

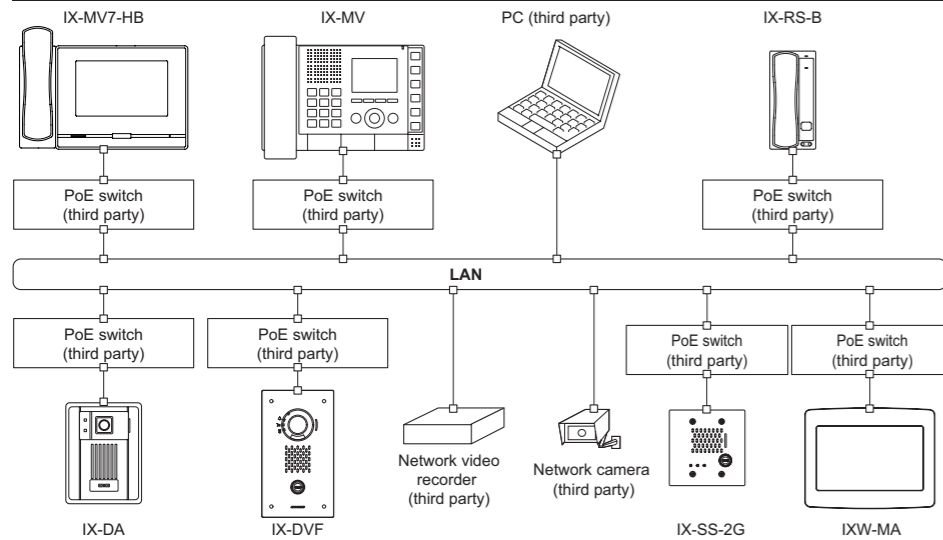
Introduction

- Read this manual before installation and connection. Read the "Setting Manual" and "Operation Manual". The manuals can be downloaded from our homepage at "https://www.aiphone.net/product/support/" free of charge. (The manuals will be available from 9 November 2018 onwards.)
- After completing installation and connection, program the system according to the "Setting Manual". The system cannot operate unless it is programmed.
- After performing installation, review with the customer how to operate system. Leave documentation accompanying the Master Station with the customer.



Perform installation and connection only after gaining sufficient understanding of the system and this manual. The illustrations used in this manual may differ from the actual stations.

Example of System Configuration



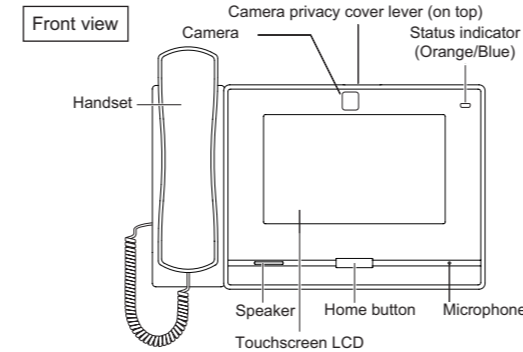
Status Indicator

Refer to "IX-MV7-* Operation Manual" for additional indicators not listed below.

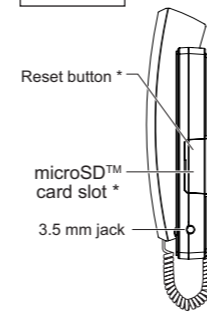
Status (pattern)		Meaning
Orange flashing	Normal flashing → [Lit 0.75 sec] → [Off 0.75 sec]	Booting
	Rapid flashing → [Lit 0.25 sec] → [Off 0.25 sec]	Device error, Startup error
	Long interval flashing → [Lit 0.5 sec] → [Off 4 sec]	Communication failure, Line supervision and device check error
	Long irregular flashing → [Lit 1 sec] → [Off 0.25 sec] → [Lit 0.25 sec] → [Off 0.25 sec] → [Lit 0.25 sec] → [Off 0.25 sec]	Firmware version updating
	Short irregular flashing → [Lit 1 sec] → [Off 0.25 sec] → [Lit 0.25 sec] → [Off 0.25 sec]	Initializing
Blue light	[Lit]	Standby (Depends on setting)

Part Names and Accessories

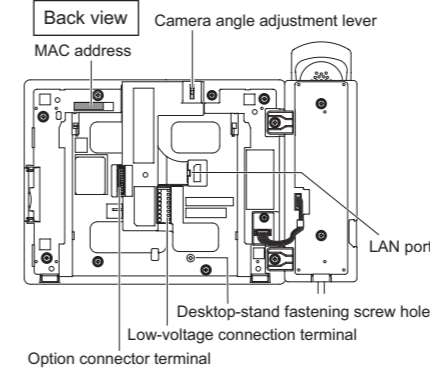
IX-MV7-HW, IX-MV7-HB



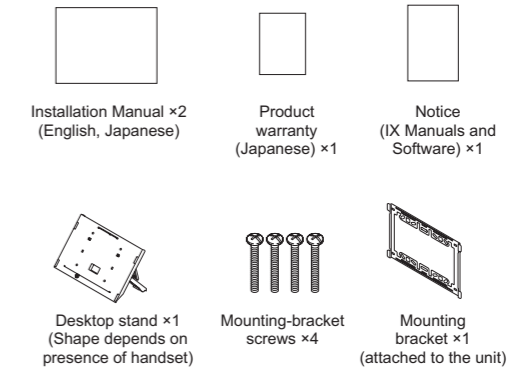
Side view



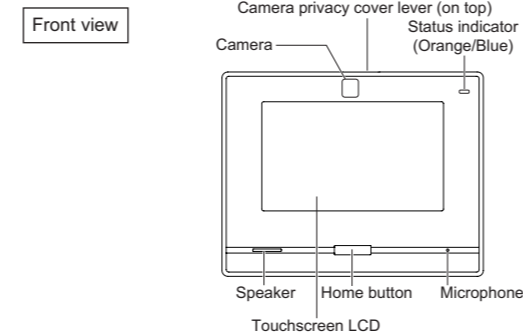
* Accessible when terminal cover is opened



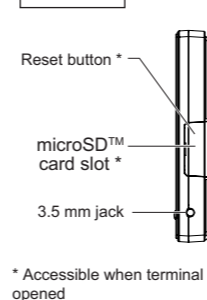
Included accessories



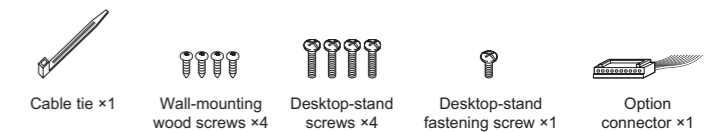
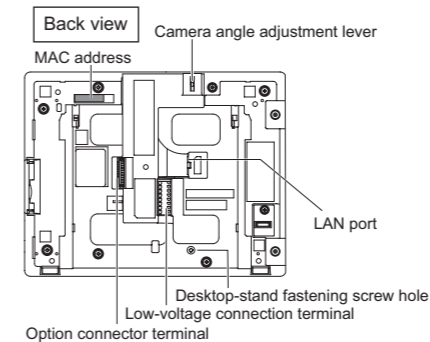
IX-MV7-W, IX-MV7-B



Side view



* Accessible when terminal cover is opened



Precautions



Warning Negligence could result in death or serious injury.



Do not disassemble or modify the device.
May cause fire or electrical shock.



Do not, under any circumstances, open up the device.
Voltage within some internal components may cause electrical shock.



The device is not designed to explosion-proof specifications. Do not install or use in an oxygen room or other such locations filled with volatile gases.
May cause fire or explosion.



Caution Negligence could result in injury to people or damage to property.



Do not install or connect the device with the power on.
May cause electrical shock or malfunction.



Do not turn on power without first checking to make sure the wiring is correct and there are no improperly terminated wires.
May cause fire or electrical shock.



Install the device in a position where it will not easily be brushed against by somebody's shoulder, etc.
Failure to do so could result in injury.



Do not install the unit in location subject to frequent vibration or impact.
It may fall or tip over, resulting in damage to the unit or personal injury.



For testing and verification of chime volume and call tone volume, do not hold the handset close to your ear.
May cause harm to the ear if a sudden loud noise is emitted.



Do not put your ear close to the speaker when using the device.
May cause harm to the ear if a sudden loud noise is emitted.

General Precautions

- If the device is installed in a dark place, but positioned in a direction where subjects will be back-lit by a bright light, it may affect the clarity of the image shown on the liquid crystal display.
- Install low-voltage lines at least 30cm (11") away from high-voltage lines (AC100V, 200V), especially inverter air conditioner wiring. Failure to do so may result in interference or malfunction.
- When installing or using the device, give consideration to the privacy rights of subjects, as it is the responsibility of the system owner to post signs or warnings in accordance with local ordinances.
- Talk within 30cm (11") or less from the unit. If you stand too far away, it may be difficult for the other person to hear the communication.

Notice

- The illustrations and images used in this manual may differ from the actual items.
- If the device is used in areas where there are business-use wireless devices such as a transceiver or mobile phones, it may cause malfunction.
- If the device is installed close to a light dimmer, an inverter electrical appliance or the remote control unit of a hot-water system or floor-heating system, it may create interference and cause a malfunction.
- If the device is installed in an area with an extremely strong electrical field, such as in the vicinity of a broadcasting station, it may create interference and cause a malfunction.

Precautions for mounting

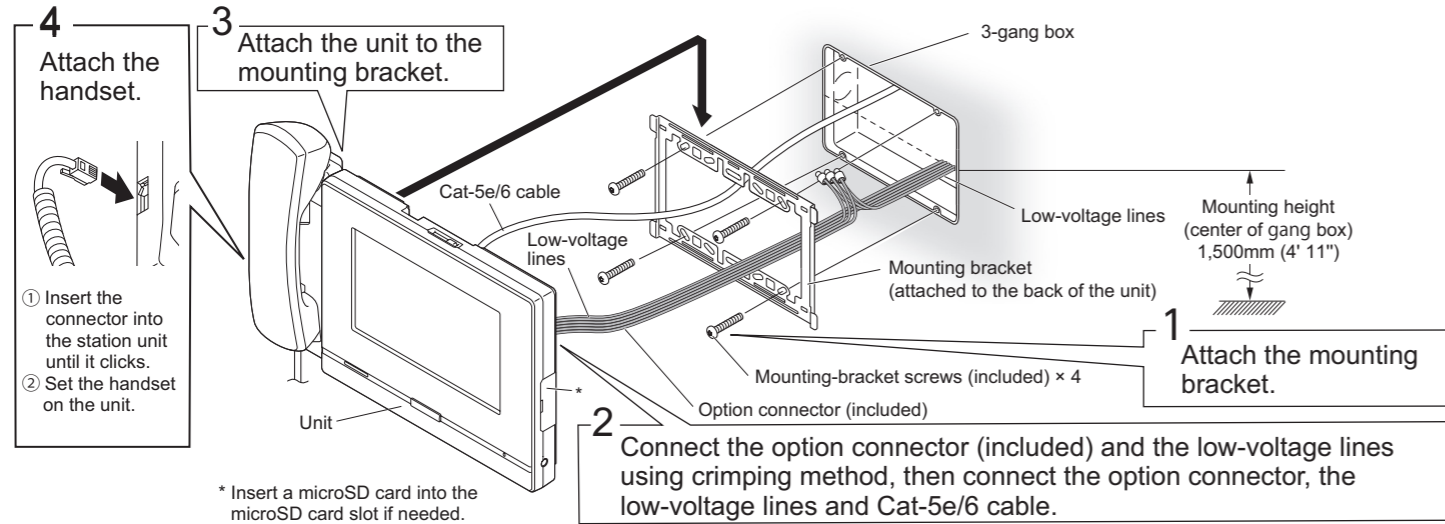
- In 50Hz regions, if a strong fluorescent light shines directly into the camera, it may cause the image to flicker. Either shield the camera from the light or use an inverter fluorescent light.
- Installing the device in the following locations could cause malfunction:
 - Locations exposed to direct sunlight
 - Locations that get hot
Close to a heater, boiler, etc.
 - Locations where there is risk of exposure to liquid, dust, oil, or chemicals
 - Locations with high humidity
Bathroom, basement, greenhouse, etc.
 - Locations with low temperature
Inside a cold storage warehouse, the front of a cooler, etc.
 - Locations directly exposed to steam or oil smoke
Next to heating devices or a cooking space, etc.
 - Sulphurous environments such as a hot spring area
 - Locations close to the sea or directly exposed to sea breeze
- If existing wiring is used, the device may not operate properly. In that case, it will be necessary to replace the wiring.
- Do not, under any circumstances, use an impact driver to fasten screws. Doing so may cause damage to the device.

How to Install

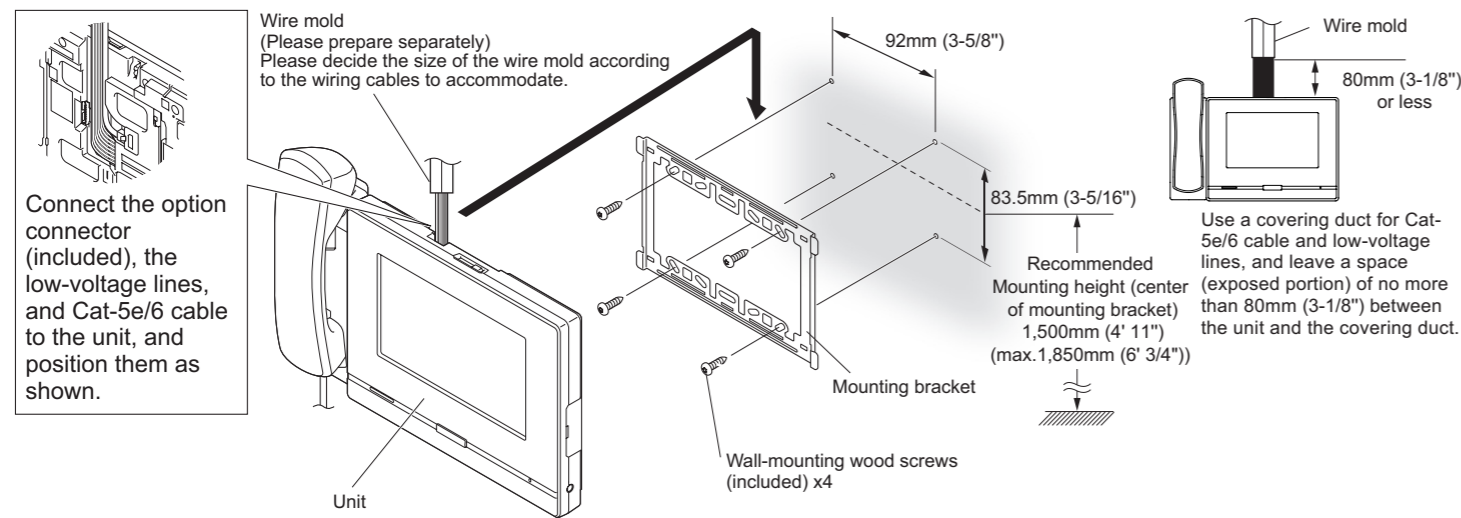
The illustrations explain installation using the IX-MV7-HW model.

Installation of Master Station

Back wiring

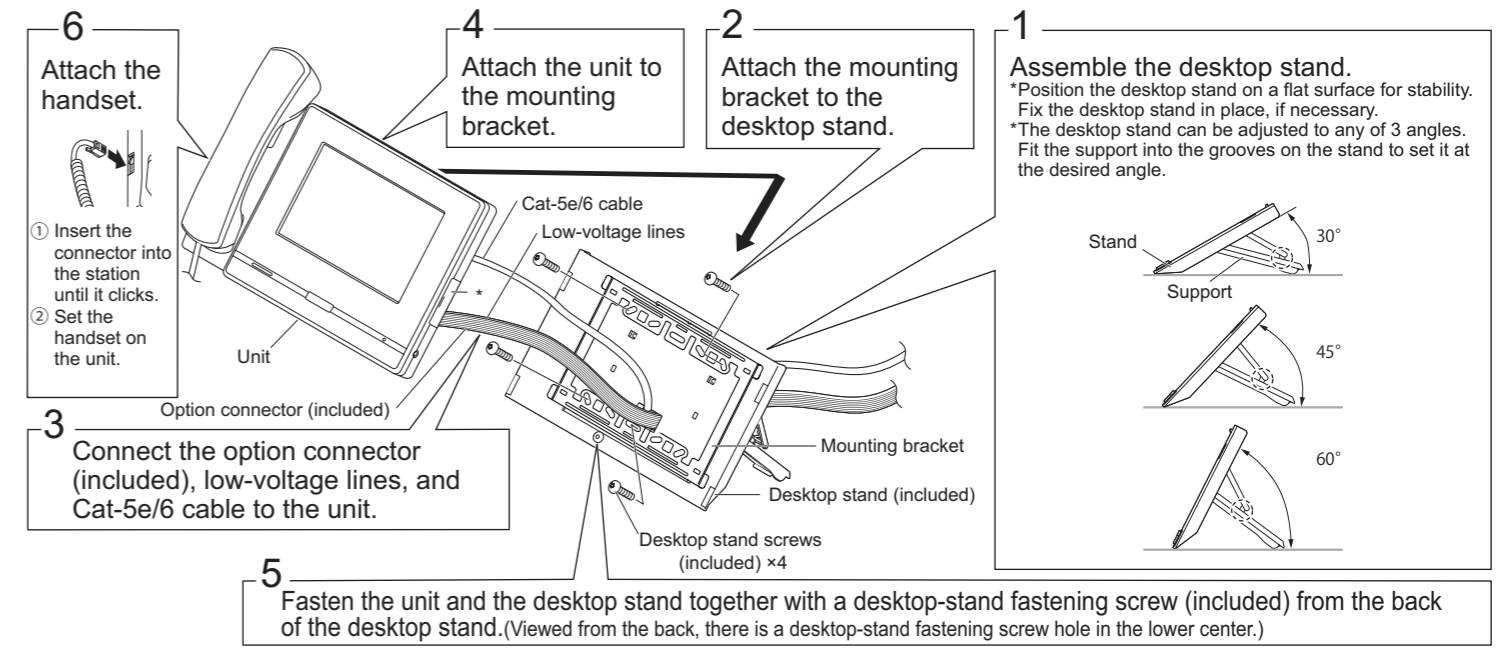


Surface wiring



• If the accessory screws are unusable for plaster board or a concrete wall, etc., please use a product such as an anchor or concrete plug (not included).

Mounting on the desktop stand

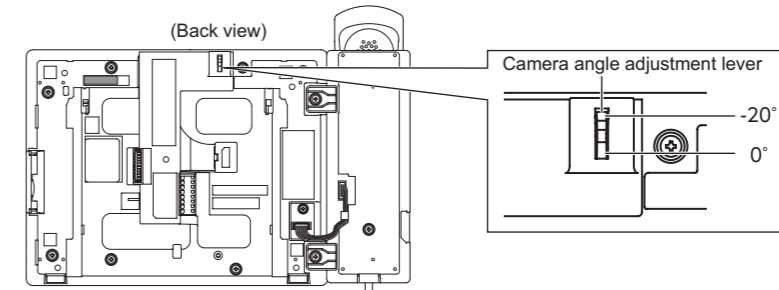


• Fasten the mounting bracket to the desktop stand with the supplied screws.
 • If necessary, secure the Cat-5e/6 cable or low-voltage line using the included cable tie.
 • When using the Desktop mounting, use the included Desktop stand.

Camera View Range and Mounting Position

Camera View adjustment

Using the camera angle adjustment lever, the camera can be tilted down (0° to -20°). Please adjust the camera to the optimal position.

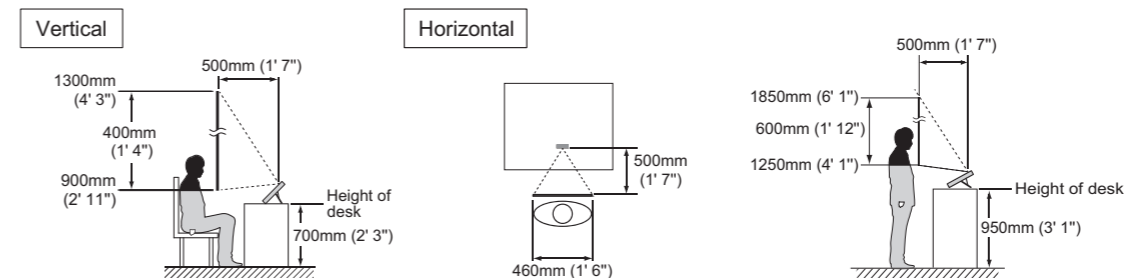


Camera view range

The camera range as illustrated is only an approximate indication and may vary according to the environment.

When installed on a flat desktop (with desktop stand at 45° and camera angle at the lowest position [-20°])

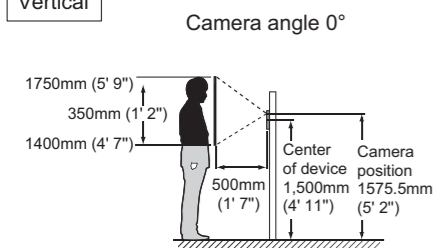
When installed on a flat desktop (with desktop stand at 30° and camera angle at the lowest position [-20°])



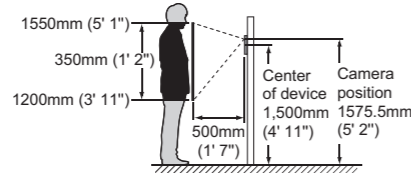
How to Install

<Wall mounting>

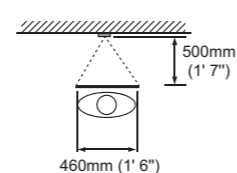
Vertical



Camera angle -20°



Horizontal



When light enters the camera, the monitor screen may flicker brightly or the subject may become dark. Try to prevent strong lighting from entering the camera directly.

How to Connect

Connection Precautions

■ Cat-5e/6 cable

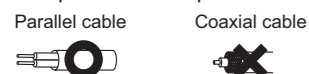
- For connection between devices, use a straight-through cable.
- If necessary, when bending the cable, please observe the manufacturer's recommendations. Failure to do so could cause a communication failure.
- Do not strip away the cable insulation any more than is necessary.
- Perform termination in accordance with TIA/EIA-568A or 568B.
- Before connecting the cable, be sure to verify conduction using a LAN checker or similar tool.
- A RJ45 covered connector cannot be connected to the LAN ports of the master stations or the door stations. Use cables without covers on the connectors.



- Be careful not to pull on the cable or subject it to excessive stress.

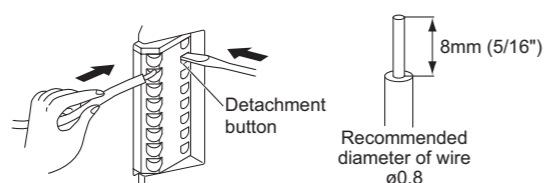
■ Precautions regarding low-voltage line

- Use PE (polyethylene)-insulated PVC jacketed cable. Parallel or jacketed conductors, mid-capacitance, non-shielded cable is recommended.
- Never use twisted-pair cable or coaxial cable.
- 2Pr quad V twisted pair cables cannot be used.



■ Connection and disconnection of low-voltage lines

- Insert the line into the quick connection terminal.
- If the line does not go in easily, push the low-voltage line into the terminal while pressing down the detachment button.
- When removing a low-voltage line, pull on the line while pressing down the detachment button.

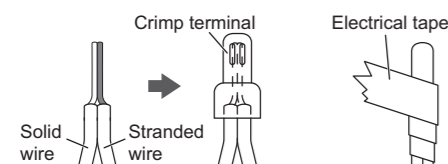


* The shape varies depending on a model.

■ When connecting low-voltage lines, perform the connection using either the crimp sleeve method or soldering, then insulate the connection with electrical tape.

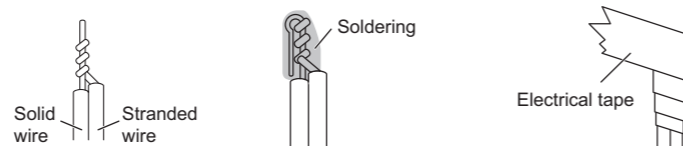
● Crimp sleeve method

1. Line up the solid wire and stranded wire and crimp them together.
2. Overlap the tape by at least a half width and wrap the connection at least twice.



● Soldering method

1. Twist the stranded wire around the solid wire at least 3 times.
2. After bending down the point, perform soldering, with care that no wires protrude from the soldering.
3. Overlap the tape by at least a half width and wrap the connection at least twice.



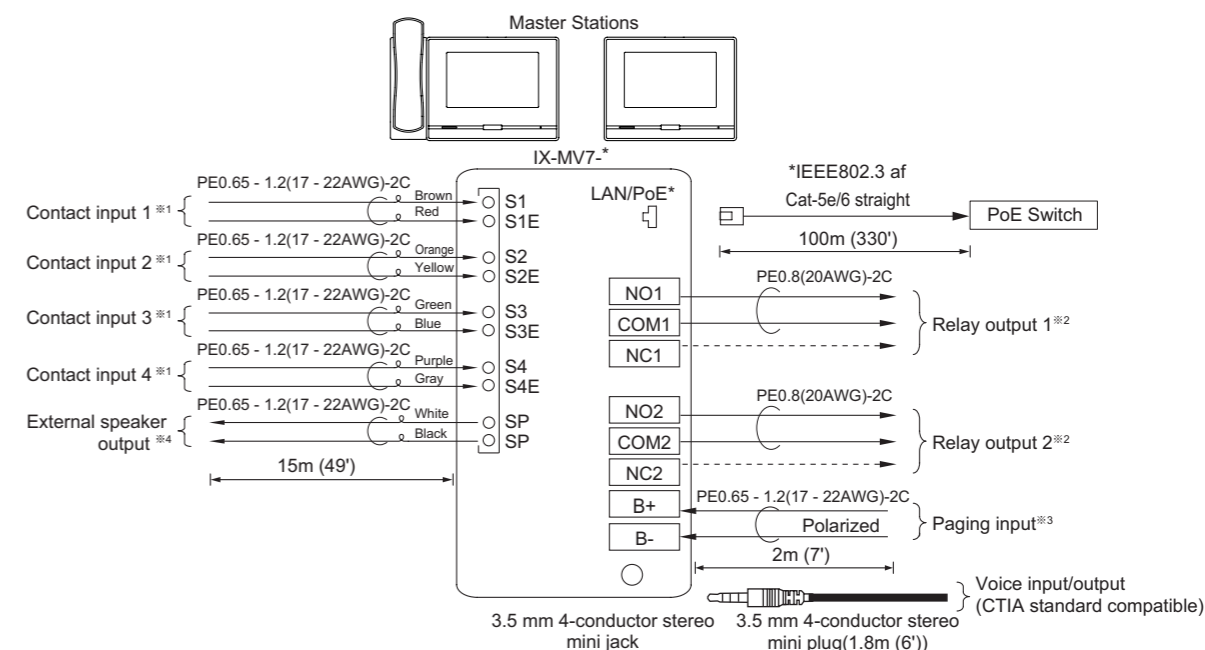
- If the connector-attached lead wire is too short, extend the lead with an intermediate connection.
 - As the connector has polarity, perform the connection correctly. If the polarity is incorrect, the device will not operate.
 - When using the crimp sleeve method, if the end of the connector-attached lead wire has been soldered, first cut off the soldered part and then perform crimp.
 - **After completing connection of wires, check that there are no breaks or inadequate connections. When connecting low-voltage lines in particular, perform the connection using either soldering or the crimp sleeve method and then insulate the connection with electrical tape. For optimal performance, keep the number of wiring connections to a minimum.**
- Simply twisting low-voltage lines together will create poor contact or will lead to oxidization of the surface of the low-voltage lines over long-term use, causing poor contact and resulting in the device malfunctioning or failure.



Wiring Connection



- Insulate and secure unused low-voltage lines and the connector-attached lead wire.



※ 1 Contact Input Specifications

Input method	Programmable dry contact (N/O or N/C)
	Level detection method
Detection time	100 msec or more
Contact resistance	Make: 700 Ω or less Break: 3 kΩ or more
Terminal short-circuit current	10 mA or less
Voltage between terminals	5.5 VDC or less (between open terminals)

※ 2 Relay Output Specifications

Output method	Form C dry contact (N/O or N/C)
Contact rating	24 VAC, 1A (resistive load) 24 VDC, 1A (resistive load) Minimum overload (AC/DC): 100mV, 0.1mA

※ 3 Paging Audio Input Specifications

Input impedance	600 Ω
Input audio level	50 mVrms

※ 4 External Speaker Output Specifications

Output impedance	8 Ω
Maximum output power	0.5 w