE hub is not used, each network microphone must be connected to a 12 V DC power supply.
- When using 12 V DC, power supply from a PoE hub or router is not required.
- The network microphone is only intended for a connection to an ethernet or PoE network without routing to the outside plant.

Connect a LAN cable (category 5 or better, straight)

Connect a LAN cable (category 5 or better, straight) to the network connector.

IMPORTANT:

- Use all 4 pairs (8 pins) of the LAN cable.
- The maximum cable length is 100 m {328 feet}.
- Make sure that the PoE device in use is compliant with IEEE802.3af standard.
- When connecting both the 12 V DC power supply and the PoE device for power supply, the PoE device will be used for power supply.*
- * Depending on the PoE device used, if you operate the 12 V DC power supply and a PoE hub or router at the same time, the power supply may stop, causing the microphone to restart.
- When the LAN cable is disconnected once, reconnect the cable after around 2 seconds. When the cable is quickly reconnected, the power may not be supplied from the PoE device.



Note:

- Since the connector storage section does not have sufficient space, use a LAN cable that does not exceed the sizes described in the illustrations.

Step2 Mount the brackets to a ceiling or wall

There are 4 methods to install the microphone to a ceiling or wall as described below. Prepare the required parts for each installation method before starting the installation. The following are the requirements for the various installation methods.

- ① **When a ceiling or wall sufficiently supports the total weight**
 - Mounting [1] and [2] are possible.

IMPORTANT:

- Procure 4 screws (M4) to secure the attachment (accessory) to a ceiling or a wall according to the material of the installation area. In this case, wood screws and nails should not be used. For mounting a microphone on a concrete wall, use an anchor bolt (M4) or an AY plug bolt (M4) for securing. (Recommended tightening torque: 1.6 N·m {1.18 lbf·ft}.)
- Mount the attachment (accessory) in consideration of the microphone angle in accordance with the instructions.
- Required pull-out capacity of a single screw/bolt is 196 N {44 lbf} or more.

- ② **When a ceiling insufficiently supports the total weight**

- Mounting [3] is possible.

IMPORTANT:

- If a ceiling board such as plaster board is too weak to support the total weight, the area shall be sufficiently reinforced or the optional ceiling mount bracket for the microphone, WV-Q105A, must be used.

- ③ **When you want to hang the microphone from a ceiling using a ceiling mount bracket**

- Mounting [4] is possible.

IMPORTANT:

- When hanging this microphone from a ceiling, use the optional WV-Q117A or a sufficiently reinforced mount bracket.

- ④ **When a wall insufficiently supports the total weight**

IMPORTANT:

- If a wall board such as plaster board is too weak to support the total weight, the area shall be sufficiently reinforced.

Installation method	Recommended screw	Minimum pull-out strength (per 1 pc.)
[1] Using a two-gang junction box	M4 screws x 4	196 N {44 lbf}
[2] Installing the microphone directly on the ceiling or wall	M4 screws x 4	196 N {44 lbf}
[3] Using the optional ceiling mount bracket WV-Q105A*1	*2	*3
[4] Using the optional ceiling pendant type mount bracket WV-Q117A*1	*2	*3

*1 For information on mounting the microphone using WV-Q117A or WV-Q105A, refer to the Instructions provided with the WV-Q117A or WV-Q105A.

*2 For information about screws or anchor bolts when mounting the microphone using WV-Q117A or WV-Q105A, refer to the Instructions provided with the WV-Q117A or WV-Q105A.

*3 Make sure that the installed mount bracket can support more than 5 times the weight of the mount bracket, microphone, and camera.

[1] Using a two-gang junction box

Note:

- The direction of “FRONT↑TOP” on the attachment (accessory) determines the upwards direction of the image on the PC monitor when connecting the camera.
- For ceiling mounting:
Determine the direction that you want images to be displayed upwards on the PC monitor, and then mount the attachment (accessory) with “FRONT↑TOP” facing this direction.
- For wall mounting:
The attachment (accessory) shall be mounted with “FRONT↑TOP” facing upward.

Note:

- The direction of "FRONT↑TOP" on the attachment (accessory) determines the upwards direction of the image on the PC monitor when connecting the camera. Determine the direction that you want images to be displayed upwards on the PC monitor, and then install so that the direction of the arrow shown on the installation template (accessory) is aligned with "FRONT↑TOP" of the attachment (accessory).

46mm
(1-13/16 inches)

83.5 mm
(3-9/32 inches)

Mounting hole for WV-Q105A

Installation template (accessory)

Safety wire angle (WV-Q105A supplied)

Attachment (accessory)

Fixing screws (4 pcs. (WV-Q105A supplied))

Direction marker for installation "FRONT" ↑ "TOP"

Fixing screws (4 pcs. (WV-Q105A supplied))

<Completed mounting image>

Roof space

Anchor bolt

WV-Q105A

Fixing screw (4 pcs. (WV-Q105A supplied))

Safety wire (WV-Q105A supplied)

Attachment (accessory)

Network Microphone

Ceiling board as plaster board

Diagram illustrating the completed mounting of the Network Microphone (WV-Q117A).

The diagram shows the microphone unit (WV-Q117A) mounted on a ceiling. The unit is secured using an attachment (accessory) and a safety wire (WV-Q117A supplied) anchored to the ceiling structure. The ceiling board is sufficiently reinforced.

Labels in the diagram include:

- Roof space
- Anchor bolt
- Safety wire angle (WV-Q117A supplied)
- Safety wire (WV-Q117A supplied)
- Sufficiently reinforced ceiling board
- WV-Q117A
- Attachment (accessory)
- Network Microphone
- Direction marker for installation "FRONT" and "TOP"
- Attachment (accessory)
- Fixing screw (4 pcs. (WV-Q117A supplied))

- ① Remove the center cover by removing the fixing screws and then rotating the center cover itself in the direction of the arrow.
- ② Align the position so that the "OPEN" mark on the side of the microphone matches the projection of the attachment, engage the 4 attachment fixing pins in the back of the microphone with the microphone mounting holes of the attachment, rotate the microphone in the direction of the arrow, and align the projection with the "LOCK" mark to temporarily secure the microphone.

Center cover fixing screw

Center cover

Microphone mounting holes (x4)

Projection of the attachment

"OPEN" mark

Attachment fixing pins (x4)

Center cover fixing screw

Center cover

Microphone mounting holes (x4)

Projection of the attachment

"OPEN" mark

Attachment fixing pins (x4)

Before securing

After securing

46mm
{1-13/16 inches}

83.5 mm
{3-9/32 inches}

Two-gang junction box

Attachment (accessory)

Direction marker for installation
"FRONT" ↑ "TOP" →

Fixing screws (4 pcs. (M4), locally procured)

46 mm
{1-13/16 inches}

83.5 mm
{3-9/32 inches}

Arrow

Cable access hole (ø 30 mm
{1-3/16 inches})

Installation template (accessory)

Attachment (accessory)

Direction marker for installation
"FRONT" ↑ "TOP" →

Fixing screws (4 pcs. (M4), locally procured)

05A

Diagram 1

Diagram illustrating the removal of the side cover and center cover (back side) from the device. The side cover is shown being lifted away from the main unit, secured by a side cover fixing screw. The center cover (back side) is shown being lifted away from the main unit, secured by a center cover screw.

Diagram illustrating the removal of the adapter and sub cover:

- Adapter (for WV-SF438/ WV-SF448/ WV-SF448E), white**
- Camera groove**
- Adapter projection**
- Sub cover**
- Attachment fixing screws**

Note:

- When removing the adapter, remove the projection and the hook on the opposite side before removing the adapter.

Adapter (for WV-SW458), gray

Note:
 ● When removing the adapter, remove the projection and the hook on the opposite side before removing the adapter.

3 Engage the attachment fixing screws in the rear of the camera with the camera mounting hole of the microphone and rotate the camera in the direction of the arrow shown below to temporarily secure the camera.

● Insert the camera into the microphone in a position where the Δ marks of the adapter and microphone match, and then rotate the camera in the direction of the arrow shown below to secure the camera.

Camera mounting holes (x3)

Δ mark of the microphone

Δ mark of the adapter

4 Tighten the camera fixing screw.

5 Attach the sub cover for the camera.

6 Tighten the camera fixing screw.

Camera fixing screw

Groove of the adapter

CD launcher

Close

Panasonic

IP Setting Software

Install Run

Manual

Install Open

Plug-in software

Install

Please read first About this software Close

Panasonic IP Setting Software

File Edit Help

List of camera-related device

About this software

No.	MAC Address	IPv4 Address	Port No.	Device name	Model	IPv4 overlap

Search Network Settings Open the device window

IPv4/IPv6
IPv4

Close

Note:

- When the microphone setup screen is not displayed, refer to the Troubleshooting in the Operating Instructions on the provided CD-ROM.
- It is possible to enhance the network security by encrypting the access to microphone using the HTTPS function. Refer to the Operating instructions on the provided CD-ROM for how to configure the HTTPS settings.
- Click the [Setup] button on the setup menu, the user authentication window will be displayed. Enter the default user name and password as follows, and log in.
User name: admin
Password: 12345
- When changing settings related to the network settings, such as connection mode, IP address, and subnet mask, click the [Network Settings] button in [Panasonic IP Setting] screen as shown in step ③, then change each setting.
- Due to security enhancements in "IP Setting Software", "Network settings" of the microphone to be configured cannot be changed when around 20 minutes have passed after turning on the power of the microphone. (When the effective period is set to "20 min" in the "Easy IP Setup accommodate period".)
However, settings can be changed after 20 minutes for microphones in the initial setup mode.